

**Dr. Bernard E. Vodnoy's
Lecture Notebook
on
NUTRITION AND HEALTHCARE
AGAINST
AGING, DISEASE AND POOR MENTAL
HEALTH**

• There are many health care books written for the layman (see pg. 9 for a list of 24 very good ones). They all (including Dr. Vodnoy's) preface their book with the explanation to the reader to check their self-health care plans and procedures with their doctor. Persons utilizing any of the materials presented in their books do so at their own risk and assume complete responsibility for any adverse effects they think they acquired from them. They advise that if you want to keep from getting sick, eat healthful (vegetarian), unprocessed (no refined flour, no manufactured), uncontaminated (organic if possible) food.

• We have the finest medical schools and hospitals in the world. We select fine, especially gifted students to become our doctors, and yet our nation is overwhelmed with tremendous health problems. Fortunately, in Michiana we have outstanding hospitals which, in addition to rendering very fine sick care, have developed excellent illness prevention and health restoration programs. Now we must stop bringing to our doctors and hospitals our self-inflicted, health-injured bodies. We must stop asking them for the "impossible quick fix". They are working hard to do their part—now let's do our part by joining the American Healthcare Revolution!

• Dr. Vodnoy's goal is to bring information to people which will enable them to achieve the maximum benefits from present day health care knowledge at the lowest cost with the greatest convenience and time saving. He does not diagnose or treat any illness or prescribe any treatment, diet or exercise.

All of Dr. Vodnoy's services and programs are no charge and nonprofit.
The price of the lecture notebook is the actual printing cost. No royalties or commissions have been or will be paid to Dr. Vodnoy.

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Smoking Kills & Retards Kids

Study: Smoking by adults kills hundreds of kids" — Boston Herald

A new report in *Pediatrics* concludes that secondhand tobacco smoke kills between 136 and 212 kids each year by causing respiratory infections, and more die from cigarette-caused fires.

Parental smoking also forces at least 4 million children to annually seek care from a hospital or doctor.

In addition, secondhand smoke causes in young children each year:

- 354,000 to 2.2 million episodes of otitis media (ear infections)
- 5,200 to 165,000 tympanotomies (tubes inserted in ears)
- 14,000 to 21,000 tonsillectomies and/or adenoidectomies
- 329,000 physician visits for asthma
- 1,300,000 to 2,000,000 physician visits for serious coughing
- 260,000 to 436,000 episodes of bronchitis in children younger than 5
- 115,000 to 190,000 episodes of pneumonia in children younger than 5

ASH attorneys suggest that this study is likely to cause even more states to consider smoking as a factor in deciding custody. States which already do this include: California, Florida, Illinois, Louisiana, Maryland, Massachusetts, Michigan, Missouri, New Jersey, New York, Oregon, Pennsylvania, South Carolina, Tennessee, and Texas.

Another new study in *Pediatrics* shows that pregnant women who smoke are 50% more likely to have mentally retarded children.

Although smoking during pregnancy previously was linked to low birth weight, increased infant mortality, and lower intelligence in children, this study was the first to connect smoking with retardation. It also showed that:

- About 35% of women who gave birth to retarded children reported smoking as few as five cigarettes a week during pregnancy
- Women who smoked during the last six months of pregnancy were 60% more likely to have retarded children
- Pregnant women who smoked at least a pack a day were 85% more likely to give birth to a retarded child.

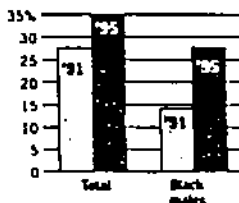
Smoking Up Among Kids

Smoking among teens has shot up 25% in just the last four years, and doubled among Black males.

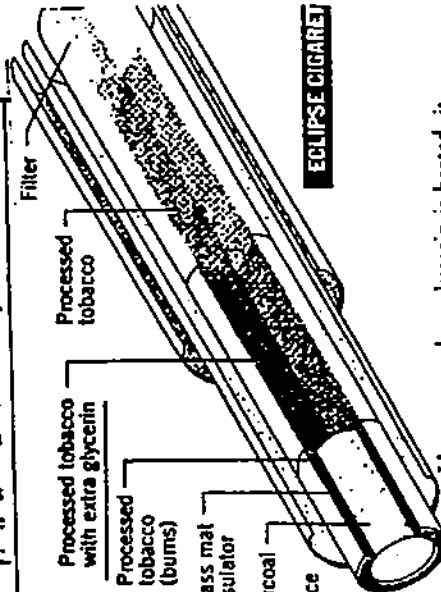
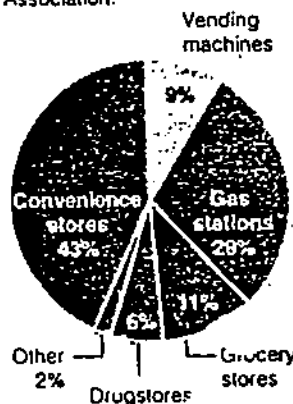
The most recent study also shows that teens have no trouble buying cigarettes from stores and vending machines, despite tobacco industry claims.

Cigarette smoking among high school students is on the rise, particularly among black males.

Percent of high school students who said they smoked in the past month



Where teen-agers, 13 to 17, buy cigarettes, according to a survey by the National Automatic Merchandising Association.



However, when glycerin is heated, it generates acrolein, a deadly known carcinogen. Smoke from Eclipse reportedly has about four times as much glycerin as conventional cigarettes.

Precursor: Substance in food which after digestion are converted by the liver into vitamins and other nutrients so that they can be utilized by the body; e.g. foods do not contain vitamin A, they contain the precursor called beta-carotene which after ingestion, digestion and absorption are converted by the liver into vitamin A.

Synergism: Joint action of discrete agencies (as drugs) in which the total effect is greater than the sum of their effects when acting independently. e.g. if we ingest vitamin C with iron the effectivity of the vitamin C triples, and the absorption and utilization of the iron source goes up 300%.

Catalyst: a substance that alters the rate of a chemical reaction but is itself unchanged at the end of the reaction. The catalyst is 5.

The red-hot charcoal tip (which has to be specially ignited) superheats glycerin. The vaporized glycerin absorbs nicotine within the nostril, and delivers it to the user.

biochemical reactions are the enzymes. Build your health science vocabulary. Read and study back pgs 573 thru 580. He's compiled a wonderful glossary. It will give you tremendous, in-depth background for your study of healthcare sciences.

Don't be scammed and victimized by many companies and industries. They must earn a profit to stay in business that's fine, however, there are many who will do anything for a buck. BEWARE of the "sharp" marketing of the:

- Meat Industry
- Baking Industry
- Tobacco
- Pizza
- Alcohol
- Snack Food
- Candy Industry
- Cereal Industry
- Oil Industry
- Soft Drink Industry
- Sugar Industry
- Dairy Industry
- Herb Industry
- Margarine Industry
- Health Food and Supplement Indus.
- Health Publications Ind.
- Cosmetic & Soap Industry

Stay BASIC! Understand subclinical disorders (disorder not revealed by tests.)
 BE a nutritional SMARTY - Practice KISS (Keep it simple smarty)
 We don't need cooking classes and cook books. We need non-cooking books and classes.
 Learn to use 1pt and 1qt. MASON JARS with the new plastic caps.

Table of contents.....1 - 2a-b

20 goals of these lecture workshops.....3

Biography of Dr. Vodnoy.....4a-b

Course announcement poster.....5

Cost of chronic illness.....6a
 So -- Who is Sick? (also read pg 19) 6b-

Alzheimer's.....6-c

Nutrition takes a bow.....7

Research on alternative medicine.....8

Introduction.....9 - 15

Be sure you read Mendelson's "Confessions of a Medical Heretic and Dissent in Medicine"

Principle books at discount prices.....16a

Study Baleh - 300 Disorders (2nd Ed)

Additional books at discount prices.....16b

Sickcare system vs. healthcare system.....17

Processing destroys nutrition.....18 a
 Read labels 18 b

Oxygen therapy Read McCabe & Nathaniel 19 - 24
 Dr. E.C. Rose now 19

Food restoration and detoxification.....25

Food preparation.....26 - 27

Other uses of oxygen. Grape seed extract.....28

Dr. Whitaker's "Guide To Natural Healing" "100 disorders" 29

Tragedy of the SAD diet, Dr. REUBEN 30
 Be sure you read this book!

World of illness prevention.....31

Denutrition and toxification of food.....32

Pesticides and toxic chemicals.....33 a
 EDC's: Endocrine Disruptive Chemicals 33 b

Going shopping? Beware!.....34

Dr. Vodnoy at The Forever Learning Institute.....35 - 36

40 billion arteries clogged: Read pg 185. Stay out 37
 of fast food joints! Atherosclerosis

Eliminate, a very important word.....38
 Mnemonic Key: KISS - Keep it simple smarty

America losing the cancer war.....39

Read Confessions of a Medical Heretic
 and Dissent In Medicine - Mendelson, Robt. M.D.

Nutrition in fruits and vegetables.....40

Nutrition in grains and legumes.....41

Nutrition in maintenance foods 1760 - 5620.....42

Nutrition in maintenance foods 5780 - 6290.....43

Nutrition in maintenance foods 6325 - 7210.....44

Nutrition in SOLENU drink.....45a - 45b
 Maintenance List of Healthcare Foods 45c

Nutrition in Soy products.....46

TVP - Textured Vegetable Protein

Foods and supplement list.....47 - 49

40 Therapy Fields Used In Self-Help-Care 49

Genetically engineered hormones in milk.....50 - 51

RDA for vitamins and minerals AICR.....52

Learn: Best sources, Functions, Deficiency Symptoms

Disorders caused by Vitamin & Mineral deficiencies.....53

Food phytochemicals.....54

Make your own drinks and cereals.....55

Make AB-MORKS-RB-WG-FM cereals.....56
 Barley Grits, Bulghar, Kasha, Soy Products are
 TOASTED. NEED only soaking.
 Now labels.....57 - 58

Natural food supplements.....59 - 60

Soy fiber.....61

NEAL BARNARD M.D.
 Vegetarian foods powerful for health.....62 - 63

Research on killers of Americans.....64 - 65

Breast cancer in U.S.....66 - 67

Cataracts and macular degeneration.....68 - 71

Healthcare lighting.....72

Light therapies.....73

Avoid light starvation.....74

Health benefits from UV-A & exercise.....75

Sperti lamps.....76

Bright light therapy for SAD.....77- 85

A = Amaranth Grain, Organic NB = Wheat Germ
 B = Barley, Buckwheat FM = Flaxseed Meal
 M = Millet O = Oats
 R = Rice, Brown
 K = Kasha
 RB = Rice Bran
 S = Soy

start to
study 86-93 and become a "lay" Endocrinologist

Light therapy with infra-red light.....86 - 88a
Physiological and psychological effects 86b-c
Endocrine gland functions.....89

Glandular therapy.....90

Melatonin.....91 - 92

Light, aging, pineal, and hypothalamus.....93

Food and supplement cabinet.....94

Supplement holder for 23 vials.....95

Balance your pH.....96

White blood cells halt HIV.....96

Aging Balch 94-97. Duke 24-28

Acidophilus, yogurt and alfalfa.....97a

Air purification therapy 97a-f

Alkaline water concentrate 98

Pastel portrait painting.....98 - 99

Anatomical Illustrations 100a-b

Anemia. Baking soda.....100 c

Acidosis (Balch pg 97), Alkalosis (Balch pg 105)

Blood test flow chart.....101

Brain - How To Preserve and Improve 105b-105c

Explanation of blood tests.....102 - 105a

Calcium.....106

Calcium, joint support, and coffee.....107

Capsicum.....Therapy.....108 - 109

Cat's claw.....Therapy.....110

Chicken problems - Dr. Michael Klaper 111-112

Cholesterol (high) and High Blood Pressure 112

Constipation 113

Chromium - full spectrum minerals.....113

Coenzyme Q10 Balch 113

Cow's milk.....DR. MICHAEL KLAPER.....114

Commercial and dairy foods bad for health.....115

Dental care - Sonic and Water Pik.....116 - 119

Dimethylglycine (DMG) Balch pg 38

Chart of Subgingival pockets.....and.....Therapy.....120

Dental heavy metal toxicity.....121 - 125a

Oral Chelation therapy 125b

DHEA.....126

Digestive problems.....126

G.I. Tract Therapy.....126 - 127

Drinks undermining health.....126 - 127

Confessions of a soft drink 127

Drugs disastrous on nutrition.....128

Second Hand Smoke causes in non-smokers a 20% increase in ATHEROSCLEROSIS

THE LEADING CAUSE OF DEATH in the U.S. is ATHEROSCLEROSIS!!

SMOKING SPEEDS UP MENTAL DETERIORATION - 2a -

ESPEC. IN SENIORS

GOAL: BECOME A HIGHLY SKILLED
LPP (Lay physician in prevention)

Dry mouth.....Therapy.....129

Essential oils (pg 213)

Exercise.....Therapy.....130a

EDCs: Endocrine Disruptive Chemicals

Flaxseed oil.....Therapy.....130b - 130c

Fiber.....Therapy.....131

Fish.....Salmon & Tuna for Vit. D.....132 - 136

Food therapeutics.....137

Garlic and Gotu Kola.....138a-138b

Grape fruit Extract.....138c

Happiness - search for.....139 - 141

Health history - tests and problems.....142

Heart attack - prevention.....143 - 144

Jerusalem Artichoke - Tablets & Flour.....144

Hearing.....Therapy.....145 - 149

Herbal Therapy.....149a-149g

Lecithin.....Therapy.....150 - 152

Legumes.....152 - 153

Loofas pg 49

Magnesium.....153

Magnetotherapy.....154a-g

Massage.....Therapy (Self).....155

Massage - Acupuncture.....Therapy.....156 - 158

Meat contamination.....161 - 162

Meatout - The Great American.....163

Mother Earth's rape and meat insanity.....164 - 165

Meat - stop eating it!.....166

Meatless myths.....167 a

MSM. Replaces Sulphur RES PYES 167b

Music - life without it, a mistake.....(Therapy).....168

Nutrient destruction.....169

Nuts.....170

Oils - essential

Potassium.....171 a

Pregnenolone.....171 b

Prostate cancer.....172 - 174

Vital Read

Protein requirements.....175
Recipes-Natural Health - Balch: Rx for
Dietary Wellness 190-302
 Selenium.....176

Sprouting.....177 - 180

Sugar.....181
 Surfactants.....181

Sunlight could save your life.....182 - 188
UR - A THERAPY

Avoiding Head Chilling w/berets, caps & hats.
 Thermal therapy.....189 a-d

Thyroid problems..... - 190 a
 Toxification and Denutrition of Food 190 b
 Vegetarian menu.....191
 Urine Therapy.....190c-d
 Vegan nutrition.....**DR. MICHAEL KLAPER** 192 - 193

Vinegar.....(Therapy).....194
 Vision-fundus of the human eye.....195 e
 Nutrient Supplements used in therapy of eye vision.....195 b
 Vision - cross section of human eye.....195 c

Vision - Amsler Grid.....196

Vision - nuclear and cortical cataract.....197 left

Vision - adnexa of human eye.....197 right

Vision - distance vision Snellen Chart.....198

Vision - near vision testing.....199

Vision - non - refractive anomalies.....200 - 201

Vision tangent field Testing 202-203 a
 920 transglyph trainer 203 b
 Stereo Circles-Free Space Orthoptics 203c-e
 Water-benefits of distilled water 204-5
 Water - Fluoride-theirging factor 206-7

Water - parasites in.....208

Water - detriments from contaminated.....209 - 210 a-b

Yogurt and Acidophilus.....211 - 212

Zinc.....213

Many people will do anything for a buck!
 Live defensively. Just because people are
 in a position of great authority, doesn't
 mean you can trust them. Beware of
marketing strategies.

Essential Oils.....213

-2-b-

Persons taking this course are asked to obtain a copy
 of Balch and Balch - "Rx For Nutritional Healing"

2nd edition. I refer to this wonderful book thru out
 the course. It's the basic backbone of this course. It
 offers a comprehensive, natural healing (and preven-
 tion), in-depth, wellness program. The 2nd edition,
 revised and updated, became available Sept. '96.

(cost \$ 19.95). See page 16a.

This wonderful husband and wife team also have
 another book "Prescription For Dietary Wellness".

I urge you to also obtain this book. (cost \$ 16.95).

See page 16a. for other books

Also obtain a copy of "Dr. Whitaker's Guide to
Natural Healing" and study both as you learn to

develop your healthcare program. ^{out-of-print,} See page 16a.
 check your library. He has a New Letter

• **Learn to make your own health**
drinks. Use SOLENU as your
base (or sprinkle them in your cereal & soup
 • The Dozen Dr's Who Can Help Us:
 Dr. ME - LPP (Lay Prevention Physician)
 Dr. DW. Grove, G.E., EENT (Probiotics) (LPP)
 Dr. Veggie Bocaps - G.T. (LPP) Pg. 719
 Dr. B.K. MORS - RB, M.G., (Cereals and Legumes).
 Dr. Roy G. Biv Light Therapy Vis. & Invisible.
 Dr. ABC GLO - ARS. LPP
 Dr. ABCDEK - (COR) Vitamins. (LPP)
 Dr. F.S. Minerals (LPP)
 Dr. Amino - Acid (LPP)
 Dr. Anti - Oxidant (LPP)
 Dr. Enzymes (LPP)
 Dr. T.E.C. Herodolist (Teas, Extracts, Capsules)
 Powders, Leafs) (LPP)
 Dr. SDP Dental (LPP)

• Autonomic system.
• Sympathetic nervous system
• Para. " " "
CENTRAL HEATH
• Voluntary Nervous System
/ODNOY Involuntary " "
Central " "

HEATH

Voluntary Nervous System

Involuntary	"	"
Central	"	"

Inventory
Central

- READ PG
Dr. E.C. Roseman.

f. bactericidal
v. virucidal
fungicidal
probiotic,

- bactericidal
fungicidal
antibiotic,
are bad
ds.
c-d.
ic, Precursor
(book.)
72-88
dentitis
al problems.
Support
e.g. Nat. Pub
Radio:
T.K. P.O.6

striated muscle fiber

- Reflex arc
- Effector nerves
- Afferent nerves
- Stimulus-response

No charge - Non-Profit - Lecture Laboratory Courses in Healthcare against Aging, Disease and Poor Mental Health

Enhance your ability to practice prevention of illness.

Prepare yourself to work better with your doctor.

The first six statements below are from "Renewal - The Anti-Aging Revolution" by Timothy J. Smith M.D. I urge you to read this book

Self Help
Therapies for:
Aging
Air Purification
Aloe Vera
Alzheimer's
Amino Acids
Antioxidants
Aromatherapy
Atherosclerosis
Bacterial Infection
Blood
Brain Function
Cancer
Chelation-oral
Cartilage
Collagen
Colon Cleansing
Constipation
Dental
DHEA
Digestion
Ears
Enemas
Exercise
Eyes
Fasting
Gastrointestinal
Glandular
Health Drinks
Hearing
Herbal
Hydrotherapy
Hyper & Hypo Thyroid
Immunity
Insomnia
Laryngitis
Light
Magnetics
Massage
Mental Health
Natural Food Supplements
Nutraceuticals
Nose
Orthoptics
Oxygen
Pain Control
Phytochemicals
Prostate
Skin Problems
Soy
Sprouting
Throat
Vinegar
Viral Infection
Voice
Weight Reduction
Xerostomia
and many more

■ Women who eat meat every day are four times as likely to develop breast cancer as women who eat meat less than once a week.

■ Women who eat butter or cheese three or more times a week are three times as likely to develop breast cancer as women who eat these foods less than once a week.

■ Women who eat eggs every day are three times as likely to develop breast cancer as women who eat eggs less than once a week.

■ Women who eat eggs three or more times a week are three times as likely to die from ovarian cancer as women who eat eggs less than once a week.

■ Men who eat meat, milk, cheese, or eggs every day are about 3½ times as likely to die from prostate cancer as men who seldom eat these foods or who avoid them completely.

■ Animal-derived foods contribute to all of the most common cancers. It's not only their high fat content that causes problems. It's also their lack of fiber, their high levels of pesticides, their added hormones, and more.

- National Institute On Aging warns: By the year 2040 we will have 14 to 15 million victims of Alzheimers. *That's the size of Texas.*
- At present 47% of people who reach their mid-80's have Alzheimers. Many more millions of seniors have senile dementia. Nutrition is critical for brain health
- We're pouring 2.2 billion pounds of pesticides on our foods yearly.
- 1 out of 5 seniors, 60 - 70 years old have cataracts. Over 70, the number skyrockets.
- Institute for Science In Society reports that yearly 33 million get sick - 9000 die from bacterial contamination of meat and poultry which is a time bomb waiting to go off anytime, as it did in England, *and is now starting to explode in our country.*
- In our country someone dies of a heart attack every 45 seconds and of cancer every 75 seconds.
- Heart Autopsies of 3 yr. olds killed in auto accidents, reveal their heart arteries are already clogging with cholesterol.
- *Smoking causes arteriosclerosis and destroys the body and mind.*
- Over 50% of 16 to 20 yr. olds have hardening of the arteries and dangerous arterial lesions. *(Pg 185)*

Member Emeritus of American Optometric Assoc.

Fellow Emeritus of American Academy of Optometry

1430 E. Clayton Drive, South Bend, IN 46614

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HEALTH LECTURE - LABORATORY COURSES NO CHARGE - NON-PROFIT - PUBLIC SERVICE WORKSHOPS ON SELF-HEALING WITH NATURAL WHOLISTIC HEALTHCARE

- By Dr. Bernard E. Vodnoy
(219) 291-8773



- In your Home, Church, Club, Business or School
- Time and Length of Program: Your Choice
- Number of Attendees and Sessions: Your Choice
- Course and Content: Your Choice
- Enhance your ability to practice prevention of illness
- Prepare yourself to work better with your doctor

A. NUTRITION AND HEALTHCARE AGAINST AGING, DISEASE AND POOR MENTAL HEALTH

To help you become more proficient with natural healing with foods, supplements, and many health procedures at the lowest cost, highest quality and greatest convenience. Nutrition, exercise, light therapy for depression, immunity, slow aging, alleviate depression and stress, improve brain function. Therapy with acidophilus + FOS, air ionization, aroma, AUT, blood pH, constipation, DHEA. Hearing, light, magnetic, MSM (methyl sulfonyl methane) and oxygen therapy. Dental care with digital imagery, brushing and flossing with sonic energy and sub and supra gingival irrigation. Information you can integrate immediately into your lifestyle, bringing you great physical and mental benefits.

B. HERBAL THERAPY

Herbologists say, "Many diseases can be treated naturally with herbs, safer, far less expensively and far more effectively than with drugs." Because of the many serious side effects and adverse interactions of multiple drugs, many doctors are reducing their use of drugs and increasing their use of herbs. The adverse side effects that can occur with herbs will also be discussed. Many herbs will be available, at the course, at 1/4 retail price. Learn to make your own natural medicine cabinet.

C. MAGNETIC THERAPY

The finest magnets and materials will be demonstrated and will be available at great discounts. Instructions will be given on how to make magnetic mattresses, magnetic wraps for your head, face, neck, shoulders, arm, elbow, wrist, ankle, and magnetic shoe inserts.

D. VISION CARE AND VISION TRAINING (ORTHOPTICS)

Our eyes have a profound effect on our health, learning, work and life. Course explains what constitutes a fine complete examination of the eyes and vision, which problems are corrected with glasses and which are corrected with vision training. You will experience using training instruments. Nutritional foods and supplements used in eye and vision nutrition therapy will also be presented. Educators, Counselors, Psychologists, School Nurses, Teachers, Students, Healthcare Practitioners, Human Resource Managers, most everyone will find this course valuable.

ESSENTIAL REFERENCE BOOKS AT MY COST: (my cost is your cost)

	<u>Regular Cost</u>	<u>My Cost</u>
A. Prescription for Nutritional Healing : Balch (600 pages)	\$ 19.95	\$ 12.00
B. Prescription for Dietary Wellness : Balch (318 pages)	\$ 16.95	\$ 10.00
C. Green Pharmacy : James Duke (Hard Cover - 507 pages)	\$ 29.95	\$ 18.00
D. Green Pharmacy : James Duke (Paperback - 617 pages)	\$ 6.99	\$ 4.20
E. DHEA Breakthrough : Stephen Cherniske (Paperback - 356 pages)	\$ 6.99	\$ 4.20
F. Magnetic Therapy - The Pain Cure Alternative : Lawrence & Rosch	\$ 14.95	\$ 9.00
G. Nutrition and Healthcare Against Aging, Disease, and Poor Mental Health : Vodnoy		\$ 13.00

- Dr. Vodnoy is an internationally known speaker on vision and vision perception. He has presented lectures and workshops in most states of the U.S. as well as Canada, Sweden, England, Denmark, Monte Carlo, Spain, Italy, Belgium, Colombia, Venezuela, and Australia. He is a life member of the American Academy of Optometry, the American Optometric Association, American Optometric Foundation and the Indiana Optometric Association. He is also the recipient of the Illinois College of Optometry, D.O.S. (Doctor of Ocular Science), degree, an honorary degree for having rendered distinguished service in the field of graduate optometry. The Indiana Optometric Association awarded him its Distinguished Service Award. He is also the author of many articles published in optometric journals, and the book "The Practice of Orthoptics". Many vision testing and training instruments invented by Dr. Vodnoy are in use throughout the world.
- Dr Vodnoy has had over 250 *Light Therapy Lamps* made for people with Seasonal Affective Disorder at a very low cost. They are also very valuable for most people for their work. He will explain how to build or obtain one for yourself.
- Since retiring, he has lectured to almost every Lions, Rotary, and Kiwanis Club throughout Michiana. He has also lectured to men's and women's clubs, churches, health support and labor organizations. He has given over 170 courses.
- A crucial need exists for each of us to become very knowledgeable in the field of nutrition and healthcare. He does not treat any illness or prescribe any treatment, diet or exercise. Persons with health problems are urged to see their doctor.

Chronic ills cost \$425 billion

By PAUL RECER
AP Science Writer

1. WASHINGTON — An estimated 100 million Americans are suffering from chronic health conditions, and the nation spends about \$425 billion a year to treat these ailments, a study shows.
2. The study, to be published Wednesday in the Journal of the American Medical Association, found that the vast majority of people classified as having chronic health conditions are not disabled, but are living with the threat of relapses that could suddenly result in lost work days and higher health costs.
3. People with chronic health conditions spend an estimated \$425 billion for treatment and medication, and there is another \$234 billion in indirect costs from such things as lost days of work, the study estimated.
4. The number of Americans with chronic conditions will increase to 148 million by 2030 and the direct costs, in 1990 dollars, will rise to about \$798 billion, the study estimated.
5. Chronic conditions are defined in the study as impairments or diseases that require medication or medical attention and create persistent and recurring health consequences lasting for years.
6. Estimating the number of people with chronic health conditions is important, the researchers found, because these patients account for about 80 percent of all hospital stays and 69 percent of hospital admissions. The average annual health care cost for people with chronic conditions was \$3,074, compared to \$817 for people with acute, or limited, ailments, the study found.
7. The researchers said health care providers and policy-makers "must deal with how to transform our health care delivery system so that it better meets the needs of those living with chronic conditions."

8. Although an elderly person is more apt to have a chronic condition, the study found that adults from ages 18 to 64 years accounted for 60 percent of the people with chronic conditions who were not in nursing homes or hospitals.
9. Researchers at the University of California, San Francisco, based their conclusions on a 1987 survey of 34,459 people not living in institutions.
10. The people were interviewed to determine if they suffered from a chronic condition. Examples of such conditions are diabetes, heart disease, cancer and arthritis.
11. The 1987 survey found that about 90 million Americans, about 45 percent of the noninstitutionalized population, suffered from one or more chronic conditions.

Now start your study of your
Balch Book, READ:

*Preface *How to use this book

Everyone must read - Part I.

*PART II. Read each topic that applies

to you and also those which apply to

most everyone.

Introduction

Trouble Shooting

Aging

Arteriosclerosis

Common Cold

Constipation

Depression

Headache

Indigestion

Memory Problems

Periodontal Disease

Stress

Wrinkling of Skin

For further knowledge, look up each

of the above in your Whitaker Book.

Read and apply

Natural Food

Supplements.

Very Important!

Herbs

Pgs 63-78

Apply as Balch

suggests. Check

the ones New carries

espec.

CHICAGO — The American Medical Association (AMA), the nation's largest physician group, plans to commission a study to evaluate the financial performance of managed care plans. AMA wants to determine if profits represent profiteering at the expense of quality care.

The study comes in the wake of media reports about HMO profit and multimillion-dollar compensation to managed care executives. One HMO CEO reportedly earns \$14.3 million. Seven of the top CEOs in the industry reportedly earn over \$2 million annually. In addition, large HMOs tend to have substantial cash reserves, according to published reports presented at the meeting. The nine largest HMOs in the nation have \$9 billion in cash and marketable securities, according to the reports.

HEALTHCARE COSTS BURDENED BY TASK FORCE SALARIES

Hillary Clinton's healthcare task force spent nearly \$14 million in its failed effort to redesign the national health system, the General Accounting Office (GAO) has reported. The original cost estimate was \$100,000.

In a report released in November, the GAO said 10 government agencies accrued direct and indirect costs of at least \$13,819,000 in support of the project.

About half that amount was in salaries for government workers assigned to help prepare the Clinton administration's healthcare proposal.

Another \$5 million was spent by the Department of Health and Human Services for research contracts "designed or, if previously under way, substantially modified in order to be used in developing the president's proposal," the GAO said.

An association of physicians and surgeons sued successfully to have the records of the first lady's closed-door healthcare-reform meetings opened.

Those records revealed that some consultants hired to work on the report earned more than \$100,000, reported the Associated Press.

Thomas Spencer, attorney for the Association of American Physicians and Surgeons, said the \$14 million price fixed by the GAO understates the amount spent by the task force.

The GAO audit showed that at least 149 employees of HHS worked on task force-related activities at a cost of nearly \$1 million.

Both the Treasury and Veterans Affairs departments rolled up more than \$1 million in task force salaries.

The GAO cost analysis included \$433,966 the administration spent defending against the doctors' lawsuit. It did not include an anticipated six-figure judgment to pay some legal costs of those who sued to open the records.

we must practice Prevention!

*If children go off breast feeding too early, we start murdering them from that day forward. Vast numbers of our kids have significant arteriosclerosis by age 3! proved by autopsies of children killed in auto accidents !!!

So Who Is Sick? - Understand subclinical disorders

Read Dr. Rubens Pg 30 , Dr. Barnard Pgs 62-65 PCRM.

- Healthcare Scientists, who are not being paid off by the food manufacturers and processors, tell us that you are sick if you are:
- A MEAT EATER and eating snack foods. (Are you eating bagels, oyster crackers, "white bread," sweet rolls, crackers, and pasta *made from refined flour?*?)
- A Smoker, STOP.
- Eating foods made from refined flour or so-called "enriched" flour made from refined flour with a chemically added concoction, Pg. 30. They tell us to eat only products made from 100% whole grain.
- *Eating foods which contain hydrogenated oils. Read the labels, if it says hydrogenated oil (fully or partially). Don't Buy it. Don't Eat it. The oils have been converted to "Trans fat" and will plug up your arteries. AVOID saturated fat which comes from all animal products. Remember you may be able to protect yourself against heart disease, cancer and diabetes by adding healthy high-fat foods. Switch to unsaturated fats, like polyunsaturated fats and mono unsaturated oils. Eat foods that are rich in Omega 3. Good fat foods e.g. are avocados, walnuts, almonds, canola & safflower oil, olives and olive oil, tofu, fatty fish (salmon, tuna, sardines, mackerel, herring and other fatty fish).*
- Eating dairy products (with the exception of non-fat, plain yogurt, and non-fat, low heat, non-instantized milk, Pg 114, 115.
- A vegetarian, eating only fruits and vegetables, and not eating an abundance of legumes (beans, whole grain cereals, and unrefined brown rice [Don't eat white rice and processed rice cakes, etc] Pg 191.
- Not getting an abundance of Vitamins A, B, C, D, E, and K, full spectrum minerals, phyto chemicals from food, Pg 52 and 53.
- Not getting adequate exercise Pg 130a
- Overweight. You have a paunchy stomach? GET RID OF IT.
- Let stress and hate dominate your life Pgs 139-141
- Killing your children with kindness, if you are giving them "snack" foods, candies, pg 181, french fries Pg 18, hamburgers, feeding them in fast food joints (so-called restaurants), and letting them drink "soft drinks" Pg 37; F. Murray Pg 127.
- Doing the above; you are on the SAD, Standard American Diet. If you refuse to give up the SAD Diet, realize you (Pg 115) and your family will just go on committing slow motion suicide and condemn yourselves to years of suffering and pain with a high risk of cancer (Pg 37), diabetes, high blood pressure, heart attacks, stroke, cataracts, glaucoma, macular degeneration (Pg 68-71), gall bladder and kidney stones and disease, poor brain function, depression, loss of mental alertness, concentration and learning ability, senile dementia, Alzheimers (Pg 64), Arteriosclerosis (Pg 185), suffer surgery with many times excruciating pain, devastating x-ray, and chemotherapy, toxic pharmacologic drugs, (prescription and non prescription), glandular mis-function and cancer, breast (Pg 66-67), prostate (Pg 172-174), pancreas, pituitary, thyroid, adrenal, testicle, spleen (Pg 90), thymus disorders, and cancer, (Pg. 39)
- If you decide to take up the challenge, join (Pg 38) the American Healthcare System, and leave the Sickcare System, You'll Save Your Life. Congratulations!!!

JAN. 1995 AARP Bulletin
'If we don't do something soon, [Alzheimer's] is going to consume us.'

ZAVEN S. KHACHATURIAN
ASSO. Director For Neuro-
science - NAT'L Institute
on Aging (NIA) - AARP

Khachaturian told the Bulletin he believes the nation must set a goal—the elimination of Alzheimer's—just as President John F. Kennedy set a goal of putting a man on the moon when there was no rocket to do so.

Such a plan would require an enormous national commitment, Khachaturian recognizes. And it would require convincing Americans voters and other decision-makers of its necessity.

"My objective is to stir the pot," he told a Bulletin reporter. Stirring the pot is essential, he believes, because, "If we don't do something soon, [Alzheimer's disease] is going to consume us." *So what about nutrition?*

The urgency, Khachaturian says, stems not only from the need to alleviate the considerable human suffering associated with Alzheimer's, but also from simple demographics.

The rate of Alzheimer's, he notes, rises steeply with age, and the aged population is growing astronomically. According to one study, Alzheimer's strikes 5 percent of people aged 65-74, 20 percent of those 75-84 and an astonishing 47 percent of people over 85.

Significantly, the 85-plus age group is also the fastest-growing segment of the U.S. population.

Federal estimates are that Alzheimer's disease is costing the nation some \$90 billion a year in direct and indirect costs, a sum that includes lost wages and the cost of unpaid care by caregivers.

As the population continues to live to extreme old age, that number is expected to grow exponentially, with as many as 14 or 15 million victims by the year 2040, demographers say.

"Imagine the whole state of Texas,"

says Khachaturian. "Imagine all those people in need of long-term nursing home [and home] care. Our society simply cannot afford it."

I've taken the left column on Pg. 30 and changed it as follows: "It's incomprehensible that the Alheimers Asso., the AARP, the National Institute of Aging & Health, the medical and Pharmaceutical Professions and their related Associations have not made the obvious, glaring connection between the chemicalized, denutritified, contam-

-inated, deeply embalmed garbage of the "modern diet" and the directly resulting brain deterioration resulting in alzheimers in 3% who reach 65, 20% who live to 75, and 47% of those who reach 85. In the literature of the foregoing organizations we never find a word about nutrition as the critical program we have to prevent Alzheimer's Disease.

study in Balch: 2nd Ed. Pg. No.
 Aging 94 94
 Alzheimer's Disease 123
 Arteriosclerosis 136
 Memory Problems 379

study in Balch 1st Ed. Part 3

Improving Brain Function. Read Pgs 105b & 105c

Nutrients Balch recommends:

Essentials:

Acetylcholine

Boron

Coenzyme Q10

Ginkgo Biloba

Lecithin Granules

Multi vitamin and

mineral complex

with potassium

Pycnogenol or

Grape seed extract

Selenium

Vit B complex

+ extra

Vit B6, B12 & B5

Zinc

L-Carnitine

Apple pectine

Calcium & Magnesium

Free form amino-acid

complex

Kelp

Melatonin

RNA & DNA

Superoxide Dismutase

+ copper

Vit C w/ bioflavonoids

Vit E

Butcher's Broom

Stop eating meat &

eat a well balanced

vegetarian diet.

Distilled water only

at least 8-8oz cups.

Dietary fiber (abundant).

Optimum intake of the amino acids

glutamine, phenylalanine,

aspartic acid, tyrosine

dimethylglycine (DMG)

melatonin

RNA & DNA.

Take nutritional

yeast.

Avoid brain inflammation

and headaches.

Balch - Pg 544

Consider DHEA

and HGH (pg 552)

Balch

No Smoking

No alcohol

No processed food

Environmental

toxins

Avoid aluminum

Avoid Mercury

Preserve sense of

smell, hearing &

vision.

Avoid sugar

Avoid allergans

Women avoid low

estrogen levels.

avoid low levels of

choline & ethanolamine

& high levels of

glutamate

avoid drug tacrine.

avoid high cholesterol,

high triglycerides,

drugs, candidiasis,

stress, thyroid

disorders, low blood

sugar, (hypoglycemia)

wide swings in blood

sugar levels, low

neurotransmitters.

NUTRITION TAKES A BOW

From Modern Maturity Nov.-DEC. 1996

Fruits, veggies and vitamins finally get some respect • by Jack Challem

■ He said it 200 years ago, but the latest medical and nutritional research is giving fresh meaning to French gastronome Anthelme Brillat-Savarin's famous philosophy: You are what you eat. To be fair, nutrition's role in health hasn't changed, but scientists' perception of it certainly has. In recent

years they've gained a better understanding of how the human body works at its most basic levels—those of cells and molecules—and how inadequate intake of certain nutrients predisposes people to cancer, heart disease, and Alzheimer's disease. As this knowledge filters through medicine, nutrition is emerging as the new cornerstone of preventive medicine.

This shift evolves from two scientific revelations. One is that many chronic degenerative diseases are largely caused or influenced by free radicals, which are produced by tobacco smoke and other pollutants, as well as by normal body processes. These destructive particles oxidize healthy cells much the way air turns butter rancid, fruit rotten and iron rusty. When they damage your cells' DNA they garble the instructions that tell your body's cells how to behave. (Imagine trying to follow written directions if key words are deleted.) Cells become confused, and malfunction or die—increasing the risk of cancer and other diseases.

But the human body mounts a defense. Antioxidants—which include

vitamins C and E, various carotenoids, and flavonoids—can neutralize the free radicals. Plants produce large quantities of antioxidants, which is why eating plant foods may bolster our protection against disease.

While some individual antioxidants are very important, Lester Packer, Ph.D., a University of California, Berkeley, scientist, stresses that antioxidants work best as a team—what he describes as the “antioxidant network.” Fruits and vegetables containing dozens of antioxidants may be the ultimate source of this network.

The other factor giving nutrition a boost is that scientists now better understand how DNA becomes damaged and subsequently creates cancer cells. Bruce N. Ames, Ph.D., another researcher from UC Berkeley, believes nutritional deficiencies are to blame for much of the damage. For example, he says a lack of the B vitamin folic acid weakens DNA, causing chromosomes to break apart.

Although Ames and Packer consistently emphasize the importance of fruits and vegetables, they also believe modest supplementation can give

people a nutritional edge and reduce their risk of disease—underwrite insurance against nutritional gaps, if you will. In the case of the antioxidant alpha-lipoic acid, supplements might even be preferable to its richest dietary source, red meat.

Eat your fruits and vegetables and take your vitamins is, of course, what you've been told all along. Now that advice has the blessing of many scientists. To put it into practice consider these approaches:

■ Think of the recommended five or more servings of fruits and vegetables daily as side dishes, snacks, desserts.

■ Eat a variety of fruits and vegetables for a diverse selection of nutrients.

■ Select foods with rich and diverse colors. Many of the beneficial antioxidants in fruits and vegetables are also the pigments responsible for making them red, orange, green or yellow.

As for supplements, consider one of two types: a high-potency multivitamin with a broad selection of vitamins, or an antioxidant supplement that includes vitamins C and E, mixed carotenoids (in contrast to just beta-carotene) and alpha-lipoic acid. ■

1. Make a composite list of the foods, supplements, and herbs Balch prescribes for each disorder you've listed.

2. Read top right hand section of page 6a.

3. Turn to pages 47 thru 49. Select the New Equivalent to those Balch suggests.

4. Add their cost and subtract 25% from your total to obtain your expenditure.

5. By becoming a vegetarian, you can greatly reduce your need for supplements.

a. It's now established that ^{the} tobacco ^{industry} adds additives which make the smoker more addicted to smoking.

b. The makers of cereals, cookies etc. from refined flour, add chemicals they list as taste enhancers and "artificial" additives, add substances which causes the user to eat more & more of these junk foods. (E.g. Oreo cookies and sugared cereals.)

#1760 Flaxseed Oil 12oz 10.95/8.25

#1880 Wheat Germ Oil 16oz 10.95/8.25

1st price is reg. 1st. 2nd price is 25% discounted. Both oils are super natural foods

#3040 Alpha Lipoic Acid 100mg 60 caps 19.95

#3042 " " " 250mg 60 caps 29.95

incredibly expensive!

HERE goes more Billions of dollars down the drain, to find sick-care health care systems to treat our self-inflicted illnesses. Many people cannot afford Western Medicine or Eastern Medicine or Alternative Medicine. We must practice prevention of illness health care. Join the healthcare revolution. Change from all sickcare systems to the prevention of illness healthcare system.

ALTERNATIVES: AMA TAKES THEM SERIOUSLY

The fact that the American Medical Assn. (AMA) has encouraged its member physicians to educate themselves about the "techniques and practices of alternative medicine" is seen by many as a landmark event: recognition that "alternative medicine" is here to stay.

The AMA's House of Delegates took the step at an interim meeting in December and also reaffirmed its policy of "encouraging rigorous, scientific studies in the efficacy and safety of unconventional medicine" by the National Institutes of Health Office of Alternative Medicine (OAM).

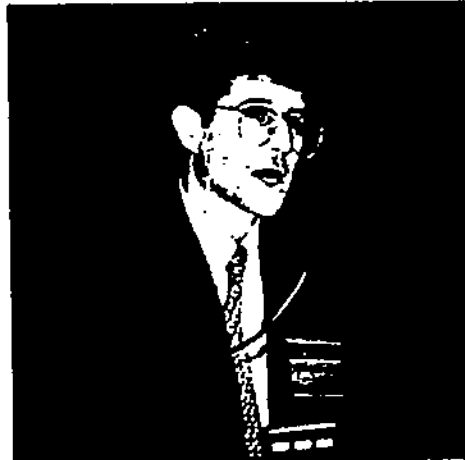
Earlier, and despite a penchant for governmental cost-cutting by the congressional Republican majority, the House approved a 1996 spending bill to increase the funding of the OAM (\$5.4 million in fiscal 1995) to \$7.5 million.

The action came via an amendment to the Department of Health and Human Services (HHS) bill offered by Reps. Jim Moran (D-VA) and Peter DeFazio (D-OR). Rep. Moran said his interest in the subject was piqued by an outpouring of information on the possible value of shark cartilage after a newspaper article described his three-year-old daughter's harrowing struggle with brain cancer.

The Center for Mind-Body Medicine in Washington DC assessed last September's OAM program advisory council meeting, the first official OAM meeting since Wayne Jonas, MD became the organization's new executive director:

"Two researchers reported on their ongoing studies: David Shannahoff-Khalsa of the Institute for Nonlinear Science at the University of California at San Diego said

his treatment of obsessive compulsive disorders using nine techniques from kundalini yoga was thus far proving as effective or more effective than medication.



Upward Bound — New Office of Alternative Medicine (OAM) Executive Director Wayne B. Jonas MD has announced a new staff, a new budget and numerous new projects for the three-year-old unit of the National Institutes of Health (NIH).

"On the other hand, a therapist from Chicago who attended the meeting objected to the use of yoga techniques without teaching the entire yoga belief system, calling it 'cultural imperialism.'"

"A field investigation of 14 patients using shark cartilage revealed that 10 reported better quality of life and four noted no change. The treatment showed no toxicity or side effects."

By fall, the OAM, which had already begun funding \$13 million worth of re-

search through 90 "alternative medicine" projects, announced establishment of eight research centers to receive \$850,000 each year over a three-year period.

While several states have either written in protection of "alternative medicine" in some form into their statutes or are scrambling to do so (see companion article), there have been these developments in the general area:

- New Hampshire has become the 10th state to license practitioners of naturopathic medicine who have graduated from federally accredited four-year naturopathic schools.
- Six states as of 1995 were requiring health insurers to cover acupuncture and 41 states were requiring coverage for chiropractic.
- Oxford Health Plans, described as a fast-growing health-maintenance organization (HMO), is testing an experimental plan for its 1500 employees which allows them to choose naturopaths or homeopaths as primary-care physicians.
- American Western Life Insurance's Wellness Plan (for residents of California, Utah, Colorado and New Mexico) covers visits to acupuncturists, Ayurvedic doctors and lymphotherapists, among others.
- The nationwide Alternative Health Plan covers licensed practitioners of acupuncture, ayurvedic medicine, homeopathy, naturopathy, chiropractic, and traditional Chinese medicine.
- Lovelace Health System, an Albuquerque HMO, is reported to "offer referrals to Mexican folk healers when traditional allopathic medicine fails to offer answers."

CARE FOR THE CARELESS

The head of Washington's largest preferred provider organization in November was sentenced in federal court to two years in prison and \$2.5 million in penalties for a healthcare scam.

John P. Milne of Woodinville WA, chief executive officer of Integrated Systems Inc., was sentenced by US District Judge John Coughenour.

Milne had pleaded guilty earlier to wire fraud, tax fraud, and making false claims against the United States, according to a news release from the office of US Attorney Kate Pfaffner. We cannot afford HMO's PRACTICE "PREVENTION OF ILLNESS HEALTHCARE"

• We must eliminate the SAD American Diet which is the CAUSE of the horrendous Break down of the health of our nation; it's destroying our nation!

• Resorting to a sickcare system is too late. We cannot afford to get sick!

• Refer to Balch and Duke's book on "Green Pharmacy Everytime you have a health problem. Avoid ALL DRUGS"

-8-

To Dr. James F. Balch and Phyllis Balch - I wish to express my great admiration and gratitude for giving our nation your SUPER books. They are a tremendous contribution to the health of our nation. They are the basic references for my future workshops. They have given me a wonderful, rewarding retirement avocation.

This Book is Dedicated 12/1/98 IMPORTANT - Read Balch's Book "The SuperAntioxidants"
To my wife, Elsy, for the patience, encouragement and assistance which she has given me through these many years while I expended very time-consuming effort in the many fields of my profession. Since I am still hard at it, and plan to be for many more years, she deserves continuing thanks.

To my sons, Robert and Daniel, and daughters, Laurie and Shelley, for the love and respect they have accorded me and for being most considerate in sharing their father with his multi-faceted professional endeavors.

JOIN THE WONDERFUL WORLD OF ILLNESS PREVENTION
(AND LEAVE THE WORLD OF SLOW-MOTION-SUICIDE-WHERE MOST PEOPLE ARE)

Edited by
Bernard E. Vodnoy, OD, DOS, FAAO

Many people are digging their grave with their tongue.

These lecture notes are used by Dr. Vodnoy in his presentations of lecture-workshops on "Nutrition and Healthcare Against Aging, Disease and Poor Mental Health. After Topic the titles of the topics are arranged alphabetically to facilitate their reference and use. He goes through them with his participants, highlighting crucial points and then they take them home for their home study.

GOALS: THE GREATEST GOOD FOR THE GREATEST NUMBER AT THE LOWEST COST, WITH THE GREATEST CONVENIENCE AND TIME SAVING. Help prevent constipation, indigestion, aging, disease, poor mental health, tiredness, headaches, nausea, and a host of degenerative and infectious diseases. Persons utilizing any of the materials presented, do so at their own risk and assume complete responsibility for any adverse effects they think they acquired from them. The workshop presenter does not suggest any treatment, diet, exercise program etc., for any person. These must be custom designed for every person. If they have any questions as to the advisability of any of this information for them, they should consult with their doctor or other qualified professional.

PLEASE LEARN THE:

Seven Rules of Good Health and the Memory Keys to the High Density Nutrient Foods. These rules and keys (BORS-WM,BOCAPS-GT,ABC-GLD-PSS) should be memorized and conscientiously applied everyday of your life. Use them as a guide when you are shopping.

IN THESE NOTES YOU WILL LEARN THAT THE MOST IMPORTANT WORD IN THE HEALTHCARE VOCABULARY IS ELIMINATE. Most Americans need to eliminate hundreds (if not thousands) of products from their diet. The most disastrous attitude in our life style is self-indulgence and laziness (bowing to convenience). The key words to good physical and mental health are: "substitute self-discipline for self-indulgence, and practice elimination as a purist". Eliminate hate intolerance.

ONE OF THE GREAT TRAGEDIES IN OUR COUNTRY IS THAT PEOPLE HAVE NOT MADE THE CONNECTION BETWEEN NUTRITION AND POOR PHYSICAL AND MENTAL HEALTH. Vast numbers of people suffer with depression and unhappiness and still persist in adhering to their atrocious SAD (Standard American Diet). = Stupid American Diet

SMS - Slow Motion Starvation - Slow Motion Suicide

OBESITY AND OVERWEIGHTNESS IS A GREAT TRAGEDY. Even being 5 lbs. above a person's optimal weight may indicate that one is at risk of diabetes, high blood pressure and heart trouble (see section on body weight). American Institute For Cancer Research.

The country is now in the throes of the American Healthcare Revolution. It's astonishing that an educated, highly developed society like ours has taken so long to awaken to the sorry facts that over 200,000,000 people follow a nutrition and healthcare program which can best be described as slow motion suicide. For the

Learn Titration: Determine the optimum kind, quantity and times per day (dosage) and titrate your foods and supplements which are right for you. Eat Natural Foods, not processed.
Introduction,

sake of a small amount of convenience, Americans are sacrificing their health, sentencing themselves, especially in their senior years, to pain, suffering, and a tremendous loss of quality of life. These notes provide information which will help you speed up your process of changing from a sickcare system to a healthcare system. IF A FOOD OR DRINK IS ADVERTISED ON TV DON'T EAT OR DRINK IT!

We Americans have spent trillions, quadrillions and much more on our sickcare system (and still continue to do so). When we inevitably become ill and present our body (and mind), which has been injured by our SAD, Standard American Diet and Sickcare System, to our doctor and ask him to "cure" us we find to our dismay that in a great number of illnesses there is NO MEDICAL CURE. As one highly qualified, board certified internist expressed to the editor, "people come to us with self inflicted badly damaged bodies and it is too late. The horse is already out of the barn. All we can do is practice "band-aid" medicine, that is, try to patch them up the best we can, but we sure cannot perform the miracles they are expecting from us, and return them to good health. Astonishingly most of them refuse to change their foods, diet, and lifestyle and go right on suffering!" Please read now "Medicine's Effectivity". Hopefully you will gain the conviction and motivation through the study of these notes, to join the American Healthcare Revolution and start to IMMEDIATELY PRACTICE PREVENTION. BEWARE OF COMMERCIAL EXPLOITATION! *Read "First Pills, Best Pills II" by Sidney Wolfe M.D.*

Read:
Dissent In
Medicine
Dr Pinckney

Read Pg 5
161-167a
to convince
you to be
BE a
Vegan. You
don't should
be
meatless
Eat legumes
instead!

It is very easy to go back to eating ONLY BASIC FOODS. Get rid of all manufactured, processed, preservatives, junk foods and candies and refined flour foods. Eat only FRESH fruits and vegetables, only eat baked goods, breads, cereals, cakes, cookies, pancakes, etc. which are made with 100% whole grains (free of chemical additives). Eliminate fried saturated fat foods, get rid of all junk drinks and booze. Eliminate smoking. ~~Eat very cold water ocean fish and free running chickens which have not been fed tranquilizers, hormones and antibiotics.~~ Eliminate processed fruit and vegetables, processed drinks and juices, buy a juicer, make your own raw vegetable and fruit drinks. Eat food that will spoil but eat them before they spoil. Avoid eating in most restaurants. Carry fresh fruits and vegetables with you that do not have to be cooked. Let them be your lunch, and use them as your mid-morning or mid-afternoon snacks. They will not make you fat, will keep your heart and cardio-vascular system and organs healthy and normalize your cholesterol and triglycerides (blood fats). *Read Pg 5 (Get your Vit D 400 IU daily). It's a problem, each of us have to resolve. We should be converting our tobacco farms into fruit and vegetable farms. *Salmon or tuna and sea of carrot.**

STOP
EATING
MEAT
Many
scientist
no longer
subscribe
to this
advice

Riparian
Zones
Pg 165

Much of
this research
is being
paid for
by taxes.
This is not
free
Enterprise
Risk
Capital.

We should be building thousands and thousands of greenhouses alongside our cleanest rivers and lakes all over the country to raise the finest possible fruits and vegetables. In spite of the acknowledged poor, low and adverse effectivity of medicines the pharmaceutical manufacturers will spend 7.3 billion dollars on the development of new drugs and will pass these costs on to the public. These drugs may very well make us sicker not healthier with atrocious side effects. The irony is, that instead of tackling the causes and practicing prevention, there are 87 drugs being tested for heart disease, hypertension and stroke (in 1987 nearly 2 billion was spent on new drugs for cardio vascular disease); we are spending billions yearly on cancer research (currently 65 drugs are being developed) with very little results that will actually help cancer victims or prevent cancer; whereas, we should be spending vast amounts of money educating the public on how to prevent cancer. We are spending enormous sums of money on developing medicines for Alzheimer's, arthritis, osteoporosis, Parkinson's Disease, etc., whereas the great part of these funds should be spent on PREVENTION to eliminate the causes, and teach people to build up their immunity, and not be committing slow motion suicide.

(1987)

→ I've changed to 0562-VITA 25, 1000 IU and 1000 IU D 250 0.95 retail
-10-
• Half our population is Vit D Deficient - even those who take a multi-vitamin.

Be a light therapist with both visible and invisible light.
Be exemplary, so you will be able to say "not only do as I say
but do as I do!" (Learn to use IR, V.S, and U.V. light.
IR (infra red), VS (visual spectrum), UV (ultra-violet (UVA).

FLG means
food
grade.

Learn to grow vegetables in water in your kitchen by sprouting, learn to grow acidophilus by making your own homemade yogurt, learn to plump-up dried fruits with distilled water, learn to make your own multi-grain cereal from raw grains and legumes, learn to make delicious meals with FRESH fruits and vegetables, legumes, nuts, and ~~cold-water~~ ^{fresh} ~~northern and southern~~ ^{fresh} ~~ocean fish and healthy chicken~~, eat sun-flower seeds, wheat germ, wheat bran, and get a juicer and make your own fresh, raw vegetable and fruit juices. ^{Use dis-} ^{tilled water} ^{hydrogen per-} ^{oxide 3%} ^{to keep} ^{your veggies} ^{fresh} Juicing results in a serious loss of dietary fiber, however, provides a source of mega vitamins and minerals from food.

THE U.S. PREVENTIVE SERVICES TASK FORCE, A 20 MEMBER PANEL OF HEALTH-CARE EXPERTS, APPOINTED BY THE DEPARTMENT OF HEALTH AND HUMAN SERVICES IN 1984, RECENTLY MADE ITS REPORT (MAY 1989). It reviewed more than 2400 scientific studies to assess the effectiveness of more than 100 clinical screening procedures for the prevention of 60 diseases and conditions. They concluded that a vast increase in preventive health care is greatly needed. The panel recommended doctors should spend more time counseling their patients on how to lead healthier lives through diet, exercise and other preventive means - and charge more for that guidance.

TE. H₂O₂
means
Technical
Grade
H₂O₂

The report questions the value of routine screening tests and says physicians should reserve use of these procedures for high-risk patients.

The key to improved health and disease prevention often lies in lifestyle changes made by patients rather than in the broad testing or sophisticated medical procedures performed by health providers."

The guide recommends physicians counsel their patients who smoke on how to kick the habit, their sexually active patients on how to prevent sexually transmitted diseases and all their patients to engage in regular physical activity.

Doctors should also provide periodic counseling on diet and all patients should be urged to use seat belts and should be warned about the effects of drugs and alcohol, the guide says.

The guide also concludes routine chest X-rays are ineffective as a screening tool for lung cancer and that electronic fetal monitoring - currently used in more than half of all deliveries - should be used only for high-risk pregnancies.

The panel said it is unclear whether fecal occult blood testing is an effective routine screening tool for colorectal cancer or whether digital rectal examinations are an effective test for prostate cancer in men who have no symptoms of the disease.

"Our review of the data has shown that routinely performing a uniform battery of tests on patients is often ineffective in improving health and can potentially lead to large numbers of inaccurate results," Lawrence said.

Lawrence said a greater emphasis on providing information and patient counseling will require changes in the attitudes of doctors and in the medical fee system.

"It's going to be a long, hard struggle," he said. *Tradition dies hard!*

"Insurance companies will have to change how they reimburse for physician services, raising what they pay for information and counseling services, which are generally reimbursed at a higher rate."

Be a lay nutritional physician. Learn to be lay therapist. See pg 49.

• Know the difference between food allergies and food intolerance and titrate.

• Read pages 120b thru 120h.

Introduction,

Only 5 percent of federal health care dollars are spent on prevention!

THE EDITOR, BERNARD E. VODNOY, OD, DOS, FAAO, is retired, and is an internationally known speaker on vision and vision perception. He has presented lecture-workshops in most states of the U.S., Canada, Sweden, England, Denmark, Monte Carlo, Spain, Italy, Belgium, Columbia, Venezuela, Australia, and Hawaii. He is a life member of the American Academy of Optometry, the American Optometric Association, American Optometric Foundation, Indiana Optometric Association and is a recipient of the Illinois College of Optometry, D.O.S. (Doctor of Ocular Science Degree) Honorary degree for having rendered distinguished service in the field of graduate optometry. The Indiana Optometric Association awarded him its Distinguished Service Award. He is the author of many articles published in Optometric Journals, and the book "The Practice of Orthoptics". Many vision testing and training instruments invented by Dr. Vodnoy are in use throughout the world.

THE EDITOR WISHES TO MAKE IT CLEAR THAT HE IS NOT A HEALTH AUTHORITY OR ACADEMICALLY TRAINED NUTRITIONIST. This information is NOT original with him, and comes from a great many sources. Further, since he is not a physician, he does NOT diagnose or prescribe any treatment or supplements. If you have any health problems, he urges you to see your doctor. This information was assembled to help you with your illness prevention program and to work more effectively - WITH your doctor. It was not intended to have sick people avoid going to their doctor.

HE HAS LECTURED ON HEALTHCARE TO A GREAT MANY SERVICE CLUBS, SCHOOLS, MANY MEN'S AND WOMEN'S CLUBS, CHURCHES, HEALTH SUPPORT CLUBS, LABOR ORGANIZATIONS, AND MADE MANY TELEVISION AND RADIO APPEARANCES. His Lecture-Workshops on "Nutrition and Healthcare Against Aging, Disease, and Poor Mental Health" are given without charge. 9/77 - Approx. 160 Lectures.

HE BELIEVES THAT A CRUCIAL NEED EXISTS FOR EACH OF US TO BECOME VERY KNOWLEDGEABLE IN THE FIELD OF NUTRITION AND HEALTH CARE. The goals of these seminars are to help people acquire that knowledge, and put it into practice in their everyday life. Our great national health organizations tell us that cancer and many other diseases are largely preventable, that vital keys lay in proper nutrition, and that we can do something about these tragedies. Much of our food is laden with chemical additives, pesticides, insecticides, preservatives, coloring matter, saturated fats, cholesterol, salt, refined sugar, and many of these substances are carcinogenic and productive of many illnesses. Dr. Vodnoy's seminars show people how to eliminate these substances from their diet, avoid being overweight, improve their health, and save great amounts of money. These seminars are a plea to people to GO BACK TO BASIC FOODS. Participants are also frequently given the opportunity, preceding the lecture-workshops, to have their cholesterol, blood pressure, blood sugar, pulse, vision and hearing tested. The cholesterol test is usually \$3.00 to \$4.00 and the balance of the tests are at no charge. Become a vegetarian and the need for many tests will become unnecessary.

WORKING WITH EXPERT BAKERS, HE HAS HELPED DEVELOP BAKED GOODS MADE OUT OF 100% WHOLE GRAINS, NO REFINED SUGAR, NO PRESERVATIVES, NO CHEMICAL ADDITIVES, NO REFINED FLOUR. Since the various grains vary tremendously in the kind and amount of the B Vitamins and minerals they contain, to obtain a balance of these vital nutrients, we must eat a plentiful supply of multigrain (100% whole grain) food products. Therefore, he has helped develop nutritionally sound, outstanding BORS-W Multigrain bread and cereal (with and without wheat). The meaning of BORS-W is explained later in these notes. Also the recipes and preparation directions are given in these notes. *Even in the best breads, some refined flour must be used in order to make the bread rise. Rising can be helped by adding Gluten Flour. Available in New Foods #650, approx 30¢ per lb.* *It's 76% protein. Consider eating Brown Berry Bread, and/or Food for Life Bread. Garden of Eatin' carries it.*

Even be careful with Brown berry Bread - READ THE LABELS!

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WNDU 88.9 + WAUS 90.7*

Introduction,

DR. VODNOY'S AIM IS TO BRING INFORMATION to people which will enable them to achieve the maximum benefits from present day knowledge at the lowest cost with the greatest convenience and time saving. He has developed seven healthcare memory keys which he urges everyone to live by. They are given and explained in these lecture notes. He makes a strong plea to everyone to go back to BASIC, NATURAL, UNPROCESSED FOODS.

He also states that, if we erect economic barriers, we automatically cut out many people. If we make the healthcare program too time consuming, many will not do it because, in many cases, both parents are working many hours in order to earn a livelihood. Fortunately, going back to BASIC FOODS doesn't cost more, it costs far less, because we stop paying the astronomical costs of overhead, processing, packaging, advertising, and distribution. BASIC FOOD preparation and eating is actually less time consuming than eating the Standard American Diet (SAD) food at home or in restaurants. The tremendous rewards in good healthcare are worth the effort. He urges, begs, and pleads with his listeners and readers to make the changes. The SAD (Standard American Diet) is Slow-Motion Suicide (SMS). Organizations are invited to contact him to make arrangements for his lecture programs.

THE EDITOR, DR. VODNOY EXPLAINS WHY THESE NOTES WERE COMPILED. This is my *59th* year out of school (I am now *84 yrs. of age*). As an optometrist, I performed thousands of ophthalmoscopies, which is the procedure used to look inside the eye and see the retina and choroid of the eye. The inside (back) of the eye is called the fundus (plural fundi). Unfortunately, I saw many fundi with hemorrhages out in the periphery and reported it to my patients. I explained to them that they were at great risk of blindness. If a hemorrhage occurred in the central fundus (macula of the eye) they could go from 20/20 to INSTANT BLINDNESS. A great number of these people were overweight with diabetes or high blood pressure, or both, and I begged them to get off the SAD (Standard American Diet). I had my heart broken many times when they would call later and tell me, "I went to sleep last night and I could see very well. I woke up this morning and I AM BLIND." They then hurried to my office being led by the hand by their spouse; and sure enough, when I looked into their eyes, I saw a central retinal hemorrhage over their macula which was blotting out their vision. The prognosis of these dreadful occurrences is VERY poor. The great tragedy of this experience is that in the great majority of cases this blindness was preventable. These lecture notes were compiled because of my knowledge and experience, and my conviction that a great many illnesses are preventable. I resolved to join the illness prevention battle. It is my hope that you, too, if you haven't already, will join actively in this crucial fight and will also get off the SAD (Stupid American Diet) as well as try to convince your family and friends to do so. We ARE our brothers keepers. We should become devoted disciples and missionaries to this cause. It's everybody's responsibility.

PRIOR TO MY EARLY THIRTIES, I WAS A LONG DISTANCE SWIMMER, PLAYED TOURNAMENT TENNIS, PLAYED GOLF, DANCED ON ICE SKATES, AND SPENT FIVE VERY ACTIVE YEARS IN THE ARMY. After I returned from World War II, a year before the Salk Vaccine, I contracted severe polio. It left me with no body muscles, a severely paralyzed left leg, a weakened right leg, a wrecked colon, poor breathing capacity, and now post-polio syndrome of further progressive muscle deterioration. I thereby know what it is to live as a normal person and what it means to live as a handicapped person. My resolve is to help as many people as I possibly can, to wage their prevention of illness battle, not get themselves into a similar mess, and live with the handicaps I've had to for the last *49* years.

Build your health vocabulary.

- Understand:*
- *Reciprocal Innervation of Antagonistic muscles: builds smooth, non-jerking movement; preserve!*
 - *SKELETAL MUSCLES innervated by the voluntary nervous system.*
 - *Smooth Muscles innervated by the autonomic nervous system.*

*Be an oxygen therapist. Learn oral and colon insufflation oxygen therapy.
Learn how to add 3% H₂O₂ to your drinks, fruits and vegetables.*

Introduction,

Be a super antioxidant therapist; learn how to prevent cancer.

I RETIRED NINE YEARS AGO AFTER FINISHING MY AUSTRALIAN LECTURE TOUR. I presented 100 hours of lectures in seven weeks while I was there. This completed over 300,000 miles of travel, to present my lectures throughout the U.S., Europe, Central and South America, Australia, etc., and I was tired, with many, many physical symptoms and illnesses. I resolved that now that I was retired, I would do everything I could to achieve the best possible health. By following the Illness Prevention Program given in this book, I can report to the reader that I am far healthier at 80 than I was at 65. I am practically free of many of my illness symptoms and enjoy a good sense of well being.

AT RETIREMENT, I SUFFERED with VERY dry itchy skin (which was breaking down into skin ulcers), dry brittle hair, dry scalp with severe dandruff, headaches, dizziness, fatigue, severe loss of vision in my left eye, ^{20/100}loss of hearing (which is now very severe), sinusitis, pharyngitis, severe dental problems, nodules on my vocal cords (lost my voice), severe hiatus hernia, severe indigestion, inability to eat many foods, redundant, atonic, elongated colon, very severe constipation, periodic attacks of fungal infection of the crotch and feet with severe nail infection, advanced prostatic cancer, and on and on. Of the men dying of cancer after age 70 the leading cause of death is prostate cancer and I'm 80, I'm living on borrowed time and I wanted to better my longevity. I consulted four family physicians, four internists, three dermatologists, four gastro-enterologists, an allergist, an optometrist, an ophthalmologist, three otolaryngologists, four dentists, five large medical centers, etc. Several months later, after all these examinations and consultations, when I summarized the results I obtained, I realized that I had really gotten NO real definitive help from this large body of practitioners, and if I was going to make any headway, it was going to have to be through a self-help program, since none of these doctors gave advice or guidance in nutrition, exercise and self-health care against the illnesses ^{with which} I was afflicted. . . They assured me that my blood, stethoscope, pulse, EEG, EKG, urine, tests of a complete physical were ok and I really didn't have to do anything. Pretty amazing when you consider the foregoing symptoms. Their advice was that I must realize that I'm an aging old man and I should lie down and take a nap every afternoon which I refused to do.

When I retired at age 65, my body weight was around 138 and I thought I was on a good diet, better than most people, and my doctors considered that a good optimal, "normal" weight for me and that my diet was fine. I went on the healthcare diet AS A PURIST, and started to slowly and gradually lose weight, even though that was not my intention. I went down to 108. Lost 30 lbs in 8 months. I stayed there for a few months and then started gaining weight finally reaching 118. I now stay at 118. I was 20 lbs overweight. What I thought was muscle was fat. My cholesterol went down from 267 to 197, 70 points. All this weight revolution occurred even though I persisted and did not change my healthcare diet through the entire period to this date. 9/98 My cholesterol now stays between 165 to 175.

Many of the symptoms described above have been eliminated or greatly improved and I never lie down for an afternoon nap. The vision in my left eye returned to 20/20 from 20/100. My skin became normal, my dizziness vanished, my dental health became normal, my vocal cord nodules disappeared (aided by vocal exercise). My severe indigestion has been eliminated, my hiatus hernia never bothers me, my sinusitis and pharyngitis has been eliminated. My mental health has been markedly improved to an excellent level. My fatigue and tiredness has been largely eliminated, my severe ^(20/10) _(19/15)

I was in the medical dept of the Army from 1941-1946, and contracted "cold to cold" about a year after I left service. This left me with no body muscles and a badly paralyzed left leg and severely weakened right leg. However with the aid of a wheelchair I was able to conduct my optometrical practice as well as travel over 300,000 miles on my lecture tours.

- Get Hooked On Classical Music -

I have advanced prostate cancer which I've kept in remission for over 18 yrs

Introduction,

itching, dry, wrinkling, grey skin and aging are GREATLY corrected. This has all occurred in spite of my advanced cancer and radiation therapy which gave me ulcerative proctitis and colitis and near constant rectal bleeding - and I still have a sense of good physical and mental well being. I'm healthier at 82 than I was at 65 even in spite of my post polio syndrome weaknesses, *and being 17 yrs. older!*

SELF STUDY PROGRAMS. During the last 18 years, I obtained about 60 books on healthcare, read every healthcare article in our newspaper, in the several magazines and professional journals and newsletters to which I subscribe, subscribed to "Nutrition Action" from the Center For Science In The Public Interest (headed by Michael Jacobson, Ph.D) and all of the CSPI's books, and newsletters, Public Citizen Health Research Group, headed by Dr. Sydney Wolfe, Health Newsletters from Tuft's Medical School, University of California, Mayo's, Harvard, Saturday Evening Post. Studied the publications of the Rodale Press, the Bantam Healthcare Books, the books of Dr. George Watson, "Nutrition and Your Mind", Michael A. Weiner, Ph.D, and Kathleen Goss's "Nutrition Against Aging", "Confessions of a Medical Heretic" by Robert E. Mendelsohn, M.D., "The Vitamin C Connection" by Cheraskin, Ringsdorf and Sisley; Dr. David Reuben's "Everything You Wanted to Know About Nutrition", "McDougall's Medicine", Orville Schell's "Modern Meat"; Roy L. Walford, M.D. The 120 Year Diet"; Jane Brody's books on personal health and nutrition, and "Food Pharmacy" by Jean Carper, *plus many others.*

- The Department of Health and Human Services reports that the fraud and abuse in our healthcare system costs Medicare 10%, \$17 billion, of its annual budget.

- One California company billed Medicare \$5 million for surgical dressings for patients who never underwent surgery. New York doctors who recruited drug addicts of the street billed Medicare \$10 million for conducting un-necessary medical tests on them. No wonder Medicare is going broke!

- 50 million in political contributions were given by the health insurance industry and doctor groups. during the last decade. They stand to reap tens of billions of dollars in new profits under the new Congress plans so-called reform. Many of the Health Maintenance Organizations have turned out ^{their} boards of directors and their chief executive officers have voted themselves enormous salaries and benefits, into millions. We MUST become very knowledgeable and proficient in self-help care study and apply Balch and Whitaker. *Our country cannot afford HMO's or Medicare or Medicaid. we are going to have to practice prevention. By 2040, we will have 15*

- In the first half of 1995 alone the political parties raised \$30 million from the special interests; they raised \$1.5 million from the tobacco industry alone; they raised \$1.6 million from the casino owners and their attached industries!

million people with Alzheimers, the size of the state of Texas. Add to the tragedy of Alzheimers, the millions with Aids, diabetes, heart, and lung, cardio-vascular, senile dementia, and on and on, we have no choice. We must all become vegetarians and smoking must stop.

Audio Tapes: A Diet for all Reasons Family Health Library 7 Cassettes @ \$50.00. \$8.00 each. Dr. Michael Klaper is an incredible, prolific health scientist. He has a large library of tapes, books, videos, etc. Contact NAVS for help in learning to profit from Dr. Klaper and John Robbins.

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- Juicers - Omega
- Light Therapy Lamps
- Super Sonic Toothbrush & Flosser
- Blood Pressure Meter - Digital - Auto Inflation

Additional MUST Reading: (Start with #2, #3, #17.)

- ① "Confessions of a Medical Heretic"
Robert S. Mendelsohn 200 pgs (12.95)
- ② "Prescription for Nutritional Healing" (New Edition)
Balch 600 pages Cost \$19.95
Your cost \$14.00 (for all size pg.)
- ③ "Prescription for Dietary Wellness" (New Edition)
Balch 310 pages Cost \$16.95
Your cost \$11.00
- ④ "Everything You Wanted to Know About Nutrition"
David Reuben, M.D. 285 pages - out of print.
5. "Dissent In Medicine" Mendelsohn et al. (Will loan to you)
Your Cost \$9.00 Out of print.
- ⑥ "Nutrition and Healthcare Against Aging,
Disease and Poor Mental Health"
By Dr. Bernard E. Vodony. Your cost \$13.00
230 pages
7. "Worst Pills Best Pills 11" \$19.00
By Sidney Wolfe, M.D. et al
8. "The Vinegar Book" Cost 14.95
By Emily Thacker (See Pg. of these notes)
9. "Sunlight Could Save Your Life."
By Zaue R. Kine, M.D.
\$19.95 + 3.50 postage = \$23.45
10. "Super Learning 2000" Cost \$21.95
By Sheila Ostrander & Lynn Schroeder
11. "Diet For A New America" \$13.95 (Will loan to you)
By John Robbins (A MUST)
Your cost \$12.00
12. "May All Be Fed: Diet For A New World" (Will loan)
\$23.00 By John Robbins Your cost \$19.55
13. "Vegetarianism: Answers to the Most Commonly
Asked Questions."
(\$.50 by NAVS)
14. "Vegan Nutrition Pure and Simple" \$9.95
By Michael Klaper, M.D.

NAVS - North American Vegetarian Society, Box 72, Dolgeville, N.Y. 13329 \$18.00 Annual Fee

obtain the 4 books I've circled (#2, 3, 6 and 16)
28. "Depression Cured At Last" Sherry Rogers MD \$24.95 (20.00)
29. "Wellness Against All Odds" Sherry Rogers MD \$17.95 (14.40)

Books I'll loan you from my library:

- McDougall's Medicine By John McDougall MD.
- Diet For A New America By John Robbins
- Jane Brody's Nutrition Book. By Jane Brody
- The Food Pharmacy By Jean Carper
- It's All In Your Head By Hal A. Huggins DDS.
- The Price Of Root Canals By Weston A. Price DDS.
- Guide to Personal Health - Jane Brody
- High Performance Health - Yiamouyiannis
- * People's Pharmacy - Joe Graedon \$6.99 OWN
- The Dr's Vitamin & Mineral Encyclopedia - Hendler
- Melatonin - Russell Reiter
- Discovery Of Magnetic Health - Harniss & Hricak
21.95 Your cost 17.50
- Biomagnetic Handbook Philpott & Taplin
The Energy Medicine of Tomorrow 19.95
\$4.40 47pgs Your cost 16.00
- Magnetic Field Deficiency Syndrome - Nakagawa
\$5.00 Your cost 4.00.
- Empty Harvest - Jensen & Anderson \$9.95
- Build your Healthcare Vocabulary.
Study Dr. Balch's Glossary (pgs 573-580)
Use it frequently - It's wonderful!
- 14. "The Super antioxidants" by James Balch M.D.
21.95 - Your price 12.00
- 15. "DNA BREAK THRU" by Stephen Cherniske
6.99 - Your price 4.00
- ① 16. "Green Pharmacy" By Dr. James Duke
Hardcover 29.95 your cost 12.00. Soft cover 6.99
THIS A MUST BOOK!! Your cost 4.30
- 17. "Magnetic Therapy - The pain Cure Alternative" by
Lawrence and Rosch 15.00 - your cost 9.00
- 18. "Fluoride, The Aging Factor" (Will loan)
By John Yiamouyiannis (Approximately 40,000 die
from fluoride each year. Drink only distilled water)
- 19. "Oxygen Therapies" by Ed McCabe. Cost \$ 12.50
Regular price \$18.00 (Will loan.)
- 20. "Dr. Whitaker's Guide to Natural Healing
\$22.95 Hard Cover 417 pages. Your cost \$13.00
Out of print.
- 21. "Pregnancy, Children and the Vegan Diet" \$9.95
By Michael Klaper, M.D.
- 22. "Nutrition Almanac J.D. Kirschman \$12.95
McGraw - Hill (Will loan)
- 23. "Bantam Medical Dictionary" \$6.99
By Bantam Books. This is a very important book.
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- 24. "Healing With Mind Power" (Will loan to you)
- 25. "The Melatonin Miracle" Pierpaoli & Repleon MD.
21.00 Will loan to you.
- 26. Melatonin, Russell Reiter, Soft Cover - 6.99
- 27. Oxygen Healing Therapies 12.50
Nathaniel Altman
- 27. Dissent In Medicine (Will loan)

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- "Prescription for Dietary Wellness" by Balch 320 pages \$16.95
- "Dr. Whitaker's Guide to Natural Healing" Julian Whitaker, M.D. \$

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Number At The Low- with Self-Discipline.

est Cost And Great- We Can Save 800 Billion

est Convenience. Yearly + Great Suffering Death.

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of Modern Health Than Any Dr. Hospital,

Science To Everyone. Drug Or Machine.

USED To Be Inevitable, Factors That Help Us Avoid

The Older We Got, The Cancer Heart Disease, Diabetes

Greater Our Chance Of Within Our Control Not The Dr's

BECOMING ILL. NO LONGER Children Must Be Taught

True. Join The American To Eat A Healthcare Diet.

Healthcare Revolution. Obesity Afflicts 34,000,000;

Leave the Sick Care Even 5 Lbs Overweight May

System For The Self Increase Risk Of Cancer

Healthcare System Disease, Diabetes, etc.

In The Prevention Of Illness We're Too Complacent About

Battle, The Enemy Is Us. Our Bodies.

THESE FIGURES ARE 10 YRS
OLD. THEY ARE MUCH WORSE NOW.

INCIDENCE OF ILLNESS - PREVENTABLE GREAT TRAGEDIES

EVERY 75 SECONDS AN AMERICAN DIES OF CANCER.

Improper Diet Causes 1/3 Of

Deaths Than Smoking.

Cancer Strikes 2 Out Of 3 Families.

One Out Of 4 Get Heart Disease,

One Out Of 5 Get Diabetes,

Many Become Blind.

53,000,000 AMERICANS WILL

Contract Cancer.

2,000,000 Yearly Have Heart Attacks

And 50% Will Die.

MORE CHILDREN, AGE 3 TO 14 DIE

OF CANCER THAN ANY OTHER DISEASE.

24,000,000 WOMEN AND 5,000,000

1,000,000 CONTRACT CANCER YEARLY.

MEN HAVE OSTEOPOROSIS.

500,000 DIE OF CANCER YEARLY.

MEN WITH CHOLESTEROL 203 & 220

142,000 WOMEN HAVE BREAST

CANCER YEARLY; 30% DIE.

HAVE DEATH RATE 73% HIGHER

THAN THOSE BELOW 180. AVERAGE

RESEARCH HAS NOT PAID OFF.

MAN HAS CHOLESTEROL OF 220!

BILLIONS SPENT. EARLY DIS-

COREY MAKES IT SEEM

TABACCO INDUSTRY SPENDS

WE'RE GAINING FALSE HOPE

AND DEATH PROMOTION

400,000 TRANSURETHRAL PRO-

-STATE SURGERIES PERFORMED

TO US; AND THE BILLS GOING UP!

YEARLY. MANY COULD HAVE

MUCH OF THE ABOVE IS

BEEN PREVENTED WITH

PREVENTABLE THAT'S

PROPER DIET.

THE TRAGEDY!

Colorectal cancer - 2nd leading
cancer killer 53,000 deaths each
year. Congress considering
Medicare pay for screening
of Americans over age 65

Enlarge and Make into Posters and Display in School, Church and Businesses.
The same should be done with the many posters in the latter part of this book.

- Don't eat food that's been subjected to

manufacturing processing, has artificial additives and preservatives - they destroy the nutrients and prevent their absorption. Be a vegetarian

- Buy the best basic foods you can. Then don't turn them into junk food by long storage, lack of refrigeration, evaporation, drying, over cooking. Over 125° starts the down slide.

- Don't think you can pop vitamin and mineral pills and avoid a proper healthcare diet - it won't work and will lead to illness.

- You must get your nourishment from fine, basic food.

- If a food is advertised on TV - don't buy it!

Avoid TV Dinners and all JUNK food. They're tremendously expensive and deteriorate health.

- By the time processed foods reach you, they may have been shipped, stored, trimmed, blanched, frozen, canned, condensed, dehydrated, pasturized, sterilized, smoked, cured, milled, roasted, cooked, toasted, or puffed. • What's left after these tortures is then liable to be further stolen by heat, light, oxygen, oxalates, antivitamins, acidity, alkalinity, metal catalysts, enzymes and irradiation. • Eat food that will spoil, but eat it before it does. If it doesn't spoil it's been blanched, boiled, sterilized, preservatives, irradiated, chemicalized, etc. and made unfit for eating. • Prepare your foods from basic foods to KNOW what's in them.

- Every process destroys nutrients, and many of our foods have undergone several processes! They have been de-nutritified into worthless, junk food. Don't buy it - Don't eat it!!

From: Dr. Whitakers Guide To Natural Healing Pg 11.

According to detailed analysis of all available data, there are over 10 million adverse reactions yearly from FDA-approved over-the-counter and prescription drugs. We are not talking about mild nausea or headaches. Between 60,000 and 140,000 people die each year from adverse drug reactions. Each year, more Americans die after taking prescription drugs than died in the entire Vietnam war. This constitutes a real "public health issue." / in this book read pg. 996.

On the other hand, only a single death related to a vitamin supplement was reported in the United States by the American Association of Poison Control Centers (AAPCC) in 1990. One death.

THE GREAT VITAMIN C ROBBERY v MURDER

	STORED	% Vit C Loss
Potato	4 Months	50%
Apple	3 Months	50%
Spinach	24 Hrs. At 66°-78°	29%
Spinach	1 Week At 32°-42°	55%
Spinach	5 Weeks Frozen	100%
Canned Foods Blanched Or Cooked		13-63%
Canned Grapefruit	12 Weeks	70%
Potatoes Baked In Skin-On Steam Table	30min	34%
" " " " " " " "	" " " " 45min	59%

Potatoes Peeled, Sliced, Mashed " " " 0min 39%
Green Vegetables - Frozen 75%
Peas - Frozen 95%

Frozen Foods Lose Nutrients In Defrosting.

All Drugs, Including Aspirin, Greatly Deteriorate Vit C.

Women On Birth Control Pills Need 500mg Vit C Daily

Smokers MUST Have 500mg Daily From Foods.

Potatoes, 3.5oz. Baked In Skin - Calories 93 ^{Some} Vit C loss.

Potatoes, 3.5oz. French Fried - Calories 274 ^{Great} Vit C loss.

Potatoes, 3.5oz. Potato Chips - Calories 570 ^{Very Great} Vit C loss.

• At this point in the course you must learn about OXYGEN and its vitamines in health and disease prevention

READ THESE TWO BOOKS

"OXYGEN THERAPIES" by Ed McCabe 180¢. Your cost 125¢

"OXYGEN BREAK THROUGH" by Sam Hendler M.D.

"OXYGEN HEALING THERAPIES" by Nathaniel Altman 125¢

Fordhook Frozen Lima Beans

MEGA BRAND - Fordhook Lima Beans

Serving Size 1/2 cup (89g)

Calories 25

Total Fat 0g
Sat Fat 0g
Cholesterol 0g
Sodium 110mg 5%

Total Carbohydrates 17g

Dietary Fiber 5g
Sugar 1g
Protein 6g
Vit A 2%

*Vit C 25%
Calcium 0%
Iron 4%

Fresh Like Fordhook Lima Beans

Fresh Like Fordhook Lima Beans

Serving Size 1/2 cup (83g)

Calories 110

Total Fat .5g
Sat Fat 0g
Cholesterol 0g
Sodium 140mg 6%

Total Carbohydrates 22g

Dietary Fiber 5g
Sugar 1g
Protein 6gm
Vit A 0%

*Vit C 4%
Calcium 2%
Iron 6%

- Read the labels; there can be a significant difference between brands. Note the differences in calories, total carbs, Vit. C.

Edy's Fat Free Frozen Yogurt 1/2 cup - 4oz

Serving Size 1/2 cup (67g) 4oz

Calories 80 Calories from Fat 0

Total Fat 0

Saturated Fat 0

Cholesterol 0

Sodium 65mg

Total Carbohydrates 18g

Dietary Fiber 0

Sugars 14g

Protein 3g

Vit A 2%

Vit C 0

Calcium 45%

Iron 0

Cultured skim milk, sugar, corn syrup,

Calcium carbonate, whey protein, black

cherries, high fructose corn syrup,

Modified food starch, cellulose gel,

Dextrose, cellulose gum, mono and

diglycerides, natural flavor, carra-

geenan, sodium citrate, carob bean

gum, red #40, blue #2, green #3, annatto

color

Compare: In the protein, 40 more calories

No: Vit. C, B1, B2, B12, Potassium. Also

no undesirable additives like carrageenan

dyes (red, blue, green.)

Reads like a chemistry book, we don't read this junk.

Dannon's Non-Fat Plain Yogurt

Serving Size 1 cup - 8oz

Calories 120 Calories from fat 0

Total Fat 0

Saturated fat 0

Cholesterol 5mg

Sodium 170mg

Total Carbohydrates 18g

Dietary Fiber 0%

Sugars 10g lactose a normal component of milk

Protein 18gm

Vit A 0%

Vit C 6%

Calcium 40% plain means not

Iron 0 polluted by contaminating

Vit. B1 4% pollutants.

Vit. B2 30%

Vit. B12 20%

Potassium 17%

Dannon 1-800-321-2174-3

ECH₂O₂, Inc. PO Box 126, Delano, CA 93235

The information contained in this booklet is for educational purposes only. It is not to be considered medical advice, diagnostic or prescriptive. See your doctor for qualified health care. *The material published in pages 19-20 was taken from Walter Grotz's publication ECH₂O₂, Inc.*

41 million Americans have serious arthritis. 20 million have herpes. 13 million have serious diabetes. This is 74 million or over one third of our population and we have only covered three diseases. At the beginning of this century we were one of the healthiest nations on this earth. We are the wealthiest, but far from being the healthiest.

Some of the reasons for this are that our air, water and food are not what they were 75 to 100 years ago. We have polluted the air, we need additives for our water to make it safe to drink, and our food has lost its trace elements, long leached from our soils. We now must use supplements to help supply what has been lost. One of these supplements is oxygen.

Oxygen is the most abundant element on earth. It comprises 45.6% of the earth's crust and 20.95% of dry air. It is one of the most vital and necessary elements to support life. Oxygen is so vital to good health that hospitals have it installed in patient's rooms. All rescue units, ambulances and life support systems are equipped with it. Without oxygen you can live only a few minutes.

Through his research efforts, Dr. Edward Carl Rosenow (1875 - 1966) worked out the causes of some 35 diseases and was the author of 450 medical papers. Dr. Rosenow developed a technique by which microorganisms in the body could possibly be eliminated or controlled. The hydrogen peroxide program is a method of taking oxygen into the body to possibly eliminate or control these microorganisms.

His basic tenet was that we live in an ocean of microorganisms. The body is like a world. In the world of the body are millions of microorganisms — little creatures each seeking their own habitat, food and environment. Just as animals in our world live in different climates, eat different foods, multiply, prey upon others, infect, go through metamorphosis, pollute streams, so these little microorganisms invade our bodies and seek out their proper habitats. These microorganisms do the following: **READ CAREFULLY. VERY IMPORTANT!**

- gnaw away at the joints (inflammatory arthritis)
- Give off calcium waste matter that cements bones together
- lodge in liver and kidneys, and with their bite form stones
- live in the very lining of the arteries and leave their hard deposit on the walls of the arteries
- cling to the lining in the nervous system and short-circuit some of the electronics in the central computer of the brain
- attack cells and enter them, building cocoons around the stricken cell; thus cutting off the blood supply and causing the cell to lose its specific function, so that it can only live and multiply into cancerous tumors.

One of the earliest sources of this healing oxygen is dro- peroxide. Hydrogen peroxide traces back through to the origin of time. It was first reported by the French chemist Louis-Jacques Thenard in 1818, who named it eau oxygenee. It is very natural, it is found in traces as rain and snow (McGraw-Hill Encyclopedia of Science & Technology 5th Edition, p. 747). In 1863 Meissner proved its presence in the rainwater collected during thunder storms and this has been corroborated by others (Journal of the American Medical Association, Vol. X, No. 9, March 3, 1888). It gets into our rain and snow from the ozone layer high in the earth's atmosphere. It can also be created in the atmosphere when ultraviolet light strikes oxygen in the presence of moisture. Ozone (O₃) is free oxygen (O₂) plus an extra atom of oxygen. This extra atom of oxygen splits off very easily, and does so when it comes in contact with water. Water (H₂O) now becomes hydrogen peroxide (H₂O₂).

Compared to chlorine, bacterial and viral disinfection with ozone is up to 5000 times more rapid. (McGraw-Hill Encyclopedia of Science & Technology 5th Edition, p. 728) This is why many cities in Europe use ozone and hydrogen peroxide in their drinking waters. Many brands of bottled water that you buy in this country have been ozonated for your protection.

Hydrogen peroxide is found in fresh fruits and vegetables; some of it comes from rain and some of it is manufactured in the photosynthesis process. (Gen. Biochemistry Furton & Sommonds, p. 338) If we were to eat fresh fruits and vegetables in their raw state, we would get this healing oxygen into our bodies.

We tested human mother's milk and found it contains a good amount of natural hydrogen peroxide. Colostrum milk (first milk secreted after birth) has an even stronger hydrogen peroxide content. In testing natural spring waters, we found the spring water at Lourdes, France contained the strongest amount of hydrogen peroxide in its natural form.

Since 1966 there have been over 7000 medical articles published about hydrogen peroxide. They do not all concern human beings and they are not all positive. An article on the internal injection of hydrogen peroxide appeared in The Lancet Feb. 21, 1920 (Influenza Pneumonia: The Intravenous Injection of Hydrogen Peroxide pp. 432-433). An article on external use appeared in Hautarzt 12:425 Sept. 1961 Germany (On a Simple and Painless Treatment of Warts). In 1983 there were over 100 articles published on the subject of hydrogen peroxide. From 1880 to 1904 Charles Marchand published eighteen books on the subject of hydrogen peroxide and ozone. A listing of some of these articles appears later in this booklet. The complete articles can be found in medical libraries.

The Food & Drug Administration (FDA) in Federal Regulation Vol. 46 Number 6 Jan. 9, 1981, in effect gave the food industry a green light to use hydrogen peroxide in the "aseptic" packaging process. The FDA has further ruled that hydrogen peroxide can be used in the processing of cheese and related cheese products (part 133), eggs and egg products (part 160), and as an antimicrobial agent in whey processing. They have also ruled it to be used in cleaning and healing mouth

injuries. It is used in milk in 45 countries around the world. A good article on the "Aseptic" process for milk can be found in *Trailer Life* Nov. 1981 pp. 51-52.

NOTE: THE FDA HAS NOT APPROVED OF THE USE OF THE PURGING SCHEDULES OR OF THE DRINKING OF HYDROGEN PEROXIDE INTERNALLY. THOSE WHO CHOOSE TO DO SO DO IT AT THEIR OWN RISK. THE INFORMATION IS PASSED ALONG FOR RESEARCH AND EDUCATIONAL PURPOSES ONLY AND THOSE WHO CHOOSE TO USE IT ASSUME ALL RESPONSIBILITY PERSONALLY.

Pg. 20 is from Walter Grotz.

CAUTION: If any strong solution of hydrogen peroxide concentrate is spilled on the skin, flush the skin immediately with water. Fingertips may whiten temporarily.

KEEP HYDROGEN PEROXIDE CONCENTRATE OUT OF THE REACH OF CHILDREN AT ALL TIMES. DO NOT TRANSFER HYDROGEN PEROXIDE OF ANY STRENGTH TO AN IMPROPERLY LABELED OR UNLABELED CONTAINER.

Store 6% or 3% food grade hydrogen peroxide in a cool, dry place. Refrigeration is not necessary.

1 Safety & Storage Tips For Hydrogen Peroxide

Accidents can occur with hydrogen peroxide concentrate when safety precautions are not taken and directions are not followed. For this reason, we want to stress some safety and storage tips. Read them carefully and review the way you handle the concentrate to determine whether changes must be made with your handling procedure.

- 1) Keep hydrogen peroxide concentrate out of the reach of children.
- 2) Never transfer the concentrate into unlabeled or improperly labeled containers.
- 3) If hydrogen peroxide concentrate is accidentally spilled on the skin, flush the area immediately with running water.
- 4) If hydrogen peroxide concentrate is accidentally ingested, drink large amounts of water to dilute. Stay upright and contact your doctor. It could be toxic or fatal if swallowed at full strength.
- 5) For spillage of hydrogen peroxide concentrate, dispose of according to Federal, State and local regulations.

Flush the spill area with water. Do not return the spilled material to the original container. Prevent undiluted hydrogen peroxide from entering into the sewage system. Report spills in compliance with Federal, State or local regulations.

Large quantities, such as drums, should be stored in a cool, dry area. When high concentrations of hydrogen peroxide come in contact with organic materials, this may form explosive mixtures (spontaneous combustion).

Once a sterile spigot has been inserted into the drum, it should remain in place. Repeated insertions may cause lint or dust to enter, which could cause contamination of the product. After filling properly labeled containers, put a child-proof cap on and cover the spigot with a plastic dust protector.

Small quantities of 35% food grade hydrogen peroxide should be stored in the freezer over-wrapped with black plastic and labeled as to contents. Thirty-five percent food grade hydrogen peroxide will not freeze unless the temperature is 33 degrees below zero.

Low concentrations, such as 3% or 6% would freeze, so freezer storage is not recommended. Store properly labeled containers in a cool, dry place out of the reach of children.

Learn the meaning of stabilized oxygen. Sometimes referred to as Vitamin D. It's referred to as a safe, non-toxic solution of sodium chloride (otherwise known as salt) and distilled water. Suggested use is 10-20 drops in a glass of pure water 2-3 x per day. The latest Vitamin D is stabilized with potassium.

Deep breathing of fresh air, along with exercise, is very important. Hydrogen peroxide is sold in drug stores and grocery stores as an antiseptic; it has been around for many years. It is called Oxygen Water in many countries around the world. In Spain it is called Agua Oxigenada, in Italy Acqua Ossigenata, in France Eau Oxigenee. In the United States we call it Hydrogen Peroxide (H_2O_2).

ADDITIONAL USES FOR 35% FOOD GRADE HYDROGEN PEROXIDE

Caution: If you spill 35% H_2O_2 on your skin, rinse immediately with water. Avoid any contact with eyes.

* To make a 3% solution mix 1 oz 35% to 11 ozs water. Use distilled water as often as possible.

Vegetable soak: Add $\frac{1}{2}$ cup 3% H_2O_2 to a full sink of cold water. Soak light skinned (like lettuce) 20 minutes, thicker skinned (like cucumbers) 30 minutes. Drain, dry and refrigerate. Prolongs freshness.

If time is a problem, spray vegetables (and fruits) with a solution of 3%. Let stand for a few minutes, rinse and dry.

Leftover tossed salad: Spray with a solution of $\frac{1}{2}$ cup water and 1 tsp 3%. Drain, cover and refrigerate.

To freshen kitchen: Keep a spray bottle of 3% in the kitchen. Use it to wipe off counter tops and appliances. It will disinfect and give the kitchen a fresh smell. Works great in the refrigerator and kid's school lunch boxes.

Marinade: Place meat, fish, or poultry in a casserole (avoid using aluminum pans). Cover with 3% H_2O_2 . Place loosely covered in refrigerator for $\frac{1}{2}$ hour. Rinse and cook.

In the dishwasher: Add 2 ozs of 3% H_2O_2 to your regular washing formula. $2 \text{ oz} = \frac{1}{4} \text{ cup}$.

* **Sprouting seeds:** Add 1 oz. 3% H_2O_2 to 1 pint of water and soak the seeds overnight. Add the same amount of H_2O_2 each time you rinse the seeds.

House and garden plants: Put 1 oz. 3% H_2O_2 in 1 quart water. (Or add 16 drops 35% to one quart water.) Water or mist plants with this solution.

Insecticide spray: Mix 6 ozs. white sugar, 4-8 ozs. 3% H_2O_2 in 1 gallon of water.

Humidifiers and steamers: Mix 1 pint 3% H_2O_2 to 1 gallon of water.

Laundry: Add 8 ozs of 3% to your wash in place of bleaches.

* The dropper from a 2oz. dropper bottle (when tightly squeezed) picks up $\frac{1}{4}$ tsp. (approx 18-20 drops).
 $1 \frac{1}{2} \text{ tsp} = 9 \text{ to } 10 \text{ drops}$
 $\frac{1}{4} \text{ tsp} = 18 \text{ to } 20 \text{ drops}$

* 1 part H_2O_2 + 11 parts H_2O = 12 parts 35%.

$\frac{35\%}{72} = 3\% H_2O_2$ Concentration. You may use this formula for all your H_2O_2 dilutions to determine concentrations. EG. estimating 72 tsp in an 8oz glass, if you added 1 tsp of 3% H_2O_2 it would reduce the concentration to .04% H_2O_2 . $3\% \div 72 = .04\%$

* Food grade 35% H_2O_2 is difficult and expensive to purchase. In 15 gal drums it is 168¢ per drum. Technical grade 76 35% H_2O_2 in 15 gal drums is approx. 115¢. The 3% H_2O_2 we buy in the stores is Tech. Grade. It has .001% phosphoric acid added to preserve stability. Since this is such a minute %o, I purchase it at Myer Dept Store @ 1¢ = 6¢ and use it for all my oxygen usages.

Shower: Keep a spray bottle of 3% H_2O_2 in the shower. Spray your body after washing to replace the acid mantle on your skin that soap removes.

Facial: Use 3% on a cotton ball as a facial freshener after washing.

* **Rejuvenating/Detoxifying bath:** Add 6 ozs 35% H_2O_2 to $\frac{1}{2}$ tub of water. May increase H_2O_2 up to 2 cups per bath. Soak at least $\frac{1}{2}$ hour.

Alternate bath: Add $\frac{1}{2}$ cup 35% H_2O_2 , $\frac{1}{2}$ cup sea salt, $\frac{1}{2}$ cup baking soda or epsom salts to bath water and soak.

Foot soak: Add 1 $\frac{1}{2}$ ozs. 35% H_2O_2 to 1 gallon water and soak.

Athlete's foot: Soak feet nightly in 3% H_2O_2 until condition is improved. *Peeling between toes; use 'q' tip and apply.*

Mouthwash: Use 3% H_2O_2 . Add a dash of liquid chlorophyll for flavoring if desired.

Toothpaste: Use baking soda and add enough 3% H_2O_2 to make a paste. Or just dip your brush in 3% H_2O_2 and brush.

Douche or Enema: Add 6 Tbls. of 3% H_2O_2 to a quart of distilled water. 6 Tbls. is the maximum amount to use. *Insufflation.*

Colonic: Add $\frac{1}{2}$ pint 3% H_2O_2 to 5 gallons warm water. (Note: 1 pint 3% is the maximum amount to use.)

Pets: For small animals (dogs & cats) use 1 oz. 3% H_2O_2 to 1 qt. of water. $\frac{1}{33} \quad 3 \div 33 = .09 \text{ concentration}$

Agriculture: Use 8 ozs. 35% H_2O_2 per 1000 gallons of water. If you do not have an injector, start out by using 1 tsp. 35% H_2O_2 in the drinking cup at the slanchion.

For the drinking water of cows that are sick, use 1 pt. 3% H_2O_2 to 5 gallons of water. To drench sick calves, put $\frac{1}{3}$ pt. of 3% H_2O_2 in a pt. bottle and fill remainder with water. Do this twice a day. For an adult cow, use the same procedure, but use a quart.

To foliage feed crops, put 5 to 16 ozs. of 35% food grade hydrogen peroxide into 20 gallons of water. Spray on plants early in the morning when the dew is still on them and the birds are singing. (It has been

* For some disorders, Balch suggests 9 drops of Aerobic 67 (4% H_2O_2) in a glass of water. This would equal 14 drops of 3%.

To calculate H_2O_2 concentration in Enema above: $1 \text{ qt} = 32 \text{ oz. } 6 \text{ TBLs. } 2 \text{ oz.}$
 $\frac{2}{32} = \frac{1}{16}, 3\% \div 16 = .187\% \text{ concentration.}$
 $\therefore 1 \text{ Tbsp} = .187 \div 6 = .031\% \text{ concentration.}$
 For intravenous feeding: H_2O_2 concentration is .0375% or lower. Must be done by Dr.
 For use of 35% H_2O_2 added directly to 8 oz of water. Start with 2-4 drops. Increase a few drops daily to establish your tolerance and desired individual dosage.

Some report taking up to 10 drops of 35% in 8oz. water = concentration approx .06%
 Taking 20 drops = " " .12%
 See Tom Pg. 116 Left Column. I have never tried it

* 35% H_2O_2 is available from: PAT HADEN - phone 679-9881 (Osceola)

* 3% Hydrogen Peroxide is too weak to use in a Rejuvenating-Detoxifying Bath. USE the 35%

When we have too many free radicals in our bodies, cell damage can occur. In his book Free Radicals and Disease Prevention, David Lin lists how excess free radicals can cause harmful effects to cells; they can

- break off the membrane proteins, destroying a cell's identity
- fuse together membrane lipids (fats) and membrane proteins, hardening the cell membrane and making it brittle
- puncture the cell membrane, allowing bacteria and viruses easy entrance
- disrupt the nuclear membrane, opening up the nucleus and exposing genetic material
- mutate and destroy genetic material, rewriting and destroying genetic information
- burden the immune system with the above havoc, and threaten the immune system itself by undermining immune cells with similar damage?

As a result, free-radical damage has been linked with a number of degenerative diseases, including atherosclerosis, cancer, cataracts, diabetes, allergies, mental disorders, and arthritis. Excess free radicals also play a role in the aging process and decreased immune response, opening the door to a variety of immune disorders, including the onset of AIDS.*

How are Bio-Oxidative Therapies Used?

In bio-oxidation therapies tiny amounts of ozone or hydrogen peroxide, added to a base of oxygen or water, are used to flood the body with active forms of oxygen by intravenous, oral, intradermal, or rectal means. Once in the body, the ozone or hydrogen peroxide directly and indirectly becomes damaging to viruses, bacteria, fungi, microbes, and diseased and deficient tissue cells. Through oxidation, these disease microorganisms are killed and eliminated from the body. In this way, ozone and hydrogen peroxide act as purifying agents.

It has been estimated that over ten million people (primarily in Germany, Russia, and Cuba) have been given bio-oxidative therapies over the past seventy years to treat over forty different diseases, including heart and blood vessel diseases, diseases of the lungs, infectious diseases, and immune-related disorders. According to the International Bio-Oxidative Medicine Foundation (IBOMF), the following conditions or diseases have been treated with ozone and hydrogen peroxide with varying degrees of success. In some cases bio-oxidative therapies are administered alone, while in others they are used in addition to traditional

medical procedures (such as surgery or chemotherapy) or as adjuncts to alternative health practices like megavitamin therapy, acupuncture, or herbology.

- Average both tabs filled to the overflow on 1st = 62 gallons. 4 cups = 1 qt = 1 gallon 1 gal. = 16 cups 62 gallons = 992 cups. 1 cup 35% H₂O = 35/100 = 0.35
- Also consider oxygen therapy in cases of undiagnosed disorders and "just not feeling good" disorders. Dr's call it subclinical.
- Intravenous is called infusion (0.0375% H₂O₂). Oral and rectal is called insublation.
- With oral Inse 370.
- With colonic Inse from .06 to .187%

Pulmonary Diseases

- Asthma
- Bronchiectasis (dilatation of bronchus or bronchi)
- Chronic bronchitis
- Chronic obstructive pulmonary disease
- Emphysema
- Pneumocystis carinii (PCP or AIDS-related pneumonia)

Infectious Diseases

- Acute and chronic viral infections
- Chronic unresponsive bacterial infections
- Epstein-Barr virus (chronic fatigue syndrome)
- Herpes simplex (fever blister)
- Herpes zoster (shingles)
- HIV-related infections
- Influenza
- Parasitic infections
- Systemic chronic candidiasis (candida)

Immune Disorders

- Diabetes mellitus Type II
- Hypersensitive reactions (environmental and universal reactors)

The printed materials on page 22-24 are from "Oxygen Healing Therapies" by Nathaniel Hyman. You are urged, strongly, to read this book as well as Dr. Lin's book

- I started with 1/4 tsp 3% - per 500 water in my drinks and my soak the of my vegetables. After 3 months I increased to 1/2 tsp. of 3%. I've detected no adverse reactions.
- Remember if you try oxygen therapy, you are on your own. You assume complete responsibility.

I am presently at the level of 1/4 tsp 3% per 500. water. I prefer Oral insublation to infusion H₂O₂. See Pg 24 top right

Multiple sclerosis
Rheumatoid arthritis

1 oz = 30 ml

16 oz = 480 ml

Other Diseases 1 tsp. of 3% H_2O_2 in 8 oz water =
0.4% concentration

Alzheimer's disease
Cancers of the blood and lymph nodes "
Chronic pain syndromes (due to multiple causes)
Migraine headaches
Pain of metastatic carcinoma
Parkinson's disease

Understand "free radicals" and antioxidants,
both natural and supplements.

How Do Bio-Oxidative Therapies Work?

According to Frank Shallenberger, M.D., bio-oxidative therapies have been found to have the following effects on the human body:

1. Bio-oxidative therapies stimulate the production of white blood cells, which are necessary to fight infection.
2. Ozone and hydrogen peroxide are virucidal.
3. Bio-oxidative therapies increase oxygen and hemoglobin dissociation, thus increasing the delivery of oxygen from the blood to the cells.
4. Ozone and hydrogen peroxide are antineoplastic, which means that they inhibit the growth of new tissues like tumors.
5. Bio-oxidative therapies oxidize and degrade petrochemicals.
6. Bio-oxidative therapies increase red blood cell membrane distensibility, thus enhancing their flexibility and effectiveness.
7. Ozone and hydrogen peroxide therapies increase the production of interferon and tumor necrosis factor, which the body uses to fight infections and cancers.
8. Bio-oxidative therapies increase the efficiency of the antioxidant enzyme system, which scavenges excess free radicals in the body.
9. They accelerate the citric acid cycle, which is the main cycle for the liberation of energy from sugars. This then stimulates basic metabolism. It also breaks down proteins, carbohydrates, and fats to be used as energy.
10. Ozone and hydrogen peroxide therapies increase tissue oxygenation, thus bringing about patient improvement.¹⁴

HOW IS THIS THERAPY ADMINISTERED?

(By infusion)

Note

Weak, very pure Hydrogen Peroxide (0.0375% or lower concentration) is added to a sugar or salt water solution, the same as used for intravenous feeding in hospitals. This is injected in doses from 50 to 500 mL into a large vein, usually in the arm, slowly over a period of 1 to 3 hours, depending on the amount given and the condition of the patient. It is painless, excluding the very small needle stick. Treatments are usually given about once a week in chronic illness, but can be given daily in patients with acute illness, such as pneumonia or flu. Physicians may

recommend 1 to 20 treatments depending on the condition of the patient and the illness being treated. The patient is rechecked usually in 1 to 3 months to evaluate the benefit and determine if additional treatments may be necessary. Some patients, especially with chronic illness, may need to take follow-up treatments in a series of 5 to 10 treatments, or may need to be maintained indefinitely on a regular monthly schedule. As many as 50 treatments have been administered to several patients without complications. An experienced physician must decide how many treatments are necessary in each individual case.

WHAT ABOUT THE SAFETY OR SIDE EFFECTS OF THIS THERAPY?

Over the past 50 years, hundreds of patient have received Hydrogen Peroxide without reported serious side effects. Early use of Hydrogen Peroxide was noted to occasionally cause irritation of the vein being infused. This troublesome side effect was eliminated after the concentration and rate of infusion were adjusted downward. The IBOM Foundation publishes and distributes a Protocol (Physician Instruction Book) on the proper administration of Hydrogen Peroxide. A protocol is one way for physicians to properly learn about any new therapy. Also, regular training workshops are offered. Any interested physician can contact the IBOM foundation for information.

International Bio-Oxidative
Medicine Foundation

P.O. Box 891954

Oklahoma City, OK 73189-2954

Electron/oxygen transport substances. (Real pgs 179 thru 187 in Ed McCabe's book on Oxygen Therapies.) Aerobic 07 (50 ml) = 202 price \$7.95. Aerobic 07 (30 ml. = 1 oz) = 11.95, oxygen content 4.5%.

To make a 3% solution of hydrogen peroxide, mix 1 oz 35% to 11 oz water produces 3%. If you wish to make a 6% solution use only 5 oz of water. To make a 4.5% solution use only 8.25 oz of water. The cost of technical grade 35% hydrogen peroxide is approx. 12¢ per gallon.

Read and apply Dr. Balch's new book
"The Super-Antioxidants"
Nutritional Antioxidants

Because excess free-radical activity can seriously deplete our body's natural antioxidant reserves, nutritionists recommend that we augment those supplies with foods rich in antioxidants. Three common vitamins—beta carotene (vitamin A), vitamin C, and vitamin E—are important antioxidants, as are minerals like zinc and selenium. According to Natalie Angier, writing in *The New York Times Magazine*:

Vitamin E and beta carotene both are used in the fatty membranes of the cell, sponging up free radicals before the vagrants can poke holes into the cellular sheath. Vitamin C, a water soluble compound, works in the aqueous innards of the cell, coupling with radicals and allowing them to be flushed away in the urine.¹⁰

Many of the foods we eat—green and yellow vegetables, fruits, nuts and seeds—contain antioxidant vitamins and minerals in abundance and are recommended as a major part of all healthy diets. Many people take nutritional supplements rich in antioxidants for additional protection. The role of nutrition as an adjunct to bio-oxidative therapy will be discussed in chapters 9 and 10.

Bio-Oxidative Therapies

We mentioned earlier that a major part of free-radical activity involves oxidizing the pathogenic by-products of modern living, which result from environmental pollution, stress, and radiation. A growing number of physicians believe that if the body's antioxidant requirements are met, adding certain oxidative substances to the body is safe as long as those substances are of the right kind and are introduced in the proper manner. Utilizing the principles of oxidation to bring about improvements in the body is known as *bio-oxidative therapy*. This term was first introduced in 1986 by Dr. C. H. Farr in his monograph *The Therapeutic Use of Intravenous Hydrogen Peroxide*.

While aerobic-type exercises; deep, rhythmic breathing; and high-oxygen foods (like fresh fruits and vegetables) promote the normal oxidation process in the body, two natural elements—ozone and hydrogen peroxide—are among the most powerful oxidizers available to humanity and form the essence of bio-oxidative therapy today.

The medical potential for bio-oxidative therapies is based on the relationship of oxygen to human cells. Bio-oxidative therapies accelerate oxygen metabolism and stimulate the release of oxygen atoms from the bloodstream to the cells. When levels of oxygen increase, the potential for disease decreases. When large amounts of oxygen flood the body, germs, parasites, fungi, bacteria, and viruses are killed along with diseased and deficient tissue cells. At the same time, healthy cells not only survive but are better able to multiply. The result is a stronger immune system and improved overall immune response.

Although ozone and hydrogen peroxide are highly toxic in their purified states, they have been found to be safe and effective when diluted to therapeutic levels for medical use. When they are administered in prescribed amounts, the chance of experiencing adverse reactions to bio-oxidative therapies is extremely small. For example, a recent German study evaluating the side effects of over five million medically administered ozone treatments found that the rate of adverse side effects was only 0.000005 per application. This figure is far lower than in any other type of medical therapy.¹¹

Although few of us have heard of them, bio-oxidative therapies have been around for a long time. They have been used clinically by European physicians for over a century and were first reported by Dr. T.H. Oliver in the British medical publication *The Lancet* in 1920.¹² Since that time, they have been studied in many major medical research centers throughout the world, including those at Baylor University, Yale University, the University of California (Los Angeles), and Harvard University in the United States, as well as medical schools and laboratories in Great Britain, Germany, Russia, Canada, Japan, Cuba, Mexico, and Brazil. Today, between fifty and one hundred scientific articles are published each month about the chemical and biological effects of ozone and hydrogen peroxide.

Restoration of Foods by rebuilding the water and oxygen in foods that have been lost by evaporation, drying (dehydration) and storage. Preservation of food freshness and safety by eliminating bacteria, viruses, and parasites with a safe biocide (oxygen) instead of toxic, dangerous chemicals

You will obtain from McCabe, Nathaniel Altman, and Handler a vast, increased knowledge as to the vital importance of oxygen to health and life, and how to apply it in your everyday life. We get our oxygen through our lungs and also from our food as it passes through our gastro-intestinal tract and released by digestion. Become a vegetarian and eat a lot of your food raw. (50% to 75%) NO RAW MEAT OR FISH because of its contamination; read pages 132-136 of this book.

When food is on the vine and growing, it's alive. When it's picked, it instantly starts going down hill. Its oxygen, water, and nutrient supply is turned off and the denutrition processes begin. Eat your food as soon after harvesting as possible.

Water (H₂O) is composed of 2 molecules of hydrogen and 1 molecule of oxygen. Drink 6-8 glasses of distilled water daily-drink your oxygen as well as inhale it. Avoid dried out foods.

Hydrogen peroxide (H₂O₂) is enriched water which has 2 molecules of hydrogen and 2 molecules of oxygen and therefore called peroxide. Ozone is O₃.

- Many people destroy their foods right in their own home by over-cooking and storage. Buy small quantities and eat it as soon as possible.
- Learn, and apply everyday, how to restore the oxygen lost from your foods and how to keep it from spoiling, by refrigeration and using 3% H₂O₂ diluted (pg 132)
- Some foods, when stored in the refrigerator, start to spoil in even 3 days. Soaking or spraying diluted 3% H₂O₂ on them prevents spoilage. *Kroger carries Loney Honey which comes in pint and quart mason jars.*
- Obtain 10-24 pint Mason jars and the white plastic caps which are made to fit them. You will use them to follow this program. DO NOT DISCARD the diluted 3% H₂O₂ water after you have removed the foods. Use it as the base for all your drinks.

When foods are dehydrated (dried), there is a severe loss of water, oxygen, and nutrients during the evaporation process. These foods must be re-hydrated and re-oxygenated. It will put their nutrients back in solution and make the food more digestible and their nutrients more bio-available as well as make them more chewable, more tasty and easier to mix with the digestive juices of the stomach. AVOID Cooking by using diluted 3% H₂O₂ and storing in refrigerator to obtain nutritional enhancement instead of destruction. Use containers that have very tight fitting tops.

When Balch suggests increasing your intake of:

Very Important.

- Amino Acids consider: soy protein powder, soy grits, toasted soy beans, and soy chunks.
- Vit B Complex consider: Nutritional Yeast Flakes.
- Lecithin: Lecithin Granules. It is a fat emulsifier.
- Emulsified Vit. A, D, & E, Mix them into your Lecithin Drink. They are fat soluble vitamins.
- Chlorophyll and green foods consider: ABS Drink; Alfalfa, Barley grass Powder, Spirulina.
- Colon Cleansers, consider: PBS Drink; Psyllium, Bentonite Powder, Sucanat, Brown Cider Vinegar
- Minerals, consider: Full Spectrum Minerals - Eat whole grains only - No foods made of refined flour.
- Garlic, consider: Lightly steamed whole garlic and odorless garlic capsules.
- Vit A & D, consider Vit A & D capsules from fish oil, greatly increase FRESH FRUITS & vegetables, salmon and tuna.
- Vit C, greatly increase FRESH FRUITS and VEGETABLES and 625 mg Ester C Complex. *or Ester C 1000 High Potency 075A - 120 tabs \$9.95 (see pg. 26)*
- Vit E, Eat sunflower seeds and take Vit. E Liquid from soy bean oil.
- Acidophilus, eat plain, non-fat, yogurt w/active cultures and acidophilus caps (at least 2 billion caps).
- Digestive Enzymes, increase eating of brown apple cider vinegar, papaya enzymes, and super enzymes.
- You don't need multi-vitamin-mineral tablets and capsules. *If you have trouble swallowing tablets, use capsules; they're much easier to swallow. It's easier to get tabs down if you*

See pages 40-49.

They will give you the nutritional content of the above. *chew them with a*

Acidophilus: Use #5832 Non-Fat Dry Milk + #2907 Acidophilus Caps.

Capsicum (Cayenne Pepper and Chili Peppers) #5010 Cayenne Pepper. Pour #5810 in a salt shaker and give 1 sprinkle on a fork full. *Purchase a tablet splitter. They're obtainable in pharmacies for around 50¢. Ester C (espec. double strength) are hard to swallow. Split them and chew them up with food, if need be. Taken with a lot of water will help them go down.*

Here are several dried fruits to enhance your diet.

Now Code # - All unsulfured, dried

5620 Apricots rich in Vitamin A

5720 Papaya Spears

5760 Pineapple Slices (Fresh is preferred)

5780 Raisins, Thompson's

• Also buy the large, unpitted PRUNES.

• and SOAK them in .01 or .02 % H_2O_2 .

• USE distilled water.

• The H_2O_2 concentration I use is $\frac{1}{4}$ tsp (1 dropper load) per 8 oz. water.

Do not cook your dried fruits. Enzymes are destroyed over $125^{\circ}F$, and all other

phytochemicals and nutrients are injured or destroyed. Cooking can also cause a loss of oxygen.

• Obtain 5 - 1 pint Mason Jars

Suggested dosage of mix of magnesia is 2-4 TBS.

• Pour each fruit, $\frac{2}{3}$ full, into jar. Add distilled water to above the fruit.

There is 400 mg per tsp. 1 TSP = 1200 mg. 2 TSP = 2400 mg.

• Add 3% H_2O_2 - $\frac{1}{4}$ tsp.

3 TSP = 3600 mg. 4 TSP = 4800 mg.

• Add water to fill. Pat on cap and shake.

• Place in refrigerator.

Sprout the following seeds and legumes, make sure they're all organic.

7210 Alfalfa Seeds Also; Garbonzo Beans

7220 Azuki Beans Lentils

7245 Foenugreek Seeds Lima Beans

7250 Mung Beans Soy Beans

7050 Sunflower Seeds wheat berries

are a great source of Vit. E.

Soy contains an enzyme called genistein which helps against prostate and breast cancer. This makes soy-bean sprouts and soy grits very important foods. Soy beans (organic) are only 49¢ per lb.

Soak: seeds 8 hrs.; beans 12 hrs. Add 3% H_2O_2 ($\frac{1}{4}$ tsp) to soak water to kill any bacteria which may be on the seeds, grains or legumes.

After they are sprouted, rinse them and place in pint jar. Again add 3% H_2O_2 ($\frac{1}{4}$ tsp) into an 8 oz. glass of water, stir, pour onto the sprouts, add enough water (distilled preferred) to insure all sprouts are under water. Place in refrigerator.

Keep 3 to 4 types of sprouts in your refrigerator.

You will need 3 or 4 pint jars.

Consider using Vit C Complex in addition to Ester C. Now #770 8 oz. 11.95 use $\frac{1}{4}$ tsp per each 8 oz of liquid. $\frac{1}{4}$ Level Tsp. = Vit C 300 mg, Bioflavonoids 200 mg. Rose Hips 100 mg; acerola 100 mg, calcium 50 mg. Understand the difference between Ester C and regular Ester C. Sprinkle your Vit C powder onto your cereal.

Use the same procedure with many of your vegetables e.g. broccoli, cauliflower, carrots, green peas, lima beans, cranberries, brussel sprouts, green leafies, asparagus, sweet potatoes, celery, sugar snap peas, Mnemonic Key: BOCAPS-G.T. tomatoes.

Place them into separate pint jars. Pour 3% H_2O_2 - $\frac{1}{4}$ tsp. into an 8 oz. glass of water. Stir. Pour into the jar and add more water if needed. SHAKE. Eat them raw. Let them soak an hour before eating. Keep refrigerated

Try soaking the other nuts to see how you like them.

Use the following nuts: Only soak almonds;

→ The most valuable nut.

7005 Almonds → Place $\frac{1}{2}$ cup of almonds in a small jar. Pour $\frac{1}{4}$ tsp - 3% H_2O_2 in

7095 Cashews $\frac{1}{2}$ glass water. Stir, pour over almonds; soak

7001 Pecans Shake. Pour off water to eliminate the tannic acid. Pour in fresh

7015 Pine Nuts 3% H_2O_2 water, and store in refrigerator. Add 5-6 almonds to your

7073 Walnuts plate once or twice a day.

For a comparison of the nutrients in these nuts see pg. 120

Aerobic Life Industries sells Homozon (a very effective colon cleanser). It retails for 35.95 for 150 gms. It is: Magnesium oxide 72% and magnesium peroxide 28% (slow release). Start with $\frac{1}{2}$ tsp in 8 oz H_2O . Follow with 1 teaspoon of lemon juice in 4 oz water. Learn your transit time (time it takes to work). Stay at home; it can cause a very strong movement of the bowels very quickly. I do not use the Aerobic brand - I make my own. -26 150 gms = 5 $\frac{1}{8}$ oz.

Honey • Read Balch, Bee pollen pg 50, Bee propolis pg 50, Honey pg 55-56, Royal Jelly pg 59.

• SOME NEW BEE Products to consider:

- 2512 Bee Pollen 500mg Chewable 250 tabs
- 2540 Propolis 500mg 100 caps
- 2530 Pollen Chinese Granules 8 oz.
- 2550 Royal Jelly 300mg 100 caps.

• LARRY HONEY, La Porte, IN. Comes in 12oz squeeze bottles, 1pt and 1 quart Mason Jars. Buy a 12oz bottle first. For refilling, buy a pint or quart jar later. Kroger stocks Larry Honey. Pour off about 1 1/2" of honey (increase the convenience of use). Add distilled water and 1/4 tsp H₂O₂ (optional). Use a knife and stir thoroughly. Sprinkle on vegetables, grains, cereals, legumes, fruits and into drinks. The advantage of using honey farmed within 10-15 miles of your home, is that it may contain minute quantities of allergens to which you may be allergic; it's like taking allergy shots from a doctor.

• CANNED Goods? Eliminate. Use only canned tuna and salmon. Salmon preferred. I prefer the non-canned salmon-broiled.

• Eliminate canned foods absolutely. (exceptions) Meijer Department Stores carry excellent fresh fruits and vegetables. They have fresh sugar peas and sugar snap peas @\$2.99 per lb. They carry excellent alfalfa and onion sprouts which are non-preservative and organic @ 4 oz. at \$.59. Keep them in pint jars soaking in diluted 3% H₂O₂. (1/4 tsp per 8oz) = .01% concentration.

• Learn how to use your microwave to enjoy a hot meal. Put your vegetable mix into a glass casserole dish, add minimal water and put on the lid. Microwave up to the point the food is hot (Don't over-cook). In a 750 watt oven, 30% or less of weight e.g. 10 oz. vegetables microwave 3 minutes on high. Serve immediately. Sprinkle on your taste enhancers. It's easy to make them delicious.

• When the raw vegetables are first removed from the refrigerator, they may be too cold to eat. Arrange them on a dinner plate and let them stand for several minutes until they warm to room temperature or microwave right on this plate for approximately 40 seconds. Saves on casserole washing.

• Martin's on South Bend Ave and Ironwood carry organically raised fruits and vegetables, check them out. Also check out the Farmers Market on Sample and North Shore Blvd.

• I do use Fresh Frozen peas and Fordham lima beans. Read labels! some brands will give 25% Vit C for 3oz. Others may only give 2 to 4% for 3 oz.

• Balch recommends Aerobic O₂, 9 drops per usage.

• Balch recommends oxygen therapy for the following:

AIDS	Fungus	Fiber Supplementation	Indigestion	spray on:
Athlete's Foot	Gangrene	Allergies	Irritable Bowel Syndrome	
Breast Cancer	Hayfever	Celiac Disease	Obesity	Bedsores
Cancer	Indigestion	Colitis	Polyps	Burns
Candidiasis	Irritable Bowel Syndrome	Constipation	Stress And Anxiety	Poison Ivy
Cirrhosis	Legionnaire's Disease	Diverticulitis	Varicose Veins	Sunburn
Colitis	Polyps	Halitosis	Colon Cleansing	
Emphysema	Raynaud's Disease	Hemorrhoids	Fasting	
Food Poisoning	Skin Cancer	Low Blood Sugar		

Aerobic O₂ has 4.5% H₂O₂. If you're using 3% H₂O₂, increase the 3% by 50%. I do not use Aerobic O₂ or the other Aerobic Life Products; they are unnecessarily expensive. -27-

Use the regular Standard 3% H_2O_2 instead of Aerobic 07. (Contains 4 1/2% H_2O_2)

Aerobic All Purpose Spray - A powerful solution of stabilized oxygen in a convenient spray bottle.

You can use this to...

Ease The Pain Of Poison Ivy! As listed in the best-selling book "Prescription for Nutritional Healing." This works to destroy bacteria and prevent spreading.

Ease The Pain Of Sunburns And Help Prevent Peeling. Used by the Red Cross in Mexico, stabilized oxygen works wonders for sunburns. Spray on the area as often as desired.

Help Heal Rashes. All Purpose Spray kills infectious anaerobic bacteria preventing infections and helping you heal faster. Use at least three times a day.

Keep Vegetables Fresh For Weeks. Spray the vegetables every two to three

days. This can really extend shelf life to save you money and prevent wasted food.

Keep Food Fresh! This works great on leftovers. It retards mold and helps prevent food poisoning. Works on all types of food and keeps it fresh and safe for you for weeks!

Make Your Food Safe. Spray all animal products. Proven by science, this spray kills E.Coli and Salmonella, Aerobic 07 protects you and your family from food poisoning.

Stop Pet Odors. Spray on litter boxes and pet sleeping areas to kill odor causing bacteria and keeps your house smelling fresh and clean.

Clean Food Prep Areas. The perfect spray for cutting boards and all kitchen prep areas. Kills E.coli, salmonella and other harmful bacteria. Doesn't affect the taste and gives you the security to know your food is safe.

Healthy Non Toxic Deodorizer. Works great on garbage cans and bathrooms. This kills infectious disease causing bacteria, parasites, microbes and viruses.

Nobel prize winning Doctor Otto Warburg showed that most cancers occur in an oxygen lacking environment!

1/2 tsp = 18 to 20 drops

Here's a few more uses for Aerobic 07 that save you money and make your life easier!

#1 Keep milk fresh! Use eight drops per gallon. This can double the normal shelf life of milk and other dairy products to save you money.

#2 Soothe colds and flus and fight viruses! Twenty drops three times a day in a teaspoon of honey really helps to ease discomfort and fight viruses.

#3 Soothe sore throats and help stop them from getting worse! Take forty drops in four ounces of water and gargle three times a day. This helps to end your sore throat pain!

#4 Knock out bladder and kidney infections in pets! Add 20 drops to the water dish. You'll see results fast.

"An oxygen rich blood stream brings sparkling vitality, stamina and freedom from infections and most diseases"
Jack Tipps, N. D. Ph.d.

This works great for old dogs over twenty years! and cats.

#5 Prevent root rot in your favorite house plants! Add 10 drops per gallon of water and water plants as normal. Aerobic 07 is also a great soil conditioner and helps your plants stay healthy.

#6 As an antacid spell relief
AEROBIC 07. 20 drops in a glass of water works wonders for the upset stomach!

#7 Get rid of fungus! Use twenty drops in 1.5 ounces of water and soak the infected area. Aerobic 07 has been used to get rid of fungus for

The list goes on and on and on. If you have a special use for Aerobic 07 like this, let us know. We would love to hear from you!

30-Day risk free guarantee! Try Aerobic 07 now. Try some of the many uses and if you're not satisfied simply send it back to us for a prompt refund.

AEROBIC 07 - 2.33 oz.
Item #1001\$17.95

AEROBIC 07 - 1oz
Item #1002\$11.95

If you have been using Aerobic 07, 10 drops, use 15 drops of 1oz - w/ at 3% H_2O_2 .

Grape Seed Extract.

Researchers say it's twenty times stronger than Vitamin C and fifty times stronger than Vitamin E!

Case studies, biological and pharmacological laboratory research, biochemical observation, hundreds of references and clinical studies all prove you can benefit from grape seed extract!

According to Richard Passwater Ph.D. the benefits of this are...

- ⇒ Improves skin smoothness and elasticity
- ⇒ Strengthens capillaries and varicose veins
- ⇒ improves circulation
- ⇒ enhances cell vitality
- ⇒ reduces capillary fragility
- ⇒ improves resistance to strokes
- ⇒ reduces risk of phlebitis
- ⇒ reduces varicose veins
- ⇒ reduces edema and swelling of the legs
- ⇒ helps restless leg syndrome
- ⇒ reduces diabetic retinopathy
- ⇒ improves visual acuity
- ⇒ helps improve sluggish memory
- ⇒ reduces the effects of stress

*Each capsule contains:
Grape seed extract..... 60mg.
Citrus Bioflavonoids (40%) 800 mg.*

⇒ improves joint flexibility

⇒ fight inflammation in arthritis and sports injuries.

What Else Can Grape Seed Extract Do For You?

Now \$32.50 Grape Seed Antioxidant
100 Caps Concentrated and bio-available grape seed extract helps protect against free-radical damage. Free radicals cause oxidative damage to cells and tissues. Damage caused by free radicals is what is recognized as aging.

Also, free radicals are known to cause degenerative disease such as arthritis, circulatory disorders, diabetes, cirrhosis, heart disease and cancer.

More Benefits...

Reduce Stress Ulcers By 82 percent! — says Dr. Duncan Bell of Ipswich Hospital in England.

Help Provide Relief From Allergies And Hayfever! — According to "OPC in Practice".

Materials on this page were taken from the Aerobic Life Industries catalog. I do not purchase their products.

Dr. Whitaker's Guide to Natural Healing-Table of Contents.

Real Healthcare Reform 1

1 The Non-Natural Roots of the Problem	
National Task Force Politics	3
The Pharmaceutical Industry and Disease	4
The Industry and the Doctor	6
The FDA's Role	9
The FDA and Dietary Supplements	10
Point 1: Health Claims on Supplement Labels	13
Point 2: Amino Acids Regulated as Drugs	16
Point 3: Dietary Supplement Limits	19
Point 4: Nonessential Nutrients as "Unsafe Food Additives"	19
Point 5: Herbs as Drugs	20
The Solution: Get Involved and Stay Involved	23
CHAPTER SUMMARY	24

2 The Whitaker Wellness Program	26
The Definition of Health	26
Step 1: Adopt a Healthy Lifestyle	27
Step 2: Become More Active	31
Step 3: Take a Multiple Vitamin-Mineral Formula 33. <i>Learn to make your own.</i>	
Step 4: Take Extra Antioxidant Nutrients	40
Step 5: Take Extra Magnesium and Potassium	44
Step 6: Take an Omega-3 Oil Supplement	48
Step 7: Eat a Lowfat, High-Complex-Carbohydrate Diet	53
Some Practical Tips	57
CHAPTER SUMMARY	57

Building Optimal Health 59

3 Enhancing Digestion and Elimination	
Hydrochloric Acid	62
Heidelberg Gastric Analysis	62
Preventing "Heartburn"	64
The Small Intestine and Digestion	68
Pancreatic Enzymes and Digestion	69
The Liver, Bile, and Digestion	72
The Large Intestine and Digestion	72
CHAPTER SUMMARY	73
4 Enhancing Detoxification	75
Sources of Toxins	76
Symptoms and Known Health Effects of Toxins	76
Diagnosing Toxic Conditions	77
A Well-Rounded Detoxification Plan	79
Lethal Toxicity	85
CHAPTER SUMMARY	87

This book plus the Balch books are MUST books. New Code numbers are 4 numbers. one exception Aloe Vera Gel.

5 Enhancing Brain Power	88
Brain Function, Atherosclerosis, Food	88
Brain Function and Specific	90
Ginkgo biloba	94
Phosphatidylcholine	96
DHEA	97
CHAPTER SUMMARY	98

6 Enhancing Adrenal Function	100
Stress and Burnout	100
Coping with Stress	102
Adrenal Health	105
Ginseng	106
CHAPTER SUMMARY	108

7 Enhancing Immune Function	110
Pasteur, the Germ, and the Host	111
Magic Laughter, Stress, and Susceptibility	112
Lifestyle, Diet, and Resistance	113
The Master Gland of the Immune System	115
Diet and Nutrition	116
Echinacea and the Immune System	118
CHAPTER SUMMARY	120

Enhancing Weight Loss	121
The Oprah Winfrey Example	122
The Whitaker Prescription for Weight Through Health	122
CHAPTER SUMMARY	138

Specific Health Conditions, 139

Acne	141
Age Spots	143
Anemia	144
Angina	145
Anxiety	158
Arthritis	163
Asthma	163
Bladder Infection	171
Boils	172
Bronchitis and Pneumonia	174
Candidiasis	176
Canker Sores	184
Carpal Tunnel Syndrome	186
Cataract	187
Cerebral Vascular Insufficiency	189
Cholesterol	191
Chronic Fatigue Syndrome	202
Cold Sores	206
Common Cold	208

These books are critical. Study and apply them.

Pgs 1259-K Synovial Membranes. Learn:

Neuro-transmitters
Colonitis
Colonoscopy
Hypotonic colon
Hypertonic colon
Spastic colon
Elongated colon
Redundant colon
Transit Time

New Code Numbers.
90012 Aloe Vera Gel
3050 Bentonite Powder

Constipation	210
Crohn's Disease and Ulcerative Colitis	216
Depression	221
Diabetes	221
Ear Infection	234
Eczema	239
Fibrocystic Breast Disease	241
Food Allergy	242
Gallstones	249
Glaucoma	251
Gout	252
Hayfever	255
Headache	257
Heart Disease	260
Hemorrhoids	263
Hepatitis	265
Herpes	268
High Blood Pressure	269
Hives	273
Hyperactivity and Learning Disorders	273
Hypoglycemia	277
Hypothyroidism	281
Impotence	284
Insomnia	290
Irritable Bowel Syndrome	293
Kidney Stones	295
Macular Degeneration	299
Menopause	300
Multiple Sclerosis	307
Osteoarthritis	310
Osteoporosis	314
Premenstrual Syndrome	322
Prostate Enlargement (BPH)	324
Prostatitis	328
Psoriasis	332
Rheumatoid Arthritis	335
Sinus Infection	343
Stroke	345
Ulcer	346
Vaginitis	351
Varicose Veins	354

THE TRAGEDY OF THE SAD DIET. (SAD = Standard American Diet)

EXCERPTS FROM THE BOOK: EVERYTHING YOU WANTED TO KNOW ABOUT NUTRITION BY DAVID REUBEN M.D. (out of print)

(SEE BELOW)

IT IS MUST READING. Penny for penny and pound for pound, you eat one of the worst diets in the world—and it is hurting you and your children more than you are willing to admit.

Before you say yes or no, slide your hands down over your stomach and see how much fat you carry there. Run your tongue over your teeth and check the number of cavities—and plastic imitation teeth—your overrefined diet has brought you. Think of your friends and relatives with cancer, diabetes, and heart attacks—and think of the rotten food they ate to get that way.

Then realize that many people on this planet eat better than you do, pay less for their food, have good teeth, slim bodies, and much less diabetes, cancer, and heart attacks. They know something that you don't know: your body—and your mind—is only as good and as wholesome as the food you put into it. The food processors spend their billions to tell you that your body doesn't know the difference between a real strawberry and ethyl-3-methyl-3-phenylglycidate, a common imitation strawberry flavoring. Your body knows the difference. And someday when you suddenly wake up with a lump you never had before or a pain that won't go away from the 5000 synthetic chemicals in your food, write a letter to the big food companies or to the FDA and ask them to take care of your family. Good luck.

It is incomprehensible to me that intelligent people have not made the obvious, glaring "Emperor's-new-clothes" connection between the chemicalized, denutritified, contaminated, deeply embalmed garbage we incorrectly refer to as a "modern diet" and the directly resulting diseases that each year kill more than twice as many Americans as perished in all the many wars the United States has ever fought. People of America—the greatest threat to the survival of you and your children is not some terrible nuclear weapon. It is what you are going to eat from your dinner plate tonight.

What's so bad about American bread?

Everything. Once upon a time bread was known as "the stuff of life"—a better description of American bread might be "the stuff of lies." Ninety-five percent of the "bread" sold in the United States is a product known as "enriched white bread." It is not bread. It is doubtfully enriched. It is very definitely white. All refined flour

baked goods are lies and not food. Try: Brownberry Whole Wheat Bread and Food For Life from Garden Patch.

Let's go back to the origin of the substance known as "bread." Since pre-Biblical times men have been grinding grains of wheat between stones to produce a gritty powder called flour. Those ground-up grains of wheat were mixed with yeast and salt and water to make a dough. The dough was allowed to rise (as a result of the carbon dioxide gas formed by the yeast), and the risen mass was baked in an oven to form bread. That's bread. The atrocity that covers in plastic bags labeled B-R-E-A-D on supermarket shelves is not bread.

What do you mean it's not bread? The label says it's bread.

The label is there to make you feel better. This is the way it really is:

A grain of wheat has three components: bran, wheat germ, and endosperm. If you are going to get any real nutritional benefit from bread, you must consume all three components and in the proportion that God put them there. Unfortunately the Divine Plan does not coincide with the greed of flour millers. Insects like to eat bran because their little insect instincts tell them it is good for them. Insects also like to eat wheat germ because it makes them strong and healthy. Flour millers like to store flour

for long periods of time so they can buy it cheap and sell it at high prices, and they don't like insects to nibble at their assets. So about eighty years ago they figured out a cheap way to get rid of the bran and the wheat germ in the flour. They simply turn whole wheat flour into white flour. They pass those plump little grains of wheat under high-pressure steel rollers that reduce them to a fine dust. Then they remove the wheat germ and bran, leaving only the next-to-worthless pale white sterchy endosperm. Endosperm keeps almost forever. "Cream of Wheat" is made with the endosperm.

• Whole Wheat-Apple-Raisin Bread (made in a Bread Making Machine).

- 1 pkg yeast - 4 Tsp.
- 3 Cups 100% whole wheat flour. Stone ground.
- 3 Tbs Wheat Gluten (or Pear Gum).
- 1/2 Cup wheat germ.
- 1/2 Tsp Cinnamon + pinch nutmeg.
- 3 Tbsp Non-fat dry milk.
- 1 Tsp Salt.

• Run Mixer For 1 minute. Then add:

- 1 1/2 Cups Applesauce (warm).
- 2 Tbsp Unrefined vegetable oil
- 2 Tbsp Honey
- 2 Tbsp Molasses
- 1 Cup warm water.

• AFTER 1st Kneading stops, pulling plug, add 1/2 cup raisins.

• AFTER 3-4 minutes, replug and start the machine again.

• Learn to use 4 lbs soy powder (Hou) into your bread 2 lbs 3.95

• Please let me know how the above recipe worked out for you and the machine you used.

"baked goods are lies" and not food.

Try: Brownberry Whole Wheat Bread and Food For Life from Garden Patch.

• This very informative, delightful book. By David Reuben M.D.

SEE DR. KODNEY. YOU MUST READ THIS BOOK.

• When you buy your bread making machine be sure it states will bake 100% whole wheat bread. If you get it home and you discover it does not — take it back. It must be successful with a large portion of 100% whole wheat flour

• 2500 yrs ago, Hippocrates said "Let your food be your medicine. It's still true today.

Don't eat processed junk food made from refined flour! -30-

Welcome To The Wonderful World Of The Practice of Illness Prevention

Prevention of Illness Healthcare Program

You are urged to join the American Healthcare Revolution and fight to change our country from a sickcare system to a health care system. It used to be inevitable that the older we got the greater would be our chances of becoming ill. That's all changed. Nutritional and healthcare science has shown us that there is a lot we can do to greatly reduce these odds against us. We can live a longer, healthier life without falling prey to many illnesses that cause so much pain, suffering, poor health and death. Through good nutrition and healthcare we can fight against aging, disease and poor mental health. Nutritional experts warn us that we must get our nutrition, vitamins, and minerals, from our food. Supplements (pills etc.) must not be used as a substitute for food. However, they can be valuable adjuncts; learn how to use them. *Vegetarian diet is highly recommended!*

PRACTICE THE SEVEN SIMPLE RULES OF GOOD HEALTH

1. Eat only fresh fruits and vegetables to get your Vitamins A and C. (Raw, steamed or lightly microwaved)
2. Eat only foods which have been made with 100% whole grains to get your B Vitamins and minerals. In 1 and 2 above, emphasize those which contain an abundance of high density nutrients. Your breads, baked goods, and cereals must be multigrain without preservatives and chemicals
3. Eat healthy fish, chicken and turkey to insure an optimal intake of proteins. *Vegetarians must eat abundance of beans.*
4. Eliminate foods made with refined flour, refined sugar, caffeine, preservatives, chemical additives, fried, smoked, fatty foods, canned, processed, manufactured foods, smoking, drugs, junk foods, alcoholic drinks, soft drinks, junk drinks. Eliminate nutrient-poor foods e.g. puffed rice cakes, puffed oat, wheat, corn cakes, butter, margarine, caffeine and decaf drinks, white rice. *Be cautious in restaurants.*
5. Reduce stress to the very minimum. Don't make mountains out of molehills. Practice the happiness habit not the grouch habit. Smile on the inside as well as the outside. Speak kindly to everyone especially your family and friends. Eliminate shouting and screaming. *If you want to be depressed and feel mean just hate someone. Eliminate hate and intolerance.*
6. Exercise. Take a brisk 20 minute walk daily. Remember caffeine and nicotine are very injurious drug addictions. Eliminate decafs and artificial sweeteners. *Do resistance exercise.*
7. ELIMINATE SMOKING, IT'S SLOW MOTION SUICIDE. Every time something goes in your mouth its a chance to benefit your health. Don't waste or lose the opportunity to build and maintain your health.

LET YOUR FOOD AND HEALTHCARE PROGRAM BE YOUR MEDICINE.

Use natural remedies everywhere possible. Ice berg lettuce is a poor nutrient food; eat Romaine lettuce, kale, spinach, sweet potatoes, onions, and garlic, instead. To the question how do processing and preparation affect the nutritional content of food? Experts answer, badly, they are a disaster. Also eliminate products like Metamucil, laxatives, and many non prescription drugs and cosmetics. *Eliminate or at least minimize pain pills and antacids.*

unnecessarily expensive

Strictly adhere to the health rules. The additives used in canned and commercially prepared foods zap vitamins and minerals. EDTA (a preservative) is a heavy duty iron blocker; so are phosphates used in soft drinks, ice cream, candy, beer, BAKED GOODS, ETC. BHA and BHT are serious toxins. Read the label. If it reads like the index to a chemistry book don't eat the food. Eliminate caffeine, beware of it in pain pills, anti-sleepiness pills etc. Combat fatigue and stress with the 7 Rules of Good Healthcare; not pills, drugs, etc. *If the food or drink is advertised on TV don't buy it.*

Memory keys to the high nutrient foods of the cancer prevention diet. (Same for many illnesses).

FRUITS (ABCD-F-GO-PRS): apricots, bananas, cantaloupe, dates, figs, grapefruit, oranges, prunes, raisins, strawberries. *Insure Vit A and C intake. + capsaisin*

VEGETABLES (BOCAPS-GT): Broccoli, onions, carrots, asparagus, bell pepper, spinach, sweet potatoes, greens, tomatoes. *Insure Vit A and C intake. + garlic*

GRAINS (BORS-WM): Buckwheat grits, oats, oat bran, rice bran, soy grits, wheat bran, wheat germ. Insure vitamin B and mineral intake. Others are barley, brown rice, and millet. *Make your own cereal. Learn how to make the MOR CEREAL. millet, oat groats, Brown whole Rice.*

Eliminate all foods made with refined flour. Refined flour results in de-nutritified foods. An example of this horrendous practice is what is being done to the wheat berry or grain. The wheat berry consists of 3 parts: the wheat germ, wheat bran and endosperm. The germ and the bran are 5% of the berry and contain all of the nutrients. The endosperm (95% of the berry) has little nutrient value, yet most of our baked goods and farina are made with it. Spraying on some synthetic vitamins does not remedy the disaster visited upon this vital grain.

If the original flour is worthless then everything that is made with it is worthless. Indeed it is even worse than worthless because all kinds of preservatives (6 lbs per person per year) and chemical additives are added to them to increase the ease of manufacturing and shelf life. Refined sugar is dumped into our foods at the rate of 150 lbs per person per year, plus artificial sweeteners and loads of salt. Many consume 7,000 to 10,000 mg. of salt daily. The body needs approximately 250 mg of salt per day for its physiological functions.

Foods made from refined flour are junk foods. The rotten flour gets into our pancakes, cake mixtures, spaghetti, macaroni, waffles, home baked pastries, pies, cookies, doughnuts, sweet rolls, crackers, hot dog and hamburger buns, turn overs, brownies, pizza dough, biscuits, breakfast squares, and every other flour and pasta product. If the raw material-the flour-has no nutrition, the final product can only be worse. Therefore, make your own cereal. Question every food, drink, drug and cosmetic advertised on TV. If they fall into the categories above or on page 3 don't eat it or use it. You will also be paying enormously inflated prices for the product. *Eliminate instantized foods. They have been denutritified*

YOUR BREADS-CEREALS

CAKES-COOKIES

MUST ALL BE MULTIGRAIN

100% WHOLE GRAIN

31-

Now Brand's Psyllium Husks Whole 12 oz @ 65

it's much worse now!

OUR HEALTH AUTHORITIES WARN US THAT:

- *Every 75 seconds, someone in America dies of cancer.
- *Cancer will strike 2 out of every 3 families.
- *53,000,000 living Americans will eventually contract cancer.
- More children aged 3-14 die of cancer than any other disease.
- *About 1,000,000 Americans will contract cancer this year.
- *Improper diet causes more deaths each year than cigarette smoking.
- *483,000 people will die of cancer this year. Most will suffer severe pain from surgery, X-ray, and chemotherapy. *Yearly 142,000 women have breast cancer; 30% die.
- *Research has not paid off. We've seen very little significant progress after billions of dollars and many years of tremendous effort.
- *One out of 4 will get cardiovascular (heart disease).
- *One out of five will get diabetes.
- *Many of the above will become blind.
- *Yearly 2,000,000 persons will have an heart attack and one-half of them will die.
- *In 1986, 373,859 Transurethral Prostate Surgeries were performed. With proper diet, many could have been prevented.
- *We have 24,000,000 women and 5,000,000 with osteoporosis.
- *Men with Cholesterol levels between 203 and 220 have a coronary death rate 73% higher than those with a level below 180. The average American man has a level of 220!!!! Get your cholesterol level down.

The great tragedy of the above is that they are preventable.

The National Institute of Health urges everyone (children and adults) to know their cholesterol level. If your cholesterol is elevated, you may be at risk for a heart attack and not even know it. Reduce your cholesterol level to the lowest possible level by diet, drugs can have very serious side effects. Avoid drugs if at all possible.

Free yourself of preventable causes of illnesses

Replace self-indulgence with self-discipline.

Reduce the 80% of all disease that is preventable.

We can save \$500 billion per year plus enormous suffering and death.

Your doctor will tell you that each one of us can do more for ourselves than any doctor, hospital, drug, or machine. The factors that reduce heart disease, cancer, diabetes, osteoporosis, etc. are within your control not the doctor's.

Smoking is slow motion suicide.

In the prevention of illness battle the enemy is us.

Teach your children good health care and to eat only health-giving foods.

Obesity afflicts 34,000,000 Americans. Even 5 lbs overweight may increase your risk of cancer, diabetes and heart disease.

The Tobacco industry spends \$5 billion dollars per year on disease and death promotion, and then charges the bill to us.

We are too complacent about our bodies, and then pay a tremendous price to attempt to repair them.

The Denutrition and Toxification of our food.

Please apply this knowledge to everything that you eat. Our foods are contaminated by pesticides, insecticides, etc. Yearly, we pour 3 billion pounds of these poisons on the farmlands of this country. When Mother's milk is tested in Toronto, Canada we find traces of the poisons being sprayed on the crops in Central America. When Mother's milk is tested in Denmark, we find traces of poisons being used in Michigan, etc. We poison the air with acid rain, industrial pollutants. The astronomical amounts of poisons being poured on the soil, seeps down through the earth into the aquifer, the underground water, and then we pump it up and drink it.

It is very important that we understand the word denutritify and apply it in our eating program. Just because a food "tastes good" does not mean it is "good" for you. Foods can be so heavily doctored up by salt, sugar, artificial sweeteners, spices, herbs, etc., that its worthlessness and health destructive components can be masked. Take seriously how we denutritify our grains and rob them of their nutrients through our refining process and then pollute them with preservatives, antifungal and anti-bacterial agents. Our breads, cakes, cookies, pancakes, waffles, pastries, etc., are made with this flour! We add plaster of Paris, anti-freeze, etc., and batter-whip it to fill it full of large air bubbles. We add sawdust to make "lite" breads, then salt, sugar, artificial sweeteners, artificial flavoring agents to make it taste "good". In France they allow 6 food flavorings: in this country we allow 1622!! Of the 1622 additives, 1077 are only taste enhancers, most are phony flavors made from coal-tar bases.

BHA AND BHT are laced throughout our foods from bakery to pastries and pork sausage. When BHA was tested on animals it inhibited the contraction of smooth muscles (the muscles in the intestines, blood vessels, heart, etc. and we wonder why we have such a tremendous amount of indigestion, hiatus hernias, heart and blood vessel disease. It also caused growth retardation.

BHT IN ANIMAL RESEARCH caused metabolic stress, growth retardation, loss of weight, increase of liver weight, liver and kidney damage, increased serum cholesterol, baldness, fetal abnormalities. BHT is stored in organs and only excreted very slowly. It has been banned in Rumania, Sweden, Austria, United Kingdom. Research in 1972 showed up major changes in brain chemistry and behavior patterns. **SODIUM NITRATE** is in almost all processed meats as a preservative. It is a carcinogen. Nitrate combines with stomach juices to produce toxic nitrosamines and nitrosomides. Children are especially vulnerable. The Surgeon General warns parents to avoid processed baby foods containing meats. Autopsies on "healthy" children, 3 yrs of age (killed in auto accidents) reveal their aortas (heart) are already clogging up with fat and cholesterol. Eat the healthcare diet and feed your babies the same food that you are eating. Don't victimize your baby with processed, denutritified, bottled and canned foods for your convenience.

**QUESTION THE CONTENT
OF EVERY FOOD YOU BUY.
READ LABELS!!!**

food & water

RR1, Box 68D Walden, Vermont 05873 802-563-3300

Dear Friend of Food & Water,

It's time to get serious about stopping pesticide use. Forget Congress. We know they're fixated on "risk assessment" and allowing a quantifiable number of people to die from pesticide exposure.

It's time to go directly to the food industry. Food & Water has been preparing for the action phase of our campaign, and now we're ready. With your help, we're going to change history.

For years, we've been nagged about the possible dangers of pesticide use, wondering if we should wash our fruits or if it really matters. For years, we've listened to the bawling back and forth of the chemical industry scientists saying everything is safe and public interest scientists pointing out that nothing is safe. For years, Congress has been tinkering with pesticide regulations - while industry complains they're too restrictive and environmentalists complain they're not restrictive enough.

In the meantime, U.S. agribusiness is using about 33 times more pesticides than it did 50 years ago. And the cancer rate is rising from 1 out of 3 to approaching 1 out of 2.5 people who will get the disease.

The good news is that an alternative agriculture network of farmers growing healthy food, without pesticides, is getting stronger and stronger in every region in the country. Products are coming onto the market that are produced without pesticides. We know U.S. agriculture can move off its dependency on chemicals - if there's a will to do so.

We know too, that if consumers demand it, pesticide-free food will come.

It's time to make demands in an effective and coordinated manner. And if anyone can lead the charge to get the food industry to listen and give us food for our kids that is free of dangerous pesticides, it's Food & Water.

You've seen us push and push to keep food irradiation a dim possibility. The papaya growers in Hawaii cannot even test a couple of shipments without being avalanched with thousands of postcards from outraged customers!

You've been watching us give the Cabot Creamery the challenge of its life, demanding the company go back to a no-bovine growth hormone policy. And the entire dairy industry has taken serious notice.

You've seen us pre-empt the irradiation promoters in their courtship of the beef industry. It's been nearly 3 years since the E.coli tragedy in Washington state, the event that was to set beef irradiation on a fast track, and still neither the FDA nor the EPA has approved the process for beef.

This "us" that I'm talking about is you, our supporters who do this critical work - of making the phone calls, sending in the postcards and giving the donations that make the work possible.

Now it's time for Food & Water - for us - to take action on the approximately 2.2 billion pounds of pesticides used in this country every year.

When the cancer rate continues to rise and the deaths are particularly clustered in agricultural areas, we know there's a problem. When the number 1 cause of disease-related death in children under the age of 14 is cancer, we know something is wrong. When recent research is finding that the average sperm count in males is half of what it was 30 years ago, due to exposure to chemicals that mimic sex hormones, we are getting a warning that should not be ignored.

It's time to do something. And that's what Food & Water plans to do. With your help.

We're taking the message of "Get toxic food out of your store," to a number of targeted supermarkets. They are going to hear from their customers in their local stores and at their headquarters that people want change now. This is an enormous undertaking. Chemical agriculture has been around for 50 years and it won't die easily. But we really don't have a choice. We must do everything in our power to get rid of it.

A donation of \$50 will allow us to send out 350 action alerts. Or it will give us approximately 5 hours of phone time to organize neighborhood networks. Or it will pay to send 150 letters delivering our message to the top-level supermarket executives.

If you cannot give \$50 right now, we ask that you give what you can and find a friend or family member to join Food & Water. A \$25 donation from you and one from them will only help us reach our goal and it brings on a new member.

This winning campaign can change history. Please help us deliver a resoundingly loud message to stop the poisoning. Together, we will make our food supply safe. Thank you.

By WAYNE FALDA So. Bend
Tribune Staff Writer Tribune 9/25/96

Indiana ranks 20th and Michigan 25th in the country in the level of toxic chemicals that are discharged legally into rivers, their tributaries and other bodies of water, according to a report released today by two environmental organizations.

While the information was culled from the federal Toxic Release Inventory, or TRI, almost nobody, including the report's authors, said the report gives the public an accurate depiction of the level of toxins being released into America's waterways.

The environmental organizations, the Environmental Working

Group, or EWG, and the U.S. Public Interest Research Group, believe the actual level of pollution may be 20 times as high as the 1.5 billion pounds of chemicals dumped into waterways from 1990 to 1994. By federal law, companies must file TRI reports, but for just 343 of the 73,000 chemicals that are used in commerce.

But local companies, including Bayer Inc. of Elkhart, that are mentioned in the report titled "Dis-honorable Discharge" contend that EWG's information was flawed from the very start.

Bayer was reported to have dis-charged 2.7 million pounds of an unnamed substance from its own pretreatment facility on its premis-

es into the Elkhart waste-water treatment plant.

That discharge is probably ammonia, said Lenny Scott, director of health, environment and safety.

Scott's records indicate that Bayer discharged 400,000 pounds of ammonia a year during EWG's study period. Last year the level was reduced to 250,000 pounds because of changes in the plant fermentation process.

*Read pages 205 thru 210
Drink only distilled water
We consume 30,000 tons of aspirin per year!*

The World Wide Tragedy of EDC's (Endocrine Disruptive Chemicals)

Every plant, animal and person on the planet is carrying at least 250 measurable foreign chemicals in their body that were NOT a part of human chemistry before the 1920's. They disrupt endocrine glands and their hormonal processes. The volume of synthetic chemicals produced in the United States has increased a thousand fold over the last 60 years. If a chemical is foreign to humans, plants and animals when ingested, it is toxic to them. These compounds have ended up everywhere, in farmland soil, the air, water, food consumer products and in the tissues of all plants, animals and people.

During pregnancy the fetuses of humans and animals are exquisitely sensitive. These chemicals alter the developmental path of the fetal cells and the effect is enormously magnified as the fetus grows. The impact of this sabotage is permanent and range through the reproductive, cardio-vascular, nervous and immune systems. The possible end points include eventually prostrate cancer, lowered IQ, endometriosis, testicular cancer, attention deficit disorder, lowered sperm count, breast cancer, genital and reproductive -trait deformities and lowered production of disease fighting T cells to just name a few. We must not add further insult to our body and mind. Become an eliminator (pg. 38). Don't add new chemicals! Try to "clean house" of those we already have stored, along with trying to chelate the cholesterol and triglycerides piled up on the walls of our arteries (atherosclerosis). Our endocrine system is vital to our health and life. (See pg. 89)

ABCs of EDCs: Anatomy of an endocrine disruptor

If an organism's biological processes were likened to a symphony, the endocrine system could fill the role of conductor, interpreting the score and coordinating the timing of instructions to the musicians: when to play, when to rest, and what nuance of expression to affect. The system is vastly complex, comprising many organs, functions, and mechanisms. Endocrine glands (a few of the more familiar include the adrenal, thyroid, and pituitary glands, the ovaries and testes, and the pancreas) form a balanced yet ever-changing harmony of hormones. As they circulate through blood and tissue, the hormones carry messages that govern growth, maintenance, and reproduction in all living things. Together these intricately orchestrated messages form the songs of life. - John Murphy. *From the Amicus Journal of The National Resources Defense Council.*

From: Multiple Sclerosis Asso. of America Treatment of MS with Magnetotherapy

During 1997, we made a very generous grant to a company conducting research into the use of low-level electromagnetic fields (EMFs) Until recently, this technology was used primarily to treat migraine headaches, but we are hopeful that the Food and Drug Administration will approve this treatment in the very near future so it can be used to treat both relapsing/remitting and chronic progressive MS patients.

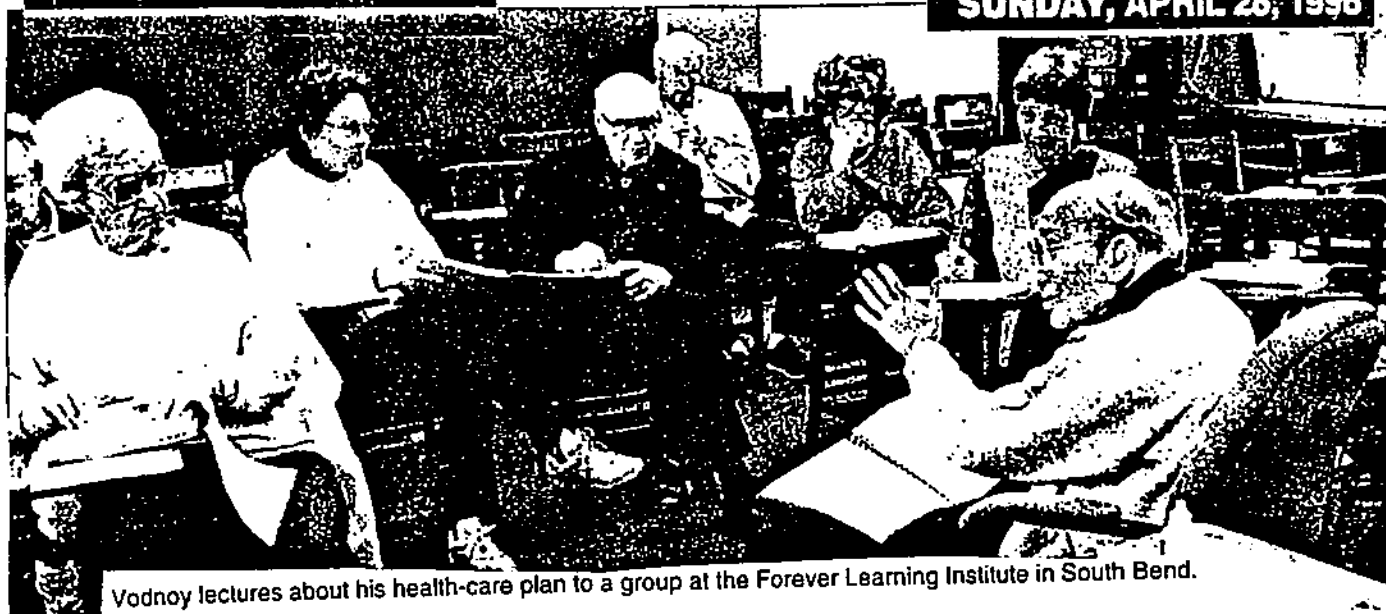
Right now, the symptoms that seem to be most responsive to EMFs are cognitive functioning, spasms, fatigue and bladder control. Can you imagine what this will mean to MS patients who live with these symptoms day after day—even year after year! *News release (Feb '98) from Multiple Sclerosis Asso. of America*

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Make copies of
this page and
give it to your
loved ones and
friends.

- Free yourself of the preventable causes of illness. *this page and give it to your loved ones and friends.*
- Replace self-indulgence with self discipline.
- We can save \$800 billion per year plus enormous suffering and death. *Apr. '95 - US Dept Health reports obesity has become worse! Oct. '96 - " " " " " " far worse!*
- Your doctor will tell you that each one of us can do more for ourselves than any doctor, hospital, drug or machine. The factors that reduce heart disease, cancer, diabetes, osteoporosis, etc. are within your control not the doctor's.
- SMOKING IS SLOW MOTION SUICIDE
- In the prevention of illness battle the enemy is us. Teach your children good healthcare and to eat only health-giving foods. Obesity afflicts 34,000,000 Americans. Even 5 pounds overweight may increase your risk of cancer, diabetes and heart disease. *American Institute for Cancer Research.* The Tobacco Industry spends \$5 billion dollars per year on disease and death promotion, and then charges the bill to us. We are too complacent about our bodies, and then pay a tremendous price to attempt to repair them.



Vodnoy lectures about his health-care plan to a group at the Forever Learning Institute in South Bend.

By JASON KELLY
Tribune Staff Writer

SOUTH BEND

Dr. Bernard Vodnoy leaves the door to his study open when he is expecting visitors. That way he doesn't have to get up from his chair to greet guests.

Simple acts like answering the door don't come easily to Vodnoy anymore. He hunches over a walker to get around the house, and he rides in a wheelchair in public.

His 81-year-old body is bent and frail, ravaged by a lifetime of diseases from polio to prostate cancer.

Despite his age and obvious afflictions, he maintains a rigorous daily routine.

Awake by 7 a.m., he spends an hour in his exercise room, riding a stationary bicycle, walking on a treadmill and using a rowing machine.

Then it's into his study, where the retired ophthalmologist continues his 16-year quest to create the optimal health-care program "against aging, disease and poor mental health."

He scours medical books and journals, compiling pertinent information in his own spiral-bound volume, which he uses as a basis for the free lectures he gives to groups around South Bend.

Retired doctor preaches the benefits of a meatless diet



Tribune Photo/REBECCA BELLING

Vodnoy practices what he preaches, adhering to a strict vegetarian diet that he believes can prevent aging and disease.

A vegetarian diet is the most important point in Vodnoy's plan, and he believes it is the key to his renewed vigor.

When he retired in 1980, he was riddled with health problems — prostate cancer, loss of vision, fatigue, sinusitis, constipation — and he turned to more than a dozen doctors for help.

But they didn't give him adequate assistance, so Vodnoy

decided he could do better by himself.

And after 16 years of following a strict vegetarian diet — without ingesting so much as an aspirin for his ailments — along with a regular exercise regimen, his health problems have drastically diminished.

"I'm actually healthier now than I was at 65 when I started this," Vodnoy said. "I'm trying to

give my body every possible break. I've had prostate cancer for 16 years, and I'm a polio, pretty well wrecked. I'm living on borrowed time."

SLOW-MOTION SUICIDE

Every tissue in the body, from hair to heels, needs nourishment.

To neglect providing the proper nutrients — which most Americans do — is to deny the body the necessary means to prevent disease and prolong life, which Vodnoy calls "slow-motion suicide."

A study by the Physicians Committee for Responsible Medicine estimated that 35 percent to 60 percent of all cancer cases are caused by diet.

And the other most common killers — heart disease and strokes — also are directly linked to high blood pressure and elevated cholesterol levels, factors determined by diet.

People, in essence, control their own disease destiny.

"Don't take the attitude that aging and disease are inevitable," Vodnoy said. "We must practice prevention. We have to live defensively."

A common criticism of that notion is that abstaining from things like cheeseburgers and chocolate shakes and other such cravings takes too much pleasure out of life.

It's not worth giving up the good stuff, many people believe.

See VODNOY/Page F8

Vegetable Vitality?



VODNOY

From Page F1

"If the same inevitable end awaits.

But Vodnoy and other proponents of a vegetarian diet insist that it actually adds to the overall enjoyment of life, providing the nourishment necessary for improved vitality.

"It's not about living to be 86 instead of 85, that's not much of an incentive for people," said Dr. Dean Ornish, president of the Preventive Medicine Research Institute in Sausalito, Calif. "It's about increasing the joy of living."

Ornish grew up in Texas, eating and enjoying meat four or five times a week.

But at age 19, he began living the vegetarian lifestyle he has documented in his books, "Eat More, Weigh Less" and "Everyday Cooking with Dr. Dean Ornish."

He chose to give up meat, not because his heart was failing like many of his patients today, but because the benefits outweighed the burden.

"There is no point in giving up something you like if you don't get something you like better in return," Ornish said. "I felt so much better that it was a choice worth making."

NATURAL HEALING

Vodnoy is shuffling through a stack of sealed containers full of fresh fruits and vegetables, trying to decide what he feels like eating tonight.

He chooses some broccoli and

baby carrots, asparagus and red pepper, celery and mushrooms, pineapple and walnuts. Then he adds some soy grits — an essential source of protein in a vegetarian diet — and a cereal made from oat groats and brown rice.

He regrets that he is low on beans and dark green, leafy vegetables, two important elements of his nutritional program. But he will have to do without them for a day.

He sprinkles apple cider vinegar and squirts some honey mixed with distilled water over the food for flavor.

It takes about 15 minutes to prepare plates for him and his wife, Elsy.

"Eating becomes an adventure," Vodnoy said. "It's a tremendous amount of fun to acquire all these wonderful foods and say, 'What do I have in the refrigerator today?'"

Variety is a key to success in a vegetarian diet. Mixing and matching fresh fruits and vegetables with adequate grains and the proper amount of protein from beans and soy products provides the necessary nutrients — in the form that nature provides.

"You can't be a fruit-arian or a vegetarian only," Vodnoy said. "You'll be missing important items, and that's what's in these grains and beans."

If all of this sounds a bit drastic, well, that is the intention.

Ornish suggests that people who want to alter their diet should do it literally overnight — and expect almost immediate results.

"Large changes all at once

reframe the reason for doing it," he said. "Conventional wisdom says that fear (of disease) is the best motivator, but preventing the heart attack that may or may not come is not the most motivating factor for people. This is about feeling better quickly and increasing performance."

Many members of Vodnoy's lecture groups have tried this diet program for themselves.

Some are elderly, others are not so old.

Some suffer from health problems, others feel fine.

What they have in common is a desire to make the most of every day they have left, so they study how nutrition can help them achieve their peak vitality.

"If you eat what nature provides without doctoring it up and using all these preservatives," said 79-year-old Bernie Bauer, "you'll feel better and be subject to a lot less ailments."

It is, of course, up to each individual to determine whether such a significant lifestyle change is worth making.

"I never tell people what to do," Ornish said. "As a scientist, I simply try to show people how powerful these changes can be."

One of Vodnoy's students suggests that skeptics look no further than the front of the classroom for proof of the effectiveness of a vegetarian diet.

"Just look at his color and energy," Betty Hopf said, gesturing toward Vodnoy. "He's a living example of how it works."

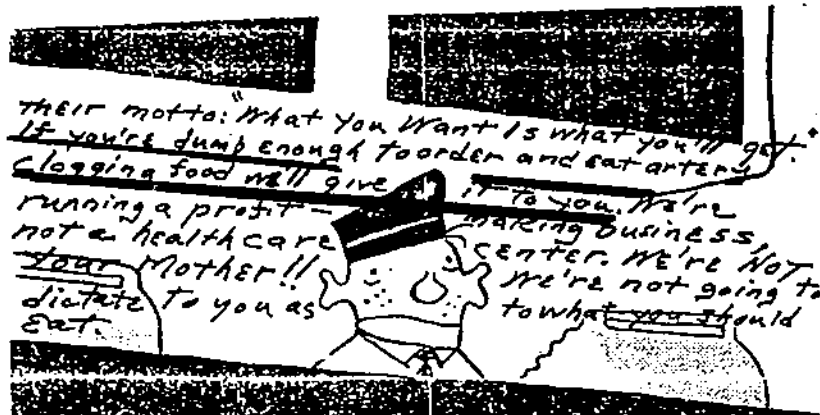
Dr. Bernard Vodnoy attributes his youthful energy to the vegetarian diet he has followed for 20 years.

Tribune Photo:
ED BALLOTS



Chemicals in well-done beef

Hamburgers that are broiled or fried well-done contain six chemicals that cause mutations, chromosome damage and possibly cancer in rodents, scientists said Friday. The \$2-million, six-year study at Lawrence Livermore National Laboratory in California found that well-done ground beef contains three newly discovered mutagens and three known mutagens. Two other mutagens also were found, but they have not been identified or tested in animals. Two of the three previously known mutagens are known to cause malignant tumors in mice and rats, said senior biomedical scientist James S. Felton, but the risk to humans from any of them remains unknown. Mutagens are compounds that change genetic structure.



To prevent cancer and many other illnesses - be an Eliminator
ELIMINATE !!!

ELIMINATE: (Join the ranks of the eliminators and live defensively). **ELIMINATE MEAT.**

The most important word in the healthcare vocabulary today is the word eliminate. Heighten your awareness of the many tragedies and catastrophes of modern chemistry and take steps to protect yourself against them as well as you can. **YOU CAN DO A GREAT DEAL TO PROTECT YOURSELF.**

Putting anything in your mouth you would not want to swallow (includes mouthwashes, toothpaste, etc.)

OTC (over the counter) drugs, cosmetics, skin and hair products. The chemicals in them will very likely be absorbed through the skin and ultimately find their way into the blood stream and every organ and cell of the body. Do not use Rx drugs unless your doctor states it is absolutely necessary, ask for alternatives.

Manufactured foods, canned, boxed, frozen TV dinners, etc. Manufactured soft drinks.

Chickens raised in cages and fed tranquilizers, antibiotics, etc., and the eggs which they lay. STOP EATING MEATS from cattle which have been fed antibiotics and other chemicals. This means practically all meats MEAT.

Manufactured meat foods like sausages, hot dogs, most deli-type foods. Homogenized milk and processed cheeses.

Save your children's health and life. Studies reveal with children 7 to 12, 28% had elevated blood pressure

42% had high levels of cholesterol, and 98% at high risk for coronary disease. Teach this page to them.

READ LABELS. If they show chemical additives, coloring matter (dyes), DON'T BUY THESE PRODUCTS:

ELIMINATE ALL ILLICIT DRUGS. (Tremendous problem even 1/3 of the physicians below 40, use cocaine and marijuana.

Jellies, preprocessed puddings, non-dairy creamers, margarine, Jello, butter.

Deodorants, especially those containing aluminum. Use baking soda, corn starch, etc.

Deodorant soaps. Taste enhancers like ketchup, prepared salad dressings, monosodium glutamate. **MAKE YOUR OWN SALAD**

Pancakes, French toast, waffles, etc. made from refined flour. **DRESSINGS.**

BEWARE OF ICE CREAM, Eskimo pies, milk shakes and maltshakes. They are loaded with sugar and other additives.

ANTI-ACIDS. Change your diet so that you can completely eliminate them. *most contain aluminum which is very adverse to your health!*

TOTALLY ELIMINATE ALL REFINED CARBOHYDRATES, (foods made with white refined flour, e.g. white bread, buns, cakes, pastries, cookies, spaghetti, macaroni, pizzas, doughnuts, etc. *Eat highly moisturized food.*

DRINKING Water or beverages with your meal. They dilute the digestive juices, pass out of the stomach

in 10 minutes, carry digestive juices with them, and greatly retard digestion. Drinking encourages

washing the food down without chewing and salivating it. Fermentation, putrefaction, gas, heart burn,

and indigestion results. Drink water 1/2 hour before meals, 1/2 hour after a fruit meal, 2 to 3

hours after a protein or starch meal. Drink at least 6 to 8 glasses of fluids daily. *(Distilled water preferred)*

COFFEE, (decaffeinated), tea, soft drinks, alcohol (booze, wine, beer), soft drinks, pop, and all junk drinks.

Drinking coffee with meals destroys 37% of the iron in your food, tea destroys 87% Soft drinks w/caffeine are, SATURATED and Poly-unsaturated fats, and free fats. Eat only monounsaturated fats (e.g. almonds, avocados, flounder, haddock, peanuts). *(Flaxseed oil is a preferred oil)* **destructive.**

HYDROGENATED OILS AND FATS. - They clog arteries. Candies- bars, chocolate, sugared and salted snacks.

THEY NOW ADVISE THAT WE SHOULD START TAKING CHOLESTEROL TESTS ON ALL CHILDREN 3 YRS OF AGE AND UP. *After accidents autopsies reveal clogged cardiac arteries!*

MANUFACTURED CEREALS. - Make your own. Buy unprocessed Multi-grains and legumes.

COLD AND VERY HOT FOODS - Chew very thoroughly. Allow foods to warm to at least room temperature.

Foods cannot be digested until warmed to body temperature. Cold foods cause stomach aches and indigestion.

Desert the refined flour and refined sugar desserts. Eat fresh fruits 1 to 2 hours after meals. Fre-

quently have an all fruit breakfast or lunch. *No*

butter cookies (no refined flour or sugar).

ELIMINATE FAST FOOD JUNK FOODS LIKE HAMBURGER, french fries, their baked goods, white buns, milk shakes, ice cream.

Do not mix acid fruits (oranges, grapefruit, strawberries) with sub-acid fruits (apples, grapes)

or sweet fruits (bananas, raisins, prunes). Other than fresh fruits, do not eat between meals.

Irritating condiments and foods (pepper, added salt and sugar). *Learn to use capsaicin vegetables. 92c.*

Do not mix starchy or non-starchy vegetables with fruit. It may cause indigestion. *Know your tummy.*

White, brown and milk sugars, refined maple and refined cane syrups.

We must eliminate half of the hysterectomies done on women of child-bearing age. A center for

Disease Control survey found that 50 percent of all such operations in the past decade were unjustified.

We must achieve 25,000 fewer pacemakers implanted each year. These 25,000 aren't really needed, critics

charge, and they cost \$280 million.

We must be far more cautious with the drugs we are taking. At least one million people end up in hos-

pitals each year, suffering from adverse drug reactions.

Our medicine and doctor bills are soaring astronomically. Last year, we paid out 17 percent more to phy-

sicians than in the previous year. A highly respected medical journal reports that "nearly 20 percent

of all hospitalized patients are stricken with other diseases that result from the medical treat ment

they're receiving at the hospital," causing new symptoms, disability, and even death."

GRAINS VARY GREATLY IN THE TYPE AND AMOUNT OF NUTRIENTS THEY CONTAIN. BY EATING A MULTI-GRAIN CEREAL YOU OBTAIN A SPLENDID BALANCED FOOD. Eat only eggs from naturally raised chickens (no tranquilizers, chemical

additives etc.) Eliminate the typical restaurant breakfast and sunday brunch. 40% of commercial chickens are infected with salmonella bacteria; the rinse water used in washing them down after slaughtering has been described as fecal soup! Don't drink the typical commercial soup. Many have 1000 mg of salt per serving.

Americans Are Losing The War Against Cancer.

Americans are losing the war against cancer, with the odds of dying from the disease increasing in the past three decades, a new report says. The study recommends that scientists concentrate on finding ways to prevent cancer, not new ways to treat it. "We see no reason for optimism about overall progress in recent years", the researchers write in today's New England Journal of Medicine. "There is no reason to think that, on the whole, cancer is becoming any less common". In 1950, 170 of every 100,000 Americans died of cancer. In 1982, after the figures were adjusted to reflect the aging population, there were 185 deaths per 100,000, an increase of more than 8 percent.

THE NATIONAL CANCER INSTITUTE HAS SET A GOAL OF CUTTING CANCER MORTALITY IN HALF BY THE YEAR 2000. THE RESEARCHERS SAID THIS WON'T HAPPEN unless there is "a precipitous and unprecedented decline" in the cancer death rate in the next 14 years. Responding to the report, a federal cancer official said that steady progress is being made against the disease and that the institute's goals are realistic. The report was written by Drs. John C. Bailar III of the Harvard School of Public Health and Elaine M. Smith of the University of Iowa Medical Center. Bailar said he would like to see more effort to understand the causes of cancer, especially the role of diet and environment. While it once made sense to search for cures, Bailar said, "those efforts have not paid off". I'm not convinced they ever will, and I think it's time to start getting serious about prevention". Bailar said that although doctors

have made considerable progress in curing a few rare kinds of cancer, such as childhood leukemia, these account for only a tiny part of the cancer problem.

INTERPRETING CANCER FIGURES CAN BE TRICKY. The National Cancer Institute contends that nearly half of all cancer victims now survive for at least five years after their disease is spotted, whereas in the 1950's only a third of them live that long. But Bailar and a Harvard colleague, John Cairns, contend this is misleading because cancers are being diagnosed sooner; therefore, they say, people are followed longer until they die, but they don't really live any longer.

PEOPLE MUST REALIZE THAT THEIR ONLY PROTECTION AGAINST CANCER IS PREVENTION. With one out of three persons eventually getting cancer, negligence in cancer prevention places most of us at very high risk. Once we have it, there is no backtracking. When it passes the initial stage, the chances of metastasis are great, this means the cancer cells migrate from the initial site through the blood, lymph, or from tissue to tissue. It explains why our chances of cure from surgery, radiation, or chemotherapy are so poor. Even if we destroy the original site with surgery, radiation or chemotherapy, there is a strong likelihood that the migrating cancer cells have set up residence elsewhere in the body. As a rule, before the cancer is discovered it is too late and metastasis has occurred. These therapies are highly toxic and do great damage to the body. The "hope" of effecting a "cure" is tiny indeed.

GAO figures high cost of health-care fraud.

Health-care fraud costs the American public \$70 billion a year and could reach \$100 billion by 1995, or 10 percent of total outlays, says a new government study.

Investigators at the General Accounting Office, the congressional watchdog agency, say fraud is rampant in the private sector as well as in the government's two major health-care programs, Medicare and Medicaid.

It takes many forms, they say. Some health-care providers submit bills for services or products not furnished. They file padded claims. They seek payment for unnecessary tests. Others get "backs.

Health care fraud is \$100 Billion Yearly.

THEY'VE FINALLY MADE NUTRITION LABELS THAT EVERYONE CAN UNDERSTAND.

"EAT TOO MUCH OF THIS STUFF AND YOU'LL DIE."



Fruit Memory Key

Vegetable Memory Key

ABC-GO-PRS.

FRUITS AND VEGETABLES - BOCAPS-GT

	Food	oz.	Cal.	Prot.	Vit A	Vit C	Vit B1	Vit B2	Vit B3	Iron	Calcium
	Apple	4.9	80	5	2.0	10.0	3.0	1.8	5	2.0	1.0
soak	Apricot (Dried)	1.25	90	2.0	80.0	6.0	-	4.0	6.0	(10.0)	2.0
/	Asparagus	2.1	12	2.0	11.0	27.0	7.0	6.0	4.0	2.0	1.3
✓	Bananas	4.2	101	2.0	5.0	20.0	4.0	4.0	4.0	4.0	1.0
	Beans, Green	2.2	16	1.5	7.0	13.0	3.0	4.0	1.5	2.0	3.0
/	Beans, Baby Lima	3.0	120	10.0	4.0	25.0	6.0	4.0	4.0	(10.0)	2.0
/	Beans, Lima	3.0	94	10.0	5.0	23.0	10.0	5.0	6.0	(12.0)	4.0
✓	Broccoli	2.75	20	4.0	39.0	117.0	5.0	9.0	3.0	3.0	(7.0)
	Cabbage	2.6	13	1.1	1.7	28.0	0.7	.6	.5	1.1	3.0
✓	Cantaloupe	3.4	29	1.1	65.0	53.0	3.0	1.8	3.0	2.0	1.3
✓	Carrots	2.6	22	1.1	152.0	7.0	3.0	2.0	2.0	2.0	2.0
/	Cauliflower	2.1	13	2.0	.7	55.0	3.0	3.0	2.0	2.0	1.3
collards	Celery	2.0	10	.8	3.0	8.0	1.3	1.2	1.0	1.1	2.0
	Corn	3.0	70	3.0	6.0	5.0	1.3	2.0	4.0	2.0	.4
	Corn 5" Ear	4.5	114	6.0	10.0	18.0	10.0	8.0	9.0	4.0	.4
soak	Dates	2.1	163	2.0	-	-	3.3	3.3	7.0	(10.0)	3.3
Figs	Grapefruit	4.2	48	.9	10.0	75.0	3.0	1.2	1.0	3.0	1.9
Black Mission and Calymra	Greens, Kale	2.75	17	3.0	106.0	60.0	5.0	8.0	2.0	(8.0)	(10.0)
soak	Lettuce	2.7	10	2.0	4.0	2.0	2.0	-	-	2.0	2.0
	Onions	4.0	45	2.0	*	20.0	2.0	2.0	-	4.0	4.0
✓	Oranges, Med.	4.6	65	2.0	5.0	110.0	9.0	3.0	3.0	3.0	(5.0)
	Peaches	4.5	100	.8	11.0	6.0	.9	1.5	4.0	2.0	.5
	Pear, Med.	5.9	101	1.9	.7	12.0	2.0	4.0	1.0	3.0	1.3
	Peas, Green	3.0	54	6.0	10.0	17.0	15.0	4.0	7.0	(8.0)	1.5
✓	Peppers, Green	3.2	16	2.0	6.0	160.0	4.0	4.0	2.0	-	2.0
✓	Peppers, Red	3.2	25	2.0	70.0	250.0	4.0	4.0	2.0	2.0	-
	Potato, baked	5.0	132	6.0	-	47.0	9.0	4.0	12.0	(6.0)	1.3
✓	Potato, sweet	2.8	78	1.9	89.0	20.0	3.0	2.0	2.0	3.0	2.0
soak	Prunes	2.0	108	1.1	9.0	1.7	1.3	2.0	2.0	(5.0)	1.9
soak	Raisins	1.5	123	1.7	2	-	3.0	1.8	1.0	(8.0)	(3.0)
✓	Spinach	3.3	17	3.6	116.0	33.0	5.0	7.0	-	(10.0)	(8.0)
✓	Squash, winter	3.7	56	3.0	29.0	22.0	3.0	8.0	4.0	(6.0)	4.0
✓	Strawberries	2.7	28	.8	.90	73.0	1.3	3.0	2.0	4.0	1.6
✓	Tomato	3.5	22	1.7	18.0	38.0	4.0	2.0	4.0	3.0	1.3
✓	Turnip Greens	3.0	17.4	2.4	103.8	98.1	8.7	11.4	1.2	(14.4)	(4.5)
✓	Watercress	1.25	8	2.0	35.0	45.0	2.0	4.0	2.0	4.0	6.0
	Watermelon	7.0	52	1.5	24.0	23.0	4.0	4.0	2.0	(6.0)	1.4

Raw Spinach
56gms
Cal 12
Prot. 1.6g
Calcium 56mg
Iron 1.52mg
Magnesium 44mg
Potassium 312mg
Vit. C 15.8mg
B1 .044mg
B6 .11mg
Vit A 3,700 IU
Carbohydrates 1.96g

check Mark Indicates Very High Density Nutrients
-40-

Eat 100% Whole Grain-Multigrains. Abundantly, Daily. Eat No Foods Made With Refined Flour

Fresh Fruits & Vegetables Are A Great Source Of The Vital Vits A-C, but are low in the B Vits and Minerals, and must be obtained from the Grains.

There is A Great Variance Of These Nutrients In The Various Grains, Therefore, Eat Daily, A Selection Of Multigrains To Achieve A Balanced Supply Of The B Vits And Minerals.

Avoid The Commercial Pre-Packaged (Cereals Many Contain Poisonous Preservative Chemicals, Are Severely Denutritified In Processing, And Needlessly, Extremely Expensive

By Eating These Grains, We Obtain Greatly Improved Nourishment At Great Savings.

SEE PG 56
BORSWM
MEMORY KEY

Read pg. 272 to understand Soy:
2150 - Soy Protein
6170 - Soy Powder
6245 - Soy Grits
6770 - Soy Halves
6336 - TVP Chunks

See pg 77c for Amino acid breakdown in #2150 Soy Protein powder

Food	Cups	Cal	Prot	Carbo	Fat	Fiber	Vit E	Vit B1	Vit B2	Vit B3
Barley, Pearled	1/2	340	20	70	1.0	8.0		20	8	
Buckwheat Grits	1/4	145	6	31	.7	.4		15	3	6
Farina, Wheat	1/4	156	8	32	.4			2	2	2
Kasha, toasted buckwheat	1/2	330	12	74	1.6	1.1		30	6	10
Soy Nuggets TVP Millet, hulled	1/2	320	15	68	3.0	3.2		45	20	10
Oat Groats	1/3	174	15	31	3.6	.9	6	25	6	4
Oats, rolled	1/2	150	10	25	3.0	.6		15	4	2
Rice, brown, long grain	1/2	335	10	71	1.8	.8	6	20	2	25
Soy Grits	1/4	110	30	12	1.0			20	6	
Wheat, whole grain	1/3	190	10	39	1.3	1.3		20	6	
Wheat germ	1/2	160	20	24	5.0	1.2	70	70	20	20
Bran, Wheat	1/2	59	8	15	1.7	3.4		15	6	30
Oat Bran	1/2	90	15	13	2.0	5.0		30	4	2
Rice Bran	2 tbs.	54	6	10	.4	1.4		15	6	35
Sunflower seeds	1/3	290	20	7.5	24	1.5		70	8	15
Brewer's Yeast	3 tbs.	70	20	7	3			220	75	50

	Cups	Vit B6	Bio-tin	Calc	Cop-per	Folic Acid	Iodine	Iron	Magn.	Pantoth-emic	Phosphorus	Zinc
Barley, Pearled	1/2	10		4	45	8		35	30	4	40	10
Buckwheat Grits	1/4				20		8	4	8		8	
Farina, wheat	1/4			2		2		4	2		6	
Kasha - toasted buckwheat	1/2	20		2	60	15		15	20	10		
Soy Nuggets TVP Millet, hulled	1/2		5	5	18	18	60	13	15	8	13	10
Oat Groats	1/3	25		4				15	20	6	20	55
Oats, rolled	1/2	25		2	15		15	10	15	6	15	40
Rice, Brown, Long Grain	1/2	45	15	4	15	4	15	8	25	10	20	10
Soy Grits	1/4	15	8	10	15	25	100	25	25		25	4
Wheat, whole grain	1/3	6		2	25	30		10	25	8	20	20
Wheat germ	1/2	30		4	20	25		20	30	10	45	40
Bran, Wheat	1/2			4				25	40	8	35	25
Oat Bran	1/2			2				10	20		20	
Rice Bran	2 tbs.	25	15	4	10	6		6	100		25	6
Sunflower seeds	1/3			8				30	4		45	
Brewer's Yeast	3 tbs.	45		4	10	50		15	15	25	40	8
Torula's Yeast	3 tbs.	60	10		25	100	70	25	10	30	45	20

Nutritional 2tbs Yeast Code # 2455 See pg 77c - for nutritional contents. Very important supplement.

See Pg 456 for list of the Maintenance List of Healthcare Foods

Code #1760-5620	1760 Flaxseed Oil 12 oz. 10.75	1830 Olive Oil 16 oz. 9.45	1880 Wheat Germ Oil 16 oz. 10.75	2254 Lecithin Granules 2 Lbs. 12.95	2455 Nutritional Yeast 10 oz. 7.45	3240 Grape- fruit-Ex 1 oz. 7.95	5540 Rice Bran Long 2 Lbs 1.72	5620 Apricots Dried 1 Lb 2.30
Serving Size	1 TBS	1 TBS	1 TSP	2 TBS	2 H. TBS	1 Drop/8oz	1/4 cup	8 pcs.
Weight				10 mgs	16g		45 g	46 g
Calories	125	119		70	50		170	100
Calories from fat				50	7		10	0
Total Fat	14 gm	14 gm		9 g	21 g 1%		15g 2%	0
Saturated Fat		18g 15 11g		1 g			0	0
Cholesterol					0		0	0
Sodium		0			5mg 0%		0	0
Total Carbohydrate				1 g	5 g 2%		35g 12%	25g 8%
Dietary Fiber					4 g 16%		8g	1.4g
Sugars							0	1.2g
Protein					8g		35g	1 g
Vit. A	90%						0	60%
Vit. B1					640%		10%	
Vit. B2					560%		1%	
Vit. B3					280%		12.5%	
Vit. B6					480%		22.5%	
Vit. B12					130%			
Biotin							15%	
Niacin								
Pantothenic Acid					100%			
Folic Acid					60%		20%	
Vit. C							0	
Vit. E							3%	
Calcium							2%	
Copper							10%	
Iron					4%		4%	10%
Magnesium							15%	
Manganese								
Phosphorus							10%	
Potassium					180 mg	2.0mg 9%		
Selenium					30%			
Zinc							6%	
Iodine							15%	
Lecithin					10%			

Cold Pressed - Temp. not above 100° preserving oil nutrition. 1 tsp = 385 mg octa co-sol. (High Energy Nutrition). 47% Linoleic Acid (omega-6); 6% Linolenic Acid (omega-3); 16% Oleic Acid (omega-9). All are unsaturated fat.

Major portion of the brain and nerves. Fat emulsifier

2930	8 Billion Acidophilus & Bifidus (N)	60 Caps	7.95
2932	(tested at 10 billion)	120 Caps	18.95
Each 8 Billion Acidophilus & Bifidus Capsule Provides: 8 billion organisms minimum guaranteed in the following amounts			
		Potency	
		4.0 billion (50%)	
		3.2 billion (40%)	
		0.8 billion (10%)	
		8.0 billion (100%)	
2940	Bromelain 500 mg 2000 GDU (N)	90 Tabs	13.95
2942	NutraFlora FOS Powder NEW! (N)	4 oz.	7.95
2945	Pancreatin 2000 mg (N)	100 Caps	7.95
2946	NEW SIZE!	250 Caps	21.95
2970	Papaya Enzyme, chewable (N)	180 Tabs	5.45
2972	(With Chlorophyll and Mint)	360 Tabs	7.95
2960	Super Enzymes (N)	90 Tabs	7.95
2962		180 Tabs	14.95
Each SUPER ENZYMES tablet provides:			
	Betaine HCL (from beet molasses)	200 mg	
	Bromelain (2,000 GDU from pineapple)	50 mg	
	Papain (140 MGU uncoated from papaya)	50 mg	
	Pancreatin 44 (equivalent to 800 mg)	200 mg	
	Supplying Amylase (20,000 USP units)	100 mg	
	Protease (20,000 USP units) (Trypsin & Chymotrypsin)	100 mg	
	Lipase (3,400 USP units)	25 mg	
	Papain Enzymes (NF 1:10,000)	50 mg	
	Cellulase	10 mg	
	On the Edge Enzymes	100 mg	
	Papaya Enzymes	45 mg	
	Thymol Enzymes	45 mg	
		750 mg	

2250	Lecithin Granules	8 oz.	3.50
2252	Traditional unbleached	1 lb.	6.95
2254	98% Phosphatides	2 lb.	12.95
EACH HEAPING TABLESPOON PROVIDES:			
	Phosphatidyl Choline	1760 mg	
	Phosphatidyl Ethanolamine	1530 mg	
	Phosphatidyl Inositol	1070 mg	
	Linoleic Acid	2025 mg	
	Linolenic Acid	260 mg	
	Choline	275 mg	
	Inositol	168 mg	
	Potassium	108 mg	
Our Lecithin Granules contain 25% Phosphatidyl Choline, the active ingredient in Lecithin.			
2280	Lecithin Fine Granules 98% (N)	1 lb.	6.95
2310	Lecithin Granules beige	12 oz.	6.75
2370	Lecithin Liquid (N)	16 oz.	4.50
2380	Phosphatidyl Serine 500 mg	60 Caps	32.95
2381	(100 mg PS) NEW SIZE!	120 Caps	59.95

- 2150 Soy Protein 95% 1 Lb 2.95
- 6170 Soy Powder 2 Lbs 3.55
- 6325 Soy Grits 2 Lbs 2.65
- 6330 TVP Granules 2 Lbs 2.25
- 6336 TVP Chunks 1 Lb 2.35
- 6790 Soy Beans 1 Lb 3.35
- Dry-Roasted-unsalted

The products on pgs 42-43-44, constitute my NOW BASIC HEALTH CARE FOODS, in addition to fresh fruits and vegetables. I URGE you to buy and integrate them into your daily diet.

SOLENU DRINK:
6170 Soy Powder + 2254 Lecithin Granules + 2455 Nutritional Yeast Flakes
- 42 I now add these 3 foods into my cereal instead of ingesting them as a drink

	5780 Raisins 1 lb 2.49	5830 Non-Fat non-Instnt Dry Milk 1 lb. 4.95	5950 Oat bran 1 lb. 1.75	5995 RICE Bran 1 lb. 1.99	6170 Soy Powder 2 lbs. 3.55	6260 Kasha Buckwheat Groats 1 lb 3.30	6285 Millet Hulled 1 lb. 2.39	6290 OAT Groats 2 lbs. 1.50
Serving Size	1/4 cup	1/4 cup = 80g	1/3 cup	3 TBS	1/4 cup	1/4 cup	1/4 cup	1/4 cup
Weight	40g	25g	38g		20g	45g	45g	45g
Calories	120	90	95		90	170	170	175
Calories from fat	0	0	25		35	15	20	5
Total Fat	0	0			4g 6%	2g 2%	2g 3%	3g 5%
Saturated Fat	0	0			.5g 3%		0	.5g 3%
Cholesterol	0	0			0	0	0	
Sodium	5mg 0%	130mg 6%			0	10mg 0%	0	0
Total Carbohydrate	82mg 11%	12mg 4%			5g 10%	35g 12%	33g 11%	30g 10%
Dietary Fiber		0	6g 24%		3g 12%	2g 10%	2g 8%	5g 20%
Sugars	26g	11g	1g		0	0	0	
Protein	1g	9g	7g		8g	6g	5g	8g
Vit. A	0	0	0		0%	0	0	
Vit. B ₁						15%		25%
Vit. B ₂						3%		
Vit. B ₃						5%		
Vit. B ₆						10%		
Vit. B ₁₂								
Biotin								
Niacin								
Pantothenic Acid						5%		
Folic Acid						7.5%		
Vit. C		0			6%	0	0	
Vit. E								
Calcium		30%	2%		6%	0		2%
Copper						30%		15%
Iron		0	10%		15%	8%	8%	10%
Magnesium			20%		10%	10%		20%
Manganese								
Phosphorus								
Potassium	300mg 8%							
Selenium								
Zinc			6%		6%		6%	12%
Iodine								

SOY PROTEIN

Our NOW Soy Protein contains the top quality industry leader, Supro® 90% protein isolate. Soy Foods are gaining in popularity because of recent research demonstrating a number of positive benefits in decreasing the risk of heart disease and cancer. For example, 26g (about 1/3 cup) of 90% Soy Protein has been shown to reduce cholesterol an average of 12%. Soy Protein also inhibits oxidation of LDL cholesterol. The most exciting compound, genistein, has been the subject of over 800 recent scientific studies concerning its role in cancer prevention. One of its documented mechanisms is an anti-estrogen agent which may help reduce the risk of breast cancer. As more people continue to switch from animal-based protein to vegetarian sources, it's nice to know that a simple, convenient, low-cost and pleasant-tasting alternative is available.



Soy Protein is one of the very few vegetable sources of complete protein. Many current formulas do not contain the balance that is found in Soy Protein, or the essential Amino Acids. Soy Protein is a first generation body building product that continues to be used worldwide. This product is the most economical protein for the value obtained. Add flavors and blend to suit taste.

Amino Acids per 100 grams

L-Alanine	3780 mg	L-Arginine	6818 mg
Aspartic Acid	11100 mg	L-Cystine	1100 mg
L-Histidine	8300 mg	Glutamic Acid	19800 mg
L-Glycine	3600 mg	L-Isoleucine	4400 mg
L-Leucine	7800 mg	L-Lysine	8000 mg
L-Methionine	1200 mg	L-Phenylalanine	5000 mg
L-Proline	4800 mg	L-Serine	4800 mg
L-Threonine	3200 mg	L-Tryptophan	1180 mg
L-Tyrosine	3400 mg	L-Valine	4500 mg

You do not have to eat meat to get your proteins. You get complete protein by a combination of brown rice, grains and legumes. Study labels to understand the essential proteins, non-essential proteins and amino acids.

To increase your lysine intake, add corn meal to your meals.

*1/2 cup Corn Meal 2 lbs 1.95
1/2 cup Corn Meal 2 lbs 1.95*

**ALL PRICES ARE REGULAR
RETAIL - BUY THEM AT
25% DISCOUNT.**

Qty.	Code	Product	Size	ONLY
	2150	Soy Protein	1 lb.	7.95
	2152		2 lb.	13.95

6325-7210-Now Code Numbers

	6325 SOY-Grits 2 Lbs. 2.39	6330 SOY-TVP Granules 1 Lb. 2.25	6350 Wheat Germ 1 Lb. 1.30	6336 SOY-Chunks 1 Lb. 2.40	7005 Almonds 1 Lb. 4.99	7050 Sunflower SEEDS 1 Lb. 1.99	7073 Walnuts 12 oz. 4.59	7210 Alfalfa SEEDS 1 Lb. 3.59
Serving Size	1/4 cup	1/2 cup	2 TBS	1/2 cup	1/4 cup	3 TBS	1/4 cup	2 TBS
Weight	40 g	43 g	15 g	30 g		29 g	30 g	
Calories	110	120	45	90	160	165	210	
Calories from fat			10	5	130	130	180	
Total Fat	0	0	1.5g 2%	<1g	14g	14g 22%	20g	
Saturated Fat	0	0			1g	1.5g 8%	1.5g	
cholesterol		0	0		0	0	0	
sodium	0	0	0	0	5mg	0	0	
Total Carbohydrate	13g 4%	14g	7g 2%	9g 3%	5mg	6g 2%	3g	
Dietary Fiber	7g 28%	8g	2g 8%	5g 20%	3g	4g 16%	3g	
Sugars	0	1g	2g		0	0	0	
Protein	21 gm	23 g	3g	15g	6g	7g	5g	
Vit. A		0	0		0	0		
Vit. B1	20 %		15 %		6 %			
Vit. B2	6 %				15 %			
Vit. B3					8 %			
Vit. B6	15 %	There's much more in the foods analyzed than shows on 42, 43 & 44. This is what I copied off the labels. These values may vary from time to time. Label laws do not require full disclosure.						
Vit. B12								
Biotin	8 %							
Niacin								
Pantothenic Acid								
Folic Acid	25 %				40 %			
Vit. C	0	0	0		0	0	0	
Vit. E			4 %		70	150 %		
Calcium	15 %	15 %	0	10 %	8 %	4 %	2 %	
Copper	15 %				20 %	25 %		
Iron	20 %	35 %	4 %	15 %	6 %	10 %	6 %	
Magnesium	30 %	35 %	8 %	25 %	20 %	25 %	15 %	
Manganese	30 %							
Phosphorus	25 %				15 %			
Potassium				140 mg				
Selenium								
Zinc	15 %	15 %	10 %	10 %		10 %	6 %	
Iodine	100 %							

TVP #6330 is a wonderful product that can be used in many ways. Be sure to buy it and experiment with it. You'll love it. You may prefer to use it in your SOLENU DRINK instead of soy powder. A hand blender works excellently with either. Some people are allergic to soy or have a low tolerance for it. You're fortunate if you are not one of this group. If you experience unpleasant gas, start with small quantities to give your body time to develop the ability to digest such rich, complex proteins. Taking digestive aids can help greatly. They are: 2972 Papaya Enzymes (proteolytic) 2692 Super-Digestive Enzymes.

There's a lot of information about soy in Balch Book. There's also the book "Soybean and Your Health" \$12.95 and "The Simple Soybean" by Mark and Virginia - 44¢ - \$2.95 (your price \$2.95)

	1 Non-Fat Plain Yogurt	2 Non-Fat Non-Instant Dry Milk	3 Skim Milk Liquid	4 Soy Protein # 2150	5 Soy Powder # 6170	6 Lecithin Granules # 2254	7 # 2455 Nutritional Yeast Flakes	8 Total Column 1, 2	9 Total Column 5, 6, 7	10 Total Column 1, 2, 5, 6, 7
Serving Size	8 oz	1 1/3 Cup	8 oz	1 1/4 Cup	1 1/4 Cup	2 TBSP	2 TBSP			
Weight	248 g	23 g	240 ml	24 g	20 g	10 g	16 g			
Calories	120	80	90	90	100	70	47	200	217	417
Calories from Fat				10		50	7	0	57	57
Total Fat (grams)	0	0	0	1	5	9	1	0	15	15
Saturated Fat (grams)	0	0				1		0	1	1
Cholesterol (milligrams)	5	2	< 5	0	0		0	7	0	7
Sodium (milligrams)		125	125	220	0		5	125	5	130
Total Carbohydrate (grams)	18	12	13	0	6		5	30	11	41
Dietary Fiber (grams)	0	0	0	0	6		2	0	8	8
Sugars (grams)	17	12	13	0	0		0	29	0	29
Protein (grams)	13	8	8	21	10		8	21	18	39
Vit A	0	0	10%	0	0		0	0	0	0
Vit. B					15%		650%		665%	665%
Vit. B 2		25%			6%		580%	25%	586%	611%
Vit. B 3					2%		275%		277%	277%
Vit. B 6							480%		480%	480%
Vit. B 12							130%		130%	130%
Biotin										
Vit. D			25%	0	0		0			
Pantothenic Acid										
Folic Acid					8%			0%	8%	8%
Vit. C	6%	0	4%	0	0		0	6%	0%	5%
Vit. E										
Calcium	40%	25%	30%	4%	6%		0	65%	6%	71%
Copper										
Iron				25%	8%			0%	8%	8%
Magnesium				15%	15%			0%	15%	15%
Manganese										
Phosphorus					15%			0%	15%	15%
Potassium (milligrams)	600	390	0	0	0	160	0	990	160	1150
Selenium							30%			
Zinc				6%						
Iodine					65%			0%	65%	65%
Lecithin (grams)						10		0	10	10

(SOLENU)

I sprinkle 5, 6, 7 into my cereal
instead making it into a drink,
for enhanced digestion.

Two types of grapefruit Extract:

3240 1oz 7.95 (Extract)

5945 Grapefruit Fiber 100% pure 1 Lb 7.49

7553 Grapefruit Oil 1oz 5.95 (Extract)

2.483 2.485 10.02
3.55 12.95 7.45
0362 VIT A 10 25,000 IU, 1000 IU D 250/3.95
0352 VIT A D 10,000 IU, 400 IU D 250/12.95
0294 VIT E 400 IU MIXED 250/24.95
2530 Bee Pollen Granules 8oz 8.95

4686 Ginkgo Biloba

4700 Gotu Kola

60 caps 13.50

100 caps 4.50

- Don't buy the expensive concoctions marketed as "health drinks" at exorbitant prices. Make your own.
- Column 8 shows the nutrition achieved with the 2 most highly recommended, 'safe' dairy products. They bring us 21 gms of protein, 25% of our B₁, 65% of our calcium and 990 mg of potassium.
- Column 9 shows the wonderful benefits derived from a mixture of #5, 6, 7. Use a ^{pint or} quart jar. Pour in distilled water, 3/4 full. Add the 3 ingredients (after each ingredient). You now have the Basic SOLENU Health Drink. Add enhancement foods as you desire, e.g. fruit drinks, 1 banana/or 2 oz milk, honey, rice bran, wheat germ, Vit A+D, and Vit E. The latter are fat-soluble vitamins. You may also use flaxseed oil and wheat germ oil. Lecithin will emulsify them and greatly increase their digestion and absorption. Fill the jar to the top and refrigerate. Drink small quantities, with your meals and in between meals. Start slowly. Use 1/2 the above serving size initially in a pint jar. If you tend to get gas from the soup, microwave a simmer. If you still get gas use #6350 Soy granules which have been unsweetened.

additional ways of enriching your SOLENU drink are given on pages 55 & 56.

- Be careful with intestinal gas. Be prepared with charcoal caps, simethicone, Beano, Lactase Digestives, if you're a gas maker. Steam your sprouts. I use Gas-X Simethicone 80mg - chewable and find them excellent.
- Study the catalogs, products and books of NOW Natural Foods and Indiana Botanic Gardens 3401 W. 37th Ave, Hobart, IN. 46342. 1-800-644-8327 My doctor discounts with these companies is very large and I'm happy to pass the savings on to you.
- Instead of making the 3 SOLENU products into a drink, I now sprinkle a tablespoon of each into my cereal, to increase the synergistic action of these foods. I also squeeze in a NOW 6362 Vit A+D (25,000 IUA and 1000 IUD) and a #1894 Vit E 400 IU into the cereal (since they are fat soluble vitamins) so that they will be emulsified by the lecithin. I also add a tablespoon of flaxseed oil (#1760). Over 50% of people in our country are Vit. D Deficient.

Maintenance List of Healthcare Foods

1760 Flax Seed Oil 12 oz.	10.95	6336 TVP Chunks 1 lb.	2.40
1830 Olive Oil 16 oz.	6.65	6350 Wheat germ 1 lb.	1.30
1880 Wheat Germ Oil 16 oz.	10.75	7005 Almonds 1 lb.	4.49
2254 Lecithin Granules 2 lbs.	11.95	7050 Sunfl. Seeds (sprouting) 1 lb.	1.99
2455 Nutritional Yeast 10 oz.	6.95	7073 Walnuts 12 oz.	4.59
3240 Grapefruit Extract 1 oz.	2.95	7210 Alf. Seeds (sprouting) 1 lb.	3.59
5540 Rice, Brown Long 2 lbs.	1.72		
5620 Apricots, Dried 1 lb.	3.95		
5780 Raisins 1 lb.	2.49		
5830 Non-Fat Dry Milk 1 lb.	4.95		
5950 Oat Bran 1 lb.	1.75		
5995 Rice Bran 1 lb.	1.99		
6170 Soy Powder 2 lbs.	3.55		
6280 Kasha-Buckwheat 1 lb.	3.30		
6285 Milled, Hulled 1 lb.	2.39		
6290 Oat Groats 2 lbs.	1.50		
6325 Soy Grits 2 lbs.	2.39		
6330 TVP Granules 1 lb.	2.25		

You don't have to eat meat to get your proteins, you can get much better proteins from beans (legumes).

In many cases, Balch may suggest taking several individual amino acids. Other researchers prefer achieving their amino acids with whole foods, and specifically toasted soybeans. They are inexpensive and they afford a very fine source of the highest quality protein (and therefore amino acids) at the lowest cost. They are toasted or roasted and do not require cooking. Soak them in your refrigerator and then add your taste enhancers (BROWN CIDER, VINEGAR, HONEY etc.).

PROTEIN: RDA GRAMS

WOMEN	AGE	MEN
11-24.....48		11-14.....45
25-70+.....50		15-18.....63
		19-24.....68
		30-70+.....63

SOY POWDER #6170

from toasted soybeans 2 lbs \$3.35

Serving size 1/4 C

Use to make soy milk, mix into your drinks.

Calories.....	100
Protein.....15%	10g
Fat.....	5g
Carbohydrates.....	6g
Fiber.....	6g
Vit A.....	0
Calcium.....	6%
Magnesium.....	15%
Vit C.....	0
Thiamin...Be.....	15%
Riboflavin...B2.....	6%
Niacin...B3.....	2%
Iron.....	8%
Folic Acid.....	8%
Phosphorous.....	15%
Iodine.....	65%
Vit. B6.....	8%

T.V.P. CHUNKS #6336

From toasted soybeans 1 lb \$2.25

Serving size 1/2 C 30gm

They make a wonderful meat substitute. Pre-soak them and use them in soups.

Calories.....	90
Calories from fat.....	5
Total fat.....	<1g
Sodium.....	0
Potassium.....	740mg
Total carbohydrates.....	9g
Dietary fiber.....	5g
Protein.....	15g
Calcium.....	10%
Magnesium.....	25%
Iron.....	15%
Zinc.....	10%

INGREDIENTS: Enzymatically predigested Lactalbumin (from Vhey), Soy Protein isolate, Pancreatic digest of Casein, Stearic Acid, Cellulose, Magnesium Stearate, L-Ornithine, L-Carnitine Tartrate, Vegetable Protein Coating, Pyridoxine (B6).

SOY PROTEIN

Soy Protein is one of the very few vegetable sources of complete protein. Many current formulas do not contain the balance that is found in Soy Protein, or the essential Amino Acids. Soy Protein is a first generation body building product that continues to be used worldwide. This product is the most economical protein for the value obtained. Add flavors and blend to suit taste.

AMINO ACIDS per 100 grams **302.**

L-Alanine.....	3780 mg	L-Arginine.....	6210 mg
Aspartic Acid.....	11100 mg	L-Cystine.....	1100 mg
L-Histidine.....	2300 mg	Glutamic Acid.....	19600 mg
L-Glycine.....	3600 mg	L-Isoleucine.....	4400 mg
L-Leucine.....	7900 mg	L-Lysine.....	6000 mg
L-Methionine.....	1200 mg	L-Phenylalanine.....	5000 mg
L-Proline.....	4800 mg	L-Serine.....	4500 mg
L-Threonine.....	3200 mg	L-Tryptophan.....	1180 mg
L-Tyrosine.....	3400 mg	L-Valine.....	4500 mg

Qty.	Code	Product	Size	ONLY
	2150	Soy Protein, 95%	1 lb.	7.95
	2152		2 lb.	13.95

T.V.P. GRANULES #6330

(Textured vegetable protein) 1 lb. \$1.99

Serving size 1/2 C

Use to prepare anything that would be made with ground meat products.

Calories.....	120
Total Fat.....	0
Saturated fat.....	0
Cholesterol.....	0
Sodium.....	0
Total carbohydrates.....	14g
Dietary fiber.....	8g
Sugars.....	1g
Protein.....	23g
Vitamin A.....	0
Vitamin C.....	0
Calcium.....	15%
Iron.....	35%
Magnesium.....	35%
Zinc.....	15%

SOY BEANS ROASTED #6790

1 LB \$2.95

Serving size 1/3 C

Eat as a snack food. Many prefer them pre-soaked.

Calories.....	130
Calories from fat.....	6g
Total fat.....	7g
Saturated fat.....	1g
Cholesterol.....	0
Sodium.....	0
Total carbohydrates.....	10g
Dietary fiber.....	5g
Sugars.....	0
Protein.....	13g
Vit A.....	0
Calcium.....	8%
Magnesium.....	15%
Vit C.....	0
Iron.....	15%
Zinc.....	10%

SIX AMINO 1500 TABLETS TYPICALLY CONTAIN:

L-Alanine.....	398 mg	L-Lysine.....	556 mg
L-Arginine.....	313 mg	L-Methionine.....	148 mg
L-Aspartic Acid.....	741 mg	L-Ornithine.....	60 mg
L-Carnitine.....	60 mg	L-Phenylalanine.....	315 mg
L-Cystine.....	123 mg	L-Proline.....	600 mg
L-Glutamic Acid.....	1908 mg	L-Serine.....	366 mg
L-Glycine.....	146 mg	L-Threonine.....	372 mg
L-Histidine.....	157 mg	L-Tryptophan.....	84 mg
L-Isoleucine.....	400 mg	L-Tyrosine.....	255 mg
L-Isoleucine.....	661 mg	L-Valine.....	420 mg

SOY PROTEIN #2150

From toasted soy beans 1 lb \$7.95

Serving size 1/4 C (24gms)

Mix it into your drinks.

Calories.....	90
Calories from fat.....	10
Total fat.....	1g
Sat fat.....	0
Cholesterol.....	0
Sodium.....	220mg
Total carbohydrates.....	0
Dietary fiber.....	0
Sugars.....	0
Protein.....	21g
VIT A.....	0
Calcium.....	4%
Magnesium.....	15%
VIT C.....	0
Iron.....	25%
Zinc.....	6%

SOY GRITS #6325

From toasted soy beans

2 lbs \$3.10

Serving size 1/4 C

Mix it into your cereals.

Calories.....	110
Calories from fat.....	0
Dietary fiber.....	7g
Protein.....30%	21g
Carbohydrates.....	13g
Fat.....	1g
Vit B1.....	20g
Vit B2.....	6g
Vit B6.....	15g
Biotin.....	8g
Calcium.....	15g
Copper.....	15g
Folic Acid.....	25g
Iodine.....	100g
Iron.....	20g
Magnesium.....	30g
Phosphorus.....	25g
Zinc.....	15g

Other sweeteners are: #6905 Barley

Malt Powder 24oz \$5.95, #6060

Succanat Powder 2 lbs \$4.79, #6954

Stevia liquid extract 2oz \$ 9.95, #6960

Stevia powder 1oz \$9.75.

AMINO 1500 PREDIGESTED #0017

Highly recommended since they are a whole food. They come in two sizes-

150 tabs \$9.95 - 300 tabs \$18.95.

Sec. I. Foods and Supplements To Regain & Maintain Good Health

M = Maintenance Foods For Those On Complete Health Care Vegetarian Diet, With No Health Problems

* = For those with mild disorders; add to the M items

For those with moderate disorders, consider all items on pg 47, 48, & Top of 49.

0030	L Arginine 500mg	100 Caps	7.95	Amino Acid therapy; increase thymus, retards tumors, cancer
0160	Tyrosine 500 mg	60 Caps	5.45	Amino Acid therapy: norepinephrine & dopamine precursor, mood regulator.
0340	Vit A 25,000 I.U.	100 Caps	3.20	Large dose Vit. A therapy
*0472	DMG Dimethyl Glycine	100 Caps	9.95	Cellular Respiration, energy, enhances oxygen utilization
*90012	Aloe Vera Gel	1 Gal	17.95	G.I. Tract Therapy
0362	Vit A & D 25,000 I.U. A, 1000 I.U. D.	250 Gels	8.95	Immunity, bone structure, Vit. D Deficiency
*0352	Vit A & D 10,000 I.U. A, 400 I.U. D	250 Caps	5.50	Immunity, bone structure, Vit. D Deficiency (50% of people are Vit. D deficient)
*0428	B-50 Complex	250 Tabs	14.95	Immunity & "B" Vitamins.
*0712	Ester-C Complex 625 mg	180 Tabs	16.95	Immunity, overall nutrition. <i>CHEN with food.</i>
*0894	Vit E 400 IU Mixed	250 Caps	24.95	Protect red cells, fat. sol. vits
0930	Vit E Liquid	4 Ozs	12.95	Protect red blood cells, emulsify fat soluble vitamins
1436	Citrimax	180 Caps	33.95	Inhibits synthesis of fatty acids in liver, promotes burning of body fat, suppresses appetite
*1542	Full Spect Minerals	250 Tabs	12.95	Protein Chelated. Consider 1227, and 1405 <i>CHEN.</i>
M1760	Flax Seed Oil	12 Oz	10.95	Vit A, E, Omega 3, 6, 9. <i>Very fine food.</i>
*1817	Super Odorless Garlic (pg 138-a)	180 Caps	18.95	Broad scale nutrition <i>0770 Complex Vit C Pwd.</i>
2150	Soy Protein 95% carbohydrate	1 Lb	7.95	Amino Acids, Energy <i>802. 1/4 level tsp =</i>
M2254	Lecithin Granules	2 Lbs	11.95	Fat Emulsification <i>Vit C 500mg</i>
2381	Phosphatidyl Serine 500 mg	120 Caps	69.95	Improve memory. Erase 12 yrs of decline <i>Bioflavonoids 200mg</i>
M2455	Nutritional Yeast	10 Oz	6.95	B Vitamins, Protein <i>Rose Hips 100 mg</i>
*2607	Alfalfa Juice Concentrate	250 Tabs	12.95	Fine nutrition, Chlorophyll <i>Acerola Pwd. 100mg</i>
2668	Barley Grass 500 mg	250 Tabs	12.95	Fine nutrition, Chlorophyll <i>Calcium 50mg.</i>
*2675	Kelp Caps 640 mg	250 Caps	7.95	Thyroid Function (iodine), energy
2676	Kelp Powder	8 Oz	3.15	Thyroid function (iodine), Energy
2680	Kelp 150 mcg	200 Tabs	2.50	Thyroid function (iodine), Energy
2698	Spirulina 500 mg	200 Tabs	11.95	Fine nutrition, Chlorophyll, Weight Loss
*2720	Wheat Grass 500 mg	100 Tabs	5.95	Fine nutrition, Chlorophyll <i>2664 Barley Grass 100 Tabs \$95</i>
*2907	Acidophilus (+ F.O.S. #2942)	250 Caps	14.95	G. I. Tract (2 Billion)
*2962	Super Digest. Enzymes	180 Tabs	14.95	Digestive Aid
*2972	Papaya Enzymes (Proteolytic)	360 Tabs	8.95	Digestive Aid
3150	Bovine Cartilage 750 mg	100 Caps	27.95	Accelerate wound healing, reduce inflammation
3188	CoQ10 - 30 mg	120 Caps	29.95	Cellular Respiration, Energy (<i>#3190 240 caps \$5.00</i>)
*3254	Grape Seed Antioxidant	180 Caps	39.95	Antioxidant, anti-cancer
3259	Melatonin Sublingual -3 mg	180 Tabs	17.95	Pineal Gland Aid
3270	Shark Cartilage 750 mg	100 Caps	21.95	Neo-Vascularization, <i>anti-cancer</i>
*4620	Cascara Sagrada 450 mg	100 Caps	3.95	Constipation
*4627	Cayenne Caps 500 mg.	250 Caps	8.95	Capsaicin Lessen Pain, aids digestion, improves circulation,
*4662	Echinacea 400 mg	250 Caps	17.95	Immunity Builder <i>stops bleeding from ulcers. catalyst for other herbs, good for heart, kidneys, lungs</i>
*4687	Gingo Biloba 60 mg Extract	120 Caps	25.95	Neuro-Transmit, Brain Function, Energy <i>pancreas, spleen, stomach, arthritis and rheumatism. wards off colds, signs infections, sore throat.</i>
*4692	Goldenseal Root 500 mg	100 Caps	14.95	Immunity Aid, Diuretic, Antiseptic
4700	Gotu Kola 450 mg	100 Caps	4.95	Neuro-Transmitter, Energy
4718	Licorice Root 450 mg	100 Caps	3.95	Interferon Aid (Immunity)
4728	Pygeum -Saw Palmetto	60 Caps	14.95	Prostate Problems - <i>anti-cancer</i>
*5010	Cayenne Pepper 40,000 B.T.V.	3 Oz	1.99	Capsaicin lessen pain, etc
M5540	Rice, brown long (MOR)	2 Lbs	1.72	Vit, Min, Prot, Fiber
M5620	Apricots Dried	1 Lb	3.95	Vit A, Fiber
5720	Papaya Spears	12 Oz	3.25	Vit A, Cal, Fiber, Sweetener
5760	Pineapple Slices	12 Oz	3.25	Prot, Sweetener, Fiber, Iron
M5780	Raisins, Thompson	1 Lb	2.49	Sweetener, Fiber, Potassium
M5830	Non Fat Dry Milk <i>non-instant</i>	1 Lb	4.95	Protein (amino acids, calcium) carnitine, taurine, <i>threonine</i>
5940	Bran Medium - <i>roughage</i>	1 Lb	.99	G. I. Tract Health
M5950	Oat Bran	1 Lb	1.75	Important source of soluble fiber
5980	Psyllium Husks Whole - <i>softage</i>	12 Oz	6.60	G. I. Tract Health Important source of soluble fiber
M5995	Rice Bran	1 Lb	1.99	B Vits. Min. Prot. Phytochemicals, Energy
M6170	Soy Powder	2 Lbs	3.55	B Vits, Min. Prot. Phytochemicals, Energy
M6280	Kasha-Buckwheat Toasted	1 Lb	3.30	B Vits. Min. Prot. Phytochemicals

groats

M6285	Millet, hulled (MOR)	1 Lb	2.39	B Vits. Min, Prot, Phytochemicals
M6290	Oat Groats (MOR)	2 Lbs	1.50	B Vits, Min, Prot, Phytochemicals
M6325	Soy Grits	2 Lbs	2.39	B Vits, Min, Prot, Phytochemicals
M6330	TVP Textured Veg. Protein	1 Lb	2.25	B Vits, Min, Prot, Phytochemicals
M6350	Wheat Germ	1 Lb	1.30	B Vits, Min, Prot, Phytochemicals, Energy
M6336	TVP Chunks (Soy)	1 Lb	2.40	on the benefits of soy. Meat substitute.
*6965	Sucanat Cane Powder	2 Lbs	2.50	Natural Sweetener - Dehydrated Sugar Cane
7001	Pecans	12 Ozs	9.30	Mag, Zinc
M7005	Almonds	1 Lb	4.99	Vit E, Mag, Prot.
7015	Pine Nuts	8 Ozs	3.99	Prot, Fiber, Mag, Iron, Zinc
M7050	Sunflower Seeds Sprout	1 Lb	1.99	Vit E, Mag, Cop, Iron, Zinc
M7073	Walnuts	12 Ozs	4.59	Prot, Fiber, Mag, Iron, Zinc
7095	Cashews	12 Ozs	4.99	Prot, Mag, Iron, Zinc
M7210	Alfalfa Seeds-Sprout	1 Lb	3.59	Fine nutrition, phytochemicals
7245	Foenugreek Seeds (Sprout)	1 Lb	2.35	Fine nutrition, phytochemicals
7250	Mung Beans (Sprout)	1 Lb	1.95	Protein, Fib, B Vit, Mag, Iron, Zinc

- Learn Herbal Therapy. Herbs are in the "4000" code numbers on all 3 pages. Study Balch pgs. 63-79, *Green Pharmacy by James Duke Ph.D.*
Study Indiana Botanic Gardens Literature.

SECTION 2

- ADDED FOOD AND SUPPLEMENTS FOR MORE SEVERE PROBLEMS AND DISORDERS. *Also some "Mand" items*

0017	Amino 1500 Predigested	300 Tabs	18.95	Protein Fortification, amino acid therapy
0322	BetaCarotene-NaturalAlgae	180 Caps	18.95	Vit A, Therapy, Anti-Cancer
0438	B-100 Complex	250 Caps	29.95	Depression, stress
0458	B6 100 mg	150 Caps	9.95	Anti-cancer, brain function
0468	B12 1000 mcg Sublingual Lozenges	250 Loz	11.95	Chronic Fatigue Syndrome; Mental Function
0484	Niacin-Flush Free Vit B3	180 Caps	16.95	Improve Cerebral Circulation, energy
0488	Pantothenic Acid 500	250 Caps	15.95	Anti-stress.
0732	Ester C 1000 (1250mg)	120 Tabs	18.95	For large doses
1227	Bone Calcium (lead free) r	240 Tabs	19.95	Minerals Microcrystalline Hydroxyapatite Calcium
1240	Calcium Citrate Powder	8 Oz	6.50	Antacid, Indigestion, Kidney
1292	Magnesium Citrate 200 mg	250 Tabs	13.95	Metabolism, Carbo, Min, Sugar, acid-alkaline balance
1405	Colloidal Minerals	32 Oz	14.95	Very high absorption
1422	Chromium Picolinate 200 mcg	250 Caps	12.95	Reduce sugar cravings by stabilizing metabolism of simple
1610	DHA 250 500mg 50% DHA; EPA 20% 120 gels	120 gels	18.95	carbohydrates (sugar)
1462	Potassium Gluconate 99 mg	250 Tabs	4.95	Fluid bal, heart, neural, kidney, energy
1470	Potassium Gluconate	8 Oz	3.98	Fluid bal, heart, neural, kidney, energy
1480	Selenium 100 mcg	100 Tabs	3.95	Destroys free radicals
1492	Silica Complex	180 Tabs	15.95	Astringent-shrinks prostate
1520	Zinc (Gluconate) 50 mg	100 Tabs	2.50	Prevent cataracts, macular degeneration
1552	Zinc Picolinate 50 mg	120 Caps	9.95	Improve brain function and prevent cataracts + mac. deg.
M 1830	Olive Oil	16 Oz	6.65	Rich in monounsaturated fat. Lower bad cholesterol
M 1880	Wheat Germ Oil	16 Oz	10.75	Energy - 1 tsp = 40% RDA Vit E
2105	Lipo-trim w/Carnitine & Chromium	120 Tabs	16.95	Weight Reduction
* 2530	Bee Pollen Granules	8 Oz	4.50	Nutrition, energy, immunity
* 2540	Propolis 500 mg	100 Caps	9.95	Sooth nose, throat phagocytosis
* 2550	Royal Jelly 300 mg	100 Gels	9.95	" " " "
2570	Royal Jelly 30,000 mg	10 Oz	7.95	Combines honey & pollen
2722	Wheat Grass 500 mg	500 Tabs	24.95	Fine nutrition, Chlorophyll
2742	Wheat Sprout Antioxidant	200 Tabs	24.95	Chlorophyll, 900 mg. Enzyme activity, energy
* 2932	8 million Acidophilus	120 Caps	18.95	G.I. Tract Therapy. also see 2907
* 2942	Nutraflora FOS	4 Oz	10.95	Indigest. Carbo for Acidophilus
3050	Bentonite	4 Oz	2.60	G. I. Tract Cleanser
3239	Glucosamine 1000mg Hydrochloride	180 Caps	32.95	Arthritis, Rheumatism
M 3240	Grapefruit Extract	1 Oz	7.95	Mouth wash, gargle, enema, cleanser
3241	Glucosamine H.C.L Powder	6 Oz	32.98	Arthritis, Rheumatism (32.95)
3272	Shark Cartilage 750 mg	300 Caps	65.95	Anti-Cancer, macular degeneration
3292	Joint Support	180 Caps	37.95	Super Arthritis Formula
3302	Eye Support	120 Caps	29.98	For contents see page 128i, contains Bilberry
4014	Panax Ginseng 8 gr (Balch 42 & 53)	250 Caps	22.95	Tonic-male reproduct organs Whitaker-Hypo thyroidism

4033	Siberian Ginseng 500 mg	250 Caps	11.95	Energy, General Tonic
4205	Cat's Claw Herbal Tea	4 Oz	6.95	Antioxidant, anti-inflammatory
4305	Pau d'Arco Tea Bags	100	5.95	Anti-Cancer Tea Drink
4519	Raspberry Leaf Tea c/s	4 Oz	2.00	Menstrual Bleeding, uterine spasms
4605	Astragalus	180 Caps	4.95	Anti-Cancer, Blood Cleaner, Energy
4612	Bilberry Complex	100 Caps	24.95	Macular Degeneration
4614	Boswellin 250 mg w/Curcumin	120 Caps	18.48	Arthritis
4615	Butchers Broom 500 mg	100 Caps	3.95	Arteriosclerosis
4621	Cat's Claw 400 mg	250 Caps	16.95	Cleans GI Tract, enhances Wht. Cells, immunity, cardiac
4670	FEVERFEW 400 mg	100 Caps	5.95	vascular, antioxidant, anti-mutagenic, cancer aids
4645	Dandelion Root	100 Caps	5.95	Anti-Cancer, Blood, Liver Cl
4655	Dong Quai 500 mg	100 Caps	3.95	Female Reproduct Disorders
4672	Esiak	90 Caps	14.95	Herbal Cancer Formula
4680	Ginger Root 550 mg	100 Caps	3.95	Colitis, Diverticulosis, nausea, gas, indigestion, energy,
4716	Kava Kava 250 mg 30% Extract	60 Caps	11.95	morning sickness, vomiting
4730	Red Clover 450 mg	100 Caps	4.95	Anti-Cancer, Blood, Liver Cl
4733	Rei-shi Mushrooms 600 mg	110 Caps	11.95	Anti-Cancer, interferon
4737	Silymarin 150 mg	120 Caps	15.95	Liver rejuvenator
4982	"Green" Black Walnut Hull	2 Oz	13.95	Parasites
5810	Buttermilk Powder	1 lb	4.65	Enrich calcium, carnitine, taurine, threonine
5830	Non Fat Dry Milk - non instantiated	1 lb	5.05	
6211	Amaranth Grain	1 lb	2.95	Super grain
6265	Flaxseed Meal	1 lb	2.95	Benefits of Flaxseed Oil
6948	Maple Syrup	16 oz	8.35	Sweetener, Taste Enhancer
6790	Soy Beans Dry Roasted	1 lb	2.59	B Vits, Min. Prot, Phytochemicals
6905	Barley Malt Powder	24 Oz	5.95	Healthy Sweetner
8608	Dr. Whitaker's Guide to Natural Healing 417 pages Reg. Price is \$22.95. Your Price \$14.00			
8615	Prescription for Nutritional Healing 2nd Edition By Balch & Balch 600 Pages Reg. price \$19.95. Your price \$14.00.			
8625	Prescription for Dietary Wellness Revised Edition By Balch & Balch			

4761 St. John's Wort 300 mg 3.95 250 caps 27.95

4760 St. John's Wort 100 caps 11.95

- Dr. Vodnoy's Lecture Notebook 200 pages your cost \$13.00
- Items are in their largest size to save. If you are just starting, use smaller size. To estimate your cost reduce your total approx 50% and then take off your additional 25% discount.
- Whitaker Guide to Healing-page 10 "Using FDA data and medical literature, dietary supplements are 2,550 times safer than over the counter drugs". Glandulars most frequently used are: Multi-gland, Spleen, Thymus, Thyroid.
- "Maintaining Healthy Glandular System" Read Balch Pages 550-552, See Page 90 for selection and prices of Glandulars.
- Look up each item in both Balch books, Whitaker book and this lecture notebook.
- Make a complete listing of all your health problems and study them in all 4 books.
- Prices on 47-48-49 are regular retail. Shop to obtain them for 25% off.

Loofas

7815	Bath Brushes	8.65
7820	Complexion Pads	7.50
7844	Loofa 10"	3.30
7850	Loofa on a stick 12"	5.30
7855	Sea Sponges 6"	6.70

SOLENU: Soy powder, Lecithin Granules, Nutritional Yeast.

BOCAPS-GT: Broccoli, Beets,

onions, celery, chili peppers,

carrots, asparagus, bell peppers,

spinach, sweet potatoes, garlic,

deep green leafy vegetables, tomatoes,

Red, Green, Yellow, Bananas,

(mangoes),

cauliflower, dates, grape fruit,

lemons, oranges, Prunes, Raisins,

strawberries, Raspberries,

MARKS-RA-VLG: Millet, Oat Groats,

Bran, Rice, Kasha, Soy, Rice Bran,

Wheat germ,

ACHMS: Alfalfa, chickpeas,

(garbanzo), lentils, mung, soy,

sunflower seeds.

Fields of Therapy to Practice Comprehensive Self-help Healthcare

Balch, Part 3 Remedies & Therapies - Study and increase your

Knowledge in each field and then apply it.

AGING (slow down or turn back the clock)

AIR PURIFICATION (Air Density Ionization)

AMINO ACIDS

ARTERIOSCLEROSIS

BINOULAR VISION & FUSION

(ORTHOPTICS - Vision training)

CANCER ← Cellular

CHELATION

COLON ← Collagen & Cartilage

DENTAL ← Chondroitin

DERMATOLOGIC

DIGESTIVE (Bismarck) Probiotic & super

EAR, NOSE, MOUTH, THROAT, enzymes

LARYNX (grapefruit extract)

EXERCISE

EYE and vision ← Gall Bladder (Balk)

GASTROINTESTINAL Org. Brown Apple (Lid)

GLANDULAR, Thyroid, Multi-gland, Spleen,

HEALTH DRINKS Thymus, Phyto-Chemicals

MASSAGE (Use Safflower Oil)

MAGNETOTHERAPY

MILK: NON-FAT YOGURT Make Your Own.

MENTAL HEALTH LINKED To Physical

NATURAL FOOD SUPPLEMENTS Health,

NATURAL HEALING 59-60

NUTRITION

HYDROMASSAGE (spa)

HEMATOLOGY (use of the flow chart)

HERBAL, Balch 63-82 & James Duke

IMMUNITY, Balch 523-527

LIGHT: VISIBLE & INVISIBLE 86-88

NUTRICEUTICALS ← Liver

OXYGEN THERAPY Insufflation vs

infusion, food re-oxygenation &

rehydration, re-juvenating - de-

SOY (5 types all pre-toasted) ← Purifying

SPROUTING-beans & seeds

VINEGAR (malic acid) Increase hydrochloric

VITAMIN, MINERAL, Phyto-Chemicals

XEROSTOMIA (Dry Mouth)

CONSUMER WARNING

**IF YOU ARE AGAINST GENETICALLY ENGINEERED HORMONES,
ANTIBIOTICS & PUS IN YOUR MILK & DAIRY PRODUCTS,
YOU BETTER ACT NOW!**

**HERE ARE SIX THINGS YOU SHOULD KNOW BEFORE YOU BUY
MILK & DAIRY PRODUCTS IN ANY STORE.**

- **GENETICALLY ENGINEERED HORMONES
COULD BE IN YOUR MILK AND DAIRY PRODUCTS.**

All milk and dairy consumers beware:

Starting on February 3, 1994, milk, cheese, butter, ice cream, yogurt, beef and infant formula sold and consumed throughout the United States will be laced with genetically engineered recombinant Bovine Growth Hormone (rBGH) - also known as "Bovine Somatotropin" or BST. Recently, the U.S. Food and Drug Administration (FDA) approved the use of rBGH in dairy cows without long-term testing of the hormone's health effects on consumers.

The (FDA) has also refused to require labeling of milk and other dairy products derived from use of the genetically engineered hormone, even though more than 90% of consumers favor labeling of rBGH products so they can avoid buying them.

- **INCREASED ANIMAL
CRUELTY**

rBGH use will cause suffering to millions of animals:

rBGH is like "crack" for cows. It "revs" their system and forces them to produce a lot more milk - but it also makes them sick.

Even the FDA admits that cows injected with rBGH could suffer from increased udder infections (mastitis), severe reproductive problems, digestive disorders, foot and leg ailments, and persistent sores and lacerations.

- **THOUSANDS OF FAMILY DAIRY FARMERS
WILL LOSE THEIR FARMS**

rBGH will bankrupt family farmers:

The overproduction of milk caused by rBGH could force up to 30% of U.S. dairy farmers out of business within 36 months after rBGH is introduced into the market. For each family farmer driven out of business, 25 other dairy-related jobs could also be lost.

- **YOU AND YOUR FAMILY ARE AT RISK.**

rBGH milk can make you sick:

The Food and Drug Administration (FDA) admits that the use of rBGH in cows may lead to increased amounts of pus and bacteria in milk.

Equally disturbing, the powerful antibiotics and other drugs used to fight increased disease in rBGH-injected cows may lead to greater antibiotic and chemical contamination of milk and dangerous resistance to antibiotics in the human population.

The FDA has released studies showing that milk from rBGH-treated cows could have more saturated fat and less protein than regular milk.



Graphic by: M. Wuerker

Both the U.S. General Accounting Office (GAO) and the Consumer's Union, publisher of *Consumer Reports* magazine, have warned of the potential hazards to human health caused by consuming products derived from rBGH-treated cows.

- **MORE WATER & SOIL
POLLUTION**

rBGH will harm the environment:

The use of rBGH leads to unsustainable farming practices. Studies indicate that widespread use of the hormone will result in increased soil contamination and groundwater pollution.

- **rBGH WILL COST THE TAXPAYER HUNDREDS OF MILLIONS OF DOLLARS.**

rBGH use will increase the federal deficit:

According to the federal Office of Management and Budget (OMB) rBGH use will cost the taxpayer between \$300 million and \$500 million over the next six years in increased price supports for milk. This will include at least \$65 million for fiscal year 1994, and another \$116 million in 1995.

WHAT YOU CAN DO TODAY

to Protect Yourself, Your Family and Friends From Hidden Hormones in Milk, Dairy and Beef Products.

Ask supermarket managers and grocers to provide you with a written statement on whether or not their milk and dairy products are free of genetically engineered Bovine Growth Hormone (rBGH).

Patronize only supermarkets, natural food stores, convenience stores and restaurants that offer products that are rBGH-free.

BUY your milk, cheese, butter, ice cream, yogurt, infant formula and beef products from companies that have gone on record as rBGH-free.

Join the Pure Food Campaign's rBGH Boycott. Help organize opposition to rBGH tainted foods that are being sold in supermarkets, restaurants and school cafeterias.

Make a donation to your local Pure Food Campaign. Your funds will be used to alert other consumers to the dangers of genetically engineered hormones in their milk and dairy products.

Call the 13 companies listed below and tell them you will not purchase their milk, dairy or beef products until they can provide you with a written assurance that their products are and will remain free of genetically engineered Bovine Growth Hormone (rBGH).

Borden's	Dannon	Häagen-Daz	A&P
1-614-225-4511	1-800-321-2174	1-800-767-0120	1-201-573-9700
Land O' Lakes	Yoplait	Kroger	McDonald's
1-800-328-4155	1-800-967-5248	1-513-762-4000	1-708-575-6198
Nestlé/Carnation	Baskin-Robbins	Safeway	Pizza Hut
1-800-637-8530	1-800-331-0031	1-510-891-3000	1-800-262-1744
Kraft/Phillip Morris			
1-800-323-0768			

BOYCOTT BGH

To get involved in the rBGH Boycott in your local area, write or call:

The Pure Food Campaign
1130 17th Street, N.W. Suite 300
Washington D.C. 20036
1-800-253-0681 or 202-775-1132

Please make copies of this flyer and distribute them to your family, friends, and co-workers.

The Pure Food Campaign is a project of the Foundation on Economic Trends.

Eliminate all meats below

Vitamin (U.S. RDA)	Best Sources	Functions	Deficiency Symptoms
A Carotene (5,000 IU)	Liver, eggs, yellow & green fruits and vegetables, milk & dairy products, fish liver oil	Growth & repair of body tissues (resist infection), bone & teeth formation, visual purple production (necessary for night vision)	Night blindness, dry, scaly skin, loss of smell & appetite, susceptibility to infection, frequent fatigue, teeth decay
B₁ Thiamin (1.5 mg)	Wheat germ, yeast, liver, whole grains, nuts, fish, poultry, beans, meat	Carbohydrate metabolism, appetite maintenance, nerve function, growth & muscle tone	Heart irregularity, nerve disorders, fatigue, loss of appetite, forgetfulness
B₂ Riboflavin (1.7 mg)	Whole grains, green leafy vegetables, organ meats	Necessary for fat, carbohydrate & protein metabolism, cell respiration, formation of antibodies & red blood cells	Eye problems, cracks in corners of mouth, dry, sore disturbances
B₆ Pyridoxine (2.0 mg)	Fish, poultry, liver meats	Necessary for fat, carbohydrate & protein metabolism, formation of antibodies, maintenance of sodium/potassium balance (nerves)	Nervousness, dermatitis, blood disorders, muscular weakness, muscle convulsions, skin cracks, anemia
B₁₂ Cobalamin (6 mcg)	Organ meats, eggs, milk, fish, cheese	Carbohydrate, fat, protein metabolism, maintenance of healthy nervous system, blood cell formation	Pernicious anemia, nervousness, neuritis, fatigue, brain degeneration
Biotin (300 mcg)	Yeast, organ meats, legumes, eggs	Carbohydrate, fat, and protein metabolism, formation of fatty acids, helps utilize B vitamins	Dry, grayish skin, depression, muscle pain, fatigue, poor appetite
Choline (No RDA)	Organ meats, soybeans, fish, wheat germ, egg yolk	Nerve transmission, metabolism of fat & cholesterol, regulates liver & gall bladder	High blood pressure, bleeding stomach ulcers, liver & kidney problems
Folic Acid Folacin (400 mcg)	Green leafy vegetables, organ meats, milk products	Red blood cell formation, protein metabolism, growth & cell division	Anemia, gastrointestinal troubles, poor growth
Niacin (20 mg)	Meat, poultry, fish, milk products, peanuts, brewer's yeast	Fat, carbohydrate & protein metabolism, health of skin, tongue & digestive system, blood circulation	General fatigue, indigestion, irritability, loss of appetite, skin disorders
Pantoic Acid (10 mg)	Lean meats, whole grains, legumes	Converts nutrients into energy, formation of some fats, vitamin utilization	Vomiting, stomach stress, restlessness, infections, muscle cramps
C Ascorbic Acid (60 mg)	Citrus fruits, vegetables, tomatoes, potatoes	Helps heal wounds, strengthen blood vessels, cures坏血病, resistance to infection	Bleeding gums, slow healing wounds, bruising, aching joints, osteoarthritis, poor digestion
D (400 IU)	Fish liver oils, egg yolks, organ meats, fish, fortified milk	Calcium & phosphorus metabolism (bone formation), heart action, nervous system maintenance	Rickets, poor bone growth, nervous system irritability
E (30 IU)	Vegetable oils, green vegetables, wheat germ, organ meats, eggs	Protects red blood cells, inhibits coagulation of blood, protects fat soluble vitamins, cellular respiration	Muscular wasting, abnormal fat deposits in muscles, gastrointestinal disease, heart disease
K (No RDA)	Green leafy vegetables, fruit, cereal, dairy products	Important in formation of blood clotting agents	Tendency to hemorrhage

1 lb. Tbsp Yogurt = 1/2 oz. 1 Tbsp w/eq. MEAL = 4.5 oz. = 55% of these values →

Calcium (1000 mg)	Milk & milk products	Strong bones, teeth, muscle tissue, regulates heart beat, muscle action & nerve function, blood clotting	Soft brittle bones, back & leg pain, heart palpitations, indigestion
Chromium (No RDA)	Corn oil, clams, whole grain cereals, brewer's yeast	Glucose metabolism (energy), increases effectiveness of insulin	Abnormalities, glucose intolerance in diabetics
Copper (2 mg)	Oysters, nuts, organ meats, legumes	Formation of red blood cells, bone growth & health, works with Vitamin C to form insulin	General weakness, impaired respiration, skin sores
Iodine (150 mcg)	Seafood, iodized salt	Component of hormone thyroxine which controls metabolism	Gather, dry skin & hair, nervousness, obesity
Iron (18 mg)	Meats & organ meats, fish, leafy green vegetables	Hemoglobin formation, improves blood quality, increases resistance to stress & disease	Anemia (pale skin, fatigue), constipation, breathing difficulties
Magnesium (400 mg)	Nuts, green vegetables, whole grains	Acid/alkaline balance, important in metabolism of carbohydrates, minerals & sugar	Nervousness, tremors, easily stressed anger, disturbances, blood clots
Manganese (No RDA)	Nuts, whole grains, vegetables, fruits	Enzyme activities, carbohydrate & fat production, sex hormone production, skeletal development	Dizziness, poor muscle coordination, ear noises
Phosphorus (1000 mg)	Fish, meat, poultry, eggs, grains	Bone development, important in protein, fat & carbohydrate utilization	Poor bones & teeth, arthritis, rickets, appetite loss, irregular breathing
Potassium (No RDA)	Lean meat, vegetables, fruits	Fluid balance, controls activity of heart muscle, nervous system, kidneys	Poor reflexes, irregular heart beat, dry skin, general weakness
Selenium (50-200 mcg, provisional RDA)	Seafood, organ meats, lean meats, grains	Protects body tissues against oxidative damage from radiation, pollution & normal metabolic processing	Heart muscle abnormalities
Zinc (15 mg)	Lean meats, liver, eggs, seafood, whole grains	Involved in digestion & metabolism, important in development of reproductive system, aids in healing	Retarded growth, prolonged wound healing, loss of appetite

American Institute for Cancer Research • Washington, D.C. 20089

Butter is high in saturated fat. Margarine is high in trans-fatty acids. A cup (8oz) of Non-Fat Yogurt with active cultures will provide you with acidophilus, plus:

Calcium 40% Total Carbohydrates 15g 6%
 Protein 11.9g Dietary Fiber 4%
 Potassium 520mg 3490%
 Vit A 2% Total Fat 0.9g
 Vit C 2% Saturated Fat 0%
 Vit B₁ 4% Cholesterol 10mg 4%
 Vit B₂ 30% Sodium 135mg 6%
 Vit B₆ 20% Phosphorus 85%
 Iron 0% (Milk is a great spread on bread)

on a healthy diet FIRST,

1-

DISORDERS and SYMPTOMS CAUSED BY DEFICIENCIES OF VITAMINS AND MINERALS (AICR)

You may get rid of your symptoms & disorders

Do you "fly off the handle" easily?

American Institute For Cancer Research

Anger, easily aroused: magnesium (rice bran). *Poor nutrition CAN cause poor mental health!*
Anemia: B6, folic acid, iron, chlorophyll.

Kidney problems: choline (lecithin granules + B Vit Complex)
(Nutritional Yeast Flakes).

Liver problems: choline

Appetite, loss of smell &: vit A, B1, Biotin, B3, Vit C, phosphorus, zinc. *Approx. 80% of Americans suffer clinically significant depression frequently.*

Muscle cramps, pain & weakness: Biotin, pantothenic acid, vit E

Arthritis: phosphorus.

Muscular wasting: Vit E, copper

Atherosclerosis: chromium, B6.

Mouth, cracks in corners: B2

Blood clots: magnesium (rice bran)

Muscle coordination, manganese

Blood disorders: B6, B12.

Nerve disorders: B1, B6, B12

Bones, poor, soft or brittle: vit D, calcium & phosphorus

Neuritis: B12

Brain deterioration: B 12

Night Blindness: vit A

Breathing difficulties: iron, phosphorus.

Nose bleeds: vit C

Bruising: vit C

Pains, back and leg: calcium

Concentration, poor. All of them!
Constipation: Vit B complex, all the brans, fruit & veg. chlorophyll (dark greens), fiber, rice bran.

Pernicious anemia: B12

Depression: Biotin, soy, legumes, rice bran

Obesity: iodine (soy grits)

Dermatitis: B 6

Skin cracks: B6

Digestive disturbances: B2

Skin problems: vit A, B2, B3, B6, Biotin, copper, potassium, iodine

Digestion, poor: vit C, vit A, B1, B12, Biotin, B3.

Skin sores: copper

Ear Noises: manganese

Stomach stress: pantothenic acid (vit. B5). Use to help relieve stress regardless of cause.

Eye problems: B2

Skin and Hair, dry, grayish: vit A, biotin, iodine (soy grits).

Fatigue: vit A, B1, B3, Biotin, B12, iron, Vit E.

Skin pale: iron.

Disorientation: magnesium. (rice bran)

Respiration impaired: copper

Dizziness: Manganese

Restlessness: Pantothenic acid (vit. B5) *Results? Poor Mental Health. Learning disability.*

Fat deposits, abnormal in the muscles: vit E. Eliminate foods with saturated fats and cholesterol.

Reflexes, poor: potassium

Forgetfulness: B1

Rickets: vit D, calcium, phosphorus

Gastrointestinal problems: Choline, folic acid, B2, B3, vit E.

Tooth decay, vit A, vit C, calcium & phosphorus

Glucose intolerance in diabetes: chromium

Tetany: calcium

Growth, poor: folic acid, vit D, zinc.

Tremors: magnesium (rice bran) *lecithin granules, nutritional yeast flakes, soy protein powder*

Gums, bleeding: vit C.

Ulcers, bleeding stomach: choline

Goiter: iodine (rice bran)

Vision problem (& night blindness): vit A, B2

Heart disease: vit E, and eliminate overweightness.

Vomiting: pantothenic acid (vit. B5)

Heartbeat irregularity: B1, potassium
Heart muscle abnormalities: selenium
Heart palpitations: calcium

Weakness, general: copper, potassium

Hemorrhage, tendency: vit K

Wounds, slow healing: Vit C, zinc. (oats)

High blood pressure: choline, *losing weight, eliminating salt, lowers high blood pressure.*
Indigestion: B3

Enrich your diet with the foods which are espec. rich in the nutrients your disorders and symptoms require. Make a detail list of them before you start. The high nutrition foods required most often are: pure, raw wheat germ and wheat bran, oats and oat bran, soy grits, rice bran, nuts, dark green leafy vegetables, like spinach, and collards, kale (eliminate lettuce which is a very poor food nutritionally), carrots, broccoli, green peppers, cantaloupe, bananas, oranges, grapefruit. Eat some of these at each meal. *The new broccoli flower hybrid of broccoli and cauliflower is the new super food. It is a good as broccoli.* A tablespoon of plain, low-fat yogurt will fortify your acidophilus (good bacteria). Use it as your spread and eliminate butter and margarine. Other dairy products and red meat are not essential. Eliminate all processed meats and all foods with refined flour and refined sugar. *If you decide against being a vegetarian, eat only unchemicalized chicken, and fish from uncontaminated water. Do not eat your fruits with your meals. Eat them at least an hour after meals; does not apply to everyone.*

Infection, susceptibility to: Vit A, Vit C

Insulin sensitivity: B6

Irritability: B3, Vit D *Note poor mental health.*
Joints, aching: vit C

GET YOUR NUTRIENTS FROM NATURAL FOODS, NOT PILLS, WITH MINIMAL COOKING. *(different ones)*

• Vitamins do not work alone. You need an array of ~~them~~ from unprocessed natural foods, to enable them to work together.

Process is called SYNERGISM. Become very knowledgeable, acute and competent in the use of supplementary nutrients and foods, they can be VERY IMPORTANT to you.

Are you the type of person who prefers cereal in the morning or do you prefer a refreshing mix of coumarins and limonenes? And for lunch, are you looking forward to feasting on a salad of Boston bib and Arugula? Allium Compounds or Dithiolthiones? Planning on relaxing sitting back, enjoying a snack of indoles? Or were you planning an enticing creation of isothiocyanates and thiocyanates, perhaps with a few saponins tossed in? If these sound like meals from Mars, well, don't despair, they aren't alien delicacies at all. Rather, they are substances known as phytochemicals, which are found in such

commonly consumed foods as citrus fruits, broccoli, cabbage, onions, garlic, leeks, soybeans and whole-grain cereals, to name a few. Although they have no nutritional value, these chemical substances, which occur naturally in plants, may provide health benefits including the prevention and treatment of disease. Scientists now believe that there are thousands of phytochemicals in our foods. The accompanying table depicts the actual chemical compound (the phytochemical), the food source and how these compounds may affect us and possibly help us in the quest for medical knowledge.

Phytochemicals	Best Sources	Possible Benefits
Allium Compounds	Onion, Garlic, Scallions	Promote production of anticancer enzymes; may reduce incidence of stomach and intestinal cancer.
Carotenoids	Yellow, Orange & Dark Greens	Antioxidants able to block damage of DNA.
Coumarins	Citrus Fruit	Promote production of detoxifying enzymes and inhibit tumor growth.
Dithiolthiones	Broccoli, Cabbage	Promote production of detoxifying enzymes and inhibit tumor growth.
Indoles	Broccoli, Cabbage, Cauliflower, Brussel Sprouts	Promote production of enzymes that inactivate estrogens & androgens; may have anticancer properties.
Inositol Hexaphosphate	Soybeans, Whole-Grain Cereals	Inhibit Lipid Oxidation
Isoflavones (Phytoestrogens)	Soybeans	Inhibit certain enzymes that activate carcinogens; may reduce estrogen-related cancers in women.
Isothiocyanates & Thiocyanates	Broccoli, Cabbage, Cauliflower	Promote production of detoxifying enzymes; inhibit tumors in carcinogen-exposed rats.
Limonene	Citrus Fruit	Promotes production of anticancer enzymes.
Phenols & Polyphenols	Fruit, Vegetables & Green Tea	Powerful antioxidants; promote production of anticancer enzymes.
Saponins	Soybeans	Bind cholesterol and bile acids; may reduce incidence of colon cancer.
Sterols (B-sitosterol)	Vegetable & Vegetable Oils	Lowers cholesterol

by Stephen Strum, M.D., F.A.C.P.

Preliminary studies involving human prostate cancer cells grown in the laboratory indicate that Soy appears to contain an active ingredient that inhibits the growth of prostate cancer. This active substance, Genistein, is also found in

tropical legumes. Stephen Barnes of the University of Alabama has initiated a study of 80 men at high risk for prostate cancer. The men in this study will consume large amounts of soy to see if this product can prevent or decrease the incidence of prostate cancer. I believe it is reasonable to use soy as your main source of protein while eliminating animal fats from your diet. The latter appears to be a high-risk factor for prostate cancer and other illnesses. My recommendation is to consider the product "Take Care" from Nutritious Foods, Inc. Their product HP-20 contains 20mg of Genistein per serving. Two servings per day at a minimum are recommended. You may order this product directly by calling Nutritious Foods at 1-800-445-3350.

8-12-22

Retail:
 Non #6325 Soy Grits 2 Lbs. 8.95
 #2150 Soy Protein Powder 1 Lb. 6.95
 91% 2 Lbs. 12.95
 #6170 Soy Powder 2 Lbs. 3.50
 Very Important for making
 your health drink.
 #6790 Soy Beans-use 1 Lb 2.95
 for snack food
 unsalted
 #6336-TVP Chunks 1 Lb 2.10
 Don't do it, it's way over priced
 #6330-TVP Soy Granules 1b. 2.00

-54

Make Your Own High Nutrition Drinks, Cereals, and Salad Dressing

MNEMONIC (Memory) KEYS for your Healthcare Program

The following information is based on the books by Balch & Whitaker: You need to determine the desirability of it for you and assume complete responsibility for its use. You should study the Balch & Whitaker books to enhance your understanding and ability to apply this information. If you have any questions concerning your use consult your doctor. Start slowly and reduce portions, especially if you are allergic or intolerant to any of these

foods. My memory ^{key} previously was LENUPRO. I've now changed it to SOLENU and SOLENU. So = Soy powder, LE = Lecithin, NU = Nutritional Yeast. Buy the basic supplements and mix them yourself. The memory key I use is

* I sprinkle a tablespoon of each into my cereal.

- To save time: Barley Grits, Bulghur Wheat, Kasha (Buckwheat), Soy Products (Now) are pre-toasted. Soak (1/4 to 1/2 cup) overnight and they can be eaten with only very light (or no cooking) or put 1/2 cup of each in a 1 qt. slow cooker, add 2 1/2 cups fine water and cook for 1 to 4 hrs.

* Eat: oat + groats (or steel cut), millet, brown rice; put 1/2 cup in slow cooker with 2 1/2 cups H₂O for 3 hrs (approx); keep your cooked cereals in your refrigerator. To maintain freshness place 1/2 tsp H₂O in them and mix thoroughly before refrigerating.

B. To Enhance your daily diet with chlorophyll plus many nutrients: Obtain a supply of each of the following "green foods": Memory key is: American Broadcasting System -ABS. Use tablets, the powders will stain your teeth.

Now #

Retail

2622 Alfalfa 10 Grain or	500 Tabs	4.95	or 2614 Alfalfa Pwd.
2607 Alfalfa Juice Concentrate	250 Tabs	13.00	or 2611 Alfalfa Juice Conc.
2668 Barley Grass Powder	250 Tabs	13.00	or 2666 Barley Grass Pwd.
2698 Spirulina, Hawaiian	200 Tabs	11.95	See Pg 276 for amino acid content in #2150 Soy Protein. ALSO USE wheat grass tabs.

C. To Enhance your SOLENU Drink use the following:

Lecithin will emulsify Vit A & D and greatly enhance their absorption.

0352 1 Cap Vit A & D. 10,000 IU A, 400 IU D Vit. D. Pierce with a sharp pointed knife and squeeze.			
0712 1 Tab. Ester C 625 mg with bioflavonoids	180 Tabs	\$17.00	(also 0770 Vit C Complex)
0894 1 Gel Vit. E mixed tocopherols (pierce and squeeze) 400 IU	250 Gels	22.00	or 0930 Vit E. Lipid
0422 1 Tab B-50 Tabs Caps	250 Tabs Caps (642k Tabs 250 = 14.95)	15.00	402. 12.95
1542 2 Tab. Full Spectrum Minerals	250 Tabs	13.00	also incorporate #405 Colloidal Minerals 32oz. 17.95
1227 3 Tabs Bone Calcium	240 Tabs (spread thru the day)	19.95	if you do, you may reduce 1542 and 1227.

If 1227 is too expensive, use 2 Tabs of 1542 only. Do not take these all at one meal.

D. SALAD DRESSING

7 oz. Distilled or Boiled water Add 1/4 tsp. 3% H₂O

#2252 1 tsp. Lecithin Granules

Optional.

#5020 1 tsp. garlic powder

1 tsp. onion powder

1/4 tsp. celery salt

#1830 1 lbs. olive oil

1 lbs. honey

1 lbs brown vinegar

#6265 1 tsp. Flaxseed meal

#5995 1 lbs. Rice Bran

#6350 1 lbs. Wheat Germ

#6965 2 tsp. Sucanat

#1880 Wheat Germ Oil.

You do not have to go this extensive. Using oil, honey and vinegar with a very light sprinkle of salt makes an excellent salad dressing.

} = OPTIONAL - will lose transparency

#6942 Stevia Rebaudiana (Sweetener) may be of interest to you.

* Don't buy salad dressings

* They are junk food and dangerous

* to your health! Develop your own

recipes. Keep it simple. (KISS)

* Keep your salad dressings refrigerated.

* Use ^{organic} brown apple cider vinegar abundantly.

It's a super taste enhancer and digestive aid.

* Olive oil and flaxseed oil are super oils on salads

* Eat non-fat yogurt daily. ^{wheat germ oil} plain, no take

1 cup = 40% Calcium + 11gm protein. ^{sugars.} use as bread

Make your own with #5830. ^{spread.}

Make Your Own Cereals and Nutrition Drinks. Complete memory key: AD-MARKS-RB-WG, FM

(RB=Rice Bran; WG=Wheat Germ; FM=Flax-seed Meal)

- MOR-CEREAL - meat substitute (Millet, Oat Groats, Brown Rice)

Now Foods Code Numbers Pour in a quart jar:

6285 1/4 cup Millet

6290 1/4 cup Oat Groats

5540 1/4 cup Brown Rice

#5950 Oat Bran (highest in soluble fiber.)

#6211 Amaranth Grain

#6220 Barley Grits

#6230 Buckwheat Grits

#6235 Buckwheat Groats

3 1/2 cups Distilled (or boiled) water. #6280 Kasha, (toasted #6235)

1/4 tsp. celery salt (adjust to taste) optional.

Place in refrig. overnight; for microwave pour into 2 qt. glass Casserole. Add 2 cups water (place cover off center) Microwave on high for approximately 20 min. (until all grains have opened) Allow to cool with lid on (not tilted) to avoid nutrient loss. Mix in 1 tsp 3% H₂O₂. Pour back into quart jar and keep refrigerated. Eat 2-3 TBS with 2 or 3 meals daily.

Optional: see pgs. 19-24 - You'll also need a pint jar

Each grain has its own unique flavor, crunchiness, and personality. To enjoy each, I recently have stored away from preparing them as a multi mix and am now cooking them separately. I use 1 pint jars. Pour in 1/2 cup distilled water, 1/2 tsp H₂O₂, mix and add 1/4 cup of grain or legume. Let it soak for 2 or more hrs. Pour into a 1-2 quart Casserole dish. Add sufficient water to insure it won't cook dry. Microwave until the grain is open and/or at the desired softness. Store them in your refrigerator. I will place 1-2 Heaping Tablespoons of two of the grains and one of the soy bean products on my plate (either soy grits or soy granules). Occasionally I'll also stir in a tsp. of rice bran or wheat germ. These soy products are VERY important. They contain an enzyme genistein which is espec. important anticancer agent against prostate and breast cancer.

- P.B.S. DRINK - 1/2 hrs after breakfast. G.I. Cleanser GI=Gastro Intestinal (mnemonic key: Public Broadcasting System.)

6 oz. water (adjust the amount of psyllium powder to your needs.)

5975 [P.] 1/2 tsp Psyllium powder - Very Important. Let set until fully in solution. Then add:

3050 [B.] 1/4 tsp Bentonite Powder

6965 [S.] 1/2 tsp Sucanat, honey, Maple Syrup and/or 2530 Bee Pollen Granules. Sucanat, honey and maple

4620 1 capsule Cascara Sagrada. or more, if needed.

Add 2 oz. water (Total water 8 oz.)

1 tsp. Apple Cider vinegar

90012 3-4 Tbs. Aloe Vera Gel. Up to 1/2 glass. Take in the evening or try 1/8 cup with each meal.

The above enhancers may also be added to your SOLENN drink.

- Experiment! Vary the type and amount of each component in these drinks and cereals to your taste and needs. Even 1/2 tsp. Psyllium, 1/2 hr. after meals can be greatly effective. Use 3 x daily. (Soak them thoroughly)

- RWBG (Rice Bran, Wheat Bran, & Wheat Germ) Use as a supplement to your MOR-Cereal and Soy Grits, especially when you're pressed for time and do not have time to cook. Pour 1 TBS of each into a bowl and add your enhancers. Soaked prunes, raisins, bananas, walnuts, apple juice, apple cider, apple cider vinegar, honey and/or sucanat. 1/16 tsp. salt.

- Take your underarm temperature before you get out of bed. 97.6° F. or lower may indicate an underactive thyroid. Add Kelp to your cereal. Read Balch pages 234, 235, and 236.

- Each person needs to establish the value of hydrogen peroxide for themselves. They may use it because they have one of the problems listed on page 27. They may use it solely because it's a healthy biocide to preserve the freshness of their foods and they wish to increase the oxygen and water content of their food. I use the regular hydrogen peroxide (3%) purchased in the stores. Concentration I use is 1/4 tsp per 8 oz. water = .01% concentration of H₂O₂ of 3% H₂O₂.

According to the *Colon Health Handbook*, the healthy colon should contain at least 85 percent *Lactobacillus* and 15 percent *coliform* bacteria. However, the typical colon bacteria count is the reverse, which leads to an overgrowth of *Candida*.

Factors that contribute to candidiasis are recurrent use of antibiotics, oral contraceptives, aspirin, corticosteroids, poor diet, sugar, yeast, and stress. These all cause an imbalance of the "friendly" bacteria. The good flora bind with some of the unwanted substances, causing them to be excreted.

—Dr. Balch in "Prescription for Nutritional Healing."

ACIDOPHILUS

NOW FOODS is an excellent source for acidophilus products. We include twice as much potency in our one billion Acidophilus at time of manufacture to guarantee one billion potency up to one year. Our one-strain Acidophilus is *Lactobacillus*, the most popular strain used in supplements.

Qty.	Code	Product	Size	ONLY
2905		Acidophilus Caps (REFRIG)	100 Caps	
2907		2 Billion/Cap, milk-free	250 Caps	
2916		Acidophilus Powder (REFRIG)	4 oz.	
		2 Billion/Gram, whey base		

Food Source:
Non-Fat,
Plain Yogurt
Inactive
Cultures.

4 X 6 ACIDOPHILUS

We buy our 4 x 6 Acidophilus exclusively from the world's culture leaders, Roselle Institute. Roselle has tested many different strains of acidophilus and found that they complement each other and have different healthful benefits.

EACH 4X6 ACIDOPHILUS CAPSULE CONTAINS:

300 mg of four billion organisms in the following amounts at the time of manufacture:

	50%	20 Billion
<i>Lactobacillus rhamnosus</i>	150 mg	10 Billion
<i>Lactobacillus acidophilus</i>	150 mg	10 Billion
<i>Lactobacillus bulgaricus</i>	150 mg	10 Billion
<i>Streptococcus thermophilus</i>	150 mg	10 Billion
<i>Streptococcus lactis</i>	150 mg	10 Billion
<i>Bifidobacterium longum</i>	150 mg	10 Billion
Total	600 mg	40 Billion

4 x 6 Acidophilus is formulated with a whole-foods base, and is free of milk, wheat, yeast, soy, preservatives, additives, and common allergens. Manufactured in Canada by Roselle Institute.

Qty.	Code	Product	Size	ONLY
2920		4 x 6 Acidophilus (N, REFRIG)	60 Caps	
2922		4 Billion x 6 strains—Roselle	120 Caps	
2925		4 x 6 Acidophilus (N, REFRIG)	3 oz.	
		10 billion per gram		



Vitamin C is an antioxidant that is required for tissue growth and repair, adrenal gland function, and healthy gums. It helps protect against the harmful effects of pollution, protects against infection, and enhances immunity. It also aids in interferon production, and is needed for the metabolism of folic acid, tyrosine, and phenylalanine.

ESTER-C CAPS

Our capsule formula is identical to our tablet, containing 625 mg Ester-C Calcium Ascorbate with naturally occurring metabolites.



Qty.	Code	Product	Size	ONLY
	10721	Ester-C Caps	90 Caps	
	10722		180 Caps	

ESTER-C 1000

Our highest potency Ester-C has twice as much Ester-C compared to most product. Get maximum prevention with Ester-C 1000.

EACH TABLET PROVIDES:

1250 mg ESTER-C® Calcium Ascorbate with naturally occurring metabolites containing:	
Vitamin C	1000 mg
Carotene Beta-carotene (40%)	200 mg
Ascorol powder	25 mg
Rose Hips Powder	25 mg
Rutin Powder	25 mg
Calcium	62 mg

Qty.	Code	Product	Size	ONLY
	0730	Ester-C 1000	60 Tabs	9.95
	0732		120 Tabs	18.95

PAPAYA ENZYMES

Our chewable Papaya-mint enzymes taste great and work for improved digestion. This popular enzyme can be enjoyed as a nutritional after-dinner mint that really helps.



Qty.	Code	Product	Size	ONLY
	2970	Papaya Enzyme, chewable	180 Tabs	4.95
	2972	with Mint, Chlorophyll	360 Tabs	8.95

PANCREATIN

Each capsule contains 500 mg of 4X potency, a super high potency enzyme.

Qty.	Code	Product	Size	ONLY
	2945	Pancreatin 2000 mg	100 Caps	9.95

SUPER ENZYMES

Supplement your body's enzymes with a balanced enzyme formulation. Naturally occurring enzymes produced in the body can be depleted due to illness, smoking, diet, age, or a faulty gastrointestinal system. Our super enzymes specify the actual enzyme potency and measurements. This is a complete formula designed to avoid nausea, gas, and constipation.

EACH SUPER ENZYMES TABLET PROVIDES:

Betaine HCL (from beet molasses)	200 mg
Bromelain (2,000 GDU from pineapple)	50 mg
Papain (140 GDU uncooked from papaya)	50 mg
Pancreatin 4x (equivalent to 800 mg)	200 mg
Supporting:	
Amylase (20,000 USP units)	100 mg
Protease (20,000 USP units)	100 mg
(Trypsin & Chymotrypsin)	
Lipase (2,400 USP units)	50 mg
Papain Enzymes (PF 1:10,000)	50 mg
Cellulase	10 mg
Or Bile Extract	100 mg
Papaya Enzymes	45 mg
Pineapple Enzymes	750 mg

Qty.	Code	Product	Size	ONLY
	2960	Super Enzymes	90 Tabs	7.95
	2962		180 Tabs	14.95

Research your digestive system with Apple Cider Vinegar. -57-

GARLIC

Garlic is one of the most valuable foods on this planet. It has been used since Biblical times, and is found in the literature of the ancient Hebrews, Greeks, Babylonians, Romans, and Egyptians. Pyramid builders ate garlic daily for endurance and strength. Today, Garlic is a popular nutritional supplement because of its effects on so many different problems.

Qty.	Code	Product	Size	ONLY
	1782	Garlic Oil 500 mg	250 Caps	3.95
	1790	Garlic Oil 1500 mg	100 Caps	2.95
	1792	Triple Strength Softgels	250 Caps	5.95
	1800	Garlic/Parsley Softgels	100 Caps	2.95
	1802	574 mg/110 mg	250 Caps	5.95
	1810	Odorless Garlic 2500 mg	100 Caps	4.95
	1812	in softgels	250 Caps	9.95

SUPER ODORLESS GARLIC 5000 MG

Our highest potency garlic is aged for 18 months in Japan and contains high levels of S-allylmercaptan, a component of Garlic which may be responsible for some or all of Garlic's renowned benefits.

EACH CAPSULE PROVIDES:

Odorless Garlic Extract (100:1 concentrate)	50 mg
(equivalent to 5000 mg fresh garlic)	
Heathorn Berry Extract	100 mg
(standardized to contain 1.8% vitamin E—alpha-tocopherol)	
Heathorn Berry Powder	250 mg
Cayenne Pepper (40,000 heat units)	100 mg

Qty.	Code	Product	Size	ONLY
	1815	Super Odorless Garlic 5000 mg	90 Caps	9.95
	1817	in two-piece caps	180 Caps	18.95

GLA

Gamma Linolenic Acid (GLA) is an essential fatty acid that must be supplied through the diet. The body does not manufacture GLA. It is produced in the body from vegetable oils if zinc, magnesium, and vitamin C are not deficient. Hydrogenated vegetable oils, mayonnaise, as well as a high-fat diet can inhibit the body's conversion of GLA. While Evening Primrose Oil is the most popular and tested source of GLA, Black Currant Oil and Borage Oil supply higher levels of the vital GLA.

The benefits of herbs have been known to man for centuries. The records of Roman, Egyptian, Persian, and Hebrew medicine show that herbs were used extensively. Many herbs contain powerful ingredients that, if used correctly, can help the body. The early pharmaceutical industry was based upon its ability to isolate these ingredients, and make them available in a purer form. Herbalists, however, contend that nature provided other ingredients in the same herb to balance with the more powerful ingredients. These other components, though they may be relatively less potent, may help to act as a buffer, a synergist, or a counterbalance when working in harmony with the more powerful ingredient. Therefore, by using these herbs in their complete form, the body's healing process utilizes a balance of ingredients provided by nature.

—Dr. Balch in "Prescription for Nutritional Healing."

LECITHIN

Approximately 30% of your brain is composed of lecithin. Of the insulating and protective sheaths that surround your brain, spine, and thousands of miles of nerves, lecithin accounts for two-thirds of their composition, and of all the muscles in your body, your heart—the hardest muscle to fatigue—has the highest lecithin content.

Lecithin is a nutrient compound which was first isolated from egg yolk in 1850 by Maurice Boble. Since that time, it has been shown to be present in many foods: soybeans and other legumes, grains, wheat germ, brewer's yeast, and fish, as well as egg yolks, are all good sources of lecithin.

ESTER-C COMPLEX

EACH TABLET PROVIDES:

625 mg ESTER-C® Calcium Ascorbate with naturally occurring metabolites containing:	
Vitamin C	500 mg
Carotene Beta-carotene (40%)	200 mg
Ascorol powder	25 mg
Rose Hips Powder	25 mg
Rutin Powder	25 mg
Calcium	62 mg

Qty.	Code	Product	Size	ONLY
	0710	Ester-C Complex	90 Tabs	8.95
	0712		180 Tabs	16.95

Qty.	Code	Product	Size	ONLY
	2210	Lecithin 19 grain/1200 mg	100 Caps	
	2212		200 Caps	
	2214		400 Caps	
	2230	Lecithin Triple Strength 1200 mg	100 Caps	
	2232	35% Phosphatidyl Choline	200 Caps	
	2250	Lecithin Granules	8 oz.	
	2252	Traditional	1 lb.	
	2254	98% Phosphatides	2 lb.	

EACH HEAPING TABLESPOON PROVIDES:

Phosphatidyl Choline	1760 mg
Phosphatidyl Ethanolamine	1530 mg
Phosphatidyl Inositol	1070 mg
Linoleic Acid	2025 mg
Linolenic Acid	260 mg
Choline	275 mg
Inositol	168 mg
Potassium	108 mg

Our Lecithin Granules contain 25% Phosphatidyl Choline, the active ingredient in Lecithin.

Yeast and Liver are two natural food supplements, rich in many basic nutrients. Those include: B vitamins, amino acids, minerals, trace minerals, and protein. Brewer's Yeast is grown from hops and is a by-product from breweries. Nutritional Yeast is grown especially for its nutritional benefits.

Our Liver Extract Softgels provide 550 mg of raw liver concentrate (20:1) supplying the equivalent of 11,000 mg low fat, non-desiccated Argentine beef liver. Each capsule also includes 450 mg lecithin and 100 mcg vitamin B-12.

Qty.	Code	Product	Size	ONLY
	2410	Brewers Yeast 10 grain	200 Tabs	
	2412		500 Tabs	
	2420	Brewers Yeast Powder	1 lb.	
	2430	Liver Extract Softgels	100 Caps	
	2440	Liver Tabs 10 grain	200 Tabs	
	2442		500 Tabs	
	2450	Liver Powder	12 oz.	
	2455	Nutritional Yeast Flakes	10 oz.	
	2460	Nutritional Yeast Powder	10 oz.	
	2470	Tonka Yeast Powder	10 oz.	

Minerals:

Like vitamins, minerals function as coenzymes, enabling the body to quickly and accurately perform its activities. They are needed for the proper composition of body fluids, the formation of blood and bone, and the maintenance of healthy nerve function.

Minerals belong to two groups: macro (bulk) minerals and micro (trace) minerals. Bulk minerals include calcium, magnesium, sodium, potassium, and phosphorus. These are needed in larger amounts than trace minerals. Although only minute quantities of trace minerals are needed, they are important for good health. Trace minerals include zinc, iron, copper, manganese, chromium, selenium, and iodine.

—Dr. Balch in "Prescription for Nutritional Healing."

Green Superfoods are the supplements of the nineties. This category of product offers more advantages over conventional vitamins including being absolutely 100% natural. Greenfoods are vegetable source, often organic, pure, and an excellent source of natural vitamins and enzymes. Seventy years ago pharmacists recommended cereal grasses—like barley and wheat—as daily one-a-day vitamins. Then when synthetic vitamins drastically increased the potencies of supplements natural cereal grass became obsolete. It wasn't until recent years when Americans rediscovered the value of "natural" source vitamins. Green superfoods supply a wide range of naturally occurring vitamins, minerals, amino acids, and enzymes. *and chlorophyll.*

FULL SPECTRUM MINERALS

Here's our best (and only!) multiple mineral that includes everything an average diet needs.

TWO TABLETS PROVIDE:		AMOUNT
Calcium (Carbonate, amino acid chelate, citrate)	1000 mg	100
Magnesium (Oxide, amino acid chelate, citrate)	500 mg	125
Zinc (amino acid chelate)	22.5 mg	150
Iron (amino acid chelate)	20 mg	120
Copper (amino acid chelate)	1 mg	50
Iodine (Kelp)	150 mcg	100
Vitamin D (Cholecalciferol)	200 IU	50
The following nutrients do not have a U.S. FDA established Potassium (Potassium)		
Manganese (amino acid chelate)	5 mg	
Selenium (L-Selenium Methylselenate)	50 mcg	
Chromium (Yeast-free, Potassium)	100 mcg	
Molybdenum (amino acid chelate)	50 mcg	
Vanadium (amino acid chelate)	50 mcg	
L-Glutamic Acid (HCL)	50 mg	
Boron	3 mg	

Qty.	Code	Product	Size	ONLY
	1540	Full Spectrum Minerals	100 Tabs	
	1542		250 Tabs	

now **CERTIFIED ORGANIC**
SUCANAT®
GRANULATED CANE JUICE

Nutrition Facts
Serving Size 1 Tablespoon (20 g)
Servings per container 200

Total Fat 1g	2%
Sodium 10mg	0%
Total Carbohydrate 20g	4%
Dietary Fiber 2g	8%

100% Natural Cane Sugar
No artificial flavors or colors added.
No significant source of saturated fat, cholesterol, Vitamin A, Vitamin C, Calcium or Iron.

6211	Amaranth Grain, Organic	1 lb.
6470	Citrus Pectin	3 oz.
7320	Citric Acid	4 oz.
6490	Cream of Tartar	4 oz.
6260	Flax Seeds, Organic	1 lb.
6265	Flax Seed Meal, Organic	1 lb.
6050	Gluten Flour	1 lb.
6285	Millet, Hulled Organic	1 lb.
6090	Multigrain Flour	2 lb.
6520	Poppy Seeds	8 oz.
6310	Quinoa Grain, Organic	12 oz.
6155	Semolina Flour	2 lb.
6320	Seven Grain Cereal	2 lb.
6325	Soy Grits	2 lb.
6160	Soy Flour, raw	2 lb.
6551	Tapioca Pearls, small	1 lb.
6330	TVP-Tex. Veg. Protein	1 lb.

NUTRITIONAL YEAST FLAKES

Nutrition Facts

Serving Size 2 TBS (16 g)
Servings per container 18

Amount per Serving	
Calories 47	Calories from Fat 7
Total Fat 1g	0%
Sodium 5mg	0%
Total Carbohydrate 5g	2%
Dietary Fiber 2g	4%
Protein 8g	

Thiamine (B1) 850% • Pyridoxine (B6) 480%
Riboflavin (B2) 560% • B12 100%
Niacin (B3) 275% Selenium 30%
Not a significant source of saturated fat, cholesterol, Vitamin A, Vitamin C, Calcium or Iron.
*Percent Daily Values are based on a 2,000 calorie diet.

NOW pleasant tasting Nutritional Yeast Flakes are produced from a specially selected strain of *Saccharomyces cerevisiae*. This yeast is grown on enriched purified cane and beet molasses under carefully controlled conditions. This is a primary grown yeast and is therefore NOT a brewery byproduct as are other brewer's yeasts. This product is guaranteed FREE of *Candida albicans* yeast.

INGREDIENTS: Dried Yeast, Nicotin, Pyridoxine Hydrochloride (B6), Thiamine, Hydrochloride (B1), Riboflavin (B2), Vitamin B12.

Free of sugar, milk, egg, wheat, soy, artificial colors, or flavors.
#2455

INSTEAD OF 2 TBS OF YEAST.
B Complex vitamins are essential for human health. Eleven separate nutrients have been identified as belonging to the B-vitamin family. These used to be found more readily in our diet before foods became processed, genetically engineered, and "enriched." Milled grains have been depleted of the germ and fiber, both important factors of grains in the past. Today, only a few foods remain good sources of B vitamins: liver, brewer's yeast, wheat germ, and brown rice. We offer various B-vitamins produced pharmaceutically to supplement the average diet. All are hypoallergenic in a white rice base.



SPIRULINA

Spirulina is an incredible source of concentrated nutrients. It is 65% protein, making it the world's highest known source of protein. Raw meat is only 27% protein, and even soybeans are only 34% protein. The protein in Spirulina contains all eight essential amino acids, making it a complete protein. Spirulina is the world's highest known source of B-12 with high concentrations of vitamins A, B-1, B-2, B-6, D, E, and K. In addition, Spirulina also provides all necessary minerals, trace elements, cell salts and digestive enzymes. The list does not end here, however, because Spirulina also offers an abundance of chlorophyll, ferredoxins, and other pigments.

The ancient Aztecs thrived on Spirulina from Lake Texcoco in Mexico, and for the people who live around the lake in Chad, Africa, Spirulina has been a mainstay in their diet for generations.

Spirulina, although considered by many to be an amazing supplement just recently discovered, is actually a source of concentrated nutrients that has been used for centuries.

Spirulina is a water-grown, 100% vegetable plankton. It is a blue-green algae that grows in fresh water lakes throughout the world.



Qty.	Code	Product	Size	ONLY
	2696	Spirulina 500 mg	100 Tabs	
	2698		200 Tabs	
	2690	Spirulina Powder	4 oz.	
	2692	Hawaiian	2 lb.	

Note: Get your Balch Books and read this section thoroughly Natural Foods And Supplements (From Balch)

Kelp

#2676 Kelp powder 8oz. \$2.95. Take 1/2 tsp. 55 Kelp is a type of seaweed that can be eaten raw, but it is usually dried, granulated, or ground into powder.

Granulated and powdered kelp are used as condiments or for flavoring. Kelp is a rich source of vitamins, minerals, and many trace elements, and has been used in the treatment of thyroid problems because of its iodine content. Kelp is recommended as a daily supplement in the diet and can be used as a salt substitute. It can be purchased in a health food store in tablet form if the taste is unappealing. Read Pg 110 - Hypothyroidism Balch.

Acidophilus #2916 Powder, 2 Billion per 1/4 tsp. Starts out as 2 Billion 4oz. 4.95.

#5830 Non Fat Dry Milk (Non-instant, low heat) Use 1 cup per qt. distilled water.

Aids synthesis of the B vitamins by creating a healthy intestinal flora. ACIDOPHILUS in the intestinal flora establishes a healthy environment for the manufacture of the B-complex vitamins and vitamin K.

When taking antibiotics, the "friendly" bacteria are destroyed along with the harmful bacteria. Supplementing with acidophilus helps maintain a healthy intestinal flora. An unhealthy flora can lead to the liberation of large quantities of ammonia, which irritates the intestinal membranes. The ammonia can be absorbed into the bloodstream and cause nausea, a decrease in appetite, vomiting, and other toxic reactions.

Acidophilus supplements was designed to support and maintain the growth of the good bacteria in the intestinal tract. Undigested food can stagnate or lead to constipation and gas. The putrefactive bacteria that is produced from undigested food may produce excessive histamine, causing an allergic reaction and additional toxic build-up.

Yeast infections of the vaginal tract respond very favorably to douching with acidophilus. Its

microorganisms destroy the pathogenic organisms. When used as an enema, it helps establish a healthy intestinal environment. It improves bowel function by aiding peristalsis and results in the production of a softer, smoother stool. Harmful bacteria are kept in check, and waste toxins that have accumulated in the intestines are destroyed.

Acidophilus has proved useful in the treatment of cirrhosis of the liver and chronic hepatitis.

Eat non-fat, plain yogurt with active cultures. 1 cup gives 40% RDA for calcium and 11 gms. protein. Make your

own home-made yogurt. It's Easy. Bring 1 qt. of milk to a boil. Let it cool to 112°. Stir in 1 tsp #2916 Powder. Pour into qt. mason jar. Wrap with heating pad, set

Lecithin is needed by every living cell in the human body. Cell membranes, which regulate which nutrients may leave or enter the cell, are largely composed of lecithin. Without lecithin, the cell membranes would harden. Its structure protects the cells from damage by oxidation. The protective sheaths surrounding the brain are composed of lecithin, and the muscles and nerve cells also contain this essential fatty substance.

NOTE: Very Important

Lecithin, which is largely composed of the B vitamin choline, also contains linoleic acid and inositol. Although lecithin is a fatty substance, it acts as an emulsifying agent.

It is especially important that the elderly obtain this nutrient because it helps prevent arteriosclerosis, protects against cardiovascular disease, increases brain function, and aids in the absorption of thiamine by the liver and vitamin A by the intestine. Lecithin is also known to promote energy and is needed to help repair the damage to the liver caused by alcoholism.

Lecithin would be a wise addition to anyone's diet. Two tablespoons of lecithin granules can be sprinkled on cereals and soups or added to juices or breads. Lecithin also comes in capsule form. Taking one capsule before meals helps the digestion of fats and absorption of the fat-soluble vitamins. Those taking niacin for high serum cholesterol and triglycerides need to include lecithin in their program. Lecithin enables fats, such as cholesterol and other lipids, to be dispersed in water and removed from the body. The vital organs and arteries are protected from fatty build-up with the inclusion of lecithin in the diet.

Most lecithin is derived from soybeans, but recently egg lecithin has become popular. This type is made from the yolk of fresh eggs. A liquid form is available by Source Natural, who claim the emulsifying can actually be observed while blending or stirring the "Eggs-Act." This mixture will spoil within an hour, so drink it right away. Egg lecithin may hold promise for those suffering from AIDS, herpes, chronic Epstein Barr virus, and immune disorders associated with aging. Other sources of lecithin include brewer's yeast, grains, legumes, fish, and wheat germ. #2255 Lecithin granules 2 lbs. \$12.95. 25% Phosphatidyl Choline, the active ingredient.

#2232 Lecithin Triple Strength 1200mg 200 caps \$4.95 35% PC.

Octacosanol is derived from wheat germ. Although it is possible to extract octacosanol from whole wheat, ten pounds of wheat would be needed to obtain 1,000 micrograms of octacosanol. Studies indicate octacosanol is superior for improving endurance. Therefore, this substance would greatly benefit those who experience muscle pain after exercise or who have a lowered endurance level.

This naturally derived wheat germ oil concentrate has been clinically proven to increase oxygen utilization when exercising. Octacosanol also reduces blood cholesterol, muscular dystrophies, and other neuromuscular disorders. Wheat germ has long been known for its many benefits. Today, extracts of wheat germ weighing 2,000 micrograms are known to improve glycogen storage in muscle and endurance and reaction time, to reduce high altitude stress, and to aid in tissue oxygenation. Wheat germ should be included in the active person's program. #1820 Octacosanol 5000 mcg (approx) 100 caps \$9.95.

#6350 Wheat germ (Refined) 1 lb. \$6.50

I included pgs 59 and 60 from Balch's book to give you a sample of Dr. Balch's wonderful writing and thereby urge you to read, study and apply Balch thoroughly and to urge you to urge your friends and loved ones to own this book and use it.

Natural Foods And Supplements (From Balch)

Spirulina

Recognized the world over as the most promising of all microalgae, spirulina is being considered as an immediate food resource. Spirulina thrives in hot sunny climates and in alkaline waters around the world. It represents a breakthrough in the production of food, producing twenty times the amount of protein as that of soybeans on an equal land area.

Spirulina contains concentrations of nutrients unlike any other single grain, herb, or plant. It contains

gamma-linolenic acid (GLA), linoleic and arachidonic acids, high amounts of B₁₂ needed (especially by the vegetarian) for healthy red blood cells, high iron content, 60-70 percent protein content, the essential amino acids, RNA and DNA nucleic acids, chlorophyll, and a blue pigment (phycocyanin) found only in blue-green algae, which increased the survival rate of mice with liver cancer in laboratory experiments.

Spirulina is a naturally digestible food that aids in protecting the immune system, in cholesterol reduction, and in mineral absorption. Spirulina is beneficial while fasting. It supplies the nutrients needed to help cleanse and heal, while also curbing the appetite. The hypoglycemic individual may benefit by using this food supplement between meals because its high protein content helps stabilize the blood sugar.

#2670 Spirulina Powder 4oz. \$8.95
#2672 " " 2 lbs. \$28.95
(Hawaiian)
#2696 Spirulina 500 mg 100 Tabs 6.50
Wheat Germ USE Tablets.

Wheat germ rapidly becomes rancid. If wheat germ is purchased separately from the flour, make sure the product is fresh. The product should be vacuum packed or refrigerated with a packing date or a label stating the date before which the product should be used. Toasted wheat germ has a longer shelf life, but the raw product is better because no processing is used. Use wheat germ oil capsules or wheat germ that has been tightly sealed.

#6350 Wheat germ 1 lb. 95¢

Wheatgrass

Wheatgrass is a rich nutritional food discovered by Dr. Ann Wigmore. She claims that wheatgrass contains the greatest variety of vitamins, minerals, and trace elements, and that 15 pounds of fresh wheatgrass is equal in nutritional value to 350 pounds of the choicest vegetables.

#2710 Wheat grass powder 9oz. \$14.95
#2720 Wheat grass 500mg 100 Tabs \$5.95
#2722 " " 500 " \$21.95
#2660 Green River Barley grass 6oz. \$11.95
#2662 " " " 2 lb. \$51.95
2664 " " " 100 Tabs 5.95
USE

Dr. Wigmore also reports that wheatgrass therapy, along with "living foods," has helped to eliminate cancerous growths and helped many other disorders, including mental health problems. Treatment by wheatgrass rectal implants and enemas are also used.

The molecular structure of wheatgrass closely resembles hemoglobin, the oxygen-carrying protein of red blood cells, and may be the reason for the effectiveness of chlorophyll. The only difference between the two is that the metallic atom in a molecule of human blood is iron, while the metallic atom of chlorophyll is magnesium. In experiments with anemic animals, their blood count returned to normal after four to five days of receiving chlorophyll.

Yeast (Brewer's Yeast)

A yeast is a single-celled organism that can multiply at extremely rapid rates, doubling its number in two hours. It is rich in many basic nutrients such as the B vitamins (except for B₁₂), chromium, sixteen amino acids, fourteen or more minerals, seventeen vitamins (not including vitamins A, C, and E). The protein content of yeast is responsible for 52 percent of its weight. Yeast is also high in phosphorus, so be sure to add extra calcium.

There are various sources from which yeast is grown. Brewer's yeast is grown from hops (a by-product of beer), also known as nutritional yeast. Tourla yeast is grown from blackstrap molasses or wood pulp. A liquid yeast product from Switzerland, called Bio-Strath, is derived from herbs, honey, malt, etc. It is a natural product that we highly recommend.

Live baker's yeast should be avoided. Live yeast cells deplete the body of B vitamins and other nutrients. Home-baked breads are best consumed the second day because of the baker's yeast. In nutritional yeast, these live cells are destroyed.

Yeast may be consumed in juice or water, and is a good energy booster between meals. Yeast may be added to the diet to aid in certain disorders. It helps in sugar metabolism and is good for eczema, heart disorders, gout, nervousness, and fatigue. By enhancing the immune system, yeast is important during cancer therapy (radiation and chemotherapy). It also seems to increase mental and physical efficiency. Those suffering with osteoporosis should avoid yeast products. Dr. William Crook states that if a person with Candida-related health problems is not specifically allergic to yeast, it is all right for that person to take a food supplement containing yeast. We suggest avoiding yeast products if candidiasis is suspected.

#2420 Brewer's Yeast Powder 1 lb. \$5.95
(Debittered Belgian)
#2450 Nutritional Yeast Flakes 10oz. \$6.95

Soy Fiber Can Lower Cholesterol And Hyperglycemia

Not only may dietary fiber help prevent conditions as diverse as carcinoma of the colon and diabetes, but investigators at Washington University in St. Louis, Missouri, have found that when fiber is added to the diet in sufficient amounts it may also significantly decrease elevated levels of blood cholesterol.

"The degree of cholesterol lowering, particularly low-density lipoprotein cholesterol lowering, was greatest in those people whose lipid levels were the highest to begin with,"

Cholesterol, a fatlike steroid alcohol, is a constituent of many body tissues and is the precursor of the body's steroid hormones. The liver is the principal site of synthesis, although cholesterol is secreted by nearly every kind of cell in the body. Part of the cholesterol is excreted in the bile; the rest is incorporated into three types of lipoprotein particles: high-density lipoprotein (HDL), considered the "good" kind since it seems to protect against certain types of heart disease; low-density lipoprotein (LDL), strongly associated with an increased risk of heart attack; and very-low-density lipoprotein (VLDL).

In a study performed at Washington University's General Clinical Research Center

(GCRC), 25 grams of soy fiber, consisting mainly of noncellulose-type polysaccharides from the cell walls of soybeans, were administered in two cookies two times a day as part of the daily diet of patients with inherited genetic defects that caused elevated concentrations of blood cholesterol (type IIa hypercholesterolemia) or triglycerides

(type IV hypertriglyceridemia).

After 9 weeks of this treatment the patients' cholesterol levels dropped an average of 13 milligrams per deciliter (5 percent), Dr. Schonfeld says.

The 5 percent drop in cholesterol level was in addition to a 10 percent decrease that had already been achieved by adherence to a low-cholesterol, low-

saturated-fat diet formulated by the National Institutes of Health for patients with these kinds of disorders.

"The real interest in this study lies in the fact that the subjects had already been on the NIH hypolipidemic diet," says Dr. Grace Lo, director of fiber research for Protein Technologies International in St.

Louis, which developed and provided the ingredients for the soy fiber supplements; the soy fiber furnished 75 percent of the total amount of dietary fiber.

She explains that while continuing to follow the hypolipidemic diet the subjects taking the soy fiber supplements ingested a total of about 1,800 calories per day, which in-

cluded about 17 grams of saturated fatty acids and 27 grams of polyunsaturated fatty acids; the mean cholesterol intake was 135 milligrams.

"The patients in our study," Dr. Goldberg notes, "have not been classified as diabetic subjects. Instead, they met the formal American Diabetes Association diagnostic criteria for impaired glucose tolerance with high plasma insulin levels. Antidiabetic drugs can lower their fasting blood glucose too far, to levels that can cause hypoglycemia." In this study, the group of patients with impaired glucose tolerance had the greatest decrements in plasma cholesterol and LDL triglyceride levels and also had significant reductions in total plasma levels of glucose and insulin during a glucose tolerance test. This sug-

gests that the fiber improved their sensitivity to insulin, thereby lowering plasma glucose levels, and also implies that for this type of patient "fiber may be an optimal treatment."

Dr. Goldberg explains that type II diabetes, noninsulin-dependent diabetes, often is associated with an increase in triglycerides, a drop in high-density lipoprotein, and a rise in low-density lipoprotein, much of which is correctable by controlling glucose tolerance.

"The correspondence is not 100 percent; although patients with type II diabetes tend to be obese, with high cholesterol and triglyceride levels and evidence of blood vessel disease,

some do have normal cholesterol values," he says.

The use of fiber supplements to help control glucose and lipid levels might be particularly helpful in type II diabetes, Dr. Goldberg says, because many diabetic patients don't consume enough fiber in their diet. "The American Diabetes Association recommendation is that 25 to 35 grams of the daily diet be fiber. If you took 20 patients with type II diabetes and fed them this ADA-recommended diet, they would probably do just as well as they did with the soy fiber cookies, but few patients can adhere so rigidly to a diet like this.

"They mean to do so but this type of high-fiber, low-fat food

have to be in a very palatable form or people won't want to consume them daily."

Dr. Schonfeld adds that the soy fiber changes the consistency of food. It has a dry, grainy texture and very little taste of its own. Soy fiber can have some side effects, such as abdominal bloating, increased stool bulk and urgency, but the side effects are mild and in a short time subside, or the patients are no longer bothered by them, Dr. Schonfeld says. R

—Dana H. Murphy and
Jude K. Langsam

Research Resources
Reporter
Sept. 1988

is usually sold in bulk to food suppliers, so it is not readily available in most retail stores, it's expensive, and people can't be expected to be so compulsive. And that's the problem: How can we make it possible for people with type II diabetes to follow a prescribed diet? How do we get anyone, even healthy people, to follow the principles of good nutrition? It would take the cooperation of industry and government, and major financial support from foundations to make this degree of compliance possible — and would represent a major sociological change in Western society!" Dr. Goldberg says.

Soy is not the only kind of fiber that has a positive influ-

ence on abnormal serum cholesterol and blood glucose levels, Dr. Lo says. In studies by other investigators, 15 to 40 grams of guar gum or pectin added to the diet of patients with inherited tendencies to high cholesterol decreased blood cholesterol levels 8 to 15 percent. In both normal and diabetic subjects 10 to 24 grams of guar gum in the diet were found to reduce the amount of urinary glucose, fasting and postprandial blood glucose levels, and insulin concentrations.

The problem with some sources of fiber, according to Dr. Lo, "is palatability. Very few people could eat them on a continuing basis. Changes in diet don't work like drugs; you don't see a 1-day effect, you have to eat the food for extended periods to see a long-term benefit. So supplements

Vegetarian Foods Powerful for Health

pg 1
(of 2 pgs)

A FACT SHEET FROM PHYSICIANS COMMITTEE FOR RESPONSIBLE MEDICINE

5100 Wisconsin Ave. N.W. Suite 404
Washington, D.C. 20016 (202) 686-2210

A VEGETARIAN DIET has been advocated by everyone from philosophers, such as Plato and Nietzsche, to political leaders, such as Benjamin Franklin and Ghandi, to modern pop icons such as Paul McCartney and Bob Marley. Science is also on the side of vegetarian foods. A multitude of studies have proven the health benefits of a vegetarian diet to be remarkable.

"Vegetarian" is defined as avoiding all animal flesh, including fish and poultry. Vegetarians who avoid flesh, but do eat animal products such as cheese, milk, and eggs are ovo-lacto-vegetarians (ovo = egg; lacto = milk, cheese, etc.). The ranks of those who eschew all animal products are rapidly growing; these people are referred to as pure vegetarians or vegans (vee' guns). Scientific research shows that ovo-lacto-vegetarians are healthier than meat-eaters, and vegans are healthier than ovo-lacto-vegetarians.

Preventing Cancer

A vegetarian diet helps to prevent cancer. Numerous epidemiological and clinical studies have shown that vegetarians are nearly fifty percent less likely to die from cancer than non-vegetarians.¹ Similarly, breast cancer rates are dramatically lower in nations, such as China, that follow plant-based diets. Interestingly, Japanese women who follow Western-style, meat-based diets are eight times more likely to develop breast cancer than women who follow a more traditional plant-based diet.² Vegetarians also have lower rates of colon cancer than meat-eaters.³ Animal products are usually high in fat and always devoid of fiber. Meat and dairy products contribute to many forms of cancer, including cancer of the colon, breast, prostate, and other organs. Colon cancer has been directly linked to meat consumption. High-fat diets also encourage the body's production of estrogens, in particular, estradiol. Increased levels of this sex hormone have been linked to breast cancer. One recent study linked dairy products to an increased risk of ovarian cancer. The process of breaking down the lactose (milk sugar) into galactose evidently damages the ovaries.⁴

Vegetarians avoid the animal fat that is linked to cancer and get abundant fiber and vitamins that help to prevent cancer. In addition, blood analysis of vegetarians reveals a higher level of Natural Killer Cells, specialized white blood cells that attack cancer cells.⁵

Beating Heart Disease

Vegetarian diets also help prevent heart disease. Animal products are the main source of saturated fat and the only source of

cholesterol in the diet. Vegetarians avoid these risky products. Additionally, fiber helps reduce cholesterol levels⁶ and animal products contain no fiber. One study even demonstrated that a low-fat, high-fiber, plant-based diet combined with stress reduction techniques, smoking cessation, and exercise could actually reverse atherosclerosis—hardening of the arteries.⁷ Heart diets that include animal products are much less effective, usually only slowing the process of atherosclerosis.

Lowering Blood Pressure

Back in the early 1900's, nutritionists noted that people who ate no meat had lower blood pressure.⁸ It was also discovered that vegetarian diets could, within two weeks, significantly reduce a person's blood pressure.⁹ These results were evident regardless of the sodium levels in the vegetarian diets.

Preventing and Reversing Diabetes

Non-insulin-dependent (adult-onset) diabetes can be better controlled and sometimes even eliminated through a low-fat, vegetarian diet along with regular exercise. Because such a diet is low in fat and high in fiber and complex carbohydrates, it allows insulin to work more effectively. The diabetic person can more easily regulate glucose levels. While a vegetarian diet cannot eliminate the need for insulin in people with insulin-dependent (childhood-onset) diabetes, it can often reduce the amounts of insulin used. Some scientists believe that insulin dependent diabetes may be caused by an auto-immune reaction to dairy proteins.

Gallstones, Kidney Stones, and Osteoporosis

Vegetarian diets have been shown to reduce one's chances of forming kidney stones and gallstones. Diets that are high in protein, especially animal protein, tend to cause the body to excrete more calcium, oxalate, and uric acid. These three substances are the main components of urinary tract stones. British researchers have advised that persons with a tendency to form kidney stones should follow a vegetarian diet.¹⁰ Similarly, high-cholesterol, high-fat diets—the typical meat-based diet—are implicated in the formation of gallstones.

For many of the same reasons, vegetarians are at a lower risk for osteoporosis. Since animal products force calcium out of the body, eating meat can promote bone loss. In nations with mainly vegetable diets (and without dairy product consumption), osteoporosis is less common than in the U.S.—even when calcium intake is also less than in the U.S.¹¹

Vegetarian Foods Powerful For Health

Asthma

1985 Swedish study demonstrated that asthmatics who practice a vegan diet for a full year have a marked decrease in their need for medications, and in their frequency and severity of asthma attacks. Twenty-two of the twenty-four subjects reported improvement by the end of the year.¹² Dairy allergies may be part of the reason.

Common Concerns

Some people still worry about the ease with which a vegetarian diet can provide all essential nutrients. The fact is, it is very easy to have a well-balanced diet with vegetarian foods. Vegetarian foods provide plenty of protein. Careful combining of foods is not necessary. Any normal variety of plant foods provides more than enough protein for the body's needs. Although there is somewhat less protein in a vegetarian diet than a meat-eater's diet, this is actually an advantage. Excess protein has been linked to kidney stones, osteoporosis, and possibly heart disease and some cancers. A diet focused on beans, whole grains, and vegetables contains adequate amounts of protein without the "overdose" most meat-eaters get.

Calcium is easy to find in a vegetarian diet. Many dark, green, leafy vegetables and beans are loaded with calcium, and some orange juices and cereals are calcium-fortified. Iron is plentiful in whole grains, beans, and fruits.

Vitamin B₁₂

Vitamin B₁₂ is a genuine issue for vegans, although very easy to deal with. Traditionally, getting this vitamin has not been difficult. In cultures with plant-based diets, the microorganisms that produce B₁₂ grow in the soil and cling to root vegetables, and additional Asian miso and tempeh contain large amounts of the vitamin. But with industrialized production and improved hygiene, this source of B₁₂ has been eliminated. Meat-eaters get B₁₂ through microorganisms living in the animals they eat.

Although cases of B₁₂ deficiency are very uncommon, it is important to make sure that one has a reliable source of the vitamin. Good sources include all common multiple vitamins (including vegetarian vitamins), fortified cereals, and fortified soy milk. It is especially important for pregnant women and breast-feeding mothers to get enough vitamin B₁₂.

Special Concerns: Pregnancy, Infants, and Children

During pregnancy, one's nutritional needs increase. The American Dietetic Association has found vegan diets adequate for fulfilling nutritional needs during pregnancy, but pregnant women and nursing mothers should supplement their diets with vitamins B₁₂ and D. Most doctors also recommend that pregnant women supplement their diet with iron and folic acid, although vegetarians normally consume more folic acid than meat-eaters.

Vegetarian women have a lower incidence of pre-eclampsia in pregnancy, and significantly more pure breast milk. Analyses of vegetarians' breast milk show that the levels of environmental contaminants in their milk are much lower than in non-vegetarians.¹³ Studies have also shown that in families with a history of food allergies, when women abstain from allergenic foods, including milk, meat, and fish, during pregnancy, they are less

likely to pass allergies on to the infant.¹⁴ Mothers who drink milk pass cow antibodies along to their nursing infants through their breast milk. These antibodies can cause colic.

Vegetarian children also have high nutritional needs, but these, too, are met within a vegetarian diet. A vegetarian menu is "life-extending." As young children, vegetarians may grow more gradually, reach puberty somewhat later, and live substantially longer than do meat-eaters. Do be sure to include a reliable source of vitamin B₁₂.

Further Reading

For more information on vegetarian diets, PCRM recommends:
The Power of Your Plate, by Neal Barnard, MD
The McDougall Plan, by John McDougall, MD
Dr. Dean Ornish's Program for Reversing Heart Disease, by Dean Ornish, MD.

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From: Dr. Whitaker's Guide To Natural Healing.

It was a smart organizing move by the AMA. Just three years later, in 1915, combined advertising dollars from these journals were dominating AMA revenues. The power of the pharmaceutical dollar in the AMA has not diminished, as the industry makes significant contributions to centers for medical education. The industry makes "charitable contributions" to major medical centers and funds endowed professorships and research positions knowing that this practice brings a return of profits both sooner and later.

Gifts and Educational Incentives

Most physicians receive little formal medical education on how drugs work. How then do they learn to distinguish between various drugs? In our present disease management system, most of the 550,000 prescribing physicians rely for their information on the over 45,000 representatives of the drug companies. This is such a tremendous educational responsibility that these "detail people" should be as well-educated as any "visiting professors," but less than one in twenty of these experts-by-default has had any formal training in pharmacology.

The educational settings are often exciting, far-off resort settings, with all expenses paid by the drug companies. The salespeople wine and dine and rationally and scientifically attempt to convince the doctor that their company's drug is the one they should be prescribing. Other environments favored by the detail people include major sporting events, elegant dinners, and celebrity performances.

This kind of relationship between the drug companies and the doctors they supply has been decried in a number of major medical journals. Some medical organizations have also put together panels to establish guidelines for professional conduct. However, there's not much hope things will change. Practice PREVENT-ION

Research on the Major Killers of Americans

2-14-94
Pg 1
(of 2 pgs.)

FROM PHYSICIANS COMMITTEE FOR RESPONSIBLE MEDICINE

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Medical research is at a crossroads. The major killer diseases are not solved by old experimental techniques. In order to win against the major diseases, researchers are looking to new technologies, and doctors are forced to learn new approaches.

Heart Disease

The Number One Killer

The greatest advance in the understanding of heart disease was the discovery that it can be virtually eliminated by controlling three factors—cholesterol, smoking, and blood pressure. This extraordinary advance came from sophisticated studies of human patients.

Over the past four decades, in Framingham, Massachusetts, thousands of individuals in two generations have been carefully studied to see which factors are responsible for heart disease. The Framingham Heart Study showed that if one's cholesterol level stays below 150, a heart attack is extremely unlikely. Every one percent increase in cholesterol leads to approximately a two percent increase in risk. Other studies, such as the Lipid Research Clinic's Trial and the Multiple Risk Factor Intervention Trial, have also demonstrated the importance of controlling cholesterol levels.

Dr. Dean Ornish of the University of California at San Francisco has shown that if people who have advanced heart disease adopt a low-fat vegetarian diet, stop smoking, reduce stress, and engage in mild daily exercise, the plaques in their arteries will actually start to disappear.

Coronary artery bypasses and heart transplants, while helpful for some patients, have not matched the potency of dietary and other lifestyle measures. Bypasses and transplants develop aggressive atherosclerosis unless strict dietary steps are taken. Clearly, medicine's best strategy is to institute such steps while the patient is still healthy.

More research is needed: What we need are human behavioral studies on how to help people change long-standing smoking and dietary habits. Economic and political studies on how to shift farm production away from tobacco and live-

stock and toward grains, legumes, vegetables, and fruits are also essential.

Cancer

The Number-Two Killer

In 1971, President Nixon declared the new, aggressive "War on Cancer." In spite of these efforts, cancer death rates continue to climb.

A standard technique in the search for new anticancer drugs has been to give test substances to laboratory mice with leukemia. This is a slow and expensive procedure. It has yielded few effective agents while consuming millions of dollars and no fewer than a million animals each year.

A new method developed by Michael Boyd, Robert Shoemaker, and others at the National Cancer Institute tests potential drugs on actual human tumor cells.¹ In an automated system, the effectiveness of a substance in killing cancer cells is checked and entered into a computer. Potential drugs which have been overlooked by the mouse screening system may be found to work in the new human cell screen.

Instead of struggling—and often failing—to cure established cancer, a large body of data now shows that cancer can be prevented. The National Cancer Institute estimates that as much as eighty percent of cancer cases can be prevented.

Thirty percent of cancers are due to tobacco. Avoid smoking, and lung cancer becomes very unlikely. At least 35 percent of cancers are due to dietary factors.

In 1982, the National Research Council released a technical report, Diet, Nutrition, and Cancer,² showing that diet was probably the greatest single factor in the epidemic of cancer. Since then, more evidence has implicated specific dietary factors in several types of cancer. Foods rich in fats and oils increase risk of cancer in organs related to digestion (e.g. colon, rectum) and organs that

The American Cancer Society estimated there will be 317,000 cases of prostate cancer in the U.S. in 1996 and 41,400 deaths. OUTRAGEOUS!

The greatest advance in the understanding of heart disease was the discovery that it can be virtually eliminated by controlling three factors—cholesterol, smoking, and blood pressure.

are sensitive to sex hormones (e.g., breast, prostate).³

In addition, certain food constituents help protect against cancer. Dietary fiber, principally found in whole grain cereals and legumes, helps prevent cancer of the colon and rectum. It also appears to reduce risk of breast cancer, perhaps by lowering cholesterol and sex hormones. Several vitamins have shown anticancer activity:

Beta-carotene (the form of vitamin A found in dark green and yellow vegetables and fruits), vitamins C and E, and the mineral selenium may help prevent cancer.

Avoiding excessive exposure to sunlight is a critical step in the prevention of skin cancer.

In addition, radon, a natural radioactive gas that seeps up from certain underground rocks into groundwater supplies, has been implicated in certain cancers. Improved ventilation stops radon from building up in enclosed areas.

Prevention is the light at the end of the tunnel for those looking for a way to reduce the cancer epidemic. By avoiding factors that lead to cancer and including foods that strengthen us against the disease, we can, to a great extent, control our own risk.

Estimated Percentages of Cancer Due to Selected Factors*

Tobacco	30%
Diet	35-60%
Alcohol	3%
Radiation	3%
Air and Water Pollution	1-5%
Medications	2%

These figures are rough estimates based on data from Cancer Rates and Risks, National Cancer Institute (Washington, DC, 1985), and R. Doll and R. Peto, Journal of the National Cancer Institute, 1981, 66(6):1191-1308. Other factors may also play a role in certain forms of cancer and are not included in this table. Categories may overlap. For example, both tobacco and alcohol contribute to esophageal cancer.

The National Cancer Institute estimates that as much as eighty percent of cancer cases can be prevented.

Cellular Tests for Cancer-Causing Chemicals

While cumbersome and expensive animal tests take years to yield a verdict on potentially dangerous chemicals, rapid non-animal tests can give results in a matter of hours or days.

The Ames Test, the best known of these, uses bacteriologic methods that are markedly cheaper and faster than animal tests. The test checks whether substances can cause genetic damage in salmonella bacteria. If so, the chemical is likely to be a carcinogen. A cancer text states:

"The progressive arrival upon the scene of the Ames salmonella mutation test culminating in the (so far) definitive version in 1975 undoubtedly signalled a change in the way in which the field of carcinogenesis had to be viewed. It reflected almost a quantum jump in our progress towards understanding of this difficult area."⁴

The Number-Three Killer - **Stroke**

In stroke, a part of the brain is killed, leading to paralysis, loss of sensory function, and often death. Clinical and epidemiologic studies have shown how stroke is caused and how it can be prevented. It has become clear that the same factors that lead to heart disease—high blood pressure, elevated cholesterol levels, and smoking—can also cause stroke. Controlling these factors can prevent stroke. To reduce the incidence of stroke, more aggressive measures to help people change dietary and smoking behavior must be developed.

From: Dr. Whitaker's Guide For Natural Healing

According to the laws of economics, free market competition would keep prices down. But the world of the pharmaceuticals is a different kind of place. There are several barriers to competition.

First, there are very few major players. Most of the power is in the hands of a few companies. Second, when a drug company develops a drug, it is granted a patent that can last up to twenty-two years when extensions are included. The company that developed the drug has exclusive marketing rights for the duration. When the patent expires, other drug companies are allowed to market the same drug as a "generic." At that point, the price of the original drug should come down. In fact, in many instances, the brand name drug will go up. Why? Doctors tend to continue with the higher-priced name drug because the pharmaceutical companies spend billions of dollars each year in search of that loyalty: about 22 cents on every dollar spent by drug companies goes for promotion and marketing, about \$13,000 per doctor each year. This is more money than the companies spend on research and development of new drugs.⁵

A close analysis of the situation reveals that rather than price-cutting competition, the drug companies engage in competitive price escalation. Here is one instructive case. In 1977, the anti-ulcer drug Tagamet was introduced by Smith-Kline. Tagamet had a virtual lock on the market until Zantac was introduced in 1983. Glaxo, the company that introduced Zantac, cited improved tolerance and fewer side effects and charged a premium for their drug.

Smith-Kline, rather than lowering the price of Tagamet, increased it, and the price of the two drugs has continued to increase. When two new drugs came into this market, Pepcid (1986), marketed by Merck, and Axid (1988) by Eli Lilly, each followed Glaxo's lead, charging a premium rather than competing on price.

Breast Cancer in the United States

Breast cancer is on the rise in the United States. One out of every nine women will develop this disease in her lifetime. And it isn't a disease of older women only. Breast cancer is the leading cause of death among women between the ages of 35 and 45. Approximately 45,000 women will die of breast cancer in 1991.¹

The United States has one of the highest rates of breast cancer in the world. In some countries the rates of breast cancer are just a fraction of ours. Scientists think that much of the difference is due to diet.

A Breast Cancer Prevention Plan

The following reduce risk for breast cancer:

Reduce Fat Intake

In countries where fat intake is high, the rate of breast cancer is also high.² For example, in the United States, where breast cancer is common, people consume over 160 grams of fat per day on average. In Japan, fat intake is about 80 grams per day, and the rate of breast cancer is just one-fourth that of ours. Genetics don't seem to be the reason; when women from Japan move to the United States, their breast cancer risk goes up. Also, people in Japan are beginning to adopt our way of eating. As they eat more meat and more fast foods,

the rate of breast cancer in that country is on the rise.

There is still some debate among scientists about the role of fat in the diet. But the Surgeon General's Report on Nutrition and Health (1988) noted the most important piece of evidence:

"Indeed, a comparison of populations indicates that death rates for cancers of the breast, colon, and prostate are directly proportional to estimated dietary fat intakes."³

Some researchers argue that breast cancer is linked to diets with too many calories, not too much fat. However, since the best way to lower calorie intake is to lower fat intake, eating less fat is a crucial step to lowering breast cancer risk.

Fat from animal products seems to be more dangerous than fat from plant foods. Diets high in meat and milk have been linked to higher risk of breast cancer.⁴ This is probably because meat and dairy products are high in fat and contain no fiber, but it may also relate to other properties of meat, such as cancer-causing substances that form when meats are cooked. Scientific studies have not shown benefits from including meat, and those who exclude it have lower cancer rates.

To lower your risk of breast cancer, reduce your fat intake to 20% or less of calories. That means that you should eat no more than 22 grams of fat for every 1000 calories you consume. Less is probably better.

To lower the fat in your diet you must substantially reduce (or preferably eliminate) the following foods: added fats, such as butter, oil, margarine, creams, gravies, and sauces; high-fat dairy foods, such as

whole and 2% milk, cheese and ice cream; meat, poultry, eggs, nuts, seeds, baked goods, snack chips, and fried foods.

Eat More Fiber

A high-fiber diet may reduce the risk of breast cancer. Dietary fiber changes the activity of estrogens, which are hormones that are involved in breast cancer.⁵

Americans consume about 11 grams of fiber a day. The National Cancer Institute suggests eating at least twice that amount.⁶ Fiber is found only in plant foods, particularly those that have not been processed. To increase the fiber in your diet you must eat more whole grains such as brown rice, whole wheat pasta, and whole wheat bread, and more beans, peas, lentils, fruits and vegetables.

Avoid Alcohol

Even very moderate intake of alcohol raises risk for breast cancer. One study showed that even one drink a day can increase breast cancer risk by more than 50 percent.⁷

Stay Slim

Obese women are more likely to develop breast cancer than normal weight women. The best ways to reduce weight are to eat less fat and to exercise.⁸

Other Research

Research continues on other factors. Soybean products may help to lower risk. Soybeans contain chemicals called phytoestrogens that may block the action of estrogens in the body and may reduce risk of breast cancer. In Asian countries, where soyfoods are a common part of the diet, breast cancer incidence is low.⁹

If You Have Fibrocystic Breasts

Women with fibrocystic breasts often find relief from this condition when they avoid caffeine. Fibrocystic lumps are not cancerous; they are benign. But women with fibrocystic breasts may be at greater risk for breast cancer. And breast self-examination is more difficult for these women, making early detection less likely.

Even small amounts of caffeine can worsen the condition. Caffeine is found in coffee, tea, chocolate, and many medications.

If You Have Cancer

If you are being treated for breast cancer, it makes sense to follow the same dietary guidelines as are used in prevention. Although relatively little research has been done in this area, some studies have shown that breast cancer patients who followed low-fat diets had better survival rates.¹⁰

Summary

There is no foolproof way to prevent breast cancer. But the right diet can greatly reduce your chances of developing this disease. To reduce your risk, let low-fat, high-fiber plant foods play the central role in your diet. Build your meals around whole grain breads and cereals, pasta, potatoes, beans, fruits, and vegetables. Avoid alcohol, meat, poultry, eggs, high-fat dairy foods, oils, nuts, and seeds and other fatty foods.

The Horrendous Tragedy of Breast Cancer in Our Country - PCRM

NAVS IS A NON-PROFIT, NON-SECTARIAN EDUCATIONAL ORGANIZATION THAT STRIVES TO:

North American Vegetarian Society

Provide educational resources for informing the public about the advantages of a Vegetarian life-style.

Provide nutritional information including recipes, that will support and facilitate the adoption and healthful enjoyment, of a Vegetarian Diet.

Provide insight into the impact of animal-centered diets on human health, on the integrity of our environment, on world hunger, and on cruelty needlessly inflicted on billions of living, creatures every year.

Provide an opportunity for interested not-yet-vegetarians to learn at first-hand about the delights of good Vegetarian Cooking and to get to know and interact with experienced Vegetarians.

Provide an opportunity for enriched understanding, mutual support and shared fellowship for practicing Vegetarians.

Provide opportunities for community outreach and community service in the interest of good health, environmental protection, and compassionate living.

We meet on the 3rd Sunday of every month. Our activities include: discussions on ethical issues, book reviews, speakers, films, potlucks, cooking classes, etc.!! We also publish a newsletter, "The Vegetarian Pulp", with updates on the Society's activities, recipes, articles on nutrition, health and the environment, as well as issues on compassion and respect for living creatures. We will also report on restaurant dining in our area, and sources of vegetarian food.

NAVS welcomes all Vegetarians to membership, as well as those who, while not yet vegetarians, are interested in learning more about vegetarianism by sharing the groups activities, and in supporting the objectives and philosophy of the Society.

NAVS defines Vegetarianism as the practice of living without the use of flesh, fowl, or fish, and the "ideal" of total independence from animal products. We are supported by members dues and accept no advertising or commercial support.

For more information about NAVS call Christine at (212) 292-5802 or write to:

NAVS c/o 72 Do 19 E V 116, N.Y. 13329

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Cataracts and Macular Degeneration

Ester C 625 mg tablets

Use Vit E oil from soybeans.

Recent research indicates that a high level vitamin C tablet and E capsule each day may help to slow or prevent cataracts because these antioxidants interfere with cataractogenesis, lens protein oxidation, that causes cataracts. In some studies, the cataract risk reduction appears to be 56% for the Vitamin E users and 70% for Vitamin C. The risk reduction that might be achieved if both were taken has yet to be established.

1/98 - I now use 0222 - Ester C 1000 (Double strength) 12 x mg, and 0894-Vit E 400 IU-Mixed.

1 part it and Vit A-D cap in my SOLENU

IN ANIMAL STUDIES IN WHICH HIGH AMOUNTS OF VITAMIN C WERE GIVEN lenses with high vitamin C seemed better protected against cataract-like changes induced by ultra-violet radiation. Also researchers have found a correlation between cataract incidence and high serum levels in the blood of Vitamin C and carotenoids; research of Vit. E is still ongoing. Carotenoids can have a profound effect on the physiology, function and health of the retina, and the regeneration of the visual purple pigment which is vital to vision. The vision in the left eye of the editor deteriorated to blurred 20/100. After being on a health care diet with a great amount of beta-carotene from foods (carrots, broccoli, etc.) for several months, the vision returned to 20/20.

fortable.

Now there is no blur & I can read the next line below 20/20 (20/15).

THE APPROXIMATE DAILY DOSAGE SUGGESTED is 500 mg of Vitamin C complex and 400 IU of Vitamin E complex (start low)

A super-abundant

supply of these vitamins must be obtained daily from fresh fruits and vegetables, and 100% whole grains not processed to death. Make your own multi-grain cereal and eliminate all processed, canned, commercially mass-produced foods. EAT ONLY BASIC FOODS. Cataracts are the third most common chronic illness of people age 60 or older. One out of 5, or many more of this age group, have this horrendous disease. When people pass 70 the number of people with cataracts skyrockets. The Editor has performed thousands of ophthalmoscopies (examination of the interior of the eye) and has seen enormous numbers of cataracts in these seniors. It's a very disheartening, sickening experience to see these cataracts and then watch these people going blind as the cataracts grow. *Be wary of over dosing. Researchers are finding excess gives may contribute to Alzheimer's.*

IF INGESTING HIGH LEVELS OF VITAMINS C AND E slows down or prevents cataracts, a vast amount of disability, pain, suffering and cost would be eliminated. Also, the ingestion of high levels of Vitamin C, E, beta carotenes, and fish body oil, from north and south ocean fish (which are rich in omega 3) are considered highly beneficial in cardio-vascular diseases, skeletal joint disorders (arthritis), and blood chemistry abnormalities like elevated cholesterol and triglycerides; recent research indicates the same benefits will be obtained in these diseases. We must remember also that smoking is a cause of cataracts with resultant blindness, deafness, and slow-motion-death. Certainly everyone (especially after 40) should go on a health-care diet and also ingest indicated supplemental nutrients with the amount being adjusted to their body and needs.

I use Zinc gluconate 15 mg, one on Mon, Wed, Fri.

ZINC - ONE OF THE MOST IMPORTANT NUTRIENTS IN THE EYE. Zinc is a mineral needed for the proper functioning of many enzyme systems in the body, including several in the eye. In fact, certain tissues in the retina, the back part of the eyeball that contains cells responsible for vision, have some of the highest concentrations of zinc anywhere in the body. Zinc also helps mobilize vitamin A from the liver to other tissues in the body. Many researchers have suggested that zinc probably plays a vital role in ocular nutrition. Recent studies have examined the relationship between dietary or supplemental zinc and conditions such as age-related macular degeneration, the leading cause of blindness in older Americans; cataract, a condition in which the lens inside the eye is clouded, blurring the vision; severe near-sightedness; injuries to the cornea, the outer coating of the eyeball; and night blindness, or poor sight in the dark. Zinc is available in a variety of salts (i.e.: sulfate, gluconate, oxide) which the body must break down into elemental zinc for absorption into the system. Zinc oxide, provides the most concentrated form of elemental zinc. For example, twice as much elemental zinc is available from zinc oxide as compared to an equivalent amount of zinc sulfate. *In the Full Spectrum Minerals The zinc is amino acid chelate. 2 tabs give 22.4 mg. ESPEC. oat grains*

GOOD DIETARY SOURCES OF ZINC. Red meat, liver, eggs, milk, whole grains and seafood, particularly oysters, are all rich sources of zinc. The problem is that many of these foods are also very high in fats and cholesterol, and many people do not eat enough of them to get all the zinc they may need. You may need the supplementation of zinc to help provide adequate nutritional support. Avoid foods with refined flour. Be sure you eat only breads, cereals, and baked goods made with 100% whole grain and an abundant amount of seafood.

Antioxidants are involved in important metabolic processes in the eye. Vitamin C, vitamin E and beta-carotene (which converts into vitamin A in the body) are known as the antioxidant vitamins because they help regulate oxidation, a metabolic process that is always occurring throughout the body and in the eyes as well.

Flaxseed oil is also very rich in Vit A, E, and Omega 3, Omega 6, and Omega 9. One TBS is equal to 8 Fish Oil Capsules. But a TBS daily on your salad or other food. Do not overdo.

According to Whitaker 1/97 - #1552 Zinc Picolinate is now the #1 choice. 120 caps = 9.95

The Prevention OF Macular Degeneration.

HOLLER FOR COLLARDS

Vegetables may make you see red (and orange, purple, black and white) Green may be the next great color for eyes. Leafy verdant vegetables like spinach and collard greens could protect your peepers against the leading cause of blindness in people over age 65.

So far, diet looks like the only promising way to thwart the onset of this disease called macular degeneration. The advanced form strikes about 1 in 100 people by age 65. By age 75, the risk is 1 in 20.

Earlier studies hinted that nutrients called antioxidants could stave off this disease, in which blood vessels in the macula (part of the retina) develop sight-blocking leaks. This study provides the first evidence regarding diet: People who consumed the highest amounts of carotenoids lowered their risk of macular degeneration by 43 percent, compared to people who ate the least. This study also suggests that two specific carotenoids—lutein and zeaxanthin—are most strongly associated with a reduction in risk. With regard to specific foods, eating one-half cup of spinach or collard greens per week, or more often, was associated with a lower risk, and the more often the better.

Those exotic-sounding nutrients aren't hard to find: This study pinpointed spinach and collard greens as offering the most benefits, but the nutrients are also plentiful in kale, mustard greens, turnip greens, parsley and dill. Lutein and zeaxanthin are present, but a little more sparse, in broccoli, brussels sprouts, raw leek, leaf lettuce, celery, squash and pumpkin. Researchers discerned this reduction in risk after polling 356 people with macular degeneration and 520 without, on their eating habits during the past year (*Journal of the American Medical Association*, November 9, 1994).

Since the macula contains polyunsaturated fatty acids, it may be particularly susceptible

to damage from the free radicals created in the course of simply living through a day. The two carotenoids mentioned may disarm those radicals enough to leave the cells—and your sight—in good working order, says Johanna M. Seddon, M.D., associate professor of ophthalmology and epidemiology at Harvard Medical School and Harvard School of Public Health.

"The study showed that more frequent intake of these nutrients

and foods was better," she says. "The maximum reduction in risk was 80 percent for people who consumed these vegetables five or more times per week, though there were few people in this category so we have to be cautious."

So should you start to holler for collards? "It seems prudent," says Dr. Seddon, to eat more vegetables, particularly dark green leafy ones, which are high in these particular carotenoids. Even if you've never

handled them before, collards, kale or other greens can be turned into tasty dishes without a whole lot of research. Dice these greens and place them where you'd use broccoli on a pizza. Or make a side dish in a minute by sautéing these greens with a little olive oil. Get creative with the spices: Try ginger, cardamom, cinnamon and nutmeg; ginger and chili pepper; or just use garlic. —by Marty Munson with Teresa Yeykal

RK—Corneal Surgery

An American Academy of Ophthalmology (AAO) study of 435 RK patients, released last year, found that 30 percent still needed some form of corrective lenses for distance vision and 43 percent became prematurely presbyopic. Up to three percent of RK patients suffer partial vision loss as a result of the surgery, according to the academy study.

The number of RKs performed has skyrocketed to 250,000 RK surgeries conducted in the U.S. in 1994 from 30,000 in 1989.

The resurgence of RK and the "marketing extravaganza" used to tout the benefits of RK treatment was the subject of a recent *Wall Street Journal* article which blamed an oversupply of practitioners.

RK is the abbreviation for Radial Keratotomy, the cutting of small slits in the periphery of the cornea

VITAMIN A HELPS MAINTAIN THE NORMAL STRUCTURE AND FUNCTIONING OF OCULAR EPITHELIAL CELLS, WHICH MAKE UP THE SURFACE OF THE EYEBALL. It is also involved in the synthesis of light sensitive cells needed for vision. Vitamin A deficiency can cause night blindness or xerophthalmia. Although there are no conclusive findings yet, researchers have been studying the possible role of vitamin A in people with cataracts and macular degeneration. Vitamin A is available from several sources (i.e. retinol/retinyl esters and beta carotene). Beta carotene is not metabolized or stored in the body the way other sources of vitamin A are; therefore, it has not been associated with vitamin A toxicities. *Get your beta carotene from your food.*

Vitamin C is normally heavily concentrated in the lens and inner fluid of the eye. It plays an important role in wound healing; people with severe vitamin C deficiency may have bleeding in their eyelids and inside their eyes.

SELENIUM, A MINERAL, ALSO HAS ANTIOXIDANT ACTIVITY. Antioxidant vitamins are abundant in certain fruits and in dark green and leafy vegetables. But some people do not eat enough fruits or green vegetables to get the antioxidants they may need. *Try to get as much as possible from your food*

In view of the conclusions of the current research, someone (you) should ingest from their food plus supplements as needed:

- 2 OZS. DARK GREEN LEAFY VEGETABLES. (Very rich in carotenoids-helps prevent macular degeneration)
- 1 capsule Vit. A 10,000 I.U. + Vit. D 400 I.U. NATURAL
- 10925 consider Vit. A 25,000, Vit. D 1000 I.U. per capsule.
- 1 H. TOS. Full Spectrum Vitamin E + protein
- 1 Cap. Vit. C Complex 500 mg (Ester C preferred). If you are constipated, add 1/4 to 1/2 tsp with each meal.
- 2 Tabs. Full Spectrum Minerals. Amino acids chelated. Learn their contents
- 1 Cap. Vit. E 400 I.U. NATURAL NOT SYNTHETIC.

Taking the above makes the taking of Multi Vitamin - Mineral Tablets unnecessary and contra-indicated

1 TOS VIT. E: FINEST OIL for essential fatty acids, Vit. A + Vit. E, Omega 3, 6, & 9. 1500 mg. Alfalfa: vit. minerals fiber, chlorophyll, enzymes, amino acids, saponins, sprout alfalfa seeds. Also consider spirulina. Maintain your chlorophyll intake

As always, the above should be checked out with your doctor. In addition, follow a health-care diet as a purist. If you are having retinal problems, you should check with your doctor as to how high you may go. He may allow you to intake the high levels, as long as your blood tests are watched and you are watched for adverse effects from over-doing it.

Vitamin and mineral supplementation can be an effective way to retard loss of visual acuity in the early stages of macular degeneration, according to David A. Newsome, MD, clinical professor of ophthalmology, Tulane University School of Medicine here. (Please read carefully) Top limit on Vit. D = 2000 I.U.

He and other researchers believe that tissue zinc depletion may play a significant role in the metabolism of the retina and the development of macular degeneration. Researchers also see a link between the high incidence of macular degeneration in the elderly and the high risk for zinc deficiency in the same population. Dr. Newsome's research has shown that with micronutrient supplementation, the quality of vision in senile macular degeneration patients can be protected to some degree.

"A number of medications prescribed for older Americans, such as diuretics, can, with as little as 6 months administration, result in tissue depletion of zinc, even though the serum zinc level stays in the normal range," he told Ophthalmology Times. Vitamin and mineral supplements already on the market contain many of the key nutrients essential to normal visual function: zinc, vitamin C, vitamin E, vitamin A, he added. Now Brand #1520 Zinc Gluconate 50 mg. 100 Tabs. If you are taking #1522 " " " " 250 Tabs. Full Spectrum Minerals, Chop

"In my own research, we used 100 mg of US Pharmacopeia-graded zinc sulfate, twice daily, for macular degeneration patients in a double-blind, placebo-controlled study," Dr. Newsome continued. In that prospective study, Dr. Newsome and colleagues found that among 151 subjects with drusen or varying degrees of macular degeneration, the group treated with oral zinc had significantly less visual loss than the placebo group after a follow-up of 12 to 24 months. Although some patients in the zinc follow-up group did go on to have visual loss as profound as those in the placebo group, the ratio was 1:3 in favor of the zinc effect. This will give you 225 mg 47.5 mg

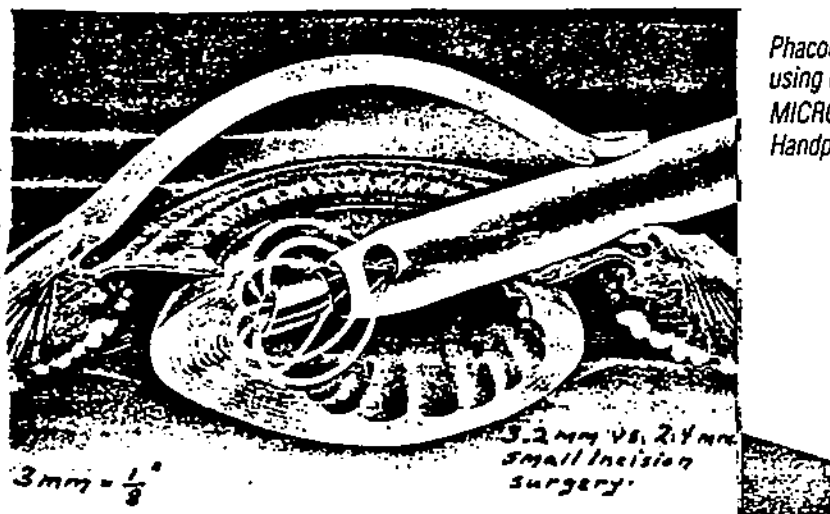
group did go on to have visual loss as profound as those in the placebo group, the ratio was 1:3 in favor of the zinc effect. Now Brand 1550 Zinc Picolinate 50 mg 60 caps. 5.50 retail. 1552 " " " " 120 Caps. 10.00

Dr. Newsome based the dosage of zinc for his study on that used in previous therapeutic studies. With a bioavailability rate of 40%, the dose of 100 mg of elemental zinc represented 5.3 times the 15 mg recommended daily allowance (RDA) of elemental zinc.

"In my clinical work since then, I have been using 2.5 times the RDA because I feel it is still an effective dose, yet it avoids a lot of problems with zinc toxicity," Dr. Newsome said. Zinc is known to interfere with the uptake of copper in the gastrointestinal tract, preventing its absorption. The co-administration of a small amount of copper (2 mg) can help reduce the risk of zinc-induced copper deficiency anemia, he added. *Now Full Spectrum Minerals contain 1/2 mg copper per tab.* *Cataracts and macular degeneration*

Dr. Newsome said zinc also improves the antioxidant capability of the eye by participating as a structural element in the enzyme superoxide dismutase. "This enzyme reduces free radical to hydrogen peroxide, which although not nice, is a lot nicer than the very destructive free radicals," he said. Other nutrients, such as vitamins E and A, can contribute to the cascade of oxygen toxicity protection reaction found in the eye, he noted. *An excellent source of super oxide dismutase is wheat germ oil, a potent antioxidant*

"My patients have been satisfied with the improvement in vision they have experienced while taking zinc and vitamin supplementation," he said. *Do not rush to start taking multi-vitamin tabs. MAKE your own multi vitamin-mineral supplement. It will be far superior.*



Phacoemulsification
using the new
MICROSEAL™
Handpiece

- A more stable intraocular environment
- Decreased BSS flow through the eye—virtually eliminates incision leakage
- A deeper anterior chamber—increased safety and control
- Reduced likelihood of incision burn during phaco

takes small-incision to micro-incision, raising cataract surgery to the next level of surgical control. The MICROSEAL™ Handpiece permits a smaller incision, which, for the first time, provides a truly closed-eye surgical system, enhancing intraoperative control and postoperative results.

Refractive Keratotomy RK May Cause:

complications of glare and pain. Significant complications of RK include: intraoperative micro and macroperforations and corneal edema in the early postoperative phase. Refractive complications of overcorrection and undercorrection, induced astigmatism, diurnal fluctuation in acuity in addition to epithelial inclusion cysts, keratitis, neovascularization, cataract formation and even endophthalmitis

The Excimer Laser emits ultraviolet radiation at 193nm wavelength and is capable of submicron precision with virtually no collateral damage; each pulse removes 0.25 microns of stromal tissue in 12 billionths of a second. !!

This brief description of how the excimer laser changes the shape of the human cornea is the essence of the outpatient procedure, photorefractive keratectomy or PRK. It has generated unprecedented interest in the public, the media, among eye care professionals, and within the business community.

Although still investigational in the United States and Canada, over 250,000 PRK procedures have been performed at 600 different facilities in 45 countries worldwide. Results from these procedures have been gratifying; 80% of patients treated with this technology have achieved better than 20/40 distance vision after their initial procedure.

The number of radial keratotomy (RK) procedures performed in the United States eclipsed 250,000 in 1992, and the number of eye care professionals performing RK has tripled in the last three years.

Healthcare Lighting Includes

1. Visible Light Therapy.

A. Bright light therapy of the body clock

B. Proper (sufficient) lighting for all facets of everyday life.

2. Invisible light therapy

A. Healthy tanning with UV-B Long wave-ultraviolet light. I use the Sperti UV Lamp made by KBD Inc. Erlanger, Ky. 41018. 1-800-544-3757. I use model P-164-R. It sells for 169.95. I may be able to get it for you for 119.95. It's a deluxe table model with 800 watts of tanning power. The electronic timer shuts unit off automatically. I've been using it for 20 years and have found it to be excellent. I use 2 of these lamps one in front and one behind me when I am doing my daily bicycle ride for 20 minutes. Protective eyewear, instructions and warranty are included. Do not overdo. Suntanning is healthy; sun burning is NOT. DO NOT SUNBURN! The bulb in my Sperti lamp emits 70% UVA and 30% UVB.

B. Infra red light therapy

3. The body clock is very important to our overall well-being.

A. The hypothalamus is the body's pace maker and can be reset by bright light. When its working properly our day/night activity pattern is synchronized with our life's schedule and we feel better.

B.

LIGHT THERAPEUTICS (With Probiotic Visible and Invis- ible Light.)

- **Achieve Synchronization of Your Body's Systems With Your Body Clock:**
- Desynchronization results in:
 - **Fatigue**
 - **Sleepiness**
 - **Loss Of Alertness**
 - **Concentration Loss**
 - **Insufficient or Excess Of Appetite.**
 - **Overweightness**
 - **Obesity**
 - **Susceptibility To Illness.**
 - **Delaying Of Puberty**
 - **Upset Menstrual Cycle**
 - **Upset Rhythms Of Labor & Birth**
- **AVOID BRIGHT LIGHT STARVATION.**
- **Depression**
- **Sluggishness**
- **Difficulty Awakening**
- **Carbohydrate Craving**
- **Sadness**
- **Social Withdrawal**
- **Low Sexual Desire**
- **Work Disturbance**
- **Binge Eating**
- **Loss Of Physical and Mental Abilities**
- **Verbal Reasoning**
- **Manual Dexterity**
- **Disruption Of The Messages To the Heart, Adrenals, Liver, Kidney, Intestines.**

Read pages 182-188. They are from "Sunlight May Save
Your Life." by Dr. Kime.

Avoid Light Starvation

Relative Illumination Needed for the Performance of a Given Visual Task

Note how the need for light skyrockets as we age.

- At the age of:

10	1	Many youngsters appear to not get eyestrain even with only 10 Foot Candles of light.
20	1.5	
30	2	
40	3	
50	6	Seniors need at least
above 60	15	(75 to 100 Foot Candles)

- Insufficient and improper lighting causes eyestrain, headaches, loss of sense of well being and depression.
- Don't starve yourself for light.

Designer Bulbs (formerly called Interior Design) are full spectrum - Cost 4.99.
sylvania Design Bulbs, Cost 7.99
and are not full spectrum!! BE
VERY CAREFUL WHEN YOU BUY BULBS.
They look alike and are both 40 Watt.
It's very easy to confuse Design Bulbs
and Designer (Life 20,000 hrs.)

Health Benefits From UV-A Light And Exercise

- Depression is a great problem among sedentary people, espec. among seniors. BE a vegetarian and exercise!
- Concerning skin cancer - study
Pages 126-i thru 126-m.

- Health Benefits from Tanning with UV-A (Long Wave) Ultra Violet Light.
- Daily - Get your exercise, suntanning and fresh air by taking a 20-30 minute walk outside.!
- If weather is inclement, exercise indoors using a sunlamp.

Sedentary People:

• By Age 65 Lose 60% of Their Lung Capacity.

• Lose Up To 7 Lbs. of Muscle Each Decade After 30.

• Don't Be a Couch Potato, It's not funny!

• Many sedentary people become depressed; don't let your 41-
-self become a victim of depression

	Short term response (Response after several days exposure)	Long term response (Response after weeks to months exposure)
↓ Blood pressure	•	
↑ Cardiac output	•	
↓ Resting heart rate	•	
↓ Respiratory rate	•	
↓ Blood cholesterol	•	
↑ Electrocardiogram improved		•
↑ Oxygen carrying of blood	•	
↑ Resistance to infections		•
↓ Blood sugar	•	
↑ Energy & endurance		•
↑ Muscular strength		•
↑ Stress tolerance		•
↑ Vitamin D produced	•	

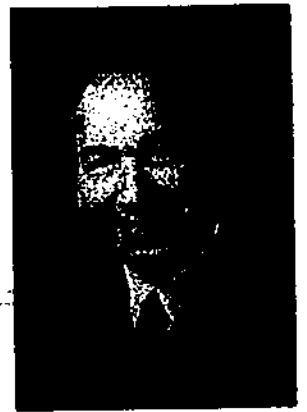
NO CHARGE, NON-PROFIT, PUBLIC SERVICE LECTURE ON: **BRIGHT LIGHT THERAPY HEALTH CARE**

For Persons Experiencing SAD (Seasonal Affective Disorder)

Presented by: **DR. BERNARD E. VODNOY**

Comprehensive in-depth Wellness Program

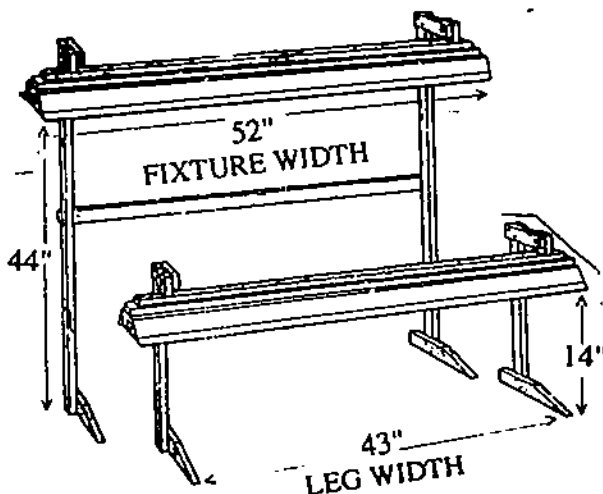
TO REGISTER OR FOR MORE INFORMATION CALL DR.VODNOY: (219) 291-8773



Dr. Bernard E. Vodnoy
1430 E. Clayton Drive
South Bend, IN 46614

- **BRIGHT LIGHT THERAPY HEALTH CARE LAMPS** provide excellent glare-free, cool, full spectrum bright light over a large field. They help improve and maintain concentration and productivity and thereby help with learning and memory. They help eliminate eyestrain, sleepiness and sleep difficulties.
- **THEY HELP ELIMINATE SAD (SEASONAL AFFECTIVE DISORDER)** In people who become depressed in the dreary winter months due to daylight or bright light deprivation. Therefore, used in bright light therapy to effect the body clock and biological rhythms of the body. This principal is used by many psychologists and psychiatrists.
- **FOR MAXIMUM BRIGHT LIGHT STIMULATION**, the lamp shade is tilted approximately 30 degrees, enabling the light to shine into the eyes while reading, writing or working. The person need not look directly at the light. There are no diffusers over the light bulbs; they would cut down the brightness and therefore their effectiveness. When the shade is horizontal (not tilted) the distance from the table top is 14 inches.
- **ANYONE USING THESE LAMPS DOES SO UNDER THEIR OWN RISK.** No one, designer or makers, can be held responsible in any way for any adverse effects the user may think they have experienced. Lamps are not returnable. No claims are made and no guarantee is made for results.
- **THESE LAMPS UTILIZE SYLVANIA INTERIOR DESIGN, 40 WATT FULL SPECTRUM FLUORESCENT BULBS.** At 1", 2 bulbs emit 18,830 lux; at 3" they afford 11,190 lux; at 12", 3,440 lux.
- **THEY ARE MADE OF FINE HARDWOODS** Walnut and Oak and crafted with fine workmanship. Lamps are easily assembled, or disassembled for easy packing and shipping. These lamps are manufactured at the lowest possible cost.

Dr. Vodnoy has had over 250 lamps made for people with SAD. These lamps are also of great value where fine lighting is needed for reading and working in many circumstances.



IF YOU ARE EXPERIENCING SAD and are very short of time and need extra bright light stimulation, consider the four bulb model (2-2 bulb fixtures).

THE ESSENTIAL NUTRITIONAL SUPPORT NEEDED IN SAD will be covered in depth during the course.

THE LAMPS USED FOR INFRARED LIGHT THERAPY emit very bright light and are a month while adjunct to these SAD lamps. USE them while you are exercising, if you are experiencing SAD problems.

Chromatex Incandescent Full Spectrum Bulbs. Retail \$5.99. Discount price 6.80.

see pg 72 - 1 A.B. I trick them - 17 - and do not approve their purchase

GOALS: To help people understand and apply the principles of good lighting to improve their physical and mental well being and performance, and functioning of their body clock and biological circadian rhythms.

OUR BODY SYSTEMS AND ORGANS OPERATE IN SYNCHRONIZATION WITH OUR BODY CLOCK. When we go to sleep, we enter in the dark mode of our light-dark rhythm cycle, our organs and systems slow down, our breathing slows, our body temperature and blood pressure decrease, our metabolism decreases, our brain activity decreases, etc., and we turn off. As the sun comes up and the room light brightens, we gradually "turn on" and as the light increases we change from our night time (dark) mode to our day time (light) mode.

MANY PEOPLE LIVE AND WORK MAINLY INDOORS UNDER MINIMAL NON-OPTIMAL, INSUFFICIENT, LOW LEVEL LIGHTING. Researchers believe that this deprivation of daylight (light starvation) can cause a host of problems to these people and that they are living in desynchronization with their body clock. They believe that the light under which many live, especially in their homes, is perhaps 5 to 10 foot candles and is inadequate to cause them to switch over fully to their daylight mode and they go through their day not fully awake. They are living and working in the "twilight" zone midway between being fully light adapted and fully dark adapted. This, they believe, can result in waves of fatigue, sleepiness, lapses of alertness, loss of ability to concentrate, insufficient or excessive appetite, overweightness or obesity, depression, plus many of the symptoms listed above and below. The person battles these problems, and tries to overcome them by drinking caffeine containing drinks, and they suffer many of the adverse effects caused by the caffeine containing drinks. The body's biological clock is also sensitive to the seasonal variations in the length of night and day, sometimes with serious consequences of winter depression. Studies indicate that 5 to 10% of the population in the mid to northern U.S. becomes seriously disabled between December and February (when the nights are the longest) with the symptoms of sluggishness, difficulty awakening, carbohydrate craving, psychological responses of sadness, social withdrawal, low sexual desire, and work disturbance. These winter doldrums are stated as being far less common in the south where outdoor light-dark cycles are more constant throughout the year. In the last decade we have seen the development of artificial bright-light treatment which can quickly trick the brain into operating in its daylight and summer mode without drugs and/or psychotherapy.

LIGHT COORDINATES THE BODY CHEMICALS THAT GOVERN THE WAY WE SLEEP, FEEL, AND BEHAVE. As the level of daylight changes, these chemicals fluctuate altering our alertness and capacity for physical and mental tasks. These everyday shifts (compounded by seasonal changes) often cause changes in mood, energy, sleep, and susceptibility to certain illnesses and diseases. These changes can be so powerful that they can become health problems requiring medical care.

LIGHT MAY INFLUENCE OUR REPRODUCTIVE HEALTH by affecting the time of puberty, the menstrual cycle, rhythms in fertility and childbirth, sexual arousal, women's ovulatory cycle, rhythms of labor and birth, fluctuations in weight, and cause certain food cravings and binge eating. Sunlight can strengthen our bones by triggering the body's process of vitamin D production. Conversely, light (ultraviolet-UV-B shorter than 290nm, called short wave UV) can damage the skin, eyes, and immune system.

Healthcare Lighting

THE 24-HOUR CYCLE OF LIGHT AND DARKNESS PLAYED SUCH A FUNDAMENTAL ROLE IN THE DEVELOPMENT OF LIFE that a built-in sense of time is present in virtually all plants and animals from algae to humans. Researchers think that these circadian rhythms are as old as life itself. The circadian system prepares us for the start of the day, e.g. before it grows light and as we awaken, heart rate, blood pressure, and body temperature rise, and the hormone cortisol starts to increase from its night time level.

BECAUSE THE BODY FLUIDS AND TISSUES FUNCTION ACCORDING TO CIRCADIAN RHYTHMS, OUR PHYSICAL AND MENTAL ABILITIES DIFFER WIDELY WITH THE TIME OF DAY AND FROM ONE DAY TO ANOTHER. The ability to do tasks requiring verbal reasoning and short term memory tends to peak toward noon. Our long term memory appears to be more effective between 6:00 p.m. and midnight. Repetitive tasks involving manual dexterity, e.g. practicing musical instruments, assembly work, etc., tends to be the easiest in the late afternoon and early evening. These peak reaction times vary greatly depending on whether the person is a "morning" or "evening" person. The cycle, normally 24 hours, can vary from 16 to 30 hours.

ONE OF THE MOST IMPORTANT INTERNAL TIMEKEEPERS (PACEMAKERS) IS LOCATED IN THE HYPOTHALAMUS which then sends messages to the pituitary, pineal, and certain parts of the brain stem. They, in turn, send hormonal messages to the heart, adrenals, liver, kidneys, and the intestines - keeping them in time with the pacemaker. The pacemaker can be reset by the use of unusually bright artificial light. The timing of the bright light is critical. Bright light during the dawn hours resets the pacemaker to an earlier hour. Bright light in the evening resets it to a later hour. Exposure to bright light in the middle of the day may not be as effective. The circadian rhythms of the cells of the retina of the eye possibly determine the time of the day our eyes are most sensitive to light. Two of the eyes most light-sensitive times appear to be dawn and dusk. The retino-hypothalamic nerve tracts are separate from the visual pathways. It's possible to be functionally blind yet timed to a normal light-dark cycle; yet surprisingly, one may have excellent vision and be badly unsynchronized with their light-dark cycle.

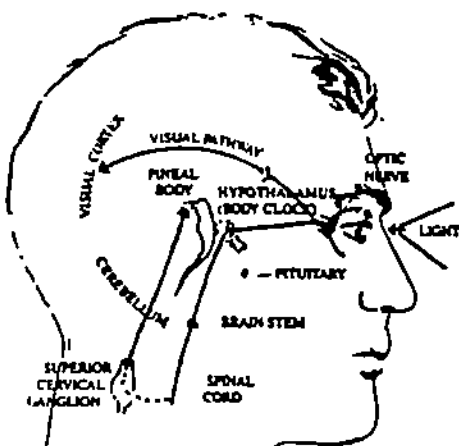
THE PINEAL GLAND, a small gland behind the midbrain, secretes a hormone called melatonin rhythmically in time with the 24-hour light-dark cycle. It reaches its highest levels in darkness and reacts directly to sunlight which suppresses its flow; it influences biological rhythms by acting directly on the biological clock within the hypothalamus.

THE DIGESTIVE SYSTEM AND OUR METABOLISM HAVE A LINK TO THE LIGHT-DARK CYCLE. The eating control system appears to prefer certain nutrients at a certain time of the day. The body evidently puts carbohydrates to maximal use around noon. Studies indicate that the ideal breakfast should be mainly carbohydrate, while the ideal supper should emphasize proteins, preferable from vegetables, whole grains, legumes, and fish. Breakfast provides energy for the activities of the day and supper anticipates the body's needs for the hours of darkness, sleep, and fasting. The body's process for using food is called metabolism, which has a prominent circadian rhythm which peaks in the early afternoon, and is apparently linked to the light-dark cycle and other circadian rhythms since it is also modified by sleep and waking, and may vary with the seasons reaching its peak in winter. Ongoing research indicates that a meaningful linkage exists between the light-dark cycle and eating, weight, meal timing, anorexia, bulimia, and food cravings.

- 79 - ALCOHOL CAN AFFECT THE CIRCADIAN RHYTHMS, that are normally set by the light-dark cycle. It disrupts the circadian rhythms of sleep. One episode of intoxication alters the circadian organization of the adrenal system for three days, raising the adrenaline to more than ten times its normal level. Male alcohol addicts lose the circadian rhythm of the hormone testosterone.

AGING. These researchers conclude that since the light-dark cycle and other circadian reflexes have such a profound effect on every aspect of our mental and physical being and behavior that in sum total they have a significant effect on our rate of aging. They state that if people live their life in synchronization with their body clock, they will retard aging, greatly improve their health, and add to their quality of life.

LIGHT AND THE BODY CLOCK



A MAJORITY OF PHOTOBIOLOGICAL RESEARCHERS POINT TO THE IMPORTANCE OF THE INTERNAL BIOLOGICAL CLOCK, OR "BODY CLOCK" IN OUR OVERALL WELL-BEING. Our body clock is located in the hypothalamic center of our brain. When light hits the retina, the retina transmits impulses to to our body clock. When our body clock is working properly, our day/night activity pattern is synchronized with our work schedule and lifestyle - and we "feel better." Further, an overwhelming amount of research shows that light of daytime intensity is a critical element in body clock synchronization.

The Dual Pathway of The Nervous From The Retina:

- 1) Through the visual pathways terminating in the visual cortex and results in vision.
- 2) Directly back to the hypothalamus and pineal glands, (the pacemakers of the glandular system) and results in profound effects on the entire body and mind.

CHART OF LIGHT OUTPUT OF THE SINGLE FIXTURE LAMP - 2,40 WATT FULL SPECTRUM FLUORESCENT LAMPS MADE BY SYLVANIA. (CALLED INTERIOR DESIGN.)

To obtain LUX, multiply Foot Candles by 10.76.

Distance From Bulbs	Foot Candles	LUX
1"	1750	18,830
3"	1040	11,190
6"	670	7,210
9"	460	4,950
12"	320	3,440
14"	280	3,010
17"	230	2,475
20"	190	2,045

When using your lamp pull it forward so that the front bulb is 9-10" from your face

When the fixtures are in the horizontal position and white paper is placed on the desk the light being reflected is as follows: (distance from bulbs to desk is 14")

Single Fixture	Foot Candles	LUX
140	1510	

Double Fixture	Foot Candles	LUX
290	3120	

LIGHT OUTPUT OF THE DOUBLE FIXTURE LAMP. 4,40 WATT BULBS.

Distance From Bulbs	Foot Candles	LUX
3"	1280	13,775
6"	960	10,330
9"	820	8,823
12"	670	7,210
14"	580	6,240
17"	470	5,060
20"	380	4,090

ELECTRO MAGNETIC FIELD - EMF IN MG. (MILLIGAUSS)

Measurements were taken with TESLA TRONICS Model 70 Triaxial ELF Milligauss Meter. This is a highly precise instrument to measure Extremely Low Frequency (ELF) Magnetic Fields.

Distance	Center of Bulbs	At Ends of Bulbs	At Ends of Fixture
3"	1.7	160	475
6"	1.4	60	45
9"	1.6	33	7
12"	2.0	20	
14"	2.0	13	
17"	2.0	10	

Exposure Time	Magnetic Field Limit
10 hrs	5,000 milligauss
short term	100,000 "
For limbs only	250,000 "

These are safety limits i.e., we can be exposed to 5000 mg for 10 hrs safely.

Genetically Engineered Foods - Health, Environmental And Ethical Concerns

- **Hazardous effects will continue for generations to come.** Unlike chemical or nuclear contamination, gene pollution can never be cleaned up. New living organisms, bacteria and viruses will be released into the environment to reproduce, migrate and mutate. They will transfer their new characteristics to other organisms and can never be recalled or contained. The effects of genetic mistakes are irreversible and irretrievable.
- **Damage to the ecosystem, harm to wildlife and change in natural habitats.** Our plant and animal species have evolved over millions of years. Introducing genetically engineered species upsets the delicate balance of our ecosystem with changes which would not naturally occur. Insects, birds and wind can carry genetically altered seeds and pollen into neighboring fields and beyond, creating new species. These unpredicted and unknown species may endanger wildlife and alter essential ecological relationships between plants and animals. For example a genetically engineered bacterium developed to aid in the production of ethanol, produced residues which rendered the land infertile. New corn crops planted on this soil grew three inches tall and fell over dead. (Ref: OSU Study Finds Genetic Altering of Bacterium Upsets Natural Order, Hill, H.R., The Oregonian, August 8, 1994)
- **Increased pollution of food and water supplies.** Approximately 57% of the research of biotechnology companies is focused on the development of plants that can tolerate larger amounts of herbicides. It's estimated that this will triple the amount of herbicides used on crops, resulting in even more chemicals in our food and water. (Ref: Environmental concerns with herbicide-tolerant plants; Goldberg, Weed Technology, 6, 1994)
- **Unsafe track record.** In 1989, a genetically engineered form of the food supplement tryptophan, produced toxic contaminants. As a result, 37 people died, 1500 others were permanently disabled, and 5000 others became very ill. Who can guarantee that this kind of mistake won't happen again? (Ref: Eosinophilia-myalgia syndrome and tryptophan production: a cautionary tale. Mayeno, A.N., Gleich, G.J. Tibtech, 12, 346-352, 1994)
- **Allergic reactions.** Genetic engineering may transfer new and unidentified proteins from one food into another triggering allergic reactions. Millions of Americans who are sensitive to allergens will have no way of identifying or protecting themselves from offending foods. Allergic reactions can cause more than simple discomfort—they can result in life-threatening anaphylactic shock. (Ref: Food and Drug Administration 57 Federal Register 22987)
- **Unpredictable, permanent changes in the nature of our food.** The genetic structure of plants and animals has been nourishing the human race for millennia. Now that structure is being tampered with. Genes from bacteria, viruses and insects, which have never been part of the human diet, are being spliced into our food. No one really knows if they are safe. Genetic engineering is not an exact science. Scientists can unintentionally create changes in the genetic make-up of plants that result in new, unknown proteins with unknown results.
- **Harmful effects may not be discovered for years.** Changing the fundamental make-up of a food could cause new diseases, just as herbicides and pesticides have in the past. There are no long-term studies to prove the safety of genetically engineered foods. These products are not being thoroughly tested before they arrive on the grocery shelves—they are being tested on us.
- **New and higher levels of toxins.** Many plants naturally produce a variety of compounds that are toxic to humans or alter food quality. Generally, these are present at levels which do not cause problems. Combining plants and animal species in genetic engineering may create new and much higher levels of these toxins. Corn and potatoes engineered to produce toxins that kill insects, are now classified by the Environmental Protection Agency as pesticides, rather than vegetables. (Ref: Food and Drug Administration 57 Federal Register 22987, EPA Approves Bt Corn and Cotton with Conditions, The Gene Exchange, Dec., 1995)
- **Decreased effectiveness of antibiotics** Antibiotic-resistance genes are incorporated into nearly every genetically engineered organism as markers to indicate that an organism has been successfully engineered. Scientists expect these genes and their enzyme products, which inactivate antibiotics, to be present in engineered foods. (Ref: Food and Drug Administration 57 Federal Register 22988)



Feb. 1992

Sept. 1991 The lamp has now been greatly improved and costs half the cost of the above

light lamp.

Be it dark, cold or overcast, every morning begins bright and shiny for Dr. Bernard Vodnoy when he flicks on his mood-elevating bright

He sheds light on 'winter blahs'

WAYNE FALDA
Tribune Staff Writer

SOUTH BEND

Dr. Bernard E. Vodnoy's heart leaped when he picked up the newspaper and read about the winter-blues syndrome, called Seasonal Affective Disorder.

"I felt it hit the nail right on the head," he said.

It just so happened that the 77-year-old retired optometrist and inventor had been working for the past five months on two prototypes of a high-intensity lamp that has been found effective in some people in restoring balance to their internal circadian rhythm, the 24-hour cycle of light and darkness.

Psychologists believe that some people who are deprived of the beneficial effects of sunlight over extended periods can slip into a state of depres-

sion. For ages, people have described the problem loosely as "the winter blahs."

Vodnoy has been a lecturer and prolific designer of inexpensive optometric devices for more than 50 years. He has been collaborating with his friend and associate, Chuck Hodgson, to develop a therapeutic lamp under his guiding philosophy of making equipment "for the greatest good, for the greatest number of people, with the greatest convenience and at the lowest cost."

Therapeutic light lamps already on the market can sell for hundreds of dollars, even as high as \$500. "We have proven that we can make a lamp for less than \$100," he said.

Vodnoy said he will make the blueprint of either a desktop or floor model available to anyone who requests it. The materials are available at any hardware store or lumber yard, includ-

ing four fixtures and 24-inch fluorescent or full-spectrum bulbs that are the heart of the lamps.

A well-known luncheon speaker, Vodnoy has delivered hundreds of free lectures to local Rotary, Kiwanis, Lions and service clubs on dozens of health and nutrition subjects.

"I try to explain the background of a topic, and I always try to offer the audiences a solution to what I tell them," he said.

So when scientists made the link between Seasonal Affective Disorder and bright light therapy, Vodnoy — ever the tinkerer — sought a low-cost remedy that would be affordable to all.

It was a natural evolution.

Long ago, during his practice he made the link between the headaches his patients often complained about to the poor quality of reading light in their homes.

"It was not that their prescription

Within 3 weeks 65 people came to my study wanting a lamp

We have made over 200 of them, to them great satisfaction and of their psychiatrist or their psychiatrist.

Sept 1991, I have now achieved a new design which is far easier to make, uses even more efficient and half the cost.

My services are no fee, non-profit. Dr. Bernard E. Vodnoy 1-219-241-8773

PLEASE TURN OVER.

New York Schools Consider Installing Full-Spectrum Lights to Help Students

needed changing, or their bifocals were too high or too low," he said. "Almost always they were trying to read under light that gave off only 5 to 8 foot-candles."

His crusade on the causative effects of low light and eye strain lately evolved into an interest in light therapy as a means of combating the malaise that depression-prone people experience to the point of dysfunction, especially during short, often sunless, days of December, January and February.

"People would come up to me after one of my lectures and say 'Doctor, I don't know why I've been so depressed lately,'" he said. "I heard that over and over and over again."

During the late 1980s, an increasing number of books and scientific literature documented what has now become widely known as Seasonal Affective Disorder.

The cure was simply light, and plenty of it. "The illumination of 100 foot-candles (10,000 lux) entering the eye is required to achieve effective light therapy in as short a time as 15 minutes," he said.

The beneficial effects of light therapy in the morning can begin with illumination as low as 25 foot-candles (2,500 lux).

Curative benefits of light therapy occur quicker for some people.

Vodnoy said the lamps he and Hodgson designed have an dual benefit: When the head of the lamp is flipped deskward, it makes an excellent reading lamp that can be adjusted simply by clicking off or on any of the four individual lights.

"Bright light therapy begins to work as quick as a half hour," he said.

12/1994 - Our new lamp has only one switch. We found 4 bulbs on separate switches are unnecessary and needlessly expensive

12/31/92 WALL ST. JOURNAL B 8
By ROBIN GOLDWYN BLUMENTHAL
Staff Reporter of THE WALL STREET JOURNAL

NEW YORK — Some New York schools are debating whether to change classroom lighting from fluorescent lights to sunlight-simulating full-spectrum lamps, partly in an effort to help students learn.

Full-spectrum light gives off more ultraviolet at certain wavelengths than standard "cool white" fluorescent light. The light is closer to natural daylight than ordinary light. Therefore, some dentists prefer it, as do cosmeticians and graphic artists because it improves their ability to distinguish colors. It's considered more energy-efficient, even though the bulbs can cost twice as much as standard lighting. Partly because there haven't been conclusive studies about the long-term effects of increased exposure to ultraviolet, its use has been relatively limited, however.

But on New York's Long Island, lighting engineer Daniel Karpen has made a business out of promoting full-spectrum lighting to area schools. Mr. Karpen, known in the lighting industry for his advocacy, designed full-spectrum lighting with polarized diffusers, which reduce glare and ultraviolet emissions.

By promoting the beneficial effects of this lighting, along with its energy-efficiency, he has won several jobs to design school lighting. Mr. Karpen is also pushing for the state to pass legislation requiring such lighting in schools, which he estimates could cost close to \$1 billion.

A Decrease in Cavities

Mr. Karpen and other proponents claim the lighting may improve the health and performance of students. They most often cite a five-year Canadian study that found better attendance and gains in achievement among students in classrooms with full-spectrum lighting compared with two other light sources. When trace amounts of ultraviolet were added, gains were recorded in height and weight. Even cavities were reduced, with savings in dental costs averaging \$100 a child per year, says Warren Hathaway, of the Alberta Education Department, which conducted the study.

George C. Brainard, associate professor of neurology and pharmacology at Jefferson University Medical School in Philadelphia, who is known for his research on light, notes that while the Canadian field study appears to be the best thus far, extensive testing under more rigorously controlled conditions is needed to rule out other possible explanations for the improvements.

Still, Prof. Brainard says, "When I look at a handful of applied studies in schools—some with greater rigor than others—the remarkable thing is that each of those studies suggests the same finding... that the quality of light has an impact on either the health or the performance of students."

Prof. Brainard recently completed a three-year study that showed that near-ultraviolet light enters the retina and causes both visual stimulation and electrical activity in the brain in children and young adults. Such stimulation, strongest at birth, appears to be lost in adulthood.

But the best results in the Canadian study involved the enhancement of light with ultraviolet. Although Dr. Hathaway, of the Alberta Education Department, says he hopes to make changes in the schools based on his findings, "The stumbling block is the near mass-hysteria over exposure to ultraviolet."

An eight-hour exposure to such light would be equivalent to 15 minutes in full summer sun; similar exposure to full-spectrum light would amount to three or four minutes, while fluorescent exposure is about half that.

On Long Island, Mr. Karpen conducted an energy audit for the Manhasset school district, which plans a partial changeover in an effort to cut electricity costs. The district expects to receive a state grant for the project.

"We have the oldest fixtures in captivity, so whatever we do will be a major step forward," says William Leo, deputy superintendent of the Manhasset schools.

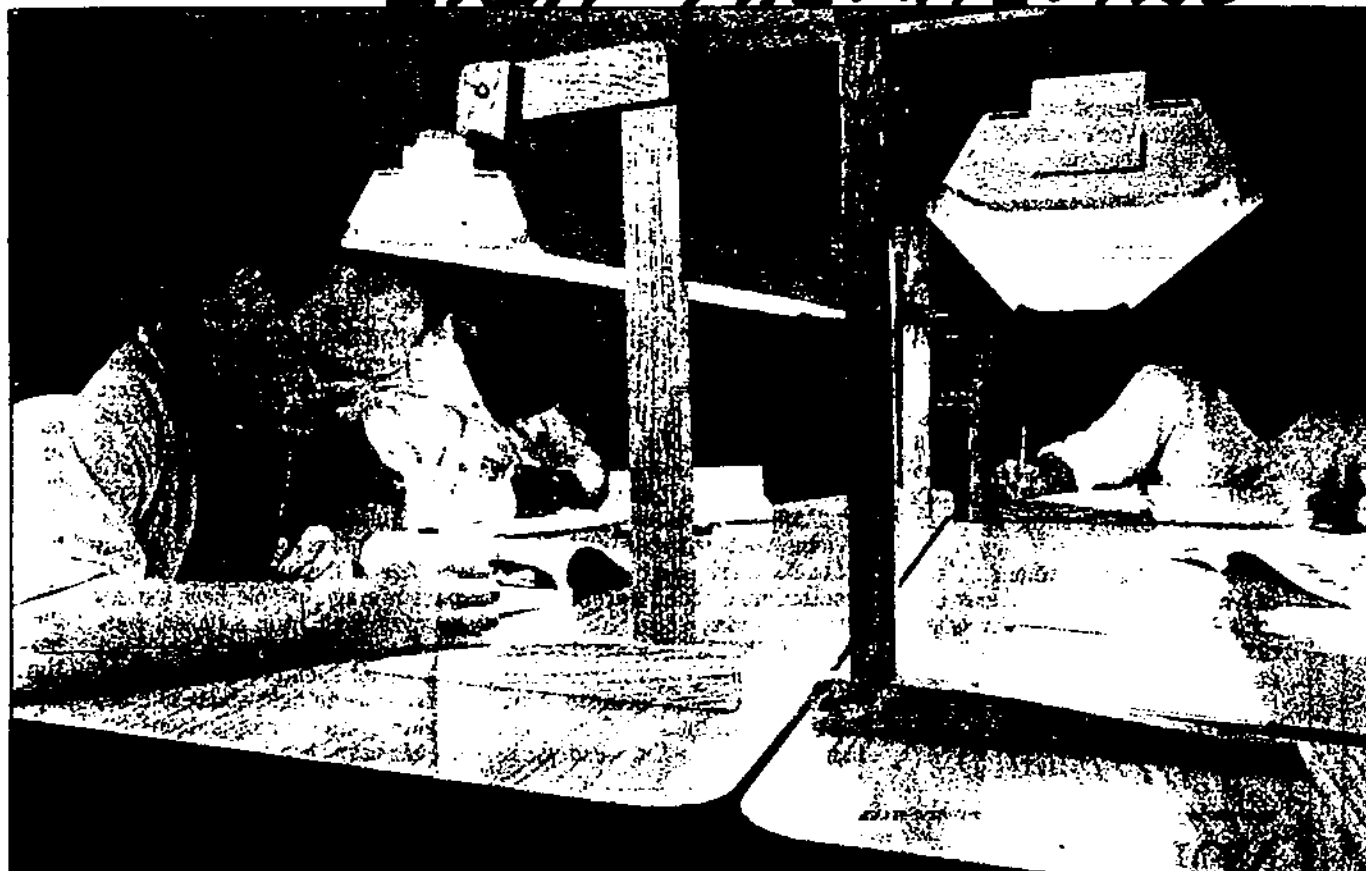
Mr. Karpen also spurred the East Northport Middle School to change its lighting, which reduced electricity usage by one-third, partly because fewer lights were needed.

Saves Energy, Cuts Costs

Tom Shaw, director of facilities management for the Hicksville, N.Y., public schools, tried full-spectrum lighting in 15 classrooms in one elementary school. The lighting saved energy and reduced the number of bulbs needed, cutting replacement costs. The lights' long-term benefits "can't be proved," says Mr. Shaw. But unlike standard lighting, full-spectrum lights allow students to see the blackboard clearly from the back of the room as well as the front, he says.

Sylvania reports their full spectrum fluorescent lamps emit less than 1 watt (16) of UV light at 380 nanometers. This is at the very end of the visual spectrum and are therefore considered healthy U.V. light. OSHA considers them entirely safe and makes no restriction on their use. Sylvania calls them Interior Design. They have a 20,000 hr. life

LIGHT THERAPEUTICS



Tribune photo/PAUL RAKESTRAW

The full-spectrum lamps at Indiana Vocational Technical College-Northcentral serve a dual purpose: They illuminate subjects and they counteract the seasonal "downer" effects of reduced light. From left are Mike Peck of Mishawaka, Alicia Hood of South Bend and Tammy Thompson of Mishawaka.

They see light at Ivy Tech

Lamps help switch on sunny side of SAD sufferers

By WAYNE FALDA Oct. 1994
Tribune Staff Writer

JUST AS the darkness of October mornings lengthens, so goes the familiar spiral into lethargy for many people.

The cycle of depression has begun to run its course for 10 million Americans suffering from seasonal affective disorder, or SAD.

The listlessness of the doldrums, or "winter blues," takes its toll on the rich as well as the poor, professionals as well

as blue-collar workers.

Depression costs society an estimated \$44 billion a year, \$24 billion of which is attributed to lost work days and reduced productivity.

But SAD is a condition that may be particularly difficult to diagnose in students, too. It is the young who tend to cloak a short attention span and a disinterest in learning with a veil of youthful bonhomie.

Because youth is synonymous with change, a pattern of moodiness is apt to conceal the onset of SAD.

When retired South Bend optometrist Bernard Vodnoy began making connections a few years ago between light therapy and an array of disorders, including SAD, his inquiry led him deeper into the greatest organ of all, the human brain.

Though his 80-year-old body is bent and frail, his crusade energizes him. His personal victory over cancer years ago left him disabled. But with help from professional woodworkers, Vodnoy has distributed more than 200 full-spectrum

OVER See SAD/Page A2

From Page A1

lights on a not-for-profit basis to sufferers of SAD.

The cost: \$5 apiece. In contrast, commercial lamps may sell for as much as \$500.

His lamps are popping up around South Bend and elsewhere. One is in Carter Wolf's downtown office at Center City Associates. Two showed up at the Koala Center in Indianapolis.

Some of his lamps found their way into Indiana Vocational Technical College-Northcentral.

At Ivy Tech, students enrolled in Excel are having their computer areas illuminated by Vodnoy's lamps.

Whether or not students enrolled in Excel are susceptible to SAD, the benefits of light therapy intrigued Tracy Mooers-Younce soon after she met Vodnoy.

Originally, Mooers-Younce, the director of the Excel program, intended to seek nutritional advice from Vodnoy as part of a holistic way of improving students' study habits.

But when Vodnoy began to show her how students could focus better and study more effectively under the full-spectrum light, she — essentially — saw the light.

"We decided the lamps might be something we could look into, as well," she said.

Now she says: "We recognized that the students would be more effective and we would help them stay more alert if they received the full benefits of the lamps."

For years, neuroscientists and psychologists have been sold on the notion that light therapy can reverse the effects of SAD. But Vodnoy and others have taken the concept one step further: that the physiological benefits of light play an important part in orchestrating that extraordinary neuronal circuitry of the brain, the impact of neurochemicals like serotonin and melatonin, and the interrelationship with critical glands of the brain.

It is a hot area of research into SAD, said Todd Hardin, a clinical psychologist with the National Institute of Mental Health in Washington, D.C.

"The mechanism by which light works is very controversial. But what he (Vodnoy) is suggesting is pretty much in line with current research," said Hardin.

Hardin is a colleague of Dr. Norman Rosenthal, a pioneer in Seasonal Affective Disorder.

Vodnoy believes that light-stimulation will activate the hypothalamus, the adrenal and pituitary glands.

The chemical neurotransmitter, called serotonin, controls mood and personality. Neurochemists have found that serotonin is the key link that explains how the mind works

and how the brain thinks and feels.

It closely interacts with another neurotransmitter, a hormone called melatonin. Melatonin is critical in regulating sleep cycles, sexual reproduction and even moods.

It is clear that SAD is attributed to low levels of melatonin and is treatable through light therapy. But how this grand orchestration actually works is far from understood.

"One very strong possibility is that serotonin itself is undersecreted. Melatonin is made from serotonin, and so possibly there is not enough serotonin produced in the brain in the wintertime," Hardin said.

"Or it is being secreted at the wrong time — that's another possibility," said Hardin.

Of this there is little doubt: the reduction in light disrupts the body's biological clock, or circadian rhythm. Some people are more prone to mood swings than others.

Women, by a margin of 3 or 4 to 1, are more often affected by SAD than men. Midwesterners are especially vulnerable, given the combination of short days and cloudy weather in the winter.

On average, people here get 220 hours of sunlight in a typical summer month but only 80 to 120 hours in a winter month.

Exposure to light about 20 times brighter than ordinary indoor lighting has been shown to control SAD.

Dr. Vodnoy's Coming LEC. - RE - JUL -

Healing of Michiana - Lutheran, Christ The King Church, 17195 Clere/and Ave, July 24, 1994 2:00 To 4:00
Center For Homeless - 813 So. Michigan - 282-8700 - Open To The Community Aug. 24, 94 1:30 To 3:30
YMCA of Michiana - 1201 Northside Blvd. 287-9622 - Sept. 7, 1:30 To 3:30 Sept. 9, 94 7:00 To 9:00
Forever Learning Institute - 308 So. Scott 282-1901 - Sept 21 4:28, 1:00 To 3:00; Oct 5, 12, 19, 26 1:00 To 3:00
UNITED RELIGIOUS COMMUNITY WOMEN'S EXECUTIVE COMMITTEE GORE AVE. UNION CHURCH Aug. 11, 1994 10:30 To 12:00

His goal is to help others

By MELISSA MIELKE
Staff Writer
Senior Life July 1994

What he strives for is to bring the greatest good to the most people for the absolute lowest cost. That's why Dr. Bernard Vodnoy has spent his retirement lecturing — for free — to thousands of people in Michiana on the importance of nutrition and health care. And that's why — at a moment's notice — Vodnoy is ready to speak to any group on these important topics.

A retired optometrist, Vodnoy spent his life speaking internationally on vision and vision perception. Many vision testing and training instruments invented by Vodnoy are in use throughout the world.

"When it came time for retirement I asked myself the question of what I was going to do with myself," the near 80-year-old said. What he found himself thinking about was the very profound problems he had seen with nutrition and health care. So his response 15 years ago was to do what he knew best — lecturing.

He started as a volunteer educator for hospitals, colleges and schools, and then began speaking for service clubs, senior citizen centers and any-

one else who would listen. He has spoken on "Nutrition and Healthcare Against Aging, Disease and Poor Mental Health" in more than 140 workshops. And he's not ready to stop yet. His hundreds of 22-by-28 poster boards of information are standing ready in case he needs to give a 20-minute presentation or a 20-hour presentation.

"I work at this problem seven days a week, every day, because we have to get the information to people," he said. "People need this information in a good, solid dose. They need to know that they have to get motivated and take active steps to change their lives."

"Science has given us very definite rules to go by," he continued. "In foods, there are incredible substances which are beneficial to our health. What I teach is when they tell you to eat 3 ounces of broccoli a day, why is this so important? I say if we don't live by health care rules we are making ourselves sick."

Vodnoy doesn't treat any illness or advocate any particular treatment, diet or exercise. What he does is outline these healthcare rules that need to be followed in order to lead a

healthy life-style. He teaches not to eat processed foods because of the low nutritional value in them. He teaches not to eat beef, but to eat only healthy chickens, turkey and fish. A healthy animal is one that has been free to walk around and is not caged permanently from birth till death.

"The average person takes in six pounds of poison a year through processed foods," he said. "There are chemicals in these foods that are used to preserve, but they are toxic to our systems. I urge others to practice illness prevention and join the American health care revolution — fight to change our country from a sick care system to a health care system. Two thousand years ago Hippocrates said, 'Let food be your medicine.' We need to get back to this philosophy. Every time a food goes into our mouth it's an opportunity to build our health. Don't waste a single moment."

Everything Vodnoy teaches, he follows. His kitchen is his laboratory. There, the refrigerator is filled with only fresh fruits and vegetables, homemade salad dressing, sprouted beans and other good-for-you foods he teaches about.

Along with teaching proper nutrition and healthcare, Vodnoy is an inventor. Our newest lamp (different than the above) is the best and even for better.



WITH LIGHT — Dr. Bernard Vodnoy, an internationally known lecturer and retired optometrist, developed this lamp for bright light therapy. The lamp allows the person to get more light to his hypothalamus, an internal pacemaker of the body. Vodnoy speaks all over on the subjects of nutrition and health-care. (Photo by Melissa Mielke)

He has developed a special lamp which allows seniors to get light into their glandular systems every day. This light allows the hypothalamus (an internal pacemaker) to be stimulated. "We need light all year round to keep the body going, and seniors need it more than ever because as they age less and less light is coming through the eye," he said.

For More Information
Call Dr. Vodnoy
291-8773

LIGHT THERAPY WITH INFRA-RED LIGHT (IRLT)

Infra-red light therapy (IRLT) can be very beneficial. It can increase the speed of healing, improve blood circulation, make the skin more supple and healthy, improve tanning, improve fitness and aid with weight loss.

IRLT is a sauna without the steam and hot air and any associated breathing discomfort. Infra-red is simply heat radiation that penetrates the skin to a depth of over 4 cm. ("1 ½ inches") and is easily absorbed by the body.

IRLT is used extensively thru out the world. According to the Ninth Edition of Clayton's Electrotherapy, 'infrared radiations are the only antidote to excessive ultraviolet radiations', ie. an antidote for sunburn. Another reason seems to be the deep pore-and skin-cleansing associated with increased sweating and excretion of toxins, leading to a cleaner, healthier skin. The sauna is very popular in Scandinavia, where one Finnish doctor is quoted as saying: 'The best dressed foreigner can come into a doctor's office, and when his skin is examined it is found to be rough as bark. On the other hand, as a result of the sauna, the skin of any Finnish worker is supple, healthy, smooth, clean, and younger-looking'. Also 'healthy skin tans best' and probably ages least.

The benefits to the skin are attributed to the greatly increased blood circulation and dilation of peripheral blood vessels which occurs when the body gets hot enough. The skin looks red when this occurs, signifying the distribution of copious amounts of fresh oxygen-rich blood to areas that may not normally have an adequate supply. If the skin becomes toxin free, it may well take on a youthful, soft, glowing appearance that would enhance any tan.

There is also a possible effect on cellulite. Cellulite is a gel-like substance made up of fat, water and wastes which are trapped in pockets below the skin. Regular IRLT may help this condition, as profuse sweating is thought to clear some of this unwanted debris from the body. Some weight loss authorities believe that our bodies use fat to dilute toxins. IRLT is an unsurpassed expeller of toxins. It could be a great way to get rid of any fat our bodies may be using to dilute toxins we are storing.

Infrared heat is radiant heat which has nothing to do with ultra-violet or atomic radiation. It is at the opposite end of the light spectrum to ultraviolet. Our sun radiates most of its energy in the infrared part of the spectrum. Radiant heat is a form of energy which heats objects directly, without having to heat the air in between. This makes it safer for children and those concerned about heart and blood pressure risks. It also means we can use IRLT longer and relax more, whilst breathing easier. This makes it more 'user friendly' than a sauna.

As a health and skin-care system, IRLT radiates heat similar to the heat from the sun, or that which our own bodies produce as they burn fuel to keep us warm. Body tissues which are operating at less than the correct temperature are less efficient at warding off diseases, or repairing themselves. Infrared rays are selectively absorbed by these tissues to boost in variety of heating responses and, after boosting a tissue's level to maximum, the remaining rays pass on harmlessly. The concept was invented in Japan for medical purposes as long ago as 1965, with over 700,000 infrared IRLT systems having been used in the Far East alone. An additional 30 million people have received localized body infrared treatments. The better known medical uses are for muscular pain relief and in the treatment of sports injuries, sprains, strains, bursitis, arthritis and skin circulation disorders. As well as these, IRLT treatments have been used successfully in Japan to treat slipped-disc pain, bone fracture pain, post traumatic shock, muscular tension, post-exercise pain, cramps, lower back pain, menstrual pain, adhesions, brain contusion, and in the accelerated healing of new injuries.

The model #MK IV F Sperti lamp, manufactured by KBD, Inc. at 20 Kenton Lands Road, in Erlanger, Ky, 41018-1378 (1-800-544-3757) produces both U.V. and IR light controlled by a timer. I use my exercise bicycle daily. It affords exercise of both my arms and legs. I use one lamp in front of me and one behind. I first exercise 20 minutes with the UV light and then 10-15 minutes with the IR light. I am 85 years old with extensive paralysis from polio and am unable to physically work myself hard enough to cause my body to sweat. With this program I'm able to activate the vital physiological responses described above and find this dual program very beneficial and superior to UV A light only. *Since developing the Infra Red Lamps (on page 88), I suggest using the lesser expensive U.V. Lamps (UV only) with the Infra Red Therapy Lamps to achieve a dual program*

SUPREME
EXTRALIFE
Heat Lamp
Infrared / Clear
250 Watt / 115-125 Volt

WARRANTY

Product is warranted to last an average of life-hours stated. In case of premature failure, return to the address below for free replacement.

SUPREME CORP.
Mullins, SC 29574

Read carefully, the label of the bulb you buy and abide by its precautions.

OPERATING INSTRUCTIONS AND WARNING NOTICE READ THIS ENTIRE STATEMENT BEFORE USING THIS LAMP

This lamp is designed for use in applications specifically requiring a short wave infrared radiation source. Infrared radiation from this lamp causes surfaces to be heated. This lamp should never be placed closer than 18 inches to any person or surface.

WARNING

A. This heat lamp should not be used on infants, children, incapacitated persons, or sleeping or unconscious persons without a continuous, responsible attendant. Do not use over sensitive skin or persons having poor blood circulation. Sufficient temperatures are generated that may cause burns. To reduce risk of eye injury do not stare at exposed lamp in operation. In industrial applications where large banks of these lamps may be used, appropriate eye protection should be used when continual exposure is expected. Do not use this heat source in close proximity to combustible materials (litter, paper, etc.) or to materials adversely affected by heat or drying.

B. Although this lamp has been carefully constructed using the best materials, certain conditions beyond the manufacturer's control may cause the glass bulb to crack or shatter. Prevent water, moisture, liquids or metal objects from coming in contact with this lamp as the glass may shatter. Use a protective screen or mask between the lamp and the exposed person or other application where glass shattering would be a safety hazard. Do NOT use this lamp in wet or moist environments, including sauna, shower, bathing, bathroom or other areas where steam or moisture may accumulate; other heat resistant glass lamps may be appropriate for this use.

C. Avoid scratching, scraping or striking a hard surface with the glass bulb since this could cause minute cracks. Do not use if the glass bulb is scratched, cracked or touching accessory equipment.

D. Use only in standard 115-125 volt sockets designed for 250 watt use.

INTRA-RED THERAPY LAMPS

- 6" Diameter Galvanized tubing

10" long
Total

- Supreme Heat Lamp Bulb - 4 1/4" Face
- 6" Long
- Cost 3.00

On sale 1.69

Richard's Home Center on Inland Rd.

- Face of bulb is 2" behind front of shade

(bulbs)

- Lamps are also made by:

Phillips
Sylvania

General Electric

Cost: \$100 To \$1000

- 1711 four of the (bulbs) lamps have built-in reflectors.

- I use one of these

lamps behind and one in front of my stationary

bicycle. 3 lamps also work exceptionally well.

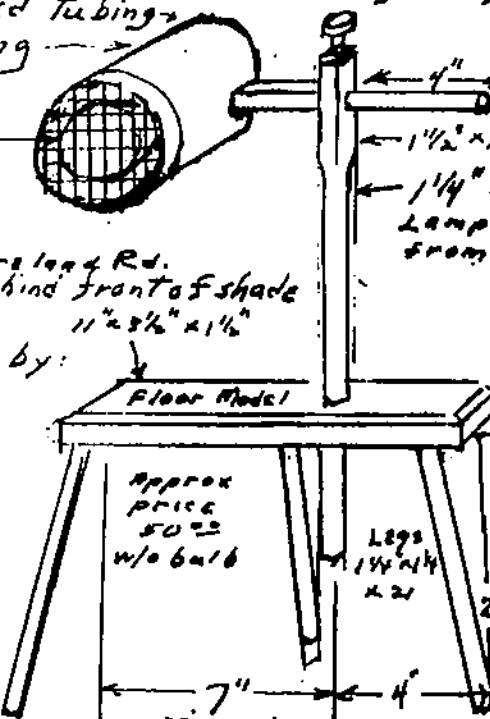
Tightening knob

Infra-Red Therapy Lamp - Floor Model

You'll also get Bright Light Therapy while using these lamps.

Lamp height adjustable - 20" to 40" from the floor.

This table is also made with a thick plywood top. Can be used to set the table model V-A Lamps, Infra-Red Lamps, and light portable typewriters. It can also be used as an adjustable height work table alongside your desk and as a writing table.



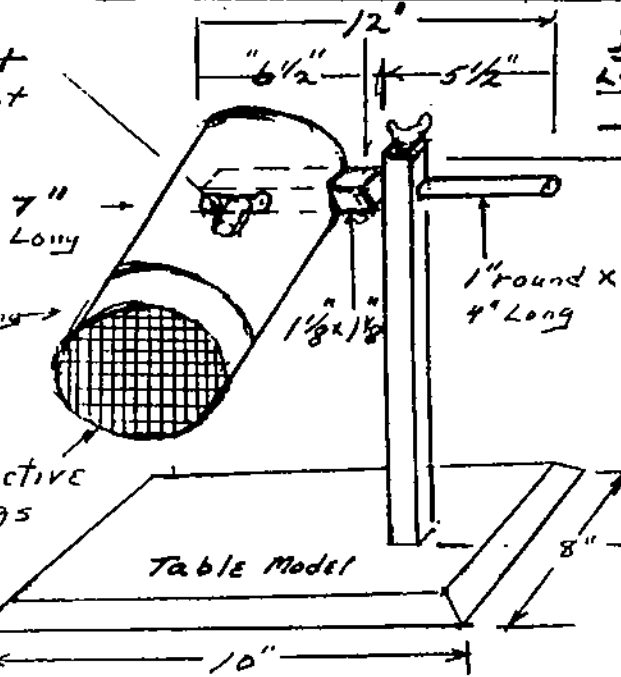
Floor Model

Approx price \$50 w/o bulb

Legs 1 1/4 x 1 1/4 x 22

Visible spectrum 380nm-760nm
Short wave infra-red 1000nm-1400nm
Far infra-red 4000nm-100,000nm.
Radio waves: 500 meters
Electric waves: 3100 miles

- Ceramic socket with Supreme Heat bulb 250 watt.



Infra-Red Therapy Lamp

Table Model

- Heavy Protective Wire-Openings 1/2" square soldered in

12" x 1 1/2" x 1 1/2"

- Both of these lamps are also made to hold

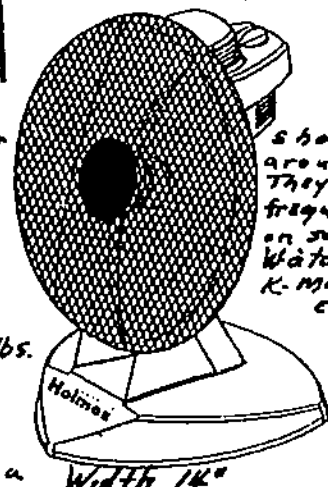
incandescent 150W. They're less sensitive.

Holmes HRH 710 Portable Parabolic Heater

- Compact Parabolic heating system, with 1000 watt heat cone for instant, concentrated whole-room warmth. No motor. No noise. No air movement.
- Adjustable heat settings allows users to control the heat output
- Deep-pitched, brushed steel reflector disc for maximum focused heat dispersion. Wonderful appliance. You may use it close by without heating up the whole room. Very effective. Be cozy warm without heating up the whole house. Economical.
- Space saving triangular base design
- Steel mesh Grill design
- Comfort Control Thermostat automatically maintains desired temperature level
- Total Safety System with Auto Reset and Instant Tip-over Protection for the best in safety protection

- Hgt. 17"
- Depth 13 1/2"
- \$69.95

Don't put up with being chilled when you are seated and working or reading



shop around. They are frequently on sale. Watch K-Mart etc.

Width 14"

THE PHYSIOLOGIC EFFECTS OF COLORS

From: "The Power of Color"
By Dr. Morton Walker

Red

The pituitary gland, which is an endocrine gland, comes into play when a person is exposed to red. In just a fraction of a second, a chemical signal goes from the pituitary gland to the adrenal gland, and epinephrine (adrenaline) is released. The adrenaline courses through the bloodstream and produces certain physiological alterations with metabolic effects. The following reactions begin immediately but may not be noticed for a few minutes or even several hours depending on the health of the individual's homeostasis (the physiological process by which the internal systems of the body are maintained at equilibrium despite variations in external conditions):

- The blood pressure elevates.
- Blood flow speeds up, as manifested by an increased pulse rate.
- The rate of breathing becomes rapid.
- The autonomic nervous system takes over and reactions become automatic.
- The taste buds become more sensitive.
- The appetite improves.
- The sense of smell heightens.
- Males become attracted to yellow-based reds while females become attracted to blue-based reds.

Orange

Being half red and half yellow, orange can be either a classifier color or a declassifier color depending on the lightness or darkness of its shading.

The Wagner Institute for Color Research in Santa Barbara, California, defines a classifying color as "one that holds position or alters appeal so that only a limited number of people will respond positively." In contrast, the Institute defines a declassifying color as "one that moves its position downward and extends appeal to a broader number of people."

As a classifier, orange is a pivotal color for a person making a buying decision. Also in the classifying mode, orange in general appeals to just a limited number of people. As a declassifier, orange moves into another range and appeals to a larger percentage of the population, causing more people to react positively to an orange object or concept.

The physiologic effects of orange are:

- The appetite elevates and the appetite increases.
- Relaxation is induced and the potential for sleep increases.
- The rate of blood flow slows down.
- A sense of placidity, calmness, and security develops when orange is combined with blue.

Yellow

A declassifier with a broad-based appeal, yellow causes the following physiological alterations:

- The electrochemical transference from eye to brain called vision takes place the quickest in the presence of yellow. Yellow is the first color a person distinguishes when he "sees" something. It is also the most complex color for the brain to process.
- Humans have an inherent precautionary reaction to yellow in nature, especially when it is combined with black.
- Yellow gets a quick though temporary response from a subject under stress.
- Yellow adds to stress by preparing a person for flight or fight.
- Yellow-painted rooms cause children to cry more often.
- Yellow surroundings cause allergies to flare more frequently.

Blue

Known to produce a calming effect, a deep and strong sky-blue color (known in hospitals as cardiac blue) is the most tranquilizing color of all. When in a person's field of vision, it causes the brain to secrete eleven neurotransmitters that tranquilize. These hormones are chemical signals that bring calmness to the whole body. They also:

- Slow the pulse rate.

- Deepen breathing.

- Reduce perspiration.

- Lower body temperature.

- Lessen sweating.

- Eliminate the flight or fight response.

- Reduce appetite (very few blue foods exist in nature).

Green

Green is a classifier color. Forest green, hunter green, and similar shades cause an anti-allergic or desensitizing reaction in certain groups of people, such as those who have hay fever. In contrast, greens with more white and less yellow seem to appeal to a wider percentage of the population. Favorable metabolic responses occur inside the body when an individual is surrounded by almost any shade of green. These sophisticated physiological alterations include:

- Blood histamine levels become elevated. Histamine is a compound found in nearly all the tissues of the body and is associated mainly with dilation of the blood vessels and contraction of smooth muscles such as the lungs. It is an important mediator of inflammation and is released in large amounts after the skin is damaged, producing a characteristic skin reaction of redness and a wheal. Histamine is also released in anaphylactic reactions and allergic conditions, and causes some of the symptoms of these conditions.
- Allergic reactions to foods are reduced.
- Sensitivity reactions to monosodium glutamate are lessened.
- Histamine release is inhibited from mast cells and basophils even when stimulated by antigens and other allergy molecules (ligands).
- Mast cells and basophils are stabilized.
- Hypersensitivity to food additives is reduced.
- Distress from eczema, diarrhea, and gastrointestinal disorders is lessened in severity and length.
- Vision chemicals that improve acuteness of sight are produced. The opposite color of exposed internal body tissue (mostly red) is surgical green, a shade that aids the doctor's eye by replenishing his vision.

Brown

Brown is generally considered environmentally sound. It offers a healthy ensphere or enclosure in which to work, play, sleep, and generally perform common metabolic functions. An aggregate of brown things influences the internal organs and mind in an enhancing way. Brown is a homeostatic color and lends a sense of security. The presence of brown helps:

- Dispel mental depression.
- Promote the synthesis of serotonin (a neurotransmitter).
- Reduce irritability.
- Eliminate chronic fatigue.
- Stimulate the formation of prostaglandin E₁. Prostaglandin is a hormone-like substance in the tissues and body fluids. It has many functions, and it factors in the actions of the womb, brain, lungs, kidney, and semen. Brown's effect on prostaglandin E₁ is therefore significant for the body's overall normal functioning.
- Increase tryptophan amino acid levels that influence sleep, migraine headaches, immunity, and moods.

ENDOCRINE GLANDS REGULATE THE ENTIRE BODY

Critical Influence On Physical And Mental Health

- They Are Linked And Influence Each Other.
- Can Be Stimulated By Bright Light Thru The Pacemaker - The Hypothalamus
- **PITUITARY** - The Master Endocrine Gland Beneath The Hypothalamus The Thyroid Stimulating Hormone - Controls Growth.
- **Thyroid** - Regulates METABOLIC PROCESSES, MENTAL AND PHYSICAL DEVELOPMENT.
- **Hypothyroidism** Causes Mental And Physical Slowing, Undue Sensitivity To Cold, Pulse Slowing, Weight Gain, Coarsening Of The Skin.
- **Adrenal** - Corticosteroids From Cortex. Governs Carbohydrate And Electrolyte Metabolism, Sex Function With Estrogens/Antigens, Our Response Time & Strength.
- **Hypothalamus** - Controls Thirst, Hunger, Water Balance, Sexual Function, Center For Integration Of Hormonal And Autonomic Nervous Activity, Etc.
- **Ovary** - makes Ova, Regulates Womb, Menstrual Cycle And Pregnancy.
- **Placenta** - Provides Fetal Nourishment, Eliminate Waste, Exchanges Respiratory Gases, Control all Above Thru Pregnancy
- **Pancreas** - Secretes Insulin & Glucagon (Effect Opposite To Insulin), And Pancreatic Digestive Juice
- **Testis** - Androgen: Male Sex Hormone.
- **Gall Bladder** - Bile Digestive Juices.
- **Pineal** - secretes Melatonin, Responds To Bright Light, Initiates Bright Light Therapy Response.
- **Pancreatic Juice** Rich in Sodium Bicarbonate Neutralizes Stomach Acids. Hormones Also Produce Amylase, Protease, Lipase, Maltase. Also learn about the spleen and Thymus Glands.

GLANDULAR THERAPY

BALCH: Pgs 550-552

Pro.#	Product Name	SIZE	Retail Price
GLANDULARS			
1001	ADRENAL 80 mg.	100	7.20
1002	ADRENAL 160 mg.	60	7.20
1003	ADRENAL CHELATE	100	12.80
1004	ANTI STRESS GLAND	100	8.80
1005	BONE 350 mg. 250 mg.	90	5.60
1006	BRAIN 360 mg.	90	8.00
1007	CARDIO 150 mg.	90	6.40
1008	DUODENUM 650 mg.	90	7.20
1009	HYPOTHALAMUS 150 mg.	90	8.80
1032	IMU-COMP	60	16.00
1010	KIDNEY 440 mg.	90	9.60
1011	LIVER CHELATE	100	6.40
1012	LIVER 450 mg.	100	6.40
1013	LIVER FORTE 1000 mg.	120	9.60
1014	LUNG 200 mg.	90	7.20
1015	LYMPH 160 mg.	90	8.80
1016	MULTIGLAND CHELATE	100	7.20
1017	MULTIGLAND PLUS	90	8.80
1018	OPHTHALMUS	100	9.60
1033	ORCHIC 220	90	9.60
1019	OVARY 165 mg.	90	7.20
1020	PANCREAS CHELATE PLUS	90	6.40
1021	PANCREAS E-660 mg.	90	11.20
1022	PARATHYROID	90	11.20
1023	PITUITARY ANTERIOR ³² / _{mg.}	90	8.00
1024	PITUITARY POSTERIOR ⁴⁵ / _{mg.}	90	9.60
1025	PITUITARY WHOLE 40 mg.	100	8.00
1026	PROSTATE 140 mg.	90	8.80
1027	SPLEEN 260 mg.	90	6.40
1028	STOMACH PLUS	90	7.20
1029	THYMUS 150 mg.	90	8.00
1030	T-GLAND 130 mg.	90	14.00
1031	THYROID, THYMUS & SPLEEN	90	8.60

1003 - ADRENAL CHELATE

100 Tablets

Each tablet supplies: Raw Adrenal Concentrate 80 mg, L-Leucine 10 mg, L-Isoleucine 20 mg, D-Calcium Pantothenate 60 mg, Sodium Ascorbate 120 mg, Potassium Aspartate 30 mg, Hesperidin Complex 150 mg, Bioflavonoid Complex 75 mg, Chlorophyll 10 mg. In a base of Alfalfa, Celery and Parsley.

1004 - ANTI STRESS GLAND

90 tablets

Each tablet supplies: Thymus 80 mg, Parotid 80 mg, Adrenal 20 mg and Spleen 20 mg all from raw tissue concentrates of bovine source.

1011 - LIVER CHELATE

100 Tablets

Each tablet supplies: As chelated proteinates 55 mg Ferrous Fumarate, 1 mg Copper, 40 mcg Folic Acid, 20 mcg Vitamin B12, 190 mg Raw Liver Concentrate of bovine source.

1016 - MULTIGLAND CHELATE

100 Tablets

Each 6 tablets supplies: Calcium 500 mg, Magnesium 250 mg, Potassium 99 mg, Manganese 10 mg, Iron 18 mg, Silicon 2 mg, Zinc 15 mg, Iodine (kelp) 150 mcg, Chromium 200 mcg, Selenium 25 mcg, Molybdenum 150 mcg, Vanadium 150 mcg. As chelated proteinates, together in a base of 240 mg of Raw Bovine Concentrates from: Spleen 144 mg, Brain 30 mg, Liver 20 mg, Heart 14 mg, Thymus 4 mg, Adrenal 4 mg, Pancreas 4 mg, Duodenum 4 mg, Pituitary 2 mg.

1017 - MULTIGLAND PLUS

90 Tablets

Each tablet supplies: Spleen 256.6 mg, Brain 67.5 mg, Liver 45 mg, Heart 31.5 mg, Kidney 31.5 mg, Thymus 8 mg, Adrenal 8 mg, Pituitary 2 mg, Pancreas 9 mg, Duodenum 9 mg.

1018 - OPTHAPLUS

100 Tablets

Each tablet supplies: Raw Eye Concentrate 120 mg, Raw Brain 20 mg, Eyebright 150 mg, Rutin 125 mg, Hesperidin Complex 20 mg.

1020 - PANCREAS CHELATE PLUS

90 Tablets

Each Enteric coated tablet supplies: 15 mg Zinc, 200 mcg Chromium as chelated proteinates, 150 mg Pancreas, 75 mg Pancreatin 6X in a base of naturally occurring Lipase and Amylase.

1021 - PANCREAS E 660

90 Tablets

Pancreas 220 mg, Pancreatin 6X 440 mg in a base of natural occurring Lipase and Amylase.

1022 - PARATHYROID

90 Tablets

Each tablet supplies: Parathyroid 10 mg, Thyroid Gland 30 mg, Stomach 32 mg, Dulce 300 mg, Calcium 50 mg, Phosphorus 22 mg, Vitamin D3 100 IU, Vitamin B12 20 mcg, Folic Acid 440 mcg, Beet 50 mg, Carrot 50 mg, Calcium and Phosphorus are from bone meal, all tissues are of bovine source.

1028 - STOMACH PLUS

90 Tablets

Each tablet supplies: 323 mg Raw Bovine Stomach Concentrate, 100 mcg Folic Acid, 50 mcg Vitamin B12, 32 mg Glycine.

1032 - IMU-COMP

60 Tablets

Each two tablets contains: Vitamin C: Ascorbic Acid 250 mg, Vitamin B1: Thiamin HCL 30 mg, Vitamin E: d-alpha Tocopheryl 200 IU, Beta Carotene 5000 IU, Copper: Gluconate 300 mcg, Selenium Chelate 25 mcg, Zinc: Gluconate 15 mg, Bone Marrow 65 mg, Lymph 65 mg, Papain 600 50 mg, Pituitary Whole 15 mg, Spleen 130 mg, Thymus 550 mg, Bromelain 1200 50 mg, Echinacea Extract 300 mg, L-Lysine HCL 250 mg, Trypsin 1:75 25 mg, Blue Flag 130 mg, Fennel 70 mg and Goldenseal Herb 70 mg. -90-

1031 - THYROID, THYMUS & SPLEEN
90 Tablets

Each tablet supplies: 42 mg Thyroid Gland, 42 mg Thymus, 42 mg Spleen, 50 mg Pacific Kelp. All tissues are concentrates of Bovine source.

Your Cost:
25% discount
+ postage.

Melatonin Information Sheet

1) **What is Melatonin?**

It is a secretion produced in the pineal gland from the neurotransmitter serotonin. It is chemically known as O-Methyl-N-Acetyl-Tryptamine or O-Methy-N-Acetyl-Serotonin.

2) **What is the pineal gland?**

The pineal gland is a pea sized entity located near the base of the brain. It has a regulatory effect on the hypothalamus gland and influences the functioning of the thyroid, thymus, pancreas and adrenal glands.

3) **What are its functions?**

Melatonin serves as an anti-oxidant, helps to regulate circadian rhythms (the body's biological clock which regulates the sleep-wake cycles), impacts positively on the immune system and healing, may act as a prophylaxis against osteoporosis, and could serve as an effective adjunct in the fight against certain types of cancers.

4) **Describe its anti-oxidant capabilities.**

Many diseases are directly related to free radicals (molecules or portions thereof which contain one or more unpaired electrons) that damage cells and organs. A list would include atherosclerosis, multiple sclerosis, muscular dystrophy, Parkinson's disease, emphysema, cataracts and autoimmune disorders, to name a few. Among the free radicals produced, the hydroxyl ($\text{OH}\cdot$) oxygen centered radical appears to be the most deleterious. Melatonin, through in vivo and in vitro testing has been demonstrated to be 4x more effective than glutathione in scavenging this reactive. In vivo tests utilizing safrole (a potent carcinogen from sassafras oil, that is known to damage DNA because of its ability to produce large numbers of oxygen centered radical's) demonstrated a significant reduction in damaged hepatic DNA when compared to animals who were not pre-treated with melatonin (99% when administered at a level of $.4\text{mg/kg}$). (Reiter et al., 1994). An in vitro system used by Tan et. al (1993) showed that hydrogen peroxide (H_2O_2) exposed to ultra violet light would form 6x as less hydroxyl radicals when quenched by melatonin than by glutathione.

5) **How does it effect circadian rhythms?**

Melatonin produces a substance called arginine vasotocin. This secretion has an inhibiting effect upon cortisol, a stress hormone produced by the adrenal glands. Insomniacs tend to have high nighttime levels of this hormone which tends to keep them in an agitated state. Inhibition of this hormone promotes sleep and allows time for regeneration.

The metabolic pathway by which melatonin is produced involves the neurotransmitter serotonin, a by product of tryptophan. Considering that tryptophan is the least abundant of essential amino acids in normal diets, there is a likelihood that in some individuals a deficiency will arise. This would result in an imbalance that would directly effect the sleep-wake cycle and the ability to experience a restful sleep.

Melatonin also has applications in the prevention of jet-lag. Dr. Arendt, at the University of Surrey in England, observed that melatonin helped to re-synchronize the circadian rhythms of subjects flying through eight time zones (San Francisco to London). Those subjects who took melatonin 3 days before the flight, on the day of their departure and four days upon their return did not note any appreciable jet-lag.

6) **What connection is there between melatonin and the enhancement of the immune system?**

The suppression of cortisol through the release of arginine vasotocin not only impacts positively upon sleep-wake cycles but also bolsters the immune system. Through the suppression of cortisol, it helps to prevent the deterioration of

lymphatic tissue. This tissue is an integral part of our immune systems and would result in immune suppression if it is compromised.

Research using supplemental melatonin demonstrated its immune enhancing potential when administered to mice whose immune systems were challenged by corticosteroids (Pierpaoli, 1987). Similar results were reported when test mice were exposed to a highly toxic virus (encephalomyocarditis). Most of the mice who were pre-treated with melatonin showed a markedly higher survival rate than those who were not. Melatonin exhibits immunoprotective capabilities that could lend themselves well to conditions of psychogenic or environmental stress.

7) **How can Melatonin help prevent osteoporosis?**

In a study entitled "Is postmenopausal osteoporosis related to pineal gland functions?" (Sandyk, et al. International Journal of Neuroscience, 1992) there is evidence to suggest that menopause is associated with a substantial decline in melatonin because of impaired pineal functions due to calcification. During the early stages of menopause, the decline in melatonin production seems to be a contributing factor in the development of postmenopausal osteoporosis. Animal data indicates that melatonin is an integral component in calcium homeostasis. It exerts a hierarchical influence on those glands involved in the metabolism of calcium and phosphorus. It stimulates the pituitary and parathyroid glands which inhibit calcitonin release and prostaglandin synthesis. In this way, it has been described as a "fine tuner" of calcium levels in the body. Therefore, measuring the levels of melatonin in early menopause may serve as an indicator of an impending osteoporotic condition. Subsequent use of melatonin could normalize levels and act as a prophylaxis in situations of this type.

It must be noted that the pineal gland, unlike other glands, is unable to regenerate when it is damaged. The body produces a specific number of cells that are attained early in one's life. Calcification of the pineal gland or an other assaults to its integrity can not be corrected once this glands' functions has been compromised. Supplemental melatonin therefore supplies hope in correcting conditions that affect millions of aging Americans.

8) **What about Cancer?**

Melatonin has been described as being "oncostatic" which means it helps to prevent the proliferation of cancer cells. In studies done by Hill and Blask at the University of Arizona School of Medicine, Melatonin inhibited breast cancer cells by as much as 60 to 70%. In a study done by Lissoni, et. al at the San Gerardo Hospital in Milan, Italy, melatonin significantly improved the survival time of patients with brain metastases when compared to those who were treated with steroids and anticonvulsant agents. It should be noted that the inhibitory effect melatonin has on cancer cell proliferation may be concomitant with its usage. Drs. Hill and Blask observed that the inhibition was immediately reversed when its administration was discontinued.

9) **What about toxicity?**

Melatonin, which has been studied for the past three decades, has been administered at doses as high as 300mg a day without any adverse effects. Any substance can prove dangerous at some elevated level including air and water when abused. It is therefore prudent to contact your doctor or health practitioner before self-medicating whenever a health concern arises. One may experience increased grogginess upon arising when used for sleep disorders but this is a direct result of its effectiveness. Lassitude of this type is temporary and should not impair cognitive abilities.

10) **Any contraindications?**

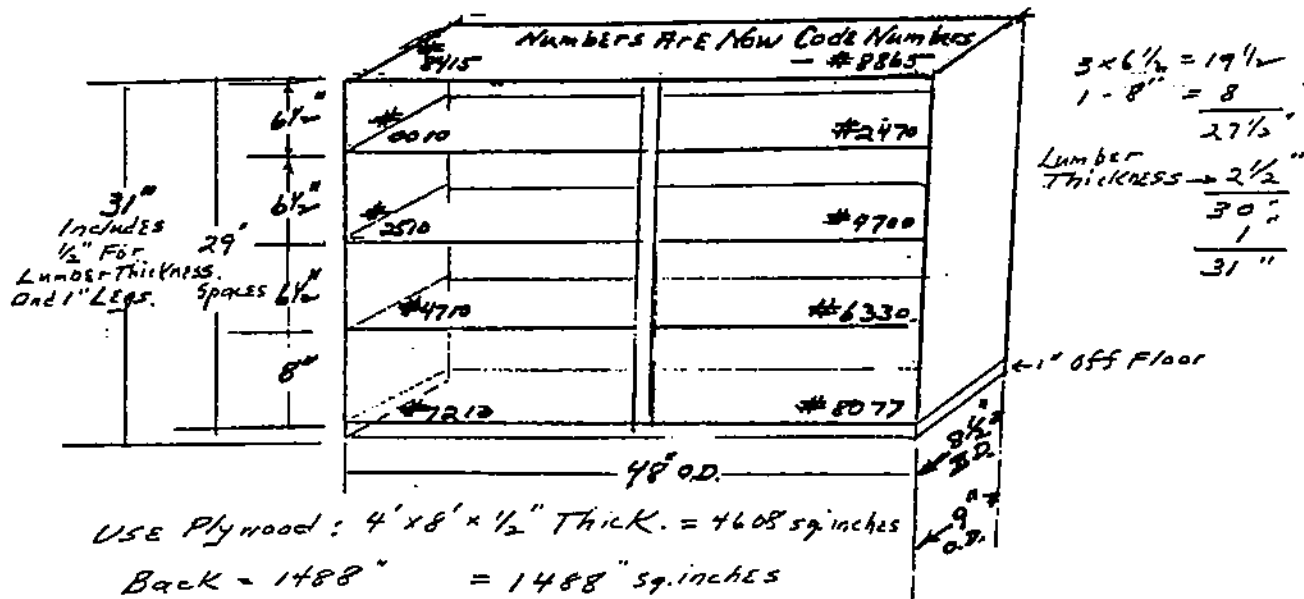
Melatonin should only be used by children or adolescents under the advise of a physician. It is advisable that melatonin be taken before retiring to maintain a healthy balance between serotonin and melatonin levels. These levels are important to maintaining a good sleep-wake cycle and preventing any disturbances in our circadian rhythms.

*READ: "The Melatonin Miracle" by Walter Pierpaoli, M.D. PhD. and (P21.00)
Now Foods. Melatonin 3mg. Sublingual William Regelson, M.D.
3258 90 caps 9.25. -92- Published By Simon & Schuster
3259 180 caps 18.00 I use the #3259.*

Light, Aging & Pineal, Hypothalamus, Pituitary Glands

Pineal gland - Many Important Hormonal Functions. Plays A Role In Degenerative Disease And Aging. Regulates Other Glandular Functions Thru Its Inhibitory Mechanisms.	Bacteria Can Enter Into The Pineal Gland (Not Protected By The Blood-Brain Barrier), Causing Abnormal Growths, Cancer Cells, Degeneration.
• Blood Pressure, • Temperature, • Growth, • Motor Functions, • Reproductive System, • Sleep Habits, • Passage Of Calcium Into And Out Of ALL Cells.	• 8 Degenerative Diseases With Aging:
• Carbohydrate Metabolism.	• Alzheimer's
• Catecholamine Production.	• Arteriosclerosis
• Cellular Respiration.	• Arthritis, • Cancer
• Collagen Synthesis.	• Diabetes • Menopause
• DNA Synthesis.	• Osteoporosis
• Enzyme Activity.	• Parkinson's Disease
• Lymphocyte Production.	• Animals Given Pineal Gland ^(extract) Can Increase Their Life Span 25%
• Integral Role In Body Cycles.	• Excess Stress And Nutritional Deficiency Markedly Reduce Pineal Function • Vit. A Deficiency Espec. Detrimental • Low Oxygen Intake Very Detrimental To Pineal Health & Function.
• Controls Metabolism.	• Light Working Thru Pineal, Hypothalamus & Pituitary
• Behavior.	Extremely Important To Longevity • Hypothalamus Primary Site Responsible For Aging - It Regulates Autonomic Responses.
• Physiological Functions.	
• Direct Effect On Adrenals.	
• Inhibits Thyroid Gland.	
• Important In Thymus Function.	
• Stimulates Prostaglandin ^{making}	
• Toxins, Free Radicals, Viruses,	

NON-Nutritional Foods And Supplement Cabinets To Help Apply Programs For Nutritional Healing



Top shelf: Products From Catalog Pages 4 THRU 10
 Second Shelf: " " " " " THRU 17
 Third Shelf: " " " " " 18 THRU 20
 Bottom Shelf: " " " " " 20 THRU 23

- Bottom Shelf made taller - Will hold 10-quart size Mason Jars.
- Product location will vary depending on products and quantities you select.
- 8 1/2" Depth allows storage of Lecithin granules, Nutritional Yeast, Soy Protein.
- Desk height 31": can be set alongside any desk or table. Found to be very successful.
- Make 2 snap-on doors 23 1/2" wide x 30" high. Held on with magnets.
- Counter shelf: Make 2 shelves; top 6 1/2" high, and bottom shelf 8" high. Gives you 3 storage shelves. Found to be very successful.

• Use Basket From K-Mart 6 3/8 x 10 1/8 x 2 3/8 - Cost 1.00 - or
 • Make tray of 1/2" plywood - Holes 1/4" deep - Circles are up diameter. Holes are 1/4" less in Diameter

• Place Strip
 of Masking
 Tape on
 Top. Print
 Label With
 Heavy Fiber
 Marker.

Numbers
 Are Now
 Foods
 Code Numbers

Use 20, 16
 Dram Vials
 With Locking
 Caps, Vial
 Size 1 1/4 x
 3 3/8 High
 Cost 15¢ ea.

Use 3, 20
 Dram Vials
 With Locking
 Caps, Vial
 Size 1 7/8 x
 2 1/8 High
 Cost 15¢ ea.

Customize
 Your Select-
 ion to
 your needs

For Traveling
 Make Card-
 Board Cover
 And Hold
 With 2 Large
 Rubberbands

Mnemonic
 Key: A-B-C
 American
 Broad cast-
 ing System.

Mnemonic
 KEY
 A-B-C-D-E
 Eliminate
 Multi Vit.
 Pills.

#1310
 Magnesium
 Oxide Powder
 or
 Sucanat Cane
 Juice Powder
 Sweetener #6965

Psyllium
 Husks #5980
 Colon Cleanser
 Stool Softener
 1/2 Tsp in Hot H₂O
 1/2 Tsp Thoroughly

#1227
 Bone Calcium
 4 Daily or mix.
 or
 Full Spectrum
 Minerals 1542
 Broad Spectrum
 Mineral Therapy
 2 Daily - 1 w/ Breakfast
 1 w/ Supper

Hypo-
 Thyroidism
 Thyroid
 Nutri-Pak
 1030
 815-648-4221

Licorice
 Root #4718
 Interferon
 Stimulant
 1/4-1/2 Tsp.

Zinc
 Gluconate
 #1520
 or
 Gotu Kola
 Caps #4700
 Neuro-Trans-
 mitter
 1/4-1/2 Tsp.

#1462
 Potassium
 Gluconate
 or
 Goldenseal
 Root #4674
 Immunity
 Stimulant

#2740
 Wheat Sprout
 Antioxidant
 or
 Ginkgo Biloba
 Cap. #4687
 Neuro-Trans-
 mitter

#4618
 Boswellin
 250mg. Arthritis
 Echinacea
 Caps #4662
 Immunity
 Stimulant

#3237
 Glucosamine
 1000 Hydrochlorides
 or
 Cayenne
 Caps #4627
 Capsaicin
 Therapy

#3252
 Grape Seed
 Antioxidant
 or
 Cascara
 Sagrada
 Cap. #4620
 Laxative
 Colon Cleanser

Melatonin
 Sublingual
 Tabs #3258
 Glandular
 Stimulant

2-3, 1hr After
 Eating
 Proteolytic.
 Papaya
 Enzymes
 Tabs #2972
 Digestive
 Aid.

One-A-Day
 Super Enzymes
 Tabs #2962
 Digestive
 Aid.

S
 Spirulina
 Tabs #2698
 Broad Spectrum
 Nourishment

Kelp Pwdr.
 #2676
 Thyroid Nutri-
 tion.

B
 (or #2720
 Wheat Grass 500mg)
 Barley Grass
 Tabs #2668
 Broad Spectrum
 Nourishment

A
 Alfalfa Ju.
 Concentrate
 #2607
 Broad Spectrum
 Nutrition

Super Odor-
 less Garlic
 Tabs #1817
 Broad Spectrum
 Nourishment

Vit. E
 Caps #0894
 High Anti-oxidant
 & Broad scale
 Nutrition.

625 mg
 w/ Bio-Flavonoids
 Vit-Ester C
 Caps #0712
 Very Broad
 Spectrum Nourish-
 ment
 High Anti-oxidant

Vit. B-50
 Pwdr
 #0510
 B-vit. Broad
 Spectrum Nourish-
 ment

Vit. A-D
 Cap. #0352
 vit. A. Therapy
 osteoporosis
 Prevention
 High Anti-oxidant.

Molecules halt HIV in body: Research

By PAUL RECER

AP Science Writer

WASHINGTON — American and German researchers have isolated natural substances in the body that battle the AIDS virus and experts say the discoveries may lead to a more effective treatment of the killer disease.

The researchers identified molecules that the body's immune system secretes and laboratory tests show the natural biological material can stop reproduction of HIV, the virus that causes AIDS.

"We identified this family (of molecules) and found that they are very powerful," said Dr. Robert Gallo, co-discoverer of the AIDS virus and director of the Institute of Human Virology at the University of Maryland.

When tested against cultures of HIV, said Gallo, the natural substance "is a very strong inhibition. It stops (the virus) pretty cold."

AIDS

From Page A1

Discoveries open a new door on AIDS research and that all four of the natural molecules may play a role in suppressing HIV. He told Science he found the American results particularly convincing.

"Gallo is getting really impressive suppression at low concentrations, and in the Kurth paper the concentrations are much higher," Fauci said in Science. "They are both important papers."

AIDS researchers around the world have been trying to identify the natural HIV-fighting chemicals since University of California, San Francisco, researchers found in 1989 that the body's CD8 white blood cells produced some sort virus-killing substance.

Gallo and his team isolated three such substances, called RANTES, MIP-1-alpha and MIP-1-beta, and then tested them against several different cultures of HIV and SIV. Virus reproduction was shutdown, said Gallo.

All three of the substances are types of chemokines, a factor that the body musters as part of the wound-healing process.

Kurth and his group found that interleukin-16 had the same anti-HIV effect, although it took a higher concentration.

Gallo, who supervised the work while at the National Cancer Institute, reports in journal Science that his team isolated three types of molecules called chemokines that are produced naturally by white blood cells. The research was released Wednesday and will be published in the Dec. 15 edition of the journal.

In a correspondence published today in the British journal Nature, a team at the Paul Ehrlich Institute in Langen, Germany, led by Reinhard Kurth, report its discovery that an immune system chemical called interleukin-16 is able to suppress both HIV and simian immunodeficiency virus, or SIV, a virus that causes AIDS in monkeys.

Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, said the

See AIDS Page A2

Gallo said that if the chemokines prove to be non-toxic in animal tests now underway, then they could possibly be used to control HIV for long periods of time in infected patients.

Precisely how the chemokines are able to suppress HIV is still not understood, said Gallo, but "by studying their mechanism of action, we may very well learn how HIV causes disease."

Although HIV-infected people produce anti-viral CD8 secretions naturally, prior research shows that the levels decline as the immune system deteriorates. Gallo said it may be possible to boost the body's production of these substances.

Kurth said interleukin-16 will have to be tested in animals not only for its usefulness but also for side effects. High doses of other interleukins are known to cause fever, diarrhea and other problems, he noted. Combining IL-16 with other drugs might reduce the dose of each required and diminish the side effects from each, he said.

Although the natural molecules may eventually be developed into powerful weapons against HIV, neither Kurth nor Gallo said the substances offer the promise of an AIDS cure.

"We are talking about control" of HIV, Gallo said. "It will be like diabetes that is controlled with insulin."

Acidosis Balch Pg 81-88
Alkalosis Balch Pg 108-110 pH
Very Important: study these pages and apply them in your everyday life. If your body pH is not within the normal range 6.0 to 6.8 - very serious health problems may result. I was not successful in buying pH test paper in Michigan and had to order it from HOME CURE, PO Box 13927 Scottsdale AZ. 85267. 1-800-559-2873. Request their complete literature before you order. Their pH paper is excellent.

• We must know which foods are acid forming and which are alkaline forming and to know how to balance our pH with our foods.

• It's very easy and will pay big dividends. If you are too acid become a vegetarian and increase your soy foods, lima beans, millet and raisins. If you are too alkaline, increase eating asparagus, beans, Brussels sprouts, legumes, mustard, nuts and seeds, oat meal, olives, peppers, organic brown cider vinegar, prunes.

• Study Balch very carefully and apply this critical nutritional science. • Being a vegetarian makes balancing the pH very easy.

• Make the connection between AIDS and the SAD American Diet, and Immunodeficiency Virus disease (HIV).

• Become a vegetarian - STOP EATING MEAT.

• Read Balch pg 523

ACIDOPHILUS OR YOGURT

• Lactobacillus Acidophilus Bacteria - Good Guys

• Eat non-fat, plain yogurt or take Acidophilus capsules **Daily**.

• Makes Vit's In The Intestines, Especially Biotin, Folic Acid - B12.

• Increases Calcium, Phosphorus, And Magnesium Absorption.

• Makes the Antibiotic Acidophilin, which Inhibits 27 Different Bacteria including Strep, Staph, And Salmonella.

• **ANTIBIOTICS KILL GOOD BACTERIA**

AS WELL AS **BAD**. ANTIBIOTIC TAKERS SHOULD INCREASE IN-TAKE OF ACIDOPHILUS.

And or Non-Fat, Plain Yogurt.

ALFALFA CONTAINS SAPONINS

• Many People Enjoy Sprinkling Alfalfa Sprouts On Their Salads As An Appetizer And Appearance Enhancer. They Can Be Very Nutritious. They Sprout Very Easily.

• In The Morning, Pour 1/4 Cup Of Alfalfa Seeds In A Quart Jar Or 1/2 Cup In A Pint Jar. Add Water To Level, & Above Seeds. Soak 10 Hrs. Rinse Thoroughly. Set Uncapped Jar Mouth Down In A Dish At 45° Angle. Each Morning And Evening Rinse Thoroughly. Keep jar at 45° Angle. When They Have 1/2" Sprout, They're Ready To Eat. Rinse And Place Capped Bottle In Refrigerator. Preferably, they

• In An Experiment With Monkeys large Amounts Of These Alfalfa Juice Concentrate #2607 250 Tabs 12.95

Alfalfa Seeds Were Fed For Weeks. Their Cholesterol Dropped 25%. Their Triglycerides Dropped 43%. Alfalfa Contains Saponins Which Form Insoluble Complexes With Cholesterol And Triglycerides And Carry Them Through The Intestine. ^{Fast} 1/30 They Cannot Be Absorbed.

Should be spread on a dinner plate and placed in the sunlight to grow green leaves with chlorophyll. This growth process takes 2-3 days of sunning.

VI-2000 Room Air Purification System

Congratulations on your purchase of the VI-2000 Room Air Purification System, another advanced technology product from Wein Products, Inc. Now you can effectively clean up to 400 square feet of indoor air space, using the most advanced pulsed ionization purifier available.

In order to receive the maximum benefit from your purifier, please take a moment to read the instructions and information contained within this booklet. Also, please complete the enclosed warranty card and return it to Wein Products, Inc. within thirty (30) days in order to validate your warranty.

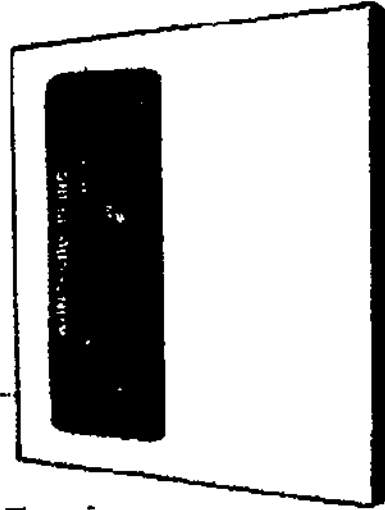
Ionization - Nature's Own Air Purifier

An ion is a molecule which has gained or lost an electron. A positive air ion is a molecule that has lost an electron; a negative air ion is generally a molecule of oxygen with an extra electron. These charged atoms are created in nature by sunlight, moving water, moving air or radiation, all of which cause electrons to leave hydrogen, nitrogen and other molecules, and attach themselves to oxygen molecules.

Negatively charged ions are beneficial to the environment because they attract the positive ions found in dust, pollen, bacteria, cigarette smoke, mold spores—even toxic chemical fumes—and pull these microscopic hazards to the earth using electrostatic forces. With the contaminants no longer airborne, the air becomes cleaner and fresh smelling. In nature, rainfall is the most effective of all air cleaners—a typical shower produces trillions upon trillions of negative ions.

Indoor living spaces do not benefit from this natural ionization process—tight insulation and poor air circulation even compound the problem. Positive ions become trapped indoors where no negative ions can be produced...not even by air conditioners which simply cool already polluted air, destroying the few negative ions in the air when it passes through the ducts.

VI-2000



VI-2000—Technology Imitating Nature

The VI-2000 uses the wonders of miniature technology to imitate nature's ionization process in one of the most compact, efficient and economical air purifiers available. Small enough to use in any room, yet powerful enough to clean large air spaces, the VI-2000 is more effective than many larger, more costly units.

Beginning the moment you plug it in, the VI-2000 releases a powerful stream of 70 trillion ions per second into the air in a pulsing "on-off" cycle. During the "on" cycle, powerful vortex waves of ions are electronically swirled into the air at a rate of 100 feet per minute, effectively washing the air of even the most microscopic pollutants. Meanwhile, a built-in ion detector monitors ion production levels, causing the red ion sensor to blink. During the "off" cycle, the ionized pollutants fall harmlessly to the foam collector pad located on the VI-2000, or to the floor. The pollutants are removed during your normal vacuuming and dusting, and when you wipe the VI-2000's pad clean.

And, unlike other ionization units, the VI-2000's ion emitter stimulates airflow by discharging ions in a rapid, spiral vortex motion—actually drawing airborne pollutants to the device, instead of waiting for them to randomly pass near the unit.

The VI-2000 precipitates a wide variety of airborne contaminants, including:

- pollen
- dust and dust mites
- bacteria
- mold spores
- viruses
- odors
- animal dander
- toxic chemical fumes
- second-hand cigarette smoke

How To Use the VI-2000

1. Place unit on a tabletop, at least 2 feet away from any walls.
2. Rotate the ion emitter wand located on the back of the unit into an upright (vertical) position.
3. Plug unit into any AC household receptacle. The status light on the right side of the top of the unit will be illuminated, and the ion monitor on the left will begin blinking. If there is a great deal of pollution in the room, the ion monitor will stay illuminated until the pollution has decreased to a healthier level, at which time the ion monitor will resume blinking.
4. Negatively charged ions will immediately start spreading into the room, and there will be a subtle but noticeable vortex of air swirling around the emitter.
5. A harmless static build-up may be noticed when a grounded surface is touched immediately after being in very close proximity to the unit. This static electricity is perfectly normal and safe.

AIR SUPPLY® — THE PERSONAL AIR PURIFIER

"Sick" buildings, crowded elevators, smoke-filled restaurants, automobiles — these are just a few places where germs, hazardous fumes and other contaminants degrade air quality. And because most of us visit places like these every day, it's a problem that affects all of us.

According to the Occupational Safety and Health Administration (OSHA), indoor air quality is the nation's #1 health concern.

But by wearing Air Supply in your shirt pocket or around your neck, these and other environments become healthier and safer — even if you have allergies, asthma or other breathing disorders. Fully portable, weighing just four ounces and powered by a single nine-volt battery, Air Supply is ideal for use in:

- Allergy season, when pollen and other irritants abound
- Homes, where dust, pet dander, second-hand smoke and other impurities aggravate allergies
- Offices, where poor ventilation systems and dangerous building materials can cause the circulation of contaminants
- Cars, where mold and dust mites live in carpets and upholstery, and noxious fumes often enter through the car's ventilation system
- Restaurants, stores, theaters, elevators and other public places where stale, contaminated air is often shared by large groups
- Airplanes, where inadequate air circulation can cause the spread of germs among passengers

Freshly purified air is discharged at 50 ft/min (approximates the flow of human breathing)

Internal particle destruction by molecular impact decomposition

Corona discharge area — 70+ trillion ions per second

Patented ion generating circuitry

Battery storage area

Grounded neutral grid

Membrane barrier

Contaminated, infectious, polluted air drawn in

Product Specifications

Size:	2.4" wide x 0.86" deep x 4.1" high
Weight:	4 ounces, including battery
Power Supply:	9 volt battery (auto and AC adapters included)
Colors:	Black or white
Warranty:	1 year

(Product shown actual size)

⁴McMenamin, P. "Costs of Allergic Rhinitis in the United States in 1990," *Annals of Allergy* 1994.

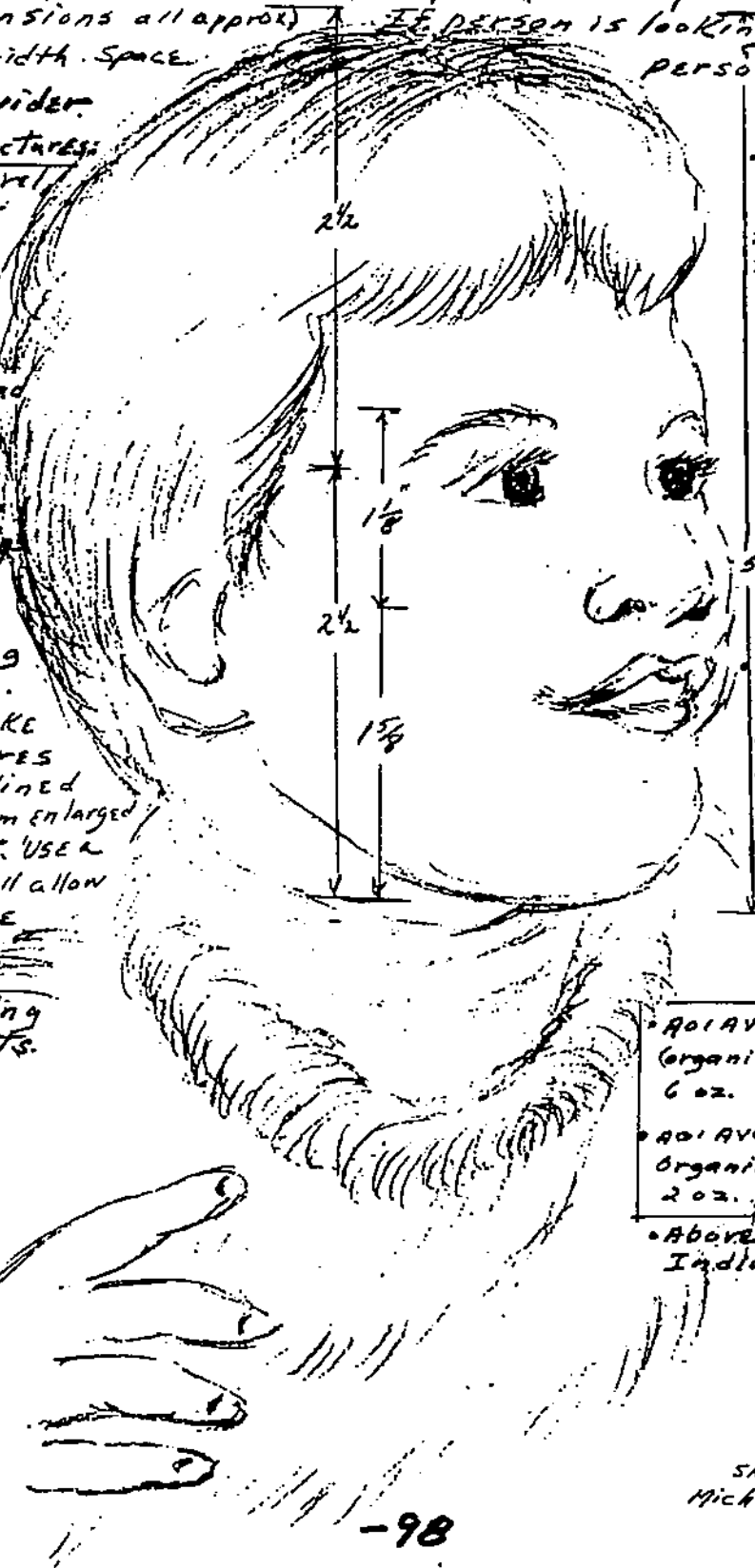
⁵NIAID 52 Profile FY 1993.

⁶Ross, RN. "Hay Fever: A Costly Disease for American Business," *CLMS-17*.

- With your color camera, take many pictures; Head turned $\frac{1}{4}$ to $\frac{1}{2}$ rotation. Have the best one enlarged to following heights: children $2\frac{1}{2}$ ", Teenagers and Small Adults $2\frac{3}{4}$ ", Adults, 3". Print size 3 $\frac{3}{8}$ ".
- Obtain STRATHMORE 400 paper or pastel sandpaper 9"x12". Use Nu-Pastel pastels.
- Sketch in the head. Double all measurements. Heights of heads will be: children, 5"; teens, 5 $\frac{1}{2}$ "; adults 6"; all other measurements will be double. Top of the head 2" from top of paper. Left space 2". Right space 3" wide (dimensions all approx). IF PERSON IS looking to the left reverse the spacing width. Space person is looking into is always the wider.

• Take several pictures:

- Camera, at eye level above and below eye level, head turned right and left, smiling and unsmiling.
- Don't worry if head is tilted. It will make the portrait more interesting.
- Have a few sitting with your subject to capture hair, skin, eye coloring and personality.
- Have someone take several pictures of you as outlined above. Have them enlarged to 3" head height. Use a camera which will allow you to come close without distortion. Use them for painting self portraits.



• If you want color copies of your portrait take your pastel painting to: Sommers Graphics
323 So. Main St
South Bend, IN
281-2000 Cost 99¢ approx

Cost of Nu-Pastels & MARKIELSKI'S Art Store. There are 7 sized 5.

5	12-11.25	60-56.00
	24-22.50	72-67.00
	36-33.75	96-98.00
	48-45.00	

I use the 96 size. I have several portraits I made, using the above procedure. I'll be happy to show them to you.

• A01 AVGX Aloe Vera Juice Conc (organic) makes 1 gallon 6 oz. Retail 9.50 (whl. 4.75)
 • A01 AVGL Aloe Vera Juice Conc. Organic makes 1 quart. 2 oz. Retail 3.50 (whl. 1.75)
 • Above available from Indiana Botanic Gardens.

Sketch of my Grandson
Michael Geraghty
S.E. Volney 3/1983

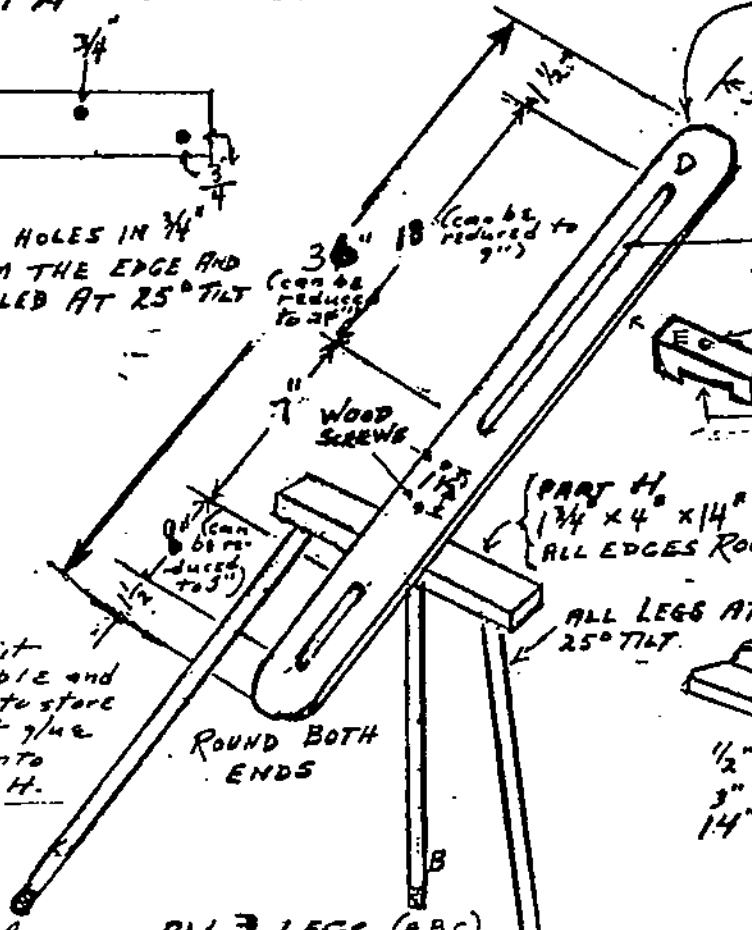
ART EASEL

PART A - UNDER SURFACE



ALL HOLES IN $\frac{1}{4}$ "
FROM THE EDGE AND
ANGLED AT 25° TILT

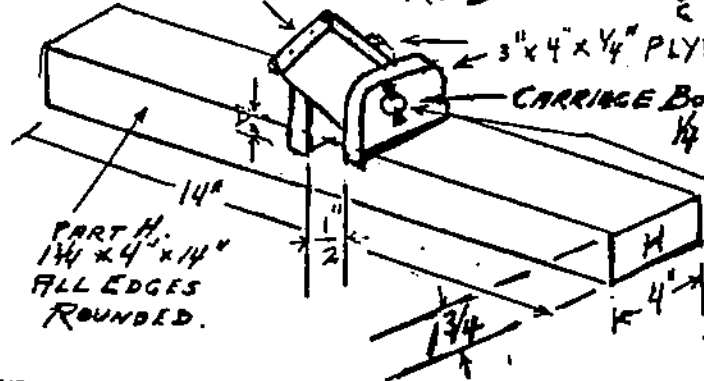
To keep it
portable and
easier to store
do not glue
legs into
part H.



ROUND BOTH
ENDS

ALL 3 LEGS (A,B,C)
1" DIAM X 30" LONG
WITH RUBBER TIPS

$\frac{1}{2}$ " THICK SOLID WOOD 3" X 3"
ATTACH TO BOTTOM OF PART D



PART H:
 $1\frac{1}{4}$ " X 4" X $\frac{1}{4}$ "
ALL EDGES
ROUNDED.

PART H:
 $1\frac{1}{4}$ " X 4" X $\frac{1}{4}$ "
ALL EDGES ROUNDED

ALL LEGS AT
 25° TILT.

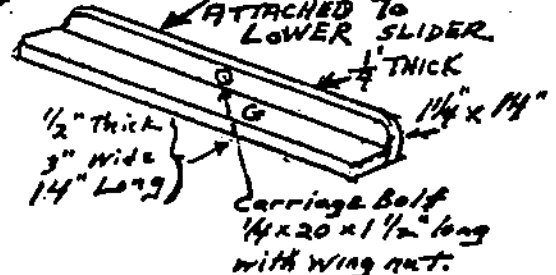
PART D: PLYWOOD
 $\frac{1}{2}$ " X 3" X 34"
CAN BE PLACED
ANYWHERE FROM
HORIZONTAL TO
VERTICAL AND LOCKED
IN POSITION IF DESIRED.
TOP CAN BE PLACED AHEAD OF
THE VERTICAL POSITION
(PASTEL PAINTING)

SLOTS $\frac{1}{4}$ " WIDE-CENTERED

UPPER SLIDER $1\frac{1}{2}$ " X $\frac{1}{2}$ " X 14"
CARRIAGE BOLT WITH WING NUT
 $1\frac{1}{2}$ " LONG - $\frac{1}{4}$ " X 20"
SLOT $\frac{1}{2}$ " DEEP X $3\frac{1}{2}$ "
SLIDES ON PART D.



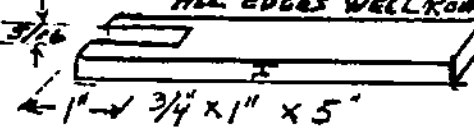
PICTURE REST (G)
ATTACHED TO
LOWER SLIDER



If 16" X 20" is the largest paper you
will use, reduce length of part D to 24".
Reduce top slot to 9" and bottom slot to 5".
If easel will not be used by small children,
the 5" slot should be fine. Shortening
part D, helps you looking over your painting.

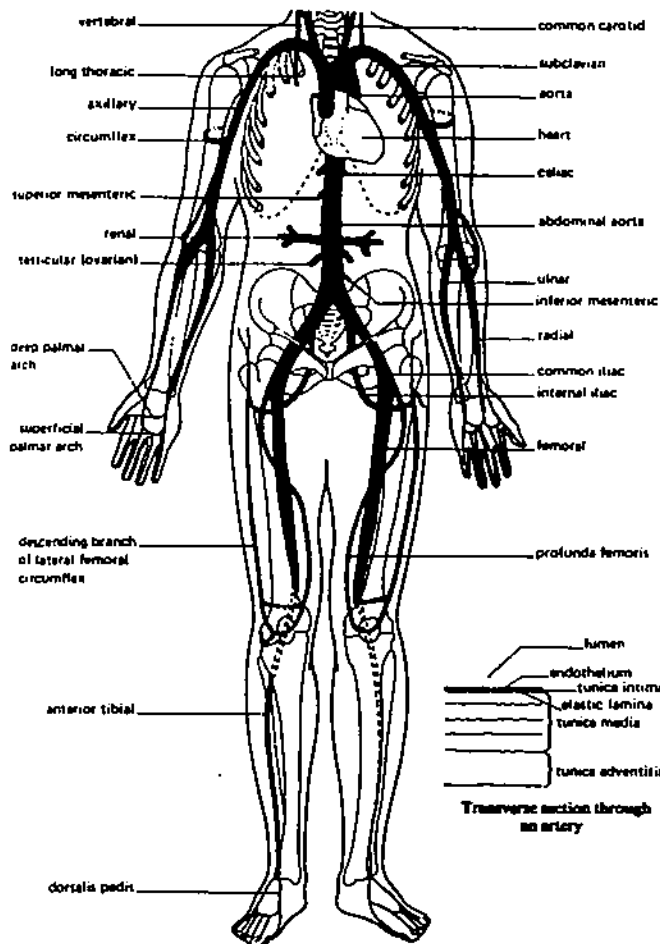
3" X 4" X $\frac{1}{4}$ " PLYWOOD
CARRIAGE BOLT WITH WING NUT AND WASHER
 $\frac{1}{4}$ " X 20" - DRILL $1\frac{1}{4}$ " BACK FROM FRONT
FRONT EDGE AND DOWN FROM TOP

SLIPS OVER WING NUT TO TIGHTEN.
ALL EDGES WELL ROUNDED

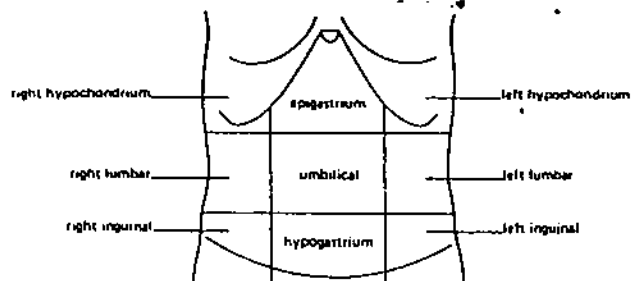


*You can also use a lap desk. See pg. 43. You may wish to increase the
tilt 1 or 2 inches.

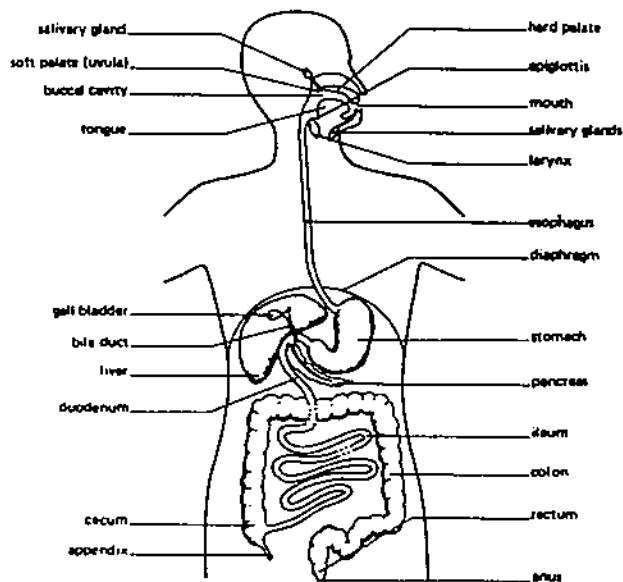
arteritis



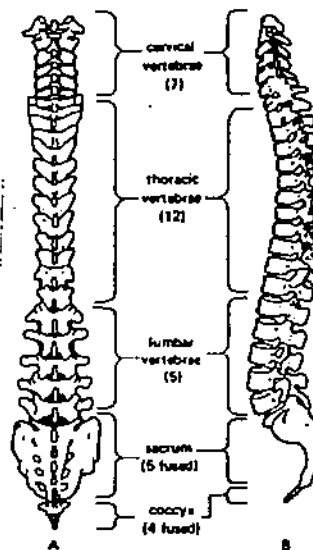
The principal arteries of the body



Regions of the abdomen

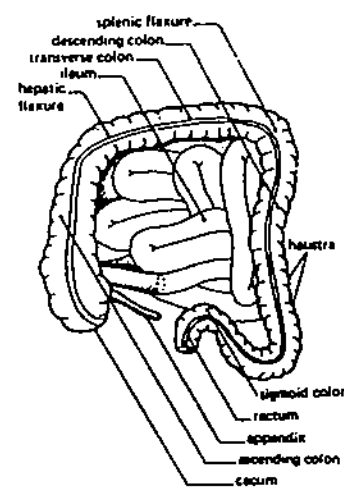


The alimentary canal

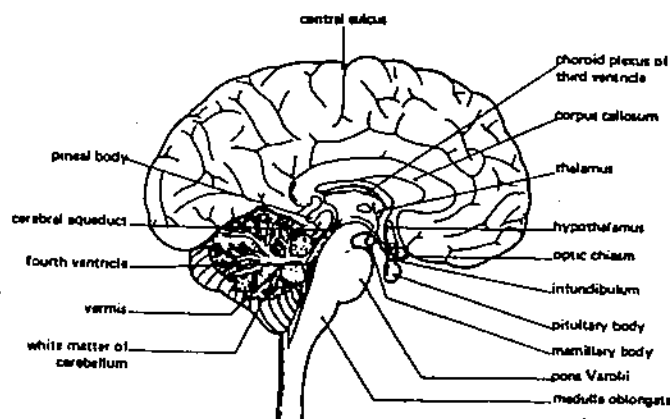


The backbone, seen from the back (A) and left side (B)

B9



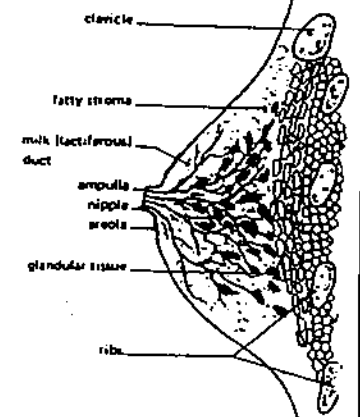
The colon



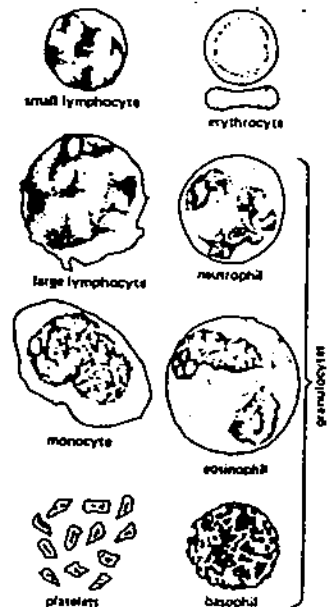
The brain (midsagittal section)

alimentary canal the long passage through which food passes to be digested and absorbed. It extends from the mouth to the anus and each region is specialized for a different stage in the processing of food, from mechanical breakdown in the mouth to chemical "digestion" and "absorption" in the stomach and small intestine and finally to feces formation and storage in the colon and rectum.

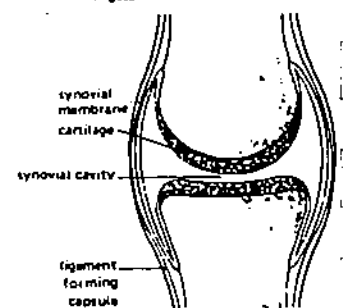
= 100 - a -



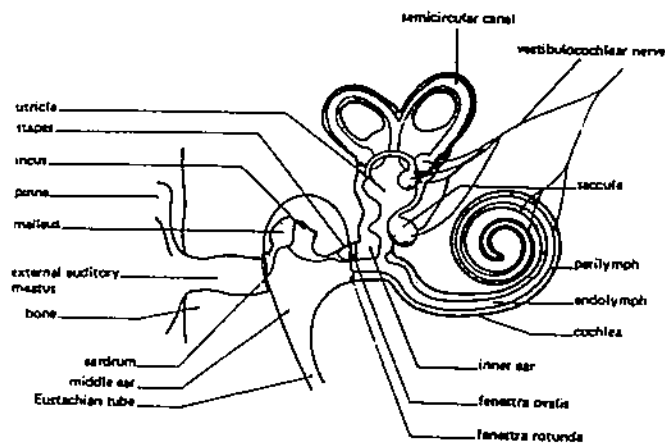
Longitudinal section through a breast



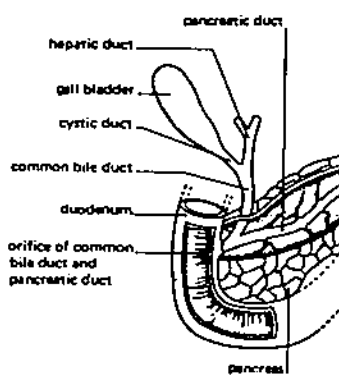
Types of blood cells



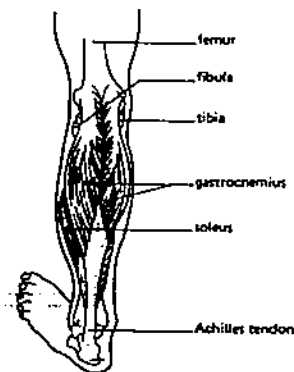
A synovial joint



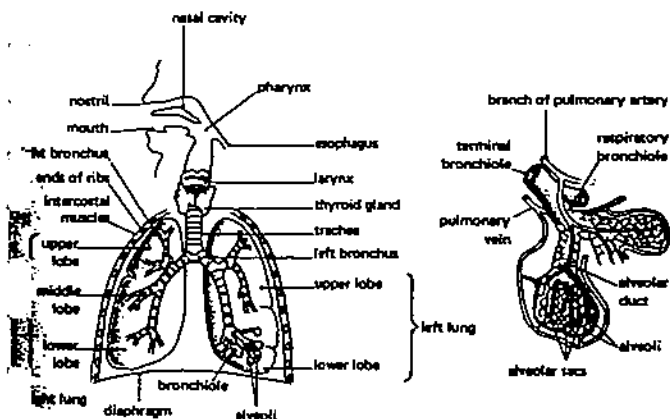
Structure of the ear



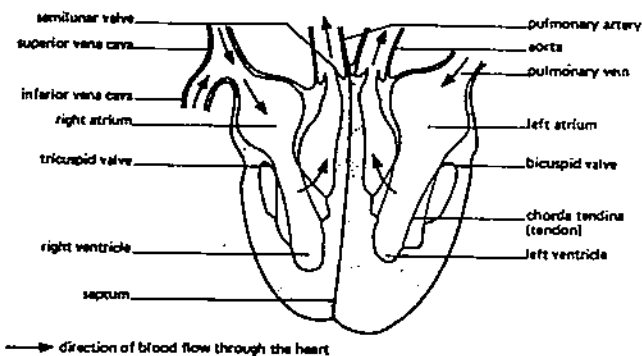
The gall bladder and pancreas and their associated ducts



Gastrocnemius and soleus muscles



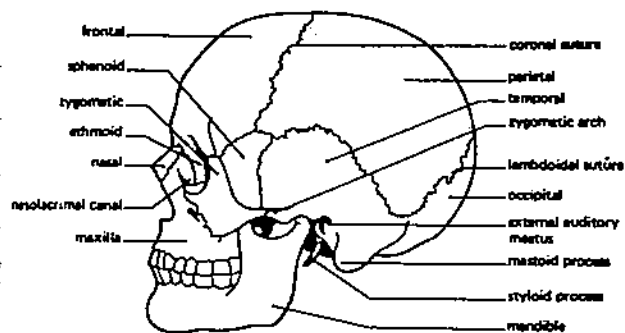
The lungs and main air passages, with details of the alveoli



Vertical section through the heart

411

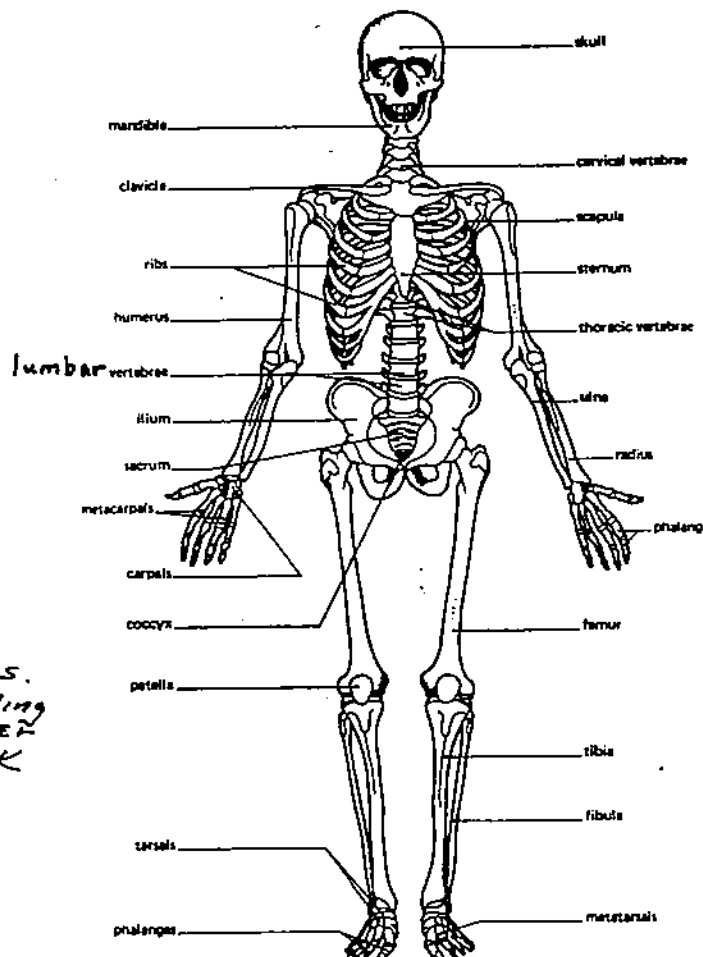
sleeping sickness



Side view of the skull

• These wonderful illustrations are from the Bantam Medical Dictionary (\$1.99). This book should be in every home. Look up every health problem you have and study the text and related illustrations. You will add greatly to your understanding of your health problems and be better able to take care of yourself and work better with your doctor.

• **BE SURE YOU BUY THIS BOOK** and urge your family and friends to also make it one of their important health reference books



The skeleton

Plain Old Baking Soda A Drugstore In A Box?

Medical science recognizes the medicinal value of baking soda. For example, it is used in kidney dialysis to reduce levels of acids in the bloodstream. But there are hundreds of everyday uses for baking soda you've never heard of. They're all in a new book, now available to the general public, by contributing editor to Family Circle Magazine, Vicki Lansky.

Discover over 500 remedies using baking soda with other ordinary household items like: vinegar, lemon, toothpaste, sugar, salt and more. A little baking soda with a pinch of this and a dash of that can:

• Soothe SORE GUMS, CANCER SORES and SUNBURN

• Make a SORE THROAT disappear

• Fight HEARTBURN and ACID INDIGESTION

• Stop the pain of BEE STINGS and BLISTERS

• Stop ECZEMA and ITCHES

• Dry up ACNE and PIMPLES

• Clear up STUFFY NOSE and ITCHY EYES

• Relieve tooth aches and soothe sore throats

• Relieve ALLERGIC REACTIONS

• Stop SMOKING (based on research at Mayo Clinic)

• Can you believe that a baking soda formula was used to clean the interior of the Statue of Liberty in her recent restoration? Well, there's practically nothing under the sun that a baking soda recipe can't clean - and clean and deodorize better than expensive store-bought products. Fact is, baking soda is the ultimate deodorizer because it doesn't simply cover up odors - it actually absorbs them. It's a natural alternative to toxic, harsh chemical cleaners. Just whip up an easy baking soda recipe to make:

• A powerful bleaching formula for linens

• Homemade scouring powder

• Drain cleaner for clogged drains

• Dishwasher detergent that makes dishes gleam

• An oven cleaner that eliminates elbow grease

• Allergy-free deodorizers for the whole house

• Upbeatener cleaner that makes fabrics look new

ANEMIA, A COMPLEX SERIOUS DISORDER

• **Severe Or Mild, Must Be Taken Seriously With Doctor's Guidance**

• **Standard American Diet Devastating To Hemoglobin And Entire Blood Chemistry**

• **Best Fed Babies Absorb 65% Of The Iron. Formula Fed Absorb 10% Of Iron In Their Food.**

• **Fast Numbers Over 40 have Hypo-hydro-chloric Secretion And Lose Iron Absorption.**

• **Iron Used To Fortify Foods Not Organic, Inert Un-absorbable. Try To Get Your Iron From Apricots, Prunes, Raisins, Wheat Germ, Dark Leafy Greens, Lima Beans, Green Peas, Millet.**

• **Becomes Yeast-etc. Organic Iron Available. Vit C-Increase Absorption 200 To 500%.**

• **Folate, Vit B2, A.C.E, Are Absolutely Vital To Absorption - Do NOT Neglect Getting Them From Your Food.**

• **Anemia Causes Fatigue, Poor Appetite, Irritability, Dizziness, Fainting, Depression, Heart Palpitations, Weakness, And Many More Problems.**

• **90% Of Women 18-44 Get 1/2 The RDA For Iron**

• **75% Of 12 to 18 yr Olds Are Iron Deficient. Causes Poor Academic Reading, Math, Problem Solving Abilities, Learning Disability**

Both are with Bioflavonoids
New 0712 Vit C 625mg Ester C 180 caps
New 0732 Double Strength Ester C 120 caps

- A cleanser for copper pot bottoms
- A great rust remover formula
- The cleanser that works like magic
- A little-known formula that really cleans old, porous tubs
- A lifesaver for white rings and spots on wood furniture
- The perfect cleanser for gold, silver and pearl jewelry
- A tooth whitener that makes teeth sparkle
- A denture soak that works great
- Shampoo, over 500 times and money-saving tips
- The how to use baking soda to melt ice on sidewalks, boost bleach's whitening power, remove age stains from linens, remove crayon and ink stains, kill ants and roaches, keep idling motors, keep color in vegetables, make cars disappear from countertops, clean stainless steel appliances, scumming, whitening porcelain sinks, put out grease and electrical fires, clean burned pans, clean up pet stains, eliminate gas from baked goods, and the list goes on and on. There are even dozens of tips for around the garage like: how to remove bugs and tar from car, make a great car wash solution, washing lubricants, neutralize battery corrosion.

Right now you can receive a special price run of Vicki Lansky's Baking Soda book for only \$8.95 plus \$1.00 postage and handling. You must be completely satisfied, or simply return it in 90 days for a full refund.

HERE'S HOW TO ORDER: Simply print your name and address and the words "Baking Soda" on a piece of paper and mail it along with a check or money order for only \$9.95 to: THE LEADER CO., INC., Publishing Division, Dept. BK294, P.O. Box 8347, Canton, Ohio 44711. (Make checks payable to The Leader Co., Inc.) VISA or MasterCard tend card number and expiration date. Act now. Orders are filled on a first-come, first served basis.

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ACIDOSIS (Balch pg 87), ALKALOSIS (Balch pg 108) maintain your pH balance. Self test with pH paper. I use test paper from HOME CURE, 1-800-559-2873. Request their complete catalog.

Record each of your Blood Tests on this Flow Chart.
Read pgs 85-106 By Edward R. Pinakney M.D. in "Dissent In Medicine"

TSH Less than 0.3 suggests hyperthyroidism. TSH = Thyroid Stimulating Hormone.
TSH above 7 m IU/L = Hypothyroidism. Between 3.0 and 7. = decreased thyroid reserve.
-10/-A.

PROTEINS

Total protein is the sum of albumin and globulin. When low, it is a general indicator of poor nutrition, malabsorption, other gastrointestinal disease or metabolic disorder.

Albumin determination helps to evaluate liver and kidney function.

Globulin, especially gamma globulin, is one measure of the body's immune mechanism.

ENZYMES

Several enzymes are now routinely measured. These help to detect abnormal function or tissue destruction, chiefly of heart or liver. Enzymes tested for are Aspartate aminotransferase (AST), Alanine aminotransferase (ALT), Gamma-glutamyl transpeptidase (GGT), Lactate dehydrogenase (LDH), Creatine kinase, Alkaline phosphatase and others.

BILIRUBIN

This substance is formed in the body by normal breakdown of red blood cells and is excreted by the liver. Excessive red cell destruction, impaired liver function or liver obstruction may cause elevated values.

BLOOD UREA NITROGEN (BUN)

Normally present in blood and excreted by the kidney, it may be elevated in kidney disorders.

URIC ACID

Also normally present, uric acid is elevated following some medications, some dietary practices, and in gout.

GLUCOSE

Low levels require further testing to confirm the presence of metabolic disorder. High levels may be associated with diabetes. Abnormal values may be restored to normal in some cases by dietary modification alone.

ELECTROLYTES

Sodium, potassium, calcium, phosphorus, bicarbonate, and chloride are all closely regulated by the body's internal mechanisms. Abnormal values require additional investigation by your physician. The anion gap is a measure of the balance between sodium and potassium, and bicarbonate and chloride.

CHOLESTEROL

This is a fatty substance manufactured in the body and available in many foods. There has been much concern over high cholesterol and its relation to heart and blood vessel disorders. Recently this concern has shifted to high levels of Low Density Lipoprotein (LDL) Cholesterol and low levels of High Density Lipoprotein (HDL) Cholesterol. These appear to be associated with increased risk of heart disease.

TRIGLYCERIDES

These are another type of fatty substance obtained readily from the normal diet. For valid interpretation an overnight fast, preferably of at least 14 hours, is required before the blood sample is drawn.

IRON

This is a chemical measure of iron available in the body for manufacture of hemoglobin, the oxygen carrying molecule in the red blood cell. It may be low in anemia or high in abnormal iron storage.

COMPLETE BLOOD COUNT

WBC — White blood cells may be increased in bacterial infections or disorders of the white blood cells. They may be decreased in viral infections.

RBC — Red blood cells carry hemoglobin. Usually they are decreased in anemia. Women normally have lower values than men.

HEMOGLOBIN — This substance is essential to carry oxygen to all parts of the body.

HEMATOCRIT — This figure represents the percent of your blood that is occupied by cells, chiefly the red blood cells. As it is a measure of red cell mass, it indicates, when low, the degree of anemia.

DIFFERENTIAL COUNT — This is a count of the percentage distribution of the various types of white cells. This helps to define the nature and severity of diseases such as infections, allergies, or more serious disorders of the white cells themselves.

MEAN CORPUSCULAR VALUES are: Volume (MCV), Hemoglobin (MCH), and Hemoglobin Concentration (MCHC). These help to define the type of anemia when present.

PLATELETS — These small fragments in the blood assist in the clotting mechanism. Abnormalities offer important clues to the diagnosis of disease.

Blood chemistry -2

To gain some understanding and working knowledge in this difficult, important area, obtain a copy of your complete blood test. Make note of the tests which are high or low or are outside the normal range. Study the food nutritional values and information in these notes, Jean Carper's book, "Food Pharmacology" and American Institute for Cancer Research Nutrition Charts given in these notes, to learn which foods you must emphasize to bring your tests back to the normal range. Discuss your out-of-range tests with your doctor and or dietitian. Learn the Seven Rules of the Illness Prevention Program and live them to the fullest - don't modify the rules. Don't be scared off by the chemical names. After a while you will become as familiar with them as the word cholesterol. Now add to your health vocabulary an understanding of glucose (sugar), sodium (salt), potassium (salt), enzymes, calcium, protein, globulin, white and red blood counts, iron, hemoglobin, hematocrit and bilirubin. It will help you understand your doctor's consultation, advice and treatment.

ENZYMES. Several enzymes are now routinely measured. These help to detect abnormal function or tissue destruction, chiefly of heart or liver. Enzymes tested for are Aspartate aminotransferase (AST), Alanine aminotransferase (ALT), Gammaglutamyl transpeptidase (GGTP), Lactate dehydrogenase (LDH), Creatine kinase, Alkaline phosphatase and others.

ELECTROLYTES. Sodium, potassium, calcium, phosphorus, bicarbonate, and chloride are all closely regulated by the body's internal mechanisms. Abnormal values require additional investigation by your physician. The anion gap is a measure of the balance between sodium and potassium, and bicarbonate and chloride.

IRON. This is a chemical measure of iron available in the body for manufacture of hemoglobin, the oxygen carrying molecule in the red blood cell. It may be low in anemia or high in abnormal iron storage. 49-206 MCG/DL

RBC. Red blood cells carry hemoglobin. Usually they are decreased in anemia. Women normally have lower values than men.

DIFFERENTIAL COUNT. This is a count of the percentage distribution of the various types of white cells. This helps to define the nature and severity of diseases such as infections, allergies, or more serious disorders of the white cells themselves.

FOLLOWING IS A BRIEF DESCRIPTION OF EACH TEST. THE NUMBERS GIVEN ARE THE NORMAL BLOOD CHEMISTRY RANGE.

HDL CHOLESTEROL. High Density Lipoproteins are believed to take cholesterol away from cells and transport it back to the liver for processing or removal. Persons with high levels of HDL have less heart disease. The HDL's have become known as the good cholesterol. 35-55 MG/DL

LDL CHOLESTEROL. Low Density Lipoproteins contain the greatest % of cholesterol and may be responsible for depositing cholesterol in the artery walls. For that reason, they could be known as "bad" lipoproteins. 65-130 MG/DL

LDL/HDL RATIO. The ideal ratio should be 2:1 or less. A ratio greater than 6.0 represents a high risk of heart disease.

TOTAL CHOLESTEROL/HDL RATIO. The ratio should be 4.0 or less. A ratio greater than 4.0 represents risk of heart disease.

CHOLESTEROL. A fat in the blood. Knowing your cholesterol may be as important as knowing your blood pressure. All Americans should have their cholesterol checked. Elevated cholesterol is recognized as being responsible for increasing the risk of coronary heart disease. 130-200 MG/DL. This fatty substance is manufactured in the body and available in many foods. There has been much concern over high cholesterol and its relation to heart and blood vessel disorders. Recently this concern has shifted to high levels of Low Density Lipoprotein (LDL) Cholesterol and low levels of High Density Lipoprotein (HDL) Cholesterol. These appear to be associated with increased risk of heart disease.

TRIGLYCERIDE. Like cholesterol, is a fat in the blood contributor to hardening of the arteries. Triglycerides should be less than 400 mg/dl in a non-fasting state. If they are greater than 400 mg/dl then a fasting blood test should be examined. 0-150 MG/DL -103-

Blood Chemistry-3

GLUCOSE. The most direct, single test to uncover diabetes. A fasting blood sugar may also be used to evaluate how a diabetic is controlling his or her disease. A non-fasting glucose taken more than 2 hours after eating should be less than 140 mg/dl. A non-fasting glucose taken less than 2 hours after eating should not be used for evaluation purposes. 64-105 MG/DL

SODIUM. The major salt in the bodily fluid. Important in the body's water balance, the electrical activity of nerves and muscles, and controlling the acid content of the body. 137-146 MEQ/L

POTASSIUM. A major salt in the body's cells. It plays a role in controlling the acid balance of the body, regulating the electrical activity of muscles, including the heart and plays a major role in maintaining body water levels. It helps keep our heart in proper rhythm, is essential for muscle and nerve function. 3.3-4.7 MEQ/L

BUN (BLOOD UREA NITROGEN). A product of protein digestion eliminated by the body through the kidneys. An indicator of kidney function. 8-23 MG/DL

CREATININE. An indicator of kidney function. MG/DL 0.7/1.5

URIC ACID. A product of digestion (removed by the kidneys). High levels in the blood may leave deposits in joints. Gout is the arthritis most often associated with an elevated uric acid. 3.9-9.0 MG/DL. Also normally present, uric acid is elevated following some medications, some dietary practices, and in gout.

CALCIUM. A mineral essential for development and maintenance of healthy bones and teeth. It is important also for the muscles and normal function. 8.8-10.5 MG/DL.

PHOSPHORUS. Together with calcium, is essential for healthy development of bones/teeth. Associated with hormone imbalance, bone disease and kidney disease. It is found mainly in bones and teeth. 2.8-4.5 MG/DL

ALKALINE PHOSPHATASE. An enzyme made mainly in the liver and bone. It is useful in determining liver and bone disease. 38-102 U/L

Total Acid Phosphate 2.4-5.9 IU/L

Prostatic Acid Phosphatase .2-1.9 IU/L. (Important in prostate disease & cancer).

PROSTATE SPECIFIC ANTIGEN 0.0-4.0. Important in the evaluation of prostate disease and cancer.

PROTEINS. Total protein is the sum of albumin and globulin. It is a measure of the state of the nutrition of the body. When low, it is a general indicator of poor nutrition, malabsorption, other gastrointestinal disease or metabolic disorder. Albumin determination helps to evaluate liver and kidney function. Globulin, especially gamma globulin, is one measure of the body's immune mechanism. 6.0-8.0 GM/DL.

ALBUMIN. One of the major proteins in the blood and a reflection of the general state of nutrition. 3.9-4.9 GM/DL

GLOBULIN. A major protein in the blood that carries infection-fighting antibodies. 2.0-3.3 GM/DL

GAMMA GLUTAMYL TRANSFERASE (GGTP). An enzyme found mostly in the liver and kidney. A sensitive indicator of liver disease, especially alcoholism and liver disease associated with alcohol. 7-37 U/L

Blood Chemistry-4

AST (SGOT). An enzyme found mostly in the liver and heart muscle. An abnormal test may represent liver or heart damage. 12-36 U/L

LDH. An enzyme found mostly in the heart, muscles, liver, kidney, brain, red blood cells. When an organ of the body is damaged, LDH is released in greater quantity into the blood stream. 102-199 U/L

BILIRUBIN. The main bile pigment of the body. Causes the yellow tinge to blood. Helps in the digestion of food.

BILIRUBIN. This substance is formed in the body by normal breakdown of red blood cells and is excreted by the liver. Excessive red cell destruction, impaired liver function, or liver obstruction may cause elevated values. 0.1-1.2 MG/DL

ALT (SGPT). An enzyme found in the liver. Abnormality may represent liver disease. 8-45 MU/MI

WBC-WHITE BLOOD COUNT. The body's primary defense against disease. This test can tell a great deal about your state of health. Whiteblood cells fight infection. 4.5-11.0 K/CU MM

RBC-RED BLOOD CELL COUNT. Measures the number of oxygen carrying blood cells available to carry oxygen to all cells. 4.2-5.9 M/CU MM

HEMOGLOBIN. A chemical compound that transports oxygen through the bloodstream to all cells of the body. We need oxygen for healthy organs. Hemoglobin gives the red color to blood and is inside the red blood cells. 13.0-17.3 GM/DL

HEMATOCRIT. Measures the volume of red cells compared with the volume of fluid carrying red blood cells (plasma). It is an indicator of how well the red blood Normal Blood Chemistry,

cells can carry oxygen to the cells of the body. This figure represents the percent of your blood that is occupied by cells, chiefly the red blood cells. As it is a measure of red cell mass, it indicates, when low, the degree of anemia. 39-53.0%

MCV. Mean corpuscular volume measures red blood cell volume which varies from normal with different diseases. 81.0-100.0 CU MIC

MCH. Mean corpuscular hemoglobin measures levels within red blood cells which varies from normal with difference diseases. 27-34 PG

MCHC. Mean corpuscular hemoglobin concentration which varies from normal with different diseases. 30.0-36%

PLATELET COUNT. Blood cells involved with the forming of blood clots. 130-470 K/CUMM

T4 (THYROXINE). These three tests evaluate thyroid hormones which control the body's metabolic rate.

5.0-12.0 MCG/DL. *Thyroxine is secreted by the hormone gland*

T3 (UPTAKE). 32.0-44.0% *(secreted)*

FREE T4 INDEX (77). 1.9-4.9

T.S.H. Thyroid Stimulating Hormone. Secreted By The Pituitary Gland

Levels between 3.0 and 7.0 mIU/mL suggest decreased thyroid reserve
Levels of 7 mIU/mL or greater suggest primary hypothyroidism
Levels less than .03 mIU/mL suggest hyperthyroidism!

Blood Chemistry

From Balch 1st Edition - BRAIN - How To Preserve And Improve

Researchers are still attempting to unravel all of the brain's complexities. The brain is an amazing organ—brain cells continue to die and are not replaced, but memories remain stored for a lifetime. The brain is made up of 100 billion nerve cells called neurons and can hold more information than all the books that have ever been published.

The brain manufactures hundreds of chemicals called neurotransmitters that affect moods, produce natural pain killers, natural tranquilizers, and a natural appetite suppressant. Neurotransmitters are made up of nutrients that allow information to pass from one circuit to another. This process allows all functions of the body to take place in proper sequence. All of these nutrients must be in balance or problems will occur. Linus Pauling, two-time Nobel Prize winner and world-renowned scientist, noted that nutrient concentrations may not always be high enough to supply all the organs and tissues, especially the brain. Many conditions that result from nutritional deficiencies alter mental states—in fact, changes in mood are often the first signs of a deficiency. Depression, memory loss, anxiety, and irritability are some of the signs.

The brain never sleeps and, overall, uses 20 percent of the body's energy. It requires constant oxygen, which it receives from the bloodstream, and uses approximately 25 percent of all oxygen inhaled. Therefore, proper oxygen is essential through a normal blood supply to the brain. The blood vessels supplying the brain with oxygen tend to clog as we age (see ARTERIOSCLEROSIS in Part Two). Without an adequate supply of oxygen and nutrients through the bloodstream, the brain will not function normally. Senility is one known result of loss of blood supply, and therefore oxygen, to the brain. When blood supply to any area of the brain is disconnected, or a hemorrhage from a blood vessel occurs, a stroke results.

The hypothalamus, a section of the brain, constantly monitors the blood sugar level by sending messages to the pancreas to release more insulin (which lowers blood sugar) and glucagon (which elevates blood sugar) into the bloodstream in order to normalize our sugar levels. The heart, liver, fat cells, muscles, and lungs all compete with the brain for blood sugar. In order to get sugar (glucose) fuel to the brain, you must have a correct diet and avoid simple sugars such as candy and soft drinks. Foods of this type trigger too much insulin release, which lowers blood sugar as in hypoglycemia, a condition that damages the brain. (See HYPOGLYCEMIA in Part Two)

Many disorders stem from a malfunction of the central nervous system, which includes the brain and spinal cord. Nerve signals travel up and down the spinal cord, linking the brain to the rest of the body.

To function properly the brain daily requires four ounces of glucose, as well as sodium, potassium, unsat-

urated fatty acids, amino acids (protein), vitamins and minerals, and 400 calories.

Recent research has shown that excess fats and toxic "free radicals" forming in the bloodstream contribute to impaired brain function. Brain cells accumulate a form of cellular garbage called lipofuscin, a by-product of fats and free radicals. In excess, this garbage can damage and kill neurons. Antioxidants destroy free radicals and protect the brain against their by-product, lipofuscin.

From Balch - 2nd Edition

Memory Problems

Memory is as natural to us as breathing. It is an ability we all have, yet rarely ever think of—unless we perceive that we are losing that ability. Memory lapses are an annoyance

in themselves, but worse is the anxiety that often comes along with them. We begin asking ourselves if they are a symptom of some other problem, such as midlife depression or arteriosclerosis. Probably the greatest fear provoked by lapses in memory is that of Alzheimer's disease, a progressive and debilitating disease that usually starts in midlife with minor defects in memory and behavior. Although this is a fairly common disorder among older people, it is important to realize that most memory lapses have nothing to do with Alzheimer's disease.

People have come to expect that, as they age, their ability to remember will begin to deteriorate; that their powers of recall will diminish. This is not necessarily true. The aging process itself has little, if any, bearing on the ability to recall information. Occasional memory lapses are a natural, normal part of life at virtually any age, but with proper diet and nutrition, the memory should remain sharp and active well into one's nineties or beyond.

One reason many people suffer from memory loss is an insufficient supply of necessary nutrients to the brain. The life of the body is in the blood. It literally feeds and nourishes every cell within our bodies. The brain is surrounded by a protective envelope known as the blood-brain barrier, which allows only certain substances to pass from the bloodstream into the brain. If the blood is "thick" with cholesterol and triglycerides, the amount of nutrient-rich blood that can pass through the blood-brain barrier decreases. Over time, this can result in the brain becoming malnourished.

• Assiduously study and apply ALL OF BALCH. Espec. Aging 94-98, Alzheimer's Pg 123-127, Anemia 128, Anxiety 131-138, Arteriosclerosis 136-138, Chelation Therapy 540-542, Depression 223-227, Stress 95-9, Memory Problems 379-383, Manic Depression 376-378

• Get everyone of your friends and loved ones to buy the Balch Books (2) and follow the above study. We must all lower the risk of getting into these problems.

-105-b-

From Balch-2nd Edition - Brain How To Preserve And Improve

In addition, the functioning of the brain depends upon substances called neurotransmitters. Neurotransmitters are brain chemicals that act as electrical switches in the brain and, through the functioning of the nervous system, are ultimately responsible for all the functions of the body.

If the brain does not have an adequate supply of neurotransmitters, or the nutrients from which to make them, it begins to develop the biochemical equivalent of a power failure or a short circuit. If your mind goes blank when you are trying to recall a specific fact or piece of information, or it begins to plug into some other, irrelevant memory instead, it is likely that such a "short circuit" has occurred.

There are numerous other factors involved in the deterioration of memory. One of the most important is probably exposure to free radicals, which can wreak enormous damage to the memory if unchecked. Nutritional deficiencies, especially deficiencies of the B vitamins and amino acids, account for memory loss in some individuals. Alcoholics and drug addicts often suffer a great deal from memory loss. Alcoholics are notorious for "blackouts"—huge memory gaps that occur even though they are conscious. Allergies, candidiasis, stress, thyroid disorders, and poor circulation to the brain may be contributing factors. Hypoglycemia (low blood sugar) can play a role in memory loss as well, because to function properly, the brain requires that the level of glucose in the blood fall within a very specific narrow range. Wide swings in blood sugar levels affect brain function and memory.

NUTRIENTS

SUPPLEMENT	SUGGESTED DOSAGE	COMMENTS
Very Important		
Acetylcholine	As directed on label.	Most important of the neurotransmitters. Maximizes mental ability and prevents memory loss in adults.
Choline #470	100 mg 3 times daily.	Increases levels of acetylcholine.
Manganese #1542	As directed on label. Take separately from calcium.	Helps nourish the brain and nerves. Aids in the utilization of choline.
Superoxide dismutase (SOD) #2742	As directed on label.	Known for its ability to eliminate free radicals.
Vitamin B complex #0428 plus extra pantothenic acid (vitamin B5) 0458 and vitamin B6 #0450 (pyridoxine)	100 mg daily. 50 mg 3 times daily. 50 mg 3 times daily.	Needed for improved memory. Injections (under a doctor's supervision) may be necessary. Helps in transformation of the amino acid choline to the neurotransmitter acetylcholine. Needed for proper brain function.
Vitamin B3 (niacin) and #0484 niacinamide	As directed on label. As directed on label.	To promote proper circulation to the brain and aid in brain function. Caution: Do not take niacin if you have a liver disorder, gout, or high blood pressure.
Vitamin C #0733 and #0772	3,000-10,000 mg daily.	A powerful antioxidant that also improves circulation.

Vitamin E #0394	Start with 400 IU daily and slowly increase to 1,200 IU daily.	Causes dilation of blood vessels, improving blood flow to the brain.
Zinc	50-80 mg daily. Do not exceed 100 mg daily.	Important in binding toxic substances and removing them from the brain. Use zinc gluconate lozenges or OptiZinc for best absorption.

Important

Lecithin granules or capsules	1 tsp 3 times daily, before meals. 1,200 mg 3 times daily, before meals.	Improves brain function. Lecithin is high in choline and inositol, important B vitamins.
L-Glutamine and L-phenylalanine plus L-aspartic acid	As directed on label, on an empty stomach. Take with water or juice. Do not take with milk. Take with 50 mg vitamin B6 and 100 mg vitamin C for better absorption.	Amino acids necessary for normal brain function; serve as fuel for the brain and prevent excess ammonia from damaging the brain. Caution: Do not take phenylalanine if you are pregnant or nursing, or if you suffer from panic attacks, diabetes, high blood pressure, or PKU.
L-Tyrosine	Up to 100 mg per kg of body weight daily. Take on an empty stomach with 1,000 mg vitamin C and 50 mg vitamin B6.	Helps sharpen learning, memory, and awareness; elevates mood and motivation; aids in preventing depression. Caution: Do not take this supplement if you are also taking an MAO inhibitor drug.

Helpful

Coenzyme Q10 #3188	100 mg daily.	Improves brain oxygenation.
Dimethylglycine (DMG) (Aangamik DMG from FoodScience Labs)	As directed on label.	Improves brain oxygenation.
Melatonin #3257	2-3 mg daily, taken 2 hours or less before bedtime.	A powerful antioxidant that may prevent memory loss.
RNA and DNA	As directed on label.	Increases energy production in memory transfer in the brain. Caution: Do not take this supplement if you have gout.

HERBS

☐ Ginkgo biloba has been attracting attention from researchers because of its ability to increase blood flow to the brain. Ginkgo is available in capsule or extract form at most health food stores. Products vary, depending on the brand. For memory enhancement, take capsules as directed on the product label, or place 6 drops of an alcohol-free extract under your tongue and hold it there for a few minutes, then swallow. Do this twice daily.

☐ Other herbs that are helpful for memory include anise, blue cohosh, ginseng, and rosemary, gotu kola.

Caution: Do not use ginseng if you have high blood pressure. *Indiana Botanic Gardens:*

Rosemary Tablets 500mg	100	9.98
" Essential Oil (no alcohol)	1 oz	5.98
" Leaf Pwd	2 oz	1.65
" Leaf Male	15 oz	2.98

CALCIUM-ESSENTIAL TO:

- **BONES-TEETH.** • **Avoid** Periodontal
- **Avoid** Osteoporosis. Gum Disease
- **Avoid** Muscle • **Insomnia**
- Cramps & Spasms. • **Blood Clotting**
- **Decrease** Arthritic • **Improve** Muscle
Pain. Action- **Avoid** Menstrual • **Regulate**
Cramping & Distress. Heart Beat- **Vit. D** 400 I.U.
- Absolute MUST.**
- **Normal** Blood Calcium
Level 9.1-10.3 mg/dL- **Lessen** Cholesterol,
- Triglycerides,**
- **Arterial** Plaques.
- **Drink** Low-Fat,
- Non-Fat Dry Milk**
- **Eat** Plain, non-fat Yogurt • **Vit D** 400 I.U.
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- **Calcium RDA=**
- 1000 mg.
- 50% of people in the US
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- Consider Now #0362 25000 IU
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- instead of Vit A 10,000 and Vit D 400 IU.
- Do not exceed 2000 IU daily.

Now #0362 page 212

1227. Bone Calcium Hydroxyapatite

120 Tabs 10.95; 240 Tabs 19.95

1540 Full Spectrum Minerals

100 Tabs 5.95; 250 Tabs 12.95

1406 Colloidal Minerals Raspberry

Reduced Heavy Minerals.

32 oz. 18.95

Calcium OK for Kidneys

Who gets kidney stones? Twelve percent of Americans, especially men.

What's the cost? Considerable pain and more than \$2 billion a year. What's the culprit? Calcium was a major suspect, because most stones contain the mineral.

Now a new study from the Harvard School of Public Health seems to clear calcium of blame.

In 1986, Gary Curhan sent a diet questionnaire to 45,000 healthy male health professionals aged 40 to 75. Over the next four years, 505 of them were diagnosed with kidney stones.

But men who reported eating the most calcium (1,050 mg or more a day) had a 34 percent lower risk of getting a stone compared to those who ate the least calcium (605 mg or less).

Men who ate more potassium and drank more fluids also had a lower risk of stones. But those who ate the most animal protein (77 grams or more a day) had a 33 percent higher risk than those who ate the least (50 grams or less).

If most kidney stones contain calcium, why would it protect against them? Because stones also contain oxalic acid, and "the calcium may bind the oxalate in the gastrointestinal tract," says Curhan. Bound oxalate gets excreted.

Calcium supplements did not appear to protect against stones. "Perhaps that's because the supplements were typically taken at breakfast or between meals," when there was little or no oxalate around to bind, says Curhan.—BL

New England Journal of Medicine 328: 833, 1993.

Coffee Can Be Adverse

BEN WEIDER and **THOMAS DETERS**
CUTTING EDGE HEALTH AND FITNESS



You know what they say about vices: Everybody's got one. For some, it's cigarettes or an occasional glass of wine. For others, it's that much-needed morning cup (or pot) of coffee. Many of you may feel justified in your daily caffeine indulgence.

Americans may not condone drug, tobacco or excessive alcohol use, but coffee has been the way of the world for centuries. Whether it be that special aroma each morning or the much-needed caffeine to get us rolling out of bed, we all have our own special reasons for loving freshly brewed coffee. Unbeknownst to many of you, however, coffee — or the active ingredient caffeine — is a drug. It's also addictive. Consider the evidence, and make your own choice on how much is enough — or too much.

Coffee is made from coffee beans. It contains caffeine (about 100 milligrams per cup) — a stimulant that, when ingested, enters the bloodstream, expands the body's blood vessels and constricts those in the brain. Caffeine also elevates the body's natural production of a stimulant called epinephrine, which affects the central nervous system, heart rate, blood pressure and urinary function. Sound unhealthy?

Many studies over the past three decades also have linked coffee to more serious health problems such as cancer, high blood pressure, heart disease, birth defects, premature birth, increased cholesterol levels, premenstrual syndrome, dehydration or diuresis, and fibrocystic breast disease.

Don't starve
your brain
for oxygen

JOINT SUPPORT

A Superior Formula!

THREE CAPSULES PROVIDE:

Vitamin B-3 (Niacinamide)	100 mg
Vitamin B-5 (Pancreatic Acid)	100 mg
Vitamin B-6 (Pyridoxine HCl)	50 mg
Vitamin C (Ascorbic Acid)	100 mg
Magnesium (Oxide)	200 mg
Zinc (Picolinate)	15 mg
Manganese (Amino Acid Chelate)	7 mg
Copper (Amino Acid Chelate)	3 mg
Glucosamine HCL	1000 mg
Bromelain* (Standardized herbal extract of <i>Bromela</i> serrata)	300 mg
Sea Cucumber	300 mg
Bromelain (2000 GDU activity from pineapple)	150 mg
Yucca	100 mg
PABA (Para-aminobenzoic acid)	100 mg
Devil's Claw (<i>Harpagophytum procumbens</i>)	100 mg
Alfalfa Juice Concentrate	100 mg

3290	Joint Support	90 Caps	19.95
3292		180 Caps	37.95

Many health professionals recommend **Bromelain** for pain, inflammation and swelling. Raw pineapple alone cannot provide sufficient amounts of this digestive enzyme. Bromelain must be obtained from supplements to be nutritionally beneficial for the joints.

Nutritive Therapy For Joint Health And Digestion

Bromelain's effectiveness is due to its ability to reduce the harmful prostaglandins in the body that cause pain, inflammation and block the absorption of nutrients through the tissues. By helping to inhibit these pro-inflammatory substances, Bromelain encourages well-nourished tissue that is free of pain and inflammation.

Now #2946 Bromelain 500mg, 2000 GDU 18.95
90 Tabs

Dr. Andrew Weil, director of the Division of Perspectives in Medicine at the University of Arizona College of Medicine, has expressed other health concerns about coffee consumption. According to Weil, caffeine acts upon the central nervous system, and stress-related problems occur, including headache, indigestion, excitability, diarrhea, nausea, insomnia, and neuromuscular tremor. He also considers 80 cent or more of all coffee drinkers to be dependent on their coffee.

• Coffee addicts are not just restricted to those who consume potfuls of java daily. In fact, as little as or two cups per day can be a sign of addiction. searchers describe a coffee addict as someone who drinks it daily, relies on it for bowel movements, depends on it for mental and physical capabilities, it for energy boosts and experiences withdrawal symptoms when abstaining for more than 24 hours.

Considering the possible health problems that have been associated with coffee use, many have turned to decaffeinated coffee. It stands to reason that decaf coffee would be the ideal substitute, but research indicates there are problems with this kind, as well. For starters, many people are unaware that decaffeinated coffee does contain a small amount of caffeine as with many of the same harmful properties found in regular coffee. A 1989 study performed by researchers at Stanford University found that decaf coffee elevated levels of low-density lipoprotein (bad cholesterol) by as much as 7 percent in those who had converted from regular to decaf coffee. A more recent study found connection between decaf and an elevated risk of heart attack. This study was performed on people who drank at least four cups of decaffeinated coffee per day.

BALCH- CANCER NUTRIENTS

ESSENTIAL

NO SMOKING!

CoQ10 30mg, 3x daily=90mg daily

DMG- Dimethyl Glycine 3x 125mg

Garlic 2 caps. 3x daily, super odorless garlic caps 5000 mg- with Hawthorn Berry and Capsaicin (cayenne pepper)

Melatonin 3mg - 2 before retiring *Sub-lingual*

Natural Betacarotene 25,000 I.U. Derived from algae

Flaxseed Oil 2 tbsp. daily

Papaya Enzymes 2- 1/2 hr. after eating

Super Digestive Enzymes 1-3 daily

Selenium 1 daily =200 mcg

Shark Cartilage, 3 with each meal, 750 mg per cap. 2250 mg for the day.

Wheat Sprout Antioxidant: 1 with each meal- Super Oxide Dismutase (500) 3 daily.

Vit A 25,000 I.U. 3 daily for 10 days; 2 for 30 days; 1 daily. Emulsify them. *Fat soluble Vit*

Vit E up to 1000 I.U. daily. Must be emulsified. *Fat Soluble Vit.*

Vit B50 Complex 2x daily- 100 mg daily.

Nutritional Yeast 1 tbs. 2 x daily. Taken as an ingredient in your "SOLENU" drink. *(Heaping TBS)*

Vit C-Ester 1250 mg 3-6 x daily. As your system allows. Diarrhea indicates max dosage.

Zinc gluconate 50mg. Do not exceed 100mg. daily. \$152 20 tabs 5.45 Read pg 213 this book

Zinc picolinate 50mg. Far more expensive but better \$152 120 caps 9.95 and Balch pg 29.

IMPORTANT

Reishi mushrooms- 1 with each meal 600 mg

Full spectrum minerals \$1542 (250 tabs) 2x daily (has iron) - open capsule and pour in health drinks (SOLENU.)

HELPFUL

Acidophilus & Bifidus- 8 billion ; tested @ 10 billion

Nutra Flora FOS Powder

Wheat Germ Oil- 1 tsp 2x daily

Oxygen Therapy 1/4 tsp/ 8oz. liquid + insufflation techniques. *Infusion done by Doctor. (Chelation)*

Kelp 650 mg. 1 with each meal 2-3 daily

Chromium Picolinate 200mcg 1x daily

Grapeseed Antioxidant- a very powerful antioxidant 2x daily

L-Carnitine 500mg 2x daily

Bone Calcium tablets 1 with each meal + Colloidal Minerals 1-2 tbsp. *(no iron)*

N. Acetyl Cysteine 600mg + l-Me thionine 500 mg + B6

Taurine 500 mg 2 x daily

Multigland Plus 465 mg (10 glands) 1-2 daily

Vit B3 Niacin (flush-free) 2000 mcg daily - 275 mg 1x daily

Vit B12 1000 mcg sublingual w/folic acid 2x daily

Thymus 150 mg 1-2 daily

Spleen 260 mg 1-2 daily

HERBS

Dandelion 500 mg; Echinacea 400 mg; PAU D'arco 500 mg;

Red Clover 450 mg; Cat's Claw 400 mg or "5000" and tea 4oz bags

Esiak 450mg

ADDED RECOMMENDATIONS

Complete Vegetarian diet, 10 raw almonds, fruit and vegetable juices, distilled water, NO JUNK FOODS, NO PROCESSED FOODS, NO REFINED FLOUR, NO ANIMAL PROTEIN, Drink only skim milk, yogurt, enemas to keep colon clean, no supplemental iron, exercise, avoid low level radiation leakage, chemical pollutants, NO PRODUCTS IN AEROSOL CANS, ELIMINATE ANY EXCESS WEIGHT, consider DMSO and DHEA (read Balch)

HEALTH DRINKS

Make your own; memory key- SOLENU SO=soy LE =lecithin granules NU = nutritional yeast flakes

Mnemonic keys: BOCAPS-GT; BORS, WM, ABC-GLO-PRS, ACLMS

The Pepper Family

Capsicum frutescens and *Capsicum annuum* are the two species of plants we all think of as hot peppers, though they also include the mildest peppers. The *Capsicums* include cayenne (red pepper), jalapeño, serranos, scotch bonnets (also called habaneros), but also the mild paprika, bell peppers and virtually all other peppers you can name, except black pepper. *Capsicums* are members of the nightshade family, along with potatoes, tomatoes and eggplant.

People who like spicy food just can't seem to get enough of it. There is an interesting theory about that. It is believed that people who are fond of spicy foods are actually getting a sort of addictive high from their own endorphins. Endorphins are the body's own pain-killers and are similar to morphine. The body releases them in response to pain, including the mild pain from peppers. Ironically, among the most promising medicinal uses of *Capsicum* may be its use as a pain-reliever.

One question that has always intrigued pepper researchers is the fact that hot, spicy foods are usually quite popular in tropical and near-tropical climates, like those of Thailand, India, Mexico, Louisiana, Texas, the Caribbean, etc. One possible explanation is the diaphoretic (sweat-inducing) effect of hot, spicy foods, which could be cooling

under the right circumstances. The phenomenon was investigated in 1954 in Singapore in the appropriately-titled, *Physiological Gustatory Sweating in a Warm Climate*. The pain-relieving effect, acting especially on nerves in the skin, and the endorphin-releasing effects are other explanations. It is now known that capsaicin, the essential, hot, active component in the peppers, actually affects both the regulation of body temperature and our sensitivity to warm temperatures.

Those who become fond of *Capsicum* acquire a tolerance for the spiciness. In a controlled test, 71 percent of non-chile-eaters found it hard to appreciate the flavors of food when it contained hot spices, while only 8 percent of chile-eaters agreed. Cultures in which spicy food is a daily experience become remarkably tolerant, as witnessed by the ability of the Thais to consume impossibly hot foods on a daily basis. Consumption of hot peppers in Thailand is perhaps the highest in the world, with per capita consumption of around 5 grams per day of *capsicum*. Of course, hot peppers grow preferentially in hot climates.

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Digestive Effects of Hot Peppers

Hot peppers have long been used as a carminative, relieving digestive upset and flatulence, and perhaps a major reason for their popularity in cuisines of many countries. But beyond this common effect, peppers affect fat metabolism. Japanese scientists have demonstrated that capsaicin reduces the level of triglycerides in the blood. Better still, they found that it increased liver enzymes involved in fat metabolism, and reduced fat deposition caused by a high fat diet. Although this study used pure capsaicin, hot peppers may increase the speed of fat metabolism, and reduce weight gain caused by a high fat diet. According to low-calorie cook Barbara Gibbons, hot chiles can increase your metabolic rate and cause you to sweat, burning up as much as 45 calories of a 700-calorie meal. Capsaicin also seems to increase the speed of glucose metabolism. It increased glucose utilization

in rats and hamsters by about 24 percent in one study, and by up to 56 percent in another. Let anyone get the idea you can treat diabetes with Thai food, I hasten to point out that the maximum reduction in blood sugar level in this experiment was 18 percent produced by an oral dose of 1200 milligrams of *Capsicum annuum* extract (with seeds) per kilogram of body weight. By the way, for someone my size (70 kilograms or 154 pounds), that's 84 grams or about 3 ounces of cayenne.

The spicy principle in hot peppers is also well known for its lozative effect. Many who have experienced this effect first-hand may be tempted to attribute it to another well-known phenomenon, the double-burn effect. Actually, according to University of Iowa researchers, capsaicin acts on the nerves, stimulating the colon and showing an effect similar to other lozative agents.

Capsicum: A Pain Reliever

Perhaps the most promising use for the pain-producing chemical capsaicin, ironically, is as a reliever of chronic pain. The effect has been studied for over 25 years with surprising results. Testing has shown that capsaicin can reduce sensitivity to pain caused by heat, pressure, chemicals, etc. The surprise is that capsaicin does something that no other known substance does: it selectively depletes a chemical—called Substance P—in pain-transmission nerves. The initial pain we feel when exposed to red pepper irritation occurs as Substance P is being released. After the initial burn, though, capsaicin prevents nerve cells

from producing more Substance P. This produces a pain-relieving effect because the transmission of pain requires Substance P.

The applications of this unique property are varied. Currently, there is major research into the uses of capsaicin. Because its activity is so specific, capsaicin is used to study the activity of the nervous system and the role of Substance P in everything from nasal discharge to the effectiveness of pain killers. Because it affects only a particular kind of neuron, it can be used to determine which parts of the nervous system are connected with specific reactions. The effect is local, and specific to the kind of nerves found in the skin. This finding has led to the development of a capsaicin skin cream, used against severe skin pain, such as postherpetic neuralgia (PHN) which can result from shingles, a systemic herpes infection. The cream is also effective against a type of pain suffered by around half of diabetics, called diabetic neuropathy.

Capsaicin cream is also effective against the pain of arthritis and rheumatism. It is FDA-approved only for PHN, but is used equally as often by arthritis sufferers. Some impressive arthritis research supports the use of capsaicin cream. Scientists at Case Western Reserve University tested the effects of capsaicin on patients with both osteo-arthritis and rheumatoid arthritis. They found significant pain relief resulted from applying a capsaicin cream to painful knees four times daily. The cream was more effective for rheumatoid arthritis, reducing its pain by over half, while osteo-arthritis pain was reduced by about one-third. Capsaicin reduced pain in 80 percent of the treated patients after two weeks of treatment. The authors concluded that, "Capsaicin cream is a safe and effective treatment for arthritis."

The Institute for Clinical Medicine in Italy found additional benefits for rheumatoid arthritis sufferers. Not only does capsaicin reduce the transmission of pain by altering the production and release of Substance P, it also increases the production of collagenase and prostaglandins, both of which reduce pain and inflammation. Research reported in the *Scandinavian Journal of Rheumatology* confirms this result.

A Swedish study confirmed the powerful anti-inflammatory effect of capsaicin. Activation of the sensory nerves by cap-

Now
#4625 Cayenne Caps. 50mg 1lb \$5.95
#4627 40,000 Heat Units - 25¢ lb.
#5018 Cayenne Pepper Powder 3oz. \$1.95
Pour in a salt shaker. 1 shake per tub. or fork full.

saicin caused the release of a powerful natural anti-inflammatory. Researchers found that the pain signals themselves trigger a natural response to inflammation: "The findings provide new information about the potential impact of sensory nerve activation during inflammatory processes by indication that sensory nerves may play an anti-inflammatory role."

External applications of capsaicin cream are being researched for a number of chronic pain syndromes, such as PHN, postmastectomy neuroma, reflex sympathetic dystrophy syndrome, diabetic neuropathy, rheumatoid arthritis, psoriasis, hemodialysis-associated itching and vulvar vestibulitis.

A study at a hospital in Switzerland demonstrated that a capsicum nasal spray was effective in treating chronic non-allergic rhinitis (nasal discharge) and nasal spray abuse. In all patients, symptoms were significantly improved and remained so through a six-month follow-up. There were no significant side-effects, and the capsaicin spray made it possible for the rhinitis sufferers to stop abusing other nasal sprays. The authors conclude, "Capsaicin application could be beneficial for patients with chronic rhinitis, possibly by reducing hyper-reactive nasal reflexes." This is not recommended for home use, by the way, because capsaicin is so irritating. In the Swiss study, it was administered after local anesthesia.

In 1991, the prestigious *Archives of Internal Medicine* published the results of treatment of 252 patients for painful diabetic neuropathy. A 0.075 percent capsaicin cream was applied four times a day for eight weeks. Pain relief, according to a physician's global evaluation scale, was 70 percent, and side-effects were mild, indicating no substantial toxicity. "Study results suggest that topical capsaicin cream is safe and effective in treating painful diabetic neuropathy." This version of capsaicin cream is three times as strong as the one available for PHN.

An article in the journal of *Headache* discusses the potential for capsaicin against cluster headaches. The capsaicin, again administered as a nasal spray, produced a decrease in both the number and intensity of the cluster headaches and even disappearance of symptoms, in some cases.

Toxicity of Capsicum

A burning issue about hot peppers is whether the burning can be harmful. Because of the potent irritant effects of capsaicin, peppers can be overdone, producing acute fatal toxicity. Just how much Tabasco does it take to overdose? According to *Drug and Chemical Toxicology*, the toxic dose of Tabasco is a whopping 24 milligrams per kilogram of body weight. For an average human, that works out to 1680 milliliters or nearly half a gallon of very hot sauce.

For decades, conflicting reports have appeared in the scientific press, with some claiming that *Capsicum* fruits can cause ulcers. Peppers are known to increase gastric secretion, and many authors have referred to capsaicin-induced ulcers. *The Journal of the American Medical Association* detailed a study in which a tiny surgical camera was used to view the effects of spicy meals on the stomach lining. No difference was noted between the effects of bland meals and meals liberally spiced with red pepper. They concluded, "Ingestion of highly spiced meals by normal individuals is not associated with [gastrointestinal] damage." Those already afflicted with gastric ulcers, of course, should follow the instructions of their medical practitioner.

Cardiac Effects and Other Medicinal Uses

There are other uses for capsaicin and peppers in their myriad forms. The principal use in herbalism has been as a circulatory stimulant, especially for local circulation. Capsaicin was reported as early as 1928 to affect blood pressure and respiration. More recent work supports this potential use. Capsaicin decreased blood pressure by 10 to 15 percent in one study, within nine days of treatment. Another study found a decrease both in blood pressure and heart rate. Unfortunately, most cardiovascular research on capsaicin has involved injections, leaving open questions about the effects of taking cayenne orally.

Noted in the U.S. Dispensatory (1943), "*Capsicum* is a powerful local stimulant producing, when swallowed, a sense of heat in the stomach, and a general glow over the body, without narcotic effect." By stimulating circulation in the stomach and intestine, cayenne improves digestion. The dietary effects of cayenne go beyond this. It significantly lowers cholesterol and triglycerides in the blood. It also selectively lowers the low density

cholesterol (LDL) associated with heart disease, without affecting the high density lipids (HDL) which have a protective effect against atherosclerosis. Capsaicin shows protective effects against colitis in animals, and has immune-stimulating effects on humans. A recent Japanese patent claims capsaicin alkaloids are effective for treatment of liver disease.

Capsicum has antitumor properties and has been used in folk medicine as aphrodisiac, stimulant, diaphoretic, antispasmodic, and counter-irritant. It has antibacterial and antifungal effects and stimulates the activity of kidney enzymes. Nutritionally, peppers are high in vitamins A and C, and contribute calcium, potassium, iron, phosphorus and trace minerals to the diet. *Capsicum* contains carotenoids, including beta carotene which are powerful antioxidants.

Summary

The genus *Capsicum* is the source of dozens of peppers, from the mildest pepper or paprika to the blazing

habaneros and African bird peppers. Herbalists extol it as the most useful of the systemic stimulants for blood flow and strengthening the cardiovascular system and nerves. People use it for colds and as a digestive aid. Research finds the most interesting for the hot principle compound, capsaicin, which blocks pain signals in specific types of nerves, especially in the skin. The pain-block activity has led to its external use against chronic arthritis pain. Other effects are being explored, and pepper-oriented natural medicines are likely to appear more frequently in medicine. Its antioxidant carotenoids may offer potential anti-aging effects. It stimulates the immune system and has digestive benefits. It makes food taste great! □

About the author:

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CAT'S CLAW

Cat's Claw, also known as Una de Gato in Spanish, comes from the Peruvian rain forest and is a favorite herb for stimulating the immune system. World wide research has shown that many of the single chemicals found in Cat's Claw to be beneficial in healing cancer, arthritis, AIDS, and other diseases. This herb

has been used for hundreds of years by the Ashaninka Indians of Peru for a wide variety of health problems. Many authorities now believe that Cat's Claw is more effective than many more well known herbs such as Goldenseal, Echinacea, Pau D'Arco or Siberian Ginseng. This herb is thought to have a positive effect also on the intestinal system and the cardiovascular system. One of the alkaloids found in Cat's Claw has demonstrated the ability to enhance the circulation of the blood and reduce the accumulation of platelets in the arteries which could help to reduce clot formation and therefore might help prevent strokes and heart attacks. Also found in this herb are Triterpenes that have anti-inflammatory actions, as well as antioxidant, anti-tumor, anti-ulcer and anti-allergy properties. Damage from free radicals is believed to be a major contributing factor in the cause of many illnesses some of which include strokes, cancer, diabetes, cataracts and arthritis. Triterpenes, proanthocyanidins, and polyphenols all contribute to the antioxidant capabilities of Cat's Claw which can help to fight free radical damage. New studies show that Cat's Claw can be effective in treating inflammation, viral infections, respiratory infections, Epstein Barr, several types of cancer, fibromyalgia, yeast

infections, organic depression, PMS, allergies, rheumatism, lupus, environmental toxins and pollutants.

Cat's Claw has shown to be capable of cleansing and detoxifying the entire intestinal tract and aiding people who suffer from many stomach and bowel disorders including: colitis, parasites, diverticulitis, gastritis, leaky bowel syndrome, Chron's disease, and hemorrhoids. Many reports have shown that Cat's Claw can be used to prevent and overcome some forms of

cancer. Studies show that it has been linked with providing relief from nausea and other side effects associated with the effects of chemotherapy and the remission of brain and other tumors. This herb has been scientifically proven to contain anti-carcinogenic and anti-tumor compounds and because of it's antioxidant properties, it may scavenge substances which can cause the formation of cancerous cells. There is no known toxicity although it should not be taken during pregnancy or when breast feeding until further research is done.

There are approx 60 different species of Cat's Claw. The full name of the one referred to above, is Una de Gato (Uncaria tomentosa). Be sure the one you use is this specie.

Code	Product	Size	Qty.	Code	Product	Size
4605	Astragalus 500 mg	100 Caps		4668	Eyebright Herb 470 mg	100 Caps
4608	Burdock Root 430 mg	100 Caps		4670	Feverfew 400 mg	100 Caps
4610	Bilberry Complex (eyes)	50 Caps		4672	Esialk 450 mg 4:1 extract NEW!	60 Caps
4612	80 mg and Beta Carotene	100 Caps		4675	For-ti 560 mg	100 Caps

EACH BILBERRY CAPSULE PROVIDES:

Beta-Carotene (Pro-Vitamin A)	10,000 I.U.	6 mg
Riboflavin (Vitamin B-2)	10 mg	
Bilberry standardized extract (100:1)	80 mg	
(Contains 25% proanthocyanidins)		
Carrot Powder	300 mg	
(contains additional 1-2 mg natural Beta-Carotene)		
Citrus Bioflavonoids	100 mg	

4613	Boswellin 250 mg Extract	60 Caps
	NEW with Curcumin	120 Caps
4615	Betcher's Broom 500 mg	100 Caps
4618	Cat's Claw 400 mg	100 Caps
4621	NEW	250 Caps
4616	Cat's Claw "5,000" NEW	60 Caps
4620	Cascara Sagrada 450 mg	100 Caps
4622	Kool-Mint Cayenne	90 Caps
4624	NEW	180 Caps
4625	Cayenne 500 mg	100 Caps
4627	40,000 Heat Units	250 Caps
4635	Chickweed 400 mg	100 Caps
4640	Damiana Leaves 450 mg	100 Caps
4645	Dandelion Root 500 mg	100 Caps
4650	Devil's Claw Root 500 mg	100 Caps
4655	Dong Quai 500 mg	100 Caps
4660	Echinacea Root 400 mg	100 Caps
4662	Purplea Root	250 Caps
4665	Echinacea/Goldenseal Root	100 Caps
4666		250 Caps

EACH CAPSULE PROVIDES:

Valerian Root Extract 4:1 (Valeriana officinalis)	200 mg
Passion Flower Extract 4:1 (Passiflora incarnata)	200 mg
Hops Extract 4:1 (Humulus lupulus)	100 mg

4725	Pau d'Arco 500 mg	100 Caps
4726		250 Caps
4728	Pygeum & Saw Palmetto	60 Caps

EACH SOFTGEL CONTAINS:

Pygeum Extract	25 mg
Saw Palmetto Berry Extract (Serenoa repens)	80 mg
Pumpkin Seed Oil	750 mg

4730	Red Clover 450 mg	100 Caps
4733	Rei-shi Mushrooms 600 mg	100 Caps
4734	Saw Palmetto Extract 80 mg	90 Caps
4735	Silymarin 150 mg 80%	60 Caps
4737	+ 350 mg Turmeric	120 Caps
4750	Slippery Elm 400 mg	100 Caps
4770	Valerian Root 500 mg	100 Caps
4771		250 Caps
4780	Yucca Root	100 Caps

Code	Product	Size
4215	Chamomile Tea Bags	100
4240	Comfrey Leaf Tea Bags	25
4280	Hibiscus Punch Tea Bags	25
4285	Lemon-Mint Tea Bags	25
4300	Pau d'Arco Tea Bags	25
4305		100
4325	Peppermint Tea Bags	100
4340	Relaxing Tea Bags (poppy,	25
4341	chamomile, catnip, passion	100
	flower, valerian)	
4350	Rose Hips Tea Bags	100
4540	Sassaparilla's	4 oz.
4370	Senna Tea Bags	25
4380	Spice Tea Bags	25
	(Orange-Cinnamon Spice)	
4400	Three Berry Tea Bags-Best secret	25

HERBAL POWDERS

5010	Cayenne Pepper 40,000	3 oz.
5015	Echinacea Purpurea Root	3 oz.
5020	Garlic Powder	4 oz.
5030	Goldenseal Root Powder	2 oz.
4152	Panax Ginseng Powder	4 oz.

*Learn to become a HERBULOGIST.
Look up each of the herbs in your Batch Book pgs 63 to 79 and determine which are right for you at this time in your life.
Cat's Claw 4oz \$6.75
Pau d'Arco 4oz \$1.75*

CHICKEN OUT!

For the past few years, Americans have been eating less beef and other red meats. This is a very good idea, for reasons that have already been presented in RED MEAT "BLUES". However, in their "stampede" away from beef, many Americans are turning to eating chickens, turkeys, ducks and other birds, for red meat substitutes.

This is ill-advised for the following reasons:

1. Although promoted for its low fat content, chicken flesh is not a very lean meat. White meat chicken (with skin) contains almost three teaspoons of chicken fat in every (small) three-ounce serving; chicken without the skin still packs 1.2 teaspoons of artery-clogging fat.⁵⁷ If you have ever seen chicken soup cooking in the pot, you have seen the fatty truth of chicken flesh in the oily, yellow globules floating on the water. Chicken fat, like all animal fat, spells trouble in your bloodstream.

2. People who consume large amounts of meat protein, like chicken flesh, are more susceptible to thin, easily fracturing bones, a condition known as osteoporosis. (See "A FISHY STORY," next). The more protein in the diet, the greater the calcium loss from the body's bones, out through the kidneys. As you might expect, osteoporosis is most rampant in the countries which consume the most poultry and other meats.⁵⁸

3. The increasing salmonella bacterial contamination of chicken is a severe threat to the public health. Infection from this bacteria can cause severe dehydrating diarrhea, infection of lungs and nervous system, a lingering arthritis, and not infrequently, death. The U.S. Communicable Disease Center and the Food and Drug Administration estimates that in 1985, four million Americans became infected with salmonella bacteria.⁶⁰ Thirty-five thousand people were hospitalized. One hundred twenty thousand victims were left with chronic, crippling arthritis, and 1,000 people died.

The cost in hospital expenses, lost work time and human suffering due to salmonella poisoning from poultry is staggering. Millions of cases of the "flu" that strike people each year are suspected as being salmonella food poisoning. Poultry is the prime carrier of this bacteria to American dinner tables.⁶¹

Salmonella contamination is endemic in the poultry industry. This chronic contamination largely results from feeding grain to chickens that is laced with antibiotics and mixed with salmonella-tainted chicken manure as a "volume extender" and protein "booster". (Such bacterially-tainted volume extenders made with chicken manure are also fed to cattle, thus promoting the spread of Salmonella to beef products as well.) According to the U. S. Department of Agriculture's own inspection records, at least one out of three chickens purchased at the supermarket is contaminated with salmonella bacteria.

The very act of cutting and preparing such a bird carcass will almost surely contaminate the kitchen counter, cutting boards, knives and other utensils, and "clean-up" sponges. A contaminated knife used to cut vegetables, or a salmonella-tainted spoon dipped into the potato salad, would quickly spread the contamination to other foods prepared in the same kitchen. This seems like reason enough to abstain from bringing these contaminated carcasses into the kitchen where food is prepared.

4. There is a disturbing relationship between chickens and lymphoma, cancer of the lymph nodes. Lymphoma is the most common cancer of chickens, and is caused by a virus passed from chicken to chicken. It is called "Marek's disease," and there is a strong suspicion that this virus can induce cancer of the lymph nodes in people.⁶²

Poultry farmers have an alarmingly high rate of lymph cancer of any occupation.⁶³ They work in chicken houses, breathing the dust, and, of course, most eat a lot of chicken meat. Medical researchers who have worked with the chicken lymphoma viruses have contracted cancers of their own lymph nodes and the tumors of humans and chickens are almost indistinguishable.⁶⁴

Linking chicken to these cancer viruses has yet to be conclusively proven, but the evidence of the connection is quite worrisome.⁶⁵



6. Before we "fly the coop," let's consider another health-threatening product taken from chickens, their eggs:

Eggs carry a triple load of trouble for people who eat them:

(a) The yolk of a hen's egg is one the densest concentrations of animal fat on the planet. It is made to fuel a baby chicken for twenty-one days with no other energy. When egg yolks are eaten, this concentrated fat pours through the bloodstream, raising the cholesterol and thus contributing to clogging of the arteries.⁶⁶

(b) The albumin protein of egg whites is very concentrated, and, like all concentrated animal proteins, can contribute to leaching calcium out of the bones, leading to osteoporosis.⁶⁷

(c) Egg products have been shown to be carriers of salmonella bacteria, with all the problems that implies. The salmonella bacteria populates the chicken's egg-producing organs, and thus contaminate the egg from within, before the shell goes on.⁶⁸

There is no reason why a healthy human being should eat the eggs of chickens, and very good reasons why not.

Rather than ingesting chicken meat, eggs, and other poultry products, the wise consumer, seeking "clean protein," should rely on tofu, legumes, grains, green vegetables, and other nutritious non-animal foods. The tastes of delicious vegan dishes, like grain-burgers, tofu cutlets, seltan stew, and tempeh creations, soon replace the desires for the muscles of chickens, turkeys, ducks, geese, Cornish hens, and other commonly eaten birds. Here is one time when "chickening out" is a brave move, and a smart one, too.

COMPLEMENTARY MEDICINE HEALTH CARE

Natural Therapy For High Blood Pressure & High Cholesterol
To Avoid Drug Therapy.

High Blood Pressure (DUKE)

Celery (at least 4 stalks daily)
Garlic w/meals 1/2 Lb. whol.
Hawthorn tea 4.50
Saffron 4 8.98
Fennel 4 1.98
Oregano 11 2.60
Basil 11 1.84
Valerian 11 2.02
Onions (at least 3 stalks steamed)
Tomato (high in GABA) daily
Broccoli
Carrots
Black Pepper
Vegetable Soup in slow cooker whol.
KUDZU Caps 50mg 100/9.98
(pueraria)
Helps prevent Cancer & Heart Disease

HIGH CHOLESTEROL

Carrot 5 in blender with
Carrot Tea (cut) 1/2 Lb 6.65
Avocado (absorb on skin problems)
Beans - Lecithin (granules) 1 tbs 2X daily
Celery - tomatoes
Garlic - 3 caps. 3 cloves steamed.
Ginger - 3 caps - use in tea.
Flaxseed (sprout) USE NOW.
Nuts: Almonds, Brazil, Walnut
Safflower oil (cold pressed)
phytoosterols: dk. green lettuce (Romaine)
sunflower seeds (sprout), okra,
cucumbers, asparagus, cauliflower
spinach, figs, onions, straw-
berries, pumpkin or squash
radish, apricots, figs.
Soak apricots

1. Study BALCH AND
DUKE THOROUGHLY.
2. Post a copy of their
recommendations in
your kitchen and
follow them conscient-
iously.
3. If you have these
disorders, you must
be a very strict
vegetarian!

4. Because of the many
adverse side effects
of pharmaceuticals,
many doctors are add-
ing complementary
medicine to their
practice. Bring
your program of
natural healing to
your doctor for his
guidance and suggest-
ions.

COMPLEMENTARY MEDICINE

BALCH - Natural Healing - NO DRUGS -

HIGH BLOOD PRESSURE

Full Spectrum Minerals
Garlic - Parsley - Rosemary
L-Carnitine
Soy Powders
Selenium
CoQ10
Flaxseed Oil
Vit. C 500 to 600 mg.
Lecithin
Vit E 100 IU to 400 IU.
Super Digestive Enzymes
Spirulina & Proteolytic
Resh mushrooms Enzymes
Vit A + D 25,000/400 IU
Raw heart glandular
Vit B Complex 100mg 2x
Cayenne, chamomile, fennel
tea tea tea
in caps.

HIGH CHOLESTEROL

1 APPLE / Full Spec Minerals
Chromium picolinate
CoQ10 - Lecithin
Lipo-Trims - Olive Oil -
Vit B Complex 100 mg
choline - inositol
Vit. B3
Vit C 500 - 800 mg
Vit E Emulsified
Flaxseed Oil
Super Digest. Enzymes &
Proteolytic Enzymes
Selenium
shitake or Reishi
Cayenne, golden seal and
hawthorne (tea)

• Fresh Fruit Juices
• Monthly Spinal Massage
• Use Only Cold-Pressed Oils

• NO COFFEE
• Advanced Care Cholesterol Kit
• Johnson & Johnson - Reading 10/15/01

• CHROMIUM GTF • A VITAL MINERAL

• **Makes Insulin More Efficient. Helps Prevent:**

- **Diabetes**
- **Atherosclerosis**
Most Common Cause of Death Among Diabetics.
- **High Blood Insulin**
- **High Triglycerides**
- **Low HDL Cholesterol**
- **Poor Wound Healing**
- **Low Male Sperm Count**
- **The Roller Coasters:**
 1. **Hyper-Tot Hypoinsulinemia**
 2. **Hyper-Tot Hypoglycemia**
 3. **All of the Above Are Causes of:**

Cardiovascular Disease
GTF MEANS -

- **Glucose Tolerance Factor**
- **Chromium RDA = 200 mgg**
- **GTF: The Ability of The Body To Clear Glucose From The Blood Stream.**

For 10,000,000 Adult Onset Diabetics - Diet & Weight - Are The Key Control.

Enema Pair:

- **Eliminate**
- **Foods Made With Refined Flour**
- **Sugary Desserts**
- **Syrups & Candies**
- **Soft Drinks**
- **Phosphates Bind Up With Chromium And Iron And They Pass Right Thru.**
- **Drink Your Milk Before bedtime And Between Meals.**
- **Processed Foods Are Very Low In Chromium**

- **EAT**
- **Whole Grain Cereals**
- **Potatoes With Skin**
- **Fresh Vegetables**
- **Fresh Fruit**

Pre-toasted grains (Barley, Rye, Oats, Speltz, Quinoa, Buckwheat, Amaranth, Millet, Sorghum, Teff, Triticale, etc.)

Make Your Own Cereals From Basic Grains

Also use soy powder (toasted)

#1542 FULL SPECTRUM MINERALS

Two Tablets Provide:	1000 mg	100
Calcium (Carbonate, Amino Acid Chelate, Citrate)	1000 mg	100
Magnesium (Oxide, Amino Acid Chelate, Citrate)	500 mg	125
Zinc (Amino Acid Chelate)	22.5 mg	150
Copper (Amino Acid Chelate)	20 mg	120
Potassium (Potassium)	1 mg	50
Manganese (Amino Acid Chelate)	99 mg	50
Selenium (L-Selenium Methionine)	5 mg	50
Chromium (Trivalent, Picolinate)	100 mg	50
Molybdenum (Amino Acid Chelate)	50 mg	50
Vitamins (Amino Acid Chelate)	150 mg	100
Iodine (Kelp)	50 mg	50
L-Glutamic Acid (HCL)	200 IU	50
Vitamin D (Cholecalciferol)	3 mg	50

Basic ingredients reduce 70 trace minerals and cofactors derived from ancient sea deposits.

CONSTIPATION

- **READ BALCH and DUKE on CONSTIPATION**
- **Acidophilus:** Increase good bacteria in GI tract
- **Nutra Flora (KOS):** Nourishes good bacteria
- **Alice's:** Excellent nourishment
- **Barley or wheat grass:** and high source of chlorophyll
- **Spinach:**
- **Aloe Vera:** Heals and cleanses GI tract and softens stools. Coz. concentrate makes 1 gal (4 cups) heavy
- **Apple Pectin:** softens stools, absorbs heavy metals, corrects constipation. (Eat an apple a day)
- **Vitamin D:** 2500 IU, 1000 IU-D. Vita-A Heals GI tract
- **Read Balch pgs 13 & 14, 19.** You may want to take a lesser dose or take this one every other day. (250 @ 8:35)
- **Vita-B Complex:** Aids digestion of fats, carbohydrates, and proteins. (0.50 caps 250 @ 7:00) at retail.
- **Vita-C Complex:** 500-2000 mg, divided doses (4 cap = 500 mg) cleanses, heals, softens stool. Use max. amount which does not cause diarrhea. (See powder packet).
- **Cassia Sagittalis:** peristaltic stimulant. (100 caps @ 4:30)
- **Phlegm:** Restores DHEA in cells. (as 500 daily) see page 125-6
- **Dandelion:** Fennel, Carlin, Ginger - Broad Spectrum Herbs
- **Garlic:** Relieves abdominal pain, colon disorders, gas.
- **Garlic:** Destroys harmful bacteria in colon
- **Ginger:** colon cleanser, aids bowel disorders, indigestion
- **Goldenrod:** GI cleanser - with biotic.
- **Fennel seed:** Use meal and oil.
- **MSM (Methylsulfonylmethane):** Restores sulfur reserve in cells
- **Rhubarb Root:** Peristaltic stimulant
- **Yerba Mate:** peristaltic stimulant
- **Sylmarin (milk thistle):** Peristaltic stimulant
- **Magnesium oxide:** stool softener (like milk magnesium)
- **Add 1/4 tsp H₂O₂:** converts to magnesium peroxide.
- **Add 1 tsp lemon juice:** converts to magnesium citrate.

#1227 Bone Calcium

Complex: 1300 mg
Excellent supplement.
It's made from the bones of New Zealand calves and is lead free.

CHAPTER 8

NOW HOW, BROWN COW?

Our "rogues' gallery" of health-destroying animal products would not be complete without considering the white fluid drawn from the udders of cows. There are many problems associated with milk and products made from it.

Cow's milk is a superbly designed, high-fat fluid designed by Nature to turn a 65-pound calf into a 600-pound cow in six months. It has a "bovine" mixture of casein protein and saturated fat, and simply is not a natural food for man, woman or child.

Milk was never meant to see the light of day; it is the mother's flowing gift of life to her newborn baby - human, calf or other mammal - and is meant to flow directly from the mother's nipple to the baby's lips. The dairy farm operation is a grim distortion of this process.

Cows are artificially impregnated most every year, and give birth to calves that are almost immediately taken away from them. Female calves are added to the milking herd, while male calves are destined for sixteen weeks in a tiny wooden crate, chained by the neck, drinking iron-poor antibiotic-laced milk, to make them anemic, until their throats are cut and they are made into "milk-fed" veal.

The milk intended for the baby calf is sucked from the cow twice daily by a machine, pooled with other milk, and shipped to the dairy. There, the butterfat (cream) is separated from the milk, concentrated, and processed, and then sold to the public in various forms:

The butterfat is churned with air into BUTTER, or diluted with milk and sold as CREAM.

The butterfat/milk mixture is mixed with sugar, frozen, and sold as ICE CREAM.

The butterfat/milk mixture is congealed with rennet (from calf stomach) and bacteria, and then aged with fungus mold until it congeals into thick lumps, called CHEESE.

The butterfat/milk mixture is fermented with bacteria into SOUR CREAM or YOGURT.

The butterfat is mixed with cocoa powder and sugar and sold as MILK CHOCOLATE.

These are all artery-clogging forms of animal fat made from cows milk.

Consider the fat content of these popular dairy foods:

Butter = 80%

Cream = 40%

Ice Cream = 20% - 40%

("Luxury" ice creams have the highest fat content.)

Cheese = 25% - 40%

Chocolate = 25% - 40%

Eating foods that contain these amounts and types of animal fats has been conclusively linked with heart attacks, strokes, and cancer growth.⁹⁹

Dairy products also contain animal proteins, like casein, that can contribute to allergic/inflammatory reactions, such as chronic runny noses, recurrent ear and bronchial infections, eczema, asthmatic bronchitis¹⁰⁰, and other inflammations of joints¹⁰¹, skin and bowels.¹⁰²

COW'S MILK for CALCIUM? - A "MOOOOT" POINT

Although promoted as good sources of calcium, vital for strong bones, and "preventatives" against osteoporosis, milk, cheese, yogurt, and ice cream are not really wholesome sources of calcium. These dairy products contain significant amounts of saturated fat, allergy-itching cow protein, and pesticides, as well as a large load of phosphate, which can neutralize the benefits of calcium.

Consuming dairy products does not seem to prevent osteoporosis. The nations with the highest levels of dairy product consumption are also the nations with the highest rates of osteoporosis¹⁰³. This effect is probably due to the calcium-robbing effect of the accompanying concentrated protein load of animal products, including the protein found in dairy products themselves.

In one study, (sponsored by the Dairy Council!) women consuming three eight-ounce glasses of cow's milk per day still lost calcium from their bodies, and remained in negative calcium balance, even after a year of consuming almost fifteen hundred milligrams of calcium daily!¹⁰⁴ It is the high protein diet, laden with poultry, fish, and dairy products, that steals calcium from the body, rather than insufficient calcium consumed in the diet.¹⁰⁵ Taking extra calcium in the form of supplements has not been shown to be effective in preventing or reversing osteoporosis.¹⁰⁶ Any adult already experiencing osteoporosis, or feeling that they may be at risk for it, can slow down the rate of calcium loss from their body by:

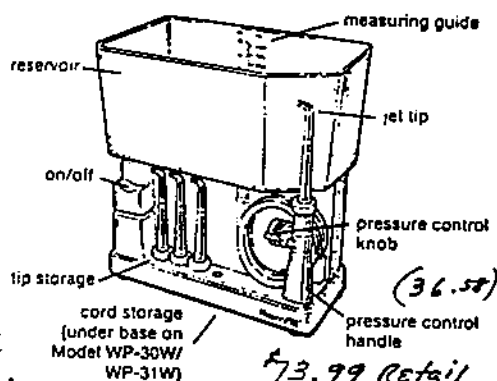
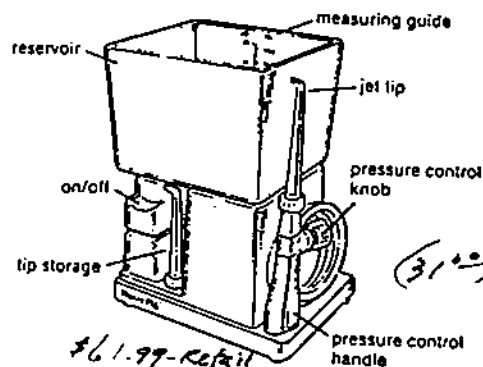
- 1) adopting a healthful, low-protein diet

Commercially Prepared Foods Are BAD FOR YOUR HEALTH

- Stouffer's Pasta Carbonara
- Swanson's Great Starts Breakfast
- Louis Rich's Lunch Breaks
- Waggen Daz Ice Cream
- Campbell's Regular Soups
- Hormel Chili - No Beans
- Turkey Franks Better Than Beef Franks Usually a Scam
- Fruit Juices & Fruit Drinks: Poisoning Causes Vast Losses & Nutrients
- Swordfish Frequently Contains Lg. Amounts Toxic Contaminants
- "Healthy" Cereals Can Be Horse For You Than Regular Cereals
- Many Diets Will Actually Make You Fat
- There Are Still Artificial Sweeteners That Cause Cancer
- SOME PROCESSED FOODS THAT ARE BAD FOR YOUR HEALTH: Cereals, Lunches, Meats, Cookies, Cakes, Chicken Dishes, Ice Cream, Frozen Desserts, Frozen Potato Dishes, Margarine's, Snack Chips, Frozen Dinners, Baked Goods, Bread, Pancakes, Naffles, Croissants, Much More.
- Eat Only Fresh Fruits and Vegetables, 100% Whole Grains
- No Foods Made With Refined Flour
- McDonald's Apple Pie
- There's Nothing in a Shell

Dairy Problems - Early Stage Research of Some Milk Problems

- Milk Has Xanthine Oxidase, They Cannot Digest Galactose
- An Enzyme Which Destroys The Complex Sugar In Dairy Products; Results In Gas And Other Intestinal Problems
- Usually Starts After Age 40
- May Cause Cataracts, 1 of 10 Million Surgeries Yearly
- Fatty Animal Foods - And Fat Containing Dairy Products, And Lactase Enzyme Deficiency May Cause Ovarian Cancer (a Great Killer) Chance Of Surviving After Insulin Producing Pancreas Discovery Only 5 Years
- Drink And Eat Only Non-Fat Dairy Products And Eliminate Fat Homogenized Milk
- Increase Eating Calcium Rich Food, Acidophiles & Calcium, Magnesium, Zinc Get them from your foods
- Lactase Enzyme Deficient
- People (50,000,000) Are
- Some Babies Have A Gene Which Causes Certain Amino Acids In Milk To Trigger Their Immune System To Attack And Destroy The Insulin Producing Pancreas Cells Resulting In Diabetes
- Babies Should Not Be Fed Cow's Milk Until They're Several Months Old
- People (50,000,000) Are
- Lactase Enzyme Deficient



HOW DOES SONIPLAK™ WORK?

Soniplak™ works by applying the principle of "harmonic resonance." Much like a musical tuning fork, the Sonibrush™ brushing attachment and the Sonifloss™ flossing attachments are tuned to or in harmony with certain frequencies of sonic energy. Sonifloss™ and Sonibrush™ convert sonic energy from the power handle into approximately 30,000 micro-cleaning strokes per minute to disintegrate plaque and disrupt bacteria.

WHAT IS SONIC ENERGY?

Sonic energy is a form of vibrational energy in the sonic range of frequencies.





WHY SONIC ENERGY?

Many forms of sonic and ultrasonic energy are used in the health professions to clean and disinfect. Sonic energy is both gentle and effective plus, it is ideally compatible with the physics of brushing and flossing.

You can use any kind of toothpaste or floss. Children are encouraged to use it.

Manufactured by American Dentronics, Inc. I can get you this instrument at great savings.

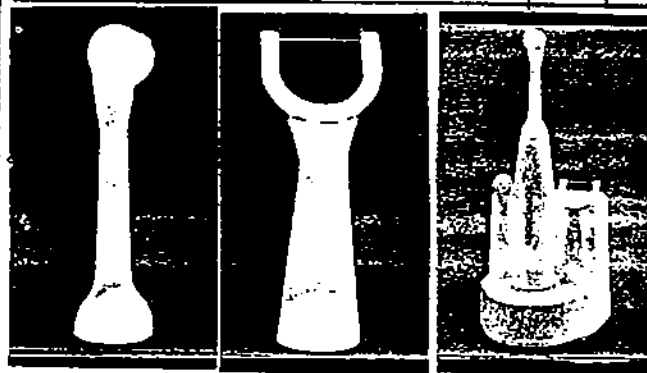
WaterPik™ DENTAL SYSTEMS by Teledyne Water Pik

 WP-21W	WaterPik Personal Dental System features compact functional design for smaller households. Flow control on handle. Reservoir measuring guide for water and antibacterial solutions. Two color-coded jet tips included. Item #285106	\$59.99
 WP-31W	WaterPik Family Dental System features four color-coded jet tips. Flow control on handle. Reservoir measuring guide for water and antibacterial solutions. Item #284242	\$67.99
 WP-33W	WaterPik Professional Dental System features two Pik Pocket® subgingival rubber tips for delivery of antibacterial solutions, two standard jet tips, the Pik Pocket® 10 oz. reservoir with linged lid, and large reservoir with storage lid. Item #295890	\$71.99
 351-W	WaterPik Travel Dental System features compact, portable design. Battery operated. Handsome travel case holds multivoltage charger, two color-coded jet tips and Travel System unit. Use with tap water only. Item #291039	\$78.99

I will be happy to get any of these for you at great saving. They are all excellent.

I use the WP 21 W. It's terrific. Learn to use it. Use it every evening before retiring. You should be able to buy it in the mid 30.00 range.

Water Piks are frequently on sale; check the discount stores.



sonibrush™

sonifloss™

soniplak™
CyberSonic

WHAT IS "LOAD ACTIVATION"?

The Sonifloss™ flossing attachment is tuned so that the phenomenon of "harmonic resonance" occurs only when a "load" or pressure is applied to the floss. This means Sonifloss™ is activated by pressure on the floss - you can test this with light pressure from your finger. We call this Load Activation which makes a lot of sense under actual flossing conditions.

- Flosses and brushes
- Gentle and effective sonic energy
- U.S. Patented & International Patents Pending
- CAD computer engineered in the U.S.A.
- Ergonomically designed
- Cordless, rechargeable and portable
- Ideal for travel
- Uses any kind of toothpaste or floss
- Massages and stimulates gums
- Extra soft end rounded bristles
- Affordable Replacement Brushes
- Dentist developed and tested

If you have any Periodontitis, and buy the WP21W or 31W, also buy a packet of PP3 Pik Pocket Subgingival Tips (2 for \$8.99). The rubber tips enable us to deliver the anti-bacteria solutions (e.g. hydrogen peroxide) deeply into the pockets.

CyberSonic. I have been using it for over 2 yrs (every evening before retiring).

Dental Care is VERY COMPLEX. Work very closely with your dentist and discuss your use of the suggestions in this article with him. He is vital to your dental care. This article in no way is intended to by pass him.

Sonic Toothbrushes with home Subgingival and supragingival irrigators and a fine healthcare diet has changed the inevitable. Until now it's been accepted that it is inevitable that a great many people will lose their teeth, have to wear dentures, will have many cavities with resultant amalgam fillings, have several gold crowns, and two or more root canal procedures. Thanks to the home sonic toothbrushes and flossers these dental tragedies can be greatly diminished.

As we go through life, the pockets formed between the gums and the teeth progressively increase in depth from 2 or 3 mm to 7 or 8 mm or more. 3 mm = 1/8". We can now practice much finer self-help dental care and greatly improve our chances of keeping our teeth and gums healthy and retaining our teeth for life.

Since it is impossible for ^{people} to get down into deep pockets (more than 3 mm) and into the crevices in between ^{the} teeth bacteria, virus, food, plaque and calculus accumulate in them, and result in periodontal disease, which can cause them to lose their teeth and threaten their health with serious disease to death.

Brushing with a manual or electric toothbrush (3,000 strokes per minute) can only remove plaque, bacteria, and food it can contact. In contrast, the supersonic brush, vibrating at 30,000 strokes per minute, gives off sound waves that project beyond the ends of the bristles into the pockets and crevices between the teeth and disintegrate the plaque and disrupt the bacteria by breaking down their cell walls. ^{even} These vibrations alter and weaken the hair-like structures that bacteria use to attach to the teeth and gums. Without these adhering structures, bacteria are easily swept away with your subgingival Pik Backet irrigator. A few years ago, I developed a knowing sensation in my right upper and lower ^{quadrants} ~~areas~~. I am 81 years of age. My dentist examined and x-rayed these areas and my hygienist gave me very thorough hygiene treatments every few months. Then about 6 months ago my hygienist did a very, very deep scaling and cleaning all the way down to depths of the pockets. The cost was \$500.00 as opposed to \$50.00 in the standard hygiene treatment. Five of them are 7 mm deep and several are 6 mm and 5mm. I brushed thoroughly every evening with an electric toothbrush and flossed. I used Stimulents. As soon as I finished eating, I rinsed my mouth and cleaned every space between my teeth with a flat toothpick to insure there was no food in these spaces. I never ate between meals. I used my Water-Pik twice a day especially before retiring. ~~I ate no candy or other sweets. I used my Water-Pik with the standard plastic tip~~

My dentist, hygienist and I did everything we could think of to solve the problem, but I was unsuccessful. Finally a few months ago I went to a periodontist. He advised he would have to cut the gums loose from the teeth very deep down, clean all the roots, treat the area antiseptically and reseed the gums back in place. The fee for the entire mouth was \$2,600.00, but he thought he could get away with doing only 3/4 of the mouth.

I then went to another periodontist. He concurred. I needed the surgery, but he would first try doing 1/2 of the mouth instead of 3/4. Same fees (\$650.00 per quadrant.)

I then obtained a Supersonic toothbrush from American Dentronics and used the brush and flosser and every night. The knowing sensation slowly diminished. For the last month, I've brushed after every meal and flossed every night. This greatly speeded up the healing process. I fill a 4 oz.

plastic opaque bottle with 3% hydrogen peroxide, ^{very lightly} I pour a small quantity into my mouth, swish it around until it foams. I then press the moistened brush into dry baking soda and brush very thoroughly. I follow with the flosser and finally with the water pik. In a few months, I diminished the discomfort about 85%. - 117 -

A few weeks ago I had a dental hygiene treatment. She stated my teeth were remarkably free of plaque and calculus, my gums were very healthy, no bleeding, and my teeth and gums were in excellent health. The dentist then examined me and verified the hygienist's findings; he also stated I had no loose teeth and that I did not need periodontal surgery! He said "If you continue giving yourself the dental care you've been following, your teeth will out last you!" For the last three days, I've awakened without the knowing sensation which has been immediately apparent upon awakening everyday for the last few years. Since I still had some residual knowing, I obtained a Water Pik, Pik Pocket Tip which is an irrigator with a very small soft rubber tip which can be inserted more deeply in the subgingival pockets for much more effective irrigation. I've used it for a few weeks and have achieved great results. *My irrigating solution is*

Hydrogen peroxide 3% (12 oz. 24¢), (1 qt. 66¢)

Many health and dental scientists state that tooth decay, and the resultant amalgam fillings, ^{at any age} are very serious health matters; we must not take them lightly and we must do everything possible to prevent them. They state that root canal therapy must also be assessed as A VERY SERIOUS HEALTH MATTER since a dead tooth can be a source of serious threat to our health.

We must recognize that after conventional brushing (manual or electric) many food particles and bacteria will still be lodged between the teeth as well as under the gums and in the pockets. If they are not removed, they will result in cavities, periodontitis and eventually root abscesses.

The time has come for everyone who has Periodontitis and pockets deeper than 3 or 4 mm. to *add to their* manual and electric toothbrushes, the new sonic tooth brushing and flossing and subgingival irrigation. The cost of hygiene treatments are \$50.00, and more, of deep cleaning \$500.00, of root canals \$350.00 single root, \$565.00 for 2 or 3 root teeth, gold crowns \$550.00, fillings \$50.00 and up, and periodontal surgery \$650.00 per quadrant and \$2,600 for the whole mouth.

Heed what Dr. Hal Huggins has to say in the following pages about the dangers of amalgam fillings and root canals and consider the cost of dental care. Get a supersonic toothbrush and flosser and subgingival irrigator and go on a super nutritional diet; become a vegetarian. The gums, teeth and bones that hold the teeth require super nutrition.

If you are concerned that brushing with only baking soda and hydrogen peroxide will deprive you of fluoride, read the excerpts from Dr. John Yianouyiannis which are on page 206 and 207 of this book. Of course, you can use any toothpaste you prefer. *If you have tooth sensitivity, use paste with potassium nitrate frequently.*



Patient-Applied Subgingival Irrigation



Patient-Applied Supragingival Irrigation

Subgingival Delivery by an Oral Irrigation Device.

Braun, R.E. and Ciancio, S.G.; J. Periodontol., 63(5):469-472, May 1992.

Summary: Subgingival irrigation with a new soft tip [Pik Pocket®] delivers an aqueous solution to approximately 90% of the depth of pockets, ranging from 0 to 6 mm. Rinsing averaged 21% into the pocket depth.

Design: - Erythrosin dye delivery & tooth extraction
- 70 sites in the Irrigation Group, and
- 75 sites in the Rinse Group

Results:

Pocket Depth	Depth of Delivery	
	Control	Irrigation
1 - 3 mm	21%	90%
4 - 6 mm	21%	90%
≥ 7 mm	—	64%

Depth of Penetration in Periodontal Pockets with Oral Irrigation.

Eagle, W.S., Ford, C. and Boyd, R.L.; J. Clin. Periodontol., 13:39-44, .

Summary: Supragingival oral irrigation with a Water Pik® Irr delivered an aqueous dye solution from 44 to 71% into the depth periodontal pockets.

Design: - Erythrosin dye delivery & tooth extraction
- Nine patients with 20 subject teeth
- Test groups: Irrigation 90° or 45° to long axis

Results: Best with Irrigator tip applied 90° to long axis of the t

Pocket Depth	Percent Delivery Depth
0 - 3 mm	71%
4 - 7 mm	44%
> 7 mm	68%

- 3 Out Of 4 Adults Have Periodontal Disease, Are Bruxers, Have Tooth Destruction From Clenching and Grinding.

- Get Report Of Your Complete Dental Conditions, Depth Of Pockets, Gum Conditions, Bony Recession, Dentin Exposure. Have them record their findings on the following form. Each time you have your pockets measured use the same form to make your comparison study easier.

- If pockets are deeper than 3mm, get a supersonic toothbrush and a water-pik and use them before retiring. If you have had bone loss, take 2 Full Spectrum Mineral Tablets, one morning and one evening. See your dentist for periodic evaluation. Become a vegetarian and go on a complete healthcare diet and lifestyle. Also consider bone calcium tablets (see pg 749.)
- Bruxism is among the oldest maladies known to man. One out of 4 have it. Few are treated before teeth and jaw bones are seriously destroyed, requiring costly rehab and tooth extraction.
- Bruxers grind teeth at night, grind down canine teeth, flatten chewing surfaces of other teeth, shove teeth deep into the bony sockets holding teeth, inflaming the lining causes tooth sensitivity, abscesses at tooth roots and root canal surgery and injury to the Temporal-Mandibular Joint. (TMJ Syndrome). Treatment: semi-soft, custom-made bite plate worn while sleeping and during stress, prevents grinding; the occlusal splint takes the wear, instead of the tooth structure and enamel.

Flosser. Carry with you. If you can - not clean with toothpick (floss) or Dent-Tek because space is too tight.

- 1 Out Of 4 Adults Suffer From Sensitive Teeth. Use tooth paste with Potassium Nitrate.

- *If you have periodontitis (even very mild), "bad" breath, or use this flosser*
a wakening, take it VERY SERIOUSLY. Work closely with your dentist and perform your home self help - dental care VERY AGGRESSIVELY.
- *Here's what I do. I invented the memory key "DR. D.W. GROVE".*
DW = distilled water. Grapefruit Extract 100% concentration. V = vinegar.
- 1. Fill (almost) a 4oz bottle with distilled water.
- 2. Add 1 drop of Grapefruit Extract. (also effective against yeast e.g. candida.)
- 3. Add 1/4 tsp of 3% hydrogen peroxide. *SEE pg 138C*
- 4. Add 1/2 tsp organic ^{apple} brown cider vinegar (non-refined)

- * 5. Shake. Swish a small amount thoroughly thru-out the mouth. Swallow (or spit out if you prefer).

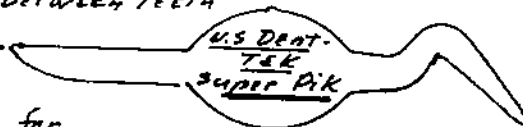
• AFTER EATING

1. Rinse mouth very aggressively and thoroughly with water.
2. Clean (very thoroughly) between the teeth and pockets with a Skat tooth pick.
3. Clean remaining food particles and plaque using the white plastic U.S. Dent-Tek Super Pik.
4. Rinse with Dr. D.W. GROVE. If you use vinegar in the nose or ears be sure there are no particles (present in apple cider non-refined vinegar). White distilled vinegar is clear.

start with this end between teeth #1 and #2.

thicker side up for upper teeth

thicker side down for lower teeth.



Nose down for upper teeth

Nose up for lower teeth

"GOOSE YOUR PLAQUE"

- * Do Not Touch Bottle to the lips. Pour solution into a tablespoon or small glass. Then pour into the mouth. Don't transfer bacteria from the lips into the solution. Make a fresh solution very frequently. Keep - 119 - the bottle very clean.

Chart of Subgingival Pockets

Patient's Name _____ Date _____

[illegible]

- Mesial(M): toward the front
Distal(D): away from the front.
1. Back upper right tooth
 32. Back lower right tooth
- Numbers are millimeters of depth from the gumline to the bottom of the pocket. Pockets greater than 3mm, may retain food and harbor germs. Preventive care demands these pockets be cleaned out daily, especially before retiring. If you are experiencing any discomfort up in the gums, use your Supersonic Toothbrush 2 to 3 times daily and follow with your Supersonic flosser and Water-Pik with Pik Pocket tip and antiseptic solution (Hydrogen Peroxide H₂O₂)
- Get a copy of your periodontal examination and have your dentist or hygienist explain it to you. Be very clear a copy of your periodontal examination and have your dentist or hygienist explain it to you. Be very conscientious about keeping the pockets in your mouth CLEAN.*

-120-

Get a copy of your periodontal examination and have your dentist explain it to you. Be very critical and ask your periodontal examination and have your dentist or hygienist explain it to you. Be very conscientious about keeping the pockets in your mouth clean.

FREQUENCY OF SYMPTOMS FOR HEAVY METAL TOXICITY

Percentage of 1320 respondents indicating presence of symptom.

Symptom	Percentage	Cavity Prevention And Tooth Whitening.
1. Unexplained irritability	73.3	1. After eating pour water in the mouth, swish vigorously.
2. Constant or very frequent periods of depression	72.0	2. Use a flat tooth pick; clean all spaces between the teeth.
3. Numbness and tingling in extremities	67.3	3. Use DENT-TEK to insure removal of all plaque and clean spaces
4. Frequent urination during the night	64.5	footight for wood toothpick.
5. Unexplained chronic fatigue	63.1	4. If you have spaces too tight for Dent Tek use flosser
6. Cold hands and feet, even in moderate/warm weather	62.6	in these spaces especially
7. Bloating feeling most of the time	60.6	5. Rinse mouth with Grapefruit Juice Extract (surfactant).
8. Difficulty remembering or use of memory	58.0	To make, fill a 4oz bottle with
9. Sudden, unexplained or unsolicited anger	55.5	distilled water add 2 drops of Grapefruit Extract. Code
10. Constipation on a regular basis	54.6	(Nov) #3240 / ea. 7.95 Retail.
11. Difficulty in making even simple decisions	54.2	Rinse thoroughly. Before spitting
12. Tremors or shakes of hands, feet, head, etc.	52.3	out brush with soft toothbrush
13. Twitching of face and other muscles	52.3	6. Wet tooth brush with 3% hydro-
14. Experience frequent leg cramps	49.1	gen peroxide. Put a copius
15. Constant or frequent ringing or noise in ears	47.8	amount of baking soda on
16. Get out of breath easily	43.1	the brush. Brush thoroughly.
17. Frequent or recurring heartburn	42.5	7. Before retiring, brush with
18. Excessive itching	40.8	the Cyber sonic Tooth brush
19. Unexplained rashes, skin irritation	40.4	and a mixture of 3% hydro-
20. Constant or frequent metallic taste in mouth	38.7	-gen peroxide and baking
21. Jumpy, Jittery, Nervous	38.1	soda.
22. Constant death wish or suicidal intent	37.3	8. The above is what I do. You'll
23. Frequent insomnia	36.4	have to determine what is
24. Unexplained chest pains	35.6	right for you. Check with your
25. Constant or frequent pain in joints	35.5	dentist.
26. Tachycardia	32.4	
27. Unexplained fluid retention	28.2	
28. Burning sensation on the tongue	20.8	
29. Get headaches just after eating	20.1	
30. Frequent diarrhea	14.9	

• For periodontitis or bad mouth taste upon awakening: 1. Sit on the side of the bed. 2. Pour a sip of 3% H₂O₂ in your mouth. 3. Lean far back and support yourself on your elbows. 4. Hold your face near horizontal and gargle. 5. Sit up and keep swishing until you have achieved a thorough cleansing. 6. Spit out all H₂O₂ foam. Do not swallow any of it. The above outlines my oxygen therapy technique. You will have to develop your own customized procedure. -121-

INTRODUCTION TO YOUR FILLINGS

by Hal A. Huggins, DDS MS

If you are like most Americans, or most people in the world for that matter, you probably have mercury fillings in your mouth. Mercury fillings, also known as "silver fillings" or "amalgam" fillings, are the most common fillings in the world. Called silver because of their color, they actually contain from 45% to 52% mercury. Copper, tin, silver and zinc make up the remaining volume.

There is much discussion in the dental profession today about the safety of mercury containing fillings. This is not new. The dental association of 1840 actually destroyed itself over the same argument. At that time members of the association who PLACED mercury were expelled from membership. Today members who even TALK against mercury run the possibility of not just expulsion, but of having the American Dental Association (ADA - the political lobbying arm of dentistry) put pressure on state regulatory agencies to remove the license of any dentist who mentions mercury might be toxic. The ADA even calls it "unethical" to inform patients of the potential dangers of the most hazardous natural metal known to mankind.

Arguments are probably more emotional today than they were in the 1800's for several reasons. Today more people actually have mercury fillings. According to the ADA at least 85% of the American population have fillings, and not only that, most people have over 10 of these fillings in their mouths. Another good reason for concern is that for the past 15 years the most popular mercury filling has been the "high copper" amalgam that boasts 30% copper. Scientific studies have proven that the new high copper fillings release mercury (and copper) at a rate of 50 times faster than the pre-1980 amalgams.

The pro-mercury group has a big concern too. Liability lawsuits have been settling in the millions of dollars. Manufacturers have increased their liability insurance by 10-fold since 1984 when the biggest exposure of mercury hazard was presented directly to the ADA, National Institutes of Health, and FDA simultaneously.

Anti-mercury doctors have pointed out the tremendous increase in what are called "autoimmune diseases" in the last couple of decades. Autoimmune diseases are diseases in which the cells of one's immune system start destroying one's own tissues. Examples of autoimmune disease are, Multiple Sclerosis, Lupus erythematosus, Diabetes, Arthritis, Lou Gehrig's disease, and of course, AIDS.

Autoimmune diseases, when related to dental mercury, can be explained in the following manner. The white blood cells (lymphocytes) of the immune system have

a special team called the surveillance cells. They wander around the body checking every single cell of your body several times each day. If your tissue cells have your individual personal code on them, they are called "self" cells, and the surveillance cells go on to check other cells. Should an atom of mercury, or copper, or nickel, or any of the toxic dental materials become lodged in one of your cells, the surveillance cell yells, "NON-self" and other white blood cells instantly destroy the non-self cell. Yes, that's all it takes to create an autoimmune disease. Your body cells find a just slightly altered cell, then more and more of them, and pretty soon a whole tissue is damaged to the point of being non-functional. If a nerve cell is involved (myelin in particular) then the process is called Multiple Sclerosis. If enough pancreas cells are destroyed, then your disease is called diabetes, etc., throughout the body as your genetically weak cells allow an intrusion of a toxic metal.

For decades the ADA has steadfastly stated that mercury was tightly bound within amalgam and could not possibly get out. Chemists and toxicologists, on the other hand, point out that when multiple metals are coated with a solution that conducts electricity (saliva being an excellent example) that not only is electricity generated, but metal ions -- especially mercury -- are liberated from the surface of the metal compound. They point out that even industrial meters held over a filling for 10 seconds can register levels higher than the EPA allows us to be exposed to for a few hours a day. Fillings, of course, emit this mercury vapor 24-hours per day. It tends to accumulate within your body, for we humans do not have a good mechanism for eliminating this toxic material.

Yielding to scientific pressures, the ADA lobby now admits that mercury, prior to placement into a tooth is hazardous. They tell the dentists to use a NO-TOUCH technique, because the dentists and their personnel might become contaminated. They admit that the "scrap" amalgam -- the excess amalgam left over after filling your tooth -- also constitutes hazardous waste. Should a filling be replaced, the amalgam removed from your tooth should be treated as hazardous waste, but during the time that the mercury is in your mouth, it is perfectly safe. Scientists say this is a ridiculous statement that is in total violation of science and common sense.

If mercury is so dangerous, shouldn't we all run out and have our fillings removed? The answer is a great big NO! That may come as a surprise, but it is as safe as jumping out of an airplane when your watch says it is time to be at your destination.

Removing, and just as important, replacing fillings, is a good way to create damage to your body that might not have happened otherwise. Pain, discomfort and generation of disease are easy to come by if fillings are randomly removed and replaced. These statements are made as a result of observing hundreds of patients that we treated incompletely when we started amalgam removal. We have also listened to the 20 or so patients daily who call to say that they rushed out, had their

- 3 -

fillings replaced, and are now in worse shape than they have ever been. Why does this happen? Some of the reasons are now obvious scientifically, and others are still elusive in reason, but obvious in real life.

Compatibility -- or rather a lack of compatibility of the new filling -- is probably the most common cause of patients becoming ill after amalgam removal. The components of amalgam, such as, mercury, copper, tin, zinc and silver, each can have a detrimental effect upon your immune system. This is reason enough to have them removed. BUT -- many of the replacement materials can be almost as damaging to your immune system. It doesn't take much background in chemistry to hear words like formaldehyde, hydroquinone, phenol, nickel, beryllium, styrene, strontium, toluene, urethane and xylene to decide that these materials may not be compatible to your immune system. They don't even sound compatible.

If you replace one toxic material with another, your immune system may react in an entirely different way, and present you with some brand new disease conditions. Blood tests are available today to help you and your dentist determine which filling materials would be best suited for your body in order to avoid the "frying pan into the fire syndrome".

Your immune system also has cycles of activity that respond negatively should you violate them. If you have mercury removed on a Monday, the following Monday your white blood cells are being traded in for new ones, and there is a period of reduced immune protection. Should you experience another exposure to mercury by having fillings removed on that day, you may experience the sensations of having a really bad case of the flu for a day. If this exposure occurs on day 21 from having your original exposure, then if your body has a specific weak link for a "hereditary" disease, it is quite easy for that disease to obtain a foothold on your health for years to come. Sound dangerous? Unfortunately it is. Your body must be treated properly in these events when you are trying to do the best thing for it.

The order in which the old fillings are removed is another thing that can create more hazards than health. For some reason, accepted, but not totally clear, your body responds to the removal of the fillings according to their electrical charge. Fillings are like little batteries, and they generate electrical current. Some will read positive, and some negative when touched with an ammeter. This is similar to the test you do in a drug store when purchasing a battery for a toy. You place a probe on each end of the battery and the meter gives you a positive or negative reading along with a measure of the intensity of the charge. Evidently whether the filling is pushing electrons from the filling up into the brain, or pushing protons makes a difference to the body's own electrical system when these fillings are removed. It's rather complex, but there is a proper order to removing the fillings if one wants to have them removed without making them feel ill as a result of the process.

Another irritant to your immune system is the chemical challenge from dead teeth. Most of these are called root canal teeth, for they have had the nerve removed from their center. Chemical testing from a government research laboratory in Canada has shown that a toxic substance is formed within the root proper of a dead or root canaled tooth. This substance migrates to the outside of the root to where the tooth and bone meet. Autoimmune responses can occur as a result of this chemical flowing into your blood stream. This basic concept was understood by the head of research of the dental association for several decades. Organized dentistry has resisted the evidence that dead teeth endanger the health of the people who have had them placed. Considering that dentistry in the United States alone places over 20 million per year, it is easy to see the economic and legal implications of blowing the whistle on such a practice. For people who have serious diseases, they are rarely hesitant to exchange these teeth for better health. It should probably be a personal decision for the patient, and not a routine procedure to either place root canals or remove them. The proper procedure is probably "informed consent". Let the doctor and patient examine the patient's symptoms, chemistries, and options, and allow the patient to be involved in the decision whether to keep a dead tooth in their body or not.

After removal of all immune offending substances and replacement with more compatible substances, the process of healing begins. We offer our patients a diet based on their personal blood chemistries to provide the best raw materials for rebuilding damaged tissues. Detoxification by several means may be important for as long as a year after the offending materials are removed, because these toxins have a tendency to be stored in the body until some particular situation occurs to kick them out. Intravenous procedures are good for some conditions, drugs known to remove heavy metals are good for others, and sometimes simple things like hot baths will cause the body to release heavy metals in the bath tub to the point that they can be scraped off the tub itself.

Whatever you decide, become educated by reading books on dental material toxicity, talk with a physician or dentist trained in these procedures, or go to the library and read on toxicity from the scientific standpoint. Any of these things will better prepare you, but whatever you do, don't just rush right out and have your fillings removed. There are two ways to do it. Fast and right.

Indiana Botanic Gardens,

DHEA 25 mg. Tablets. 100

Whsl. Retail

5.24 16.95

200 8.74 28.95

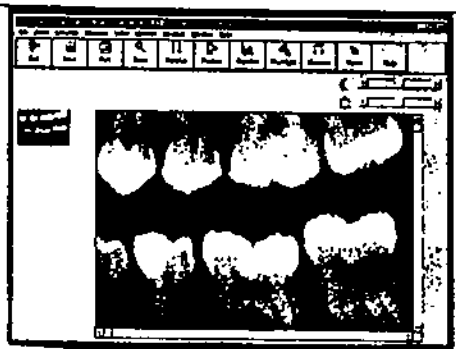
(See next page)

- **DHEA is an acronym for a hormone produced by the adrenal glands** known as dehydroepiandrosterone. A vast amount of research has been done on this hormone, so that its current reputation is backed by solid science. These studies have concluded that DHEA dramatically decreases the risk of heart attack, heart disease, diabetes, osteoporosis, and cancer; extends the life span of animals up to 50%; enhances sexual function; cures impotence; and boosts memory and cognition. The anti-obesity effects are good news. DHEA is more than an appetite suppressant; it alters metabolism to accelerate fat burning and fosters gains in muscle mass. DHEA may be the missing link in our longevity program, in helping prevent 75% of the premature deaths. DHEA may make our senior years more energetic and passionate, as opposed to progressive decrepitude most people experience.
- **TO MAKE DHEA WORK** it must be accompanied by our changing to a thorough healthcare lifestyle. Do not smoke, eat junk foods, let stress get out of hand, do not drink junk drinks and alcohol, or clog arteries with fat. If you do, DHEA will not work.!
- **STUDY DHEA AND DECIDE IF YOU SHOULD BE TAKING IT.**
 1. Obtain "The DHEA Breakthrough" by Steven Cherniske (\$6.99). Study it diligently. I can get this book for you for \$4.20.
 2. If you want to know the level of DHEA in your body - I'll give you a test kit furnished by Diagnos-Techs Inc. (PO Box 58948, Seattle, WA, 98138-1948). It contains two vials. You will insert your saliva in the two vials enclosed and mail it to them with a check for \$41.00. Note this is a non-invasive saliva test (not a blood test). They will send your report to me and I will forward it on to you. It will be graded in nanograms per milliliter. The range is 3 to 10 ng/ml. I was not surprised when mine came back, 2 (depressed). (1 gram = 1000 milligrams (mgs.)); 1 millimicrogram = 1/1000 of a milligram = 1,000,000 of a milligram (mcg); 1 nanogram = 1,000,000,000 (1 billionth of a mg.). I'm taking #8022 DHEA 50mg. (wholesale cost is 90 for \$9.60). I'm now considering taking two per day. These are distributed by the Aspen Group in Richmond, IL.
 3. Ask your doctor if he/she advises that you take it, and be guided by your doctor's advice.
 4. Women usually find that a daily dose in the range of 5 to 25 mg. is optimal. Men often benefit from amounts as high as 50 mg. These are physiologic doses and side effects are rare. See Cherniske Pg. 243-260 Chapter 11 - "What Do You Have? What Do You Need?"
 5. You'll have to decide with your doctor how long you should wait to retake your DHEA test to ascertain its effectivity.

Dental radiography (intra-oral TV) is a new technology which instantly produces greatly enlarged, high quality images (with quick zoom capability) on a computer screen. It allows the dentist to see any tooth (or more), roots, and surrounding structures under high magnification, thereby enabling him to make far superior diagnoses and give superior care and treatment. It uses 90% less radiation, is faster, easier, and cheaper than regular X-ray. Some of the dentists in South Bend who are equipped with dental radiography are:

- | | |
|----------------------|-------------------|
| • Gregory C. Moo and | • Michael Feltman |
| • Jeffery Turner | • Philip Radtke |
| • Stephen L. Nelson | • Michael Griffie |
| • Paul McLeod | • Roger Pecina |
| • Michael Rader | • R. A. Bowyer |
| • John Bond | • Jeffrey Mader |

Urge your dentist to install this technology. In my case it was absolutely crucial to my obtaining proper, needed, fine dental care and I would not obtain dental care from a dentist who did not have and utilize it on me in rendering my dental care.



Digestive Problems: Heartburn, Stomachaches, Constipation - Gas - Eat Healthcare Diet.

Saliva - Vital Digestive Juice	With Aging We Lose:
Eat Highly Moisturized Food And Chew Thoroughly.	Hydrochloric Acid And Lose Power To Kill Bad Germs In Stomach And Digestive Ability And Other Digestive Juices.
Do Not Wash Food Down Incompletely Chewed.	After 40, Loss Is Highly Significant.
Keep Water (Purified Preferred) Near You. Drink 8 Glasses Daily	Prevent Indigestion Hyperacidity, Acid Reflux.
Keep Your Mind On Your Food When Chewing.	Carbohydrate Digestion Starts In The Mouth With Ptyalin Enzymes
Many Intake 5000 Calories Daily And Are Obese And Malnourished.	Protein Digestion Starts In Stomach - Hydrochloric Acid
Any Discomfort After Eating Means We Failed With Our Eating Techniques And Diet.	Fat Digestion Starts In The Small Intestine With Pancreatin & Bile.
Tea with meals Loses 87% of Iron. Coffee With Meals Loses 40%.	Many Are Unable To Produce Even 20% Of The Stomach's Normal Production Of Hydrochloric Acid.
Foods Need To Be Near Body Temperature To Be Easily Digested.	Hypochlorhydria Is Increased By Asthma, Arthritis, Diabetes, Thyroid Dysfunction, and several other diseases and disorders.

Your DRINKS May Be Undermining Your Health And Will Kill You.	How Few Consumers 500-72 oz.
Coffee & Tea with Meals Destroy Iron Absorption. Coffee 40% & Tea 87%; They Also Weaken Our Calcium Absorption Along With Soda Pop, Wine And All Alcoholic Drinks Contribute To Osteoporosis, Many Other Diseases. Artificially Sweetened Sodas, Soft Drinks, Fruit Juices, Fruit Flavors, etc. Are The Above & Also In Colas, Chocolate, Asthma & Pain Medications. They Contribute To Breast Cancer. 75% of Water; Fruit Flavors 90% Water. Fruit-Flavored Drink A Complete Source of Sugar Yearly.	Beer May Contain Propylene Glycol, Antifreeze, Alginate, EDTA, Heptyl Parabens; Wine May Contain Sulfur Dioxide, Copper Sulfate, & PVC. DEPC That Produces Urethane. We Consume Enormous Amounts Of Refrigerated And Frozen Fruit Juices. These Lose A Great Amount Of Nutrients In Processing.
SODA POP May Contain 100 or More Chemical Agents, Some Of Which Cause Cancer. Some Destroy Digestive Enzymes, Wreck Our Digestion And Absorption Of Food Nutrients, Some Form Urethane - A Known Carcinogen Since 1949.	

CONFESSIONS OF A SOFT DRINK

Hello. I am a humble, effervescent liquid. Humble? Well, that is debatable. Actually, I am quite proud of myself. Allow me to brag a little.

I fizz, sparkle, and bubble my way into thousands of people all over the world every day. I HAVE MUCH POWVER! I can cause masses of humanity to make beelines for snack dispensers in plush, high-rise buildings. I stir men, women, and teenagers to dash into their cars late at night to speed to their nearest 24-hour convenience store. I motivate others to root through their purses or pockets for the last vestiges of pennies, nickels, dimes and quarters with which they will gladly part in exchange for me. The best thing about me is: I AM ADDICTING. I am responsible for giving thousands of addicts their daily "fixes". This is because I sometimes contain a substance called "caffeine". Caffeine is a stimulant. It makes their hearts beat very fast and makes their nervous systems work like crazy. They feel as though they could take on the world. I tell you, I have OVERWHELMING PERSONAL MAGNETISM. I'm a sneaky double-agent, too. I pretend to give people all the good they need because caffeine gives them a "lift". However, a few hours afterward they come crashing "down", get shaky, and need me AGAIN. . . for another pseudocharge. This plays havoc with their hearts and nerves, but they still look to me for relief. I feel very, very smug because I CALL THE SHOTS!!

To give me an appealing brown tint, I contain "caramel coloring", which has genetic effects and is a cancer-causing suspect. I sometimes have polyethylene glycol as one of my ingredients. Glycol is used as anti-freeze in automobiles and as an oil solvent.

The bubbles and fizz with which I potently burn human insides is caused by my phosphoric acid and carbondioxide. The phosphorus in the acid upsets the body's calcium-phosphorus ratio and dissolves calcium out off the bones. This can eventually result in OSTEOPOROSIS, a weakening of the skeletal structure, which can make one susceptible to broken bones. Also, the phosphorus fights with the hydrochloric acid in human stomachs and renders it ineffective. This promotes indigestion, bloating and gassiness in many individuals. Carbon dioxide is a waste product exhaled by humans, but they ingest it when they drink me.

I offer a selection of three types of sweeteners, according to the customer's preference. The sweeteners are: Saccharin or Aspartame in the diet type, and Sugar or Corn syrup in my regular drinks. These substances enhance my appeal and come disguised as "good" for everyone. SACCHARIN tastes can be deceiving! Let me explain..

SACCHARIN is an artificial sweetener, which has been shown to cause cancer in laboratory animals. There are warning labels on all my containers in which saccharin is an ingredient. ASPARTAME comes under the brand name NUTRASWEET and has been linked to convulsions, depression, insomnia, irritability, weakness, dizziness, headaches, mood changes and mental retardation.

*Frank Murray
Editor of Better Nutrition
Magazine.*

we've been through 128 pages of materials and information, it's time to make some resolutions.

I RESOLVE TO FIGHT CANCER, HEART DISEASE, DIABETES, OSTEOPOROSIS, ETC. --I WILL--

- PRACTICE PREVENTION OF ILLNESS and immediately go on an illness prevention diet and change my lifestyle. --I WILL--
- EAT ONLY FRESH FRUITS AND VEGETABLES. No prolonged cooking. I will not throw out the juice. I know I must get my vitamins A and C from these foods everyday. Also these foods have anticarcinogenic substances like indoles. I will emphasize carrots, broccoli, green peppers and spinach, fresh, not canned, manufactured, processed, frozen, etc.
- EAT ONLY BAKED FOODS WHICH HAVE BEEN MADE FROM 100% WHOLE GRAIN FLOUR, NO refined sugar, NO refined flour, NO chemical additives, NO preservatives. Many chemical additives and preservatives are cancerogenic.
- EAT CEREALS EVERYDAY which have been cooked from raw multi-grains, non-manufactured, non-processed, no salt, no sugar added. I realize I must get my B vitamins and minerals from grains daily. I will eat multi-grain bread daily.
- I will be a vegetarian, and eat 2/3 of my foods raw and not real cold.
- ELIMINATE: saturated fats (espec. heavy in red meats), fried, barbecued, smoked foods, chemical additives, preservatives, hydrogenated vegetable oils (oils which are solid at room temperature, cholesterol laden foods; I will get rid of my salt shaker, sugar bowl, and artificial sweeteners, ALL foods made from refined flour, white rice, white bread white buns, cakes, cookies, pasta, pancakes, waffles, pizzas, etc. THESE MUST BE MADE FROM 100% WHOLE GRAIN.
- INTEGRATE WHOLE GRAIN FOODS like buckwheat grits, millet, soy grits, brown rice into my daily diet.
- STOP SMOKING, DRINKING, AND OVER-PROTEINIZING. ELIMINATE OVERWEIGHTNESS. Even 5 lbs may place me at risk of cancer, heart trouble, diabetes, etc. I will get my weight down to normal! I realize I can get fat on protein.
- Eliminate coffee, tea, soft drinks, alcohol, and junk food.
- CONSULT A UROLOGIST (for males 40 yrs of age and older) for prostate exam. If he advises, I will have ^{a PSA Test and} ultra-sound exam of my prostate. It's quick, painless, and safe and can detect tumors 2 mm. in size. I realize that by the time they are detected by the finger, they are frequently 4" in size and have probably metastasized; THIS IS TOO LATE. Even benign prostate tumors can be very serious by destroying parts of the sexual organs and function.
- READ ALL FOOD LABELS. If it reads like the index to a chemistry book, I will not eat it. Eliminate chemical additives.

SIGNED

PLEASE POST IN YOUR KITCHEN OR ON YOUR REFRIGERATOR DOOR

- After 50, 50% of the men have prostate trouble. Before 70, prostate cancer is the #2 cause of cancer deaths in men; After 70, it is the #1 cause of cancer deaths. There are approx 400,000 new cases of prostate cancer yearly and 40,000 deaths, plus many, many thousands that go UNDETECTED. We don't know the true number.

DRUGS CAN CAUSE DAMAGE OR NUTRIENTS, OUR HEALTH AND LIFE.	
• Anti convulsants - Sedatives:	• Anti-Inflammatories: e.g. Aspirin
• Wreak Vit D & K Metabolism	• Destroys Vit E, Iron, Folate, AAs
• Cause Folic Acid, Vit B12 Deficiencies	• Oral Contraceptives And Estrogens
• espec. Plus Many Other Serious Disorders	• Destroys B6, Folate, Vitamins, Cancer
• Corticosteroids Wreak Vit D,	
Metabolism, Greatly Increase	
Excretion Of Vit C, Potassium,	
Zinc, B6, Cause Cataracts,	
• Macular Degeneration.	
• Alcohol: Throws Entire Digestive	
System Into Chaos. Destroys	
Nutrients And Their Digestion	
And Assimilation, espec.	
Zinc, Magnesium, Vits, A, B, C,	
B12, C, D, None Escape Unscathed.	
• Antibiotics Kill Acidophilus,	
Destroys Lactase Enzymes.	
• Anti Tuberculars Destroy B6, B12	
Plus A Host Of Others.	
• Diuretics: Severe Potassium	
And Magnesium Excretion.	
• Hypertensives: Be Eggs And	
Many, Many Others.	

RRRP Health Insurance News, Fall/Winter 1994 DRY MOUTH

Most of us, during our lifetime, have had an occasional episode of dryness of the mouth and have thought little about it. However, chronic dry mouth is a condition that affects many individuals, and it can lead to conditions ranging from painful mouth sores to the inability to swallow or talk properly. Although the condition may seem trivial, it can greatly impair daily function.

Incidence

The incidence of chronic dry mouth is surprisingly high. Studies have estimated that approximately 25 million adults in the United States suffer from this condition. The experts feel that the problem is increasing due to an expansion of the aging population, greater use of prescription medicines, more individuals who have radiation treatment of head and neck tumors and an increase in the diagnosis of Sjogren's (show-grins) syndrome.

Most of our saliva comes from three pairs of salivary glands: the parotid, which sit in front of the ears; the submandibular, which are behind the lower jaw; and the sublingual, which lie in the floor of the mouth, under the tongue. Important functions of saliva are the digestion of starches, the lubrication of mucous membranes, cleansing of the mouth, neutralization of acids and alkalies, maintenance of tooth structure, destruction of bacteria and the promotion of wound healing. Eating or sucking stimulates the salivary glands to produce 10 to 20 times the amount of saliva as compared to that of a resting state. Most, who suffer from dry mouth, produce little saliva during the resting phase. The glands are at rest 90% of the day. Therefore, the chronic dryness becomes a problem. I've been using almond oil for the last several months and I find it

The major cause of dry mouth is the continuous use of some prescription drugs. In fact, a

dental expert has compiled a list of 430 drugs that can cause dry mouth. They are medicines that are used for a variety of common ailments and conditions such as depression, high blood pressure, pain, gastrointestinal (G.I.) spasm, urinary tract spasm, fluid retention, colds and the flu. Due to space limitations, all possible conditions cannot be listed here. However, if you suffer from dry mouth and believe that it may be due to medicine, do not stop taking that drug. Rather, discuss the situation with the doctor who prescribed the medicine for you. The benefits of the drug may outweigh the side-effect, and a reduction of dosage or change in medicine may help. Try swishing wheat germ oil (small amount) in mouth. Additionally, x-ray treatment of head and neck tumors may cause atrophy of the salivary glands if the glands cannot be shielded during treatment. The side effect may be a dry mouth for a prolonged period of time.

- Sjogren's syndrome is another important cause of dry mouth. The syndrome is considered to be an autoimmune disease. It follows rheumatoid arthritis as the second most common autoimmune disease. The disease is a condition that primarily affects middle-aged women. Currently, it is difficult to accurately determine the incidence of the Sjogren's, but it has been estimated that one in 500 women may suffer from this condition. Also, it may accompany other autoimmune diseases, such as rheumatoid arthritis, lupus, and scleroderma. It is characterized by dry eyes, dry mouth and joint pain. However, in those with the disease, it has been determined that all the moisture secreting

glands of the body may dry up. Often the condition is difficult to diagnose because so many parts of the body are involved, and evaluations may be presented concerning the area that causes the most difficulty.

Treatment

There are some drugs and devices that stimulate saliva flow. Saliva substitutes may be purchased and used with your physician or dentist's direction. Also, experts recommend the use of sugarless gum and candies to promote saliva flow. With the

use of these options, a perplexing condition may be controlled effectively for most of those who are affected.

Sip a small amount of olive oil and gargle with it.

(or wheat germ oil)
When I encounter this problem, I suck on a dried baby lima bean and find it very helpful. Sugarless gum gets caught in between the teeth, candies and many lozenges are gone in a few minutes and upset the stomach. One baby lima bean will last in the mouth for an hour, and not disturb the stomach. By increasing the flow of saliva, it will aid digestion.

• The mucous membrane in the mouth is very absorptive. If a substance is held in the mouth for a minute or two, and blood is extracted from the toe a minute or two later, it's already there! If it's in the toes, it's already in the brain and every organ of the body. WE MUST WATCH WHAT WE PUT IN OUR MOUTH. We'll eliminate all drugs, prescription, non-prescription, legal and illegal.

• We will eliminate ALL chemical mouth washes and make our own mouth wash with BAKING SODA (1 tsp. per 8oz). We'll brush our teeth with baking soda moistened with hydrogen peroxide. We'll eliminate multitude of chemical concoctions made for the skin and use plain safflower oil (or similar) plain safflower oil (or similar) - Learn to use grapefruit extract! 12/1/98 for the last several months and I find it except it.

What EXERCISE DOES FOR US:



Electronic console

Save Over \$31 On Vitamaster® Fan Bike

88.88

Reg. 119.99

Triple-action fan bike is loaded with quality features, including high-ratio fan resistance and comfortable saddle seat. Model 9831. Made in USA.



Monitor displays time, distance, calories burned, and speed.

Save \$30 On Spalding® Pro Trax™ 2000 Aerobic Treadmill

99.99

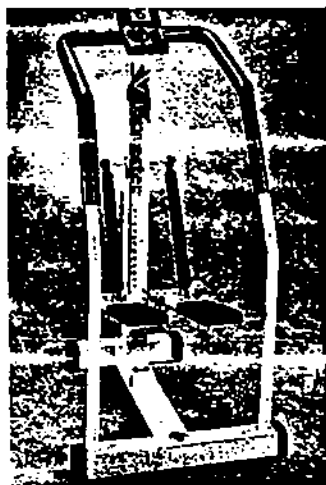
New! Treadmill lets you set the pace. Dual action design combines arm motion with walking or jogging. Matress: Reg. 129.99. Model 9914.

Dual action provides excellent cardiovascular workout.

Folds down and rolls for easy storage.

Adjustable incline.

SPALDING



18.88 Save over \$6 Reg. 24.99

Adjustable exercise step 14x28" non-skid step adjusts to 4" or 7" heights for a low-impact, high-intensity aerobic workout.

88.88 Save over \$41 Reg. 129.99

Vitamaster® Pursuit Stepper Five positions, independent shocks, oversized frame and walkman/water bottle holder.

Equipment Available At Discount Dept. Stores

Also consider using a Trampoline.

You do not have to spend a lot of money for expensive equipment.

Easy Rider. I bought mine at K-Mart Reg. price 99.95; I bought mine on sale for 95¢ and it does the job!

IF YOU WANT TO AVOID BUYING EQUIPMENT, TAKE A BRISK WALK FOR 20 minutes DAILY!! **READ Pg. 75** Ideally walk outdoors to get the best fit of the fresh air and increase your oxygen intake.



19.99 Sale

Your choice Panasonic® Reach Easy two-speed massager or Smooth Operator™ ladies' razor Models 236W, 201.

Panasonic also make another one EX 277 \$49.95 more advanced. It's the one I use. It's very good.

See next page.

- What exercise does for you:
- Lowers blood cholesterol
 - Lowers blood sugar
 - Helps prevent heart attack and stroke
 - Helps control high blood pressure
 - Helps get the weight off
 - Increases circulation
 - Fights anxiety
 - Fights depression
 - Fights arthritis
 - Strengthens bones
 - Strengthens muscles
 - Strengthens the cardiovascular system
 - Strengthens the respiratory system
 - Strengthens the body's immune system
 - Encourages the manufacture and release of the female hormone estrogen for women
 - Does the same thing with testosterone for men
 - Helps get rid of stress and tension
 - Improves mental health
 - Helps to prevent osteoporosis
 - Helps to prevent breast cancer
 - Helps to prevent colon cancer
 - Helps to prevent gastrointestinal cancer
 - Helps to prevent adult diabetes
 - Helps to prevent rectal cancer
 - Helps to prevent cancers of the reproductive system of women.

The Omega-3 Phenomenon

A book review by Rawson Associates
a division of Macmillan Publishing Company



The first medically-based guide to the omega-3 factor in human nutrition, *The Omega-3 Phenomenon*, is a landmark book based on the pioneering research of distinguished medical researcher Dr. Donald O. Rudin. Written by Dr. Rudin and nutritionist Clara Felix, with Constance Schrader, *The Omega-3 Phenomenon* reveals the scientific evidence from Dr. Rudin's research with 44 patients over a period of several years, showing how the critical omega-3 fatty oils profoundly affect a broad range of contemporary health problems, including those of the heart and arteries, the brain, the emotions and general body functions.

According to Dr. Rudin, modern food processing has stripped our food supply of many essential nutrients, most especially omega-3 essential fatty acids. Dr. Rudin shows how replacing the omega-3 nutrient in our diets cuts the risk of heart disease, and many other ailments, such as problems of the skin and bowels, arthritis, tinnitus, hypo- and hypertension, immune and allergic disorders, accelerated aging symptoms and behavior problems. To correct what he describes as "our modern malnutrition", Dr. Rudin presents his trailblazing omega program, which he has used successfully in treating his own patients.

Emphasizing fish oil and nutritional linseed oil in proper doses in our diet, Dr. Rudin goes on to provide advice on how to select healthful nonprocessed food and how to omegaify our diets. Here for the first time is a comprehensive supplement program for ameliorating overt illness as well as a collection of comprehensive diets—omega diets—designed for common health problems such as obesity, premature aging, allergies, and infertility. There are also diets tailored to the special needs of pregnancy and infancy. The medically based, flexible, and easy-to-use three-phase weight-loss program is complete with special omega recipes.

The Omega-3 Phenomenon is available in hardback (\$16.65) published by Rawson Associates, and in paperback (\$4.50) published by Avon Books.

BENEFITS OF THE OMEGA PROGRAM

Biochemical Effect:

Normalizes the body's fatty acids

Normalizes and rebalances prostaglandins

Reduces appetite provocation

Stabilizes insulin and blood sugar levels

Strengthens the immune system

Increases fiber and aerobic bacteria

Normalizes blood fats and lowers cholesterol

Corrects the body's thermogenic system (ability to burn off calories)

Brings enjoyment of total good health

Clinical Results:

Smoother skin, shiny hair, soft hands; increased stamina, vitality, agility, and a zest for life

Smoother muscle action; improvement of many other functions

Eliminates bingeing or addictive need for food

Keeps stamina high for long periods

Avoids or overcomes food allergies; fights off some diseases more effectively

Promotes proper functioning of the digestive tract to avoid gas, constipation, and other disorders

Stronger cardiovascular system; clear thinking

Burns off fat; increases cold-weather resistance; increases comfort

Improved quality of life

Excerpted from *The Omega-3 Phenomenon* by Donald Rudin, M.D., and Clara Felix, Avon Books

Also read *Flaxseed Oil And The Power of Omega 3* by Johnston and Johnston - only 2.95

WHEN TO EXPECT BENEFITS FROM OMEGA-3 SUPPLEMENTS

The following were typical periods of time in which subjects of the pilot study noted the beneficial effects of the Omega-3 linseed oil supplements. A long wait is not always necessary before results are visible:

Time after taking oil supplement	Reaction:
2 hours	Mood improved, feeling of calm, depression relieved
2-7 days	Skin smoother, with less flaking and scaling; backs of hands and fingers smoother
2-14 days	Fewer hallucinations; relief for disturbed mental patients; relief from feelings of anxiety
2-6 weeks	Osteoarthritis relieved, with easier movements and less inflammation and pain Bursitis and other soft-tissue inflammation reduced Tinnitus and noises in the ears subside Dandruff and flaking of the scalp less noticeable; dry skin alleviated
2-4 months	Rheumatoid pain diminished "Easy bruising" reduced Choking spasms subside Fewer muscular spasms; no nighttime leg cramps; relief from ocular spasms Relief from itching and burning sensations Improved skin color. Reduced sun sensitivity
3-6 months	Diminished food allergies Healing of chronic infections Disappearance of rough, bumpy skin on upper arms Improved cold tolerance. Lessening of fatigue Increased calm and feeling of well-being

As you can see from this table, the response time can vary from hours to days, weeks, or months. Improvement in some cases can continue for up to one or two years before leveling off. Allergies often require a long time for improvement. Nothing is guaranteed, because each person's makeup is so individual. Persistent emotional or physical problems may improve only after several months - if at all.

Excerpted from *The Omega-3 Phenomenon* by Donald Rudin, M.D., and Clara Felix, Avon Books

-130 b-

Now Foods #1760 Flaxseed Oil-organic. Refrigerate 12oz. \$10.75

10 TIPS

FOR SAFER EATING

- 1 Eating these raw foods may be dangerous: oysters, clams, eggs (homemade egg nog, Caesar salad dressing, soft-boiled eggs, etc.), milk, or cheese!
- 2 Choose organically grown foods whenever possible to avoid pesticides and protect the environment.
- 3 Assume that raw poultry and meat are contaminated with bacteria—wash your hands and implements carefully after touching them and before touching anything else. Never put cooked meat or poultry back on a plate that contains raw juices.
- 4 Be sure your refrigerator is clean and 40°F or less and your freezer 0°F or less.
- 5 Moldy bread or soft cheese? Toss it. Mold on hard cheese? Cut it off. Never eat moldy or discolored peanuts.
- 6 Fish for dinner? Make sure it's fresh and from the deep blue sea (cod, haddock, pollock), not the Great Lakes or polluted rivers. Eat swordfish and bluefish rarely, and not at all if you are pregnant.
- 7 Wash and scrub your fruit and veggies to remove surface pesticides and bacteria. A few drops of dish soap in a pint of water will remove more pesticides.
- 8 Avoid food stored in lead-soldered cans, lead crystal, or ceramics that leach lead.
- 9 Cut all the fat off meat to protect your heart and waistline and to minimize your intake of pesticides. Cook meat thoroughly, but don't over-do (char) it.
- 10 Avoid unsafe and poorly tested additives: acetaldehyde-K, artificial colorings, aspartame, BHA, BHT, caffeine, MSG and HVP, propyl gallate, saccharin, sodium nitrite, sulfites (italicized ones may affect only sensitive individuals).

Center for Science in the Public Interest

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E-15

(soak in distilled water & add to cereals, etc.)

FLAXSEED OIL AND POWDER - VITAL FOOD

- Twice The Soluble Fiber Of Oat Bran.
- Omega 3 Very Rich In Very Coldwater Fish. Flaxseed has 10x, O3 Of Fish. O3 Is Natural Anti-inflammatory Against Arthritis.
- Helps Lower Blood Cholesterol. Helps With Asthma, Migraines, Psoriasis, Increases Learning Ability, Improves Mental Health, Dry Skin.
- Alpha Linolenic Acid (Alena) Important In Brain & Retina Structure.
- Prevents Agglutination Of Platelets;
- Heals Skin Lesions;
- Nerve Damage;
- Increases Energy.
- An Essential Fatty Acid.
- Dietary (linolenic) fiber - 39% 2/3 Soluble, 1/3 Insoluble.
- Prevents Excess Levels Of Estrogen.
- Estrogen Tumors.
- Has Anti-Selenium Toxicity Factor
- To Work, Flax Must Be Combined With Health-care Diet Rich In B6 & Zinc. (See Pg. 19)
- Use In Baking Use In Place Of Bran When Germ.
- Flaxseed Powder - Grind In Mill (30 sec) or Use Pre-ground. 2 TBS = 2380 mg Omega 3, 50% Zinc, 100% Vitamin B12 - 100% Rich In Omega 3, 100% Omega 6, 100% Omega 9
- Flaxseed Oil 1795P = 8000 mg Omega 3, 90% Omega 6, 100% Omega 9
- Black Bottle.
- Cold Pressed.
- Organic Growth.
- Bottled With Inert Gas.

Now #1760 Flaxseed Oil (1) Refriger. 12 oz. 10.95
 1770 Flax Oil Organic (a) Cold Pressed 100 caps 8.95
 1772 " " 250 caps 18.95
 6260 Flax Seeds (b) 1 lb. 1.95
 6264 Fortified Flaxseeds (Omega 9-rich) 1 lb. 10.75
 6265 Flax Seed Meal (a, Refrig) 1 lb. 2.95

FIBER

The memory key for fiber is ABCD-FLOP. It's as easy as saying: ABC-DON'T FLOP on your fiber.

em	Serving Size	Total Dietary Fiber(grams)	Insoluble Dietary Fiber(grams)	Soluble Dietary Fiber (grams)
GRAIN AND GRAIN PRODUCTS:				
an, corn	1 tbsp.	3.0	--	--
an, oat (<i>unique</i>)	1/3 cup	7.8	3.6	3.9
Bran-flakes cereal*	2/3 cup	4.6	3.9	0.7
ead, pita, whole-wheat	1	2.6	1.9	0.7
ead, whole-wheat	1 slice	2.0	1.7	0.3
oatmeal, dry (<i>use steel cut</i>)	1/3 cup	2.4	1.5	0.9
Popcorn, air-popped	1 cup	--	1.0	--
redded wheat, lg. biscuit	1	--	2.2	--
eat-bran cereal	1/3 cup	--	7.7	--

FRUIT: (Also add to cereals to enhance taste, nutrition and fiber. Also add to Memory key: ABCD-GO-PRS vegetables.)

Apricots <i>also excellent VITA</i>	1 medium	2.5	--	--
Apples, raw, with skin	1 medium	2.8	1.9	0.8
bananas, raw	1 medium	1.8	1.5	0.3
blackberries, raw	1/2 cup	4.5	--	--
Dates, dried	5 fruits	3.6	--	--
Figs, dried (<i>soak in refri</i>)	3 fruits	9.5	--	--
elon, cantaloupe, cubed	1 cup	1.3	0.3	1.0
Oranges, raw (grapefruit)	1 medium	3.1	0.8	2.4
Pears, raw	1 medium	4.3	3.7	0.7
unes (<i>soak in refri</i>)	5 fruits	--	2.2	--
strawberries, raw	1 cup	2.8	1.2	--

LEGUMES AND NUTS: (Also add to cereals and vegetables to enhance taste, nutrition and fiber.)

Beans, kidney, cooked	1/2 cup	9.0	--	--
Beans, pinto, cooked	1/2 cup	8.9	--	--
ick-peas, drained	1/2 cup	6.5	--	--
Lentils, cooked (<i>also sprout</i>)	1/2 cup	--	4.0	--
Lima beans, drained	1/2 cup	6.6	5.6	0.9
eanuts, roasted	1 ounce	2.6	2.4	0.2

VEGETABLES: (Memory key for high density nutrientvegetables.BOCAPS-GT.)

beans, snap, raw	1/2 cup	--	1.1	1.2
Broccoli, raw, chopped (<i>soak in refri</i>)	1/2 cup	1.2	1.0	0.3
Cabbage, red, raw	1/2 cup	0.7	0.5	0.2
arrots, raw	1 medium	2.3	1.2	1.2
beans, sweet, cooked	1/2 cup	--	3.0	--
Potatoes, raw, flesh/skin	1 medium	3.0	--	--
Sweet potatoes, raw, flesh/skin	1 medium	--	3.8	--

Source: Provisional data from USDA. Dashes mean data is not available.

*Values may vary among different brands of this type of cereal.

ed meats, poultry, fish, milk, cheese, eggs, sugar have NO fiber.

*Foods made with refined flour have NO fiber. Many dry cereals are very low in fiber.

To enable fiber to do its job it must be highly moisturized.

* You must eat a balanced vegetarian diet: eat hydrophilic food.
* If you are trying to exist only as a: avoid hydrophobic food.

Fruitarian or Vegetarian only eater, you may have trouble getting adequate Fiber, proteins and B vitamins.
Meat or Dairy Products only eater, you will have trouble getting adequate Fiber and A, C, D, E Vitamins and a good balance of the "8" vitamins and minerals.

Grain only eater, you will have trouble getting adequate A, C, D, E Vitamins.

* And you must get all your nutrients from your food - DO NOT DEPEND ON SUPPLEMENTS.

- A - Apples, apricots
- B- Bananas, blackberries, blueberries
- Nutritious taste enhancers for wheat and oat bran.
- C- Carrots, chickpeas
- D- Don't
- F- Figs (Black mission are least expensive. *soak them in refri*.)
- L- Lentils, lima beans. Lentils and chickpeas are sproutable.
- O- Oranges (soluble fiber)
- P- Pears, peas, potatoes (sweet are more nutritious)

* No food compares to wheat bran for insoluble fiber; that is why it is the champion constipation and diverticulitis fighter. *If your allergic to wheat, use psyllium husk whole.*

* Soluble fiber is digested by the time it gets thru the small intestine. Only insoluble fiber gets thru into the colon. *Oat bran has both!*

* If you are constipated, emphasize insoluble fibers (bran, espec wheat, lima beans, pears, sweet potatoes).

* To lower cholesterol, emphasize soluble fiber (oat bran, carrots, oranges.)

* If you have both problems, adjust your intake of each one according to your individual needs. Oat bran has a generous supply of both. However you may still have to have an abundant supply of wheat bran.

* Drink 6 to 8 glasses of water per d
Keep a jar of water on your desk or worktable and frequently take a drink. Don't let yourself get dehydrated.

* A dry mouth or throat means your body is signalling it needs more water.

* Learn how to use "5980 Psyllium Husk's Whole" to achieve the softness of your stool and control and hopefully eliminate constipation.

FISH, in addition to affording us with delicious highly digestible meals, is a great source of nutrients with possibly the following therapeutic benefits:

Read pages 102b, 102c, 102d and re-evaluate whether or not
Thins the blood *you wish to eat fish.*

- Protects arteries from damage
- Inhibits blood clots (antithrombotic)
- Reduces blood triglycerides
- Lowers Bad-type blood cholesterol (VLDL) Very Low Density Lipoproteins
- Reduces risk of heart attack and stroke
- Lessens symptoms of rheumatoid arthritis
- Reduces the risk of lupus
- Ameliorates migraine headaches
- Acts as an anti-inflammatory agent
- Regulates immune system
- Prevents cancer in animals
- Relieves bronchial asthma
- Combats early kidney disease
- Increases mental energy
- Protects against phlebitis (a blood clot in the leg)

UNIQUE FATTY ACIDS CALLED OMEGA-3'S, concentrated in cold water fish, help block the overproduction of prostaglandins and leukotrienes that in excess cause harmful disease processes that result in the construction of dangerous plaque that narrow arteries and inhibit blood flow; the accumulation of sticky blood cell fragments called platelets that form clots, and spasms of arteries and blood vessels creating constrictions that stop the heart and shut off blood to the brain causing strokes. Research has shown that persons eating only one ounce of fish per day have a 50% lower risk of fatal heart attack than non-fish eaters. Of great interest are the findings that even eating lean fish (low in Omega-3 oils) can also effectively lower the risk of heart disease; this leads to the conclusion there are other unknown constituents in fish that are cardioprotective.

CANCER. It is believed that the promotion and metastasis of cancer is regulated by prostaglandins. Fish oils, by squelching their overproduction, reduces breast, pancreatic, lung, prostate and colon cancer in animals and they are believed to have the same effect in humans. Cancer patients have high levels of prostaglandins. There's also evidence that women who are fish eaters have a low rate of breast cancer; therefore all women are urged to eat at least 2 to 3 meals per week of ocean, cold, salt water, and broiled not fried, fish.

ARTHRITIS. It has been reported that patients who took fish oil capsules (the equivalent of a salmon dinner or a can of sardines) daily for 14 weeks had half as many tender joints, less pain and less fatigue; the benefits lasted for a month after the fish oil capsules were discontinued. The conclusion therefore is that fish oils are anti-inflammatory. Fish oils metabolically interfere with the production of leukotriene B4 which is a potent trigger of inflammation. Researchers also report that another immune inflammatory disease, systemic lupus erythematosus, was dramatically prevented in animals by fish oil.

I took the advice from "good" sources about 10 yrs. ago. Dr. Michael Klapper - gives substantial information as to why we would do well to stop eating fish, as well as poultry and BEEF. Taking into consideration all the facts, you might want to settle for 3 oz of salmon or tuna, once or twice a week, or wisely just stop eating fish - period, "however, salmon & tuna are our best source of natural Vit. D from food. I eat salmon and/or tuna 2-3 times per week. I prefer salmon; it has a higher Vit D content.

CHAPTER SEVEN

A FISHY STORY

Until recently, fish has been advocated as a healthy substitute for meat in the diet. Before getting hooked by that idea, consider this:

EATING FISH FLESH, OR FISH BY-PRODUCTS, IS HAZARDOUS TO HUMAN HEALTH

1. FISH FLESH AND FISH OIL CONTAIN TOXIC CHEMICAL POLLUTANTS

The toxic wastes from 20th Century society are poured into rivers and oceans and become incorporated into the biosystem. These poisons concentrate in the flesh of the fish who eat "at the top of the food chain". Fish flesh regularly contains toxic chemical pollutants known to cause cancer, kidney failure, nerve damage, and birth defects. Much (most?) fish flesh has been shown to harbor large amounts of any or all of the following:

Heavy metals from industrial wastes. Arsenic, methylmercury, aluminum, cadmium, etc.,⁶⁹ are flushed into streams and rivers, and washed into the bays and oceans to be taken up by the free-swimming fish and bottom dwellers (oysters, crabs, clams, mussels, scallops, flounders, lobsters, shrimp, etc.)

Mutation-inducing Hydrocarbons. Mutagenic polychlorinated biphenyls (PCB's), hydrocarbon pesticides, herbicides, dioxins, etc., from spraying of crops wash down from the fields, through the rivers and streams, and finally out into the ocean where they find their way into the bodies of free-swimming and bottom dwelling fish.⁷⁰

Radioactivity from nuclear pollution.⁷¹ Most nuclear power plants are built along rivers, so that water may be used to cool the reactor. Accidents in nuclear power plants and waste spillage from transport trucks, pipe leakage, etc, can result in radioactive contamination of the nearby waterway and the animals who make it their home.

Few U.S. waters (and indeed, world waters) are free of hydrocarbon or heavy metal pollution; this includes open sea waters, as well as most of our streams, lakes and rivers. As one might expect from living in waters laced with carcinogenic chemicals, the fish themselves show alarmingly high rates of cancer. The medical literature is filled with reports of toxicity of these chemicals to fish and to the people who eat them.

Here are some examples worth considering:

Pollutants such as PCB's, DDT, and dioxin, concentrate in the muscle tissue of fish. Eating a

one-pound fish from Lake Ontario is equivalent to drinking 1.5 million quarts of that polluted water.⁷²

Up to 80% of pike and other fish taken from lake and rivers in New York State, Ohio, and Michigan, suffer from obvious cancerous tumors of skin and liver. Carcinogenic hydrocarbons concentrate to high level in bottom-feeding fish in rivers in Maryland,⁷³ in the Nile in Egypt,⁷⁴ and in the Apalachicola River in Florida.⁷⁵ There are also alarming reports of carcinogenic residues in the fish taken from the open ocean, like the Mediterranean⁷⁶ and Baltic Seas.⁷⁷

These pollutants exert serious toxic effects upon all aquatic animals, but especially upon those animals that feed on the bottom of rivers, lakes and oceans where chemicals concentrate and enter the animals food chain. Oysters, clams, and mussels have all been found with excessive levels of pollutants⁷⁸. As filter feeders, they eliminate contaminants through their feces. People usually eat clams and oysters whole and so, humans consume not only the toxins concentrated in the animal's tissues, but also those trapped in the fecal matter left in the intestinal tract. In Monterey, California, mussels found in 1984 had lead contamination 150 times greater than the maximum level determined "fit" for human consumption.

Consumers have little way of knowing where the fish they buy comes from, or where it has been. There is virtually no government quality or safety inspection of fish or fish products. Less than 13% of fish are inspected by any government agency.⁷⁹

Numerous (and increasing numbers of) medical studies describe signs of poisoning in people that seem to result from eating contaminated fish. The following examples illustrate this health threat:

A. Nerve toxicity from methylmercury poisoning and increased rates of some cancers are seen in Japanese people who eat fish.⁸⁰

B. The Mohawk Indians tested in New York, and the natives of Lake Murray, New Guinea, showed signs of nerve damage as well as elevated levels of mercury in their blood and tissues.⁸¹

C. Canadian Indians in northern Quebec have suffered numerous incidents of kidney damage from methylmercury poisoning after eating mercury-contaminated fish.⁸²

D. Finnish children who eat fish have increased intakes of mercury, lead, cadmium, and arsenic.⁸³



E. German citizens living along the River Eibe, in Schleswig-Holstein, as well as the fish from the river, have higher levels of organochlorines and mercury in their blood.⁸⁴

F. Uranium radionuclides permeate the food chain in northern Saskatchewan.⁸⁵

G. Lead accumulates to high levels in the fish in the Missouri River downstream of the lead mines.⁸⁶

H. Breastfeeding women who eat fish show significant levels of DDT and other pesticides in the breast milk they feed to their infants.⁸⁷

Fish flesh decomposes more rapidly and with a more foul odor than any other type of meat. On board the fishing ship, the weight of the fish in the hold crushes the bottommost animals, often forcing their intestinal contents out and causing contamination. In their attempt to retard the spoilage, fishermen spray the dying fish in the hold of their ships with antibiotic solutions or ice containing antibiotics (often made from the polluted waters in which they have been fishing).

When considering eating a piece of a fish, stop and ask yourself, "What's in it today?" The human body has no requirement for their flesh and certainly has no need for the contaminants listed above.

2. FISH EATING IS LINKED WITH OSTEOPOROSIS

Fish flesh is very concentrated protein. Protein cannot be stored, and any protein eaten over the amount that can be used on a given day is broken down and excreted. After all, you can only make so much blood and grow so much hair each day.

Only 20 to 30 grams of protein are needed by your body each day.⁸⁸ A large piece of fish flesh and a glass of milk can contain 100 grams (or more) of protein. After eating any concentrated protein, like a fish fillet or halibut steak, the kidneys must cleanse the blood of protein wastes like ammonia, urea, amino acid fragments, etc.

The kidneys do oblige, of course, but to accomplish this blood cleansing, there is a predictable loss of calcium following the ingestion of concentrated protein.

This means that for hours after eating a piece of fish, precious calcium pours out of your body with each urination. This is a well-known and reproducible phenomenon called, "protein-induced hypercalcuria,"⁸⁹ and the calcium that is leaving the blood is really being taken out of the body's vital storehouse of calcium, the bones.

This calcium loss, continued year after year, drains calcium from the skeleton, resulting in thin, crumbly bones that fracture easily, called **osteoporosis**. This condition affects 15 million Americans, and is not so much a disease of calcium deficiency, but rather, a **disease of protein excess**. Osteoporosis is most severe in the people who consume the most protein⁹⁰ and is most rampant among the Eskimos. These northern natives eat large quantities of fish in their diet - averaging 150 to 200 grams of protein daily - and still lose mineral from their skeleton, despite eating 2000 milligrams of calcium each day contained in fish bones.⁹¹

All the gently-absorbed protein needed for human health and growth is obtainable from the grains, legumes, greens, nuts and seeds found in a meat and dairy-free vegan diet.⁹² These are far safer sources from which to obtain our protein. Vegetable protein is less prone to cause calcium loss due to its slower absorption and less acid nature.

3. HAZARDS OF FISH OIL AS A DIETARY SUPPLEMENT

Recently, fish oil has been trumpeted as a protective substance against clogged arteries and heart attacks. The much heralded "advantages" from consuming fish products are overshadowed by the hazards of eating fish flesh or the oil extracted from the fish's liver. The fish oils that are promoted as providing protection to the arteries from atherosclerosis may also pose a serious hazard because they **decrease the blood's ability to coagulate to stop bleeding**.

Eskimos, who eat large amounts of fish, suffer high rates of hemorrhagic strokes, nose bleeds, and epilepsy.⁹³ This "blood thinning" property could be exceedingly dangerous for anyone suffering a stroke, which would occur when a blood vessel in the brain bursts, and the blood fails to clot.

Fish oil has also been shown to **inhibit the action of insulin**. This is bad news for any diabetic trying to maintain normal blood sugar levels while eating a diet high in fish flesh. Diabetics achieve much better control of their condition on a high-fiber, plant-based diet.

An unpublicized, but potentially important problem results from fish oil's apparent tendency to **increase the length of a normal pregnancy**. An overly long gestation time increases the birthweight of the baby, and thus the attendant risk of birth accidents, cesarean sections, and maternal deaths. Birthweights in the Faroe Islands (in the North Atlantic), where the people eat a large amount of fish oils, are among the highest in the world. As might be expected, death rates during late pregnancy are twice as high in the Faroe Islands as they are in Denmark, which has a much lower consumption of fish oil.⁹⁴

Excessive consumption of all oils, including fish oil, is linked to increased cancer growth⁹⁵, and contributes to gallbladder disease.⁹⁶

Despite current advertising campaigns, no one needs to eat the oil squeezed out of a fish's flesh or liver; in fact, the products of a fish's liver, as in cod liver oil, is one of the strangest substances to consider eating. The liver of any animal is the chemical detoxifier for the body, and thus concentrates all the pollutants consumed by that animal. The oil squeezed from fish livers contains high levels of the toxins listed above, plus large amounts of cholesterol. A single fish oil capsule can contain 300 milligrams of cholesterol, yet the body can only excrete 100 milligrams of that greasy substance each day. Fish oil is a substance whose potential problems outweigh its possible benefits to health.

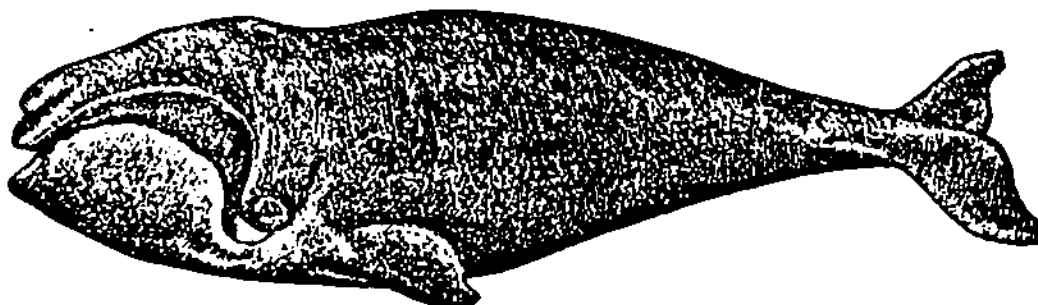
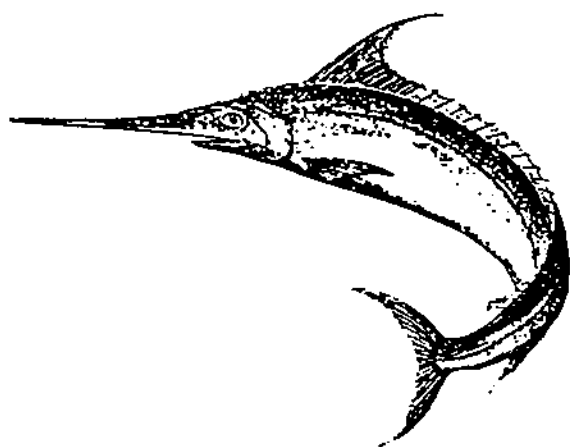
Fish oil capsules are not "magic pills" that will allow people to continue eating fatty meats and dairy products without clogging their arteries. People who use fish oil "to protect their arteries" may actually be poisoning themselves with heavy metals and hydrocarbons, and increasing their cancer risk from dietary oils. The better solution is to keep one's arteries clean, by not loading the blood with animal fat in the first place. People who do not eat animal fats generally do not suffer from clogged arteries, and thus have no need to eat the oil of fish.

The human body has a need for essential oils, but vegetarians can take heart (so to speak) because the "good" in oils sought from fish sources are available in vegetarian foods. "EPA" (eicosapentaenoic acid - one of the "fat lowering" oils sought in fish products) is found in walnuts, wheat germ oil, soybean lecithin, flaxseed oil⁹⁷, soybeans and tofu, common beans, and seaweed.

LET THEM SWIM...

In conclusion, (a) the carcinogenic and nerve-damaging chemical contaminants, (b) the calcium-robbing protein load, and (c) the potentially hazardous, blood-altering oils, make the idea of eating fresh water or marine animals a "fishy" one. Fish is not "brain food" - in fact, it is just the opposite: mercury poisons the brain and nerve cells.

Because a vegan diet meets all the human body's nutritional needs, and naturally offers protection against clogged arteries, heart attacks, strokes and cancers,⁹⁸ you will do your health (and the fish!) a favor by letting them "off the hook".



Food therapeutics. Foods contain substances which may be effective against many of the following disorders and diseases, even more effective than drugs without the side effects and far less costly. Discuss with your doctor.

	<i>cysts</i>	
Analgesic	decongestant	lactose intolerance
Antibacterial	diabetes	laxatives
antibiotics	digestion acid	longevity promotor
anticavity	diuretic	lupus erythematosus
anticoagulant	diverticulosis preventor	mental alertness
anticonvulsant	dysentery	meningitis
antidepressant	dysmenorrhea	menopause easer
anti-inflammatory	eczema	migrane alleviator
anti-motion sickness	emetic	mood elevator
antioxident	emphysema	nerve calmer
anti-ulcerative	endorphin	osteoporosis preventor
anxiety reliever	epilepsy	pain reducer
appendicitis preventor	estrogen replacer	physical energy booster
appetite stimulator	euphoria inducer	prostate cancer
arterial plaque fighter	gastrointestinal illness	psoriasis alleviator
atherosclerosis	growth promotor	rheumatism
arthritis reliever	hay fever reliever	roundworm
asthma reliever	headaches	sedatives
beta blocker	hearing deficiency	skin inflammation reducer
blocker of heart arteries	hemorrhage	sleep inducer
blood clot dissolver	hemorrhoids	sinusitis
blood HDL cholesterol	hepatitis	sore throat soother
blood LDL cholesterol	herpes simplex virus	stress reliever
blood total cholesterol	hiatal hernia	stroke
blood pressure	hyperactivity	suicide
blood sugar	hypertensives	tranquillizer
blood thinner	hypotensives	triglyceride reducer
blood triglycerides	immunity stimulators	thrombophlebitis
broncho-dilator	indole providers	thrombosis
bile stimulator	influenza	urinary tract infection bowel
bowel function improver	insulin controllers	preventor
cancer inhibitor	insomnia	uterine cancer
cardiovascular protector	jaloproctitis	urinary deodorizer
colon function regulator	kidney disease combater	varicose vein preventor
conjunctivitis	kidney stone preventor	vasoconstrictor
contraception promotor		vasodilator
constipation corrector		wound healing

**Beware of Food
Toxication!**

Many food manu-
-facturers will
do anything for
a buck. Don't
let them ruin
food Therapeutics
with "Chemical
Wonders", i.e.
fake food
additives.

If you want more
sweetening use
honey or natural
sugar granules
#6965 Now, or
maple syrup, #6948

Unless we send Congress a loud, clear message that we won't stand for, we can look forward to "chemical wonders" in our food like:

Olestra -- a fat substitute that Procter & Gamble wants the FDA to approve. While replacing fat is a worthy goal, this chemical interferes with the body's ability to absorb vitamins A, D, E, and K. Olestra also appears to cause a unique new problem called "anal leakage."

Sucralose -- a new sugar substitute the FDA may approve shortly. The manufacturer wants the FDA to approve its use in soft drinks, which would result in enormous amounts being consumed. High levels might harm the thymus gland (part of the immune system) and could be a special problem in children.

Acesulfame-K -- animal tests on this artificial sweetener indicate that it might cause cancer. CSPI opposed its approval, but recently the FDA approved it for some uses like syrups, dessert toppings, and tabletop sweeteners. Now the manufacturer has asked the FDA to vastly increase Americans' exposure to this potentially dangerous substance by allowing it in soft drinks and other foods.

GARLIC HAS ALLICIN/ALJOENE, SULFUR COMPOUNDS

Golu kola (*Centella asiatica*) is a perennial plant native to Asia, Australia, the South Pacific, and southern and middle Africa. The slender, creeping plant has fan-shaped leaves and flourishes in and around water.

For centuries, Gotu kola has been used as a medicine in India, China, and the islands of Indonesia. Its primary use centered around its ability to heal wounds and relieve leprosy. Gotu kola was also used to delay aging. One of the reported "miracle elixirs of life," Gotu kola's reputation as a promoter of longevity stems from the old report of a Chinese herbalist, LiChing Yun, who reputedly lived 256 years. LiChing Yun's longevity supposedly resulted from his regular use of an herbal mixture chiefly composed of Gotu kola.

Herbal Extracts of Gotu kola were accepted as a drug in France during the 1880s. Since then, these extracts have been used clinically in treating the conditions listed above as well as many others.

In the United States, Gotu kola arouses much curiosity among consumers. Many people confuse Gotu kola with kola nuts and assume its rejuvenating activity is nothing more than an effect of caffeine. However, Gotu kola is not related to kola nuts (*Cola nitida* or *Cola acuminata*), nor does it contain any caffeine.

Triterpenes (steroid-like compounds) are the primary active substances in Gotu kola.

Most studies on GABA_A Receptors have used extracts containing 70% triterpeneic acids, they have a balancing effect on connective tissues; they help improve the functions

integrity of the collagen matrix and supportive structures in ground substance found throughout the body. Ground substance holds the cells of our body together.

Therapeutic applications of Gotu kola are in cases of varicose veins, cellulite, and wound repair. The table on page 38 lists several other conditions in which the effectiveness of Gotu kola extract has been confirmed by scientific study.

One of the chief components of Gotu kola (asiaticoside) substantially hastened the healing of wounds. Studies designed to understand how the herb works in enhancing wound healing have shown Gotu kola extracts produce the following effects:

- Stimulates growth of hair and nails.
 - Increases blood supply to connective tissue.
 - Increases the formation of structural components in connective tissues.
 - Increases tensile integrity of the dermis, the support structure of the skin.
 - Increases keratinization (proper formation) of skin.
- The outcome of these actions is a balanced effect on →

Above information is from
Michael T. Mureay M.D. SEE pg 138-b.

- | | |
|---|--|
| <ul style="list-style-type: none"> • Stronger than Penicillin And Tetracycline, • Broad Spectrum Antibiotic Against Microbes Of Botulism, Tuberculosis, Staph, Dysentery, And 72 Different Diseases. • Antifungal, Antiparasitic, Antiprotozoan, Antiviral Antithrombotic. • Boosts Immunity. Helps Cardio-Vascular. Lowers Cholesterol, and Triglycerides. Raises Good HDL. Decongestant And Expectorant. Helps Prevent Chronic Bronchitis. • Better Anti-oxidant Than Even Vit.E. Antitumor Anticancer Agents. • Use Fresh And Raw For Maximum Allicin Effect • Eat 1 to 3 cloves Daily. Wash bulb, weigh. Place in small casseroles dish. Cover. Microwave Cook approx 30% of weight. Add an abundance of celery to eliminate odor and raises to enhance taste. | <ul style="list-style-type: none"> • Oil From Every Clove Effective. Cooking Reduces Allicin, Increases AJOENE Effectivity. • USE ODORLESS Garlic. #1 & #2 Now Odorless 250-11.95 (48oz) One Capsule w/ Ea. Meal • Steps Platelet Aggregating 1st Step To Stroke - Blood Clots • Onions In The Allicin Family. Eat 2 to 3 oz. Daily (Raw or Steamed). or soaking in distilled Steaming greatly Reduces Breathe Problem Garlic-Breath • Some Other Ailments Helped By Garlic: Arthritis - Asthma Colds - Constipation Hypertension - Diabetes Rheumatism - Influenza Thyphoid - Small Pox Gangrene - Athlete's Foot. Now: Shop odorless Garlic 250 11.95 1017 Super odorless garlic 5000mg w/ Hawthorn Berry and 1046 Cayenne Pepper 120 caps \$18.95 |
|---|--|

cells and tissues involved in the process of healing, particularly connective tissues. Standardized extracts of Gotu kola have been shown to greatly aid healing of surgical wounds such as episiotomies and other incisions, skin ulcers due to arterial or venous insufficiency, traumatic injuries to the skin, gangrene, skin grafts, schistosomiasis lesions (a result of infection by parasites in the liver), and perineal lesions produced during childbirth.

Venous disorders

Numerous studies have shown standardized Gotu kola extracts are effective in treating venous insufficiency. Gotu kola enhances the connective tissue structure of the perivascular sheath, reduces sclerosis or hardening, and improves the blood flow through affected limbs. Significant improvement in symptomatology (such as feelings of heaviness in the lower legs, numbness, nighttime cramps, etc.), physical findings (swelling, spider veins, skin ulcers, vein distensibility, etc.), and functional capacity (improved blood flow) was observed in approximately 80 percent of patients in the clinical trials.

Scleroderma and cellulite

Several trials have tested the standardized extract of Gotu kola for scleroderma (including systemic sclerosis). In addition to decreased skin induration (hardening), patients have noticed less nerve pain in the joints and improved motility of fingers. The positive therapeutic response was probably a result of Gotu kola's balancing effect on connective tissue, thereby preventing the excessive production of collagen in scleroderma.

Standardized extracts of Gotu kola have also shown good results in the treatment of cellulite. In one study, researchers observed the action of the extract on several types of cellulite in 65 patients who had undergone other therapies without success. Over a

Clinical applications of Gotu kola (Centella)

Anal fissure	Mental retardation
Bladder ulcers	Mycosis fungoides
Burns	Peptic ulcer
Cellulite	Perineal lesions
Cirrhosis	Periodontal disease
Dermatitis	Retinal detachment
Fibrocystic breast	Scleroderma
Hemorrhoids	Skin ulcers
Keloids	Surgical wounds
Leprosy	Tuberculosis
Lupus erythematosus	Venous disorders

three-month period, 58 percent of the patients experienced good results and 20 percent experienced satisfactory results. Other investigations have shown a similar success rate (approximately 80 percent).

The benefits of Gotu kola in cellulite may be related to its ability to enhance connective tissue structures and reduce skin hardening.

Scar tissues

The standardized extract of Gotu kola has shown impressive results in the treatment of keloids (thick scars resulting from overgrowth of fibrous tissue) and hypertrophic scars. It appears to affect scar formation by reducing the inflammatory phase and enhancing the maturation phase. Keloids and hypertrophic scars have a prolonged inflammatory phase which may go on for months or even years without progressing to maturation.

In one study, 227 patients with keloids or hypertrophic scars were given a standardized Gotu kola extract (effective dosage was established at 60 to 90 mg.). The patients were divided into two groups: 139 used the Gotu kola extract alone (curative group), and 88 used the extract along with surgical scar revision (preventive group). After two to eighteen months, the inflammatory

phase disappeared or symptoms were relieved in 116 patients (82 percent) of the curative group.


The gotu kola extract also showed positive effects in the preventive group. The therapeutic course in these patients began a few weeks prior to surgery. If a positive response was observed, the patient was brought to surgery and kept on the Gotu kola extract for three months. This method of preselection allowed the researchers to offer other forms of therapy to unresponsive patients. Clinical improvement was observed in 72 of the 88 patients (79 percent).

Mental function

Gotu kola extract led to a significant increase in the mental abilities of 30 developmentally disabled children. After 12 weeks, the children were more attentive and better able to concentrate on assigned tasks. Gotu kola's triterpenes have also demonstrated mild antistress and antianxiety action.

Dosage

Most clinical studies on Gotu kola have used extracts standardized to contain 70 percent triterpenic acids. The usual oral dosage is 60 to 120 mg. per day. Gotu kola is extremely safe, with no reported side effects when used orally or topically.

Because the concentration of triterpenes in Gotu kola can vary between 1.1 and 8 percent, it is difficult to calculate an appropriate dosage for the crude plant material. However, most samples yield a concentration between 2.2 and 3.4 percent, so approximately 2 to 4 grams of crude plant material per day would probably contain an appropriate amount of triterpenes. For best results, consumers should use standardized sources. 

For more information about Gotu kola and other botanical alternatives, read *The Healing Power of Herbs*, by Michael T. Murray, N.D. The book is available at health food stores or through Vital Communications at 1-800-488-0753.

-138-b.

33% Concentration .67%

**GRAPEFRUIT EXTRACT. 169.94oz.
(All Purpose Liquid Concentrate)**

A multi-purpose extract used by doctors worldwide as nutritional support for many conditions of ill health, including those of the stomach, intestines and more.

NQ-2001 Grapefruit Extract 2 Oz

Retail 10.95 **25% Off Price 8.21**

NQ-2014 Grapefruit Extract 4 Oz

Retail 19.95 **25% Off Price 14.96**

FIRST AID SKIN SPRAY

Contains 1% pure grapefruit extract. Use topically for numerous skin conditions. External use only.

NQ-2004 First Aid Skin Spray 4 Oz

Retail 5.95 **25% Off Price 4.46**

NUTRIBIOTIC® CAPSULES PLUS

Contains 100 mg of grapefruit extract (equivalent to 10-12 drops of liquid concentrate) combined with the extracts of echinacea and artemisa annua.

NQ-2002 Grapefruit Capsules 90 Caps

Retail 16.50 **25% Off Price 12.37**

NUTRIBIOTIC® TABLETS

Contains 100 mg of grapefruit extract in a conveniently easy to swallow tablet. Ideal for children.

NQ-2003 Grapefruit Tablets 100 Tab

Retail 9.95 **25% Off Price 7.46**

SUPER SHOWERGEL

Conditioning shampoo for the body

Contains .5% grapefruit extract. Moisturizing formula for the whole body including hair.

Contains no chlorine or sodium lauryl sulfate.

NQ-2008 Super Shower Gel 12 Oz

Retail 5.50 **25% Off Price 4.12**

DEODORANT STICK

Contains 1% grapefruit extract in a base of witch hazel and aloe vera. Long lasting scent free protection.

NQ-2013 Deodorant Stick 2.6 Oz

Retail 4.50 **25% Off Price 3.37**

ORGANIC RICE PROTEIN

A highly soluble, great tasting protein supplement that is free of the common food allergens.

NQ-2017 Organic Rice Protein 20 Oz

Retail 13.95 **25% Off Price 10.46**

ABOVE PRICES ARE VITAMIN SHOPPE.

NON-SOAP SKIN CLEANSER

Contains .5% grapefruit extract. Provides deep cleansing of the immediate dermal layers. Gentle, non-drying and pH balanced. Contains no chlorine or sodium lauryl sulfate. Two formulations available:

• Original Fragrance Free for Sensitive Skin with aloe vera (contains no moisturizer)

• Moisturizing Formula for Normal to Dry Skin.

Fresh fruit scent.

NQ-2005 Skin Cleanser Norm/Dry 16 Oz

Retail 6.95 **25% Off Price 5.21**

NQ-2006 Sensitive Skin Cleanser 16 Oz

Retail 6.95 **25% Off Price 5.21**

DENTALGEL

Contains .4% grapefruit extract. Promotes healthy gums and freshens your mouth. Fluoride and saccharin free.

NQ-2007 Dental Gel 4.5 Oz

Retail 4.95 **25% Off Price 3.71**

FIRST AID SKIN OINTMENT

Contains 2% grapefruit extract. Broad spectrum healing powers. Ideal for numerous skin conditions. Oil free formula.

NQ-2009 First Aid Skin Ointment .5 Oz

Retail 6.50 **25% Off Price 4.87**

NASAL SPRAY

Contains .1% grapefruit extract, combined with sodium ascorbate (buffered vitamin C). Soothing, moisturizing and healing formula.

NQ-2010 Nasal Spray 1 Oz

Retail 7.95 **25% Off Price 5.96**

EAR DROPS

Contains .1% grapefruit extract in a base of tea tree oil and vegetable glycerin. Healing and soothing formula. Ideal for both adults and children.

NQ-2011 Ear Drops 1 Oz

Retail 6.95 **25% Off Price 5.21**

FOOT POWDER

Contains 1% grapefruit extract in a base of super absorbent vegetable starch. Scent and talc free.

NQ-2012 Foot Powder 4 Oz

Retail 4.50 **25% Off Price 3.37**

Externally and internally **NutriBiotic®**

Grapefruit Extract products work naturally

and safely to enhance the health of you

and your family. Grapefruit extract has

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worldwide for over 20 years to help

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and has proven to be extremely beneficial

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302 = 12.10 compared to Now 7.95 / x 25% = 5.95

138.C.

SOME PHILOSOPHIES OF LIFE WHICH CAN HELP US IN OUR QUEST FOR HAPPINESS

(Their relationship to arts and how arts can aid us in our quest.)

- Developing an admirable way of life, at any age, is a day-by-day effort of many small victories and some major defeats. Life at all ages takes on a marvelous shape under the pressure of significant work. Maturity does not come on suddenly; many people never grow up and become really mature adults. Being an active participant in the arts helps us grow.
- One of our greatest challenges is to preserve and advance our sense of self worth, for our happiness can be greatly enhanced by doing so.
- It is truly stated that man does not live by bread alone. Arts should be an integral part of all our lives.
- Activities which give us the opportunity to keep learning new things, to use our imagination and creativity and perform acts which will make us feel good about ourselves, contribute greatly to our sense of self worth. For these reasons active participation in one or more of the fields of art is so "happiness-producing" for many persons.
- Most everything we do in art stimulates our imagination and suggests many new avenues to investigate. It provides a constant source of discovery and adventure up new roads for us to travel.
- Exploration in the arts makes us come alive, relieves "listless-leisure," thereby eliminating boredom with its feelings of tiredness and sleepiness.
- We should be good to ourselves and take the best of care of ourselves physically and mentally. This is not being selfish. Our family, and all those around us gain tremendously by our possessing good health and being self sufficient.
- The older we get, the more different we become.
- Adding years to our life is not our sole goal, we also want to add life to our years. It will help greatly if we can find abiding interests that bring satisfaction, contentment and happiness.
- We are all needed. At no age should we feel that we are just remnants from society.
- We must be alive and happily productive. Disgruntled persons cast a shadow across the day of everyone with whom they come in contact.
- Learn to be of service. Much happiness is gained from giving rather than from taking.
- Remember the philosophy of Gom zu la ta va (Hebrew) (It could have been worse!)
- Remember the philosophy of Tach-Mosh-Na (Russian) (There's more than one way to do something.)
- We should strive to find the contentment people feel when they have reached the place they know is their own place, and see before them the work they have to do.

- We should be able to lack things gracefully.
- We should strive to give courage to others who are still on the way. We need to live in a manner so that people younger than ourselves will take heart.
- One person can influence another even though the encounter may be brief.
- We must learn to compensate. Our attitude toward our lot is what counts as far as our happiness is concerned.
- We should strive to grow older gracefully and with dignity.
- To be loved requires being somewhat lovable. If we want to feel mean, just hate someone.
- Part of being human is learning to live with a degree of uncertainty. To have the courage of our doubts may be more difficult than having the courage of our convictions.
- We cannot keep the birds of trouble from flying over our heads, but we CAN keep them from building a nest in our hair.
- Accent the positive and negate the negative. We must not make mountains out of molehills.
- Tragedies are trivial things when seen in the perspective of eternity.
- We may find that our avocations may bring more delight than the ones we made a living by and will eventually be our vocation. Many persons have found that making full use of our human faculties can be more important than making money. This new sense of purpose can give a great lift to the heart.
- As we go through life, we frequently need to face ourselves afresh, and have the courage to explore other aspects of ourselves. We should try to find something we have left undone, some interest that got covered up over the years - prove to ourselves that we still have reserves, mental and physical.
- Without purposeful activity we might find ourselves surviving rather than living. We might get the feeling that nothing in life requires our presence; the past has congealed, the present is dreary, and the future limited. As a result, we may freeze in our tracks. We should look about and see such people; they serve as examples of how dreary the clutched life can be. When we see such boredom we may be jolted into doing something.
- Many people cannot endure their way of life, if it is being lived with listless leisure, freedom from effort and uninterrupted loafing. Suddenly they feel such "freedom" a burden. They need something to give direction to their day.
- Nature has been very bountiful and generous to us with her gifts and reserves. In several instances, she gave us two of each organs, e.g. eyes, ears, nostrils, arms, legs, lungs and kidneys.

- ° We can be blind in one eye and have only partial vision in the other (e.g. 20/40 or less) and still be very visually functional. One can read newspaper print with only one eye and 20/40 vision.
- ° We can lose 20% of our hearing and still not need hearing amplifiers. Man's normal hearing is exquisite and super-sensitive, he can therefore have considerable loss and be auditorily functional.
- ° We can be very functional with only one arm or one leg.
- ° We can have severe paralysis of the back and stomach muscles and still be very functional.
- ° We should pass on the lessons we have learned from life -- write them down. We should tell what we have learned from life from having lived it. Everyone has a story to tell. All have run their fingers across the texture of life and have more to tell than they realize.
- ° We must explore the inseparable relationship between the outer and the inner self. The body has a powerful influence on the mind and spirit and they on it. So caring for our body, through the proper nutrition and exercise IS important for the body and for a healthy inner life.
- ° The entry into retirement does not mean it's all downhill from that time on. It is possible in retirement to not only preserve what we have for a long time, but in many ways improve our spirits, mind and bodies.

Start at the top of your head (with your hair) and make a list of every health problem you have, down to your toes; include every thing you want to improve, e.g. hair, dry, itchy scalp, mental symptoms, etc.

Health Scientists Advise; "Above All Else, Know Thyself."

Interpupillary Distance (PD)

Distance Vision (glasses: yes, no): R ____ L ____ LensRx: R. Sph ____ Cyl ____ Ax ____ Add ____ Far ____
Near Vision (glasses: yes, no): R ____ L ____ LensRx: L. Sph ____ Cyl ____ Ax ____ Add ____ Near ____
Near Vision Range: closest & farthest points of clear vision. R ____ L ____ Birth date: ____
Amsler Grid: R ____ L ____ Pg. 196. (Macular degeneration) Intraocular Pressure: R ____ L ____
Visual Field Test: R ____ L ____ Sup. Nasal Fld. R ____ L ____ Glaucoma Risk: R ____ L ____
Physiological Blind Spots: R ____ L ____ Hyperopia ____ Myopia ____ Astigmatia ____ Anisometropia ____ Antimetropia ____
Fusion: ____ Suppression ____ Stereopsis ____ Fusional Convergence Reserve ____ Fusional Divergence Reserve ____
Periodontal Pockets: 4 ____ 5 ____ 6 ____ 7 ____ 8 ____ 9 ____ Pg 120. Physiological Diplopia: Homo: ____ Hetero: ____
Audiometric Exam: R ____ L ____ Bruxism ____ Pg 119. Ocular Muscle Balance: Far ____ Near ____
Blood Pressure: Lying ____ Sitting ____ Standing ____ Pulse ____ Energy ____
Temperature: Armpit Awakening ____ Thru day ____ Weight ____ Height ____ Fatigue ____
Symptom Mnemonics: (OLDS) O=Onset. L=Location. D=Duration. S=Severity. P=Positive; Neg.=Negative
Ratings: N=Normal. G=Good. P=Poor. 1=Mild. 2=Moderate. 3=Severe. Indigestion ____ Gas ____
?=Questionable. H=High. L=Low. Exercise ____ Walking ____ Sunlight ____ Self Massage ____ Self Hypnosis ____
Cancer ____ Hypothyroid ____ Hyperthyroid ____ Glucose ____ Uric Acid ____ Cholesterol ____ Triglycerides ____
Smell ____ Taste ____ Breathing ____ Water ____ Allergies ____ Appetite ____ Arteriosclerosis ____ Atherosclerosis ____
Libido ____ Immunity ____ Eye ____ Ear ____ Nose ____ Throat ____ Fungus: Feet ____ Crotch ____ Bone Density ____
Skin ____ Hair ____ Drugs: RX ____ OTC ____ Chelation: Oral ____ Intravenous ____ DHEA ____ Test ____ ng/ml.

Health Conditions which can be improved and/or corrected by Natural Healing. Whitaker & Balch

Study glossary of health terms in Balch pgs 573-580. If any of your answers are less than normal, describe them in full on back. Make copies of this form for your use, your loved ones, and friends.

Diet: SAD (Standard American) ____ Vegetarian ____ Meat Eater ____ Present or past problems. (turn over)

Describe all your health problems, give their OLDS characteristics, and rate them. See above. Use back of form. Give a copy to your doctor. If you're having trouble filling out your form, ask for assistance.

MENTAL INVENTORY: Balch: Depression pg 223; Manic Depressive Disorders, pg 376; Stress pg 495.

Whitaker: pg 88-98 Enhancing brain power. Enhance brain blood circulation. Duke pgs 156-160

Agitation ____ Anger ____ Alertness ____ Anxiety ____ Burnout ____ Concentration ____ Panic attacks ____ Depression ____
Emotional ____ Learning Ability ____ Happiness ____ Headaches ____ Hypersomnia ____ Insomnia ____ Memory ____ Mental
Clarity ____ Sense of Well-Being ____ Stress ____ Suicidal Thoughts ____

I need to enhance the functions of: my brain ____ nervous systems ____ cardiovascular ____ lymphatic systems ____

Need: neuro transmitters ____ phosphatidyl choline (fat emulsifier) ____ Vits. A ____ B ____ C ____ D ____ E ____

essential oils ____ minerals ____ digestive enzymes ____ herbs ____ magnetics ____ I have refractive errors ____ astigmatia ____
anisometropia ____ antimetropia >50D ____ I wear glasses part-time ____ all the time ____

I have problems with: suppression ____ fusion ____ stereopsis ____ eye muscle imbalance ____

tight accommodation-convergence association. Adrenal functions (Balch pg. 91) ____ Pulse for atherosclerosis ____
(Balch pg. 136). Fill in your blood tests on Flow Chart Pg 101. Ask Dr. about abnormal tests.

Reference Books: Balch: "Rx for Nutritional Healing", "Rx for Dietary Wellness", "Super Antioxidants"

James Duke "Green Pharmacy" (\$18.00 or \$4.20) "DHEA Break Thru", by Stephen Cherniske \$4.20.

Lawrence and Rosch: "Magnetic Therapy-The Pain Cure Alternative", \$9.00. "Renewal Anti-aging Revolution" by T.J. Smith, MD. \$18.00

MENTAL AND PHYSICAL HEALTH PROBLEMS can be helped tremendously with Natural Healing.

Study and apply Balch, Duke, Whitaker. Balch's new book (2nd Edition) lists 300 disorders and diseases which can be improved or eliminated with natural healing. They are in the Table of Contents; use them to take your inventory. Also study and apply Cherniske, Lawrence and Rosch, and T.J. Smith

Prevention And Care On Heart Attacks - Use Of Clot Busters

• Eat Healthcare Diet: Exercise, Eliminate Smoking, Drinking, Overweight, Drugs, Artery Blocking Clots Cause $\frac{2}{3}$ of The 1.6 Million Heart Attacks Yearly.

• Only 17% of Heart Attack Victims Get Clot Dissolving Therapy

• People With < 200 Total Cholesterol Not Immune From Heart Attack

• Low HDL, High Triglycerides, Greatly Increases The Risk.

• Heart Disease \rightarrow Killer Of Women

• Post Menopausal Women At Greater Risk.

• Women Wait Ave. 4 hrs. Longer Than Men Before Getting Help.

• Clot Busting Drugs Must Be Given Within The 1st Hour

Reduces Death Rate 50%. Plan Now For Possible Heart Attack

• Discuss With Your Doctor ^{And} Which Breaks Down Fibrin.

His Attitude Re. Use As Thrombolytic Agents. If He Book-Bools Them, Ask Another Dr. Have Him Evaluate Your Risk Of Heart Attack And If Clot Busters Are Right For You.

• Factors Against Use Of Clot Busters: Person Has Bleeding Problems, Had Stroke, Recent Head Injury, Very High Blood Pressure, Cholesterol Above 200, Pregnancy, Traumatic CPR, Recent Surgery, Using Blood Thinning Drugs, Liver Dys. function.

• Body Produces A Natural Clot Buster Enzyme, Plasmin, Which Breaks Down Fibrin.

Prevention And Care Off Heart Attacks - Use Of Clot Busters - 2 -

• Clot-Busting Drugs Dissolve Clots By Increasing Plasmin, Decreasing The Immediate Damage And The Later Injury To The Heart Muscle.

• 4% of Heart Attack People Show No Damage To Heart Muscle, **IF** Treated Within 1 Hour With Clot-Buster.

• 50% of Deaths From Heart Attack Occur In People Over 75.

Risk From Not Taking Clot Busters Greater Than The Risk From Taking Them.

• In England, 90% Are Given Clot-Busters.

• Determine Which Hospital You're Apt To Go To And Be Sure They Have Fine Routine And Are Well-Prepared For Heart Attack Patients, (Plasmin)

First and Paperwork And Case History Secondly.

• Clot-Busting Drugs Should Be Kept Stored In Emergency Room

• Clot-Buster Mfr's And FDA Require Confirmation Before Administration. Carry A Copy of Your EKG With You In Your Wallet For Comparison.

Reduce EKG To Wallet Size.

• Take Aspirin Immediately When Attack Starts. Learn Signs Of Heart Attack.

• 150,000 Lives Could Be Saved Yearly By Fast Clot-Busting Therapy.

EXERCISE IS VERY IMPORTANT.

It Boosts Your Natural Clot Busters, (Plasmin)

Prevention And Care Of Heart Attacks - Use Of Clot Busters - 3-

● Clot Busters Used In The U.S:

(1) Strepto Kinase, (2) tPA (tissue plasminogen activator), (3) APSAC (Anisoylated Plasminogen-strepto Kinase Activator).

(4) Best And 10X Less Expensive.

Also Carry In Wallet: Your

Dr.'s name And His Back-up

Dr. (1) Your Drug Sensitivities &

Allergies. (2) Cardiologist,

(3) Medical Conditions, (4) Sur-

geries In Last Year, (5) Family

Health History (Related).

Don't Confuse Indigestion

With A Heart Attack.

Learn Signs Of Heart Attack.

Pressure, Fullness, Squeezing

or Pain In Center Of Chest.

Lasting 2 or More Minutes.

Pain Spreading To Shoulders,

Neck Or Arms, Severe

SEE Pg 148 for 3386 Heart Support Nutritional Supplement.

120 Tablets \$37.95 (your cost 28.50)

IRON - A VITAL MINERAL NUTRIENT

Iron Deficiency Robs Us Of Our

Stamina, Weakens Our Resistance,

Promotes Stomach Cancers,

Hearing And Hair Loss.

Supplementation May Increase

Energy Even Though Iron

And Hemoglobin Blood

Tests Are Normal And

Taking Supplementation

Does Not Change Blood Levels.

Phosphates In Ice Cream, Candy

Bars, Baked Goods, Beer, Soft

Drinks, Processed Foods

(Because Of EDTA) Block

Absorption Of Iron.

Eating Excess Of Dairy

Products Interferes With

Uptake Of Iron.

Coffee Blocks 40% Of The

Absorption Of Iron Tea

Blocks 87% Of Iron Absorption

DO NOT DRINK COFFEE

OR TEA WITH YOUR

MEALS

Fish increases the absorption of iron four fold. It's another

reason to eat salmon & Tuna.

Fruits & Vegetables With High

Vit C Greatly Increase Absorption.

Foods With High Folate, eg

Dark Green Leafy Vegetables (kale).

Beans & Seafood Increase

Absorption. Some Iron Rich Foods:

Apricots (dried) 250 20% 0.2% RDA

Lima Beans 3.0 10%

Dates 2.1 10%

Kale 2.75 8%

Green Peas 3.0 8%

Raisins 1.5 8%

Spinach 3.5 8%

Brewer's Yeast 3 TBS 15%

Tofu 3 TBS 25%

Yeast 1/2 cup 35%

Fortified Barley 1/4 cup 15%

Millet, Hulled 1/4 cup 15%

Oat Groats 1/4 cup 10%

Oats - Rolled 1/4 cup 5.0%

Soy Grits 1/4 cup 25%

Wheat Germ 1/4 cup 10%

Wheat Bran 1/4 cup 13%

Oat Bran 1/4 cup 30%

Rice Bran 1/4 cup 30%

Sunflower Seeds 1/4 cup 30%

Blackstrap Molasses 1 TBS. 20%

Stop eating meat, but

increase your eating of

dark green leafy vegetables

and the other non-meat

foods above

HABRAT: HEARING AID BRAIN REWIRING ACCOMMODATION TIME

Every practicing dispenser knows that it may take a considerable amount of time for the listener to "get used to" new hearing aids. But do the fundamental and beneficial changes in the wiring of the brain itself help the auditory rehabilitation process? Data presented here indicate it is sometimes impossible to properly evaluate the benefit of a particular hearing aid fitting for weeks or even months.

WE ILLUSTRATE SOME OF THE ISSUES IN A LIGHT-HEARTED VEIN WITH THE FOLLOWING CONVERSATION: Suspicious Customer: How long do I have to wear my new hearing aids before I get used to them? Dr. Abonso: That's a tough question. Often, your new hearing aids will sound wonderful the instant you put them on. S.C.: Well, mine didn't; they still sound funny after three weeks. Dr. Abonso: Tell me your complaints. S.C.: I have three. First, everyone sounds a bit like Donald Duck, even me. Second, my own voice bothers me because it sounds as though I'm speaking into a barrel. Third, the hearing aid is noisy; unless I'm in a very quiet room, I hear all sorts of distracting noises. Dr. Abonso: One of those, the barrel effect, your dispenser can probably improve (but perhaps not eliminate) with a modification. The other two sound like a problem like a problem of retraining your brain. S.C.: Why bring my brain into this? It's my hearing that is impaired. Dr. Abonso: Because your brain is designed to be moldable, like plastic. If one has a stroke, for example, another part of the brain can ultimately take over the tasks the damaged part was doing. S.C.: What's that have to do with me? Dr. Abonso: When you lose part of your hearing, the corresponding part of your brain-which now has on input from your ear-apparently gets "rewired" to do other things.

DR. ABONSO: PROF. GATEHOUSE IN SCOTLAND HAS BEEN STUDYING HOW LONG IT TAKES FOR THE BRAIN TO MAKE USE OF NEW INFORMATION FROM A HEARING AID. It looks as though the brain makes little use of the new information for five to six weeks, then gradually starts to use it. S.C.: How does he know? Dr. Abonso: He measured word recognition scores every week. The scores didn't change for 5 weeks, but after 6 weeks they climbed steadily. Hearing-impaired listeners require a period of time to accommodate to the characteristics of their hearing aids.

THERE IS A FUNDAMENTAL PERCEPTUAL PROCESS WHEREBY A HEARING IMPAIRED LISTENER, when presented with a range of speech information which had been previously unavailable, can take considerable time to learn to make optimum use of the new set of speech cues and thereby derive optimal benefit from the amplification. Note that the benefits of a hearing aid characteristic which would be regarded as theoretically superior to a competitor (in this case, a rising frequency response), could not be determined initially. The real benefit only started to become apparent after some four to six weeks' experiments. Here, individuals whose regular hearing aids had little output above 2.5 kHz were given the potential benefits of information. Here, again the presumed benefits did not appear on initial testing; they were realized after time. Other recent data also show both the perceived benefits of amplification and measured speech identification abilities can increase across a three-month time period. FOLLOWING RETINAL DAMAGE, FOR EXAMPLE, VISUAL CORTEX DOES NOT RESPOND TO ANY VISUAL STIMULUS. With the passage of time, however, the "empty" cortex area begins to respond to stimulation from outside the damaged retinal area. In auditory domain there is also increasing evidence that cortical plasticity can exist and that the adult brain can learn to remap its resources according to the patterns of acoustical stimulation it receives. In one experiment, a frequency region of the cochlea in adult guinea pigs is destroyed, resulting in a cortical remapping of the corresponding area so that it receives signals from the intact adjacent areas of the cochlea. Similarly, Willot et al studied a particular mouse mutant which develops high frequency sensorineural hearing loss in adulthood, resulting in a reallocation of cortical high frequency areas to low frequency areas. Most relevant of all, Recanzone et al have shown that by instituting a chronic change in the pattern of auditory stimulation through intensive training on a frequency discrimination task, the cortical representation of the "trained" frequencies increases with respect to that for the untrained frequencies, which are now less active. These animal findings are consistent with the hypothesis that the adult brain "rewires" itself as needed to best process incoming signals. Turning to the human, we also find many examples of the adaptability of the adult brain. With vision, for example, it is possible to take inverting goggles and tape them to your forehead. At first you can't read, you can't write, you stumble around and you certainly can't ride a bicycle. Yet in four to six weeks of constantly wearing these inverted goggles, you become able to do all of those things. the world is back the right way up. When you finally take the goggles off, however, you go through a period of time in which you can't ride a bike, read, write, ect. To all appearances, the visual system has somehow rewired itself. (these goggle experiments, reported by Cohler, were motivated by an interest in whether the inverted image on the back of the retina was hardwired to appear to the brain right side up, or if the necessary visual inversion could be learned). There is an even more powerful visual example reported by

Cohler. You can take goggles that distort differently, depending on whether you look to the left or the right. So if you are looking at a building of windows, the windows on the left might tilt to the left and the windows on the right tilt to the right. Worse, if you look straight ahead and move your head quickly back and forth, the shape of the windows goes through wild gyrations. After several weeks of wearing these funny goggles, however, the windows all look square, and you can shake your head while looking straight and the windows don't move! Your brain can unscramble all of that rapidly varying visual distortion in real time, filtering it out so that everything stands still. (When you first take the goggles off, the windows go through wild gyration as you move your head back and forth quickly). A small vignette forms an auditory example from one of the authors (MCK).

AS AN INDIVIDUAL PROGRESSIVELY ACQUIRES A HIGH FREQUENCY SENSORINEURAL HEARING LOSS, THE CORTICAL REPRESENTATION OF THE LOWER INTENSITY, HIGHER FREQUENCY REGIONS OF THE AUDIBLE WORLD WILL NO LONGER RECEIVE STIMULATION. Because of the lack of stimulation, the brain will begin to allocate surrounding frequencies and intensities to those unstimulated regions. Given that most sensorineural hearing impairments are slowly progressive, this process will occur over a number of years, if not decades. When the hearing-impaired individual is provided with amplification (and here we presume that the amplification is appropriately designed), then the previously inaudible areas of the auditory world now become audible and are presented to the brain. However, the areas that were previously used for coding the higher frequency, low intensity signals have now been reallocated to other frequencies and intensities, and it may take a considerable period of time for this re-wiring (unremapping?) to take place. (We give a homely analogy: Having given away all the 4th floor telephone lines to the low frequencies, the brain must first get them back-or find an empty floor with mostly unused lines-before reallocating any to the high frequencies.)

PRACTICING DISPENSERS, HOWEVER, KNOW THAT SOME HEARING-IMPAIRED LISTENERS GAIN THE BENEFITS OF AMPLIFICATION ALMOST IMMEDIATELY. Perhaps the time taken to "re-learn" the high frequency information was absent- and for how long. In addition, training seems to speed up the process. Walden et al found that after two weeks of intensive Army aural rehabilitation, their newly hearing-aided subjects improved their word recognition scores about 10%; subjects given an additional 10 days of intensive visual or auditory training improved another 15%.

Experimental evidence suggests that it can take time for the benefits of the availability of particular speech cues to become apparent, so that comparative trials of different amplification characteristics for some listeners might have to take place across periods of weeks rather than hours or days.

RATHER THAN BEING REGARDED IN ITS SOMEWHAT NEGATIVE AND BOTHERSOME LIGHT, this can instead be regarded as a positive rehabilitation tool, whereby hearing-impaired listeners can be given a rational "wear it a while and you will get used to it," which has been the mainstay of practicing since the 1940s.

OUR THESIS IS THAT THE BRAIN NOT ONLY AN INCREDIBLY POWERFUL PROCESSOR, but that this processor reprogram itself over time to optimize the use of the information that is available to it. The practice of fitting hearing aids (both in selecting adjustments and rehabilitation support) should take this into account. Identifying the factors which govern the degree and speed of accommodation to hearing aids will remain prime areas for research.

End of Habrat

NOW
Heart
Support
With CoQ10, L-Carnitine,
Pur-Gar®, & Hawthorn
in Enteric Coated Tablets
60 Tablets
#3286 120-49-3784

EACH 3 TABLETS PROVIDE:

Vitamin B-1 (Thiamine HCL)	50 mg
Vitamin B-6 (Pyridoxine HCL)	50 mg
Vitamin B-12 (Cyanocobalamin)	1000 mcg
Folic Acid	500 mcg
Magnesium (Oxide/Aspartate) ..	200 mg
Potassium (Chloride/Aspartate) ..	230 mg
Iodine (Kelp Extract)	200 mcg
Selenium (Selenomethionine) ..	140 mcg
Coenzyme Q10, Pure	30 mg
L-Carnitine	400 mg
Pur-Gar® Garlic	1000 mg
Hawthorn Berry Extract (standardized to contain 1.25% Vitedin-4' rhamnoside)	150 mg
Alpha Lipolic Acid	20 mg
Ginger Root	250 mg
Cayenne Pepper (40,000 Heat units)	150 mg

BASIC EXPLANATION OF HOW WE HEAR SOUND. The auricle (the outer) gathers sound. The sound is funneled into the ear canal. At the end of the canal is the tympanic membrane (or ear drum). Sound waves hit the ear drum causing it to vibrate. The vibration sets the bones of the middle ear in motion. The tympanic membrane along with the bones of the middle ear create an increase in sound pressure of about 27 decibels. There are three bones in the middle ear; the incus, malleus, and stapes. The stapes bone connects the oval window of the cochlea (inner-ear). The movement of the stapes bone causes compression on the cochlea. The compression forces the fluids of the cochlea (perilymph and endolymph) to move. The movement of the fluid in the ear produce vibrations. These vibrations are picked up by hair cells. The hair cells change the vibrations into an electrical impulse and send the information to the brain, via the eighth cranial nerve. A basic understanding of how our ears work is important in understanding problems of the ear and solutions for correction or aid if needed.

THE FOOD AND DRUG ADMINISTRATION HAS GUIDE LINES TO HELP CATCH MEDICAL PROBLEMS BEFORE THEY BECOME SEVERE (see audiometric test form) Do not buy a hearing aid if any of these conditions exist. Type of hearing losses; sensorineural, conductive mixed (sensori-neural and conductive loss combined), central. **CONDUCTIVE LOSS** is when sound does not make it to the inner ear. Conductive hearing problems can come from; ear wax, hole in the ear drum, fluid build up in the middle ear, fixation of the ossicles(bones), and tumors.

CENTRAL DEAFNESS through damage to the brain stem, strokes, skull fractures, lack of oxygen to the brain, carbon monoxide poisoning and tumors can cause central deafness.

SENSORI NEURAL HEARING LOSS; the reason that hearing aids are generally worn. One out of three Americans over the age 50 has a sensorineural hearing loss. Sensorineural or nerve damage losses are caused from several different factors.

PRESBYCUSIS: THE MOST COMMON CAUSE OF HEARING LOSS IN AMERICANS OVER THE AGE OF 50. Presbycusis is the loss associated with increasing age. Nerve damage can occur from exposure to loud noise for long periods of time such as working in a factory. Nerve damage can come from ototoxins-drugs taken to cure other diseases that cause hearing loss such as quinine, streptomycin, neomycin, kanamycin.

NERVE DAMAGE IS THE STIFFENING OR BENDING OVER OF THE NERVE ENDINGS IN THE COCHLEA. If you could unroll the cochlea out flat, you would see 30,000 tiny nerve endings (see fig 3). Healthy nerve endings stand up straight. When sound moves across the nerve, they vibrate, sending signals to the brain. This is a very basic explanation of how we hear sound. When a person has nerve damage, the nerves become stiff and bend over. The nerves, since bent, no longer vibrate the way they should, so the individual often misunderstands words. The average person in the United States with nerve damage, loses about 15.5% discrimination every four years. There is no cure for nerve damage. The only help is a hearing aid.

HEARING AIDS ARE WORN TO FORCE DAMAGED NERVES TO STAY ACTIVE. By forcing the nerve endings to stay active, a hearing aid can slow the loss of an individual's understanding to about 2% every four years. This is why it is so important to get help as soon as possible. The longer a person waits to get help, the less the hearing aid will do for him/her. Keep in mind that a person with nerve damage often has no problem hearing peoples voices he/she just has trouble understanding some words or certain voices.

HEARING TEST; DURING A HEARING TEST PAY CLOSE ATTENTION. Day dreaming or lax attitude may effect the fit of your hearing aid. Testing should start with a case history. Case history covers the history of your hearing loss. The specific situation that you are having difficulties are important to discuss at this time, to get the best advice on your problems.

AUDIOGRAM; NUMBERS AT THE TOP OF THE AUDIOGRAM REPRESENT THE FREQUENCIES OR TONES TO BE TESTED. 250, 500, 2000, 4000, 6000 and 8000 Hertz normal frequencies tested. The numbers on the side of the audiogram represent the degree of loss, in decibels. Losses from 0-10 db are considered normal. A loss from 21-40 is mild. A loss from 41-60 is moderate. A loss from 61-80 is severe. Legends are usually located on the audiogram, that tell how to read the symbols on the test. If there is no legend, a red circle indicates the hearing in the right ear. A blue x represents the hearing in the left ear. A red < represents right ear inner hearing. A blue > represents left ear inner hearing. Notice the hearing loss of the individual on the following page. Most hearing losses look this, a more severe loss in the high frequencies. High frequency nerve endings are first exposed to noise. It is believed that this is why the high frequencies are the first to be effected in noise induced hearing losses. High frequencies are the most critical in understanding speech (1000-6000 hrz.)

HEARING LOSS SHOULD BE AT LEAST 35db AT 3000hrz. TO CONSIDER BUYING A HEARING AID. If your loss is 35db. or greater at 3000hrz. you have a hearing problem, whether you recognize it or not. Often a person

with the hearing problem is the last one to know they have a problem. Most hearing losses are so gradual over a long period of time, that they are not detected until the loss becomes severe.

TO DETERMINE THE DEGREE OF HEARING LOSS we add at 500hrz. 1000hrz. and 2000hrz. then divide by three. This gives us our pure tone average. In the example left pta. is 47, right ear is 50. If the test results are done correctly pta. and speech reception thresholds should be within 5db. of each other, there are some exceptions. This loss is considered moderate, yet the high frequency loss is in the severe range. Pta average is very misleading in determining the degree of loss, averaging the loss at 1000, 3000, 4000 will give a more true degree of loss.

YOU'VE FINALLY ADMITTED YOU NEED HELP, WHICH KIND OF AID SHOULD YOU BUY? Here are some basic things to consider. Each part of the ear picks up certain frequencies.

THEREFORE, SIZE WILL DETERMINE HOW A HEARING AID WILL SOUND. Full shell hearing aids and behind the ear aids fill the entire ear up. The result is unnatural sound because the ear can no longer pick up the sounds naturally. Also, both models tend to pick up wind noise. The advantage of BTE hearing aids is flexibility. If a person wearing a BTE hearing aid experiences hearing changes or losses, often the aid can be adjusted to the new loss. The only advantage to full shell hearing is cost, they are less expensive.

CANAL HEARING AIDS; Are about half the size of full shell hearing aids. The advantages are better sound, and cosmetically more appealing. Since canal aids are smaller they use part of the ears natural ability to pick up sound. The result is a natural sounding hearing aid.

CIC(COMPLETELY IN THE CANAL), use 100% of the ear natural ability to pick up sound. CIC's are the most natural sounding hearing aid, they are also the most cosmetically appealing. CIC volume control is set by your specialist. With CIC's, people can actually talk on the phones without feed back. For those that are vain CIC's can't be seen, the only disadvantage: cost; CIC's are expensive. The biggest problem with hearing aids is most people set their volume too high. Hearing aids are designed so that the louder the hearing aid is set the farther it reaches out to pick up sound. Set the volume too high and the aid will reach across a room to pick up sound, the result poor hearing.

CONCERNING PROGRAMMABLE HEARING AIDS, SAVE YOUR MONEY. Programmable as of yet have not proven to be worth the cost, benefits are minimal to most wearers, Most audiologists and hearing aid specialists have not been properly trained to adjust these aids.

THE SMALLER THE AID THE SMALLER THE BATTERY The smaller the hearing aid the more expensive they are. Full shell hearing aids start at \$395 and up. Canal aids are \$695. and CIC's \$1295 and up.

HEARING AIDS CHANGE YEARLY. What was impossible a few years ago is possible today. Even if you were told you have a dead ear help is available, With cross and bi-cross hearing aids. The Surgeon General recommends having your hearing evaluated every two years.

This information was compiled by Brad Stanfield NBC-HIS.

Here's the new, all natural way to help keep your colon working for you, not against you! Jerusalem artichoke tablets are not from Jerusalem or even from artichokes. They're a natural food product that comes from special dehydrated whole tubers. What makes these natural tablets special is that they are extremely rich in a substance that stimulates and helps increase friendly bacterial growth in the colon. *INDIANA BOTANIC GARDENS. F.O.S.*

JERUSALEM ARTICHOKE 500 MG. TABLETS
#C05ARTI - 250 - \$6.95 SUGGESTED RETAIL

Generally, the more friendly bacteria...the cleaner the colon is of toxins, impurities, and unfriendly bacteria. Jerusalem artichoke tablets — they're high in fiber, high in low calorie protein, and the highest source of vegetable source potassium known.

Keep your colon clean and in a healthful state with great tasting, chewable Jerusalem Artichoke tablets.

WHOLESALE PRICE - \$4.48

NOW 6070 Jerusalem Artichoke Flour (Hypoallergenic) 6oz. 5.95
6075 " " " " 5lbs 11.40

Aromatherapy Essential Oil
 CARRIER - DIFFUSER
 Made from File folder
 Make 2 holders
 A. OUTER CARRYING CASE
 NO HOLES
 B. ADD HOLES AS INDICATED
 USE mini-binder clips to
 hold closed.
 Insert paper towel
 Double thick in 1 1/4" square openings
 To combat sleepiness while driving, increase length and hand... for view mirror not oil

Fold Here
 Cut Out 1/4" wide
 5/8
 3 1/2
 7"
 3 1/2
 1 1/4
 5/8
 Paper towel or gauze
 1 1/4
 2 1/2
 1 3/8
 To increase mental alertness use rosemary essential oil
 - 148-a

Get hooked on classical music!

(I will soon be 87)

Controls to adjust both loudness and soft-sounds should be on the outside of the hearing aid.

AUDIOMETRIC EVALUATION

NAME DR. BERNARD VODNOY (1992) AGE 78 SEX M BIRTHDATE Aug 12, 1914
 ADDRESS 1430 E. Clayton Drive DATE 5/12/92
 CITY South Bend IN. ZIP 46708 PHONE 291-8773
 PHYSICIAN _____ ADDRESS _____
 MEDICAID # _____ MEDICARE # ☒

RUNNING EARS ☐ DIZZINESS ☐ TINNITUS ☐ EARACHES ☐

Types of hearing aids: BTE (behind the ear); H.S. (Half shell); F.S. (Full shell); ITE (in the ear); CIC (Completely in the canal). I found the best for me is the Dual Circuit, Full shell with volume control and adaptive compression and soft sound control.

PURE TONE AUDIOGRAM

Frequency in cycles per second (Hz) *High*
 Low Tones 125 250 500 1000 2000 4000 6000 *Tones*

	Unmasked		Masked	
	Air	Bone	Air	Bone
R (red)	0	<	0	0
L (blue)	X	>	0	0

No Response: \downarrow
 Sound Field: S

A/C PURE-TONE AVERAGE
 (500, 1000, 2000 Hz)

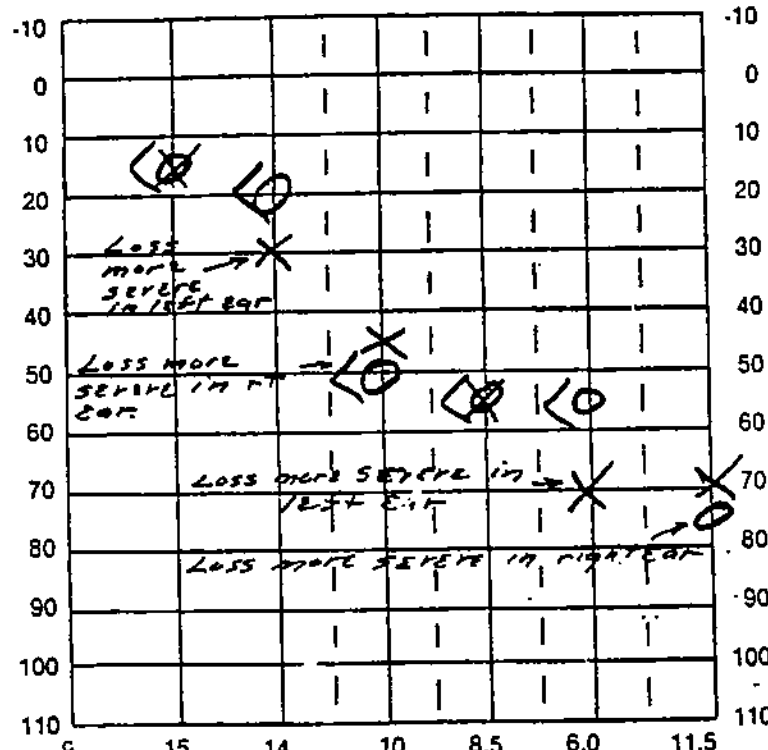
RE _____ dB (decibels)
 LE _____ dB

Hearing Aid Evaluation

My loss is typical of most seniors. This results in difficulty in hearing high soprano voices, both spoken and sang, and music e.g. the violin. Hearing aids are designed to amplify only those wave lengths which show significant loss and bring them up to the performance of the no loss wave lengths.

- Your hearing aid technician can help you understand your audiogram. If you are having any difficulty with your hearing, get a hearing test, understand it, and periodically be re tested.
- If you hearing loss, become a vegetarian, and be sure your ears and hearing nerves are getting super nutrition and oxygen.
- Consider use of food grade hydrogen peroxide. (FC 3% H₂O₂)
- Enhance your oxygen intake, watch your B vitamins, do deep breathing, become a vegetarian.

Hearing Level in dB ISO-1964 (ANSI-1969)



SPEECH AUDIOMETRY (Live voice _____ Recorded _____)

Test	RE	LE	SF	BINAURAL
SRT	dB HL	dB HL	dB HL	dB HL
Disc. (Quiet)	72 dB HL	68 dB HL	%	%
MCL	45 dB HL	40 dB HL	dB HL	dB HL
LDL	10 dB HL	10 dB HL	dB HL	dB HL

HERBAL THERAPY - 1987-1988

This section is from Dr. Duke's book, "The Green Pharmacy". Beware of interactions. Pharmaceutical medicines sometimes interact badly with each other and with certain foods. The same goes for herbal medicines, although many herbal reference books neglect to mention this. Always be particularly careful when taking more than one drug or herb or a combination of a drug and an herb. Bad interactions are always possible. If you suspect a bad interaction, consult your physician or pharmacist.

Whatever herb you're taking, I recommend that you learn as much as you can about what to expect from it. If anything unexpected happens, stop taking whatever it is and check with an expert you trust.

Make sure of the diagnosis. Herbal devotees sometimes get the idea that they can diagnose illness as well as come up with herbs to treat it. But diagnosis is a separate art and one that is best left to physicians. I discourage self-diagnosis.

Diagnosing illness is not easy, and sometimes even good doctors make mistakes. But physicians' diagnostic bating average is usually better than that of anyone who has not had medical training. Once you're confident of a diagnosis, then you can discuss with your physician how to treat it: drugs, herbs, some combination of the two or any of the foregoing plus diet, exercise and lifestyle changes. Some holistic physicians will stress diet and lifestyle more than drugs for some ailments. *Complementary Medical Herbs*

Watch out for side effects. I'm convinced that all medicines, natural or synthetic, have side effects. It's hard to imagine an active plant chemical (phytochemical)—or an herbal mixture containing thousands of them—having just one targeted chemical reaction in our body. Of course we have other reactions, unrelated to the illness, that could appropriately be termed side effects—some desirable and some undesirable. That's why you have to watch yourself when taking any new herb for the first time. *Herbs*

If you have an unpleasant reaction to an herb, such as dizziness, nausea or headache, cut back on your dosage or stop taking the herb. Listen to your body. If the herb doesn't feel right, don't take it.

Be alert for allergic reactions. People can be allergic to anything. Even if you have no known allergies, you might be allergic to a new herb that you try. Be careful. Again, listen to your body. If you develop any unusual symptoms, stop taking the herb and consult an allergist or physician.

If you experience any difficulty breathing within 30 minutes or so of trying a new herb, food or drug, call 911 immediately. You may be having an anaphylactic reaction, the most severe form of allergic reaction, which can prove rapidly fatal unless treated promptly.

Anaphylactic reactions to herbs are rare, and I'm not saying that you need to be unduly apprehensive about trying new things. Just be careful and understand the possible risks. *Healing Power of Herbs* by Michael T. Murray, M.D., Prima Publishing, P.O. Box 1260, CA 95077
1-800-632-8676 or 916-624-5718

Here's one interaction that you should be particularly aware of: Antidepressants known as monoamine oxidase (MAO) inhibitors interact badly with wine, cheese and many other foods. If you take a pharmaceutical MAO inhibitor, you shouldn't eat these foods.

The antidepressant herb St.-John's-wort is also an MAO inhibitor, so the same food restrictions apply. If you take St.-John's-wort regularly, consult a physician, pharmacist or consumer drug guide about which foods to avoid.

Open lines of communication. Too many people listen to both their physicians and their herbalists and do what both advise. Usually there's no problem with this, such as when a physician gives you sleeping pills for insomnia, for example, and an herbalist recommends a hot bath before bed with a blend of sedative aromatherapy oils.

But just as too many cooks can spoil the broth, too many health practitioners can also be too much of a good thing. Let's say your physician prescribes an MAO inhibitor for depression, and your herbalist recommends St.-John's-wort, also an MAO inhibitor. You may wind up taking too much. Or let's say your physician prescribes half an aspirin a day to prevent heart attack, and your herbalist tells you to drink a daily cup of tea made from willow bark or wintergreen. The teas contain the herbal equivalent of aspirin, and you might wind up taking more than you need, with more anti-clotting action than you want.

To avoid the too-many-cooks problem, be sure to tell your physician and your herbalist about all the medicines you're taking as well as any unusual foods you might be eating.

Back pages 65-99 covers 103 herbs. Gives parts used, chemical and nutrient content (many have vit-A, B, C, D, E, B₂, B₆, C, E, essential oils, minerals and more. He has cautions for adverse side effects in 38 herbs. That means we must be cautious and knowledgeable in lot of 3 herbs we may use. Back's book (600 pgs 20¢, your cost 12¢)

Marcy D. Nicholas's book "Herbs: Nature's Pharmacy or Nature's Poison" has 47 pgs of actual material in very large type, 9.99 + shipping. Worth reading covers 147 herbs + 35 references.

16 DISORDERS TREATABLE WITH HERBAL THERAPY

Aging	Heart Disease
Alzheimer's	Insomnia
Arthritis	Glaucoma
Cataracts	Laryngitis
Constipation	Osteoporosis
Flatulence	Viral Infections
Gall & Kidney Stones	
Hyper & Hypothyroidism	
Macular Degeneration	

AGING

<u>DUKE</u>	<u>BALCH</u>
3 Ginkgo Biloba	Ginkgo Biloba
2 Echinacea	Echinacea
2 Garlic	Garlic
2 Milk Thistle	Milk Thistle
2 Panax Ginseng	Ginseng (syberian)
2 Gotu Kola	Red Clover
2 Puralane	Wild Yam
1 Camomile	Burdock
2 Peppermint	Valerian Root
2 Evening Primrose	
2 Thyme	
1 Horsetail	

ALZHEIMER'S

<u>DUKE</u>	<u>BALCH</u>
2 Ginkgo Biloba	Ginkgo Biloba
3 Horsebalm	Butcher's Broom
2 Brazil Nut	Anise
2 Fava Beans	Lycopodium
2 Stinging Nettle	Ginseng
1 Gotu Kola	
3 Rosemary	
2 Dandelion	
2 Fennugreek	
2 Sage	
2 Willow	

ARTHRITIS

<u>DUKE</u>	<u>BALCH</u>
3 Stinging Nettle	Stinging Nettle
3 Ginger	Alfalfa
3 Red Pepper	Cayenne Pepper
2 Oregano	Buchu Leaves
1 Brazil Nut	Celery Seed
1 Rosemary	Devil's Claw
1 Licorice	Yucca
3 Pineapple	Cat's Claw
2 Willow	Brigham Tea
1 Broccoli	Burdock Root
1 Vitamin C	Corn Silk
	Horsetail
	Parsley Tea

- Herbs listed in **BOLD** may benefit 20 or more disorders
- Restudy Balch (thoroughly) and apply pages 523-8 "Weakened Immune System"

CATARACTS

<u>DUKE</u>	<u>BALCH</u>
3 Bilberry	Bilberry
3 Rosemary	Full Spec. Minerals
2 Carrot Root	Vitamin B Complex
2 Purslane	Vitamin C
1 Capers	Zinc
3 Catnip	Grape Seed Extract
2 Brazil Nut	Vitamin A
2 Onion	Vitamin E
2 Turmeric	Soy Protein enhance aminoacids
1 Ginger	

CONSTIPATION

<u>DUKE</u>	<u>BALCH</u>
3 Aloe Vera	Aloe Vera
3 Cascara Sagrada	Cascara Sagrada
2 Flax Seed & Oil	Flax Seed & Oil
1 Rhubarb	Apple
2 Psyllium	Vit. B & C Comp.
1 Fenugreek	Vitamin A,D,E
2 Senna	Garlic
Be Vegetarian with abundance of hydrophylic foods	Goldenseal
	Acidophilus
	Alfalfa & Spirulina
	Yerba Mate
	Mineral Complex

FLATULENCE (carminatives)

<u>DUKE</u>	<u>BALCH</u>
3 Camomile	Camomile
3 Peppermint	Peppermint
3 Fennel	Fennel
3 Dill	Anise
3 Horsebalm	Alfalfa
3 Coriander	Aloe Vera
3 Allspice	Catnip
3 Cloves	Fenugreek
3 Caraway	Goldenseal
3 Carrot Root	Papaya
3 Lemon Balm	Ginger

GALLSTONES & KIDNEY STONES

<u>DUKE</u>	<u>BALCH</u>
2 Horsetail	Horsetail
1 Parsley	Parsley
2 Ginger	Ginger
2 Peppermint	Peppermint
2 Beggar Lice	Alfalfa
2 Couchgrass	Lecithin
2 Spearmint	Vitamin A,B,C,D,E
1 Goldenrod	Dandelion
1 Lovage	Flaxseed Oil
1 Cranberry	Amino Acids
1 Celery	Catnip
2 Celandine	Fennel
2 Turmeric	Wild Yam
1 Milk Thistle	Multi Digestive
1 Java Tea (kidney)	Enzymes
1 Stinging Nettle	
Acidophilus	

GLAUCOMA

<u>DUKE</u>	<u>BALCH</u>
2 Vitamin C	Vitamin C
3 Jabordani	Lecithin
2 Oregano	Amino Acid Comp.
1 Bilberry	Multi-Mineral
2 Kaffir Potato	Vit. B Complex
2 Pansy	Vitamin E
1 Shepard's Purse	Flaxseed Oil
2 Fruit & Veggies	Green Tea
	Vitamin A

HEART DISEASE

<u>DUKE</u>	<u>BALCH</u>
2 Hawthorn	Hawthorn
2 Rosemary	Rosemary
3 Pigweed	Alfalfa
2 Angelica	Butcher's Broom
1 Olive	Borage Seed
3 Willow	Horsetail
2 Grape	Nettle
2 Purslane	Pau D'Arco
1 Chicory	Black Cohosh
1 Peanut	Oat Straw
	Passion Flower
	Valerian Root
	Skullcap
	Red Sage
	Cayenne
	Ginger Root
	Ginkgo Biloba
	Gotu Kola
	Evening Primrose
	Green Tea

HYPERTHYROIDISM (Graves Disease)

<u>DUKE</u>	<u>BALCH</u>
	Foods which help suppress hormone production
1 Broccoli	Broccoli
3 Bugleweed	Brussel Sprouts
3 Self Heal	Cauliflower
2 Verbena	Kale
1 Radish	Mustard Greens
3 Lemon Balm	Peaches
3 Kelp	Pears
	Rutabaggas
	Soy Beans
	Spinach
	Turnips

HYPOTHYROIDISM

<u>DUKE</u>	<u>BALCH</u>
1 Gentian	Eat above foods in moderation; plus
1 Mustard	parsley, apricots, dates and prunes
1 St. John's Wort	
1 Kelp	Bayberry
1 Radish	Black Cohosh
1 Walnut	Goldenseal

INSOMNIA

<u>DUKE</u>	<u>BALCH</u>
2 Passion Flower	Passion Flower
3 Valerian Root	Valerian Root
1 Hops	Hops
1 Camomile	Camomile
1 Catnip	Catnip
3 Lemon Balm	Skullcap
1 Rooibos	Kava Kava
2 Lavender	

avoid alcohol, tobacco, caffeine, bacon, cheese, chocolate, eggplant, ham, potatoes, sauerkraut, sugar, sausage, spinach, tomatoes and wine in the evening. Eat foods high in tryptophan, avoid those high in tyramine.

LARYNGITIS

<u>DUKE</u>	<u>BALCH</u>
3 Cardamon	Gargle with:
2 Horehound	Fenugreek
2 Mullein	Slippery Elm
1 Echinacea	Licorice
1 Ivy	Marshmallow Root
1 Plantain	Raspberry
1 Soapwort	Cat's Claw
1 Sundew	Chlorophyll
2 Ginger	Grapefruit Extract
2 Mallows	3% Hydrogen Peroxide
1 Couchgrass	
1 Elecampane	
1 Knotgrass	
1 Evening Primrose	
1 Stinging Nettle	
Hot Spicy Foods	

MACULAR DEGENERATION

<u>DUKE</u>	<u>BALCH</u>
3 Bilberry	Bilberry
2 Ginkgo Biloba	Ginkgo Biloba
2 Peanut	Green Tea
1 Wolfberry	Blueberries
1 Clove	Zinc
2 Collards,	Kale
Spinach, etc.	Green Beans

OSTEOPOROSIS

<u>DUKE</u>	<u>BALCH</u>
3 Dandelion Root	Dandelion Root
1 Parsley	Parsley
1 Horsetail	Horsetail
3 Pigweed	Alfalfa
2 Soy Bean	Barley Grass
3 Cabbage	Black Cohosh
2 Avocado	Boneset
1 Black Pepper	Nettle
	Rose Hips
	Yucca
	Oat Straw

END OF FIRST 16 DISORDERS

ADDITIONAL DISORDERS TREATABLE WITH HERBAL THERAPY

Asthma	Gingivitis
Backache	Headache
Bronchitis	Indigestion
Bursitis & Tendonitis	
Chronic Fatigue Syndrome	
Colds & Flu	
Depression	Nausea
Diabetes	Pain
Dizziness	Sinusitis
Emphysema	Sore Throat
Fungal Infections	
Prostate Enlargement	
Toothache	Tooth Decay
Viral Infections	Wrinkles

CHRONIC FATIGUE SYNDROME

<u>DUKE</u>	<u>BALCH</u>
Vegetarian Diet	Astragalus
Goldenseal	Burdock
Lemon Balm	Red Clover
Asian Ginseng	Pau D' Arco
Sib. Ginseng	Skullcap
Magnesium	Acidophilus
Spinach	Chlorophyll
Romaine	Melatonin
Dk. Gr. Veggies	Leucine
Coriander	Valine
Pinto Beans	Taurine
Broccoli	Ginkgo Biloba
Brussel Sprouts	Dandelion
Echinacea	Milk Thistle
Licorice	(silymarin)
Ginger	St. John's Wort
Panax Ginseng	Valerian Root
Purslane	Non-fat Yogurt
String Beans	Spirulina
Cowpeas	Tyrosine
Stinging Nettle	Isoleucine
Poppy Seeds	Lysine
Folic acid	8 glasses water
Asparagus	Fresh Veggie Juice
Okra	No Junk Food/Drink
Wheat Grass	No Constipation
	No Aspirin
	Plenty of Rest

DIZZINESS

<u>DUKE</u>	<u>BALCH</u>
3 Ginger	Ginger
2 Ginkgo Biloba	Ginkgo Biloba
Camomile	Butcher's Broom
Spearmint	Dandelion
1 Celery Seed	
1 Pumpkin Seed	
Fennel	

NAUSEA

<u>DUKE</u>	<u>BALCH</u>
1 Peppermint	Peppermint
1 Fennel	Fennel
1 Camomile	Camomile
3 Ginger	Aloe Vera
1 Dill	Catnip
1 Walnut Hulls	Goldenseal
1 Cinnamon	Alfalfa
1 Lavender	Anise
1 Lemon Balm	Fennugreek
1 Weight Control	Papaya

COMBINED Rx FOR NAUSEA & DIZZINESS

Anise	Fennel
Butcher's Broom	
Camomile	Ginger
Catnip	Ginkgo
Celery Seed	Lemon Balm
Cinnamon	Licorice
Dandelion	Rosemary
Walnut Hulls	

Raspberry Tea - Diarrhea, Infertility, Menstrual Cramps, Morning Sickness, Motion Sickness, Pregnancy Problems, Premenstrual Syndrome, Tonsillitis
(#4519 Now 4oz. @ \$1.99 retail)

Butcher's Broom - Helps Circulation in the brain, aging, Alzheimer's Disease, cataracts, macular degeneration
(#4615 Now 500mg. 100 caps @ \$4.95)

Purslane - Not Available.

Pigweed - I will not use; it's anti-aphrodisiac

AROMATHERAPY:

Read Duke "Green Pharmacy"
Hard Copy pg. 21
Paperback pg. 26

Apply Especially: Eucalyptus, Lavender, Peppermint, Rosemary, Spearmint, and Wintergreen.

• Herbs listed in **BOLD** may benefit 20 or more disorders.

Agrimony

amenorrhea
diarrhea
sore throat

Alfalfa Leaf

breastfeeding problems
endometriosis
menopause
saponins
arteriosclerosis

Allspice

indigestion

Angelica Root

amenorrhea
angina
cardiac arrhythmia
heartburn
heart disease
indigestion
psoriasis

Anise Seed

asthma
bad breath
breastfeeding problems
colds
cough
erection problems
inhibited sexual desire
in women
sore throat

Arrowroot

athlete's foot

Astragalus

cardiac arrhythmia
HIV infection
pneumonia
viral infections

Barberry

cardiac arrhythmia

Basil, Sweet

insect repellent
bad breath
emphysema
headache
high blood pressure
warts

Bay Leaf

preventing tooth decay
body odor
diabetes
headache

Bayberry Bark

hypothyroidism

Bilberry

cataracts
stroke
ulcers
angina
diarrhea
glaucoma
macular degeneration
menstrual cramps
varicose veins

Black Cohosh Root

amenorrhea
menopause
tinnitus

Bromelain

preventing stroke
ankylosing spondylitis
arthritis
bruises
bunions
bursitis
Carpal Tunnel Syn.
gout
sinusitis
tendinitis
worms
weight control

Bugleweed Herb

Graves' disease
hypothyroidism

Burdock Root

HIV infection
PMS
seborrhea

Butcher's Broom

hemorrhoids
varicose veins
brain circulation

Camomile Flower

anti-aging
allergies
athlete's foot
bunions
Carpal Tunnel Syn.
diverticulitis
fungal infections
gingivitis
heartburn
hives
indigestion
insect bites/stings
insomnia
psoriasis
skin problems
sores
sties
ulcers

Capsaicin

herpes
ulcers
dry mouth
headache
pain
shingles
toothache
arthritis
bunions
psoriasis

Cardamom

fainting
asthma
bad breath
emphysema
erection problems
gallstones
heartburn
laryngitis
vaginitis

Cascara Sagrada Bark

constipation

Catnip Herb

cataracts
amenorrhea
insomnia

Car's Claw

gout
swelling

Celandine

corns
dandruff
kidney stones
warts

Chickweed Herb

weight control

Chicory, Roasted

heart disease
liver problems

Cinnamon Bark

athlete's foot
body odor
diabetes
erection problems
fever
gas
heartburn
indigestion
nausea

Cloves Bud

antiseptic
altitude sickness
bad breath
bunions
diabetes
macular degeneration
pain
toothache
worms
wounds

Coriander Seed

amenorrhea
asthma
bad breath
body odor
indigestion

Dong-quai

amenorrhea
inhibited sexual desire
in women
liver problems
menopause
menstrual cramps
PMS
sciatica
shingles

Damiana Herb

inhibited sexual desire
in women

Dandelion Root

osteoporosis
Alzheimer's disease
bladder infections
breastfeeding problems
liver problems
pneumonia
swelling
tonsillitis
warts

Devil's Claw

gout

Dill Weed

amenorrhea
bad breath
colic

Dill Weed (cont.)

gas
heartburn

Echinacea

anti-aging
preventing colds/flu
athlete's foot
bladder infections
breastfeeding problems
burns
bursitis
Chronic Fatigue Syn.
dry mouth
earache
gingivitis
herpesvirus
HIV infection
laryngitis
Lyme disease
pneumonia
sinusitis
sties
tendinitis
tonsillitis
tuberculosis
viral infections
wounds
yeast infections

Eucalyptus Leaf

fainting
bad breath
bronchitis
emphysema
pain
sinusitis
sore throat
tuberculosis
viral infections

Evening Primrose

anti-oxidant
anti-aging
preventing stroke
angina
dry mouth
endometriosis
headache
HIV infection
menstrual cramps
multiple sclerosis
pain
Parkinson's disease
PMS
Raynaud's disease
scabies
skin problems
weight control

Fennel Seed

amenorrhea
angina
asthma
body odor
breastfeeding problems
heartburn
high blood pressure
inhibited sexual desire
in women

Fenugreek Seed

anti-oxidant
Alzheimer's disease
breastfeeding problems
constipation
diabetes
diarrhea
high cholesterol
inhibited sexual desire
in women

Feverfew

allergies
amenorrhea
headache

Flax

angina
constipation
diverticulitis
endometriosis
psoriasis

Garlic

anti-aging
cancer
colds/flu
heart disease
stroke
allergies
altitude sickness
angina
arthritis
athlete's foot
breastfeeding problems
bronchitis
burns
cardiac arrhythmia
diabetes
earache
fungal infections
headache
herpesvirus
high blood pressure
high cholesterol
HIV infection
insect bites/stings
intermittent claudication
Lyme disease
pneumonia
Raynaud's disease
sinusitis
sore throat
sties
tonsillitis
tuberculosis
ulcers
vaginitis
viral infections
worms
wounds
yeast infections

Gentian Root

earache
heartburn
hypothyroidism
ulcers

Ginger Root

anti-inflammatory
cataracts
fatigue
heart disease

Ginger Root (cont.)

migraines
preventing stroke
amenorrhea
angina
ankylosing spondylitis
arthritis
athlete's foot
body odor
bunions
bursitis
Chronic Fatigue Syn.
colds
cough
dandruff
depression
dizziness
erection problems
fever
high cholesterol
hives
indigestion
infertility
inhibited sexual desire
in women
intermittent claudication
kidney stones
laryngitis
liver problems
menstrual cramps
morning sickness
motion sickness
nausea
pain
Raynaud's disease
sciatica
seborrhea
sore throat
swelling
tendinitis
toothache
ulcers
viral infections
worms

Ginkgo Biloba

anti-aging
altitude sickness
stroke
allergies
Alzheimer's disease
asthma
cardiac arrhythmia
depression
erection problems
hangover
headache
intermittent claudication
macular degeneration
Parkinson's disease
Raynaud's disease
sinusitis
sores
tinnitus
varicose veins
vertigo

Ginseng Root

anti-aging
Chronic Fatigue Syn.
depression

Ginseng Root (cont.)

erection problems
hangover
infertility
inhibited sexual desire
in women

Green Tea

cancer

Goldenseal Root

antibiotic
athlete's foot
bladder infection
canker sores
Chronic Fatigue Syn.
colds/flu
earache
fungal infections
intestinal parasites
pneumonia
sinusitis
sties
tinnitus
vaginitis
viral infections
wounds
yeast infections

Gotu Kola Root

anti-aging
Alzheimer's disease
burns
skin problems
sores
varicose veins
wounds

Hawthorn Berry

angina
cardiac arrhythmia
heart disease
high blood pressure
intermittent claudication

Hops Flower

insomnia
relaxer

Horehound

amenorrhea
bronchitis
cardiac arrhythmia
laryngitis

Horsetail Grass Herb

anti-aging
anti-oxidant
osteoporosis
baldness
bursitis
kidney stones
tendinitis

Irish Moss

hypothyroidism

Juniper Berry

amenorrhea
cleansing
viral infections

Kelp, seaweed

Graves' disease
hypothyroidism

Lavender Flower

amenorrhea
burns
Carpal Tunnel Syn.

Lavender Flower (cont.)

fainting
insomnia
pain
psoriasis
vaginitis

Lemon Balm Herb

amenorrhea
Chronic Fatigue Syn.
Graves' disease
headache
herpesvirus
hypothyroidism
insomnia
shingles
viral infections

Lemongrass

insect repellent
athlete's foot
fungal infections

Licorice Root

tooth decay
smoking cessation
arthritis
asthma
athlete's foot
baldness
body odor
bursitis
canker sores
Chronic Fatigue Syn.
colds/flu
cough
dandruff
depression
emphysema
fungal infections
gingivitis
gout
heartburn
HIV infection
liver problems
Lyme disease
menopause
prostate enlargement
psoriasis
shingles
sore throat
tendinitis
tuberculosis
ulcers
viral infections
yeast infections

Lycopodium, club moss

Alzheimer's disease

Magnesium

heart disease
kidney stones
bronchitis
bursitis
cardiac arrhythmia
Chronic Fatigue Syn.
gingivitis
headache
high blood pressure
multiple sclerosis
tendinitis

Marsh Mallow

amenorrhea
bladder infections
bronchitis
colds/flu
cough
diabetes
skin problems
sore throat
wounds

Milk Thistle

anti-aging
liver problems
gallstones
psoriasis

Mullein Leaf

bronchitis
colds/flu
cough
earache
emphysema
laryngitis

Oregano

anti-oxidant
amenorrhea
arthritis
asthma
body odor
emphysema
glaucoma
high blood pressure
HIV infection
sinusitis

Passion Flower

insomnia
Parkinson's disease
shingles

Pau D'Arco Leaf

fungal infections
viral infections

Peppermint Herb

anti-aging
backache
bad breath
earache
emphysema
fever
gallstones
gingivitis
headache
heartburn
hives
indigestion
morning sickness
nausea
pain
scabies
sinusitis

Red Clover Blossom

cancer
smoking cessation
menopause
menstrual cramps

Red Pepper

heart disease
ulcers
arthritis
backache
bunions

Red Pepper (cont.)

Carpal Tunnel Syn.
dry mouth
emphysema
fever
headache
herpesvirus
indigestion
pain
psoriasis
Raynaud's disease
shingles
toothache
weight control

Rosemary Leaf

anti-oxidant
indigestion
memory improvement
Alzheimer's disease
cataracts
heart disease
amenorrhea
arthritis
baldness
body odor
depression
fainting
pain
wrinkles

Safflower

baldness
lowering cholesterol

Sage Herb

Alzheimer's disease
asthma
bad breath
baldness
body odor
canker sores
Carpal Tunnel Syn.
gingivitis
tonsillitis
wrinkles
yeast infections

St. John's Wort

bruises
burns
depression
herpesvirus
HIV infection
hypothyroidism
insect bites/stings
Parkinson's disease
scabies

Sanguinaria

tooth decay

Saw Palmetto

baldness
erection problems
inhibited sexual desire
in women
prostate enlargement

Selenium

preventing cataracts
HIV infection
anti-aging

Self-Heal

Graves' disease
HIV infection
hypothyroidism

Senna

constipation

Slippery Elm

colds/flu
cough
diverticulitis
sore throat

Soybean

osteoporosis
dandruff
endometriosis
menopause
PMS
shingles
warts

Spanish Peanuts

varicose veins

Spearmint Herb

gallstones
heartburn

Stevia Sweetener

tooth decay
yeast infections

Strawberry Leaf

menopause symptoms
menstrual cramps

Stinging Nettle

allergies
Alzheimer's disease
arthritis
asthma
baldness
bladder infections
bronchitis
bursitis
cough
gingivitis
gout
hives
kidney stones
laryngitis
multiple sclerosis
PMS
prostate enlargement
sciatica
tendinitis

Teatree

athlete's foot
dandruff
earache
fungal infection
gingivitis
scabies
sores
vaginitis
wounds

Thyme Leaf

anti-aging
amenorrhea
body odor
headache
sties

Turmeric Root

cataracts
preventing stroke
amenorrhea
arthritis
athlete's foot
bunions
bursitis
Carpal Tunnel Syn.
diabetes
fungal infections
gallstones
gout
headache
lice
liver problems
pain
swelling
tendinitis
ulcers
worms

Valerian Root

anxiety
cardiac arrhythmia
high blood pressure
hives
inflammatory bowel
disease
insomnia
PMS

Verbena, lemon

hypothyroidism
Graves' disease

Wild Yam Root

DHEA stimulant
diverticulitis
inhibited sexual desire
in women
women's problems

Willow

anti-aging
heart disease
stroke
Alzheimer's disease
angina
arthritis
backache
bunions
bursitis
Carpal Tunnel Syn.
colds
corns
earache
fever
gout
hangover
headache
pain
sciatica
tendinitis
toothache
warts

Wintergreen Leaf

amenorrhea
backache
corns
earache
hangover

Wintergreen Leaf (cont.)

sciatica
sore throat

Witch Hazel

bruises
hemorrhoids
skin problems
sunburn
varicose veins
wrinkles

Wolfberry

erection problems
macular degeneration

Yarrow Herb

amenorrhea
menstrual cramps

Yellowdock Root

vaginitis

Yohimbe

dry mouth
erection problems
inhibited sexual desire
in women

Zinc

infertility
prostate enlargement
tinnitus

Zostrix

arthritis
bunions
pain
shingles

Fruits, Vegetables and Legumes are highly therapeutic. Duke recommends these:

Aloe Vera

burns
constipation
hemorrhoids
hives
HIV infection
rashes from poisonous plants
scabies
skin problems
sunburn
swelling
wounds
wrinkles

Avocado

osteoporosis
gout
high cholesterol
psoriasis
skin problems
wrinkles

Banana

ulcers
warts

Beans

diabetes
endometriosis
high cholesterol

Bell Pepper

asthma

Blackberry

diarrhea
tonsillitis

Black Cherry

cold

Blueberry

cataracts
ulcers
bladder infections
diarrhea
multiple sclerosis

Brazil Nut

antioxidant
preventing cataracts
Alzheimer's disease
arthritis
psoriasis

Broccoli

slow aging
arthritis
Graves' disease
high blood pressure

Cabbage

osteoporosis
asthma
morning sickness
ulcers

Carrots

cataracts
stroke
smoking cessation
anti-aging
amenorrhea
angina
asthma
diarrhea
high blood pressure
high cholesterol
liver problems
skin problems
wrinkles

Castor Oil

warts
wrinkles

Cauliflower

infertility

Celery

anti-aging
amenorrhea
angina
cardiac arrhythmia
dizziness
gout
high blood pressure
high cholesterol

Cinnamon

athlete's foot
body odor
diabetes
erection problems
fever
heartburn
nausea

Citrus Fruit

asthma
colds
morning sickness
tonsillitis

Cocoa

asthma
wrinkles

Cranberry

asthma
bladder infections
fever
yeast infections

Cucumber

skin problems
sunburn
swelling
wrinkles

Currants

asthma

Eggplant

asthma
sunburn

Elderberry

cough
flu
HIV infection
tonsillitis

Grapes

heart disease
arthritis
bruises
wrinkles

Horseradish

allergies
sinusitis

Mustard

hypothyroidism
Raynaud's disease
sciatica

Oats

erection problems
gout
infertility
psoriasis
scabies

Olives

heart disease
gout
wrinkles

Onions

preventing cataracts
heart disease
allergies
asthma
burns
colds
diabetes
high blood pressure
high cholesterol
HIV infection

Onions (cont.)

inflammatory bowel disease
insect bites/stings
pneumonia
scabies
tuberculosis
varicose veins
yeast infections

Papaya

amenorrhea
corns
heartburn
indigestion
intestinal parasites
warts
worms

Parsley

osteoporosis
amenorrhea
angina
bad breath
bladder infection
breastfeeding problems
bruises
hives
inhibited sexual desire
in women
kidney stones

Parsnips

angina

Peach

morning sickness

Peanuts

heart disease
tooth decay
breastfeeding problems
diabetes
endometriosis
macular degeneration
PMS

Pear

HIV infection
shingles

Pineapple

preventing stroke
amenorrhea
ankylosing spondylitis
arthritis
bruises
bunions
bursitis
Carpal Tunnel Syn.
corns
gout
heartburn
indigestion
multiple sclerosis
sinusitis
skin problems
swelling
tendinitis
ulcers
warts

By Dr. James Duke

Pineapple (cont.)

worms
wrinkles
weight control

Pumpkin

dizziness
prostate enlargement
worms

Radish

Graves' disease
hypothyroidism

Raspberry

diarrhea
infertility
menstrual cramps
morning sickness
motion sickness
pregnancy problems
PMS
tonsillitis

Rhubarb

constipation
toothache
ulcers

Spinach

preventing stroke
Chronic Fatigue Syn.
infertility
macular degeneration
tinnitus

Tomato

asthma
high blood pressure

Turnip Juice

body odor

Vegetables

constipation
heart disease
stroke
slow aging
HIV infection
sties

Vinegar

body odor
dandruff
vaginitis

Walnuts

hypothyroidism
scabies
skin problems
weight control

Yogurt

bladder infections

when we encounter skin problems we may need an anti-histamine as well as herbs or foods with antimicrobial qualities, and you may need professional help. Many people have dry skin and need to anoint their skin daily with emollients (moisturizers). See pg. 1706. Balch and Duke give us many excellent suggestions. Be ready to supplement their recommendations.

Histidine

Histidine is an essential amino acid that is significant in the growth and repair of tissues. It is important for the maintenance of the myelin sheaths that protect nerve cells, and is needed for the production of both red and white blood cells. Histidine also protects the body from radiation damage, aids in removing heavy metals from the system, and may help in the prevention of AIDS.

Histidine levels that are too high may lead to stress and even psychological disorders such as anxiety and schizophrenia; people with schizophrenia have been found to have high levels of histidine in their bodies. Inadequate levels of histidine may contribute to rheumatoid arthritis and may be associated with nerve deafness. Methionine has the ability to lower histidine levels.

Histamine, an important immune system chemical, is derived from histidine. Histamine aids in sexual arousal. Because the availability of histidine influences histamine production, taking supplemental histidine—together with vitamins B₃ (niacin) and B₆ (pyridoxine), which are required for the transformation from histidine to histamine—may help improve sexual functioning and pleasure. Because histamine also stimulates the secretion of gastric juices, histidine may be helpful for people with indigestion resulting from a lack of stomach acid.

Persons with manic (bipolar) depression should not take supplemental histidine unless a deficiency has been identified. Natural sources of histidine include rice, wheat, and rye.

over-the-counter (OTC) Anti-histamine Cream
Benadryl Creams. Discount stores, osco, target,
K-Mart, Meijer, etc. also have it under their
Brand at lower cost
Diphenhydramine Hydrochloride USP 2%
and Zinc Acetate USP 0.1%

Athlete's Foot With Essential Oils.
6 drops in 1 tsp. isopropyl alcohol.
Further dilution for open cuts & sores:
1 1/4 pts. boiled-cool
Lavender
Tea Tree
Myrrh
Patchouly
Sweet Marjoram

Caladryl -
calamine + Benadryl
works best for
me. My first choice
for itching, redness,
wheals.
FIRST AID SALVE
Cocoa Butter
Jojoba Oil
Vit. E.
Liquid Lecithin
Natural Lemon Oil

antihistamine is a drug that inhibits the action of histamine in the body by blocking the receptors for histamine, of which there are two types: H₁ and H₂. When stimulated by histamine, H₁ receptors may produce such allergic reactions as hay fever, pruritus (itching), and urticaria. Antihistamines that block H₁ receptors (H₁-receptor antagonists), such as antihistamine, azelastine, and chlorpheniramine, are used to relieve these conditions. Many H₂-receptor antagonists, e.g., "cimetidine" and "famotidine," also have strong "anti-secretory" activity and are used to prevent motion sickness. The most common side effect of H₂-receptor antagonists is drowsiness and, because of this they are sometimes used to promote sleep. Other side effects include dizziness, blurred vision, tremors, digestive upset, and lack of muscular coordination. H₂ receptors are mainly found in the stomach, where stimulation by histamine causes secretion of acid gastric juice. H₂ antagonists (e.g.,

*cimetidine, *famotidine) block these receptors and so reduce gastric acid secretion; they are used in the treatment of "peptic ulcers."

hist- (histio-, hist-) prefix denoting tissue.
histamine *n.* an enzyme, widely distributed in the body, that is responsible for the activation of histamine.

histamine *n.* a compound derived from the amino acid histidine. It is found in nearly all tissues of the body, associated mainly with the "mast cells." Histamine has pronounced pharmacologic activity, causing dilation of blood vessels and contraction of smooth muscle (for example, in the lungs). It is an important mediator of inflammation and is released in large amounts after skin damage (such as that due to animal venoms and toxins), producing a characteristic skin reaction (consisting of flushing, a flare, and a wheal). Histamine is also released in anaphylactic reactions and allergic conditions, including asthma, and gives rise to some of the symptoms of these conditions. See also anaphylaxis, antihistamine.

wheel

wheel (wheal) *n.* a temporary red or pale raised area of the skin, often accompanied by severe itching. Wheals may be caused by scratching or rubbing the skin and are sometimes the sign of a local or general allergy (see urticaria). See also dermatographia.

SEE
SKIN Problems Pg. 1706
1/2 Aloe Vera
1/2 Evening Primrose
2 Avocado
2 Calendula
1/2 Camomile
2 Cucumber
2 Gotu Kola
2 Witch Hazel
1/2 Carrot Herb
1 English plantain
1 Ivy Leaves
1 Pineapple
1 Purslane
1 Walnut Leaves
Vitamin E. Oil
Body Balm
Lanolin 86%
Menthol Crystals 7%
Camphor Oil 2%
Eucalyptus Oil 2%
Clove Oil 1%
Cinnamon Oil 1%
Wintergreen Oil 1%
100%

Athlete's Foot
3 Garlic Tea
3 Ginger oil
3 Licorice oil
3 Tea Tree oil
2 Camomile Tea
2 Echinacea Tea
2 Golden Seal Tea
2 Lemon Balm Tea
1 Turmeric Tea
1 Arrow Root Tea
1 cinnamon Tea

HERBS FROM INDIANA BOTANIC GARDENS

Study Balch pages 63-82 and
James Duke "Green Pharmacy" (507 pages)

*** Both books are VERY important

PAGE		DESCRIPTION	FORM	SIZE	WHSL. PRICE	WHSL. PER OZ.	WHSL. 1/2 LB.	RETAIL PRICE
Front Cover	C05ARTI	Jerusalem Artichoke 500 mg.	tabs	250	4.48			
4	C05ROSM	Rosemary 500 mg. (anti-oxidant)	tabs	100	4.98			
8	A01AVGX	Aloe Vera Juice Conc. (constipation)	liquid	6 oz.	4.75			
11	002 ROSE	Rosemary Essential Oil (memory, anti-oxidant)	liquid	1 oz.	2.98			
11	002 THYM	Thyme Essential Oil (anti-aging, anti-oxidant)	liquid	1/2 oz.	4.48			
14	B0 AGRI	Agrimony (amenorrhea, diarrhea, sore throat)	cut	2 oz.	1.98	.46	3.65	10.95
14	B01 ALFA	Alfalfa Leaf (saponins, atherosclerosis)	cut	.75 oz.	.98	.30	2.32	6.95
14	B01 ANGE	Angelica Root (amenorrhea, angina, heartburn)	cut	1.5 oz.	2.48	.84	6.65	19.95
14	B02 ANIP	Anise Seed (asthma, colds, coughs)	pwd.	2 oz.	.98	.21	1.98	5.95
14	B02 ARRO	Arrow Root (athlete's foot)	pwd.	2 oz.	1.48	.38	2.98	8.95
14	B01 BASC	Basil, Sweet (bad breath, headache, emphysema)	cut	1.25 oz.	.67	.25	1.98	5.95
14	B05BAYW	Bay Leaf (body odor, diabetes, headache)	whole	1/2 oz.	.75	.30	2.32	6.95
14	B01 BAYB	Bayberry Bark (hypothyroidism)	cut	2 oz.	2.48	.63	4.98	14.95
14	B01 BLAL	Blackberry Leaf (diarrhea, tonsilitis)	cut	1/2 oz.	.98	1.46	11.65	34.95
14	B01 BLCO	Black Cohosh Root (amenorrhea, menopause, tinnitus)	cut	3 oz.	2.98	.63	4.98	14.95
14	B01 BLAD	Bladder wrack	cut	2 oz.	2.48	.63	4.98	14.95
15	B01 BULB	Blueberry Leaf (cataracts, ulcers)	cut	1 oz.	2.98	.80	6.32	18.95
15	B01 BULG	Bugle weed Herb (hypothyroid)	cut	1.5 oz.	2.48	.80	6.32	18.95
15	B01 BURD	Burdock Root (HIV, PMS, seborrhea)	cut	2 oz.	2.48	.63	4.98	14.95
15	B01 CART	Carrot Herb, Wild (cataracts, anti-aging)	cut	1.25 oz.	2.48	.84	6.65	19.95
15	B01 CAS	Cascara Bark (constipation)	cut	2 oz.	2.48	.63	4.98	14.95
15	B01 CATN	Catnip Herb (cataracts, insomnia)	cut	1 oz.	.98	.46	3.65	10.95
15	B02 CHAM	Camomile Flower (anti-aging, insomnia)	pwd.	1.5 oz.	2.48	.80	6.32	18.95
15	B02 CELP	Celery Seed (anti-aging, high blood pressure)	pwd.	2 oz.	.75	.21	1.65	4.95
15	B01 CHIR	Chicory, Roasted (liver, heart disease)	cut	2.5 oz.	.98	.21	1.65	4.95
15	B01 CHIC	Chickweed Herb (weight control)	cut	1 oz.	2.48	.71	5.65	16.95
15	B01 CINN	Cinnamon Bark (gas, indigestion, body odor)	cut	2.25 oz.	1.98	.46	3.65	10.95
15	B02 CLOG	Cloves Bud (macular degeneration, pain, worms)	pwd.	2 oz.	1.98	.44	3.48	6.95
15	B02 CORP	Coriander Seed (asthma, indigestion, bad breath)	pwd.	2 oz.	.98	.21	1.65	4.95
16	B01 DAMI	Damiana Herb (aphrodisiac)	cut	1 oz.	2.48	.80	6.32	18.95
16	B01 DANP	Dandelion Root, Plain (osteoporosis)	cut	2 oz.	2.48	.63	4.98	14.95
16	B01 DEVC	Devils' Claw (gout)	cut	1.5 oz.	2.98	.96	7.65	22.95
16	B01 DILG	Dill Weed (amenorrhea, bad breath, gas, heartburn)	cut	1 oz.	.98	.30	2.32	6.95
16	B01 ECHI	Echinacea (anti-aging, immunity, chronic fatigue syndrome)	cut	1 oz.	4.98	1.88	14.98	44.95
15	B01 CALE	Calendula PWR. (gingivitis, skin problems, sores, sunburn)	cut	1 oz.	1.98	.63	4.98	14.95

HERBS FROM INDIANA BOTANIC GARDENS

PAGE		DESCRIPTION	FORM	SIZE	WHSL. PRICE	WHSL. PER OZ.	WHSL. 1/2 LB.	RETAIL PRICE
16	BO1EUA	Eucalyptus Leaf (bronchitis, pain, sinusitis, viral infections, fainting, emphysema, sore throat)	cut	2 oz.	1.98	.46	3.65	10.95
16	B01 PRIM	Evening Primrose, Wild (anti-aging, anti-oxidant, prevent stroke, angina, dry mouth)	cut	1.25 oz.	1.98	.71	5.65	16.95
16	B02 FENP	Fennel Seed (amenorrhea, asthma, heartburn)	pwd.	2 oz.	.75	.21	1.65	4.95
16	B02 FENU	Fenugreek Seed (alzheimer's, constipation, anti-oxidant, cholesterol, diabetes, diarrhea) (Now 1.37 lb whl.)	pwd.	2 oz.	1.48	.38	2.98	8.95
16	B01 GENT	Gentian Root (hypothyroid, earache, heartburn)	cut	2 oz.	2.48	.64	5.12	14.95
16	B01 GRTE	Green Tea (cancer)	cut	2 oz.	1.98	.54	4.32	12.95
17	B01 GING	Ginger Root (arthritis, fatigue, heart disease)	cut	3 oz.	1.98	.38	2.98	2.95
17	B01 GINS	Ginseng Root, American Panax	pwd.	2 oz.	9.98	3.00	23.32	69.95
17	B02 SIGI	Ginseng Root, Siberian	pwd.	2 oz.	2.48	.63	4.98	14.95
17	B01 GOLD	Goldenseal Root (antibiotic, chronic fatigue)	cut	1.5 oz.	8.48	3.34	26.65	79.95
17	B01 GOTU	Gotu Kola Root (anti-aging, alzheimer's)	cut	1.25 oz.	2.48	.84	6.65	19.95
17	B01HAWT	Hawthorn Berry (angina, high blood pressure)	cut	2.25 oz.	2.98	.63	4.98	14.95
17	B01 HOPS	Hops Flower (insomnia, relaxer)	cut	.75 oz.		.54	4.32	12.95
17	B01 HORE	Horehound	cut	.75 oz.	1.48	.71	5.65	16.95
17	B01 HORG	Horsetail Grass Herb (anti-aging, osteoporosis, anti-oxidant, kidney stones, bursitis, tendinitis)	cut	.75 oz.	1.48	.71	5.65	16.95
17	B01 IRMO	Irish Moss (hypothyroid)	cut	2.25 oz.	2.48	.63	4.98	14.95
17	B02 JUNP	Juniper Berry (amenorrhea, cleansing, viral infections)	pwd.	2 oz.	2.48	.63	4.98	14.95
17	B02 KELP	Kelp, seaweed (hypothyroid, graves disease)	pwd.	3 oz.	.98	.14	1.32	3.95
17	B05 LAVE	Lavender Flower (amenorrhea, burns, carpal tunnel, insomnia)	whole	.75 oz.	1.98	1.04	8.32	24.95
17	B01BALM	Lemon Balm Herb (chronic fatigue, hypothyroidism)	cut	1.25 oz.	2.48	.84	6.65	19.95
17	B01 LEMG	Lemongrass (athletes foot, fungal infections)	cut	1 oz.	1.48	.63	4.98	14.95
17	B01 LICO	Licorice Root (arthritis, asthma, bursitis)	cut	2.25 oz.	2.48	.63	4.98	14.95
17	B01 LYCO	Lycopodium, club moss (alzheimer's)	cut	1.25 oz.	2.48	.84	6.65	19.95
18	B01 MULL	Mullein Leaf (bronchitis, colds, flu)	cut	1/2 oz.	.98	.70		16.95
18	B02 MUSP	Mustard Seed, Yellow (hypothyroid, sciatica)	pwd.	2 oz.	.75	.21	1.65	4.95
18	B01 NETL	Nettle Leaf (alzheimer's, arthritis)	cut	.75 oz.	.98	.54	4.32	12.95
18	B01 OREG	Oregano (anti-oxidant, arthritis)	cut	1 oz.	.98	.38	2.98	8.95
18	B01 PAPA	Papaya Leaf (heartburn, indigestion)	cut	1.25 oz.	1.48	.60	4.65	13.95
18	B01 PASS	Passion Flower (insomnia, parkinson's)	cut	1.25 oz.	1.98	.75	5.98	17.95
18	B01 PDRO	Pau D'Arco Leaf (fungal infections, yeast infections)	cut	1.75 oz.	2.48	.63	4.98	14.95
18	B01 PEPP	Peppermint Herb (anti-aging, backache)	cut	1 oz.	.98	.46	3.65	10.95

HERBS FROM INDIANA BOTANIC GARDENS

PAGE		DESCRIPTION	FORM	SIZE	WHSL. PRICE	WHSL. PER OZ.	WHSL. 1/2 LB.	RETAIL PRICE
19	B01 REDC	Red Clover Blossom (cancer, smoking)	cut	.75 oz.	.98	.54	4.32	12.95
19	B01 RHUB	Rhubarb Root (constipation, toothache)	cut	2 oz.	2.48	.63	4.98	14.95
19	B02 ROSE	Rosemary Leaf (indigestion, memory, anti-oxidant, alzheimer's, cataracts, pain, depression, heart disease, fainting)	pwd.	2 oz.	.82	.21	1.65	4.95
19	B01 SAG	Sage Herb (alzheimer's, asthma)	cut	1 oz.	1.48	.59	4.65	13.95
19	B01 SPER	Spearmint Herb (gallstones, heartburn)	cut	.75 oz.	.98	.59	4.65	13.95
20	B02 STEV	Stevia Sweetner (yeast infections)	pwd.	2 oz.	2.98	.84	6.65	19.95
20	B01 STON	Stone Root	cut	2 oz.	2.48	.63	4.98	14.95
20	B01 STRW	Strawberry Leaf (menopause, menstrual cramps)	cut	1.25 oz.	2.48	.84	6.65	19.95
20	B01 THYM	Thyme Leaf (anti-aging, headache)	pwd.	1.25 oz.	.75	.40	1.98	5.95
20	B02 TUMP	Turmeric Root (cataracts, stroke)	pwd.	2 oz.	1.48	.46	3.65	10.95
20	B01 VALR	Valerian Root (anxiety, insomnia)	cut	2 oz.	2.48	.63	4.98	14.95
20	B01 VERB	Verbena, Lemon (hypothyroid, graves disease)	cut	1 oz.	2.98	1.04	8.32	24.95
20	B02 WALB	Walnut Hulls, Black (hypothyroid, skin)	pwd.	2 oz.	2.48	.84	6.65	19.95
20	B01 WYAM	Wild Yam Root (diverticulosis, DHEA stimulant, aphrodisiac)	cut	2.25 oz.	2.48	.54	4.32	12.95
20	B01 WINT	Wintergreen Leaf	cut	1.75 oz.	1.48	.43	3.32	9.95
20	B01 YARR	Yarrow Herb (amenorrhea, menstrual cramps)	cut	1 oz.	2.48	.71	6.65	19.95
20	B01 YDOK	Yellow Dock Root (vaginitis)	cut	2 oz.	2.98	.71	5.65	16.95
20	B01 YEMG	Yerba Mate Green	cut	1.5 oz.	1.48	.54	4.32	12.95

Enlarge your health care vocabulary. Learn the meaning of:

BIENORRHEA	DERMATITIS	HALITOSIS	LITHURIA	PRURITIS
Calculus	Diaphoretic	Hallucinogenic	Lumbago	Purgative
Calmatrice	Diuretic	Hematuria	Lymphatic	Psycho-somatic
Cardiac	Dropsy	Hemorrhoids	Menorrhagic	
Cardiotonic	Dysmenorrhea	Hemostatic	Mucilage	Rubefacient
Carmine	Dyspepsia	HERPES	Mucolytic	Sciatic
Cataract	Emetic	hormone	Narcotic	SLEROSIS
Cellulite	Emmenagogue	Hyper tension	Nervine	Sedation
Cephalic	Emollient	Hypcholesterolemia	Nephritis	Sialogogue
Cerebral	Empysema	Hypoglycemia	Neuralgia	Soporific
Cholagogue	Enteritis	Hypotension	Neurasthenia	
Cholecystokinetic	Enzyme	Hysteria	Oleoresin	spasmolytic
Choleretic	Erythema	Infusion	Olfaction	Splenic
Cholesterol	Essential Oil	Larvicidal	Ophthalmia	Sudorific
Cirrhosis	Estrogen	Legume	Otitis	Synergy
Colic	Expectorant	Leucocyte	Palpitation	Tachycardia
Colitis	Febrifuge	Leucocytosis	Parasiticide	
Compress	Fixed Oil	Leucorrhea	Pediculicide	
Cutaneous	Fungicidal		Poultice	Urticaria
Cystitis	Gulactagogue	Lipolytic		
Cytophlaetic	Gastritis	Lithuria		
Cytotoxic	Genito-urinary	Lumbago		
Decoction	Germicidal	Lymphatic		
Decongestive	Gingivitis			
Demulcent	Gout			
Depurative				
Dermal				

NOW

Cat's Claw	cut	4 oz.	\$4.49
Chamomile Blossom	whole	4 oz.	\$2.29
Pau D'Arco	cut	4 oz.	\$1.99
Raspberry Leaf	cut	4 oz.	\$1.99
Sassafras	cut	6 oz.	\$3.95

Be an etiologist - correct the cause of your illnesses
#1 cause of illness is **ATHEROSCLEROSIS** - DO EVERYTHING POSSIBLE TO REDUCE IT. REDUCE cholesterol & triglycerides.

Eat only fruits, veggies, & legumes. Eat NO meat, no foods made with refined flour, no processed foods, no snack foods, no junk foods.

only dairy food eaten, non fat, plain yogurt with active acidophilus, non-fat, low-heat powdered milk.

cholesterol 203 to 220 = coronary death rate 73% higher than cholesterol below 180.

Make Your Own Vit. Min. Complex

VITA 10,000 IU; D 400 IU
or VITA 25,000 IU; D 1000 IU
Vit B Complex Pwd. 1/4 tsp = 30 mg
Vit C, Sodium Ascorbate Pwd.
1/2 tsp = 1700 mg 3x daily.
Vit E mixed, 400 to 800 IU.
Vit C Complex with Bioflavonoids
1/4 tsp = 500 mg Vit C

Minerals

Full Spectrum Minerals Tabs
Bone Calcium Tabs
Magnesium Citrate Tabs
magnesium Oxide
Colloidal Mineral Liquid
Chromium picolinate
Citric & Chromium
Selenium
Zinc

Evening Primrose Oil 52
Flaxseed Oil (12 oz) 52
Odorless garlic
Wheat Germ oil
Olive Oil
926 pg. 170-6.

MSM (Methylsulfonylmethane)
MSM Caps and powder.

Bee pollen (caps. "6.50")

Alofta juice concentrate tabs
Barley grass tabs 50
Kelp granules & caps 56
Spirulina 6-60
Wheat grass tabs 61

Antioxidants

Grapeseed Antioxidants caps
Wheat Sprout Antioxidants 50D

Digestive Aid

Acidophilus - 1/2 lb
Bromelain
Nutra Flora Fos Pwd.
Pancreatin
Papaya Enzymes
Super Enzymes.

Aloe Vera Juice 4 Gal. 13.99
Melatonin 3mg Sublingual 13.57
CoQ10: 100 mg 6, 21, 43 15
DMG, Dimethylglycine 38

Cartilage Balch
Bovine Cartilage 1/2 lb 50
Shark Cartilage 1/2 lb 59-60
DHEA - Study Balch pg 544 -
CHERNISKE: DHEA Break-
through (whole book) 420

Allergy Support Formula
Eye Support
Head Relief
Heart Support
G.I. (Gastrointestinal)
Joint Support
Prostate Support

Ginseng Balch 40.
Panax Ginseng 54-55-71
Siberian Ginseng 6, 71

Cereals

Barley Cuts
Bulgur
Kasha
Millet
Oats Steel Cut
Rice, Brown Long grain
Rice Bran
Wheat Germ

Magnesium Rich Herbs
Aloe
Blue Cohosh
Dandelion
Garlic
Gotu Kola
Mullein
Nettle
Red Clover
Red Raspberry
Valerian
Wood Betony

You can buy herbs in 2 oz. containers for 1/2 reg. retail price. If you buy them in 1/2 lb. bags, you can buy your herbs at 1/4 reg. retail price. Get together with your friends to enable you to buy 1/2 lb. bags.

Nuts

7005 Almonds
7095 Cashews
7001 Pecans
7005 Sunflower Seeds hulled
7073 Walnuts

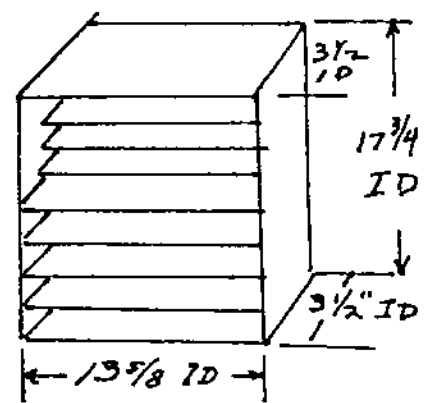
Sprouting Seeds & Beans
7210 Alfalfa Seeds
7241 Clover Seeds
7245 Foenugreek Seeds 70
7250 Mung Beans
Lentil Beans

8415 R for Nutritional Healing
8625 R for Dietary Healing 55
Balch & Balch 70/10.00

Green Pharmacy - Duke 30.00
Magnet Therapy Lawrence 15.00
and Rosch 15.00/7.00

Dr. Vodnay Lecture Notes 13.00
DHEA Breakthrough - Cherneske 7.20
Confessions of Medical Heretic
& Dissent in Medicine

HERBAL THERAPY Cabinet



Top 3 shelves 1 1/8 high x 2 3/8 deep
Holds 9 16 dram bottles per shelf.
Diameter 1 1/16 x 3 1/4 high.
Total of 27 bottles. Use the
one with locking top.

Bottom 5 shelves 2 1/4 high x
15 5/8 wide. Holds 6 white
opaque plastic bottles
2 1/8 x 3 7/8. Screw top per
shelf, a total of 30 bottles.

one cabinet costs 30.00;
4 is 25.00 per each.

Use Balch and Dr. Duke's
"Green Pharmacy" and
create your own Natural
Medicine Cabinet.
Practice your healing
with WHOLISTIC Natural
Health Care.

Herb Capsules

Code	Product	Size	Retail
4605	Astragalus 500 mg (N)	100 Caps	4.95
4607	Black Cohosh 80 mg Extract (N) SHE Standardized 2.5% Extract Price Drop!	90 Caps	13.95
4610	Bilberry Complex (N) SHE	50 Caps	12.95
4612	80 mg with Beta-Carotene	100 Caps	24.95
4613	Boswellin 250 mg Extract (N) SHE	60 Caps	9.95
4614	with Curcumin Extract	120 Caps	18.95
4608	Burdock Root 430 mg (N)	100 Caps	4.95
4615	Butcher's Broom 500 mg (N)	100 Caps	4.95
4620	Cascara Sagrada 450 mg (N)	100 Caps	4.50
BEST BUY 4618	Cat's Claw 400 mg (N)	100 Caps	5.95
4621		250 Caps	13.95
4616	Cat's Claw "5000" SHE	60 Caps	13.95
4628	Standardized 3%	120 Caps	24.95
4622	Kook-Mint Cayenne 500 mg	90 Caps	5.50
4624	with Peppermint, Guar Gum	180 Caps	9.95
4625	Cayenne Caps 500 mg, (N)	100 Caps	4.50
4627	(40,000 Heat Units)	250 Caps	9.95
4635	Chickweed 400 mg (N)	100 Caps	4.95
3230	Cranberry Concentrate (N)	100 Caps	12.95
4640	Damiana Leaves 450 mg (N)	100 Caps	4.50
4645	Dandelion Root 500 mg (N)	100 Caps	4.95
4650	Devil's Claw Root 500 mg (6:1) (N)	100 Caps	5.50
4655	Dong Quai 500 mg (N)	100 Caps	4.50
4657	Echinacea 125 mg Standardized SHE	60 VCaps	13.95
4659	+ 200 mg Echinacea Purpurea Rt. added	120 VCaps	25.95
BEST BUY 4660	Echinacea 400 mg (N)	100 Caps	7.95
4662	(Purpurea Root)	250 Caps	17.95
4665	Echinacea/Goldenseal Root (N)	100 Caps	12.95
4666	(225 mg of each)	250 Caps	29.95
4672	Esiak 4:1 Extract 450mg	90 Caps	13.95
4674		180 Caps	25.95
4668	Eyebright Herb 470 mg (N)	100 Caps	5.95
4676	Fenugreek & Thyme 500 mg NEW!	100 Caps	4.95
4670	Feverfew 400 mg (N) 0.9% Parthenolide	100 Caps	7.95
4675	Fo-Ti 550 mg (N)	100 Caps	4.50
4680	Ginger Root 550 mg (N)	100 Caps	4.50
BEST BUY 4685	Ginkgo Biloba 60 mg (N) SHE	30 Caps	6.95
4686	(24% 50:1 Extract - Japanese)	60 Caps	11.95
4687	Includes 300 mg Ginkgo Leaf)	120 Caps	21.95
4684	Family Bonus Size	240 Caps	39.95
4682	Ginkgo Biloba 120 mg - 24% (N) SHE	50 VCaps	17.95
4683	with Golu Kola and Ginseng	100 VCaps	33.95
4681		200 VCaps	57.95
BEST BUY 4690	Goldenseal Root Caps 500 mg (N)	50 Caps	9.95
4692	(U.S. wildcrafted)	100 Caps	18.95
4694		250 Caps	43.95
4697	Goldenseal & Oregon Grape Root 400 mg	100 Caps	8.95
4700	Golu Kola 450 mg (N)	100 Caps	4.50
4705	Green Tea Extract 400mg NEW! 60% Polyphenols with 60 mg Vitamin C	100 Caps	9.95
4710	Guar Gum 700 mg (N)	120 Caps	5.50
4715	Hawthorn Berry 550 mg (N)	100 Caps	4.50
4713	Horse Chestnut 300 mg Extract SHE	90 Caps	10.95
4716	Kava Kava 250 mg - 30% Ext. (N) SHE	60 Caps	13.95
4717		120 Caps	25.95
4718	Licorice Root 450 mg (N)	100 Caps	4.50

* Add Freight

SHE = Standardized Herbal Extract

Code	Product	Size	Retail
4719	Nettle Root Extract 250 mg SHE	90 VCaps	13.95
4720	Nighttime Herbs 500 mg Extract Combo	100 Caps	7.95
4723	Olive Leaf Extract 500 mg 6% V	60 VCaps	12.95
4724	Oregano 450 mg (N)	100 Caps	5.95
4725	Pau d'Arco 500 mg (N)	100 Caps	4.50
4726		250 Caps	9.95
4728	Pygeum & Saw Palmetto Extract SHE	60 Gels	15.95
4729	25/80 mg + Pumpkin Seed Oil	120 Gels	28.95
4730	Red Clover 450 mg (N)	100 Caps	5.95
4733	Rei-shi Mushrooms 600 mg (N)	100 Caps	11.95
BEST BUY 4734	Saw Palmetto 80 mg Std. Ext. SHE	90 Gels	15.95
4740	Saw Palmetto 160 mg Dbl. Strength SHE	60 Gels	13.95
4742	Standardized	120 Gels	27.95
4735	Silymarin 150 mg 80% SHE	60 Caps	8.95
4737	(Milk Thistle Extract + Turmeric base)	120 Caps	15.95
4738	Silymarin 2X 300 mg NEW! V	50 VCaps	12.95
4739	with Artichoke and Dandelion	100 VCaps	23.95
4750	Slippery Elm 400 mg (N)	100 Caps	4.95
BEST BUY 4760	St. John's Wort 300 mg 3% SHE	100 Caps	11.95
4761		250 Caps	27.95
4765	Uva Ursi 500 mg NEW!	100 Caps	4.95
4770	Valerian Root 500 mg (N)	100 Caps	4.95
4771		250 Caps	9.95
4780	Yucca Root 500 mg (N)	100 Caps	5.95

Herbal Powders - 100% Pure

Code	Product	Size	Retail
5010	Cayenne Pepper (N) 40,000 Heat Units	3 oz.	2.35
5017	Echinacea Purpurea Root Powder (N)	2 lb.	49.95/lb
5022	Ginkgo Biloba Leaf Powder (N)	5 lb.	
5030	Golden Seal Root Powder (N)	2 oz.	18.95
5032	U.S. Wildcrafted	1 lb.	122.95
5034	Highest purity, potency	5 lb.	
5040	Guar Gum Powder (N)	8 oz.	3.95
5042		5 lb.	
5060	Slippery Elm Powder (N)	4 oz.	5.95
5062		3 lb.	
6199	Xanthan Gum Powder (N)	6 oz.	7.95
6200		3 lb.	

149-m-

Hain Safflower Oil 12.7 FL. oz. \$2.25. High Oleic, 100% Expeller Pressed, Vt. E added to enhance freshness. All natural 1 Tbsp Total Fat 14g, Sat Fat 1gm, polyunsaturated 2.9g monounsaturated 11gm. Zero cholesterol, sodium, total carbohydrate, protein.
Use on skin as a moisturizer, hair dressing, massage, general cooking, salads, sauces.

Essential Oils—100% Pure

NOW

Code	Product	Size	Retail
7512	Essential Oil Display - Redwood Upgrade†	2 shelves	
7514	Allspice Berry Oil (N)	1 oz.	7.95
7515	Anise Oil (N)	1 oz.	3.95
7516	Basil Oil (N)	1 oz.	8.95
7518	Bergamot Oil (N)	1 oz.	7.95
7520	Camphor Oil (N)	1 oz.	3.50
7525	Cedarwood Oil (N)	1 oz.	3.98
7528	Chamomile Oil (N)	1 oz.	27.95
7530	Cinnamon Oil (N)	1 oz.	4.95
7535	Citronella Oil, external (N)	1 oz.	2.95
7540	Clove Oil (N)	1 oz.	4.50
7545	Eucalyptus Oil 80/85 (N)	1 oz.	2.95
7546		4 oz.	6.50
7550	Ginger Oil (N)	1 oz.	7.95
7552	Geranium Oil (N)	1 oz.	7.50
7553	Grapefruit Oil (N)	1 oz.	4.95
7555	Jasmine Oil - synthetic (W)	1 oz.	5.95
7558	Juniper Berry Oil (N)	1 oz.	11.95
7560	Lavender Oil 40/42 (N)	1 oz.	5.95
7561		4 oz.	16.95
7565	Lemon Oil (N)	1 oz.	3.95
7567	Lime Oil (N)	1 oz.	4.50
7568	Myrrh Oil (N)	1 oz.	27.95
7570	Orange Oil (N)	1 oz.	2.95
7573	Oregano Oil (N)	1 oz.	9.95
7574	Palmarosa Oil (N)	1 oz.	5.95
7575	Patchouli Oil (N)	1 oz.	11.95
7580	Pennyroyal Oil (N)	1 oz.	9.95
7585	Peppermint Oil (N)	1 oz.	4.50
7586		4 oz.	12.95
7590	Pine Oil (N)	1 oz.	4.95
7595	Rose Hip Seed Oil (N)	1 oz.	5.95
7600	Rosemary Oil (N)	1 oz.	4.95
7610	Sage Oil (N)	1 oz.	6.50
7615	Sandalwood Oil (N)	1 oz.	27.95
7617	Sassaparilla Oil - fragrance (N)	1 oz.	3.95
7620	Spearmint Oil (N)	1 oz.	4.95
7623	Tangerine Oil (N)	1 oz.	3.95
7625	Tea Tree Oil (N)	1 oz.	7.50
7626		4 oz.	19.95
7635	Thyme Oil - white (N)	1 oz.	5.95
7640	Wintergreen Oil (N)	1 oz.	3.95
7650	Ylang-ylang Oil, Extra (N)	1 oz.	14.95

Moisturizers—100% Pure

NOW

Code	Product	Size	Retail
7660	Almond Oil, sweet (N)	4 oz.	2.95
7661	(Expeller Pressed)	16 oz.	7.50
7665	Apricot Kernel Oil, refined (N)	4 oz.	3.75
7666		16 oz.	8.95
7670	Avocado Oil, refined (N)	4 oz.	4.50
7672	Body Balm (N) Trial	1 oz.	2.35
7673	Large	5 oz.	5.95
7674	Display	6-1 oz.	1.99

BEST BUY

BODY BALM

ANALGESIC/VAPORIZING ACTION



Body Balm is a traditional formula that can be used as a muscle rub or vaporizing balm. It is valuable as a warm-up prior to exercise for loosening tight, stiff muscles. Menthol, Camphor, and Eucalyptus are traditional ointments used for the temporary relief of nasal congestion and chest cold symptoms. Rub directly onto throat, chest, and back and cover with a warm cloth.

NOW BODY BALM is the only balm/rub that includes a natural Lanolin base. Lanolin is derived from sheep wool and works well as a natural alternative to petroleum jelly.

BODY BALM CONTAINS:

Lanolin
Menthol Crystals
Camphor Oil
Eucalyptus Oil
Cinnamon Oil
Clove Oil
Wintergreen Oil

COMPARE TO
TIGER BALM

7675	Castor Oil, Expeller Pressed (N)	16 oz.	5.95
7680	Cocoa Butter, pure (N)	5 oz.	5.50
7683	Coconut Oil, pure (N)	5 oz.	2.95
7685	Evening Primrose Oil (REFRIG)	1 oz.	4.75
7690	100% pure	4 oz.	12.95
7770	First Aid Salve (5,000 IU Vit. E)	1 oz.	3.95

INGREDIENTS: Cocoa Butter, Jojoba Oil, natural d-alpha Vitamin E, liquid Lecithin and natural Lemon Oil. Contains no fillers, dyes, synthetics, chemicals or preservatives. *Helps the repair of damaged skin tissue.*

7695	Glycerine, vegetable (N)	4 fl. oz.	2.95
7700		16 fl. oz.	6.50
7705	Grape Seed Oil (N)	4 fl. oz.	2.95
7707		16 fl. oz.	6.50
7715	Jojoba Oil, pure (N)	1 oz.	3.95
7717		4 oz.	8.95
7718		16 oz.	24.95
7725	Lanolin, pure (N)	5 oz.	3.95
7730	Liquid Lanolin, pure (N)	4 oz.	4.75
7735	d-Pantothenol Gel, pure (W)	1 oz.	5.95
7755	Rosewater Concentrate (N)	1 oz.	3.95
7758	Shea Butter, pure (N)	5 oz.	7.50
7760	Soft Cocoa Butter, pure jojoba added (N)	4 1/2 oz.	5.95

BEST BUY

Skin Problems

Please read Balch on recommendations for the following problems.

ACNE; AGE SPOTS; ATHLETE'S FOOT; BEDSORES; BOIL; BRUISE; BURNS; CANCER SORES; COLD SORES (FEVER BLISTERS); CORNS AND CALLUSES; DANDRUFF; DERMATITIS; DRY SKIN; FUNGAL INFECTION; HIVES; INSECT BITE; INTERTRIGO; LEG ULCERS; OILY SKIN; PSORIASIS; ROSACEA; SCABIES; SEBACEOUS CYST; SEBORRHEA; SKIN CANCER; SKIN RASH; SUNBURN; VITILIGO; WARTS; WRINKLING, OF SKIN. See also under PREGNANCY-RELATED PROBLEMS. See both Balch Books

• Read Duke: pages 392-396. He gives and explains 16 herbs that are used in treating skin problems.

• Read Julia Lawless "Essential Oils Has Herbal Therapy for 38 skin problems."

• Aromatherapy Essential Oil Carrier-Diffuser. How to make N/C yourself - See Pg 149-150.

- **DHEA is an acronym for a hormone produced by the adrenal glands known as dehydroepiandrosterone.** A vast amount of research has been done on this hormone, so that its current reputation is backed by solid science. These studies have concluded that DHEA dramatically decreases the risk of heart attack, heart disease, diabetes, osteoporosis, and cancer; extends the life span of animals up to 50%; enhances sexual function; cures impotence; and boosts memory and cognition. The anti-obesity effects are good news. DHEA is more than an appetite suppressant; it alters metabolism to accelerate fat burning and fosters gains in muscle mass. DHEA may be the missing link in our longevity program, in helping prevent 75% of the premature deaths. DHEA may make our senior years more energetic and passionate, as opposed to progressive decrepitude most people experience.
- **TO MAKE DHEA WORK** it must be accompanied by our changing to a thorough healthcare lifestyle. Do not smoke, eat junk foods, let stress get out of hand, do not drink junk drinks and alcohol, or clog arteries with fat. If you do, DHEA will not work.
- **STUDY DHEA AND DECIDE IF YOU SHOULD BE TAKING IT.**
 1. Obtain "The DHEA Breakthrough" by Steven Cherniske (\$6.99). Study it diligently. I can get this book for you for \$4.20.
 2. If you want to know the level of DHEA in your body - I'll give you a test kit furnished by Diagnos-Techs Inc. (PO Box 58948, Seattle, WA, 98138-1948). It contains two vials. You will insert your saliva in the two vials enclosed and mail it to them with a check for \$41.00. Note this is a non-invasive saliva test (not a blood test). They will send your report to me and I will forward it on to you. It will be graded in nanograms per milliliter. The range is 3 to 10 ng/ml. I was not surprised when mine came back, 2 (depressed). (1 gram = 1000 milligrams (mgs.)); 1 millimicrogram = 1/1000 of a milligram = 1,000,000 of a milligram (mcg); 1 nanogram = 1,000,000,000 (1 billionth of a mg.). I'm taking #8022 DHEA 50mg. (wholesale cost is 90 for \$9.60). I'm now considering taking two per day. These are distributed by the Aspen Group in Richmond, IL.
 3. Ask your doctor if he/she advises that you take it, and be guided by your doctor's advice.
 4. Women usually find that a daily dose in the range of 5 to 25 mg. is optimal. Men often benefit from amounts as high as 50 mg. These are physiologic doses and side effects are rare. See Cherniske Pg. 243-260 Chapter 11 - "What Do You Have? What Do You Need?"
 5. You'll have to decide with your doctor how long you should wait to retake your DHEA test to ascertain its effectivity.

*I'm now taking DHEA from Indiana Botanic Gardens 25 mg 100 Tabs 5.25 my cost. 16.25
4/15/89 I take 2 per day. = total 50mg. 200 Tabs 8.74 my cost 28.95*

PREGNENOLONE is a hormone precursor that the body normally manufactures using cholesterol as the primary raw material. In the body, it can be converted into a multitude of other hormones including DHEA, estrogen, testosterone and progesterone.

As is the case with the steroid-hormone precursor DHEA, pregnenolone levels decline with age. Many physicians and scientists believe that replacement of pregnenolone to youthful levels is an important step in dealing with the symptoms of aging. (Other hormones that decline with aging, and can be replaced, include: DHEA, melatonin and the sex hormones testosterone, progesterone, and estrogen).

However, pregnenolone may be one of the most important hormones because it seems to have a balancing effect. It is a precursor to many other hormones and may be able to bring the levels of other hormones up or down as needed.

100 TIMES BETTER MEMORY ENHANCEMENT

Many steroidal hormones have been found to have intelligence-enhancing capabilities, but pregnenolone seems to have truly extraordinary activity. Pregnenolone was the subject of memory experiments as far back as 40 years ago,

and since then has been found to play an important role in long-term memory. And, in a recent study, pregnenolone was found to be 100 times more effective for memory enhancement than other steroids or steroid-precursors. Other

studies have demonstrated that pregnenolone may improve general cognitive performance, and may be the most potent memory enhancer ever.

HOW TO USE PREGNENOLONE

For most uses 10 to 30 mg per day on an empty stomach is about right. You can adjust the dosage to what feels good for you. For help in the relief of arthritis, quantities as high as 500 mg per day have been used without any adverse effects.

Other benefits of pregnenolone may include:

- Stress reduction and increased resistance to effects of stress
- Relief of inflammation
- Improvement of mood and energy
- Reduced symptoms of PMS and menopause
- Improved immunity
- Repairing the structure of the myelin sheath
- And more

- "Pregnenolone" by Ray Sahelian M.D. 1975
- Garden Patch 228 W. Edison Rd. Mish. 255-3151 will order it. They give 5% disc.
- Ind. Botanic Gardens 10 mg caps. #404 Preg 90-295 (Dn Price - 4.48) White.
- Men with prostate problems should check with their Dr. prior to using.
- Since it influences estrogen production women should check with their doctor.

LECITHIN... IT'S CRITICAL TO CORONARY HEALTH, AND BRAIN AND NERVE FUNCTIONING

Approximately 30% of your brain is composed of lecithin. Of the insulating and protective sheaths that surround your brain, spine, and thousands of miles of nerves, lecithin accounts for two-thirds of their composition; and of all the muscles in your body, your heart -- the hardest muscle to fatigue -- has the highest lecithin content.

Lecithin is a nutrient compound which was first isolated from egg yolk in 1850 by Maurice Blety. Since that time, it has been shown to be present in many foods; soybeans and other legumes, grains, wheat germ, brewer's yeast, and fish, as well as egg yolks, are all good sources of lecithin.

Biochemically speaking, lecithin belongs to a group of nutrients known as lipids (fats, oils, waxes) and is a phospholipid called phosphatidyl choline. It is important to note this since what is commercially called lecithin is actually only one-third true lecithin. The other two-thirds is made up of other phospholipids.

It was twenty-five years ago, in 1958, that Dr. Lester Morrison, director of a research unit at Los Angeles County General Hospital, first published (Geriatrics, January, 1958) his findings that lecithin could be used to lower cholesterol levels; in fact, Dr. Morrison reported that "lecithin was found to be the most effective cholesterol lowering agent tested. . .". He reported that 80% of his patients suffering from high serum cholesterol levels showed an average decrease of 41% in serum cholesterol after taking lecithin for several weeks.

Instead of "blocking" absorption of cholesterol in the digestive tract as other cholesterol reducing agents did, lecithin enhanced the metabolism of cholesterol in the digestive system and aided in its transport through the circulatory system. The lecithin acted as an emulsifier and broke down the fats and cholesterol in the diet into tiny particles and held them in suspension, preventing them from sticking to blood platelets or arterial walls. It is when fats are not properly emulsified, that they become "sticky" and this is the major cause of blood clots, atherosclerosis, and coronary thrombosis. Interestingly enough, researchers have since demonstrated that atherosclerosis (blockage of the arteries) can be induced in the laboratory by either increasing the cholesterol introduced into the body or by decreasing lecithin intake.



Researchers Adams and Morgan have also shown that lecithin from a vegetable source (soybeans) is more effective than lecithin from an animal source (eggs) in accelerating the reabsorption of cholesterol back into the blood stream that has adhered to the walls of blood vessels and caused blockage.

This difference is attributed to the fact that lecithin from animal sources contains high amounts of saturated fatty acids while lecithin from vegetable sources are about 80% unsaturated fatty acids.



Another researcher, Dr. William Delamater, reported that in older people, if sufficient lecithin was present in the blood, the blood fat level returned to normal in about three hours after a high fat meal. But, if there wasn't sufficient lecithin in the blood, fat and cholesterol levels remained high for as long as twenty hours.

Most research studies using lecithin to lower cholesterol levels have been done using 3-5 rounded tablespoons of lecithin granules daily. After a period of three to four months significant reduction in serum cholesterol is usually observed.

PERHAPS THE MOST INTERESTING NEW FINDINGS ON LECITHIN CONCERN ITS CONNECTION WITH THE FUNCTIONING OF THE BRAIN AND NERVOUS SYSTEM.

Besides being an important factor in controlling cholesterol levels and aiding coronary health, lecithin is involved in a myriad of body functions. Every cell of your body contains lecithin. Lecithin is responsible for maintaining the surface tension of the cell membrane. It therefore controls what goes in and out of each cell, allowing nutrients in, or wastes out. Without enough lecithin, the cell wall hardens, thus not allowing enough nutrients in or wastes out. This means premature aging of cells. The surface tension of the cell maintained by lecithin is also responsible for transmitting nerve impulses and messages through or from the cell.

Perhaps the most interesting new findings on lecithin concern its connection with the functioning of the brain and nervous system. A key factor in proper brain and nerve transmissions is the presence of a cellular substance called acetylcholine. Acetylcholine deficiencies are linked with the neurological disorders tardive dyskinesia (involuntary facial grimaces and body jerking), Huntington's chorea (the disease that killed Woody Guthrie), Friedrich's ataxia (speech impairment, irregular movements, and paralysis), olivoponto-cerebellar atrophy (wasting away of the brain), Alzheimer's disease (a mind destroying disease that starts with memory difficulties), and myasthenia gravis (progressive paralysis).

Until as recently as six years ago, medical researchers were using choline chloride to help their patients who suffered from these insidious brain disorders to produce more acetylcholine in their bodies. However, in 1977, Dr. Richard Wurtman and his colleagues at Massachusetts Institute of Technology found that lecithin (which contains phosphatidyl choline) increased serum choline levels more than three times as much as the previously used choline chloride and kept those levels raised more than three times as long. This meant that researchers had found a way to significantly raise acetylcholine levels in their patients since acetylcholine production in the brain was dependant on serum choline levels.

Dr. Wurtman's research further astounded the medical community by showing that choline was taken up directly by the brain and used almost at once to help the brain make acetylcholine. This meant that the amount of lecithin (phosphatidyl choline) furnished by each meal could have a direct and almost immediate effect on the efficiency of the brain. Researchers found this so surprising because it had long been believed that the so called blood-brain barrier shielded the brain from such direct influences by nutrients and substances that are excessive or lacking in the day-to-day diet. Only a few substances such as alcohol or powerful drugs were thought to be able to cross this barrier.

DR. ALLEN COTT, A NEW YORK CITY PSYCHIATRIST STATES, "I LEARNED FROM THE WORK BEING DONE AT MASSACHUSETTS INSTITUTE OF TECHNOLOGY AND OTHER PLACES THAT GIVING 14 GRAMS OF LECITHIN A DAY - TWO HEAPING TABLESPOONS - IS JUST ABOUT THE BEST THING YOU CAN DO FOR MEMORY."

Scientists soon found to their delight that taking lecithin produced no negative side effects as did other remedies prescribed for brain dysfunctions. One researcher, Dr. Barbeau, at the University of Montreal reported that patients suffering from olivoponto-cerebellar atrophy (wasting away of the brain) showed a 30 percent improvement after only two months of taking 24 grams of lecithin daily.

Additional Findings on Lecithin Interaction in the Body

* Without sufficient lecithin, your body cannot utilize the fat soluble vitamins A, D, E, and K. By adding an adequate amount of lecithin to your diet, you could improve your digestion and utilization of these vitamins by 100% or more if your diet is now deficient in lecithin.

* When a person exercises regularly to improve their muscle tone, the amount of lecithin contained in the muscles increases. This increase in muscle lecithin is in part responsible for the greater endurance of the muscle.

* Dr. H. Dietrich of Texas has found that often a diabetic's insulin requirements are reduced when lecithin is added to the diet.

* The importance of lecithin to the functioning of the body can be realized in the fact that during starvation, when body fat and protein are being broken down for energy, the lecithin in the body is not used for energy except as a very last resort.

* Autopsies show that multiple sclerosis patients have significantly less lecithin in the brain and myelin sheath than normal persons. The autopsies also show that the lecithin that is present in the brain and myelin sheath of these multiple sclerosis victims is essentially composed of all saturated fatty acids and no unsaturated fatty acids. Multiple sclerosis is also known to have a much higher incidence in countries where the diet is high in saturated fats.

* Psoriasis is apparently due, at least in part, to a faulty utilization of fat and is usually accompanied by a high cholesterol level. Generally, with 3 to 5 tablespoons of lecithin granules per day cholesterol goes down and psoriasis clears up.

* At Mount Sinai School of Medicine in New York, Dr. David A. Oring found that in patients with gallstones, gallstone attacks were cut in half by taking 13 grams of lecithin a day (a tablespoonful is 1.5 grams). Also, the size of gallstones were greatly reduced in one patient.

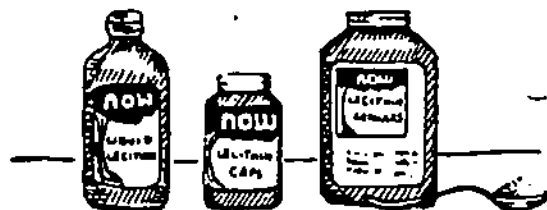
* Researcher Lehnings, in his book Biochemistry, found that proper functioning of the sex glands and improved sexual functions in general are often attributed to a good amount of lecithin in the diet.

* Bile, produced in the liver, is stored in the gall bladder. This bile is comprised mostly of bile acids, lecithin, and cholesterol, and it is necessary in fat metabolism. If sufficient lecithin is not present in the bile, the cholesterol forms gallstones.

* Cirrhosis of the liver is no longer a disease of the heavy drinker only. Being the body's waste disposal plant, many toxic materials, like food additives, preservatives, insecticides, growth hormones, etc., all pass through the liver. Lecithin and good general nutrition readily reverses liver damage.

* Dr. Allen Cott, a New York City psychiatrist states, "I learned from the work being done at Massachusetts Institute of Technology and other places that giving 14 grams of lecithin a day -- two heaping tablespoons -- is just about the best thing you can do for memory." Dr. Cott also uses lecithin to improve concentration and recall in learning disabled children, most of whom are either schizophrenic or autistic. "Clinical observations indicate about a 50% improvement," Cott added.

* W.S. Hartroff, M.D., Ph.D., reported in the American Journal of Public Health that the lack of choline was found to lead infants toward high blood pressure. Further more, it has been found that a choline deficiency induced tendency to high blood pressure can not be reversed. Interestingly enough, human milk contains lecithin while cow's milk does not.



Ways To Use and Take Lecithin

Lecithin dietary supplements come in three forms: liquid (thick, syrupy), capsules, and granules. All three contain phosphatidyl choline, but the granules contain the highest concentration of it. That is why almost all lecithin research is done using lecithin granules. However, the lecithin capsules and liquid are also both fine dietary supplements. Pick the form that is most convenient for you. It is best to take your lecithin supplement with meals since it will act synergistically with other nutrients.

Lecithin capsules are handy, tasteless when swallowed, and can be conveniently taken anywhere. Liquid lecithin mixes well with peanut butter, tahini, spreads, and sauces. Since it is an emulsifier, it will make whatever you mix it with smoother and creamier. People may find the oil naturally contained in liquid lecithin and lecithin capsules aggravates complexion problems. They should use lecithin granules. Granular lecithin has a slight nut-like taste and can be taken with milk or any other drink. It also adds a little texture to sauces and spreads. When possible, add the lecithin after the cooking is finished to help preserve the nutrients naturally present in lecithin.

Liquid lecithin can also be wiped on skillet and baking pans with a paper towel instead of oil or grease so that sticking is eliminated.

Whatever form of lecithin you decide to take, be assured that you are helping both your body and mind to be at their best.

LECITHIN - A UNIQUE, EMULSIFYING, NATURAL FOOD SUBSTANCE

- Combines Various Factors Like Phosphorus And Choline. Found In The Lining Of Every Human, Animal And Vegetable Cell. It Performs Numerous Important Roles.
- In The Brain, Choline Is Transformed Into Acetylcholine Which Relays Messages From One Nerve To Another.
- In The Liver, Lecithin Metabolizes Fat.
- In The Blood Stream, Lecithin Helps Prevent Fat From Attaching Onto Artery Walls.
- In The Intestinal Tract, Lecithin Enhances Absorption Of Vit's And Possibly E and K.
- Lecithin Emulsifies Fat So That It Will Combine With Water.
- If Lecithin Is Injected, It Will Reverse Arteriosclerosis.
- Many advise against taking large amounts, take only 1/2 tsp. (or 1 tsp) per box of water. They prefer to sprinkle into their food when cooking their grains.
- Check With Your Dr. If You Use Large Amounts. It's Considered As A Food And Therefore Safe With No Side Effects. **SOY** Granules (Textured Vegetable Protein) ^{OR} **BREWERS** Yeast, Soy Grits, Grains Legumes, Fish & Wheat Germ. All soy products.
- Many prefer to get their Lecithin from food.
- To experience the stickiness of Lecithin, after you have your soybean drink, rub your fingers around the sides of the glass and then try to wash it off!

Be careful with liquid lecithin and capsules

LEGUMES (BEANS) ARE VITAL FOODS EAT THEM EVERY DAY

- Sprouting increases their nutrients tremendously. Sprout: Adzuki, Garbanzo, Green Peas, Lentils, Navy, Oats, whole Berries
- PROVIDES GREAT BENEFITS
- For The Cardiovascular System
- Holds Down The Making Of Cholesterol By The Liver
- Speeds Up Clearing Of The LDL And Building Of The HDL.
- Regulates Insulin - Normalizes Hunger
- Helps Excretion Of Sodium - With Their High Fiber, Lowers Blood Pressure.
- Eliminate canned baked beans. They elevate Blood Sugar.
- Diabetics should not eat them.
- Lima Beans and green peas. Keep a bag of each in your freezer. Place 3-4 tsp of each in a pint jar and distilled water and 1/2 tsp food grade H₂O₂ and keep in your refrigerator. Eat frequently.

The question being raised is - since it's so sticky, won't it stick to the walls of the intestines and interfere with digestion and absorption of nutrients? If you have been taking large doses of lecithin, you may want to use an abundance of lemon juice and oil, etc.

Beans (2)

LEGUMES
Powerful Cancer Fighters.
Turn off PROTEASE ENZYMES
 which turn on ONCOGENES
 which activate Cancers.
Rich In Lignans which
Fight Off Breast & Colon Cancer.

Give Larger Softer Stools:
 Fights Colon and Rectal
 Cancer, Hemorrhoids,
 Diverticulitis, Constipation.

Steam After Sprouting:
 Eliminates Gas

Out Of Sprouts? Eat Baby
Lima Beans. 300g Gives % RDA:
 Protein - 30% B3 - 7.5 %
 B1 - 30% Iron - 20 %
 B2 - 5% Calcium - 2 %

SPROUTING GIVES VERY
HEALTHY, POLLUTION-FREE
FOODS.

• Watch your getting into gas problems
 especially if you have not been eating
 legumes. Nutrition Hdq. #15208-260mg Activated Charcoal Caps 100 caps \$7.25; 200 caps 13.00
 Be prepared!

MAGNESIUM-VITAL TO LIFE ^{RDA 400mg}
 Maintains Acid-Base Balance With
 Alkaline Balance. Calcium Is Critical
 Metabolism Of Magnesium dilates
 Carbohydrates, arteries Of The
 Minerals & Sugar heart-Calcium
^{mag.} constricts them.
 • Is are Deficient:
 • Results In:
 Nervousness.
 Tremors Easily
 aroused Anger.
 Disorientation.
 Blood Clotting.
 Has Anti-Stress
 Factor
 Lowers Blood
 Pressure
 Prevents Kidney
 Stones
 Canned Vegetables, Refined Flour
 • Shortage Of Mag.
 Induces SPIND
 Heart Failure
 • Lowers retention
 Of Lead.
 • Prevents Diabetic
 Retinopathy.
 • Controls Bad
 Breath-Body Odor
 • Avoid White Bread,
 Cake, Rice, Boiled and
 Canned Fruits And

Magnetic Therapy Course Book

Magnetic Therapy - The Pain Cure Alternative
By Drs Ron Lawrence & Pa Rosch MD's 239 pages
15.00 Your cost 9.00...aper back

Ron Lawrence, MD
North American Academy of Magnetic Therapy

Magnets

Stop Pain... Ease Arthritis

Help Heal Broken Bones

And More

Study

Bio-magnetic Handbook by Wm H. Philpott M.D.
Price 19.95 Dr. Cost 10.00



In China, France, Japan and especially in India, magnetic therapy has long been used to speed the healing of broken bones and soft-tissue injuries.

In the US, magnetic therapy is sometimes considered a form of quackery. But following the publication of several "pro-magnet" studies in the *Journal of Electro- and Magnetobiology* and other prestigious American medical journals, a few pioneering doctors in this country are starting to use magnets in their practices.

Already, magnetic therapy has proven effective at treating slow-healing fractures and arthritic knees and necks. Studies also suggest that regular use of magnets may reverse osteoporosis... prevent heart disease... slow tumor growth... and boost mental function in Alzheimer's patients.

I know from personal experience that people sleep better and wake up feeling more refreshed after a night on a magnetic mattress. I sleep on one myself!

Is magnetic therapy safe? Absolutely. Magnetic resonance imaging (MRI) machines routinely expose patients to magnetic fields as high as 15,000 gauss—with no negative effects. It stands to reason that a medical magnet rated at 200 to 800 gauss poses little threat.

HOW MAGNETS WORK

Recent studies have demonstrated quite clearly that when

placed directly on the skin, a simple, handheld magnet...

- **Increases blood flow.** It does so by stimulating cellular activity through the so-called "Hall effect." This is general heating of the magnetized area.

Some scientists think magnets improve the functioning of the autonomic nervous system, which could also stimulate blood flow to the affected area.

- **Diminishes pain.** This occurs via a combination of the Hall effect and possibly some stabilizing influence on the autonomic nervous system.

- **Speeds healing.** It does so by boosting the body's synthesis of adenosine triphosphate (ATP), the "fuel" that fires all cellular processes... and by enhancing the blood's ability to carry oxygen.

MAGNETS VERSUS ARTHRITIS

Magnetic therapy helps relieve arthritis pain and slows the deterioration of cartilage inside arthritic joints.

For my patients with arthritis, I recommend sleeping on a magnetic mattress pad... or wrapping a flexible, magnetic bandage around the affected joint. If you do sleep on a magnetic pad, remove it for a day or two, every

Health Confidential interviewed Ron Lawrence, MD, a neurologist in private practice in Agoura Hills, California. He is president of the newly formed North American Academy of Magnetic Therapy, 17445 Oak Creek Ct., Encino, California 91316. 818-501-4433.



Ref: "Discovery of Magnetic Health" Geo J. Washnis and Richard Z. Hricak \$21.95 Dr. Price \$13.17 + S.H. 5.00

two to four weeks. This seems to prolong the beneficial effects.

HEADACHES AND BACK PAIN

Magnetic pillow liners appear to be an effective treatment for chronic headaches and jaw pain.

People with chronic back pain have obtained significant relief from sleeping on magnetic mattresses, and/or using magnetic seat cushions.

SOFT TISSUE INFLAMMATION

Tennis elbow, carpal tunnel syndrome and other tendon or ligament problems heal faster when wrapped in magnetic bandages.

In most cases, the magnet is wrapped into place over the affected area—and left in place until the pain disappears.

BROKEN BONES

In some hospitals, powerful electromagnets are being used to speed healing of stubborn bone fractures. Magnetic therapy also seems to promote regeneration of spinal disk tissue.

ASTHMA

Regular use of magnets helps prevent the violent allergic reaction in the lungs that is characteristic of bronchial asthma.

Helpful: Sleeping on a magnetic mattress... or wearing a magnetic bandage on your chest.

PUTTING MAGNETS TO WORK

The benefits of magnetic therapy are often apparent within the first hour of treatment. In others, three or four days of steady treatment are required.

For maximum benefit: Place magnets as close to your body as possible. The strength of the magnetic field drops off sharply with distance.

A variety of magnetic devices is now available—including mattress pads, seat cushions, pillow liners, magnet-studded bandages and simple handheld magnets.

YOU CAN MAKE THEM YOURSELF
We have the magnets and materials for you, and the instructional material, or we can make them for you.

A Magnetic Approach to Pain Relief *By Dr. Julian Whitaker M.D.*

Inez has been a patient of mine for more than 10 years. During that time, we have worked together to keep her blood pressure and arthritic pain under control, and she has managed to avoid both a heart bypass operation and a total knee replacement. However, about a year ago, Inez's arthritis flared up in her back. The pain was so excruciating that she was unable to exercise, and as a result her blood pressure began to climb.

A friend brought her a thin, pliable magnet and suggested she wear it over her lower back, where the pain was most acute. By the next day her pain had dramatically decreased, and within a week she was back to her daily walks. Inez's daughter, a golf professional, had such severe elbow pain she couldn't swing a club and was out of work for several weeks. She began using magnets strapped to her elbow, and is now back out on the links, teaching and playing every day—completely pain-free.

Magnets Have a Long and Colorful History

Magnets have been used for medicinal purposes for centuries. One of the more notable early users of magnets was the Frenchman Franz Anton Mesmer (mesmerize comes from his name). He traveled throughout Europe in the mid 1700s, demonstrating the healing power of magnets, which he attributed to a "universal fluid" and "animal magnetism." As Mesmer's popularity grew, so did his egocentricity—he claimed that his own animal magnetism was so powerful that he could personally magnetize anything. He engaged in more and more flamboyant and outlandish displays, which eventually undermined his credibility.

Mesmer's rise and fall parallels the historical acceptance of therapeutic magnets, which have fallen into and out of favor over the years. Magnets are now going through a re-emergence in popularity—it is estimated that Americans spent \$500 million on therapeutic magnets in 1997.

Magnets Are Not Just for Athletes

Many celebrities claim to have benefited from therapeutic magnets, including Miami Dolphins' quarterback Dan Marino, professional golfer Jim Colbert, and Oscar-winning actor Anthony Hopkins. Magnets are frequently seen on the senior golf circuit, and at racetracks, where many trainers will attest to their efficacy in treating musculoskeletal injuries in horses.

Magnets have helped me. I am 53 years old, play squash, racquetball, and tennis, and suffer only from intermittent bouts of laziness. I did, however, have constant mild aching and stiffness in my lower back. After hearing about Inez's success, I started wearing a magnet over the lumbar area of my spine. In a few days, the pain disappeared completely. I never had severe pain, just aching, but it amazes me I now have no pain.

How Magnets Work

How magnets work is still a mystery, but there are two generally accepted theories. The first is that magnets enhance blood flow in an injured area, which would predictably decrease inflammation and speed up healing. However, this would not explain the dramatic pain relief—often within a very short time—experienced by many who use magnets.

Perhaps it's because, as some theorize, magnets activate electrical currents in the body and release pain-relieving neurotransmitters. They may even stimulate the brain and central nervous system directly.

Regardless of how they work, there is no question whatsoever that magnets do work. A double-blind, placebo-controlled study published in the November 1997 issue of the *Archives of Physical Medicine and Rehabilitation* revealed that exposing pain trigger points to weak magnets provided significant, quick relief in patients suffering with post-polio pain. Other research has demonstrated positive findings in relieving pain from whiplash and head injuries, menstrual pain, knee inflammation, and carpal tunnel syndrome.

RECOMMENDATIONS FOR MAGNETIC PAIN RELIEF

✓ Chronic pain in one form or another is estimated to affect almost half of American adults, and over 40 million Americans have arthritis. If you are one of them, you know the primary therapy is over-the-counter and prescription pain relievers, which are costly and have a long list of side effects. Given the dearth of options, I recommend that you get an inexpensive magnet and give it a try. Combined with diet, exercise and nutritional supplement recommendations in the Whitaker Program and those I routinely suggest in *Health & Healing*, magnets can be an important element in the treatment of backaches, arthritis, injuries, carpal tunnel syndrome, menstrual cramps and other pain syndromes.

✓ What makes magnets so attractive is their ease of use, low cost, and durability. Although you could pay over \$1,000 for a magnetic bed, you can find small magnets for under \$20, a one-time purchase that can be used again and again. You simply place the magnet over the affected area with an elastic wrap, belt or Velcro attachment (which often comes with the magnet), and go about your business. After a while you won't even notice it's there.

✓ There are a number of companies which market magnets, so you should choose what you feel comfortable wearing and spending. Bioflex (800/619-2717) carries a variety of magnets. Another source is Phillips Products and Services (800/705-5559, ext. 113021). Or look in the phone book for a local Nikken distributor. *Far too expensive - don't buy!*

Magnets are exceptionally safe, but since their effect on pacemakers, insulin pumps, drug patches and pregnancy is unknown, I do not recommend using magnets if you are using one of these devices or are pregnant. *Julian Whitaker M.D.*

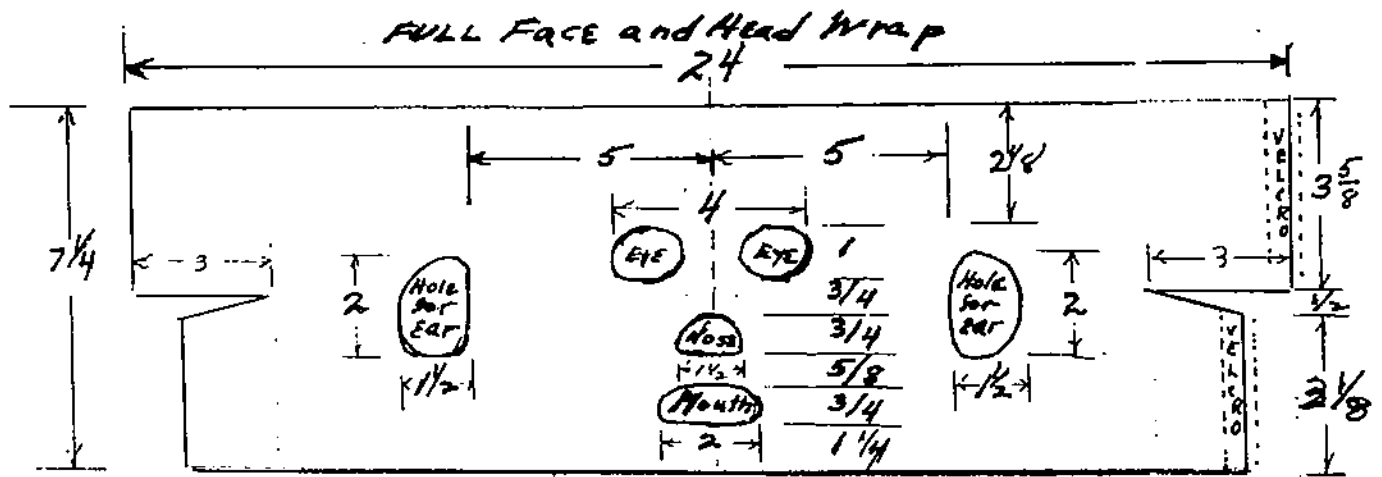
*"Pain Relief Breakthrough" by Dr. Julian Whitaker 22.95 (I can't get you a discount)
"Magnetic Therapy - The Pain Cure Alternative" by Dr. Lawrence and Rasch is a better buy 15⁰⁰ - your cost 8.00*

Magnetic Therapy has become well accepted thru-out the world as a therapy to reduce or eliminate pain. Also its becoming recognized as a means for reducing atherosclerosis. Since the vast majority are meat eaters, atherosclerosis is the number one cause of illness and death. It, therefore makes good sense for all of us to use magnetic therapy even if we are not experiencing pain. This can be done easily and inexpensively especially if we make the magnetic devices ourselves.

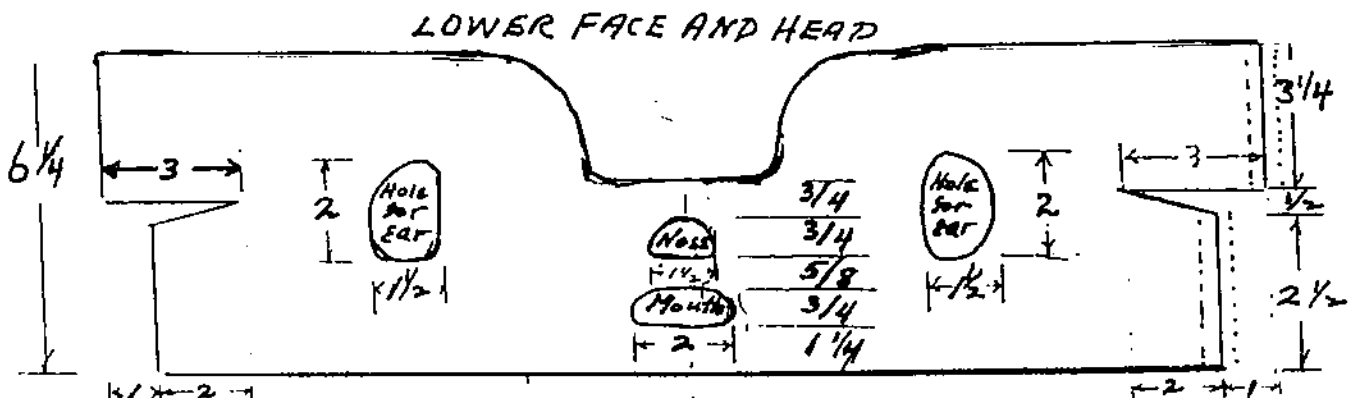
Learn how to make magnetic insoles for your shoes and pads to sit on, lean against, sleep on and all the various sized pads described below. We use THREE KINDS OF MAGNETS. We do not like flexible magnets. We can achieve every therapy we wish with ceramic and neodymium discs more conveniently, more comfortably and far less expensively. Flexible magnet strips are far heavier, very cumbersome, far more expensive, and far less versatile.

<i>3/4" diam x 3/16" thick</i>	<i>Ceramic Disc Magnets</i>	<i>8 grade</i>	<i>25 ea.</i>	<i>9950 Gauss</i>	<i>3950</i>
<i>1/2" " x 1/8" "</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>
<i>1/2" " x 1/8" "</i>	<i>Neodymium</i>	<i>"</i>	<i>"</i>	<i>(Excellent)</i>	<i>200 ea 12,300</i>
				<i>(Very strong - very effective)</i>	

- Velcro compatible material comes in two types. One side holds the velcro strips (tack side), the other (non-tack) side does not hold velcro. Dimensions ^{on drawings} are for a small person. Change them to custom-fit them to you. Velcro compatible material retail approx 14¢ per running yard (60" x 36")
- If velcro compatible material is itchy wash it thoroughly. If it is still itchy cover the magnetic side with fabric (fleece or cotton)
- To increase strength of edges, edge bind on sewing machine. To further increase edge strength cut wrap 1" oversize and foldover 1/2" as edge sewing is performed
- RECTANGULAR WRAPS (start as rectangle and then cut as needed)
- To make wraps, study the diagrams on the next page. (154-E)
- The measurements are for a small person and will vary greatly from one person to another, espec. if you a large person.
- Making a pattern to fit you will help greatly and prevent material wastage.
- Determine the size of the rectangle which will fit you. (on the tack side)
- Then draw the outline with a fine felt pen and cut out your wrap.
- Label the wrap on the tack side - just below the velcro.
- In many models, you will be able to do some sewing to minimize the amount of velcro being used.
- We have a complete set of wraps that you can try on to help you modify to fit you. Most can be made with sewing or gluing or velcro only.
- To make wraps without sewing attach velcro to tack side. Overlap material only one half the width of the velcro tape. The exposed half of the tape is used to secure closure.



If you wear glasses, put on wrap first. Temples of glasses go over the wrap

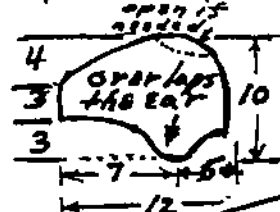
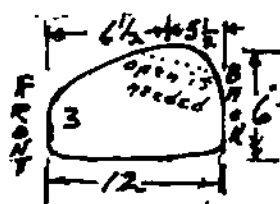


(CHEEK-NOSE-SINUS WRAP)
ON PAGE 154 E
24 x 5 1/2

154-d-

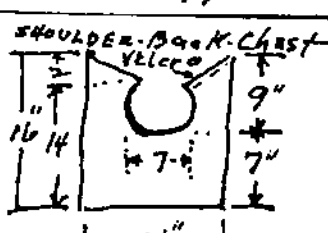
BERETS

911 three may be folded up 2" when being worn.



HEAD - Forehead Level
25 Velcro

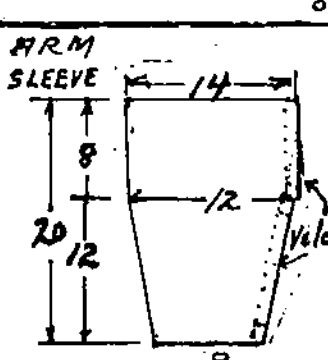
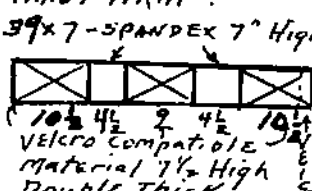
Neck
Wrap 6 1/2 x 2 1/2



CHEST
39 Velcro

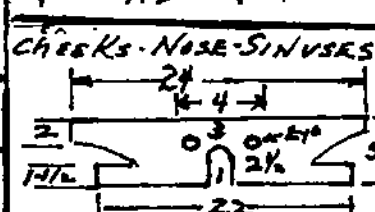
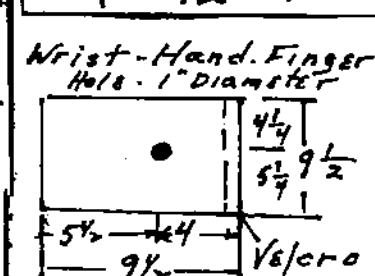
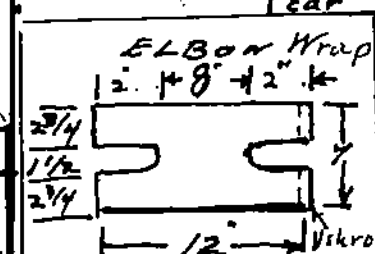
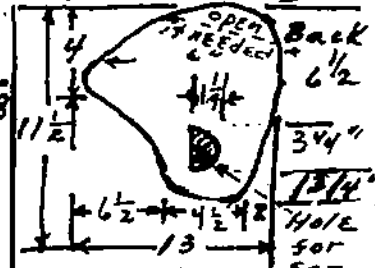
WAIST
37 Velcro

WAIST WRAP

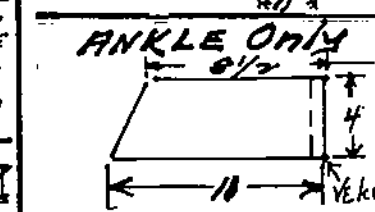
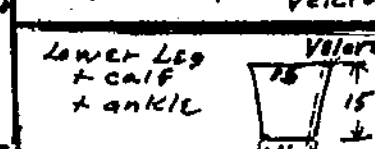
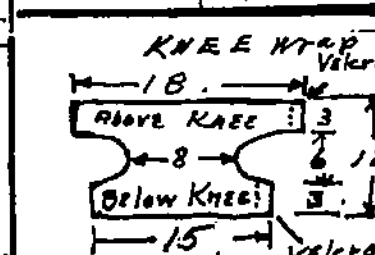
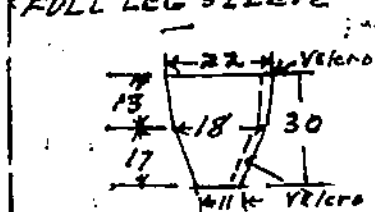


Lower Arm
Wrist
Hand
Fingers

Wrist
Only 3 8 Velcro



FULL LEG SLEEVE



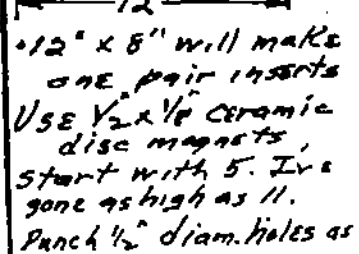
-154-E-

Ankle and Foot

To put on wraps
Lay wrap on floor,
magnets up. Velcro
strip on right.
Wrap left end over
top of foot, around
the right side of
ankle, ending up
on the left side of
the ankle.
Bring right end up,
pull to left and
attach velcro
strip under the
left end.

SHOE INSERTS

Use Hyper cell Foam
1/8" Thick covered with
denim



USE 1/2 x 1/8 Ceramic
disc magnets,
start with 5. I've
gone as high as 11.
Punch 1/2" diam. holes as
needed. Separation approx.
1 1/2". Insert magnets
North side toward the
foot.

Turn insert over, top
spread glue over
surface of insert
and denim covering
material.

When glue is tacky
place denim over
the insert.
Let set for 1 hour.
Trim denim.
If your foot sweats
or becomes uncom-
fortable, punch
additional holes
approx (3/16) diam.
in several places
to increase air
circulation.

Pads and Wraps.
Cut velcro material
into squares or
rectangles, size
and shape as de-
sired. May vary
from 2" x 2" to
32" x 32". Layout
and indicate the
placement of the
magnets marking
positions with a
fine felt pen.
Glue velcro on
south side of magnets.
Place them on the
pad. If necessary
cover them with an-
other piece of smooth
material.

Convuluted Foam from
discount stores may
be used, however
the convuluted foam
from foam companies
has a higher density
(28) and a higher
resistance to compress-
ion (60) and may be more
comfortable and have
a longer life.

CHAIR SEAT

18 use convuluted
foam, will hold
18 64 magnets.
Small person can use
16" x 16". Glue 3/4" cer-
amic disc magnet
into the valley.

Chair Back
Pad can be
14 smaller in
the vertical

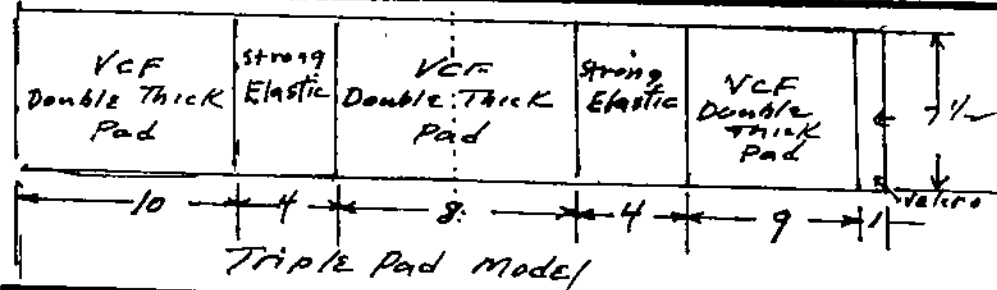
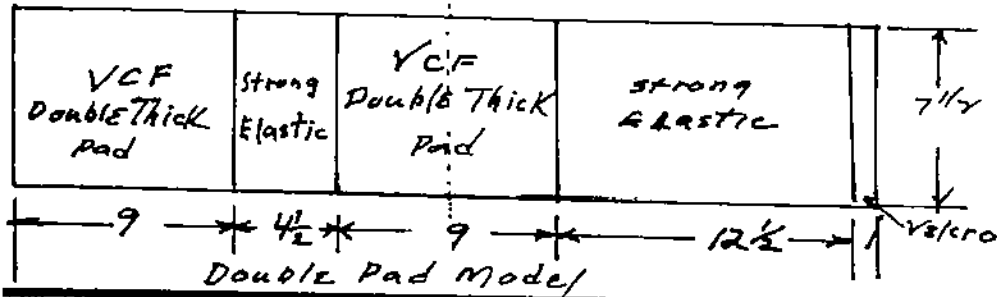
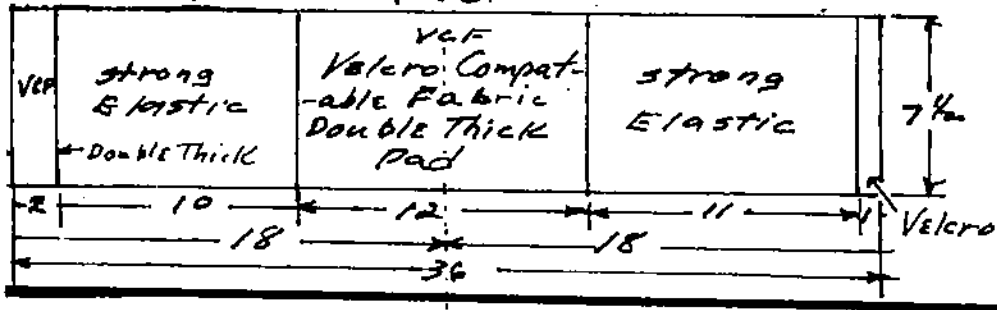
Bed Pads & Magnet
Twin 38 x 72 340
Queen 60 x 80 600
King: use two twins.
Make with convuluted
foam

Travel Bed Pads
Use 2-32 x 32 convolute
foam.

Pet Pads (Foam)
Adjust to size of pet
approx 16 x 16 to 32 x 32

Pillow Pad. (Foam)
Approx 12" x 18" to 14" x 22"

Single Pad Model



Scale: approx 1/8" = 1"

BENEFITS OF PROFESSIONAL THERAPEUTIC MASSAGE
(* SEE BELOW For Self Massage)



Of Saint Joseph's Medical Center

Benefits of Massage

- ★ Releases stress and tension
- ★ Increases energy level
- ★ Reduces or eliminates pain
- ★ Releases chronic restrictions and tension that may cause migraines
- ★ Reduces pressure on nerves
- ★ Helps recovery time from injuries, as well as athletic injuries; relaxes tight and damaged muscles

Massage relaxes muscle contractions, spasms, and relieves general body tensions.

Massage dilates the blood vessels, thus improving the circulation.

Massage increases the number of red blood cells especially in cases of anemia.

Massage acts as a "mechanical cleanser" pushing along lymphatic fluids and hastening the elimination of wastes and toxic debris.

Massage increases the blood supply and nutrition to muscles without adding to their load of toxic lactic acid, produced through voluntary muscle contraction. Massage thus helps to overcome harmful "fatigue" products resulting from strenuous exercise or injury.

Massage improves muscle tone and helps prevent or delay muscular atrophy resulting from forced inactivity.

Massage can compensate, at least in part, for lack of exercise and muscular contraction in persons who because of injury, illness or age are forced to remain inactive. In these cases, massage helps return venous blood to the heart and so eases the strain on this vital organ.

Massage may have a sedative, stimulating or even exhausting effect on the nervous system depending on the type and length of massage treatment given.

Transverse massage separates muscle fiber, undoing or preventing the formation of adhesions and trigger points.

Massage improves the general circulation and nutrition of tissues. It is accompanied or followed by an increased interchange of substances between the blood and tissue cells heightening tissue metabolism.

Massage encourages the retention of nitrogen, phosphorous and sulphur necessary for tissue repair in persons convalescing from bone fractures.

Massage stretches connective tissues, improves its circulation and nutrition and so breaks down or prevents the formation of adhesions and reduces the danger of fibrosis.

Massage improves the circulation and nutrition of joints and hastens the elimination of body toxins. It helps lessen inflammation and swelling in joints and so alleviates pain.

Massage disperses the edema following injury to ligaments and tendons, lessens pain, tissue damage, and helps facilitate movement.

Much of the above can be achieved with self-applied massage. Use cold, expeller-pressed safflower oil (contains VIT E to prevent rancidity). Also one can use a fine quality electric hand massager like the Panasonic Pana-brator ER247 and/or use a strong action spa (sit in front of the jets to get the massage action).

"These pages (156, 157-168) are from Dr. Rodney's Lecture-Note book on: Nutrition and Healthcare Against Aging, Disease and Poor Mental Health."

THE FOURTEEN MERIDIANS AND THEIR IDENTIFICATION WHEN
the vital points are located for treatment with acupuncture or
moxacautery, are as follows:

1. Lung	Lu	Lu-1	to	Lu-11
2. Large Intestine	LI	LI-1	to	LI-20
3. Stomach	St	St-1	to	St-45
4. Spleen	Sp	Sp-1	to	Sp-21
5. Heart	H	H-1	to	H-9
6. Small Intestine	SI	SI-1	to	SI-19
7. Bladder	B	B-1	to	B-63
8. Kidney	K	K-1	to	K-27
9. Circulation	C	C-1	to	C-29
10. Triple Warmer	T	T-1	to	T-23
11. Gallbladder	GB	GB-1	to	GB-43
12. Liver	Li	Li-1	to	Li-13
13. Governing Vessel	GV	GV-1	to	GV-27
14. Vessel of conception	CV	CV-1	to	CV-24

Use diagrams to:

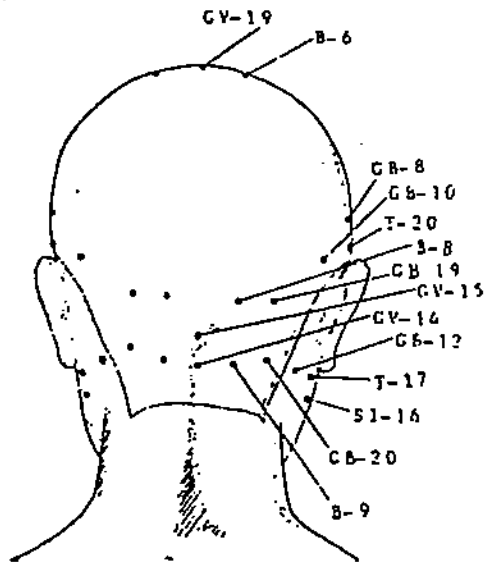
- perform acupuncture massage.

(use safflower oil cold expressed).

- To make body and extremity wraps for thermal therapy.

- To help determine placement of ceramic disc magnets. Magnetics are used if thermal therapy does not eliminate the pain or problem.

- To make flexible magnetic shoe inserts.

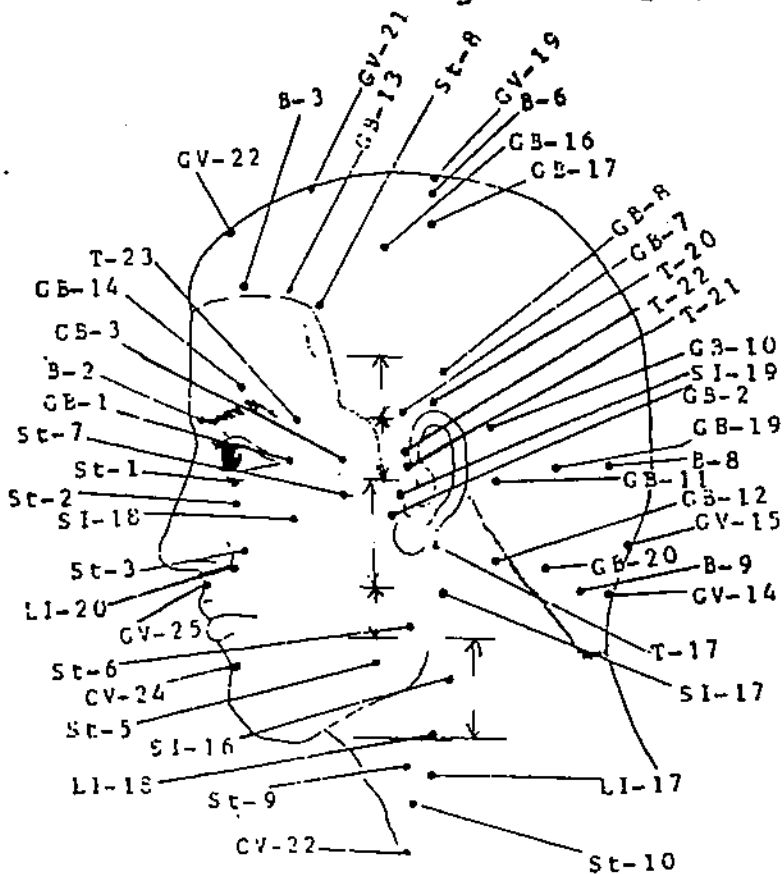


Back view of the head and neck

*Make copies of these pages and the other pages on thermal and magnetic therapy (pgs 154a-154d) and give them to friends who may be interested. Fill in the measurements where indicated. You will now be able to custom design your head body and extremity wraps.

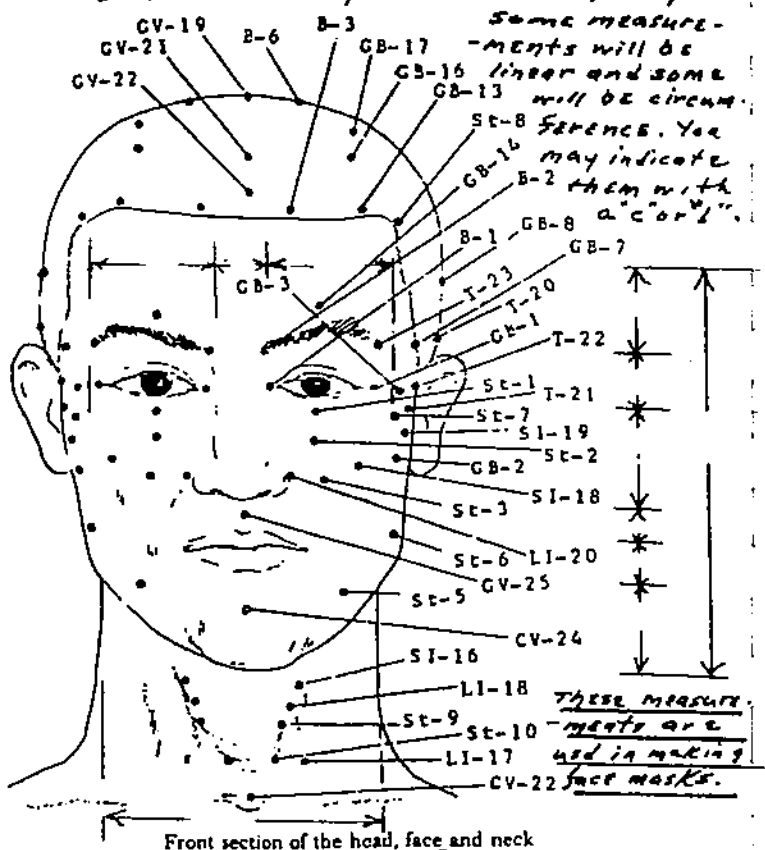
Some measure -

ments will be
linear and some
will be circum.
ferences. You
may indicate
them with
a "c" or "l".



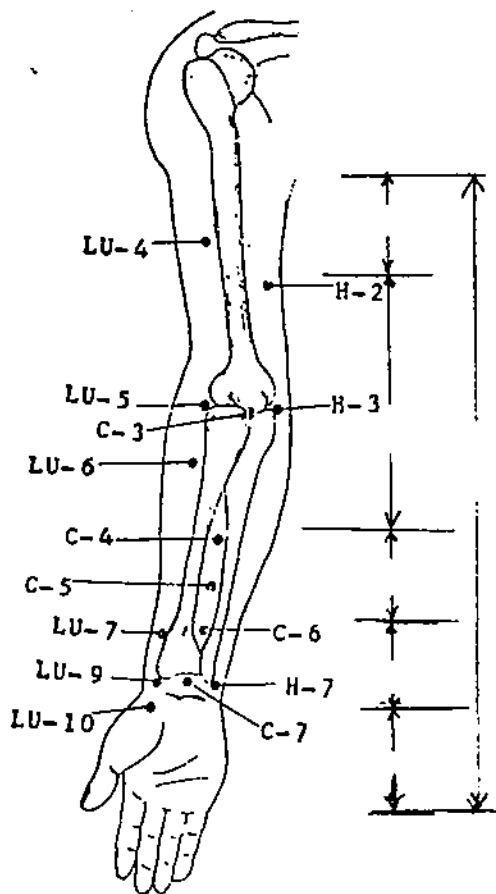
Side view of the face, neck and head section

GIVE yourself a good head, scalp, face, neck, body, arms,
and pressed Hairs.
early. Use sat flower oil as needed. 4/98. I'm now using
4 oz 2.85. I find it excellent. I'm also trying
oil - 156 - with Eucalyptus.
(Eucalyptus)

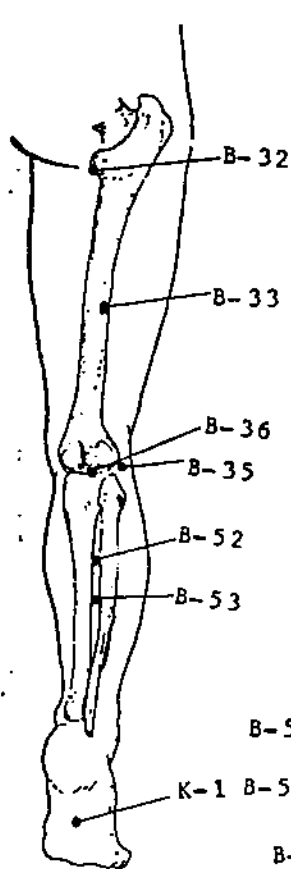


Front section of the head, face and neck

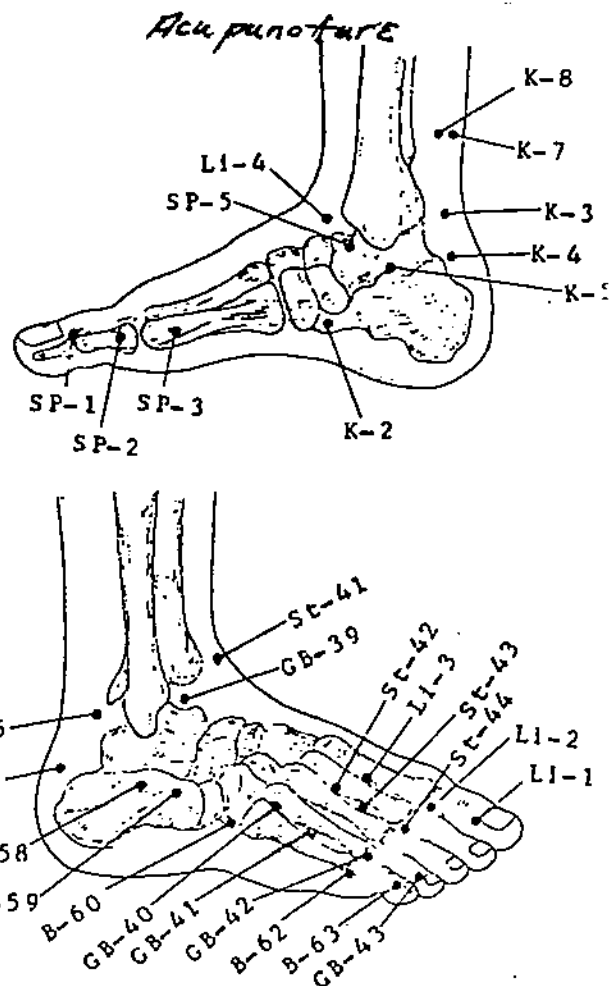
These measure-
ments are
used in making
face masks.



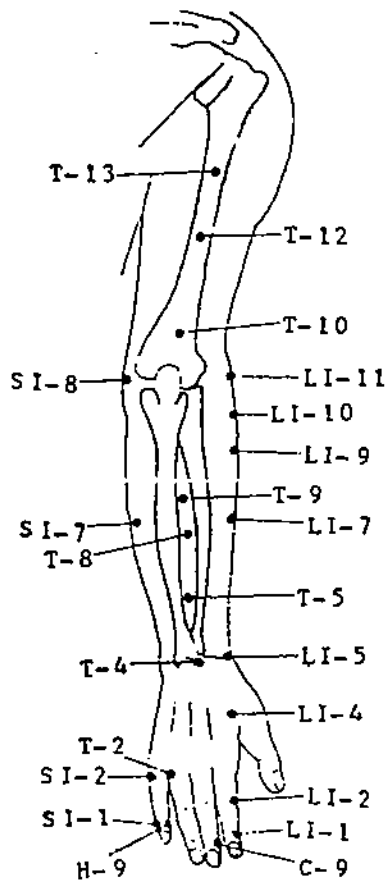
Front section of upper limbs



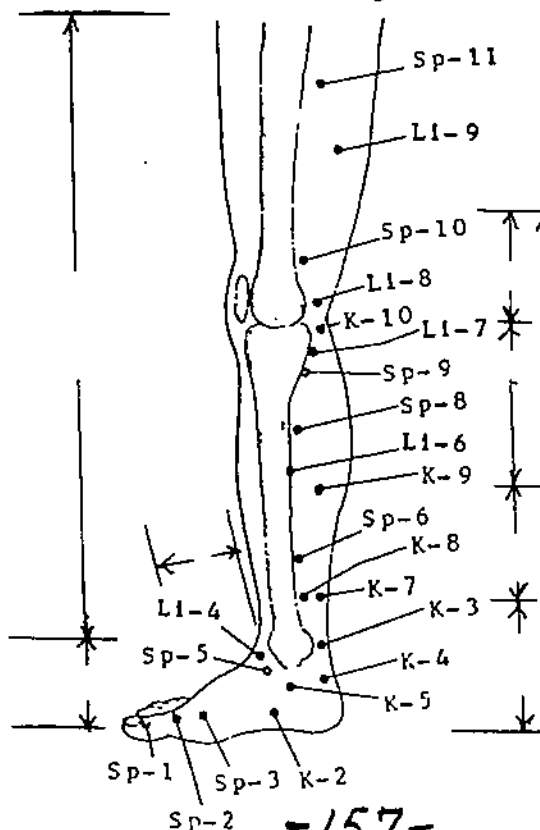
Back section of leg



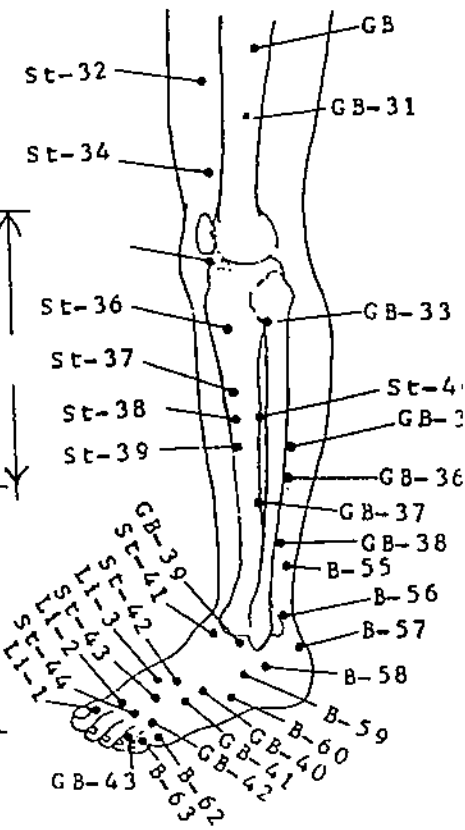
Inside and outside view of the Foot



Back section of upper limbs

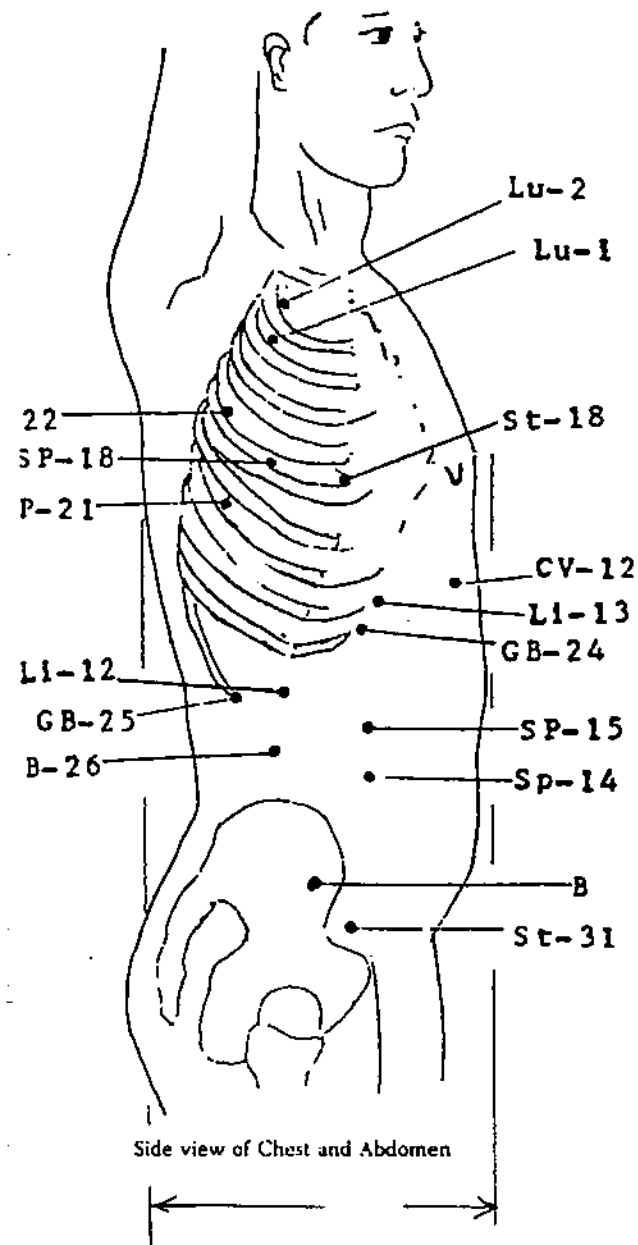


The inside view of leg

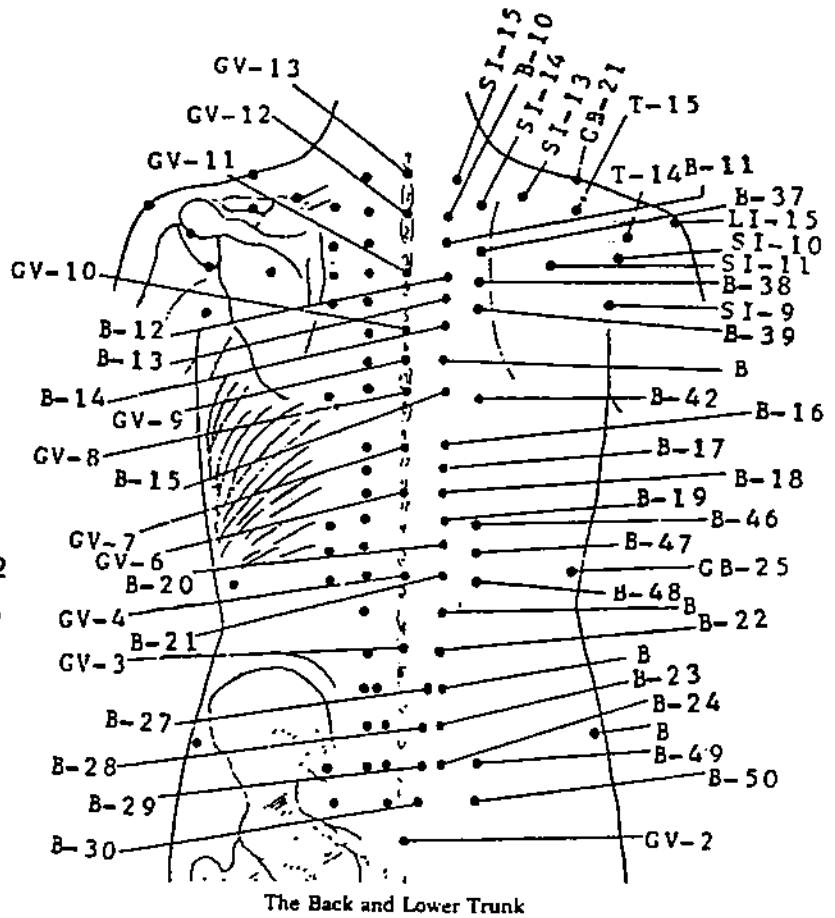


The outside view of leg

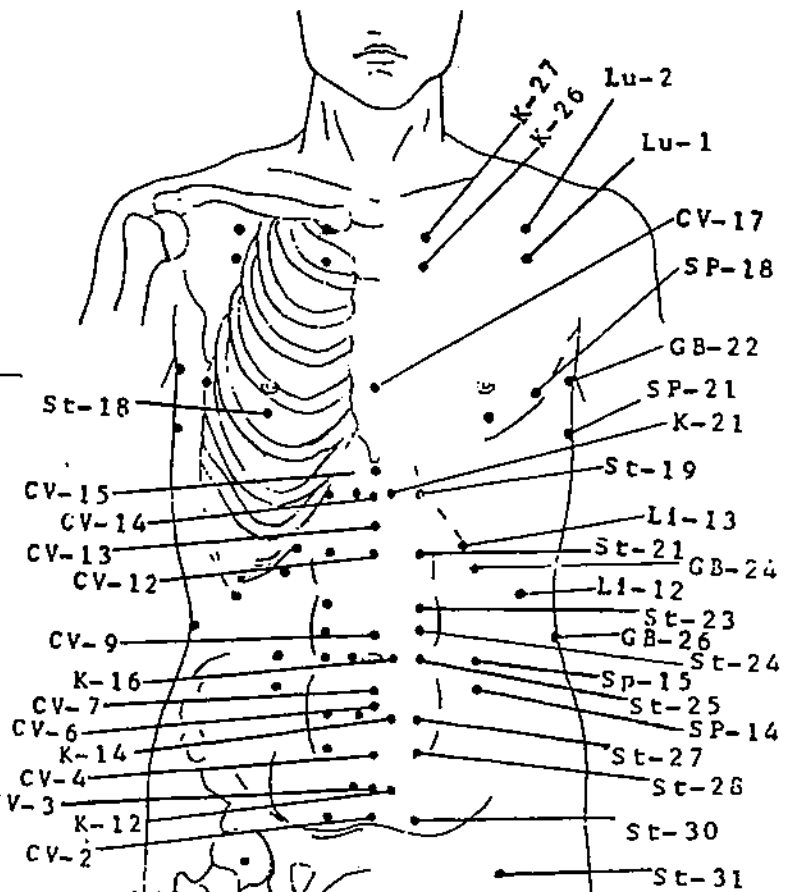
Acupuncture



Side view of Chest and Abdomen



The Back and Lower Trunk



The Front: Chest and Abdomen

Loofas - Prices Pg. 49

7815	Bath Brushes
7820	Complexion Pads
7844	Loofa 10"
7850	Loofa on a stick 12"
7855	Sea Sponges 6"

Mistakes giving edge to bacteria

By DAVID RUMBACH

Tribune Staff Writer

SOUTH BEND—Bacteria may be gaining ground in the never-ending battle between microscopic bugs and full-sized human beings.

The bugs are doing what they've always done: mutating and evolving into strains capable of surviving.

But according to Dr. John P. Flaherty, people seem to be making some mistakes.

By overprescribing antibiotic medicines for people and by using the medicines as additives to livestock feed, humans may unwittingly be giving a competitive edge to the tiny adversaries, Flaherty said Wednesday.

One bacterium in particular, called staphylococcus aureus, may become a serious health threat when it overcomes medicine's last line of defense, the powerful antibiotic vancomycin.

"When that happens, things will change dramatically," Flaherty said. "You will notice I said 'when' that happens, not 'if'."

Flaherty, an assistant professor at the University of Chicago Medical School, talked about the problem of antibiotic resistance in a lecture for local physicians at St. Joseph's Medical Center.

The issue is hot and easy to become alarmed about.

Some kinds of infections that used to be easy to cure now require the use of several antibiotics, including some with higher toxicity and harsher side effects, Flaherty said.

Pessimists are even talking about the coming of a "post-antibiotic age," in which humans no longer have powerful medicines against bacterial infection. In other words, a return to the days before penicillin came into use in 1943.

"But I'd say 'No,' we're not entering that kind of era," Flaherty said.

Actually, the whole issue of antibiotic resistance is as old as antibiotics themselves, he said. Penicillin-resistant strains of bacteria emerged within a just a few years after the use of penicillin became widespread.

Pharmaceutical companies began coming up with new antibiotics in a race that continues to this day.

"This is an old problem that has been with us from the beginning," Flaherty said.

Only the competition seems to be getting a little closer.

Flaherty said the speed at which resistant strains of bacteria emerge is directly related to the "tonnage" of antibiotics being prescribed each year by doctors. The more antibiotics used, the faster resistance to them grows.

It's become clear that as doctors write more and more prescriptions for antibiotics—the number increased from 85 million in 1980 to 110 million in 1992—the bugs are beginning to overtake the drugs.

But it could go the other way, too, Flaherty said, if doctors simply reduce the number of prescriptions by avoiding unnecessary treatments.

"So far, we've been able to stay a bit ahead," he said. "But now we've got to do our best to slow the antibiotics down so we can save some for the future."

Flaherty said the medical community should also begin to speak out about the use of antibiotics as supplements to livestock feed.

That also speeds up the emergence of resistant bacteria. There are even some strains of food-borne bacteria, such as salmonella, that resist treatment.

But the practice of using antibiotics as feed additive probably can't be banned because it also has benefit for people, Flaherty said. It promotes the growth of chickens, pigs and cows, and therefore helps keep food prices low.

"As a compromise, maybe there should be some classes of antibiotics that we reserve for humans and not put in animal feed," he said.

*Dr. Flaherty should have concluded—
"The obvious solution to this
dreadful, awesome crisis,
which is threatening our life
is—STOP EATING MEAT!!
We must all become vegetarians
NOW. Also read pgs. 161-167a
This horrible crisis is destroy-
ing our country and the
entire world."*

Study: Contaminated meat poses serious health risks

Every year in the United States, tens of thousands of cases of vomiting, diarrhea, and other gastrointestinal illnesses caused by disease-causing bacteria in food are reported to the Centers for Disease Control. Many more than that go unreported.

Why?

According to the Institute for Science in Society, most people don't recognize that their illness is caused by bacterial contamination of food, or the illness is not serious enough to warrant a visit to the doctor.

And yet, health experts estimate that 33 million people get sick – and 9,000 die – from eating contaminated foods in the United States each year. More than a third of those cases are attributed directly to eating contaminated meat and poultry.

And this trend is not getting any better – it's getting worse. Health experts from the U.S. Centers for Disease Control say more people are getting sick, while newly identified virulent strains of bacteria are causing more severe illnesses.

The Institute for Science in Society recently released the results of its intensive study of large-scale outbreaks of bacterial food poisoning in the United States and issued its findings in its report "The Risk of Getting Sick From Bacteria in Meat and Poultry."

The ISIS study shows that well over one-third of the U.S. population are at high risk for these diseases, including young children, pregnant women and the elderly. Also, people with weakened immune systems such as cancer survivors, diabetics, nursing home residents, and AIDS patients are extremely vulnerable.

Two to three percent of those who get sick are left with chronic, debilitating health problems such as kidney disease, arthritis and inflammation of the heart sac.

The report focused solely on bacterial contamination of domestically produced meat and poultry products, and excluded the threats posed by viruses, worms, pesticide residue and other food hazards. Also excluded were food sources other than meat, including milk, eggs, seafood, fruits and vegetables – all of which can become contaminated and cause illness.

"BACTERIAL CONTAMINATION OF MEAT AND POULTRY IS A TIME BOMB WAITING TO GO OFF AT ANY TIME."

– LOUISE LIGHT,

ISIS EXECUTIVE DIRECTOR

We're paying a high price for disease caused by bacterial contamination of food: The U.S. spends \$7.6 billion annually on health care and lost productivity resulting from foodborne illness.

ISIS says that specific public health strategies are needed to prevent people from getting sick from contaminated meat and poultry, because bacteria are entering the food chain at every stage: on the farm, in transport, at slaughterhouses, in processing plants, at retail food outlets, and in the home.

Although biomedical technologies are available to detect and monitor harmful bacteria and their toxins in meat and poultry, these methods aren't routinely used in the current sensory-based inspection system. "The current 80-year-old meat and poultry inspection program based on sight, touch and smell in slaughterhouses and processing plants is outdated and off the mark," ISIS officials write.

The laws "were based on the limited scientific and veterinary knowledge of that time – and were sufficient to detect the primary animal health problems of the day: tuberculosis, brucellosis, and food animal malnutrition."

Meat inspectors have a formidable task. On average, each examines 360 beef carcasses per hour and a chicken every two to three seconds for visible contamination. Only two percent or less of carcasses are rejected, ISIS reports.

The increasing complexity and centralization in the meat and poultry industry allow for food poisoning outbreaks on a large scale. ISIS found "A single batch of hamburger, improperly cooked or handled, has the potential of affecting hundreds of eaters in several states with tragic results."

Sources of meat and poultry contamination

On the Farm:

- animal feed and ground water
- environment: earth, pens, feed troughs, wildlife
- animals: feathers, hides, hooves, udders, intestines, lymph nodes
- bedding
- farm workers

Transport to Feedlot:

- trucks and boxcars
- cross-contamination of confined animals
- stress-caused "shedding" of bacteria in feces

At the Slaughterhouse:

- defeathering process
- surfaces, tools and equipment
- contact with infected parts of carcass
- pressurized sprays, treated dips and rinses

Transit to Processor, Retailers:

- inadequate temperature controls
- unsanitary storage conditions
- cleanliness of trucks and equipment
- worker health habits

Food Service / Home:

- improper food handling
- undercooking
- overlong storage

Source: ISIS, "The Risk of Getting Sick from Bacteria in Meat and Poultry," 1994

How does meat become contaminated with bacteria? That depends upon how the meat is processed. "On whole cuts, such as steaks and chops, microorganisms remain on the surface and can be destroyed in cooking relatively easily," ISIS officials write. "On the other hand, grinding or mechanically deboning pathogen-contaminated meat in order to make hamburger, ground turkey or sausage distributes the pathogens throughout the meat." About half the meat consumed in the United States is ground beef, boosting the odds that people will get sick from eating contaminated meat.

Consumers might think they are ultimately responsible for – and can prevent – food poisoning through proper storage, cooking and serving of meat products. However, the National Academy of Sciences says that producers and processors of meat play a much more central role. "Many outbreaks would not have ensued if the pathogen were not already on the meat or poultry after slaughtering or processing. Outbreaks rarely result from direct inoculation of contaminants by food handlers at the point of preparation or serving. Thus slaughtering plants and meat and poultry processor must share some of the responsibility for outbreaks that occur both in homes and food processing establishments."

Louise Light, ISIS executive director, says, "Bacterial contamination of meat and poultry is a time bomb waiting to go off at any time. The recent large-scale outbreaks in the midwest are unlikely to be the last unless there are fundamental changes in the way government deals with these problems."

The current inspection system does not – and can not – adequately detect bacterial contamination. Bacteria are not visible to the naked eye and can not be detected without microbiological tests.

Currently, we lack a coherent food safety policy to deal with the problem of foodborne illnesses. ISIS says

There is no overall mandatory compliance program. Regulatory responsibilities are fragmented among four agencies, the Food Safety Inspection Service, the Food and Drug Administration, the Centers for Disease Control and the Animal Plant Health Inspection Service.

National food safety programs do not require handlers to prevent the spread of harmful bacteria in live animals before slaughter. By the time animals reach the slaughterhouse almost all have been infected, "making the spread of disease to humans all but inescapable," ISIS found

Some common bacteria – and what they do

BACTERIA	DESCRIPTION	HIGHEST RISK GROUP	COMMONLY FOUND IN:	ILLNESSES CAUSED	NUMBER OF CASES/YEAR
<i>Salmonella</i>	First recognized in 1882; about 2,000 strains, increasingly antibiotic resistant	General population, especially young infants and elderly.	Raw eggs; raw milk; poultry; red meat; ground beef	Nausea; vomiting; diarrhea; headaches; weakness	Almost 2 million cases; 960-1,920 deaths
<i>Listeria</i>	5 major strains; only one is pathogenic to humans. Food-borne transmission confirmed in 1993	Pregnant women; newborns; immunocompromised individuals	Soft cheese; deli meats; pork	Meningitis; spontaneous abortion; perinatal septicemia; central nervous system infection	1,526-1,581 cases; 378-433 deaths
<i>Escherichia coli</i> O157:H7	Highly virulent strain of E. coli group; first identified in 1982	Young children; elderly; immunocompromised individuals	Ground beef; other beef sources; raw milk	Acute hemorrhagic colitis; hemolytic uremic syndrome; thrombotic thrombocytopenic purpura	7,668-20,448 cases; 146-389 deaths
<i>Campylobacter jejuni</i>	Known as disease-causing bacteria since 1909; increasingly antibiotic resistant	Young children; elderly	Poultry; beef; raw eggs; water	Leading cause of acute gastroenteritis (diarrhea, vomiting, nausea)	About 2 million cases; 120-360 deaths

Source: ISIS, "The Risk of Getting Sick from Bacteria in Meat and Poultry," 1994



The FAR SIDE

From: The Vegetarian Pulp
MAR-APR 1995

Early vegetarians returning from the kill



THE GREAT AMERICAN MEATOUT

NAT'L COUNCIL



Casey Kasem



Elvira



Kevin Nealon

Berke Breathed
"Oatland"

H. M. Diamond
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Sara Gilbert
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"Diet for a Small Planet"

Tony LaRusso
Oakland Athletics

Mary Levy
Gulfco Sims

Hayley Mills
Film Star

Jeremy Rittkin
"Beyond Beef"

WHAT'S A MEATOUT?

Each year, beginning on March 1st, thousands of consumer, environment, and animal protection advocates hold educational events in all 50 states. They ask visitors to sign the Meatout Pledge 'to kick the meat habit on March 20th (first day of Spring), at least for a day, and to explore a less violent diet.'

The events range from simple information tables called 'steakouts' to colorful 'lifestivals' featuring local celebrities, musical entertainment, exhibits and videos, and samples of meatless foods. Other events include cooking demonstrations, library and school displays, lectures and film screenings, and leafletting of fast food outlets.

Supportive radio interviews and newspaper articles carry the Meatout message to millions of other consumer. Dozens of governors and large city mayors proclaim Meatout observances.

WHY A MEATOUT?

The purpose of the Great American Meatout is to alert American consumers to the many benefits of reducing meat consumption on public health, food resources, environmental quality, and animal welfare. This is intended to counter the daily barrage of meat industry propaganda and to promote more judicious dietary choices.

From humble beginnings in 1985, the Great American Meatout has grown explosively to become one of the nation's largest grass-roots public interest campaigns. Over 30 million Americans have now explored a meatless diet. National beef and veal consumption have dropped by 30 and 70 percent, respectively. Most fast food chains provide a salad bar, and major manufacturers are getting into the meatless food business.

WHAT'S WRONG WITH MEAT?

Chronic Diseases. Nearly 1.5 million Americans are crippled and killed each year by heart failure, stroke, cancer, and other chronic diseases associated with excessive consumption of meat and animal fat. The elements held principally accountable include saturated fat, cholesterol, hormones, pesticides, and nitrites. Surprisingly, meat contains few of the essential nutrients. The excess protein contained in a meat diet places a heavy stress on the consumer's liver and kidneys.

World Hunger. While 800 million people around the world face agonizing starvation, we continue feeding to animals the grains and legumes that could save these lives. Production of these foodstuffs uses up to 90 percent of our agricultural resources, drastically depletes our vital topsoil and groundwater, and jeopardizes our ability to grow sufficient food to meet our future needs.

Environmental Devastation. Millions of acres of forestland are devastated through conversion to grazing land and cropland to feed farm animals both in the U.S. and abroad. Runoff from the lands carries suspended and dissolved solids, organic matter, nutrients, and pesticides into lakes and streams, accounting for more water pollution than all other human activities combined. Overgrazing and intense cultivation eventually turn these lands into desert.

Animal Suffering. Meat production is responsible for 96 percent of the six billion warm-blooded feeling animals who are abused and killed in the U.S. each year. That works out to 70 animals annually for the average family. Animals are viewed as mere tools of production and treated accordingly. From birth, they are caged, crowded, cramped, medicated, mutilated, and manhandled until the butcher's knife ends their agony.

MEATOUT ACTION

- Become more informed by reading the publications listed.
- Reduce your intake of meat and help your family and friends to cut down.
- Share your concerns with your editors, retailers, and public officials.
- Support Meatout with a generous donation.

MEATOUT READING

Diet for a New America by John Robbins; Stillpoint (1987) - \$14
Animal Factories by Jim Mason and Peter Singer; Crown (1990) - \$13
Vegetarian Times (monthly) - \$25/yr

All available from FARM postpaid.

MEATOUT SPONSOR

The Great American Meatout is coordinated each year by FARM - Farm Animal Reform Movement, a national public interest organization.

FARM ANIMAL REFORM MOVEMENT

BOX 30654, Bethesda, MD 20824; 800-MEAT



Rape of Mother Earth

Millions of acres of forestland are devastated through conversion to grazing land and cropland to feed farm animals, both in the U.S. and abroad. Runoff from these lands carries suspended and dissolved solids, organic matter, nutrients, and pesticides into our lakes and streams, accounting for more water pollution than all other human activities combined. Overgrazing and intensive cultivation eventually turn these lands into desert, posing a severe long-term threat to our survival.

Deforestation

- Cattle ranching is a primary cause of deforestation in Latin America. Since 1960, more than one quarter of all Central American forests have been razed to make pasture for cattle. Nearly 70 percent of deforested land in Panama and Costa Rica is now pasture.

- Some 40,000 square miles of Amazon forest were cleared for cattle ranching and other commercial development between 1966 and 1983. Brazil estimates that 38 percent of its rain forest was destroyed for cattle pasture.

- Just one quarter-pound hamburger imported from Latin America requires the clearing of 6 square yards of rain forest and the destruction of 165 pounds of living matter including 20 to 30 different plant species, 100 insect species, and dozens of bird, mammal, and reptile species.

Soil Erosion and Desertification

- Cattle production is turning productive land into barren desert in the American West and throughout the world. Soil erosion and desertification is caused directly by cattle and other livestock overgrazing. Overcultivation of the land, improper irrigation techniques, and deforestation are also principal causes of erosion and desertification, and cattle production is a primary factor in each case.

- Cattle degrade the land by stripping vegetation and compacting the earth. Each animal foraging on the open range eats 900 pounds of vegetation every month. Their powerful hoofs trample vegetation and crush the soil with an impact of 24 pounds per square inch.

- As much as 85 percent of U.S. western rangeland, nearly 685 million acres, is being degraded by overgrazing and other

problems, according to a 1991 United Nations report. The study estimates that 430 million acres in the American West is suffering a 25 to 50 percent yield reduction, largely because of overgrazing.

- The United States has lost one third of its topsoil. An estimated six of the seven billion tons of eroded soil is directly attributable to grazing and unsustainable methods of producing feed crops for cattle and other livestock.

- Each pound of feedlot steak costs about 35 pounds of eroded American topsoil, according to the Worldwatch Institute.

Water Scarcity

- Nearly half of the total amount of water used annually in the U. S. goes to grow feed and provide drinking water for cattle and other livestock. Producing a pound of grain-fed steak requires the use of hundreds of gallons of water. Producing a pound of beef protein often requires up to fifteen times more water than producing an equivalent amount of plant protein.

- U.S. fresh water reserves have declined precipitously as a result of excess water use for cattle and other livestock. U.S. water shortages, especially in the West, have now reached critical levels. Overdrafts now exceed replenishments by 25 percent.

- The great Ogallala aquifer, one of the world's largest fresh water reserves, is already half depleted in Kansas, Texas, and New Mexico. In California, where 42 percent of irrigation water is used for feed or livestock production, water tables have dropped so low that in some areas the earth is sinking under the vacuum. Some U.S. reservoirs and aquifers are now at their lowest levels since the end of the last Ice Age.

Water Pollution

- Organic waste from cattle and other livestock, pesticides, chemical fertilizers, and agricultural salts and sediments are the primary non-point source of water pollution in the U.S.

- Cattle produce nearly 1 billion tons of organic waste each year. The average feedlot steer produces more than 47 pounds of manure every twenty-four

hours. Nearly 500,000 pounds of manure are produced daily on a standard 10,000-head feedlot. This is the rough equivalent of what a city of 110,000 would produce in human waste. There are 42,000 feedlots in 13 U.S. states.

Depletion of Fossil Fuels

- Intensive animal agriculture uses a disproportionate amount of fossil fuels. Supplying the world with a typical American meat-based diet would deplete all world oil reserves in just a few years.

- It now takes the equivalent of a gallon of gasoline to produce a pound of grain-fed beef in the United States. The annual beef consumption of an average American family of four requires more than 260 gallons of fuel and releases 2.5 tons of CO₂ into the atmosphere, as much as the average car over a six month period.

Global Warming

- Cattle and beef production is a significant factor in the emission of three of the four global warming gases — carbon dioxide, nitrous oxide, and methane.

- Much of the carbon dioxide released into the atmosphere is directly attributable to beef production: burning forests to make way for cattle pasture and burning massive tracts of agricultural waste from cattle feed crops. When the fifty-five square feet of rain forest needed to produce one quarter-pound hamburger is burned for pasture, 500 pounds of CO₂ is released into the atmosphere.

- CO₂ is also generated by the fuel used in the highly mechanized agricultural production of feed crops for cattle and other livestock. With 70 percent of all U.S. grain production now used for livestock feed, the CO₂ emitted as a direct result is significant.

- Petrochemical fertilizers used to produce feed crops for grain-fed cattle release nitrous oxide, another greenhouse gas. Worldwide, the use of fertilizers has increased dramatically from 14 million tons in 1950 to 143 million tons in 1989. Nitrous oxide now accounts for 6 percent of the global warming effect.

- Cattle emit methane, another greenhouse gas, through belching and flatu-

tion. Scientists estimate that more than 500 million tons of methane are released each year and that the world's 1.3 billion cattle and other ruminant livestock emit approximately 60 million tons or 12 percent of the total from all sources. Methane is a serious problem because one methane molecule traps 25 times as much solar heat as a molecule of CO₂.¹¹

Loss of Biodiversity

- U.S. cattle production has caused a significant loss of biodiversity on both public and private lands. More plant species in the U.S. have been eliminated or threatened by livestock grazing than by any other cause, according to the U.S. General Accounting Office (GAO).¹²

- Riparian zones — the narrow strips of land that run alongside rivers and streams where most of the range flora and fauna are concentrated — have been the hardest hit by cattle grazing. More than 90 percent of the original riparian zones of Arizona and New Mexico are gone, according to the Arizona State Park Department. Colorado and Idaho have also been hard hit. The GAO reports that "poorly managed livestock grazing is the major cause of degraded riparian habitat on federal rangelands."¹³

- Unable to compete with cattle for food, wild animals are disappearing from the range. Pronghorn have decreased from 15 million a century ago to less than 271,000 today. Bighorn sheep, once numbering over 2 million, are now less than 20,000. The elk population has plummeted from 2 million to less than 455,000.¹⁴

- The government has worked with ranchers to make cattle grazing the predominant use of Western public lands. The Bureau of Land Management (BLM) has long favored ranching over other uses. BLM sprays herbicides over large tracts of range eliminating vegetation eaten by wild animals and replacing it with monocultures of grasses favored by cattle.¹⁵

- Under pressure from ranchers, the U.S. government exterminates tens of thousands of predator and "nuisance" animals each year. In 1989, a partial list of animals killed by the U.S. Department of Agriculture's Animal Damage Control Program included 86,502 coyotes, 7,158 foxes, 236 black bears, 1,220 bobcats, and 80 wolves. In 1988, 4.6 million birds, 9,000 beavers, 76,000 coyotes, 5,000 raccoons, 300 black bears, and 200 mountain lions, among others, were killed. Some 400 pet dogs and 100 cats were also inadvertently killed. Extermination methods used include poisoning, shooting, gassing, and burning animals in their dens.¹⁶

- The predator "control" program cost American taxpayers \$29.4 million in 1990 — more than the amount of losses caused by wild animals.¹⁷

- Tens of thousands of wild horses and burros have been rounded up by the federal government because ranchers claim they compete with their cattle for forage. The horses and burros are held in corrals, costing taxpayers millions of dollars per year. Many wild horses have ended up at slaughterhouses.

- For several years, cattle ranchers have blocked efforts to re-introduce the wolf, an endangered species, into the wild, as required by the U.S. Endangered Species Act.

FOOTNOTES

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[13] Pimentel and Hall, 35.

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Beyond Beef, 1130 Seventeenth Street, NW, Suite 300
Washington, D.C. 20036 (202) 775-1132



Printed on recycled paper.

GREAT AMERICAN MEATOUT
PO Box 20414, Bethesda, MD 20824 301-530-1237

Reasons To STOP Eating Meat

Number of U.S. medical schools: 125

Number of U.S. medical schools with a required course in nutrition: 30

Training in nutrition received during 4 years of medical school by average U.S. physician: 2.5 hours

How frequently a heart attack strikes in U.S.: Every 25 seconds

How frequently a heart attack kills in U.S.: Every 45 seconds

Most common cause of death in U.S.: Heart attack

Risk of death from heart attack by average American man: 50%

Risk of death from heart attack by average American vegetarian man: 15%

• Risk of death from heart attack by average American pure vegetarian man: 4%

Amount you reduce your risk of heart attack by reducing your consumption of meat, dairy products and eggs by 10%: 9%

Amount you reduce your risk of heart attack by reducing your consumption of meat, dairy products and eggs by 50%: 45%

• Amount you reduce your risk of heart attack by reducing your consumption of meat, dairy products and eggs by 100%: 90%

Rise in blood cholesterol from consuming 1 egg per day: 12%

Rise in heart attack risk from 12% rise in blood cholesterol: 24%

Meat, dairy and egg industries claim there is no reason to be concerned about your blood cholesterol as long as it is "normal";

Your risk of dying of a disease caused by clogged arteries if your blood cholesterol is "normal": over 50%

• Your risk of dying of a disease caused by clogged arteries if you do not consume saturated fat and cholesterol: 5%

• Leading sources of saturated fat and cholesterol in American diets: Meat, dairy products and eggs

Hollywood celebrity paid by Meat Board to tout beef as "Real food for real people": James Garner

Medical event experienced by James Garner in April, 1988: Quintuple coronary artery bypass surgery

World populations with high meat intakes who do not have correspondingly high rates of colon cancer: None

World populations with low meat intakes who do not have correspondingly low rates of colon cancer: None

• Increased risk of breast cancer for women who eat meat daily compared to women who eat meat less than once a week:
4 times higher

Egg Board's advertising slogan: The incredible edible egg

Increased risk of breast cancer for women who eat eggs daily compared to women who eat eggs less than once a week:
3 times higher

The meat, dairy and egg industries tell us: We are well-fed only with animal products.

The meat, dairy and egg industries don't tell us: The diseases which are commonly prevented, consistently improved, and sometimes cured by a low-fat vegetarian diet include:

Strokes

Kidney stones

Prostate cancer

Cervical cancer

Diabetes

Peptic ulcers

Hiatal hernias

Gallstones

Irritable colon syndrome

Heart disease

Breast cancer

Pancreatic cancer

Stomach cancer

Hypoglycemia

Constipation

Diverticulosis

Hypertension

Salmonellosis

Osteoporosis

Colon cancer

Ovarian cancer

Endometrial cancer

Kidney disease

Hemorrhoids

Obesity

Asthma

Trichinosis

Facts excerpted from the Pulitzer Prize nominated *Diet For A New America* by John Robbins, available from EarthSave, 706 Frederick Street, Santa Cruz, CA 95062-2205 (408) 423-4069

Vegetarian Awareness Month Dispels 'Meatless Myths'

One million Americans per year — about 20,000 per week — are adopting vegetarian diets. More than 12 million vegetarians have already sprouted up across the United States. Even President Clinton is eating more meatless dishes. Almost 4,000 soy burgers have been shipped to the White House for the first family and staff members, and, at about 100 calories a serving, these meatless, fat-free burgers will even be served on Air Force One.

October is Vegetarian Awareness Month, and its goal is to advance public awareness of the many surprising health, humanitarian, environmental, economic, ethical and other benefits of a vegetarian lifestyle.

The Vegetarian Awareness Network/VEGANET, the event's sponsor, annually attempts to dispel the myriad of meatless myths. Here are some common health myths:

• Myth: Vegetarians eat chicken and fish.

Reality: A vegetarian eats no flesh, fowl or fish. Total vegetarians exclude eggs and dairy products as well.

• Myth: Getting enough protein is a problem for vegetarians.

Reality: Vegetarian diets — even those without dairy or eggs — easily meet and exceed the RDA for protein. It's nearly impossible to design a diet with a variety of whole foods that is deficient in protein. If you consume enough calories to meet your energy needs, you'll get more than enough protein.

• Myth: If a little protein is good, a lot is better.

Reality: In developed countries, too much protein is a much bigger health threat than too little. Excess protein leads to kidney overload and mineral deficiency diseases, such as osteoporosis.

• Myth: Vegetarianism is too complicated. To get quality protein, one must carefully mix and match foods.

Reality: Research has proven this unnecessary. All whole foods — fruits, vegetables, grains, legumes and nuts — contain the essential amino acids that are the building blocks of protein. Bananas have complete protein. Check any official food chart listing for amino acid content.

• Myth: Dairy products are necessary for calcium.

Reality: Total vegetarians not only get enough calcium, they also absorb more calcium than people on the standard high-protein diet. Excess protein actually inhibits calcium absorption. Also, calcium requirements for those on lower-protein, plant-based diets are lower. The less protein you eat, the less calcium you require. Most greens are abundant sources of calcium.

• Myth: Vegetarians don't get enough iron.

Reality: Vegetarians do not have a higher incidence of iron deficiency than do meat eaters. Beans and leafy greens are especially good sources of iron, better on a per-calorie basis than meat.

• Myth: Vegetarians don't eat a balanced diet.

Reality: Meat unbalances our diet because it lacks fiber and introduces excessive amounts of fat, cholesterol, hormones and antibiotics. It also interferes with our absorption of crucial nutrients and stresses our digestive systems, kidneys and liver.

• Myth: The human anatomy is designed to eat meat.

Reality: The opposite is true. The small mouth, tooth structure, salivary pH, large stomach, long small intestines and puckered colon of human beings all suggest a physical structure designed for an herbivorous rather than carnivorous diet. Our body structure is much more like that of the vegetarian great apes than that of meat-eating lions.

• Myth: Some people have extra nutritional requirements and need meat.

Reality: A vegetarian diet can be followed by people of all ages — including infants, children, pregnant women and athletes. Comparative medical and dental studies prove that children raised as vegetarians have better teeth and greater freedom from childhood diseases.

• Myth: Nations with the highest per capita meat consumption are the healthiest.

Reality: Countries with the highest per capita consumption of meat also have the highest incidence of chronic killer diseases.

• Myth: Vegetarians and non-vegetarians are equally prone to chronic degenerative diseases.

Reality: Conclusive scientific evidence shows that vegetarians are generally at a lower risk than non-vegetarians for heart disease, high blood pressure, cancer, diabetes and obesity.

• Myth: Heart disease is irreversible.
Reality: Recent medical research demonstrates that a vegetarian diet can help reverse heart disease.

• Myth: All American men have the same heart attack risk.

Reality: Risk of death from heart attack for the average American man is 50 percent, versus 4 percent for total vegetarian men.

• Myth: Vegetable oils, margarine, nuts, avocado, tofu and coconut contain cholesterol.

Reality: Only foods of animal origin contain cholesterol. None is found in grains, legumes, fruits, vegetables, nuts or seeds.

• Myth: Vegetarians are weak and lack endurance.

Reality: Meat is totally lacking in carbohydrates, the most readily usable source of energy. Elephants, horses, apes and oxen are vegetarians. So are many famous athletes, such as Hank Aaron, Ridgely Abele, Andreas Cahling, James Donaldson, Roy Hilligan, Anton Innauer, Sixto Linares, Edwin Moses, Paavo Nurmi, Robert Parish, Bill Pearl, Bill Pickering, Stan Price, Murray Rose and Dave Scott.

• Myth: Making the change to a vegetarian diet is difficult.

Reality: Being a vegetarian is as hard or as easy as you choose to make it. Some people enjoy planning and preparing elaborate meals, while others opt for quick and easy vegetarian dishes. Many people become vegetarians instantly, while others make the change gradually.

• Myth: Vegetarianism is just a fad.

Reality: Vegetarianism has been around for thousands of years. Greek philosophers Socrates, Pythagoras and Plato were vegetarians. Other famous vegetarians throughout history include Ovid, Plutarch, Leonardo da Vinci, Voltaire, Einstein and Gandhi.

• You must become a vegetarian if you wish to be active in athletics (espec. if you want to compete.)
• If you have poor resistance, and frequently have colds and flu, and/or just don't feel well.
• If you are experiencing difficulty in school.
• If you want to be healthy and live a long, happy life.
• If you're battling depression.

MSM Replaces Sulfur Reserves And Thereby Relieves Musculoskeletal Pain

By Dr. Julian Whitaker, M.D.

Methylsulfonylmethane (MSM) is a naturally occurring compound in food—primarily fruits, vegetables, meat, milk and seafood—as well as in human blood and tissues. Its chemical first cousin is dimethyl sulfoxide (DMSO), which I use extensively in my medical practice and have written about before (see the August and December 1995 issues). When I began my research on MSM for this article, I went to the source, Stan Jacob, M.D., of Oregon Health Sciences University in Portland. He was the co-discover of MSM, initially reported on it as a dietary ingredient in 1982, and has given it to thousands of patients over the past 15 years. He explained that MSM has similar actions to DMSO, without its major drawback; the unpleasant sulfurous odor.

The reason MSM and DMSO relieve arthritic and other types of musculoskeletal pain is complex. It has potent anti-inflammatory action and blocks the pain response in non-myelinated nerve fibers. It also reduces scar tissue by altering the cross-linking in collagen which contributes to scar formation. Together these mechanisms provide dramatic improvement in pain. Dr. Jacob carried out a study of 24 patients with symptomatic osteoarthritis, 12 of whom were treated with the nonsteroidal anti-inflammatory drug (NSAID) Motrin, 2,400 mg daily, and the other 12 were given 3,000 mg of MSM. After one month, the patients were reassessed, and both groups noted equal improvements in pain and stiffness. I've warned you about the dangers of long-term NSAID use, and MSM, along with the cartilage-building nutritional elements I recommended in August, is a safer, more effective way of handling arthritic pain.

MSM HAS REMARKABLE THERAPEUTIC VALUE. For example a common problem in people with diabetes is destruction of the nerves in the gastrointestinal tract. Dr. Jacob had a diabetic patient with such severe neuropathy that his abdomen was grossly distended, causing his diaphragm to compress his lungs and restrict his breathing to the point that he had to be on high flow oxygen. He was given 80 mg of MSM in divided doses, and within four days he was eating and breathing without the oxygen, and continued to recover. Dr. Jacob has found MSM especially effective for allergy relief—he states that it works at least as well as or better than conventional antihistamines—constipation, stomach hyperacidity (it can be used in place of antacids and histamine receptor antagonists), and pain conditions. In addition, since our MSM levels decline noticeably as we age, he recommends that his patients take at least 1,000 mg daily to assure adequate MSM and replenish sulfur supplies.

RECOMMENDATIONS: MSM comes in capsules, crystals and topical gels, creams, and lotions. To regain former optimal levels, the minimum maintenance dose should be 1,000 mg per day in divided doses. For specific conditions, such as Marilyn's, the dosage range is between 2 to 6 g. MSM is safe and nontoxic, but some people experience gastrointestinal upset when taking larger doses.

Marilyn S. is an accomplished violinist who toured professionally throughout Europe and the Pacific Rim. Two years ago, over a period of about 13 months, she was involved in three automobile accidents, each time sustaining a whiplash injury to her neck, which left her with chronic neck pain and forced her to give up performing. Marilyn tried everything to relieve the pain in her neck, then by chance she met a woman who had suffered back pain since she was thrown off a horse over 20 years ago, and a man who had experienced great improvement in neck pain he had had for years. They had both been virtually cured with MSM, so she tried it herself. Marilyn began using a cream-based MSM product, rubbing it on her neck twice a day. She then started taking 1 teaspoon of MSM crystals mixed in water twice a day, and her pain has diminished considerably.

Now #2120 MSM (1,000 mg) Sulfur 120 caps Retail \$17.95

Now #2125 MSM Powder 8 oz. Retail \$21.95

Spring 1996. I purchased from Montgomery Ward, 3 pair of 3-way Jensen Speakers approx 4' high, 15" woofer, excellent mid-range and treble for 69.95 ea. They're super.

From: U.C. Berkeley Wellness Letter,
Feb. 1995

"Without music, life would be a mistake"

The idea that music has healing powers is at least as ancient as the Old Testament. The First Book of Samuel, for example, tells how King Saul's fits of depression were alleviated by the music of young David. The way music works on the human psyche remains a mystery, though many studies have shown that it has both emotional and physiological effects. Of course, taste in music varies widely, from string quartets to hard rock, and what enralls one person can be just noise to another. Still, music is beginning to play a modest role in modern medicine.

According to a recent study in *Diseases of the Colon and Rectum*, people undergoing colon cancer screening feel less anxious if allowed to listen to music of their own choosing. Colon cancer is the second leading cause of cancer mortality in this country, and examination of the colon with a flexible sigmoidoscope is one means of detecting the disease at a curable stage. Everyone over 50 should undergo sigmoidoscopy every five years, and those at high risk should begin earlier, but less than one-third of Americans follow this advice. Fear and embarrassment keep many people away. In this study of 50 patients, those who listened to music (they were given a cassette player and a choice of tapes) while being scoped were less apprehensive and more cooperative than those who had no music; 88% of the experimental group agreed that the music had helped calm them down.

The beat goes on

As reported recently in the *Journal of the American Medical Association*, a study from the other side of the table also suggested that music hath charms. A group of surgeons who listened to music of their own choosing while performing demanding non-surgical tasks, such as counting backwards by subtracting 13, had fewer stress responses (increases in pulse rate and blood pressure, for example) and did the arithmetic faster and more accurately. Another group, listening to music chosen by the experimenters, did not do as well as the first group, but they still performed better, and with less stress, than a third group, who had to do the counting with no music at all. Although nobody has yet studied the performance of surgeons when music is piped into the operating room, the authors of the study suggested that it might be helpful, and quoted the philosopher Friedrich Nietzsche, who wrote in 1889 that "without music, life would be a mistake."

The use of music for nonmusical goals—that is, for the alleviation of pain and anxiety and as an adjunct to therapy for such illnesses as Alzheimer's—is growing. Degrees in music therapy are offered by 63 colleges and universities. As David and Saul discovered, music can be used to good effect in treating depression and dementia, particularly in the elderly. Some patients with Alzheimer's, for example, can participate in dancing and drumming. Not only do many surgeons already use music as an aid in operating rooms, but audio tapes are being produced for alleviating anxiety and pain in patients before, during, and after surgery. Not all studies of the power of music in controlling pain have had positive results; who selects the music is always a crucial factor. If you don't like country and western, the Grand Ole Opry won't help you much as you go into the operating room.

Unlike new drugs or high-tech diagnostic techniques, music needs no FDA approval or clinical trials; it's relatively inexpensive, and can't hurt even if it fails to help. With earphones and a reasonable volume level, you're not bothering anybody else, either. If you are scheduled for a sigmoidoscopy or other

test, a stay in the hospital, or a surgical procedure, ask if you may bring along a cassette recorder and some tapes. There can hardly be any objection to your using them to while away long hours in a doctor's office or hospital bed. Women in labor may find music helpful. A cassette recorder or portable CD player—and, if you know their musical preferences, tapes or disks are wonderful gifts for hospitalized friends or relatives.

We can use music as a vital tool in helping us fight against aging, and maintaining and improving our hearing and brain function. If you are going to spend an extended time alone in a quiet room doing activity which does not require concentration, turn on music.

Obtain a quality radio which will play discs as well as cassettes. If you enjoy classical music, we have two wonderful stations WND (Notre Dame) and WAVS (Andrews Univ.). Play them daily every chance you get. Purchase the best one you can afford. The cheapest you will want to buy is the "Doom Boxes", approx. \$99. EG-3-7031 or the ones with detachable speakers, EG-3-7052.

Also try the more expensive ones to see if they're significantly more enjoyable for you. Buy one which will give you real listening pleasure, even if you have to spend 200% or more. Try various ones before you buy. Even if you are busy doing something else, the sound is still coming in the ears stimulating the entire auditory system, making it work and preserving it.

Have your hearing tested periodically at a hearing aid company. If they find significant loss, order an aid, and WEAR IT. It may take several months for the brain to learn to use it! If you have loss in both ears, order a pair and WEAR THEM and give it time. Reserve judgement, it may take months to adapt to them.

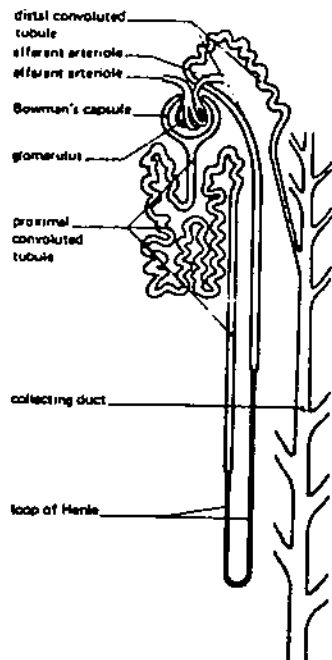
Also follow a healthcare diet and exercise. Eliminate saturated fat. Hearing requires the finest nutrition and lots of oxygen. Do aerobic exercise and/or deep breathing. Give your brain time to restore your hearing mechanism. Read Balch pgs 319 & 320 "Improving Brain Function".

A good radio-receiver-amplifier can be bought for 130% to 150%. A pair of fine stereo speakers with an 8" per woofer can be bought for 140% pair. See above

I strongly recommend

-168-a

nephrostomy



A single nephron

tubules. The term is sometimes used loosely for the "nephrotic syndrome."

nephrostomy *n.* drainage of urine from the kidney by a tube (catheter) passing directly from the kidney via the skin surface. This is commonly used as a temporary procedure after operations on the kidney. Long-term urine drainage by nephrostomy may be complicated by the attendant problems of infection and obstruction of the catheter by debris.

nephrotic syndrome *n.* a condition in which there is great loss of protein in the urine, reduced levels of albumin in the blood, and generalized swelling of the tissues due to "edema." It can be caused by a variety of disorders, most usually "glomerulonephritis."

nephrotomy *n.* surgical incision into the substance of the kidney. This is usually undertaken to remove a kidney stone (see nephrolithotomy).

nephroureterectomy (ureteronephrectomy) *n.* surgical removal of a kidney together with its ureter. This operation is performed for cancer of the kidney pelvis or ureter. It is also undertaken when the kidney has been destroyed by "vesicoureteric reflux," to prevent subsequent continuing reflux into the stump of the ureter that would occur if the kidney alone were removed.

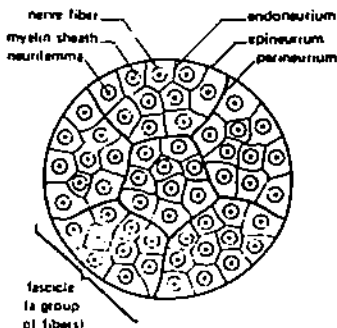
nerve *n.* a bundle of conducting "nerve fibers" that transmit impulses from the brain or spinal cord to the muscles and glands (motor nerves) or inward from the sense organs to the brain and spinal cord (sensory nerves). Most large nerves are mixed nerves containing both motor and sensory nerve fibers running to and from a particular region of the body.

nerve block a method of producing "anesthesia" in part of the body by blocking the passage of pain impulses in the sensory nerves supplying it. A local anesthetic, such as procaine, is injected into the tissues in the region of a nerve. In this way anesthesia can be localized, so that minor operations can be performed without the necessity of giving a general anesthetic.

nerve cell see neuron.

nerve ending the final part (terminal) of one of the branches of a nerve fiber, where a "neuron" makes contact either with another neuron at a synapse or with a muscle or gland cell at a neuromuscular or neuroglandular junction.

nerve fiber the long fine process that extends from the cell body of a "neuron" and carries nerve impulses. Bundles of nerve fibers running together form a "nerve." Each fiber has a sheath, which in myelinated nerve fibers is a relatively thick layer containing the fatty insulating material "myelin."



Transverse section through a nerve

neurectomy

nerve gas any gas that disrupts the normal functioning of nerves and thus of the muscles they supply. There are two groups, the G agents and the V agents. The latter are more than 300 times as deadly as mustard gas: one inhalation can kill by paralyzing the respiratory muscles. V agents also act through the skin, therefore gas masks are ineffective protection against them.

nerve impulse the electrical activity in the membrane of a "neuron" that, by its rapid spread from one region to the next, is the means by which information is transmitted within the nervous system along the axons of the neurons. The membrane of a resting nerve is charged (polarized) because of the different concentrations of ions inside and outside the cell. When a nerve impulse is triggered, a wave of "depolarization" spreads, and ions flow across the membrane (see action potential). Until the nerve has undergone "repolarization" no further nerve impulses can pass.

nervous system the vast network of cells specialized to carry information (in the form of "nerve impulses") to and from all parts of the body in order to bring about bodily activity. The brain and spinal cord together form the "central nervous system"; the remaining nervous tissue is known as the "peripheral nervous system" and includes the "autonomic nervous system," which is itself divided into the sympathetic and parasympathetic nervous systems. The basic functional unit of the nervous system is the "neuron (nerve cell)."

nettle rash an allergic skin reaction causing blisters and wheals, resembling those caused by nettle stings. See urticaria.

neur- (neuro-) prefix denoting nerves or the nervous system.

neural crest see vertebra.

neural tube the two bands of ectodermal tissue that flank the "neural plate" of the early embryo. Cells of the neural crest migrate throughout the embryo and develop into sensory nerve cells and peripheral nerve cells of the autonomic nervous system.

neuralgia *n.* a severe burning or stabbing pain often following the course of a nerve. Postherpetic neuralgia is an intense debilitating pain felt at the site of a previous attack of shingles. In trigeminal neuralgia (tic douloureux) there are brief paroxysms of searing pain felt in the distribution of one or more branches of the "trigeminal nerve" in the face. The facial pain of migrainous neuralgia lasts for 30-60 minutes and occurs at roughly the same time on successive days.

neural plate the strip of ectoderm lying along the central axis of the early embryo that

forms the "neural tube and subsequently the central nervous system."

neural spine the spinous process situated on the neural arch of a "vertebra."

neural tube the embryological structure from which the brain and spinal cord develop. It is a tube of ectodermal tissue formed when two edges of a groove in a plate of primitive neural tissue (neural plate) come together and fuse. Failure of normal fusion results in a number of congenital defects (see neural tube defects).

neural tube defects a group of congenital abnormalities caused by failure of the "neural tube" to close. In "spina bifida" the bony arches of the spine, which protect the spinal cord and its coverings (the meninges), fail to close. More severe defects of fusion of these bones result in increasingly serious neurological conditions. A meningocele is the protrusion of the meninges through the gap in the spine, the skin covering being vestigial. There is a constant risk of damage to the meninges, with resulting infection. Urgent surgical treatment to protect the meninges is required. In a meningocele (myelomeningocele, myelocoele) the spinal cord and the nerve roots are exposed, often adhering to the fine membrane that overlies them. There is a constant risk of infection and this condition is accompanied by paralysis and numbness of the legs and urinary incontinence.

*Hydrocephalus and the "Arnold-Chiari" malformation are usually present. A failure of fusion at the cranial end of the neural tube (cranial bifidum) gives rise to comparable disorders. The bone defect is most often in the occipital region of the skull but it may occur in the frontal or basal regions. A protrusion of the meninges alone is called a cranial meningocele. The terms meningoencephalocele, encephalocele, and cephalocele are used to indicate the protrusion of brain tissue through the skull defect. This is accompanied by severe mental and physical disorders.

neurapraxia *n.* temporary loss of nerve function resulting in tingling, numbness, and weakness. It is usually caused by compression of the nerve and there is no structural damage involved. Complete recovery occurs.

neuroesthesia *n.* a set of psychological and physical symptoms, including fatigue, irritability, headache, dizziness, anxiety, and intolerance of noise. It can be caused by organic damage, such as a head injury, or it can be due to neurosis. —neuroesthetic adj., *n.*

neurectasia *n.* the surgical procedure for stretching a peripheral nerve.

neurectomy *n.* the surgical removal of the whole or part of a nerve.

neurilemma (neurolemma) *n.* the sheath of the axon of a nerve fiber. The neurilemma of a medullated fiber contains "myelin laid down by Schwann cells. —neurilemmal adj.

neuroblastoma *n.* see neurofibroma.

neurilemma *n.* see neurofibroma.

neuritis *n.* a disease of the peripheral nerves showing the pathological changes of inflammation. The term is also used in a less precise sense as an alternative to "neuropathy. See also retrobulbar neuritis.

neuroanatomy *n.* the study of the structure of the nervous system, from the gross anatomy of the brain down to the microscopic details of neurons.

neuroblastoma *n.* the predisposition of a nerve cell to move toward the source of its stimuli during development.

neuroblast *n.* any of the nerve cells of the embryo that give rise to functional nerve cells (neurons).

neuroblastoma *n.* a malignant tumor composed of embryonic nerve cells. It may originate in any part of the sympathetic nervous system, most commonly in the medulla of the adrenal gland, and secondary growths are often widespread in other organs and in bones.

neurocranium *n.* the part of the skull that encloses the brain.

neurodermatitis (neurodermatosis) *n.* a skin disease in which localized areas rich in sensory nerves become thickened (see lichenification). Women suffer more than men and the cause is uncertain, though psychological factors probably play a part. Common sites are the back of the neck, forearm, upper inner thigh, inner side of knee, and outer side of ankle.

neuroendocrine system the system of dual control of certain activities of the body by means of both nerves and circulating hormones. The functioning of the autonomic nervous system is particularly closely linked to that of the pituitary and adrenal glands. See neurohormone, neurosecretion.

neuroepithelioma *n.* a malignant tumor of the retina of the eye. It is a form of "glioma and commonly spreads into the brain.

neuroepithelium *n.* a type of epithelium associated with organs of special sense. It contains sensory nerve endings and is found in the retina, the mucous membrane lining the nasal cavity, and the taste buds. —neuroepithelial adj.

neurofibril *n.* one of the microscopic threads of cytoplasm found in the cell body of a "neuron and also in the "axoplasm of peripheral nerves.

neurofibroma (neurofibroma, neurofibroma, neurofibroma) *n.* a benign tumor growing from the fibrous coverings of a

peripheral nerve: it is usually symptomatic. When it develops from the sheath of a nerve root, it causes pain and may compress the spinal cord.

neurofibromatosis (see Recklinghausen's disease) *n.* a congenital disease, typified by numerous benign tumors growing from the fibrous coverings of nerves (see neurofibroma). Tumors may occur in the spinal canal, where they may press on the spinal cord. The tumors can be felt beneath the skin along the course of the nerves; they sometimes become malignant, giving rise to neurofibrosarcomas. Pigmented patches on the skin (café au lait spots) are commonly found. This condition is often associated with the adrenal tumor "pheochromocytoma.

neurogenesis *n.* the growth and development of nerve cells.

neurogenic adj. 1. caused by disease or dysfunction of the nervous system. 2. arising in nervous tissue. 3. caused by nerve stimulation.

neuroglia *n.* see glia.

neurohormone *n.* a hormone that is produced within specialized nerve cells and is secreted from the nerve endings into the circulation. Examples are the hormones oxytocin and vasopressin, produced within the nerve cells of the hypothalamus and released into the circulation in the posterior pituitary gland, and norepinephrine, released from "chromaffin tissue in the adrenal medulla.

neurohormone *n.* a "neurohormone or a "neurotransmitter.

neurohypophysis *n.* the posterior lobe of the "pituitary gland.

neurolemma *n.* see neurilemma.

neurology *n.* the study of the structure, functioning, and diseases of the nervous system (including the brain, spinal cord, and all the peripheral nerves). —neurological adj. —neurologist *n.*

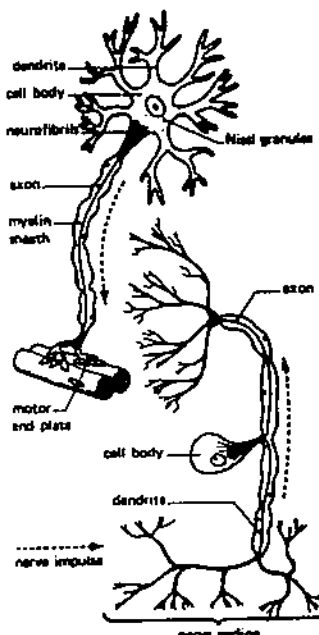
neurons *n.* see neurofibroma.

neuromuscular junction (myoneural junction) the meeting point of a nerve fiber and the muscle fiber that it supplies. Between the enlarged end of the nerve fiber (the motor end-plate) and the membrane of the muscle is a gap across which a "neurotransmitter must diffuse from the nerve to trigger contraction of the muscle.

neuromyelitis optica (Devic's disease) a condition that is closely related to multiple sclerosis. Typically there is a transverse "myelitis, producing paralysis and numbness of the legs and trunk below the inflamed spinal cord, and "retrobulbar (optic) neuritis affecting both optic nerves. The attacks of myelitis and optic neuritis may coincide or they may be separated by days or weeks. Recovery from the initial

attack is often incomplete, but relapses appear to be less common than in conventional multiple sclerosis.

neuron (nerve cell) *n.* one of the basic functional units of the nervous system: a cell specialized to transmit electrical "nerve impulses and so carry information from one part of the body to another. Each neuron has an enlarged portion, the cell body (perikaryon), containing the nucleus; from the body extend several processes (dendrites) through which impulses enter from their branches. A longer process, the nerve fiber (see axon), extends outward and carries impulses away from the cell body. This is normally unbranched except at the "nerve ending. The point of contact of one neuron with another is known as a "synapse.



Types of neuron: motor (left) and sensory (right)

neurophagia *n.* the process whereby damaged or degenerating nerve cells finally

disintegrate and are removed by scavenger cells ("phagocytes).

neurectomy *n.* reconstructive surgery for damaged or severed peripheral nerves.

neuropathy *n.* any disease of the peripheral nerves, usually causing weakness and numbness. In a mononeuropathy a single nerve is affected and the extent of the symptoms depends upon the distribution of that nerve. In a polyneuropathy many or all of the nerves are involved and the symptoms are most profound at the extremities of the limbs.

neurophysiology *n.* the study of the complex chemical and physical changes that are associated with the activity of the nervous system.

neuropil *n.* nerve tissue that is visible microscopically as a mass of interwoven and interconnected nerve endings, dendrites, and other neuron components, rather than an ordered array of axons.

neuroretinitis *n.* combined inflammation of the optic nerve and the retina.

neurosecretion *n.* any substance produced within, and secreted by, a nerve cell. Important examples are the hormone-releasing factors produced by the cells of the "hypothalamus and released into blood vessels of the pituitary gland, on which they act.

neurosis *n.* (pl. neuroses) a mental illness in which insight is retained but there is a maladaptive way of behaving or thinking that causes suffering (compare psychosis). The classification of neuroses is based on the symptoms, which may be a pathologically severe emotional state, as in "anxiety state or "depression; disturbing behavior and thoughts, as in "phobias or "obsessions; or physical complaints, as in "hysteria or "hypochondria. In practice the distinction between neurosis and psychosis is often blurred, as the amount of insight retained is very variable. Neurotic symptoms are occasionally the result of overwhelming stress (e.g. in soldiers in battle), but usually represent a complex interaction between stresses and a vulnerable personality.

Treatment for neurosis can include chemotherapy (often with "tranquilizers), "psychotherapy, or "behavior therapy. The little evidence there is favors the use of behavioral techniques, such as "desensitization and "flooding. —neurotic adj.

neurosurgery *n.* the surgical or operative treatment for diseases of the brain and spinal cord. This includes the management of head injuries, the relief of raised intracranial pressure and compression of the spinal cord, the eradication of infection, the control of intracranial hemorrhage, and the diagnosis and treatment of tumors. The

neurosyphilis

280

development of neurosyphilis has been superimposed by advances in antibiotics, particularly penicillin.

neurosyphilis *n.* "syphilis affecting the nervous system.

neurosyphilis *n.* a disturbance of personality derived from quantitative and qualitative changes in the brain and spinal cord. People with high scores in neurological tests and intact and intense and more prone to develop neurosis.

neurosyphilis *n.* the surgical procedure of severing a nerve.

neurosyphilis *n.* a chemical substance released from nerve endings to transmit impulses across "synapses to other nerves and across the muscle gaps between the nerves and the muscles or glands that they supply. Outside the central nervous system the chief neurotransmitter is "acetylcholine; "noradrenaline is released by nerve endings of the sympathetic system. In the central nervous system, besides acetylcholine, and noradrenaline, "dopamine, "serotonin, "gamma-aminobutyric acid, and several other substances are thought to act as transmitters.

neurosyphilis *n.* relating to the growth and nutrition of neural tissue in the body.

neurosyphilis *n.* growing forward or having an affinity for neural tissue. The term may be applied to various chemicals or toxins.

neurosyphilis *n.* a decrease in the number of "neurons in the brain. Neurosyphilis may occur in a wide variety of diseases, including certain hereditary defects, syphilis, "tuberculosis, tumors of the brain, "meningitis, "encephalitis, and "leukemia. It results in an increased susceptibility to infections.

neurosyphilis (neurosyphilis) *n.* a variety of "granuloma (a type of white blood cell) distinguished by a lobed nucleus and the presence in its cytoplasm of fine granules that stain purple with "Romanovsky stain. It is capable of ingesting and killing bacteria and provides an important defense against infection. There are normally 10-15 x 10⁶ neutrophils per liter of blood.

neurosyphilis (neurosyphilis) *n.* a clearly defined inflammation of the skin, present at birth. There are many different types of birth. Some are composed of small blood vessels (see hemangioma). These blood vessels, which usually disappear in early life, and the port-wine stain, which does not disappear and is best left untreated. Another kind of nevus is the "mole.

neurosyphilis *n.* the SI unit of force, equal to the force required to impart to 1 kilogram an acceleration of 1 meter per second per second. Symbol: N

neurosyphilis (neurosyphilis) *n.* a drug that dilates blood vessels. It is similar to "nicotinic acid and is used to treat disorders due to poor circulation, such as chilblains and Raynaud's disease. It is administered by mouth; side-effects are numbness, hot temporary flushing of the face may occur. Trade name: Bimol.

neurosyphilis *n.* a condition of frequent blinking or winking of the eye.

neurosyphilis *n.* an inflammation.

neurosyphilis *n.* a place in which bacteria have settled and multiplied because of particularly suitable conditions: a focus of infection.

neurosyphilis *n.* a drug active against various microorganisms, used mainly to treat fungal infections of the genital and urinary tracts (such as candidiasis) and in patients. It is administered by mouth and in patients; side-effects are rare, but some digestive discomfort may occur. Trade name: Mafadon.

neurosyphilis *n.* the inability to see in dim light.

NUTRIENT LOSSES FROM COOKING, CANNING, ANALYSIS ERRORS.

<u>LOSSES FROM COOKING</u>	
Vit A	39%
Vit B ₆	54%
Thiamine	69%
Folate	61%
Riboflavin	55%
Ascorbic Acid	61%
Niacin	46%
Biotin	31%
Vit C	64%
* 1/2 of Americans are on a low calorie diet. Most seniors are deficient in calcium.	
* Iron, Magnesium, Zinc, Vit's A, C, B, Complex & Sulfaring from low resistance to disease.	
* Fatigue, Headaches, Insomnia, Irritability, Depression.	
* Eat whole unprocessed health foods. Canned Asparagus, Beets, Carrots, Corn, Compeas, Green Beans, Green Peas, Lima Beans, Mushrooms, Potatoes, Spinach And Tomatoes are greatly deteriorated.	
* Analysis of nutrients in foods may be wrong, e.g. pork loin has 70% less and beef 20% less iron than formerly believed.	
* Losses of B ₆ in processing:	
Shredded Wheat	38%
Cracked Wheat	49%
White Bread	78%
Refined Wheat	57%
All Purpose Flour	82%
Saltine Crackers	62%
Cake Flour	87%
Spaghetti	64%

OSTEOPOROSIS - A GREAT AMERICAN TRAGEDY. WE ARE LOSING OUR BONES.

22 Million Women And 5 Million Men Have It. More Dying From Osteoporosis Complications Than Ever Before. Yearly 275,000 Women Die From Osteo. Related Hip Fractures. Chance Of Hip Fracture = 1/2 Combined Risk Of Breast, Uterine, Ovarian Cancer & Out Of 5 Women Do Not Get Even Half The Proper Amt. Of Calcium For Calcium.	Our Body Cannot Manufacture Calcium. Get It From Foods, Drinks Or Supplements. Don't depend on getting your calcium from cereal. We must have weight bearing exercise, 400 IU Vit D, taking strongly consider calcium complex like Now Brand. Which gives calcium, magnesium, zinc, Vit D, + osteoporosis = brittle thin bones due to lack of calcium in the bones. Osteomalacia = soft bones and weak muscles due to lack of Vit D.
Men, Women & Children 800 mg. Teenagers, Pregnant Women 1200 mg. Post-Menopausal Women 1500 mg.	* Fat Only Non-Fat Plain Yogurt, Non-Fat Cottage Cheese, Non-Fat Milk, Very Low Fat Cheese.
Also Highly Recommended:	* Full Spectrum Mineral
Approach To Osteoporosis. Start In Childhood Build A Calcium Bank In The Skeleton Beginning In 30's Most Women Lose More Bone Than Is Replaced High Fiber Foods Decrease our Calcium Absorption.	* Bone Calcium * Colloidal Minerals * Broccoli, Kale, collards * Spinach, Soy, Sunflower Seeds.

Nuts - Nutrient Analysis

% Daily Values (D.V.)
are based on a 2000
calorie diet.

	Almonds 7005	Cashews 7095	Pecans 7001	Pine Nuts 7015	Pistachios 7021	Pumpkin Seeds 7025	Sunflower Seeds 7050	Walnuts halves 7073
Serving Size	3 TBSP	1/4 cup	1/3 cup	3 TBSP		3 TBSP	1/4 cup	
Weight	27 gm	30 gm	28 gm	29 gms		29 gms	30 gm	
Calories	160	185	200	190		165	210	
Calories from fat	130	150	180	155		130	180	
Total Fat	14 gm	14 gm	20 gm	15 gm		14 gm	20 gm	
Saturated Fat	1 gm	2 gm	1.5 gm	4 gm		1.5 gm	1.5 gm	
Cholesterol	0 gm	0 gm	0 gm	0 gm		0 mg	0 gm	
Sodium	5 mg	0 mg	0 gm	0 mg		0 mg	0 gm	
Total Carbohydrate	5 gm	8 gm	5 gm	9 mg		6 gm	3 gm	
Dietary Fiber	3 gm	3 gm	4 gm	7 gm		4 gm	3 gm	
Sugars	0 gm	2 gm	0 gm	1 gm		0 gm	0 gm	
Protein	6 gm	5 gm	2 gm	4 gm		7 gm	5 gm	
Vit. A	0%	0%	0%	0%		0%	0%	
Vit. B ₁								
Vit. B ₂								
Vit. B ₃								
Vit. B ₆								
Vit. B ₁₂								
Biotin								
Niacin								
Pantothenic Acid								
Folic Acid								
Vit. C	0%	0%	0%	0%		0%	0%	
Vit. E	70%					150%		
Calcium	8%	0%	0%	0%		4%	2%	
Copper						25%		
Iron	6%	10%	4%	6%		10%	6%	
Magnesium	20%	20%	10%	20%		25%	15%	
Manganese								
Phosphorus								
Zinc		10%	10%	8%		10%	6%	
Tryptophan								

Threonine MINERALS - COLLOIDAL, Derived from Utah's humic shale deposits.
Isoleucine An effective source of naturally derived, colloidal major and
Leucine trace minerals. Microscopically small, therefore more easily
Lysine absorbed and readily incorporated into cells compared to most
Methionine tableted minerals. Derived from natural plant deposits.
Cystine Discovered nearly 100 yrs ago. Extracted in water without
Phenylalanine acids or heat. Used world wide since 1926.
Tyrosine

Valine	Known Essential Minerals
Arginine	
Histidine	
Alanine	Calcium
Aspartic Acid	Chloride
Glutamic Acid	Chromium
Glycine	Copper
Proline	Iodine
Serine	Iron
	Magnesium
	Manganese
	Molybdenum
	Phosphorus
	Potassium
	Selenium
	Sodium
	Sulfur
	Zinc

Antimony	Gallium	Praseodymium
Arsenic	Germanium	Rhenium
Aluminum	Gold	Rhodium
Hydroxide	Hafnium	Rubidium
Barium	Holmium	Ruthenium
Beryllium	Iodine	Samarium
Bismuth	Iridium	Scandium
Boron	Lanthanum	Silicon
Bromine	Lead	Silver
Cadmium	Lithium	Strontium
Cerium	Lutetium	Tantalum
Cesium	Mercury	Tellurium
Cobalt	Neodymium	Terbium
Dysprosium	Nickel	Thallium
Erbium	Niobium	Thoron
Europium	Osmium	Thulium
Fluorine	Palladium	Tin
Gadolinium	Platinum	Thymium

Now Colloidal
 Minerals
 #1405 - 32 Fl. oz.
 Price: \$17.95.
 Colloids a substance
 in the form of sub-
 microscopic particles
 that when in solution
 or suspension does
 not settle out.

Essential Oils—100% Pure

NOW

Code	Product	Size	Retail
7512	Essential Oil Display - Redwood Upgrade	2 shelves	
7514	Allspice Berry Oil (N)	1 oz.	7.95
7515	Anise Oil (N)	1 oz.	3.95
7516	Basil Oil (N)	1 oz.	8.95
7518	Bergamot Oil (N)	1 oz.	7.95
7520	Camphor Oil (N)	1 oz.	3.50
7525	Cedarwood Oil (N)	1 oz.	3.98
7528	Chamomile Oil (N)	1 oz.	27.95
7530	Cinnamon Oil (N)	1 oz.	4.95
7535	Citronella Oil, external (N)	1 oz.	2.95
7540	Clove Oil (N)	1 oz.	4.50
7545	Eucalyptus Oil 80/85 (N)	1 oz.	2.95
7546		4 oz.	6.50
7550	Ginger Oil (N)	1 oz.	7.95
7552	Geranium Oil (N)	1 oz.	7.50
7553	Grapefruit Oil (N)	1 oz.	4.95
7555	Jasmine Oil - synthetic (W)	1 oz.	5.95
7558	Juniper Berry Oil (N)	1 oz.	11.95
7560	Lavender Oil 40/42 (N)	1 oz.	5.95
7561		4 oz.	16.95
7565	Lemon Oil (N)	1 oz.	3.95
7567	Lime Oil (N)	1 oz.	4.50
7568	Myrrh Oil (N)	1 oz.	27.95
7570	Orange Oil (N)	1 oz.	2.95
7573	Oregano Oil (N)	1 oz.	9.95
7574	Palmarosa Oil (N)	1 oz.	5.95
7575	Patchouli Oil (N)	1 oz.	11.95
7580	Pennyroyal Oil (N)	1 oz.	9.95
7585	Peppermint Oil (N)	1 oz.	4.50
7586		4 oz.	12.95
7590	Pine Oil (N)	1 oz.	4.95
7595	Rose Hip Seed Oil (N)	1 oz.	5.95
7600	Rosemary Oil (N)	1 oz.	4.95
7610	Sage Oil (N)	1 oz.	6.50
7615	Sandalwood Oil (N)	1 oz.	27.95
7617	Sassafras Oil - fragrance (N)	1 oz.	3.95
7620	Spearmint Oil (N)	1 oz.	4.95
7623	Tangerine Oil (N)	1 oz.	3.95
7625	Tea Tree Oil (N)	1 oz.	7.50
7626		4 oz.	19.95
7635	Thyme Oil, white (N)	1 oz.	5.95
7640	Wintergreen Oil (N)	1 oz.	3.95
7650	Ylang-Ylang Oil, Extra (N)	1 oz.	14.95

Skin Problems

Please read Balch on recommendations for the following problems.

SEBACNE; AGE SPOTS; ATHLETE'S FOOT; BEDSORES; BOIL; BRUISING; BURNS; CANCER SORES; COLD SORES (FEVER BLISTERS); CORNS AND CALLUSES; DANDRUFF; DERMATITIS; DRY SKIN; FUNGAL INFECTION; HIVES; INSECT BITE; INTERTRIGO; LEG ULCERS; OILY SKIN; PSORIASIS; ROSACEA; SCABIES; SEBACEOUS CYST; SEBORRHEA; SKIN CANCER; SKIN RASH; SUNBURN; VITILIGO; WARTS; WRINKLING, OF SKIN. See also under PREGNANCY-RELATED PROBLEMS. See both Balch Books

Moisturizers—100% Pure

NOW

Code	Product	Size	Retail
7660	Almond Oil, sweet (N)	4 oz.	2.95
7661	(Expeller Pressed)	16 oz.	7.50
7665	Apricot Kernel Oil, refined (N)	4 oz.	3.75
7666		16 oz.	8.95
7670	Avocado Oil, refined (N)	4 oz.	4.50
7672	Body Balm (N) Trial	1 oz.	2.35
7673	Large	5 oz.	5.95
7674	Display	6-1 oz.	1.99

BEST BUY

BODY BALM

ANALGESIC/VAPORIZING ACTION



Body Balm is a traditional formula that can be used as a muscle rub or vaporizing balm. It is valuable as a warm-up prior to exercise for loosening tight, stiff muscles. Menthol, Camphor, and Eucalyptus are traditional ointments used for the temporary relief of nasal congestion and chest cold symptoms. Rub directly onto throat, chest, and back and cover with a warm cloth.

NOW BODY BALM is the only balm/rub that includes a natural Lanolin base. Lanolin is derived from sheep wool and works well as a natural alternative to petroleum jelly.

BODY BALM CONTAINS:

Lanolin	85%
Menthol Crystals	7%
Camphor Oil	2%
Eucalyptus Oil	2%
Cinnamon Oil	2%
Clove Oil	1%
Wintergreen Oil	1%

COMPARE TO
TIGER BALM

7675	Castor Oil, Expeller Pressed (N)	16 oz.	5.95
7680	Cocoa Butter, pure (N)	5 oz.	5.50
7683	Coconut Oil, pure (N)	5 oz.	2.95
7685	Evening Primrose Oil (REFRIG)	1 oz.	4.75
7690	100% pure	4 oz.	12.95
7770	First Aid Salve (5,000 IU Vit. E)	1 oz.	3.95

INGREDIENTS: Cocoa Butter, Jojoba Oil, natural d-alpha Vitamin E, liquid Lecithin and natural Lemon Oil. Contains no fillers, dyes, synthetics, chemicals, or preservatives. *Helps the repair of damaged skin tissue*

7695	Glycerine, vegetable (N)	4 fl. oz.	2.95
7700		16 fl. oz.	6.50
7705	Grape Seed Oil (N)	4 fl. oz.	2.95
7707		16 fl. oz.	6.50
7715	Jojoba Oil, pure (N)	1 oz.	3.95
7717		4 oz.	8.95
7718		16 oz.	24.95
7725	Lanolin, pure (N)	5 oz.	3.95
7730	Liquid Lanolin, pure (N)	4 oz.	4.75
7735	d-Pantothenol Gel, pure (W)	1 oz.	5.95
7755	Rosewater Concentrate (N)	1 oz.	3.95
7758	Shea Butter, pure (N)	5 oz.	7.50
7760	Soft Cocoa Butter, pure jojoba added (N)	4 1/2 oz.	5.95

BEST BUY

Read Duke: pages 392-396. He gives and explains 16 herbs that are used in treating skin problems.

Read Julia Lawless "Essential Oils" Has Herbal Therapy for 38 skin problems.

Traditional Oil Uses

Allspice

Derived from the leaves and berries of the *Pimenta dioica* plant, this distilled oil is a natural flavor that can be used in cooking as well as aromatherapy.

Anise

Derived from anise seeds in Spain, this distilled oil has an excellent licorice taste for internal use. Invigorating, diaphoretic.

Basil

Derived from basil leaves in the U.S., this sweet tasting, distilled oil can be used as a flavoring and in aromatherapy.

Bergamot

Derived from the bergamot tree in Italy, this sweet, distilled oil has a citrus-like aroma that can be used for flavoring and fragrance.

Camphor*

Derived from camphor tree stems in China, this distilled white oil can help topically with blisters, bruises, and colds. Invigorating, antiseptic, analgesic.

Cedarwood

Derived from cedar wood in the U.S., this distilled oil is a fragrance valuable against skin eruptions. Astringent, diuretic, sedative.

Chamomile

Derived from chamomile flowers in Morocco. This natural food grade distilled oil is a wonderful scent and used in aromatherapy.

Cinnamon

Derived from cinnamon sticks in China, this distilled oil is a flavoring and stimulates circulation externally. Astringent, relaxant.

Citronella

Derived from citronella grass in Indonesia. This cold pressed oil is primarily used to protect against insect bites.

Clove

Derived from clove buds in Indonesia, this distilled oil gives quick temporary relief to toothaches and can be used internally in drop amounts.

Eucalyptus*

Derived from the tallest tree in the world, this distilled oil from Australia aids in relieving chest congestion and minor respiratory problems.

Ginger

Derived from ginger roots in China, this distilled oil is known to help digestion and motion sickness. Carminative and digestive aid.

Geranium

Derived from the leaves of the geranium plant in Egypt, this distilled oil has a fresh scent that is commonly used in aromatherapy by itself, or in combination with other oils.

Grapefruit

Derived from the peels of ripe grapefruit in the U.S., this cold-pressed oil has an uplifting, pleasant aroma that can be used in foods for flavor or in aromatherapy.

Jasmine*

Derived part synthetic, part jasmine plant, this oil is a pleasant fragrance made for external use only. Made in the U.S.

Jojoba

Derived from jojoba leaves in the U.S., this cold-pressed oil is a conditioning oil useful in hair formulations. Historically used by Indians to promote healthy hair.

Juniper Berry

Derived from juniper berry in Europe, this mysterious distilled oil has been used ceremonially in incense, aromatherapy, and medicinally.

Lavender*

Derived from lavender plants in France, this distilled oil is versatile for therapeutic use or as a fragrance... Relax!

Lemon

Derived from lemon peels in the U.S., this cold-pressed oil fights infections, aids digestion, and is very flavorful.

Lime

Derived from lime peels in the U.S., this distilled oil has a distinctive, pleasant smell that can be used in aromatherapy, foods, and drinks.

Myrrh

Derived from the gum myrrh bush in North Africa, this biblical fragrance has an incense-like smell that can be used medicinally, in aromatherapy, and as a perfume.

Orange

Derived from orange peels in the U.S., this cold-pressed oil can be used as a fragrance or added to foods for taste.

Oregano

Derived from the oregano plant in Spain, this distilled oil is a mildly pleasant, spicy oil that is extremely potent and should be diluted in an oil base before using internally.

Palmarosa*

Derived from the grass of *Cymbopogon martinii*, this distilled oil is a pleasant scent and has traditionally been used externally for its fresh scent in aromatherapy.

Patchouli*

Derived from the patchouli plant in the U.S., this distilled light oil is a popular fragrance useful in aromatherapy. Relaxant, aphrodisiac, tonic.

Pennyroyal

Derived from pennyroyal flowers in Europe, this distilled oil is used as a fragrance. External use only.

Peppermint

Derived from peppermint leaves in the U.S., this distilled oil is a multi-purpose, refreshing taste and odor. Stimulant and expectorant.

Pine

Derived from pine needles in Siberia, this distilled oil can be used as a fragrance or in home cleanser mixes.

Rose Hip Seed

Derived from rose hip seeds in South America, this oil is similar to Jojoba oil and can be used as a moisturizer on skin or added to hair formulas.

Rosemary

Derived from rosemary leaves in Spain, this distilled oil helps the skin, scalp, digestion and colds. Antiseptic, stimulant, antispasmodic.

Sage

Derived from sage leaves in Spain, this distilled oil is a popular fragrance, and is used internally as well. Digestive, stimulant.

Sandalwood

Derived from sandalwood tree in India, this distilled 100% natural oil is mainly used as a fragrance.

Sassafras*

Derived from sassafras bark in China, this distilled oil smells similar to root beer and is commonly used in aromatherapy.

Spearmint

Derived from spearmint leaves in the U.S., this distilled oil is versatile and usable as a fragrance, flavor, or mood lifter.

Tangerine

Derived from tangerine peels in Brazil, this cold pressed oil can be added to foods for a sweet flavor and used as a fragrance.

Tea Tree*

Derived from tea tree leaves in Australia. This distilled oil is our most potent medicinal oil with many uses. Antiseptic.

Thyme

Derived from white thyme leaves in Spain, this distilled oil is uplifting and used as a seasoning, fragrance, or medicinally.

Wintergreen

Derived from wintergreen leaves in the U.S., this distilled oil is great tasting and useful in aromatherapy. This same oil is used by chewing gum manufacturers.

Ylang Ylang

Derived from ylang ylang flowers in Indonesia, this exotic sweet fragrance has a potent and unmistakable scent.

minerals 91

Potassium is Vital To Health.

Eat High PO. and Low Sodium (Na) Diet

PO. and SO. Are Linked, HELPS NERVES

Transmit

MESSAGES.

AIDS Digestive

ENZYMES

CARRIES Electrical

Charge That

Ensures Proper

Function Of Every

Muscle, Espec. Heart.

LOW PO. May Lead

To Sudden Death.

ENERGY LEVELS

Improve With PO. Level.

EAT Fresh Fruits

And Vegetables. They

Are A Great Source

Of PO.

PO. Performs

Countless Vital

Functions

In The Body.

As SO. Level Goes

Up PO. Is Dumped

Into Urine And

PO. Level Falls.

Beware Of Salty

Foods And Salt Tablets.

They Cause Tiredness,

Weakness, Irritability,

False Diagnosis Of

Emotional Disability

PO. Performs

Countless Vital

Functions

In The Body.

Daily potassium 92

Need 50 = 1/2 gm.

(1/4 tsp). PO = 2 1/2 gms

Even 6 gms. Safe

Eliminate. Processed

Food. SO. Doubles,

PO. Cut In Half.

Diuretics Rx'd

For High Blood

Pressure And

Bloating Drain

PO.

Sudden Drop

In PO. Can Cause

Heart Misfunction

And Bring It To A

Abrupt and Fatal

Halt.

SOME POTASSIUM SOURCES.

Potato 502 mg.

Raisins 1/2 cup 681

Sardines 302 501

Squash 1/2 cup 451

Apricots (dried) 5 482

Prunes (dried) 5 313

Tomato 1 med. 259

Milk Skim 1 cup 406

Salmon 3 oz 376

Grt. Na Beans 1/2 cup 374

Banana 6 oz 451

Orange 1 med 263

Orange Juice 1 cup 496

Sweet Potato 1 med 342

Cod 3 oz 345

Peach 1 med 308

Turkey (white) 3 oz 259

Tuna 3 oz 225

NO R.D.A.

PREGNENOLONE is a hormone precursor that the body normally manufactures using cholesterol as the primary raw material. In the body, it can be converted into a multitude of other hormones including DHEA, estrogen, testosterone and progesterone.

As is the case with the steroid-hormone precursor DHEA, pregnenolone levels decline with age. Many physicians and scientists believe that replacement of pregnenolone to youthful levels is an important step in dealing with the symptoms of aging. (Other hormones that decline with aging, and can be replaced, include: DHEA, melatonin and the sex hormones testosterone, progesterone, and estrogen).

However, pregnenolone may be one of the most important hormones because it seems to have a balancing effect. It is a precursor to many other hormones and may be able to bring the levels of other hormones up or down as needed.

100 TIMES BETTER MEMORY ENHANCEMENT

Many steroid² hormones have been found to have intelligence-enhancing capabilities, but pregnenolone seems to have truly extraordinary activity. Pregnenolone was the subject of memory experiments as far back as 40 years ago,

and since then has been found to play an important role in long-term memory. And, in a recent study, pregnenolone was found to be 100 times more effective for memory enhancement than other steroids or steroid-precursors. Other

studies have demonstrated that pregnenolone may improve general cognitive performance, and may be the most potent memory enhancer ever.

HOW TO USE PREGNENOLONE

For most uses 10 to 30 mg per day on an empty stomach is about right. You can adjust the dosage to what feels good for you. For help in the relief of arthritis, quantities as high as 500 mg per day have been used without any adverse effects.

Other benefits of pregnenolone may include:

- Stress reduction and increased resistance to effects of stress
- Relief of inflammation
- Improvement of mood and energy
- Reduced symptoms of PMS and menopause
- Improved immunity
- Repairing the structure of the myelin sheath
- And more

"Pregnenolone" by Ray Sahelian M.D. 1995

*Garden Patch 228 W. Edison Rd. Mish.
255-3151 will order it. They give 5% disc.*

*Ind. Botanic Gardens 10 mg caps.
#04 Preg 90-995 (Dr Price - 4.48)*

Men with prostate problems should check with their Dr. prior to using.

Since it influences estrogen production women should check with their doctor.

Saw Palmetto Berry Extract 90 Caps. 15.95
Saw Palmetto Berry Extract 80mg
Pumpkin Seed Oil 30mg
Zinc (From Gluconate) 15mg
Vit. B6 (Pyridoxine HCL) 10mg

PATIENT ADVOCATES FOR ADVANCED
CANCER TREATMENTS, INC.
1143 Parnelle NW Grand Rapids, MI. 49504
Phone (616) 453-1477

PROSCAR:

"THE BILLION DOLLAR HYPE"

1/96. Now, natural physicians are recommending

#4728 Pygeum And Saw Palmetto
60 gels cost 10.00

(30-53.87 1x Daily) Cost of Proscar

1.80 each. 7 times the cost of pygeum-saw

An editorial article, written by Alan R. Gaby, MD, for the October 1992 issue of the Townsend Letter for Doctors, pulled no punches. We thought the issue would be of interest to many of our readers. The editorial, "FDA Bias Sabotages the American Prostate Gland," follows, with minor editing to accommodate space constraints:

"The Food & Drug Administration has recently approved the drug Proscar for the treatment of benign prostatic hypertrophy (BPH). During the past year or so, Merck stock has risen in anticipation of FDA approval of this 'blockbuster' drug, which is predicted to generate \$1 billion annually within several years.

"Proscar has been touted in newspapers, magazines, and medical journal advertisements as the first compound specific for BPH. That claim is a lie. A liposterolic extract of the plant Serenoa repens (LSE serenoa, also known as saw palmetto berries) has been repeatedly shown to be a safe and effective treatment for BPH. Furthermore, the mechanism of action of both Proscar and LSE serenoa is identical.

When the results of treatment with Proscar and LSE serenoa are compared, the latter appears to be more effective. While only 57% of patients receiving Proscar had symptomatic improvement, 91% of those receiving LSE serenoa improved. Although Proscar does appear to be reasonable safe, it has not been around very long. Over the years, many drugs have been found during post-market surveillance (a euphemism for experimenting on the public) to be a lot more toxic than originally thought. Saw palmetto berries, on the other hand have been used for centuries and are considered quite safe.

One might think the FDA would look favorably on a product which is more effective, less expensive, and at least as safe as a drug the agency has approved. However, recent and past events have proven that the FDA does not necessarily do what is logical or what is in the best inter-

est of the American public. In 1990, the FDA rejected an application to have LSE serenoa approved as an over-the-counter treatment for BPH. While rejecting that application, the FDA acknowledged that Serenoa repens was officially listed in the United States Pharmacopoeia from 1905 to 1928; the National Formulary from 1926 to 1950; the Physician's Desk Reference in 1948; Remington's Practice of Pharmacy, 10th edition (1951); and the Homeopathic Pharmacopoeia of the United States, 8th edition, 1979. Nevertheless, the FDA ruled that this product is an "unapproved new drug," making it subject to the cumbersome and financially prohibitive drug approval process. Labeling LSE serenoa a new drug was clearly idiotic, as the FDA's own literature review showed.

In its review of this so-called "new drug," the FDA cited a number of studies. LSE serenoa produced a significant reduction in mean residual urine volume from 94.7 to 55.05 ml and a significant decrease in the mean number of nocturnal urinations. However, the FDA argued that these improvements, though statistically significant, are not clinically worthwhile. Specifically, having to get up to go to the bathroom an average of only one time less per night was not considered a significant improvement. In other words, if you used to get up once every night to urinate, but now do not have to get up at all, then you are, according to the FDA, no better off. It seems that the FDA is not concerned about elderly men who might stumble half asleep to the bathroom at night and fall down and break their hip. Nor are they concerned about the hundreds of thousands of men who are unable to fall asleep again after getting up to urinate.

"The FDA was also not impressed by the reduction in residual urine volume. Their report claims that, because a residual urine value above 50 ml still suggests some obstruction or abnormality...the reported 55.05 ml results do not indicate a clinically meaningful improvement."

(continued from front page)

"Even if one forgets that some urologists consider 75 ml to be the cutoff for normal residual urine volume, this FDA argument borders on being a 'big lie.' The FDA analysis also ignored another important point: if the mean residual volume fell from 94.7 to 55.05 ml, then the whole bell-shaped curve was shifted to the left, so that approximately 40% of the treated patients actually did acquire a normal residual urine volume.

"The essence of the FDA point of view is that LSE serenoa is not clinically effective because it does not completely cure BPH. By that reasoning, the vast majority of drugs prescribed by physicians every day are ineffective, since they do not restore failing organs to perfect health. Insulin does not heal a diseased pancreas, yet it is effective against diabetes; aspirin does not heal damaged joints, yet it is effective against arthritis. Why did the FDA suddenly come up with an impossible-to-meet standard when evaluating LSE serenoa?

The arguments put forth by the FDA to reject LSE serenoa cannot be defended by any reasonable scientist. Indeed, the FDA position on this matter would be grounds for flunking eighth grade science class. As most FDA officials have advanced beyond that level of schooling, one can only conclude that the FDA position on LSE serenoa is a deliberate distortion of the facts. The FDA owes the

Saw Palmetto 80mg Extract. 90 Capsules Approx. 16.00



American public an explanation as to why it approved Proscar, while rejecting a natural treatment which is less expensive and probably safer and more effective."

-Alan Gaby, MD

PROSTATE CANCER (PC) + BENIGN PROSTATE ENLARGEMENT (PBE)

- 31,000 NEW PC Yearly. 2nd LEADING CAUSE OF MALE CANCER DEATHS
- 50% Dies 1 of Every 11 Men
- Can Develop + Spread With No Warning
- If It Spreads Beyond Prostate It's Incurable.
- Digital Rectal Exam (DRE) Don't Show It. Have Yearly After 40.
- Prostate Specific Antigen Test (PSA) Tests For Protein Secreted By Prostatic Tissue.
- PSA Can Be Raised By Either Benign Enlargement (PBE) or PC. PSA Less Uncomfortable. Far More Accurate Than DRE.
- 40% vs. 20%. Wrong 4 Times Out of 10; 20% to 30% False.
- Falsely Signals PC In 16% of Prostate Cancer Free Men.
- PC May Advance Very Slowly UP To 30 years Before It Poses A Problem And Risk.
- No Treatment For PC May Be Less Harmful Than Complications From The Exam And Treatment.
- Autopsies Reveal 30 to 50% of Men With PC Die of Other Causes.
- Radiation Therapy, Chemotherapy or Surgical Removal of Prostate May Result In Impotence, Incontinence or Death.
- When DRE And PSA Are Both Done Accuracy of Diagnosis Improves.
- If 1st PSA Is High - Hold Biopsy. Could Be False Reading, or Is Benign Enlargement. Wait a Few Months Then Repeat Test.
- PSA Volume Doubles In 50 to 200 Days In PC. Takes 10 to 15 years To Double In PBE. (Prostate Benign Enlargement)
- If 2nd Test Shows PSA Is Still High or Has Risen, Consider Ultrasound And Biopsy.

- ## Prostate Cancer (PC) + Benign Prostate Enlargement (PBE) - 2 -
- Consider Treatment Or Surgery ONLY If 2nd Test Confirms PC.
 - DUAL HORMONAL THERAPY, VIRAL PROSTATE CELLS, NORMAL + CANCEROUS REQUIRE HORMONES FROM TESTICLES AND ADRENALS TO LIVE. ORCHIECTOMY (Castration) Of Testicles Eliminates Testicle Hormones, or A Monthly Shot of Leuprolide Will Block Testicle Hormones.
 - Flutamide (Eulexin) Blocks Absorption Of Adrenaline Hormones. Therapy Must Be Dual. Elimination Of Testicle Hormones Only.
 - Not Enough. Both Very Costly.
 - Eulexin Caps: 100 - 128. Dose Is 6 per Day. Leuprolide 400 mg per Shot. Annual Cost \$900.
 - If Difficulty Urinating Is Experienced - Go On A
 - Health Care Diet Immediately And Consult A Urologist.
 - Transurethral Prostate Resection, Performed On 400,000 Men Yearly. Try To Avoid!!
 - Proscar New Drug For PBE. See Report On Pg. 123
 - The American Cancer Society estimates 317,000 new cases of PC in U.S. in 1996 and 41,400 deaths.

From sat. ad. bus.

BY DANIEL O. HANEY
AP Medical Editor

BOSTON — The first head-to-head comparison of the nation's two most popular medicines for prostate trouble found that one gives significant relief while the other is virtually worthless. (Proscar)

The two medicines, Hytrin and Proscar, are taken by millions of older men to relieve the symptoms of an enlarged prostate gland. The study found that Hytrin eases men's discomfort by about one-third, while Proscar works no better than dummy sugar pills.

For the majority of patients, Proscar is no more than "an expensive placebo," said Dr. Herbert Lepor of New York University Medical Center, the study's director. Prostate drugs generally cost \$30 to \$45 a month.

The study was financed by Merck & Co., which makes Proscar, and Abbott Laboratories Inc., the maker of Hytrin. It was conducted on 1,229 men at Veteran Affairs hospitals.

The results were first reported at a meeting of urologists in May, and preliminary findings from the research were reported a year ago, so the publication of the study had little effect on the pharmaceutical companies' stock.

On the New York Stock Exchange, Merck was unchanged at \$88.75 and Abbott Laboratories fell 50 cents to close at \$47 Wednesday. One-on-one comparisons of popular prescription drugs by their makers are fairly unusual because of the expense and the obvious hazard of losing.

Although both companies approved the study's design, Merck discounted its significance as publication approached in today's issue of the New England Journal of Medicine.

PROSTATE CANCER PSA TEST ON ALL MEN ANNUAL COST \$24 BILLION+
 PSA THE BEST AVAILABLE TEST. IN 2009, HALF A MILLION MEN WILL DIE. MEN CANNOT WAIT FOR THE RESULTS. THEY MUST ALL GO ON HEALTHCARE
 In Last 10 yrs. Death Rate Has Not Changed In Last 25 yrs. DIET IMMEDIATELY
 Value Of Present Therapies 1. Only Fresh Fruits And Vegetables. Fiercely Debated. 2. No Foods Made Of Refined Flour. 3. Risks From Surgery 2% 4. Reduce Saturated Fat To Die. 25% Incontinent. 6 to 18% Incontinent. Absolute Minimum.
 No PC Positive Biopsies In Auto Accidents. Enlarged Non-Cancerous Prostate Can Elevate PSA 31% of 30 to 39 yr. olds. 38% Very Dangerous And Costly To Start Therapy On These Men. Many Deferring Recommendations More Side Effects - E.g. Severe Hot Flashes, Serious Sleepiness May Be Far Worse For 16 Yrs. PC Study Of 74,000 Men Starts In April 1993. 1/2 Will Get PC May Be Very Slow Or PSA And Therapy Other 1/2 Will Get Nothing. Then Death Rate In Both Groups Will Be Compared. Way Of Knowing In Advance

Dr. Glenn Gormley, a Merck research official, said that in hindsight, the study was not set up properly to answer the question of which drug is better. He said experts now know that Proscar works only in men whose prostate glands are larger than those typically seen in the study.

About two-thirds of American men suffer enlargement of the walnut-size prostate gland by the time they reach their 60s, and the condition grows more common as men get older. Doctors call it benign prostatic hyperplasia, but it is "benign" only in the sense that it isn't cancerous.

The enlarged prostate gland squeezes the urethra, making it difficult to urinate. Often the bladder doesn't empty completely, so men are seized with an urgent need to go at inconvenient moments, often in the middle of the night.

Until a few years ago, surgery was the only solution, but it carries a small risk of impotence or partial incontinence.

Proscar, known generically as finasteride, is intended to relieve symptoms by shrinking the prostate. Its main competitors are Hytrin, or terazosin, and Pfizer Inc.'s Cardura, or doxazosin — which work instead by relaxing bladder muscles so that urine flows more freely.

Last year, Hytrin ranked 28th among all prescription drugs in the United States, with sales of \$387.2 million, according to the market research firm IMS America. Proscar was 94th with sales of \$141.3 million. Cardura did not make the top 100.

Proscar - worth less, or worse than worthless. Patients have reported getting ulcers in the canal. (of the penis)

Enough, Already!

Here are the daily Recommended Dietary Allowances (RDAs) for protein. Odds are you eat more...and that you're no healthier for it.

Sex & Age	RDA (grams)	Average Consumption (grams)
Females:		
11-14	46	66
15-18	44	63
19-24	46	65
25-49	50	65
50-69	50	55
70+	50	49
Males:		
11-14	45	92
15-18	50	122
19-24	58	105
25-29	63	105
30-59	63	93
60-69	63	79
70+	63	69

Source: *HHS Nutrition Monitoring in the US (1989)*

THE BOTTOM LINE

- **You don't need any animal protein to be healthy.**
- **Heart Disease.** Switching even some of your animal protein to plant protein could lower your cholesterol, especially if it's high.
- **Cancer.** There is little evidence linking protein to cancer in humans. The only consistent link is with liver cancer in animals.
- **Osteoporosis.** If you're a woman who wants to avoid osteoporosis (it's not a problem for most men), eat plenty of calcium rich foods (and that includes low-fat dairy), get lots of exercise, and stop (or don't start) smoking.
- **Kidney Disease.** The American Diabetes Association recommends that diabetics not exceed their daily RDA for protein. Other people need not worry.

Protein

Get'cha Protein

The danger in eating too much animal protein is that you'll also eat too much artery-clogging saturated fat and cholesterol. Here's a list of the protein content of some common foods, along with which of them give you the most—and least—sat fat. (All meat, fish, and poultry have about the same amount of cholesterol—75 to 100 mg—per serving.)

You'll get the biggest protein bang for your saturated fat buck with skinless chicken breast, any turkey breast, and seafood.

But you don't have to eat meat to get your protein. Just make sure you get plenty of beans, pasta, and whole grain bread. And if you drink skim milk and eat non-fat yogurt or low-fat cheese, meeting your protein needs becomes a snap. Vegans (who eat no dairy or eggs) will probably find themselves chewing a lot of tofu; *vegans should eat toasted soy products, soy bean halves, soy sprouts, soy powder.*

FOOD	PROTEIN (grams)	FOOD	PROTEIN (grams)
Low Saturated Fat (1 gram or less)			
Chicken breast, skinless	35	Chicken, breast or skinless drumstick	32-34
Turkey breast, with or w/out skin	33	Turkey leg, with or w/out skin	32
Shellfish (shrimp*, scallops, clams, blue crab, lobster)	23-35	Salmon	31
Fish (cod, pollock, catfish, flounder, sole, orange roughy, ocean perch, rockfish, whiting, haddock, rainbow trout, halibut)	21-30	Chicken, drumstick or skinless leg or thigh	29-31
Tuna, packed in water (2 oz.)	14	Eggs (2 large)*	13
Dried beans, peas, lentils (1 cup)	12-18	Peanuts (1/4 cup)	9
Tofu (4 oz.)	10	Cheese, reduced-fat (1 oz.)	8
Milk, skim (1 cup)	8	Milk, 1% or 2% (1 cup)	8
Yogurt, non-fat (1 cup)	8	Peanut butter (2 Tb.)	8
Pasta (1 cup)	7	Nuts and seeds, oil- or dry-roasted (1/4 cup)	2-6
Bulgur (1 cup)	6	High Saturated Fat (4-7 grams)	
Oatmeal (1 cup)	6	Beef, chuck blade roast, choice or select	35
Bread, whole wheat (2 sl.)	5	Chicken, leg or thigh	29
Rice, brown (1 cup)	5	Ground beef, regular, lean, or extra-lean	28
Tortilla, flour (medium)	3	Mackerel	28
Medium Saturated Fat (1 1/2-3 grams)		Corned beef brisket	21
Beef, sirloin, choice or select	34	Milk, whole (1 cup)	8
Beef, bottom round, choice or select	33	Cheddar cheese (1 oz.)	7
		Hot dog, beef or pork (2 oz.)	7
		American process cheese (1 oz.)	6

* high in cholesterol

Serving size for all meat, poultry, and fish is four ounces, cooked. Bean, pasta, and rice serving sizes are for cooked main-dish portions.

By: Nancy Snyderman, M.D.

Drug-Free Sinus Treatment

Q. My nose is constantly stuffy and I have an annoying postnasal drip. My doctor has prescribed antihistamines, but they don't seem to help. What could be wrong?

A. In my practice, I see women after women with these symptoms. Instead

of having allergies or sinus infections, many of them are just dehydrated. When your body is deprived of the water it needs, everything dries up. Secretions, including the mucus produced in our sinuses, get thicker. And when mucus is thick, it sticks in the back of the nose and throat. That's postnasal drip. When you are well-hydrated, the mucus will be thinner and less noticeable. The problem can be particularly troublesome for menopausal women because the drop in estrogen may also cause dehydration. And antihistamines and decongestants won't help; they'll just further dry out the tissues.

The solution is simple: Drink at least 64 ounces (two quarts) of water a day, which is how much you need to make sure your whole system is hydrated. (Keep one of those big plastic bottles on your desk as a reminder.) Coffee, tea, and juice are not good substitutes. Too many caffeinated and sugared drinks—because of the way your body digests them—will just further dehydrate you. Only plain water is absorbed directly, and goes most quickly to where your body needs it. Obviously, drinking this much water is not recommended for people who must restrict their fluid intake because of heart or kidney problems. But for the rest of us, the only downside is a lot more trips to the bathroom!

SELENIUM - A WEAPON AGAINST CANCER

- Protects Cell Membranes, Nuclei, Chromosomes From Damage By Carcinogens.
- Increases Resistance To Cancers Of:
 - Intestines, Rectum,
 - Breast, Ovary,
 - Prostate, Lung
 - Pancreas, Skin,
 - Kidney, Bladder, And Leukemia
- High Fat Diet - Serious Cause Of Breast Cancer. Selenium Counteracts It.
- Start Early And Maintain Selenium Intake.
- Vit's A and E are Selenium Helpers.

Eat:

- Sea food • Whole Grain Cereals And Bread • No Refined Flour Foods,
- Fresh Fruits And Fresh Vegetables.
- Make Your Own Whole Grain Cereals
- Supplements Recommended.

Now Code

- Interferon, Body's Natural Antiviral & Anti-cancer Drug.
- 0352 Vit-A & D
- 0458 B-50 Complex
- 0712 Ester-C Complex 625mg
- 0894 Vit-E 400IU Mixed
- 1542 Full Spectrum Minerals
- 1760 Flax Seed Oil
- 2254 Lecithin Granules

Sprouting

Sprouts come close to being a perfect food and enable us to get back to eating basic foods. Sprouting of seeds, grains and beans has been practiced for thousands of years because it is the way of being able to produce superior, nutritious foods in a very simple, very low cost, highly convenient manner. Now that we have so seriously polluted our planet, created the greenhouse effect with its horrifying drought - summer and winter - and loss of both summer and winter crops, the destructiveness of oil spills, resulting in loss of vast amounts of fish, and the sea foods, poisoning of our lakes and streams with their fresh-water fish and the mass raising of caged chicken polluted with tranquilizers, antibiotics and chemicals, there is a great urgency to make sprouting a regular part of everyone's life. Anyone can do sprouting in their own kitchen without soil, without mess, no work achieve ready-to-eat fresh vegetables and beans, and be able to eat raw, uncontaminated food which is as free of pollutants as possible, at a very low cost.

Sprouting may well be the principle means by which man survives on this planet. Become expert in this essential, vital activity; it gives us the great opportunity for independence from the present food chain which is producing thousands of items of denutritified, chemically poisoned junk food at enormously inflated prices. Remember if a food or drink is advertised on television (or elsewhere) don't buy it. It will fit the above description. Nutrition experts describe our consumption of the foods of our Standard American Diet (SAD) along with smoking, as slow-motion-suicide. The sooner you get off of them the better off you will be. Most people do not realize their diet and lifestyle is setting the stage for pain, suffering, illness and eventual premature death!

Sprouts contain the enzymes necessary for the proper digestion and assimilation of food nutrients and are one of the highest sources of natural fiber. They are low in calories and can be grown all year around.

As seeds begin to sprout, nutritional value multiplies. According to a study by renowned biochemist Dr. Jeffrey Bland, the B-complex content in germinated wheat increases 600 percent in the first 72 hours. Vitamin E content is tripled and vitamin C increases sixfold. Sprouts are also higher in minerals than their ungerminated counterparts but are generally low in sodium and are also low in carbohydrates. Sprouts are high in protein as the following table shows. *After my legumes and seeds have sprouted, I put them in a pint jar. I put 7 drops of Aerobic O₂ into a half glass of water (distilled) and pour it onto the sprouts; then add additional water so that the sprouts are covered; finally I shake the bottle and store it in the refrigerator. BE sure you sprout all those underlined below.*

Eggs	13%	Lentils	25%
Meat	19%	Soy sprouts	28%
Mung bean sprouts	24%	Alfalfa	35%

In sprouts, vitamins are being produced right up to the time you pop them into your mouth. In other vegetables, once they are severed from their rootstock, enzymes begin breaking down the vitamins they contain. Sprouted legumes (especially soybeans) need to be steamed a few minutes before eating to destroy a protein-inhibiting enzyme, trypsin.

Listed below are sprout varieties, nutritional highlights, some characteristics of the sprouts. The underlined are complete proteins (contain all 8 of the essential amino acids). The memory key is ACLMS-W.

Alfalfa - highest in minerals, protein, vitamins A, B-complex, C, D, E and K. (Mild flavor, crunchy)
Azuki (sweet, colorful red and white).
Black-eyed peas - protein, minerals, vitamins A and C.
Cabbage - rich in minerals, vitamins A and C.
Clover (tangy).
Corn - niacin, folic acid, vitamin A.
(Garbanzos) - complete protein, many minerals.
Chickpeas
Lentils - complete protein, B vitamins.
(Peppery, crispy)
Mung beans - high vitamin C content, vitamin A, protein, calcium, phosphorus, iron.

Peanuts - protein, niacin, minerals. (Use raw, shelled nuts.)
Radish - potassium minerals. (Spicy)

Soybeans - complete protein, vitamins, A, B-complex, C, E.
Sunflower - mineral, unsaturated fatty acids, vitamins D and E.
Wheatberry - high in vitamins E and B-complex, good protein, vitamins C and E. (Sweet, chewy)
Sprout combinations not only provide extra nutrition but also can be blended for various tastes.
Seasame, Rye,
Fenugreek.
Sprouts can be eaten raw, cooked into many diverse recipes or added to salads and dips. For taste, economy, diet and health, sprouts are a versatile food you'll love to eat.

sprouting

Alfalfa sprouts are one of the most nutritious foods in the world. They are a complete protein. The roots of the alfalfa plant often go as deep as fifty feet into the earth to gather trace minerals from the soil. It is a rich source of all the vitamins A, B, C, D, E, F, and K, minerals and amino acids. After 3 to 4 days growth,

the leaves of the sprouts become green and their nutritive value increases even more. Alfalfa is the queen of sprouts, the most popular sprout used by Americans. One pound of seed makes approximately eight pounds of sprouts in five or less days. It is very economical, being many times more nutritious and less expensive than store-bought produce. Use alfalfa sprouts in snacks, salads, loaves, soup and for juicing. Its fiber is easily digested and is a wonderful intestinal cleaner.

Mung bean sprouts have been used in the orient for centuries. They are a complete protein. The Chinese brought them to America, where they have become popular. They are often found in supermarkets and restaurants. Mung sprouts are rich in vitamins A, C, and B-complex. The starch and protein in the bean is converted into simple sugars and amino acids in the sprout, which are easily used by the body. They also quadruple their vitamin content during the sprouting process. These beans are sprouted without sunlight and are best sprouted in the dark. One pound of dry beans makes eight pounds of sprouts in three to five days. They are an anti-inflation meat and produce substitute, all-in-one. Use them in salads, loaves, and green drinks.

During sprouting, proteins are converted into amino acids and amides. In germination of a seed, the amino acids are freed, but are not destroyed as in cooking, from their protein structure. This means that any seed containing all the amino acids that were in the original seed will also be a complete protein in the sprouted form. The protein is less dense due to the diluting effect of water. The breakdown of complex protein structures improves the nutritive value and digestibility of sprouts over seeds.

Simple carbohydrates in sprouts. Wheat is one of the world's staples. In three days of sprouting, its weight doubles as it develops a sweet taste. Much of the original starch has been converted into simple carbohydrates (or the simple sugars, glucose and sucrose). During the sprouting process, much of the starch in seeds, grains, beans and peas are broken down into simple sugars by the action of amylase. This makes sprouted wheat a quick energy food. The breakdown of complex starches in seeds, grains, beans and peas during sprouting, increases their nutritive value and digestibility.

Wheat has been termed by many as the 'staff of life'. When it is cooked, it becomes for many, the 'staff of death'. Living, sprouted wheat contains the eight essential amino acids or proteins needed by the body in an easily assimilable form. It also contains more vitamin C than oranges and vitamin E. Its minerals are more plentiful and more easily used by the body than those in milk. It has proven anti-cancer qualities. Wheat sprouts are blended with raisins and other fruits to make cereals, in salads and bread. It is an important winter food for cold climates.

There is a big difference between eating dry wheat or wheat products, and eating sprouted wheat or slow-dried sprouted wheat and wheat grass. The big difference being that dry wheat is chiefly made of carbohydrates, starch, proteins and if the wheat germ has not been removed, Vitamin B's. When you sprout wheat for three days, you add to the wheat, enzymes, amino acids, more vitamins and minerals. Now let the wheat grow 10 days and you add chlorophyll. You will lose some of the benefits of the fresh sprouts but you gain chlorophyll.

LENTIL SPROUTS. These are one of the most ancient beans on earth. Cooked lentils can be acid-forming, and cause flatulence. Lentils are alkaline when sprouted. They are rich in vitamins, minerals (especially) and amino acids.

FENUGREEK SPROUTS. They are an effective blood, liver and kidney cleanser. Fenugreek is an herb and has been used for centuries in the Middle East as a tea to clear away mucous in the bronchials. They're a great lymphatic cleanser and natural deodorant. They have the very pleasant fragrance of maple syrup and you will too.

RADISH SPROUTS. They are blood cleansers and heat producers. They're nice for providing warmth in the diet. They are hot, so use moderately. Also used as a natural diuretic.

CHICKPEA SPROUTS. They are a complete protein sprout and much more easily digested than when they're cooked. They make a delicious raw humus.

sprouting

Sunflower Seeds

Sunflower seeds unsalted are reputed to help lower blood pressure, improve cardiovascular health, suppress allergic reactions and help people stop smoking. Because sunflower seeds are high in potassium and low in sodium they act as a diuretic to drain excess water from tissues. They are an excellent source of "B" vitamins, including B6, niacin, pantothenate, vitamin E, minerals (calcium, iron and potassium) and fiber. Sunflower seeds are 24% protein a percentage comparable to beef. Adding 15% sunflower meal boasts the protein content of whole wheat bread by 50%.

Although sunflower seeds are very high in calories much of it is unsaturated fat called linoleic acid, a substance which lowered blood pressure in several studies. Some doctors tell their patients to eat about 1/4 to 1/2 cup of shelled, raw and unsalted sunflower seeds per day, along with daily exercise and eat abundantly of raw vegetables and fruits. Even better, sprout them.

Sunflower seeds mimic the addictive and dangerous effects of tobacco without being addictive or dangerous. Tobacco temporarily decreases the smoker's allergic reactions. Some smokers even develop respiratory problems after they quit, because these allergic reactions have been kept in check by the antiallergic effect of the tobacco. Sunflowers seeds mimic this physiological action and make quitting easier. Tobacco perks up the brain by releasing glycogen (a form of sugar) from the liver and acts as a sedative to calm down and so

do sunflower seeds. Every smoker should carry a small bag of sunflower seeds with them and every time they get the urge to smoke they should munch on a flat teaspoonful of sunflower seeds.

THE NUTRITIONAL ANALYSIS OF SUNFLOWER SEEDS IN % RDA IS AS FOLLOWS:

Amt.	Cal.	Prot.	Vit. A	Vit. C	B1	B2	B3	Calcium	Iron
2 oz.	324	32	.8	0	76	8	16	6	24
(tbs.)									
5 oz.	810	80	2.0	0	190	20	40	15	60

of sunflower seeds affords Vit. E = 26.8 LU.

2 tbs. = 2 oz.; note nutrients you will obtain from eating only 2 oz. sunflower seeds. If you sprout them the gain will be markedly increased.

Sunflower seed oil, 1 tbsp. = 12.7% of RDA for Vit. E.

Don't gobble them down; chew very thoroughly and do not wash them down with a drink. Eliminate coffee and tea, they will wreck your calcium and iron absorption. Eat 2 tablespoons daily, unsprouted, or if you prefer sprout them. *You are urged to sprout them.*

When nuts and seeds are sprouted, their enzyme inhibitors are neutralized, and they become a rich source of nutrients and calories. Overnight soaking and cooking, baking or roasting will also neutralize their enzyme inhibitors. Use more than enough water to cover them, because they will swell up. Discard the water used to soak seeds and nuts because of its chemical content. Sprouting of legumes, seeds, nuts, etc. may cure what you thought was an allergy to them, or an inability to digest them.

Sunflower seeds (raw or sprouted) are an excellent, versatile broad scale, economical, nutritious food. Learn how to use them in ways that please you. This editor enjoys a tablespoon of sprouted sunflower seeds three times a day. Their cost is approximately 16 oz. for \$1.80. Keep them in your refrigerator, *soaking in distilled water; add 1 tsp hydrogen peroxide 3% To oxygenate them and keep them fresh.*

Tapioca pearls are made from the root of the casava plant. They are cooked, ground and run through a sieve to make the pearls. They are also made into flakes and powder. When cooked, they are nutritious and easily digested. They are highly gelatinous. Mixed into your ~~OR~~ cereal it will give it an extra smooth consistency. It is 85% carbohydrate and has small amounts of protein, minerals, fats and salts. It may aid in the digestion of milk. To prepare, soak for a few hours in cold water and cook at low heat until pearls become transparent (approximately 15 minutes in a 500 watt microwave). To make tapioca pudding, beat in egg yolk, add vanilla, maple syrup or honey, milk or water, soaked raisins, wheat germ, then fold in stiffly beaten egg white and chill. This is a versatile, multiple use food worth the time and effort it takes. Preparation is easily mastered.

SPROUTING. Use approx $\frac{1}{2}$ cup of ^{organically grown} BEANS and grains. Use approx. $\frac{1}{8}$ cup (or less) of ^{organic} SEEDS. Pour them into a strainer, hold them under strong-ly running water. With seeds use a very fine mesh strainer. Put them into a ^{pint} jar with sufficient distilled or cooled, boiled water, so that as the product absorbs water and swells, there will be adequate water to insure the product remains completely submerged. When soaking is completed, rinse and place them in a jar and then in a small sauce dish so that the jar is held in a tilted position. Rinse them twice daily, morning and evening. ^{Pint or} Use quart mason jars. Steam legume sprouts for shortest time, just long enough to eliminate raw taste. Steam gets rid of the protein inhibiting enzyme, trypsin.

• Sprout: Chickpeas, lentils, lima beans, mung beans, ^{wheat berries} green peas. Soak for 1 hrs. They will grow $\frac{1}{2}$ " long sprouts in 2-4 days. Check lentils after sprouting; re any that have not sprouted.

• Risotto Seeds: Soak 5-6 hrs. and grow $\frac{1}{4}$ " to $\frac{1}{2}$ " long sprouts in 3 to 4 days.

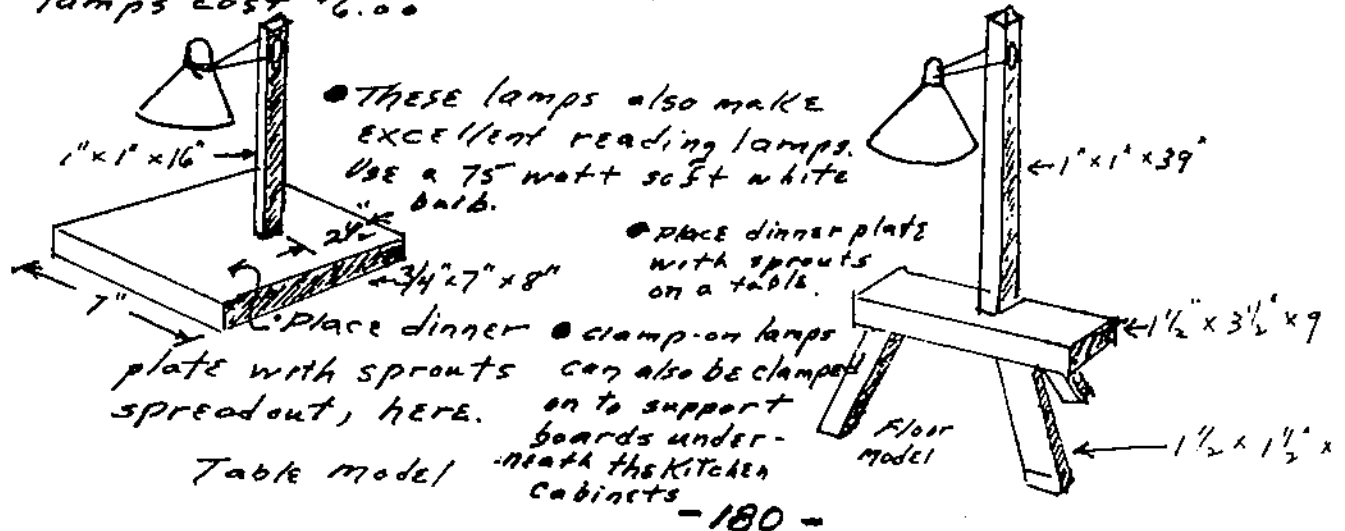
Then spread them on a large plate and place in the sunlight (indirect light is ok) Use pint size jars. ^{to grow the little green roots and thereby make chlorophyll.}

• Fenugreek and sunflower seeds: Soak for 6 hrs. and grow $\frac{1}{4}$ " to $\frac{1}{2}$ " long sprouts in 2 to 4 days. After sprouting fenugreek spread them in a large plate and pick out those which did not sprout. They will appear smaller and dis-colored, and shriveled. Use pint size jars. Cut soaked, dried fruits into small pieces, add their fruit juice enough to cover sprouts, and place in refrigerator.

• Stainless Steel Adjustable Size Steamer inserts for Your pots. Available

at Target & K-Mart. (6⁰⁰) Use for Legume sprouts.

• SPROUTING Lamps. Use a 75 watt Grow Bulb 2.25 ea. Clamp on lamps cost \$6.00



surfactant is a wetting agent; a substance, such as a detergent, that reduces surface tension. A surfactant is secreted by the cells (pneumocytes) lining the alveoli of the lungs to prevent the alveolar walls from sticking together. In its absence, as in the immature lungs of premature babies and in some diseases, the lungs tend to collapse. See atelectasis, respiratory distress syndrome.

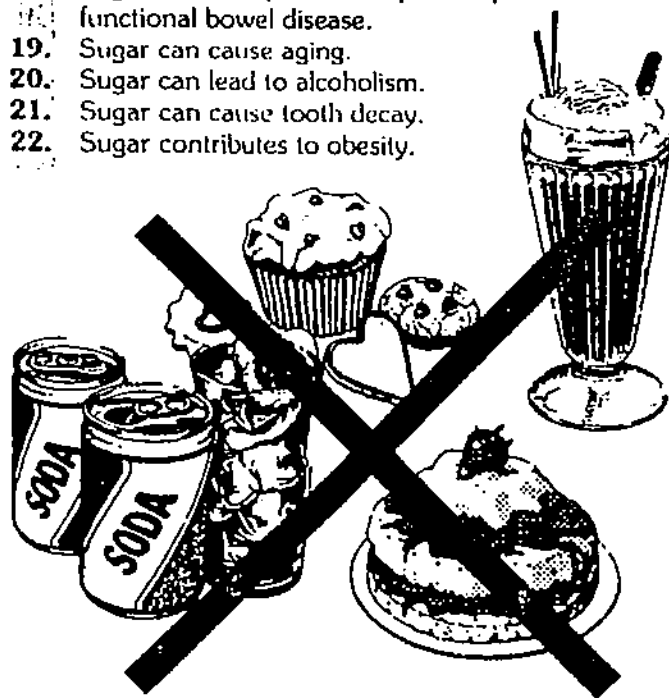
SURFACTANTS: Mouthwash, gargle, enema, cleanse.
 *34% Grapefruit Extract 1 oz. 795. 1 to 2 drops in 4 oz. water
 organic brown cider vinegar: 1/2 tsp per 4 oz. water 1 gal 3⁰⁰.

"59 Reasons Why Sugar Ruins Your Health"

By Nancy Appleton, Ph.D., author of **LICK THE SUGAR HABIT**

Bibliography with References from Medical Journals, Books and Periodicals

1. Sugar can suppress the immune system.
2. Sugar upsets the minerals in the body.
3. Sugar causes hyperactivity, anxiety, difficulty concentrating, and crankiness in children.
4. Sugar produces a significant rise in triglycerides.
5. Sugar contributes to the reduction in defense against bacterial infection.
6. Sugar can cause kidney damage.
7. Sugar reduces high density lipoproteins (LDL).
8. Sugar leads to chromium deficiency.
9. Sugar leads to cancer of the breast, ovaries, intestines, prostate and rectum.
10. Sugar increases fasting levels of glucose and insulin.
11. Sugar causes copper deficiency.
12. Sugar interferes with absorption of calcium and magnesium.
13. Sugar weakens eyesight.
14. Sugar raises the level of neurotransmitters called serotonin.
15. Sugar can cause hypoglycemia.
16. Sugar can produce an acidic stomach.
17. Sugar can raise adrenaline levels in children.
18. Sugar malabsorption is frequent in patients with functional bowel disease.
19. Sugar can cause aging.
20. Sugar can lead to alcoholism.
21. Sugar can cause tooth decay.
22. Sugar contributes to obesity.



23. High intake of sugar increases the risk of Crohn's Disease, and ulcerative colitis.
24. Sugar can cause changes frequently found in people with gastric or duodenal ulcers.
25. Sugar can cause arthritis.
26. Sugar can cause asthma.
27. Sugar can cause Candida Albicans (yeast infections).
28. Sugar can cause gallstones.
29. Sugar can cause heart disease.
30. Sugar can cause appendicitis.
31. Sugar can cause multiple sclerosis.
32. Sugar can cause hemorrhoids.
33. Sugar can cause varicose veins.
34. Sugar can elevate glucose and insulin responses in oral contraceptive users.
35. Sugar can lead to periodontal disease.
36. Sugar can contribute to osteoporosis.
37. Sugar contributes to saliva acidity.
38. Sugar can cause a decrease in insulin sensitivity.
39. Sugar leads to decreased glucose tolerance.
40. Sugar can decrease growth hormone.
41. Sugar can increase cholesterol.
42. Sugar can increase the systolic blood pressure.
43. Sugar can cause drowsiness and decreased activity in children.
44. Sugar can cause migraine headaches.
45. Sugar can interfere with the absorption of protein.
46. Sugar causes food allergies.
47. Sugar can contribute to diabetes.
48. Sugar can cause toxemia during pregnancy.
49. Sugar can contribute to eczema in children.
50. Sugar can cause cardiovascular disease.
51. Sugar can impair the structure of DNA.
52. Sugar can change the structure of protein.
53. Sugar can make our skin age by changing the structure of collagen.
54. Sugar can cause cataracts.
55. Sugar can cause emphysema.
56. Sugar can cause atherosclerosis.
57. Sugar can promote an elevation of low density proteins (LDL).
58. Sugar can cause free radicals in the blood stream.
59. Sugar lowers the enzymes ability to function.

Continued

"The doctor of the future will interest his patients in the care of the human frame, in diet, and in the cause and prevention of disease."

— Thomas A. Edison

Author's Preface

SUNLIGHT COULD SAVE YOUR LIFE by Zane R. Kime, MD

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Perry, CA 95663
1-916-663-1661

At one time or another, on the road of life, all of us have arrived at a crossroads in our thinking. Practicing medicine has brought me there, perhaps an illness will place you there too.

As I have seen the options, we may, on the one hand, choose to respect and appreciate nature. We may see within her a wisdom and intelligence that far surpasses man's greatest technological achievements. We may come to realize that man's best interest is served through obedience and conformity to nature and that sound health is the result of this obedience.

On the other hand, we may choose to believe that we can improve upon nature, that we can manipulate her to our own benefit. We may believe that we are responsible to nothing but our own pleasure, that we may freely violate and disregard natural law and then artificially manipulate the deleterious consequences. We may believe we can eat poorly, sleep rarely, work constantly, exercise sparingly, and avoid any physical consequences by the use of some wonder drug or miraculous surgery. It is evident that this is the road most of us choose, for during the 1900's, the volume of drug business in the United States has increased by a factor of 100. It is estimated that 20,000 tons of aspirin are consumed per year, or 225 tablets per person. Not only is the drug industry booming, but also, as everyone already knows, there has been a tremendous increase in health care costs. To live indiscriminately and pay the price later is easier — for the moment. Maybe that's really why we choose it. It requires no discipline and no sacrifice. It conforms to our cultural pressures. *Our country is committing slow motion suicide!* (1980)

In my medical practice, I see many whom no drug or surgery will restore to health. The hoped-for escape becomes only a means to muffle the most noxious complaints or a method to prolong a dying existence. For all our advances in science, we still remain humbly, pitifully dependent upon the forces of nature: air, water, food, and sunlight. It seems in fact, the more advanced our technology becomes, the more capable we are of destroying ourselves — not only by a nuclear holocaust, but also by more insidious inroads into our health such as the tremendous change that has taken place in the area of food technology. Death has always been easily within man's grasp, while life and health remain the property of nature and her forces. Out of this conviction this book has been written. I believe there is ample evidence in the scientific literature that sunlight, free of technological distortions, is not only beneficial, but necessary for human health.

*Do not be
scammed.
Become a
Vegan.*

Zane R. Kime, MD, MS

*Dr. Kime's Book should be in your MUST READ LIST.
Here are 5 pages (1259-1264) to help motivate you to read and
apply his book thoroughly. These pages are from the 1980
edition of his book which was titled simply "Sunlight".*

All life on this earth is dependent upon the sun. It is the source of all light and warmth, and most of the energy on earth comes, or has come, from the sun. The direct rays of sunlight that strike this planet sustain the biosphere in which we live. The sun provides the energy for the plant to photosynthesize the products necessary for growth. This energy is then stored in the plant in the form of carbohydrates, proteins, and fats to be transferred to animals or humans upon consumption. Similarly, the sun provides the energy necessary for the growth of trees, and it is this energy that is released, in the form of heat, upon combustion of the wood. The sun's energy also provides the fossil fuels upon which we find ourselves so dependent. Fossil fuels are formed when decaying plant matter is acted upon over a long period of time by the forces of heat and pressure. The energy from the plants and the forces upon them is stored in the fossil fuel to be released upon combustion.

Even the energy derived from hydroelectric plants is ultimately dependent upon the sun. Hydroelectricity is derived from the force of large rivers descending from the mountainous areas of lower elevations. The sun is responsible for this, in that air, which has been warmed by the sun, is capable of absorbing water. Sun-warmed air passing over the oceans absorbs water from the oceans. As it passes over the land masses, and moves up to higher elevations, it is cooled. When cooled, air cannot hold as much water, and some of the water will precipitate usually as rain or snow in the mountains. This feeds the rivers which in turn provide hydroelectric power. So, it is apparent that energy, and, subsequently, life, on this planet, are dependent upon the sun.

If the gross biosphere (the area of the planet in which life is sustained) is so dependent upon the sun, what of the more individual sphere of the human body? Is the human physical organism itself directly dependent upon the sun?

Throughout almost all of recorded history, man has lived and worked out of doors with full exposure to the natural sunlight. Pastoral and agricultural activities demanded an outdoor life. This was abruptly changed by the industrial revolution when thousands moved to the cities to work indoors in factories. With the industrial revolution there came also the insidious belief that man was no longer dependent upon the natural world, but was independent of it. Only in relatively recent history, has man been working indoors in factories and offices, or in mines far below the surface of the earth. In our modern

day society, we live in a glass jungle, where most of our time is spent behind window glass, which is an effective barrier to the ultraviolet portion of natural light.

Our homes, our transportation, and our places of employment all shield us from the sun. And, since there is such wide usage of fluorescent and incandescent light in offices, schools and factories, it is evident that most people, in

the present day industrial society, spend most of their waking hours under a light that is entirely different from the kind that comes from natural sunlight.

Sunlight is composed of many different energy levels. This energy is transmitted in the form of electromagnetic waves. These waves vary in length from .00001 nanometer for cosmic rays (a nanometer is one billionth of a meter) to about 4,990 kilometers (3,100 miles) for electric waves.

Not all of these energy waves reach the earth's surface. The layers of atmosphere that surround

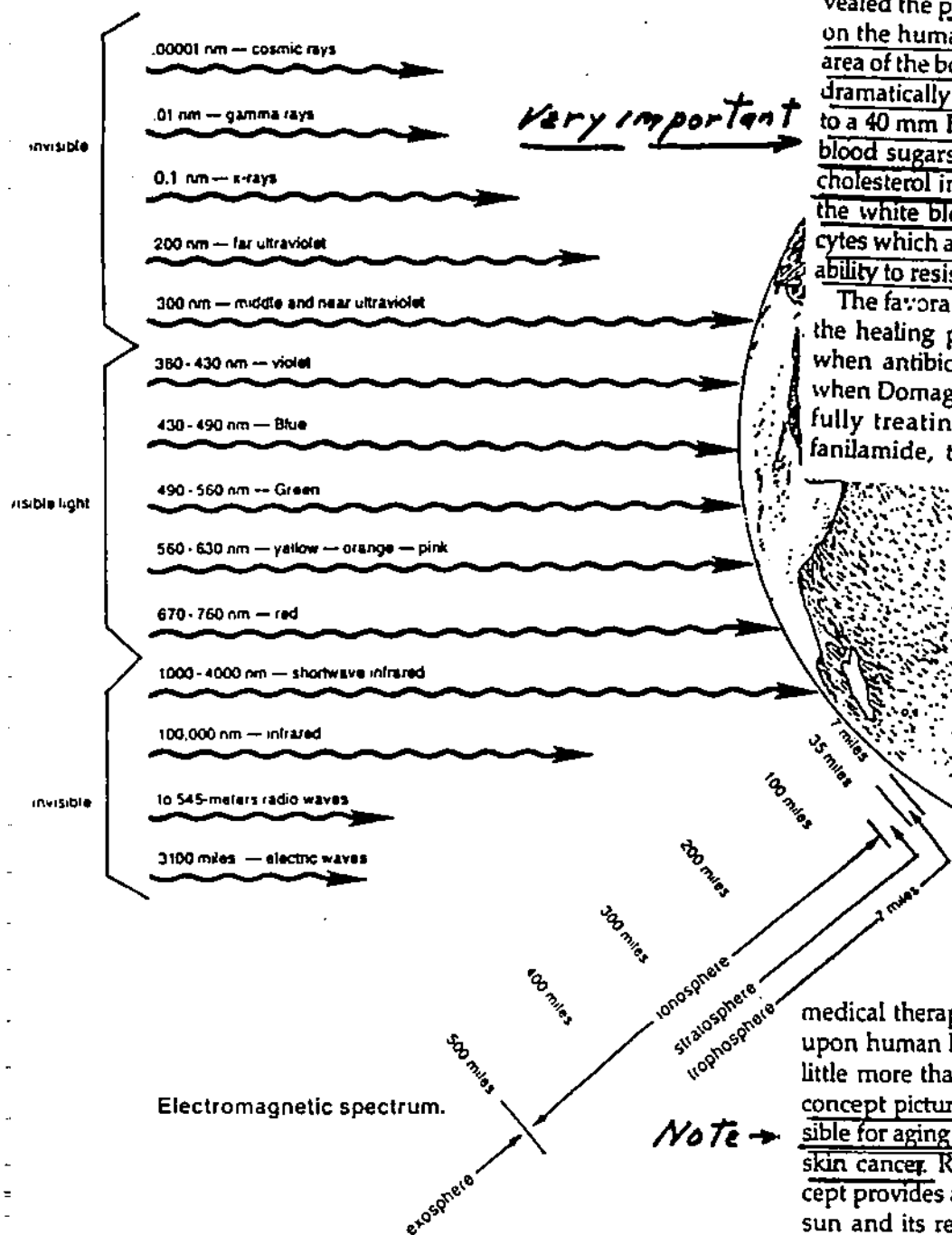
the earth protect it from absorbing all but a small portion of the wave lengths emitted by the sun (the electromagnetic spectrum). Of the waves that do reach the earth, only a very small portion can be seen by the human eye. It has been estimated that the eye sees only about 1% of the entire electromagnetic spectrum. Ultraviolet and infrared waves reach the earth's surface, but are invisible to the human eye. It is the ultraviolet portion of sunlight that has proven to be the most biologically active. And, unfortunately, it is the ultraviolet light that is the most easily eliminated by window glass, sunglasses, and clothing. The amount of ultraviolet light available depends upon the location on the earth and the season. The more atmosphere ultraviolet light must pass through the less there will be to reach the earth.

This is why in winter, when the northern hemisphere is tilted away from the sun and the sunlight must pass through more atmosphere,

there is less ultraviolet light available. At 40° latitude, ultraviolet light is available in the winter for only about 4 hours (10 am to 2 pm) while the sun is highest in the sky. In the summer ultraviolet light is available over a longer period of time, from 8 am to 4 pm.

great tragedy.

Rays of the sun



Electromagnetic spectrum.

Students of history know that men anciently revered the sun as a life-giving, healing power. From the ancient Greeks down to the beginning of the 20th century, observations were made, and detailed records were kept, that reveal the sun to be a positive factor in the health of man. Downes and Blunt, in 1877, discovered the dramatic ability of sunlight to destroy bacteria. From this point onward sunlight was enthusiastically studied as the only, then known, effective means of treating bacterial infections. Niels Fin- sen, in 1903, won the Nobel Prize for successfully treating skin tuberculosis with the ultraviolet portion of light.

Very Important

Studies continued which vealed the potent multifaceted effect the sun had on the human body. Single exposures of a large area of the body to ultraviolet light were found to dramatically lower elevated blood pressure (to a 40 mm Hg drop), to lower abnormally high blood sugars as found in diabetics, to decrease cholesterol in the blood stream, and to increase the white blood cells, particularly the lymphocytes which are largely responsible for the body's ability to resist disease.

The favorable interest of the medical world, in the healing power of sunlight, began to wane when antibiotics were discovered. Since 193 when Domagk won the Nobel Prize for success- fully treating bacterial infections with sul- fanilamide, the pharmacologic dominance in

Mnemonic Key To The Visible spectrum: ROYGBIV

medical therapy has persisted. The sun's effect upon human health has come to be regarded as little more than a placebo. The current medical concept pictures a destructive sun, one respon- sible for aging of the skin and capable of causing skin cancer. Research stemming from this concept provides a rich source of information on the sun and its relation to human health. Undeni- ably, the sun plays a role in skin cancer and aging, but is it the ultimate culprit? The author became increasingly convinced, as he studied the avail- able research data, that the highly refined west- ern diet plays the leading role, both in the aging process and in the development of skin cancer, and that sunlight seems only to accelerate the problem. **BECOME A VEGAN.**

Chemotherapy, in the meantime, is proving to be less than the total answer to human disease that it was at first thought to be. Drug resistant strains of bacteria are developing at an alarming rate. The inability to develop an anti-viral agent has left many diseases uncontrolled. Immunol- ogy, set aside since the era of antibiotics, is now

gaining prominence in medical research and thinking. And if developing the immune response of the individual assumes its proper emphasis in medical thinking, sunlight's contribution to that goal will be recognized. With advances in state health laws and sanitary measures, our major problem today is not one of infectious disease, but of chronic degenerative disease. And it is in this area, as well as in the realm of antibacterial activity, that the sun's effects are most striking. It becomes obvious when the data are studied that the main chronic degenerative diseases are the very diseases most benefited by exposure to sunlight. The author suggests that the sun continues to be the potent, life-giving, health-dealing force for modern man that it was intuitively recognized to be by primitive man, and that separation from sunlight will result in disease just as surely as will separation from fresh air, food and/or water. To explain and support this premise is the aim of this book.

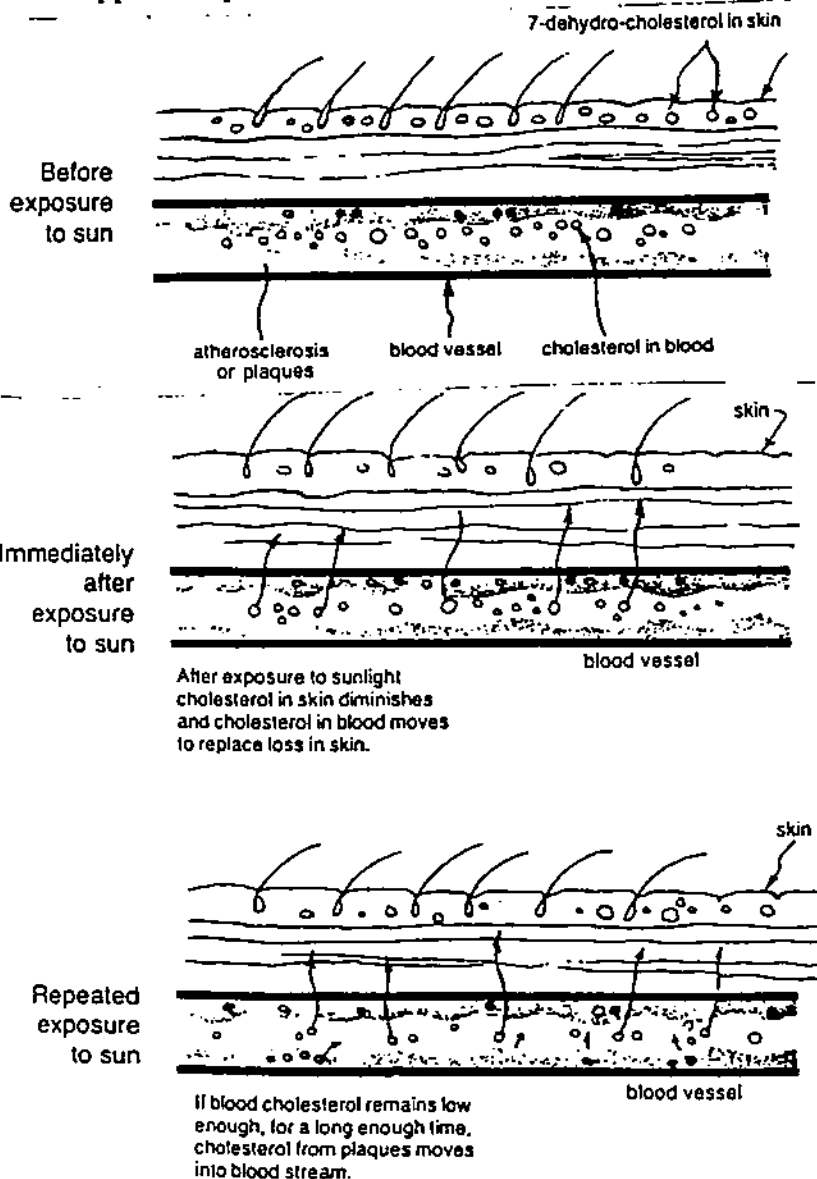
Note

When the skin is exposed to sunlight, cholesterol metabolism is changed so rapidly and to such a great extent that the blood cholesterol is decreased (6).

It has been commonly believed that once cholesterol is deposited on the walls of arteries it is a permanent alteration. However, studies have shown that the cholesterol within the plaques is also exchangeable with cholesterol in the blood (7). This would open the possibility of reducing the storage of cholesterol in plaques if cholesterol in the blood remained low enough.

A study was done using 30 patients who had hardening of the arteries. Each of these patients' blood cholesterol level was taken before a single sunlight treatment. Blood cholesterol levels were taken again two hours after the sunlight treatment. The results showed that there was almost a 13% decrease in the blood cholesterol following the treatment (8). Other studies with larger numbers of patients show similar results (6).

In some patients, I have seen a much more dramatic drop in serum cholesterol and triglycerides, following a series of sunlight treatments. One 65 year old lady was given sunlight treatments for four days in succession. At the start of the treatments her cholesterol was 333 mg/dl and triglycerides 299 mg/dl. Four days later, without any change in diet or exercise, her cholesterol and triglycerides had taken a dramatic plunge to 221 and 197 mg/dl respectively, achieving over a 100 point drop in both indexes.



Sunlight and the movement of cholesterol.



Early onset of atherosclerosis.
Our great national tragedy.

Fifty percent of all people in the United States die from hardening of the arteries, heart attacks and strokes, making this group of diseases the leading cause of death. Early signs of heart disease can be detected in the coronary arteries of children as young as five years of age, and by 15 years dangerous lesions are relatively frequent (1). At the age of 16-20, over half the population shows evidence of hardening of the coronary arteries.

In the early stages of heart and arterial disease, individuals usually feel no symptoms of the disease. Although their electrocardiograms are often negative, and test results, revealing the level of fat in the blood, are usually normal for the American population, recent evidence seems to indicate that in many persons, heart and arterial diseases are developing at an earlier and earlier age. Today it is not uncommon for men in their twenties to suffer from heart attacks.

- Read and apply, Whitaker pgs 189-190, cerebral vascular insufficiency and cholesterol pgs 191-202.
- Therefore, everyone should stop eating meat, and become vegans.

Avoid suntan lotions and sunscreens.

"What kind of cream, lotion or screen do I put on my skin while sunbathing?" This question must always be answered with an emphatic, "No kind!" Clean skin is the best (skin washed with

plain water to remove soap films and cosmetic that may sensitize it).

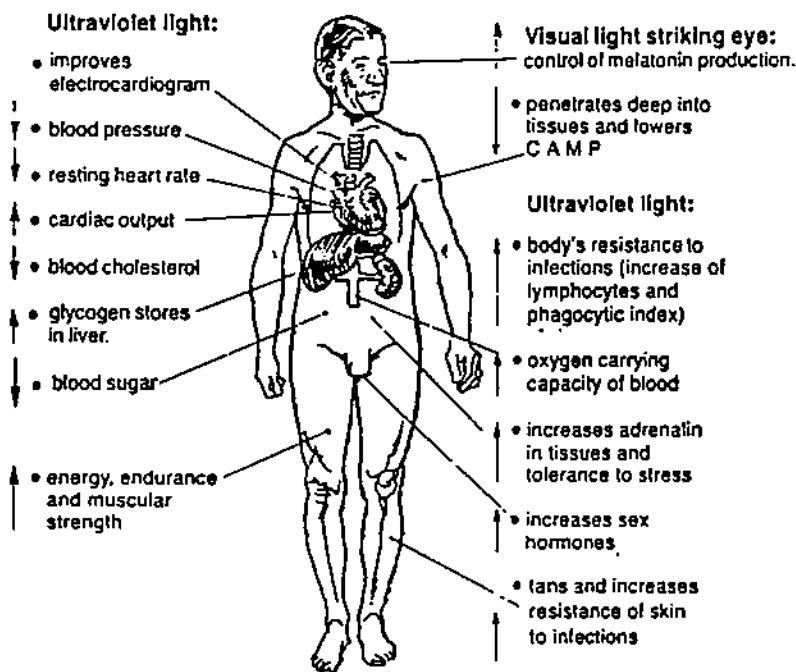
"But I burn so easily that I can't stay out in the sun very long." Then, get out of the sun sooner as there is no excuse for lying out in bright sun light for hours, using lotions and screens, if you are not seasoned to it by graduated, day by day exposure. "The sun dries my skin." Not if you use sunlight moderately and in graduated doses. If you overdo it, certainly your skin will dry off and flake and peel, but used moderately, sun light will give the skin a soft, velvety-smooth feel along with a healthy glow.

As previously mentioned in the chapter on cancer, fat or oil applied to the skin will stimulate

the formation of cancer cells (4). Most of the suntan creams, butters, and lotions have fat in their base and they should not be used.

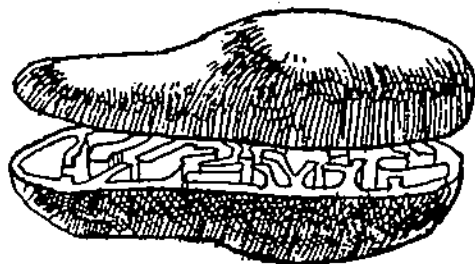
Sunscreening agents, like those based on para-aminobenzoic acid (PABA), will filter out sunburning rays but will still allow some tanning rays to pass. However, many of the therapeutic and healing effects of sunlight are blocked out by these sunscreening agents (5).

PABA, which is finding its way into so many sunscreen preparations, is running into trouble. Researchers have now discovered that the chemical causes increased genetic damage when exposed to sunlight. Damage to the genes and chromosomes composed of DNA is serious because the cells are not able to properly reproduce themselves if their genetic material is damaged. In a recent research paper, Dr. Hodges states, in this paper we present results which indicate that PABA can increase the formation of ultraviolet induced damage to DNA at wavelengths which are present in normal sunlight" (6). The long term effects to the skin cells of this genetic damage are at present unknown.



Summary of systemic effects of sunlight, and exercise

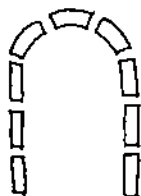
- The systemic effects of exercise are the same as the above. Sunlight, exercise, and a vegan diet are synergistic (see pg. 12 for definition).
- Before starting your sunbathing program, if you have been eating the SAD (Standard American Diet) go on a vegan diet (be a purist) and get your cholesterol and triglyceride levels down to their lowest possible level. (approx 170 or less).
- Read and apply, assiduously, Balch pgs 206-209, 299, 300 weakened Immune System 311-312, Blood purifier pg. 319. Chelation Therapy 320-321, apply oral chelation.



mitochondria

cell

**Mitochondria —
power house of the cell.**

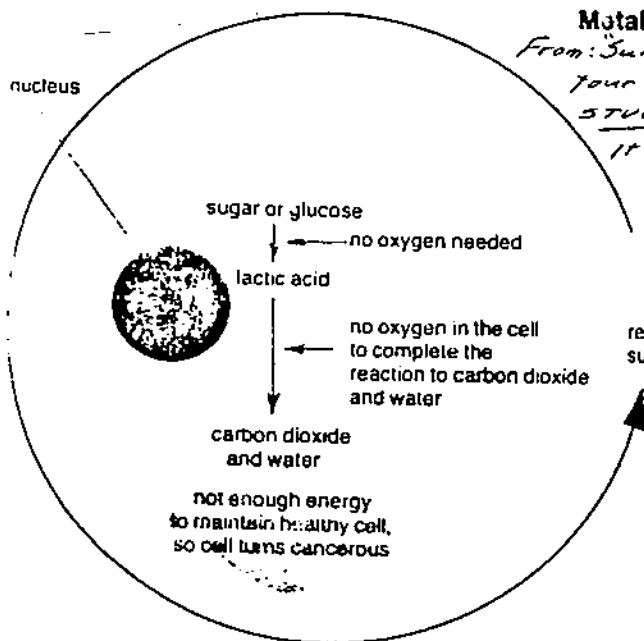


polyunsaturated fat —
cis fat



polyunsaturated fat —
trans fat

**Difference between the trans and cis
form of polyunsaturated fat.**



Characteristics of malignant cell.

**sugar or
glucose**



**carbon dioxide
and water**

- complex reaction
requiring over
30 steps
- oxygen required
- 38 units of energy
- normal cells go
all the way to
this point.

Metabolism of normal cell

**sugar or
glucose**



lactic acid

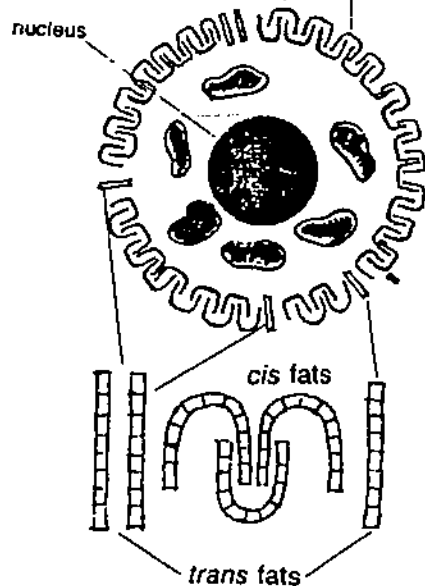
- relatively simple reactions
- requires no oxygen
- two units of energy
- cancer cells stop here

Metabolism of cancer cell

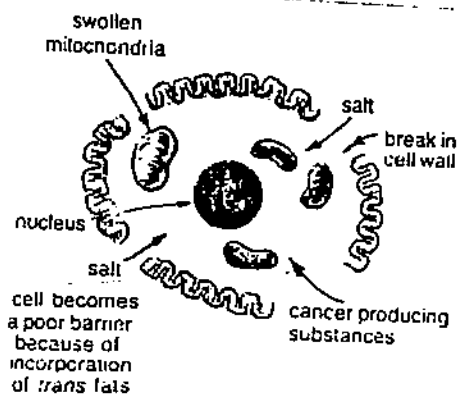
*From: Sunlight Could Save
Your Life by Zone Time.
STUDY this book.
It's a MUST*



cis fats



**Incorporation of distorted trans fats
into cell wall.**



Oxygen use stopped by trans fat.

A molecule of polyunsaturated fatty acid as comes in nature is shaped like a horseshoe. The horseshoe shape is incorporated into the walls of cells and mitochondria as part of the structure.

When the polyunsaturated fat is removed from the natural food, it has to be refined and deodorized and also may be hydrogenated depending upon its intended use. During this process, some of the polyunsaturated fat is changed from the natural horseshoe shape to a straight chain-like structure. The natural horseshoe shape is called the cis form; the straight shape is the trans form.

Pure liquid oil may have up to 6% trans fats, margarines up to 54%, and solid vegetable shortening up to 58% (20, 21, 22, 23).

SUNLIGHT COULD SAVE YOUR LIFE - LEARN TO USE IT WISELY

• Sunlight may cause skin cancer when the skin is burned. Practice Smart Tanning.

• Burning causes free radicals.

• Stopping free radicals in skin stops cancer.

• Skin burning produces cholesterol alpha-oxide (a free radical) can cause cancer. Can be inhibited by certain nutrients in the diet.

• High fat diet promotes skin cancer when the skin is burned. Also breast and colon cancer.

• SAD American Diet with its poor nutrition, poor bulk, fiber, water and high calories increase, greatly, the risk of all cancers and obesity.

• Beware of all fats: saturated, and refined polyunsaturated which will promote skin cancer. Includes lotion, creams and oils.

• Normal cells obtain their energy by burning sugar (glucose) to carbon dioxide and water. (a) Cancer cells obtain their energy by changing the sugar to lactic acid. Oxygen is required for step (a), but not for step (b). (b) Cancer cells are damaged and cannot burn the sugar to carbon dioxide and water. It's a complex process of 30 steps that weakened cancer cells cannot do. Thus cancer cells are unable to maintain normal cell structure and function, and they become malignant.

• Mitochondria are the power house of the cells. Free radicals damage the cell walls and the oxygen can't be utilized to burn food to carbon dioxide and water and cell is converted to cancer cells.

• When natural oils are refined and hydrogenated they are converted into trans fatty acids. When eaten the mitochondria become swollen and their function is inhibited, and they cannot burn oxygen, and cells become cancerous. Trans fatty acids are in all processed foods - therefore they must not be eaten!

• A weakened immune system from eating SAD diet invites cancer.

• Remember free radicals inhibit oxygen utilization by the cells, depresses the immune system & causes cancer cells.

• Cancer prevention is achieved with a full, true, vegan diet. Our food must be whole, unprocessed, brimming with natural nutrients.

• Cholesterol alpha-oxide is inhibited by Vit A, C, E, selenium, & carotene. They increase the time people can be out in the sun before burning and decrease the growth rate of skin cancer.

• Nutrients in a regular diet may be sufficient to prevent deficiency but may not be enough to prevent cancer.

• Sunlight stimulates the immune system, increasing its efficiency. Espec. in the production of antibodies. Oxygen slows the growth of cancer cells and finally stops them altogether.

• Elevated blood pressure causes cancer. Since sunlight dramatically lowers blood pressure it indirectly inhibits cancer.

• X-ray treatments cause cancer.

• Chemotherapy causes cancer espec. leukemia.

• Drugs used to treat lupus, erythematosis, kidney diseases, arthritis, psoriasis cause leukemia.

• Eating a unrefined diet rich in Vit's C, E and carotene is the greatest step you can take to prevent skin cancer. It will give you.

1. protection against free radical formation and damage to cells.
2. Skin cholesterol will not be changed into cancer producing substances.
3. Fat consumption will be greatly reduced.
4. The immune system will not be reduced by refined oils.

All these factors work to produce a healthy skin and the sun can then be enjoyed for its remarkable positive contributions to health. When these factors are working well, THEN SUNLIGHT INHIBITS ALL CANCERS!! SUNLIGHT IS VITAL FOR HUMAN HEALTH.

THERMAL FLEECE™

A UNIQUE, EASY TO SEW INSULATING FLEECE ENGINEERED FOR THERMAL EFFICIENCY

FACTS ON THERMAL FLEECE:

- Outer layer—a metallic film with excellent heat retention.
- Fleece layer—adds to THERMAL FLEECE'S insulating properties, while providing the perfect loft for many home dec & fashion applications.
- Lightweight and comfortable.
- Odorless and non-allergenic.
- Easy to sew, cut, & handle.
- Layers are needlepunched for stability—will not shift, settle or mat over time.
- Machine washable & dry cleanable.

• For Insulation where coolness is desired in refrigerator type applications such as lunch sacks, the metallic layer should be toward the inside.

• THERMAL FLEECE is not designed to withstand high direct heat. Therefore, it is not recommended for such applications as kitchen pot holders or oven mitts.

CARE:

Machine wash, warm, tumble dry, low heat. Or professionally dry clean—do not iron or use heat.

CONTENT:

100% Polyester fleece/
100% Polyester metallic
interlining

SEWING TIPS:

- Cut and sew THERMAL FLEECE as you would any other layer of fabric.
- To properly protect THERMAL FLEECE, always use it as an interlining between an outer fabric and an inner lining.

• THERMAL FLEECE can be quilted like any other fleece.

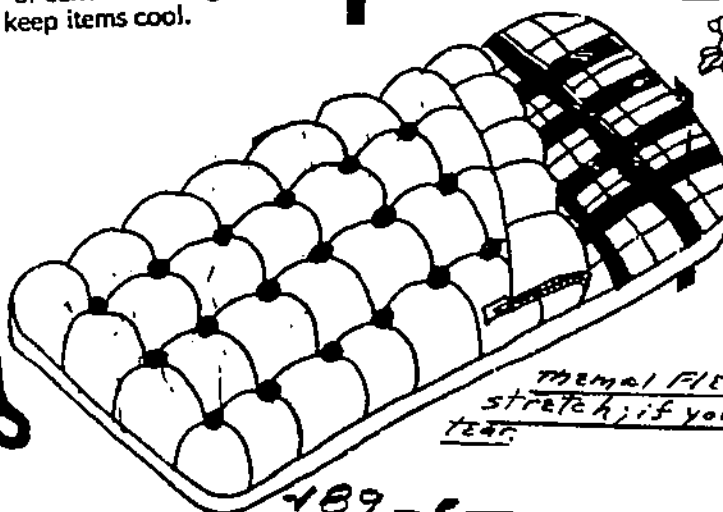
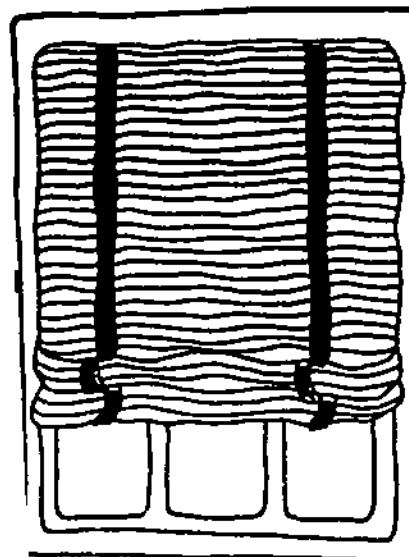
- If additional loft is desired (for comforters, etc.) other fiberfill or fleece materials such as HTC FLEECE may be used in conjunction with THERMAL FLEECE. 6.00 per running yard (45" wide). HTC FLEECE is 11.00 per yd. (45" wide.)

PROPER PLACEMENT:

- For optimum insulation, position the metallic layer away from the heat source:
- For clothing, the metallic layer should be away from the body, toward the fashion fabric.
 - For winter window shades, place the metallic layer toward the window; for summer shades, the metallic layer should face the room.
 - For insulation where warmth is desired in sleeping bags and comforters, the metallic layer should be toward the outside.

CREATIVE USES... TRY THERMAL FLEECE IN A VARIETY OF FASHION AND HOME DECORATING PROJECTS!

- Ideally suited for ski wear, active wear jackets and vests, muffs, hats and all-weather outerwear.
- Excellent for comforters, throws, sleeping bags, roman shades.
- Perfect for interlining costumes and uniforms.
- Try it in fabric lunch sacks or canvas tote bags to keep items cool.



Thermal Fleece will not stretch; if you do it will tear.



HANDLER TEXTILE CORP.
Consumer Products Division
24 Empire Blvd.
Moonachie, NJ 07074

489-2-

THE COMING OF AGE OF FAR INFRARED WAVES

During the last decade, a silent revolution has been taking place in Japan in the fields of healing, preservation, cooking, drying and heating. It is the use and application of safe and efficient Far Infrared (FIR) Wave technology, replacing the potentially harmful microwave technology. More than 150 significant patents were granted to the Japanese in the field of FIR between 1977 and 1987.

FIR waves deeply penetrate organic substances and water (2 to 3 inches), the warming effect is very uniform. We live in an environment of FIR waves and our body receives and radiates them. Married couples live longer than single people. One of the reasons may be because they act as transmitters and receivers of FIR waves to each other while sleeping. If you sleep alone, you act as a transmitter without receiving any FIR waves.

The list of FIR products available in Japan is amazing: sleeping pads, FIR sauna, FIR plastic plate to keep fish and vegetables fresher longer in your refrigerator, Bio-Mate discs for cooking, FIR socks and gloves, FIR hair dryer, FIR vest, FIR range oven, FIR ceramic paper, and Far Infrared Wave Clinical Treatments.

Dr. Toshiko Yamazaki, MD, owns a clinic in Japan where she continues her medical research utilizing Far Infrared wave technology. She attributes the successes of the FIR wave treatments to the capability of FIR waves to remove toxins from the body. This may be an oversimplification, but in general, toxins in our body are acidic. Where the toxins are accumulated, blood circulation is blocked.

Therefore FIR wave treatment is effective in expanding clogged up capillary vessels and successfully dissolving the hidden toxins into the blood and eventually out of the body via urine and perspiration.

We have an effective way to demonstrate the reduction of acid while sitting on our Thermatech Seat, which utilizes the FIR wave technology. Cut up a lemon into several pieces. Put half of the pieces on a Thermatech Seat and half on a regular plate. Allow the pieces to sit on the seat for 20 minutes or so. Then, have your testers taste the lemon pieces that have been on the seat first and then taste the others. They will notice a marked difference between the two. The lemon that was on the Thermatech seat will be milder because the acid has been partially reduced. Sitting on a Thermatech seat all day will do wonders in helping the body to reduce and eliminate the acid wastes in the body.

Nikken also has available a plate coated with special oxides which reflect the FIR. This plate can demonstrate how it can reflect the FIR waves. Place

an ice cube on the FIR plate and one on a regular plate. The ice cube on the FIR plate will melt quickly showing how the plate reflects the FIR waves. The ice cube on the other plate will just be starting to melt when the first one is already gone. People are amazed also at how cool the plate feels to the touch. They expected it to be warm or hot to melt the ice so fast. The benefits are the Thermatech seat reflects back to the body its own FIR waves which penetrate deeply and help the body to maintain body warmth without creating more blotic waste while reducing the acid toxins already in the body! We are looking forward to more FIR wave products to be introduced to our line of revolutionary, incredible health and wellness products! NOTE: Order your FIR Demo Plate from Nikken.



Nikken Did It Again... They have taken the Far Infrared Waves Technologies and woven it into fabric. It's called THERMATECH. And it may well revolutionize the way we use support systems for critical bone and joint stress points such as knees, ankles, wrists, elbows and back. Thermatech uses the double insulation principals of physics to help generate warmth through natural area stimulation. It is commonly accepted that the proper generation of natural heat can go a long way toward soothing minor stresses, strains, and resultant pain—and toward helping promote greater flexibility. Thermatech has applied all this design expertise and more to offer you simply the finest supervisor support system available today—literally from head to toe.

- This is an informational sheet published by the Nikken Corp. concerning the use of far infrared waves for human therapy
- Apply pages 189 a-d to achieve the above at the lowest possible cost.
- Read this page VERY critically. You will be amazed at how far marketing claims can go. Question many of these claims. A Nikken Kenkotherm Seat to place on your chair costs 150⁰⁰ to 195⁰⁰.
- Handler Thermal Fleece costs 6.00 for a piece 36" x 45".
- A Nikken magnetic pad (high density) twin size, costs 690.00. A comparable one made in the U.S. is 249.00. It's 36" x 48" and has 350 magnets. My doctor price (which will be your price, is greatly less).
- A comfort seat is 16" x 36". Cost of Thermal Fleece will be 2.00 per seat. Check K-Mart etc. for cost of a seat with a backrest.
- Learn to make the above yourself and save hundreds of dollars.

-189d.

THYROID PROBLEMS - 7 MILLION AMERICANS AFFLICTED

42 Of Hypo thyroid Persons Are Undiagnosed Or Misdiagnosed.

Hypo: Subnormal Activity Of The Thyroid. A Major Cause Of Depression. 15% Of Depressed People Are Hypothyroid.

Thyroid Tests:

T4 Thyroxine - A Thyroid Hormone. Low Level Indicates Hypo.

TSH Thyroid Stimulating Hormone. Secreted By The Pituitary Gland. Under Secretion Results In Hypo. Symptoms: Mental & Physical slow down. Weight

Gain, Dry And Coarsening Of Skin, Sensitivity To Cold, Constipation, Fatigue, Sleepiness.

Hyperthyroidism Over Activity Of The Gland. Oversecretion Of TSH. Tumor Overgrowth, Cancer Of The Gland

Grave's Disease, Exophthalmic Goiter, Swelling And Protusion Of The Eyes.

Thyroiditis: Acute Bacterial Or Viral Infection. Chronic Autoimmunity Response. Lymphocytes Invade The Gland.

THYROID PROBLEMS

pg 2

Thyrotoxicosis - Caused By Hyperthyroidism. Symptoms: Rapid Heart Beat, Sweating, Tremors, Anxiety, Increased Appetite, Weight Loss, Heat Intolerance.

Treatment: Thyroid Tablets (Orally) Or Synthroid (Synthetic Thyroid) Or Surgery.

Treatment of Hyperthyroidism: Surgical Removal of Gland. Radiation Iodine To Destroy Part Of Thyroid Gland, Drugs Which Interfere With Thyroid Production.

Iodine: Needed In Sm. Amts. For Healthy Growth & Development. Adult Body Has 30mg. Concentrated In Thyroid Gland, which Requires Iodine To Synthesize Thyroid Hormones. Deficiency Causes Goiter. Adult RDA = 150mcg. Found In Sea Food, Vegetables, Grains.

In Iodine Rich Soil:
 Now Code.
 2680 Kelp 150mcg 200 Tabs 2.50
 2682 Kelp 150mcg 500 Tabs 5.00
 501 G.R.I.T.S. 1/4 cup = 100% RDA for iodine.
 Read pgs 89 and 90. Note item #1030 T.G. and 90-1400 Dr. Price 90 for 700. They are natural from bovine thyroid glands.

Toxication And Denutrition of Our Food

<u>3 Billion Lbs. of Poisons Are</u>	<u>BHT Causes Metabolic Stress</u>
<u>Poured on Our Farmlands Yearly</u>	<u>Growth Retardation, Weight</u>
<u>Mother's Milk In Toronto Has</u>	<u>Loss, Increase Of Liver Weight</u>
<u>Poisons Used In Central America</u>	<u>Liver And Kidney Damage, Bakt-</u>
<u>Mother's Milk In Denmark Has</u>	<u>ness, Fetal Abnormalities,</u>
<u>Poisons Used In Michigan.</u>	<u>Increased Cholesterol,</u>
<u>Air Is Poisoned By Acid Rain</u>	<u>Major Changes In Brain</u>
<u>& Industrial Pollutants;</u>	<u>Chemistry & Behavior Patterns.</u>
<u>Seeps Down To Aquifer, We</u>	<u>Sodium Nitrate Used In Pro-</u>
<u>Pump It Up And Drink It.</u>	<u>-cessed Meat-Acarcinogen.</u>
<u>Our Grains Are Robbed Of</u>	<u>Plaster Of Paris & Anti-freeze</u>
<u>Their Nutrients By Refining,</u>	<u>Added. Batter Whipping Fills</u>
<u>And Polluted With Preserva-</u>	<u>Dough With Large Air Bubbles.</u>
<u>-tives & Anti-Fungal And</u>	<u>Saw Dust Added To Make Lite</u>
<u>Anti-Bacterial Agents,</u>	<u>Baked Goods.</u>
<u>& Our Baked Goods And</u>	<u>There Are 1622 Additives -Phony</u>
<u>Cereals Are Made With It.</u>	<u>Synthetics Made From Coal Tar.</u>
<u>In Animals, BHA Inhibits The</u>	<u>3 Yr. Olds Killed In Auto Accidents</u>
<u>Muscles Of Intestines, Blood</u>	<u>Reveal Arteries To The Heart</u>
<u>Vessels, Heart And Causes</u>	<u>Plugging Up With Fat And</u>
<u>Growth Retardation.</u>	<u>Cholesterol Plaques.</u>

The Medical Proof

For almost the entire course of the 20th century, doctors and medical researchers have been proving that a vital fluid produced by our bodies (and its extracts) can actually destroy disease-causing viruses, bacteria and cancerous tumors, dissolve blood clots, heal ulcers, obesity, asthma, allergies, colds, flu, digestive disorders and many other health problems.

WHAT DOCTORS SAY



"In clinical studies using an extract of this fluid on cancer patients, most patients in the study showed remarkable improvement after only one week of treatment..."

Dr. S. Burzynski, Physiology,
Chemistry & Physics Journal

"It surprisingly and easily kills viruses. In

strong concentration,

it not only weakens viruses, but actually destroys them."

Proceedings of the Society of Experimental Biology

In successfully treating allergies with this substance, "it was found that many physical illnesses were relieved, such as multiple sclerosis, colitis, hypertension, lupus, rheumatoid arthritis, hepatitis, hyperactivity, pancreatic insufficiency, psoriasis, eczema, diabetes, herpes zoster and mononucleosis."

Dr. N. Dunne Oxford Medical Symposium

"This therapy is so effective for immune dysfunction and asthma, that I consider any other therapy for this use as primitive."

Dr. William Hitt, Hitt Clinic, Mexico

"This agent was found to be definitely life saving."

Dr. M. Javid, MD, Neurosurgeon, University of Wisconsin

Huge Medical Profits From The Mystery Medicine

So what is this mystery miracle medicine and why don't any of us know anything about it? You want to know the answer? Then prepare yourself by first opening your mind. Let go of your initial disbelief and preconceptions and get ready for the best-kept secret in medical history.

This incredible miracle medicine that hundreds of doctors, researchers and people across the world have used for healing is human urine. Surprised? Now before you scream "I don't believe it", consider this—

To us, the public, urine is considered an undesirable waste product of the body, but to the medical research community, it's known as liquid gold:

"Urine is known to contain minute amounts of proteins made by the body, including medically important ones such as growth hormone and insulin. This summer, a company plans to market its first major urine product called urokinase, an enzyme that dissolves blood clots and is used to treat victims of heart attacks... There is a \$500-million-a-year market for these kinds of urine ingredients..."

Hippocrates Magazine, May 1988.

But this isn't the only company that's cashing in on profits from this body fluid that we consider a waste product. The Ares-Serono Company of Switzerland earned a reported \$855 million in sales in 1992 for their fertility drug, Pergonal, which is made from human urine hormones. Another multi-million dollar urine derivative is Premarin, used for hormone replacement therapy by millions of menopausal women. Ever used Murine Ear Drops? They're made with urea, the synthesized primary solid in urine.

How Does The Therapy Work?

The medical findings on urine and urine constituents are overwhelming, but it's difficult for most people to understand how and why urine is medically valuable. The best way to answer to those questions is to look at how urine is produced in the body. As your blood moves through the circulatory system, it flows through the kidneys at a rate of 1200ml of blood per minute. Inside the kidneys, the blood is continuously filtered through a system of minute tubules called nephron which absorb and sort out the various constituents of the blood including water, minerals, vitamins, enzymes, salts, antibodies, hormones and hundreds of other

-190-C

elements. The kidney goes through this filtering process in order to maintain the correct balance of every constituent in the blood.

A large portion of these elements are reabsorbed back into the bloodstream when needed, but a certain amount of critical blood elements are pooled in the kidney into a liquid which doctors call "plasma ultra-filtrate" (we call it urine). Much of this sterile ultra-filtrate, or urine is reabsorbed into the blood and some is emptied from the kidney into the bladder where it is excreted from the body—not because it is toxic, but simply because these elements are not needed by the body at that moment.

Urine, because it is essentially filtered blood, contains an almost endless list of critical physiological substances including antibodies, hormones, brain chemicals such as DHEA and melatonin, proteins of all kinds, enzymes, every vitamin and mineral you can name and hundreds of other compounds.

Doctors and researchers have found that when these urine antibodies, proteins, hormones, etc, are reintroduced back into the body through drug compounds, injections, extracts, or sublingual drops the results are dramatic:

8 cancer patients were treated with HUD (Human Urine Derivative) immediately after operation. In 5 cases in this group, the cancer had invaded the stomach wall and involved the lymph nodes. The postoperative prognosis for this group of patients was very poor, and their 3-year survival rate was considered to less than 40 %. However, following HUD treatments, 3 years passed and 7 out of the 8 patients treated are completely well and participating in almost full activities without any signs of recurrence.

Treatment of Gastric Cancer With HUD, an Anti-genic Substance Obtained From Patient's Urine, 1968, Dr. Momoe Soeda, Tokyo, Japan.

Antibody activity in urine has been demonstrated against several microorganisms including cholera, salmonella, diphtheria, tetanus and polio.

Characterization of Antibodies in Human Urine, 1965, Hanson and Tan, Journal of Clinical Investigation.

A simple technique for treating allergies - Auto-Immune Urine Therapy (A.I.U.) - is rapidly gaining recognition in the United

States and may well prove to be the method of the future. The rationale behind it is that by recycling the patient's urine, the protein globulins of which contain specific antibodies to allergens currently producing reactions, immunity from the antigen-antibody conflict (allergic reaction) is brought about

The Use of Injected and Sublingual Urine in the Treatment of Allergies, 1981, Dr. Nancy Dunne, M.D., Oxford Medical Symposium.

Urine contains a type of gastric secretory suppressant (or antacid) called urogastrone, that can protect against irritation of the stomach lining that may lead to ulcers.

The Effect of Urine Extracts on Peptic Ulcer, Dr. Sandweiss, M.D. et.al., (Research aided by grants from the Mendelson Fund & Parke-Davis).

"Thousands of years of use and 100 years of medical research have proven the value of urine therapy. Imagine antibodies, hormones, enzymes and extremely complex nutritional elements designed for your unique body in a therapeutic form that costs nothing and the FDA can NEVER regulate."

Townsend Letter for Doctors.

Reports on the remarkable external benefits of urine also abound. Medical studies relate amazing cases of 'incurable' skin diseases that disappear with urine and urea therapy. Because urine and urea are both anti-viral and anti-

bacterial, they have been used extensively for treating cysts, wounds, acne, fungal skin problems and burns. For home use or emergency treatment care for wounds, poisonous bites or stings, urine and urea have been proven to be incomparable natural healing agents that provide instantaneous therapeutic benefits under any circumstances.

Learning To Use The Therapy At Home

In *Your Own Perfect Medicine*, you'll discover amazing documented medical studies on the effects of urine therapy on health problems of all kinds including infectious diseases, allergies, digestive problems, ulcers, hayfever, asthma, heart problems, adrenal and thyroid dysfunctions, cystitis, urinary tract infections, chronic fatigue, migraines, sinus infections, meningitis, PMS, inoperable tumors, cancer and so much more.

Your Own Perfect Medicine gives you detailed step-by-step instructions that will show you how to utilize this invaluable therapy at home for both internal and external healing of every imaginable health disorder. Plus, you'll read dozens of testimonials from doctors, researchers and people just like you who have used this astounding natural therapy to cure themselves and others of illnesses that resisted every other type of natural or conventional therapy. Discover for yourself the miracle of the natural cure that will change your life forever!

Vegetarian Menu Worksheet

Welcome To _____ Restaurant

- **Do you wish to eat vegetarian Today?**

Try our Super-Healthy Vegetarian Meals. Available anytime of the day. Breakfast, \$2.95 or \$3.95 ,
Light Lunch, \$3.95 Lunch, \$4.95 Dinner, \$6.95.

- **APPLE JUICE:** 100% juice - no water added - Will be used in your Len-Nu-Pro drink to enhance the taste.

- **FRESH VEGGIES: (Memory Key BOCAPS - GT)**

We'll give you a selection of some of the following:

- | | |
|--|---|
| (B) Broccoli (raw or steamed) | (S) Spinach (raw), Squash, and Sweet Potatoes (steamed) |
| (O) Green Onions (raw) | |
| (C) Carrots (steamed) Celery (raw) | (G) Garlic cloves (steamed - odorless) |
| (A) Asparagus (raw) | Dark green leafy vegetables, collards, romaine, (raw) |
| (P) Peppers (green, yellow, red) (raw) | (T) Tomato (raw) |

- **LEN-NU-PRO HEALTH DRINK :** Lecithin (LEN), Nutritional Yeast (NU), Soy Powder (PRO). (Experience the magic on your health from: proteins, vitamins, minerals and phytochemicals and chlorophyll, from fresh fruits and vegetables, soy, legumes, grains, seeds, rice bran and wheat germ).

- **LEGUMES:** (Beans), Soup: Lentil, Pea, Mung Bean. (We'll select)

- **GRAINS:** Millet, Oat Groats, Brown Rice. We make our MOR cereal with these three.

- **SEEDS:** Alfalfa, Foenugreek, Sunflower, (sprouted). (We'll serve you sunflower.)

- **SOYBEANS:** (halves, grits, chunks). Toasted and soaked (We'll select)

- **FRUITS:** Apricots, Apples, Bananas, Cantaloupe, Grapefruit, Lemons, Oranges, Peaches, Pears, Pineapples, Prunes, Raisins, Strawberries. (We'll select.) **(Memory Key: ABC - GLO - PRS)**

- **VINEGAR:** Brown apple cider (natural, chemical-free). Many health benefits and taste enhancer.

- **HONEY:** For taste enhancement.

- **NUTS:** Almonds (whole, soaked), (our 1st choice) or Walnuts (pieces)

- **OILS:** Flaxseed-Vitamin A, E, Omega 3, 6 and 9 (anti-arthritis).
 - Olive Oil - Mono-unsaturated, (anti-elevated cholesterol).

- **BREAD:** Brownberry Whole Wheat. (1 slice gives) Calories = 80. Sat. Fat = 0; Cholesterol = 0; Iron = 4%
Carbohydrates = 17g; Fiber = 2g; Protein = 3g

- We won't mix or cut up your veggies - so you can see the quantities.

- We'll give you a sharp knife to cut them up and a take - home box, if you can't finish it!

- Stay In Good Health, Be Our Customer For A Long Time, Tell Your Friends.

- We're happy to serve you this, Health-Giving, Prevention-of-Illness, Meal. Come back soon!

- If you want more information (no charge) call Dr. Bernard E. Vodnoy 219-291-8773

Be an activist! Make copies of this menu and give it to your favorite restaurant. Invite your loved ones and friends to a vegetarian breakfast, lunch and dinner. Use this worksheet to make up your own invitations

CHAPTER 4

THE FUTURE . . . IN OUR HANDS

If everyone in America adopted a vegan style of eating, what would happen to the farmers and ranchers? What would happen to the cows? What would happen to the world?

The time has come to re-evaluate the role of meat and dairy production and consumption in the United States today.

More and more people in the meat and slaughter-related industries are becoming aware of the many problems associated with their products. The health problems stem from the fatty, fiberless nature of meat itself, as well as from the bacterial and chemical contamination inherent in modern factory farming methods. (See PART TWO.)

Yet, the scope of the problems resulting from the national craving for animal flesh and cow's milk, (two completely non-essential substances for human health), goes far beyond epidemics of Salmonella food poisoning. The economic, political and ecologic consequences of continuing the current rate of meat consumption are staggering, and threaten to create an ecologic catastrophe or to bring the world to the brink of nuclear war.

Consider the true cost of every hamburger eaten:

Growing animal tissue is terribly wasteful of energy. Cows, bulls and pigs are very inefficient converters of grain energy into edible flesh. Most of the food energy they take in is turned into edible body parts like bones and hair, or lost as heat while just walking around and breathing. Thus, it takes 16 pounds of high protein corn and soybeans to create one pound of feed lot beef flesh for a steak dinner.³⁰

As a result of this energy inefficiency, current Western meat agriculture and food distribution devour billions of gallons of oil, in the form of diesel fuel and gasoline, to:

- run the tractors to grow the mountains of grain needed to feed the animals,

- fuel the trucks that ship the grains and animals, pump billions of gallons of water to irrigate fields and run the slaughter house operations, and

- power refrigeration units to keep the carcasses from decomposing.

Consider what a poor return meat yields in exchange for precious fuel oil invested: 60 calories of petroleum energy must be "plowed into the soil" to harvest one food calorie from animal flesh. By contrast, growing grains and legumes to feed directly to people will yield twenty calories of food energy for each one calorie of fuel energy invested.³¹ One acre of land will yield 165 pounds of beef, or 20,000 pounds of potatoes!

The current energy glut, driven by meat consumption, makes American agriculture, and thus the food supply of Americans, dependent upon a string of oil tankers stretching from our shores to the Persian Gulf - with all the political and military tensions that such dependency creates. Evolving to a plant-based diet would significantly reduce, or perhaps completely eliminate, our current addiction to imported oil. This could occur as huge tracts of land, freed from growing animal fodder, could be devoted to producing fast-growing trees or fiber plants to be harvested and burned for electricity and heat. As one pound of wood or other high-cellulose biomass contains 8500 BTU per pound, one acre of harvested biomass can replace approximately thirteen barrels of oil.

Burning biomass for energy is far more environmentally benign than burning fossil fuels. Trees and prairie grass are made from carbon dioxide taken from the air itself: burning this biomass only recycles atmospheric carbon dioxide and adds no net CO₂ to the air. Fossil fuels, like coal, oil, and gas, dredge up long-buried carbon deposits, out of the carbon cycle for millions of years, and, when burned, add fresh carbon dioxide to the atmosphere - retaining the Earth's heat, worsening problems with global warming and threatening to produce famine-causing weather aberrations.

Thus, adoption of a more vegan style of nutrition on a national level could not only reduce our oil imports, but ease political and ecologic pressures as well.

WATER WORRIES

The extended and devastating droughts across North America in the summer of 1988, underscored one of the most wasteful and damaging aspects of the national meat habit: livestock production and slaughterhouse activity are, by far, the greatest consumers, and the most profligate polluters of fresh water in America today-soaking up half of all water consumed on the continent and polluting more water than all cities and industries combined.

Meat production requires gluttonous amounts of irrigation water to grow feedgrain, vast feedlots of large, thirsty animals that must be watered, and huge slaughterhouse operations awash in blood and entrails that flush through millions of gallons of drinking water per minute. Meanwhile, life-giving water tables across North America are falling steadily,³² and wells across the country are going dry.³³

Livestock meat production is also the most egregious polluter of fresh water in the world. In the United States, human beings create 12,000 pounds of excrement every second - while American livestock generate 250,000 pounds of excrement each second. A large livestock feeding operation, with 100,000 cows, has a sewage disposal problem of the same magnitude as the city of New Orleans. When the rain falls on the feedlots, tons of excrement can be washed into the nearest river, polluting untold billions of gallons of precious drinking water, often upstream from cities and towns.³⁴

This year twenty million people will starve to death due to lack of grains and legumes to eat. A child on our planet starves to death every three seconds.³⁶ If Americans decrease their meat consumption by only ten per cent, enough land would be freed to grow food for every person on Earth who would otherwise starve to death this year.³⁷ The solution to world hunger is to help other nations prosper, helping them to control their populations and grow their own food. However, in the short term, the exploding human populations and dwindling farmlands will force us to grow more grain for direct human consumption and less, if any, for the grain-feeding of animals.

The American "hamburger obsession" exacts another grave price, affecting all life forms on this planet. In order to harvest timber and grow "cash crop beef," to maximize profits and reduce foreign debt, vast tracts of priceless, tropical rainforests are being cut and burned at the staggering rate of twenty acres per minute, twenty-four hours a day. This equals a forest area the size of Pennsylvania disappearing every year. This relentless destruction of rain forests also obliterates three entire species of rare plants and animals every day, including the loss of plants with potentially great medicinal benefits.

Whether Americans actually import and consume "rainforest beef" or merely set the example for others through our prodigious beef consumption, our meat habit is a driving force of ecologic destruction.

Nothing fouls the streams like wallowing cows, and nothing turns grassland to desert wasteland like beef and dairy cattle grazing upon the hillsides. Stripped of the grasses and trees, the topsoil of land grazed on by cattle quickly erodes and washes into the rivers with every rainstorm. The United States taxpayer subsidizes cattle grazing on National Forest and other public lands. The cattle producer pays but a minimal grazing fee - a trivial portion of the cost of repairing the habitat destruction wrought by grazing thousands of heads of cattle upon the fragile, semi-arid ecosystems of the American West.

Almost half of America's croplands are devoted to producing feedcorn, soybeans, oats, sorghum, bay, and other animal fodder. Because the majority of the six billion tons of priceless topsoil that erodes off American farmlands yearly blows and washes off grazing lands or these vast fields of animal food, meat production, driven by our animal-based diet, is responsible for the vast majority of future-threatening topsoil erosion. This pernicious loss of topsoil is completely arrestable - the floor of a healthy forest does not erode. It is time to reconsider other uses for the fertile lands and soils of North America - while we still have them.⁴⁰

As author John Robbins states in **DIET FOR A NEW AMERICA**, "We do not inherit the land from our ancestors, we borrow it from our children." The American meat habit is squandering our children's priceless inheritance.⁴¹ Of extreme importance, the growing spectre of world starvation makes the American meat habit especially grotesque. Eighty-

per cent of all the grains and legumes grown in America today becomes food, not for hungry human beings, but for animals!³⁸ The grain and water resources that are converted into a single beefsteak meal can feed eight people for a day.

American forests are also continually disappearing under the chainsaw and bulldozer blade, turning much of our national wilderness heritage into cow pastures and cattle-watering holes.³⁹ We are trading our forests for cheeseburgers and hot dogs. Many people on Earth are now realizing that in the late twentieth century on Planet Earth the raising and killing of animals for food has become far too costly.

Fortunately, all the problems which seem to be dragging us along a collision course to disaster can be reversed and transformed into forces of rescue, beginning with a simple realization. It is time to positively change our taste preferences, and begin to make food choices in harmony with the nutritional realities of our bodies, and the ecological balance of nature.

It is no coincidence that **precisely** the same evolution to plant-based food choices that will improve the health of each person, will also help to rebalance the natural (and man-made) systems of planet Earth.

As less meat is produced and consumed, land will be freed for the great forests of our continent to return - and as they do, the water will become cleaner and more plentiful. As oil burning in animal agriculture decreases, the air will become clearer. Every person who changes to a pure vegetarian diet saves one acre of trees.⁴²

Most of the erosion of our topsoil and much of the poisoning of our air, water, and other life-support systems would cease - and a deep healing of the Planet would begin.

Human suffering from degenerative diseases resulting from an animal-based diet should diminish, and soon following, the national financial burden of medical costs and high taxes will lessen.

With lower health care costs, lending money would become available to help people build new houses, schools, and non-polluting energy sources. The national debt would decrease, as should our taxes.

World hunger could and should disappear. Only economics and politics would (temporarily) prevent the available food from actually finding its way into the mouths of the hungry.

A new era of peace and plenty could dawn for all the Earth's inhabitants.⁴³

...probably dependent upon, Homo sapiens, at this time in his history, evolving past the taste for animal flesh.

What of the people presently making their living from meat and dairy production? Farmers, ranchers, and meat producers are not "the enemy" in the "nutrition battle" or the "ecology war." Rather, they are valued friends and family members, people who need our help to become aware of the true cost and ecological effects of the products they create - and to help them transition to creating product free of meat and dairy products.

Garden Patch
Organic BCV
16oz 2.09
32oz 3.49

The following is taken from the book:
"The Vinegar Book" by Emily Thacker

Also read: "Apple
Cider Vinegar" by
Paul & Patricia
Bragg \$6.95 available
for \$5.95

Tresco Publishers 718-12th St., Canton, Ohio 44701
N.W.

Call Toll Free 1-800-772-7285, Ext. 661 - For Credit Card Orders

Since ancient times a daily dose of apple cider vinegar has been taken to control weight and maintain well-being.

Even Japan's feared Samurai warriors of years ago relied on a vinegar tonic for strength and power. A tonic you can make in your kitchen.

Today, countless reports and scientific studies praise the curative and preventive powers of vinegar as part of our daily diet.

You'll learn how to melt away pounds with a meal-time vinegar cocktail.

Find trusted remedies to beat colds, ease painful arthritis, and other joint diseases.

Vinegar is nature's own drug-free anti-inflammatory.

Scientific tests show it's a natural storehouse of vitamins and minerals -- over 93 different components -- to fight what ails you and to help extend life.

Imagine! Just one spoonful of apple cider vinegar is endowed with vitamins, minerals, enzymes, amino acids, nutrients and important pectin and beta carotene.

More than 70 different research studies have verified that beta carotene lowers the risk of getting cancer and it boosts the body's immune system.

And pectin helps your body reduce

cholesterol levels to lower the risk of cardiovascular disease.

"The Vinegar Book" will amaze and delight you with 308 natural ways to enrich your personal life and home. Time-honored folk remedies that show step by step how to mix vinegar with other kitchen staples to:

- ↓ • Improve your metabolism
- ↓ • Aid digestion
- Help lower cholesterol
- Uses for middle ear problems
- Care for eye infections
- Condition problem skin
- Fight age and liver spots
- Gain soft, radiant skin
- Amazing hair treatments
- Relieve nighttime leg cramps
- Soothe sprained muscles
- Forestall osteoporosis
- Help headaches fade away
- Corn and callus relief
- Aid to maintain health
- Skin rashes, athlete's foot
- Relieve insect bites
- Remedy for urinary problems
- Use for coughs, colds
- Destroy bacteria in foods
- Heart and circulatory problems
- Lower high blood pressure

And the above is only a brief sample of the 308 uses for vinegar you'll learn about.

You'll know how grandma's recipe for her famous pie crust depends on a spoonful of apple cider vinegar.

How a combination of vinegar and fruit juices relieves arthritis and other aches and pains.

DEPT of Agr Charts do not support these claims. They give for 1 Tablespoon

Protein: Trace
Carbohydrate: 9gm. Magnesium: 2mg.
Calcium: 1mg. Phosphorus: 1mg.
Copper: .014mg Potassium: 15mg
Iron: .1mg Selenium: 13.5mcg.
Zinc: .015mg

Read Balch Pgs 216-217-218 on Indigestion (Included in these notes)

Brown Apple Cider Vinegar is a fine food which deserves abundant use, even though some of the above claims may be excessive and over-enthusiastic.

Wait Skibbe at Farmer's Market makes his own brown apple cider vinegar (organic)

1/2 gal 1.50
1 gal 2.50

Commercial organic vinegar runs from 4.00 to 5.00 per quart.

organic
Buy Brown Apple Cider Vinegar, NOT
WHITE VINEGAR, pour it into a glass
dispenser bottle and keep it handy on
your breakfast and dinner table. Sprinkle
an abundant amount on your salad
and foods. After age 40, many people
manufacture insufficient hydrochloric
acid to digest protein. Use the vinegar
to help increase the acidity in your
stomach and improve digestion espec.
if you're above 40. Excellent as a mouthwash
- 194-4 gargle 1/2 tsp per 4oz. water

FUNDUS of the Human Eye

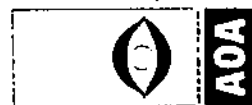
- 1 OPTIC DISC (NERVE HEAD)
- 2 ARTERY
- 3 VEIN
- 4 PHYSIOLOGICAL CUP
- 5 MACULA

Examination of the fundus with an ophthalmoscope allows us to see living blood vessels in their natural state.

The disc is examined for clarity of outline, color, shape, elevation above or below surrounding tissues.

Blood vessels are observed for condition, size ratio, tortuosity, regularity of caliber, exudates and hemorrhages.

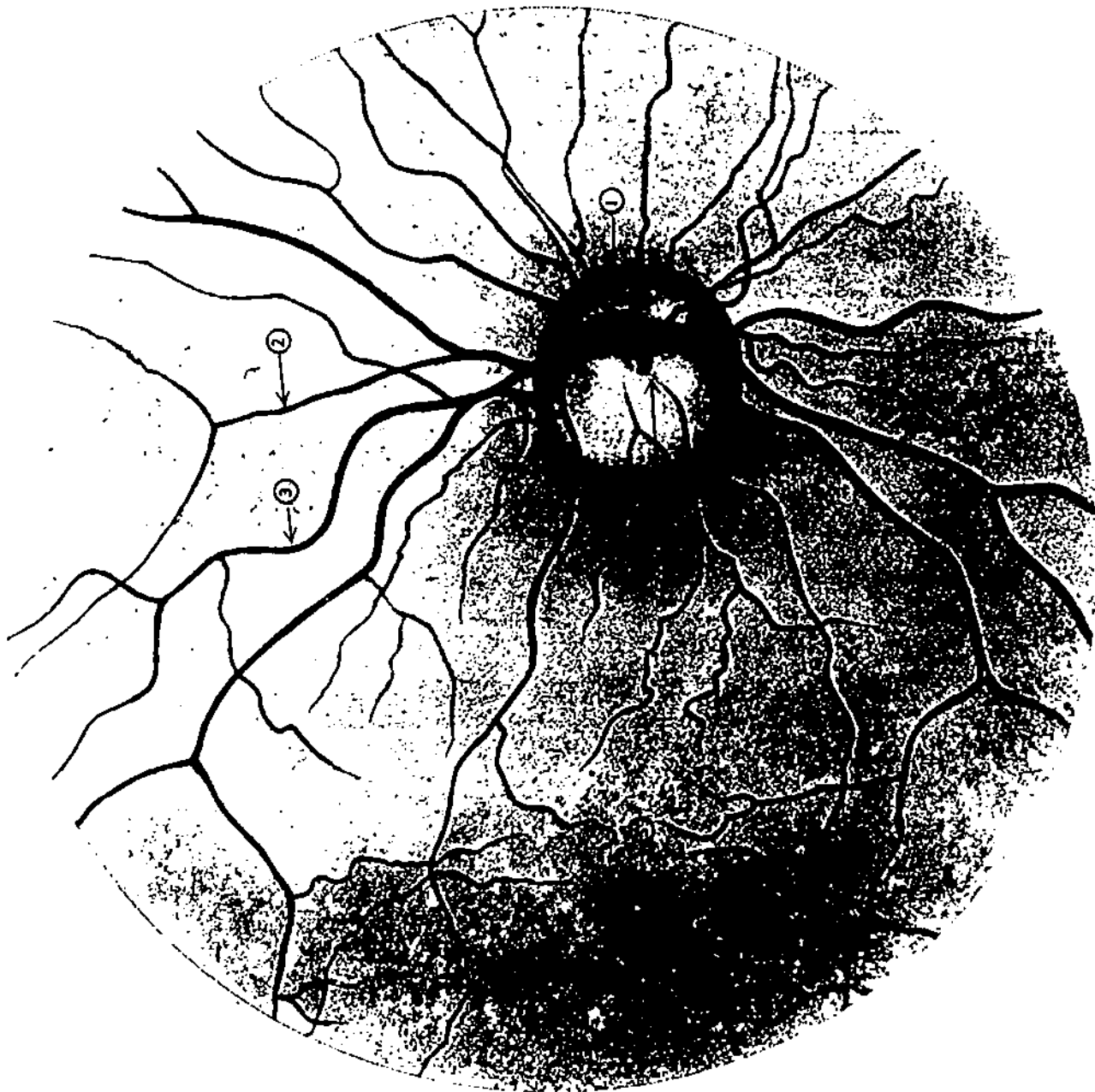
Study of the fundus may reveal evidence of many systemic diseases as well as eye disease and abnormality.



AMERICAN OPTOMETRIC ASSOCIATION
7000 Chippewa St.
St. Louis, Mo. 63119

G.10 7.1.19

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NUTRIENT SUPPLEMENTS USED IN EYE AND VISION NUTRITIONAL THERAPY

Now 0428 B50 250/14.95
 Now 0894 Vit.E 250/29.95
 Now 1542 Zinc Glucomate
 Now 1542 Full Spectrum Minerals 250/13.95
 Now 2455 10 oz. Nutritional Yeast Flakes 7.95
 Now 3302 Now Eye Support 120 caps 29.95 (see pg 7 for contents)
 Now 4612 Bilberry Complex 100 caps 24.95 (see pg 7 for contents)

Balch Pg. No's
 43 Selenium: Destroys free radicals, which damage micro circulation and retina.
 59 Shark Cartilage: Inhibit growth of new capillaries in macula.
 52 Flaxseed Oil: Now 1760 12oz. 10.95
 Apple Pectin: Now 6425 750mg 120 caps 9.95
 43 SOD-Super Oxide Dismutase (See wheat sprout tabs below)
 60 Wheat Germ Oil: Now 1880 16oz 10.95 1 Tbs-30 IU and 1000 mcg octocosanol.
 61 Wheat Sprout Antioxidant Tabs(SOD) Now 2742 900 mg enzyme active 200/22.95
 65 Bilberry Extract: Macular degeneration, glaucoma, cataracts, retinal health
 39 Glutathione: amino acid vital to eye health, Now 0096 60 caps 23.00
 37 N-Acetylcysteine: acid vital to eye health, Now 0080 60 caps 7.95
 13 Vit A: (Emulsi-fied): absolutely vital to eye health
 Vit B5 (Pantothenic Acid) Now 0488 500 mg. 250 caps. 17.95
 Vit B12: Now 0468 1000 mcg, 100 mcg folic acid sublingual 250 loz. 11.95
 14 Vit B Complex: vital for intracellular eye metabolism.
 18 Vit C Complex: reduces intraocular pressure (glaucoma)
 19 Vit E Mixed: arrest and reverse cataract formation.
 29 Zinc: deficiency linked to retinal detachment, 50 mg 100/2.50
 22-29 Full Spectrum Minerals: retard cataract growth; promote healing
 52 Grape Seed: a powerful antioxidant Now 3254 60mg 180/31.95
 40 Lysine: collagen formation; repair of lens Now 0012 500 mg 250/11.95
 40 Methionine: chelates, heavy metals
Nutritional Yeasts: very rich in "B" vitamins.

Whitaker
 Cataract 42,42,187-188, Glaucoma 251-252
 Macular Degeneration 299-300
 Bilberry, Collards, Spinach, Dark Green leafies, Cruciferous, Ginkgo Biloba, Peanuts (spanish), Clove, Soy (Genistein).

Duke: Cataracts 126-130,
 Macular Degeneration 318-320
 Glaucoma 218-221

<u>Duke:</u>	Cataract	Glaucoma	Macular Degeneration
	Pgs 126-130	Pgs 218-221	Pgs 318-320
	3 Bilberry	2 Ruberandi	3 Bilberry
	3 Catnip	2 Fruits & Veggies	2 Greens
	3 Rosemary	2 Kaffir Potato	Spinach
	2 Brazil Nut	2 Oregano	all dark green veggies
	2 Carrot Herb	2 Pansy	Ginkgo Biloba
	2 Onions	1 Bilberry	2 Peanut (Spanish)
	2 Parslane	1 Shepards Purse	1 Clove
	2 Turneric	Avoid	1 Wolfberry
	1 Ginger	Bloodroot	
		Sanguinaria	

Numbers are Dr. Duke's effectivity score, #3 is the top score

257-259 Study Balch, Duke and Whitaker.
 Pg. No's (Balch)

258-259 Maintaining Healthy Eyes

260 Bags under the eyes

260 Blepharitis

260-261 Bloodshot

261 Blurred Vision

261 Cataracts

261 Color Blindness

263 Conjunctivitis

263 Corneal Ulcer

263 Diabetic Retinopathy

264 Dimness-Loss of vision

264 Dry eyes

265 Eyestrain

265 Floaters

266 Glaucoma

266 Itchy or Tired Eyes

266 Macular Degeneration

267 Mucous in the eyes

267 Photophobia

267 Pink Eye

267 Retinal Hemorrhage

267 Retinitis Pigmentosa

269 Shingles (Herpes zoster)

268 Scotoma

268 Syle

268 Ulcerated Eye (See Corneal Ulcer)

268 Ulcerated Eye Lids

269 Vascular Retinopathy

269 Xerophthalmia

Don't gamble with your eyes and your visual system; become a vegetarian and you may avoid many of the above problems.

Selenium 30%

Nov #2455

Nutritional Yeast

Flakes

10 oz. 7.45

B1 650%

B2 560%

B3 275%

B6 480%

B12 130%

Selenium 30%

SOD: Implicated in vascular retinopathy and micro circulation in the eye; use wheat sprout anti-oxidant tablets 1 tab - 1 qt. dehydrated wheat berries

WHEAT GERM OIL: Vit E, Calcium, magnesium, phosphorus

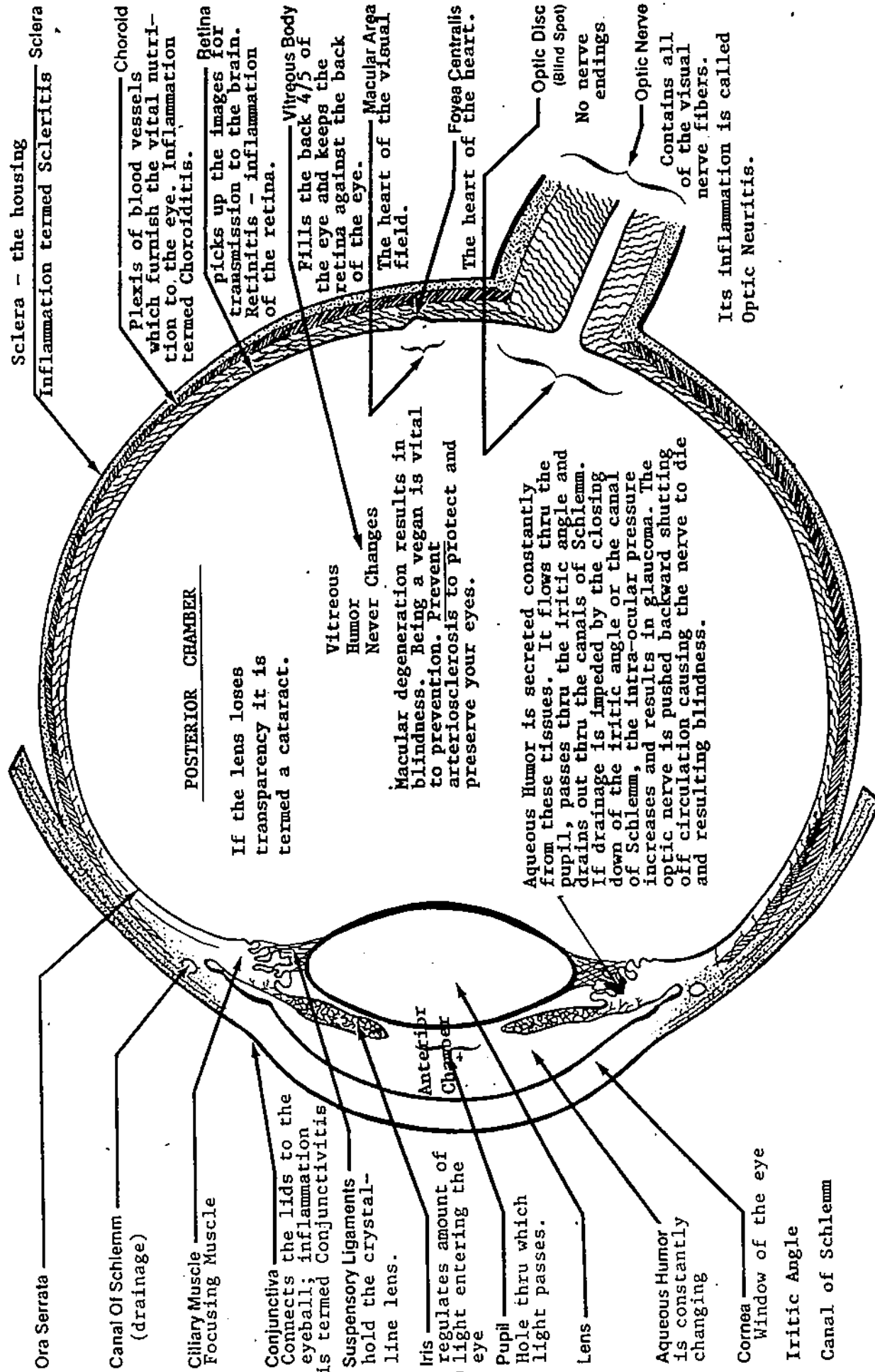
APPLE PECTIN: Binds with toxins and heavy metals to remove them from the body. (An apple a day, keeps the doctor away.)

FLAXSEED OIL: Omega 3's (also Omega 6 and 9) essential fatty acid, lowers cholesterol and triglycerides to reduce arteriosclerosis

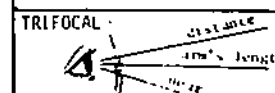
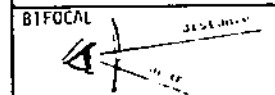
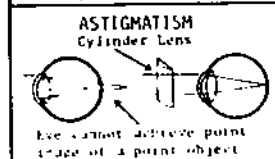
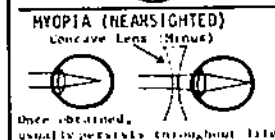
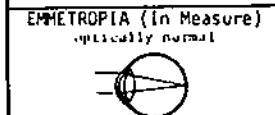
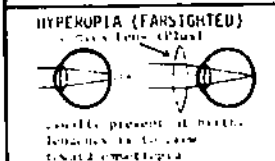
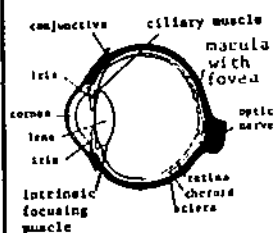
Now 1760 12 oz. 10.95

1 Tbs.-90% RDA of Vit A. 1 Tbs-30% RDA of Vit E.

SAVE YOUR EYES AND VISION - ELIMINATE ARTERIOSCLEROSIS. BECOME A VEGETARIAN.



PREVENT MACULAR DEGENERATION, CATARACTS, GLAUCOMA, IRITIS, CORNEAL DYSTROPHY, KERATOCONUS, CHOROIDITIS, RETINITIS, AND OPTIC NEURITI S. At the same time you will be benefitting EVERY cell and organ of your body, and correcting diseases within them. THIS OBJECTIVE APPLIES TO PEOPLE OF ALL AGES, NOT JUST TO SENIORS ONLY.



Lens
The resilient, transparent structure in the eye that focuses light by changes of curvature of its front surface. It is located near the front of the eye, directly behind the pupil.

Iris
The colored portion of the eye which surrounds the pupil. Its expansion or contraction increases or reduces the amount of light entering the eye through the pupil.

Pupil
The round hole in the center of the iris through which light passes. The pupil ordinarily appears black because there is very little light coming from the dark chamber behind it.

Retina
The inner lining of most of the back chamber of the eye which contains the layers of nerve cells giving the eye its sensitivity to light.

Sclera
The tough, white, fibrous, outer protective layer of the eye.

Choroid
A layer between the retina and sclera, consisting primarily of blood vessels which provide nourishment to the retina.

Optic Nerve
The bundle of fibers that carries vision related impulses from the retina to the brain.

Cornea
The front transparent part of the outer protective layer of the eye. Its bulging curvature provides the major refraction (focal strength) of the eye.

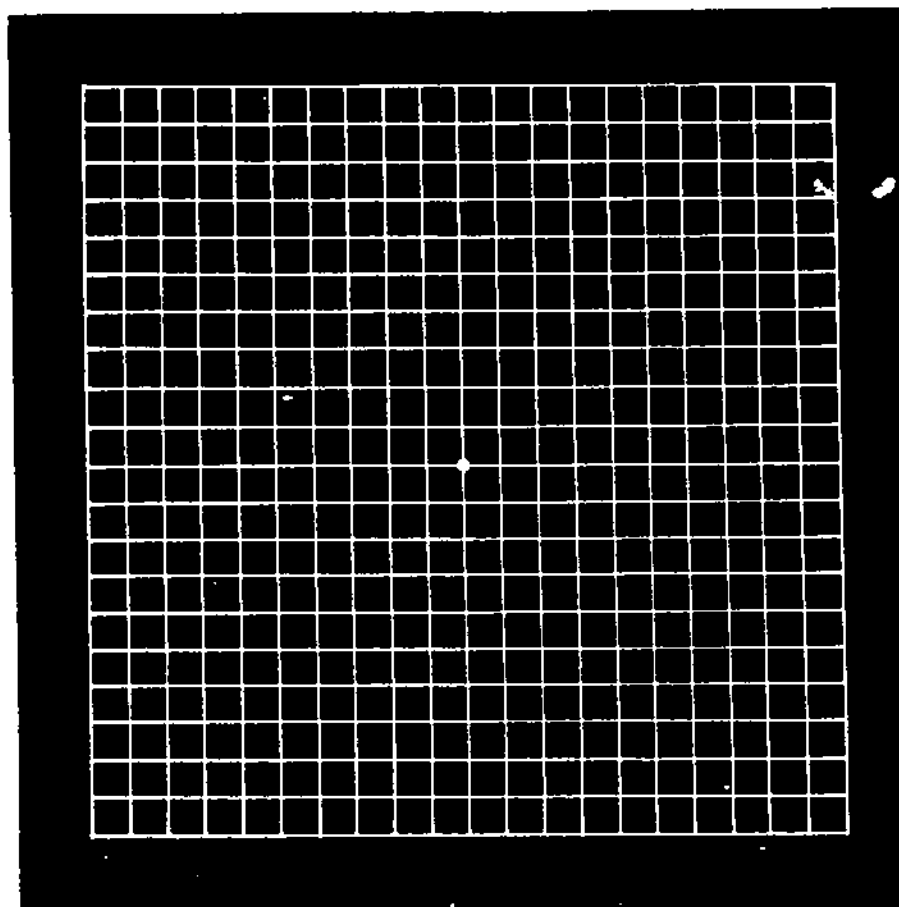
Aqueous Humor
The watery fluid that fills the anterior or front chamber of the eye and provides some of the nutrition for the surrounding parts.

Vitreous Humor
A clear, jellylike substance that fills the vitreous or rear chamber of the eye.

Ciliary Muscles
The muscles that control the focusing (accommodation) of the eye by causing the lens to change shape.

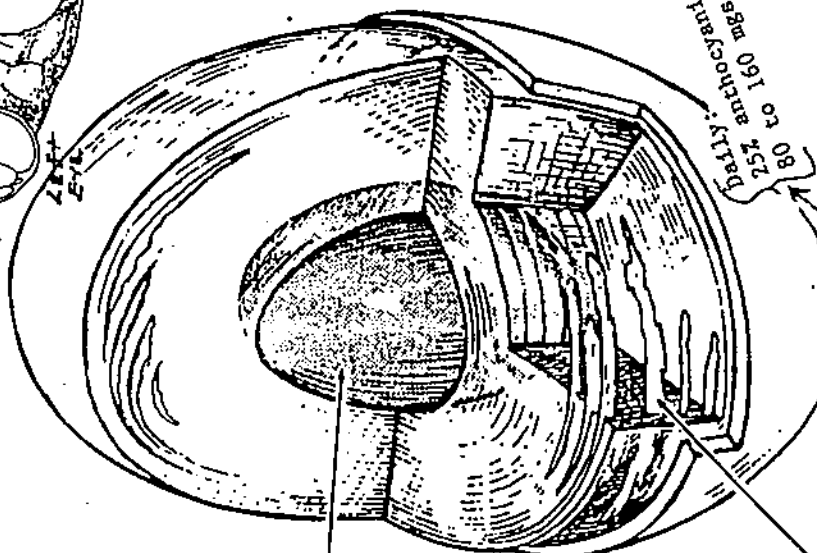
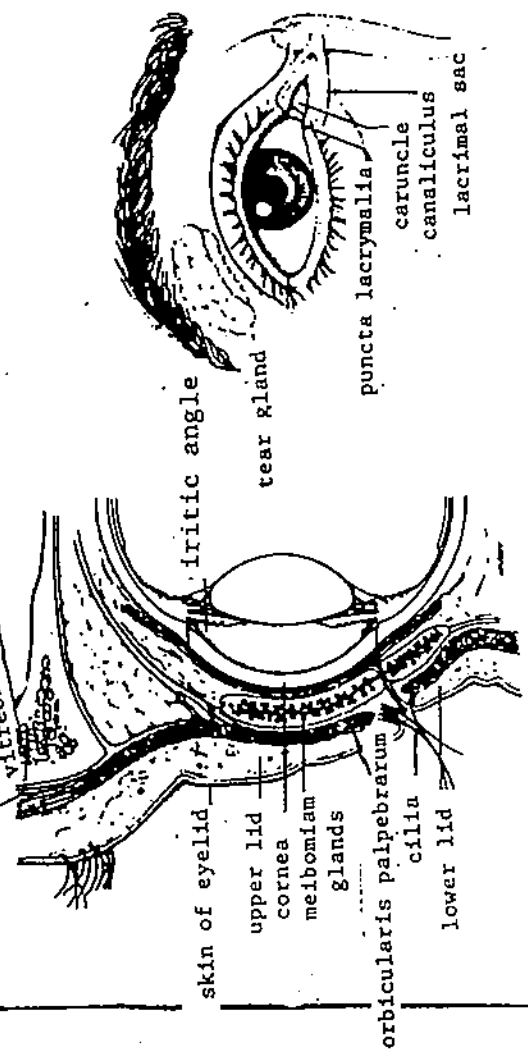
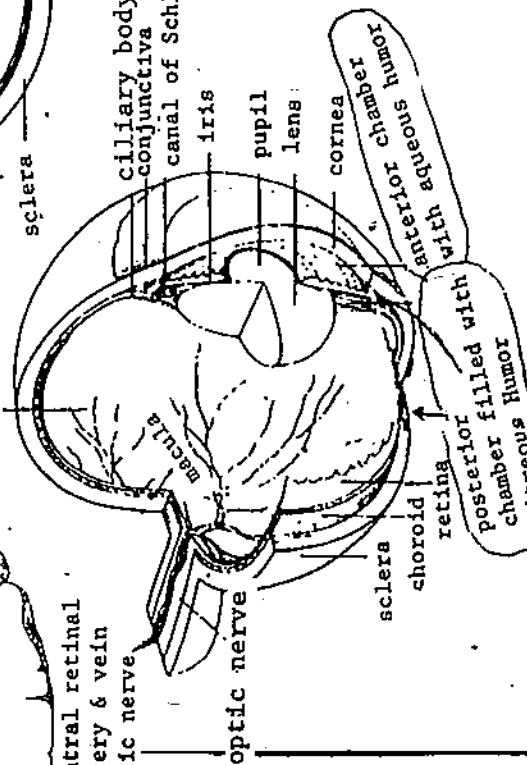
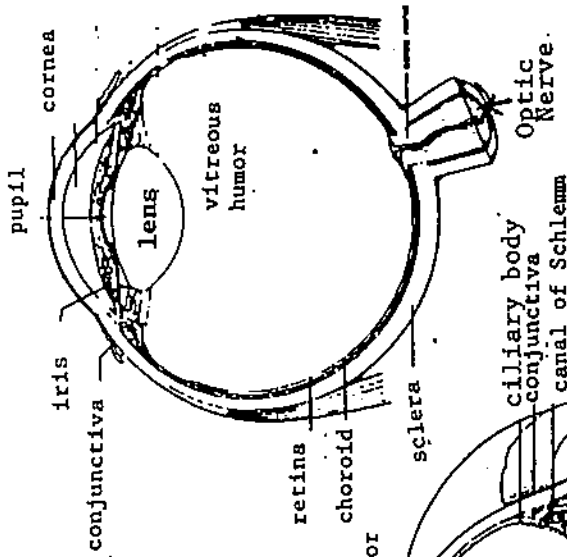
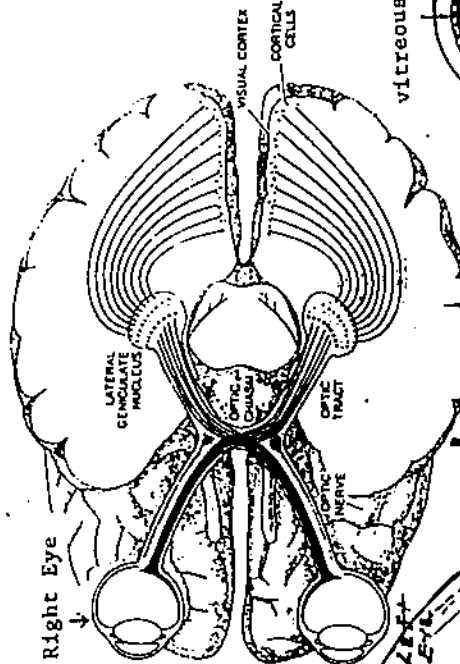
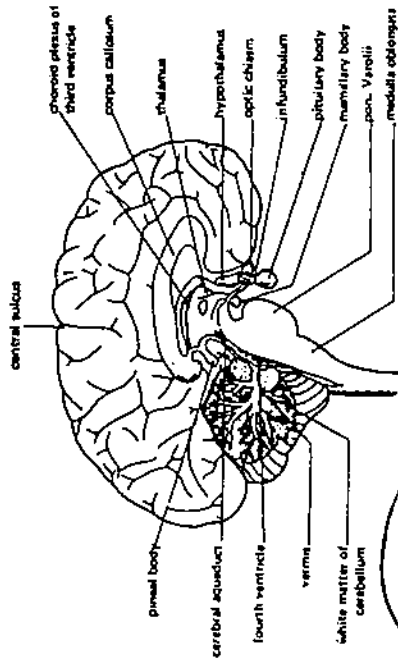
Suspensory Ligaments
Long, thin fibers which connect the crystalline lens to the ring of ciliary muscles.

Fovea Centralis
A small, thinned-out area of the retina consisting almost exclusively of receptor cells, which provides high visual acuity.



GENERAL INSTRUCTIONS

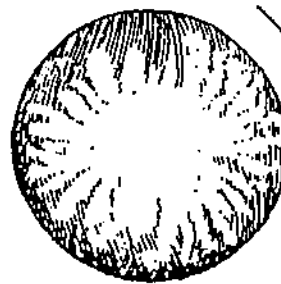
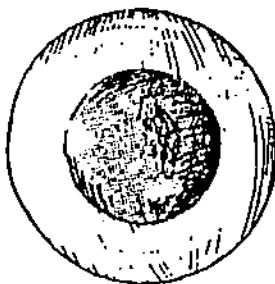
1. Hold card at approximately 12" from eye.
2. Test right eye first, by covering left eye. Then repeat procedure on left eye (by covering right).
3. Look or concentrate at center dot.
4. Notice any waves, distortions or blind spots in the lines. If problems are noticed, inform your licensed vision care specialist immediately.



Herbal Therapy: Bilberry Extract (and blueberries)
 Catnip herb (2X daily) also a mild tranquilizer.
 Rosemary: tablets, oil or tea. Brazil nuts: Vit E
 & Selenium 7 nut-D.V.

NUCLEAR CATARACT

Cataract Surgeries
 500,000 per year
 3.5 Billion
 Cataracts afflict
 5% ages 52-64
 18% ages 65-74
 50% ages 75+



CORTICAL CATARACT

Prevent cataracts with anti-oxidants. Vit's A (Beta Carotene), Vit. C & E, Bioflavonoids, selenium, magnesium, manganese
 Cataracts follow the onion-like structure of the lens. The nuclear cataract results from changes in the proteins of the nucleus that darken its color and causes the light to scatter. The cortical cataract forms when the fibers in the cortex are disturbed; the gaps fill with water and debris form among the fibers. This reduces the transparency of the lens and causes blurring of the light.

$\frac{20}{50}$

L P E D

$\frac{50 \text{ FT.}}{15.2 \text{ M}}$

$\frac{20}{40}$

P E C F D

$\frac{40 \text{ FT.}}{12.2 \text{ M}}$

$\frac{20}{30}$

E D F C Z P

$\frac{30 \text{ FT.}}{9.14 \text{ M}}$

$\frac{20}{25}$

F E L O P Z D

$\frac{25 \text{ FT.}}{7.62 \text{ M}}$

$\frac{20}{20}$

D E F P O T E C

$\frac{20 \text{ FT.}}{6.10 \text{ M}}$

$\frac{20}{15}$

L E F O D P C T

$\frac{15 \text{ F.}}{4.57}$

- .Set the chart 20 feet from your eyes in good light.
- .Read the smallest line you can read with your right eye only.
- .Read the smallest line you can read with your left eye only.
- .If you cannot read the top line, walk toward the chart slowly.
- .Find the farthest distance at which you can read the top line.
- .Measure the distance and record. If you can only read the top line at 10 feet record 10/50
- .Numerator - Test Distance
- .Denominator - The smallest line you can read.

Notre Dame, Ind., Notre Dame University. Dept of Education, presented a five hour Lecture-Workshop on "Visual Handicaps And Their Relation To Learning" before faculty and post-graduate students from the University, and other interested people from a radius of 150 miles. The conference explored in depth how poor vision, double vision, and the eyestrain from visual defects creates visual disability, discomfort, stress, tension, worry and pain and thereby are very serious deterrents and handicaps to reading, learning and working in all phases of living by people of all ages. Some of the conclusions reached were as follows:

The public must be made aware of the existence and tremendous significance of the Retinoscope. That it is one of the most vital, valuable instruments ever developed for the care of vision and that through its use, the examiner can determine the optical error of the eye without asking any questions. Therefore every child should be examined in a professional office, with a retinoscope (and other techniques) as soon as he will sit still on his parent's lap and cooperate. Parents must not wait until the child starts kindergarten or later, and then depend upon a school screening examination to determine if their child needs visual care. Such procrastination may be very tragic to their child's vision and life.

A very important area in

the practice of visual care is in testing and care of the visual defects which are not correctable by glasses. Glasses correct deficiencies like farsightedness, nearsightedness, astigmatism, need for reading glasses or bifocals, etc. It is very important that if glasses are prescribed, the examination and glasses should be done in accordance with the highest standards. "Quickie" care must be avoided, indeed abolished. Visual Training is usually essential to correct deficiencies like crossed or divergent eyes, amblyopia (lazy eye) suppression, (the act of ignoring one eye when both eyes are open), tendency of the eyes to cross or diverge at far or near or both, lack of ability to achieve fusion or good focus and obtain clear and single vision at various distances.

The need for orthoptics (vision training) to correct most of the visual defects not correctable by glasses is very great. Of the many thousands of persons who need orthoptics approx. 97% of these would be noncross-eyed people. Approx. 75% of the young, trainable cross-eyed persons, can achieve straight eyes by doing visual training. There are millions of people who are not cross-eyed but have defects in their binocular vision; thru visual training these people can achieve normal, single binocular vision. The tests which should comprise a primary visual examination, as well as many of the special tests were set forth. Several serious popular misconceptions about vision were clarified and corrected.

Next to life itself, nature's most precious gift is sight. Your vision profoundly affects your work, living and health. Always give it the best of care.

The binocular vision skills of every patient should be examined and evaluated, and if any defects are detected they should be explained and corrected if possible. To do less than this is serious neglect. Schools who have been ignoring the defects of binocular vision, either with the cross-eyed or non-cross-eyed patient, should start immediately to help detect these persons and get them under orthoptic care. There are thousands of patients who are wearing their best possible glasses who are suffering needlessly from visual defects which are not correctable by glasses, but which may very likely be correctable by visual training.

Schools and the vision specialists have great challenges in this field and several corrective measures are urgently needed. The conference urged that Laboratory Courses in vision be instituted in the elementary schools, high schools, and colleges throughout the land which will illustrate and demonstrate: (1) the normal processes involved in obtaining and maintaining single binocular vision, (2) the defects of monocular and binocular vision, (3) the great importance of detecting these defects, (4) that these defects can be serious deterrents and handicaps to achievement in learning, working and living. These laboratory courses would also serve as a vital vision screening to reveal these defects. They should be used in classes of social studies, health classes, biology, physics, physiology and education.

4 1/2 pt.

5 pt.

6 pt.

8 pt.

10 pt.

12 pt.

When looking at an object, an image of it is created in each eye, therefore, presented to the brain are two images each. These images are combined in the brain to form a single image. This is called SINGLE BINOCULAR VISION. In the normal state of vision, the visual rays from the top of an object are only to normal MONOCULAR VISION. The ability to perceive depth perception is termed STEREOSCOPIC VISION. If there are deficiencies in the visual mechanism which makes fusion difficult, the person may ignore one of the images and thereby still see clearly. In spite of the fact that images had been created in both eyes and were transmitted to the brain for perception, the act is termed SUPPRESSION. ACCOMMODATION is the act of changing the focus inside the eye to obtain clear vision at various distances; it is accomplished by changing the curvature of the focusing lens thru the use of the ring-shaped muscle that surrounds the lens periphery. In order to look at near and obtain single binocular vision, the eyes must be turned inward; also the visual axes converge and meet at the object of regard, this act is called CONVERGENCE. In youth, the focusing lenses of the eyes are very elastic; most children can focus objects even three inches from their nose. As we grow older, the focusing lenses gradually lose their elasticity and at 38 to 45 years of age, difficulty is experienced in increasing the lens curvatures to enable us to focus at near; this condition is called PRESBYOPIA. There are six muscles attached to the outside of each eyeball to accomplish the turning of the eyes. When looking straight ahead at a long distance, if the supply

of nervous energy to these muscles is "in" balance so that the visual axes do not tend to turn away from parallelism, ORTHOPHORIA exists. If the supply of nervous energy to the extra-ocular muscles is out of balance but the person can overcome it

and still maintain approximately normal, single binocular vision, HETEROPTIC exists; the imbalance is LATENT. If the eyes actually cross or diverge, the imbalance becomes MANIFEST and HETEROTROPIA exists.

ORTHOPTICS (VISUAL TRAINING) should be undertaken, with most patients if difficulty is experienced in obtaining or maintaining normal, single binocular vision.

.Hold the card at 16" from your eyes.

.Determine the smallest type you can read with the right eye and left eye only. Record.

.Determine the closest and furthest points you can read with each eye. Record.

.If you can read the 4-1/2 pt., your recording will be 4-1/2/16".

DEFINITIONS OF IMPORTANT TERMS USED IN VISION TESTING AND TRAINING - *Understand the refractive and non-refractive anomalies of the visual system.*

FUSION. When looking at an object, an image of that object is created in each eye; therefore, presented to the brain are two images of each single object in space. If these images are united into a single image, FUSION is obtained.

SINGLE BINOCULAR VISION. The attainment of single vision through the use of both eyes; it is the end result of fusion.

MONOCULAR VISION. The vision resulting from the use of one eye only.

STEREOPSIS (Syn: Depth perception, 3D Vision). When single binocular vision is attained of an object which has three dimensions (height, width and depth), the right eye image is somewhat unlike the left eye image. The right eye sees more of the left side and the left eye sees more of the right side of the object. If these dissimilar images are fused, the person has a much greater ability to perceive the solidity or depth of the object than they can obtain with monocular vision. This achievement is termed STEREOPSIS. Upon looking into space (with single, binocular, stereoscopic vision) at several separate objects located at different distances, the air space between the objects "opens up". There is a great enhancement of the ability to judge the distance of each object, the separation between the objects, and the solidity of each individual object.

SUPPRESSION. If there are deficiencies in the visual mechanism which makes fusion difficult, the person may ignore one of the images and thereby still see single, in spite of the fact that images had been created in BOTH eyes and were transmitted to the brain for perception. This act is termed SUPPRESSION.

PHYSIOLOGICAL DIPLOPIA. Normally the object being observed directly is single; objects in front and behind this object are seen double (DIPLOPIA). Usually no attention is paid to this double vision; however, people with normal binocular vision can very easily elicit this type of diplopia.

ACCOMMODATION. This is the act of changing the focus inside the eye so as to obtain clear vision when the gaze is shifted from one distance to another. This is accomplished through changing the curvatures of the focusing lens of the eye which lies just behind the iris. It is accomplished thru a combination of nerves and the ring-shaped muscle that surrounds the periphery of the focusing lens.

CONVERGENCE. In order to look at near and obtain single binocular vision, the eyes must be turned inward. Since the visual axes converge and meet at the object of regard, this act is called CONVERGENCE.

ACCOMMODATION-CONVERGENCE CONDITIONING (OR ASSOCIATION). When the gaze is changed from far to near, both accommodation and convergence are used simultaneously. They thereby become linked and act together, so that if one acts, the other also acts.

PRESBYOPIA (maturing vision). In youth, the focusing lenses of the eyes are very elastic; most children can focus objects even three inches from their nose. As we grow older, the focusing lenses gradually lose their elasticity and at 38 to 45 years of age difficulty is experienced in increasing the lens curvatures to enable us to focus at near. This condition is called PRESBYOPIA.

ORTHOPHORIA AT FAR (ortho, correct; phoria, tendency). There are six muscles attached to the outside of each eyeball to accomplish the turning of the eyes. When looking straight ahead at a long distance the supply of nervous energy to these muscles should be "in" balance; so that the visual axes do not tend to turn away from parallelism; this is called ORTHOPHORIA.

HETEROPHORIA (hetero, different; phoria, tendency). The supply of nervous energy to the extra-ocular muscles is out of balance; however, the person can overcome it and still maintain approximately normal, single binocular vision. The ocular neurological imbalance is, therefore, referred to as being LATENT.

ESOPHORIA AT FAR. A tendency of the eyes to cross ahead of the distant object of regard.

EXOPHORIA AT FAR. A tendency of the eyes to turn outward from the distant object of regard.

HYPERPHORIA. A tendency of one eye to turn above the other.

ORTHOPHORIA AT NEAR. The eyes do not tend to converge ahead or relax behind the near object.

ESOPHORIA AT NEAR. Convergence tends to overact and meet ahead of the near point object.

EXOPHORIA AT NEAR. Insufficiency in convergence. The eyes tend to turn outward from the near object.

FUSIONAL CONVERGENCE RESERVE. The ability to converge the eyes ahead of the plane of regard and maintain or recover fusion; the compensatory mechanism for exophoria.

FUSIONAL DIVERGENCE RESERVE. The ability to diverge the eyes behind the plane of regard and maintain or recover fusion; the compensatory mechanism for esophoria.

HETEROTROPIA. The imbalance is apparent and is termed MANIFEST. (Syn: strabismus, squint). In a very small number of cases, the cause may be weak muscles due to underdevelopment or injury thru disease or accident.

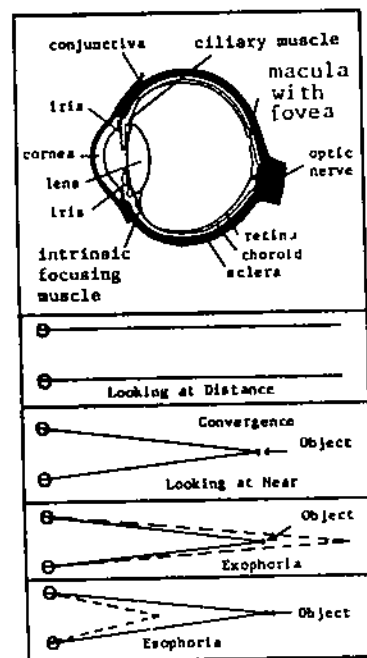
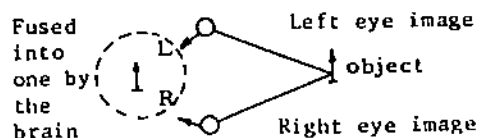
ESOTROPIA (eso, in; tropia, turn). The eyes are actually crossed.

EXOTROPIA (exo, out; tropia, turn). The eyes are actually divergent.

HYPERTROPIA. One eye is actually turned above the other.

ACCOMMODATIVE STRABISMUS. In moderate to high hyperopia (farsightedness), an excessive amount of accommodation is used to see even distant objects clearly. Because of the association to convergence, convergence responds in excess and the eyes become crossed; lenses must be worn constantly for they aid greatly in straightening the eyes. Bifocals are sometimes prescribed in these cases because they materially reduce the over-convergence at near and enable the child to learn fusion at near.

DIOPTER. The unit of measure for lenses. A one diopter lens has a focal length of one meter or 40". A two diopter lens has a focal length of 20". A three diopter lens has a focal length of 13", etc.



Extrinsic (eye turning) muscles are outside the eye.

HYPEROPIA (Farsightedness). With accommodation relaxed, the rays of light from the distant object strike the retina before coming to a focus. Accommodation must be used to see clearly at distance and never has a chance to rest. Frequently, lenses must be worn to allow clear vision without undue strain of the accommodation; the young hyperopic person may not see more sharply through their lenses. If lenses must be prescribed or increased, exophoria may be created or increased, discomfort results and orthoptics must be undertaken.

EMMETROPIA (Free of optical error). With accommodation relaxed, the rays of light from the distant object come to a perfect focus on the retina.

MYOPIA (Nearsightedness). The rays of light from a distant object come to a focus in front of the retina; vision without glasses is better at near than at far. Children or teenagers must be checked at least once a year and in many cases, every six months. Frequently, if lenses must be prescribed or increased in power to attain clear distance vision, esophoria is created or increased, and although the person sees more clearly he is more uncomfortable and orthoptics must be undertaken.

EMMETROPIZATION. Most children are born hyperopic. As they grow, the hyperopia usually decreases gradually toward emmetropia. This process is referred to as emmetropization. If the child's eyes grow past emmetropia, they become myopic (nearsighted). Children, who reach low hyperopia or emmetropia before the age of 15, should be watched even more carefully to detect the onset of myopia.

ASTIGMATISM (or astigmatia). The rays of light from a point do not focus as a point because the surfaces of the cornea or lens are not spherical.

ANISEIKONIA. The images perceived of an object through each eye are different in size or shape.

ISOMETROPIA. The optical error is the same in both eyes.

ANISOMETROPIA. Although both eyes are nearsighted or both are farsighted, the optical errors of the eyes are unequal. The accommodation muscles in both eyes are linked innervationally (called **CONSENSUAL ACCOMMODATION**) so that they cannot exert a different amount of effort to overcome unequal optical errors; therefore during binocular vision, one eye will always be out of focus and will thereby deteriorate binocular vision.

ANTIMETROPIA. One eye is nearsighted and one is farsighted.

AMBLYOPIA. Subnormal vision due to underdevelopment, disease, or injury to the eye, optic nerve, or brain.

AMBLYOPIA EX ANOPSIA. Dimness of vision due to suppression of the macular images from the conscious mind.

MACULA. The tiny area in the back of the retina in which the nerve endings are more tightly packed than anywhere else in the retina, and thru which normally the power to discriminate details is very keen.

FOVEA. The fovea is a tiny spot in the center of the macula through which the sharpness of vision is at its absolute maximum. When a person wishes to look at an object directly, and see it as clearly as possible, he must turn each eye so that the image of the object is upon the fovea.

Haidinger Brushes. An appearance of a spinning propeller when one fixates a slowly revolving polaroid plate through deep blue glasses. It can only be seen by the macula.

VISUAL AXIS. The main line of sight which extends from the fovea to the point of regard.

VISUAL ACUITY. The ability to perceive detail. Although vision is 20/20 in each eye and the person can read the smallest print at near, it is NO proof he has comfortable and efficient, normal binocular vision.

NORMAL RETINAL CORRESPONDENCE (NRC). The foveas and other corresponding areas of the two retinas are linked together so that when the images of an object fall upon them, fusion is achieved.

ABNORMAL RETINAL CORRESPONDENCE (ARC). There is a disruption of the above and the patient reports that he is using the fovea of one eye together with a retinal area in the indirect field of his other eye.

FIXATION. The act of turning the eye in order to place the image of the object of regard upon the macula.

FIXATION DISPARITY. Precise fixation with both foveas is not maintained under binocular vision; it may be in one eye only or divided between the eyes. It may be related to loss in stereopsis and/or suppression.

ECCENTRIC FIXATION. Fixation of the image of the object of regard with a false macula.

DIRECT FIELD OF VISION. The portion of the field which is seen by the macula.

PARA-MACULAR FIELD OF VISION. The portion of the field which is immediately adjacent to the macula.

INDIRECT FIELD OF VISION. The area outside the para-macular field.

PHYSIOLOGICAL BLIND SPOT. The normal blind spot in the field of vision is approximately 3° wide and 5° high. It is created in the area in the back of the eye through which the optic nerve enters. There are no nerve endings of the optic nerve exposed in this area and, therefore, it is blind.

GLAUCOMA. A very infrequent disorder in which the pressure in the eye is above normal limits. It is detected by (a) the study of symptoms, (b) loss of vision, (c) examination of the exterior and interior of the eye, (d) enlargement of the physiological blind spot and blind or dim areas in the peripheral fields. Since it occurs mainly after 40 years of age, these persons should have a yearly examination.

TANGENT FIELD TEST. The patient looks with one eye at a fixation target in the center of a black, square screen and the test for (d) above is performed.

TONOMETER. This instrument is touched very lightly against the white of the eye (sclera) or the cornea and the internal eye pressure is measured.

PHOTOPHOBIA. Discomfort arising from exposure to light. It varies greatly from one person to another; the degree of absorption must be determined individually for each person. **INDOORS**, it is intensified by exposed light bulbs, glare off highly-polished, reflecting surfaces, and direct or reflected sunlight entering through unshaded windows. **OUTDOORS**, it is intensified by bright sunlight and is more severe where vegetation is sparse or at beaches, on the water, etc. In lenses with strong prescriptions, the absorption can be achieved by a coating on white lenses; this eliminates the variation in absorption from the center to the edge of the lens. Non-tinted lenses diminish the light by reflection. **INDOORS**, a small amount of additional absorption may be needed. **OUTDOORS**, most patients prefer a neutral, dark grey lens; patients with moderate light sensitivity prefer approximately 70% absorption; patients with marked light sensitivity prefer approximately 80% absorption. These prescription sunglasses are of great value to practically all patients.

ANTI-REFLECTION COATING. A microscopically thin, colorless (or colored) coating which is bonded to the glass and greatly eliminates the secondary or ghost images seen alongside of light bulbs, car headlights, street lights, or reflections off spectacle lenses. It is of vast value to many patients. - 201 -

1. On page 11, read definitions from "Amblyopia" thru "Fovea" and "Direct Field Of Vision" thru "Physiological Blind Spot" (last 4 definitions)
2. Cut off the test wand at the bottom of this page, or preferably make one.
3. Lay a 17" x 22" cardboard on your lap tilted approximately 15-20°. A lap desk is a great aid. Use low light.
4. Place page 8 in the superior right quadrant and cover or close your left eye.
5. Use a test distance of 12". Use a 12" ruler to establish the test distance. Place it against the upper lip and the page. Fixate the dot in the lower left corner; move the test wand target thru-out the right superior quadrant. Note and record any disappearance.
6. Move the page to the superior nasal quadrant. Fixate the inferior right dot. Repeat the test. Be especially careful in this quadrant. It's the first to lose vision in glaucoma.
7. Move the page to the inferior nasal quadrant. Fixate the superior right dot. Repeat the test.
8. Move the page to the inferior right quadrant. Fixate the superior left dot. Repeat the test.
9. Testing of the Physiological Blind Spot (P.B.S.). Move the page to the center of the large card. Fixate the central fixation dot with your right eye only. Place the test wand target about 2 1/2" to the right and 3/4" below the fixation dot. It should be in the P.B.S. and should disappear. P.B.S. is approximately 1" x 1 1/2" in size. Move target up, down, left, and right and establish size of P.B.S. Be especially careful above and below the P.B.S. These areas are the first to lose vision in glaucoma.
10. If you experience difficulty or a loss of the target in any quadrant or any increase in your P.B.S., glaucoma may be indicated. See your eye doctor without delay.

To make your own visual field equipment:

1. Obtain a piece of black paper or cardboard, 8 1/2" x 11" and a bottle of white out. Paint an 1/8" dot in each corner and in the center.
2. Obtain a black ball point pen and blacken the tip down to the body of the pen. Paint 1/8" of the tip with white out or,
3. Use a nail file or a tongue depressor and blacken it, down 2". Using the white out, paint a 1/8" diameter white spot near the tip as below.
4. Follow steps 3 through 10 above.

To decide whether to take Now's Eye Support capsules:

- (a) Study your findings with tests of visual acuity, Amsler Grid and visual field tests.
- (b) Record your subjective visual symptoms.
- (c) Study your Balch and Whitaker books, pertaining to vision.
- (d) If you have any questions, ask your doctor.
- (e)

#4612 Bilberry Complex 100 caps \$24.95
RDA

Contains:	Bilberry	80 mg	
(ea.cap)	Beta Carotene	6 mg	200%
	Vit B ₂	10 mg	580%
	Carrot Powder	300 mg	
	Citrus Bioflavonoids	100 mg	

NOW Eye Support™ offers a full range of antioxidant nutrients which may aid in maintaining some visual functions. Lutein, a carotenoid found in dark green leafy vegetables, is a dominant pigment in the macular region of the eye.



Qty.	Code	Product	Size	ONLY
	3300	Eye Support	60 Caps	15.95
	3302		120 Caps	29.95
THREE EYE SUPPORT CAPSULES CONTAIN:				
Vitamin A		15mg / 25,000 IU		
(natural beta carotene, D. Salina)		300 mg		
Vitamin C (as ascorbic acid)		200 IU		
Vitamin E (as d-alpha tocopheryl succinate)		20 mg		
Riboflavin (Vitamin B-2)		25 mg		
Zinc (as L-OptiZinc)™		100 mcg		
Selenium		100 mcg		
Bilberry standardized extract		100mg		
(Vaccinium myrtillus) (25% anthocyanidins)		10 mg		
Lutein™		150 mg		
Green Tea Extract (Camellia sinensis)		100 mg		
(40% catechins)		100 mg		
N-acetyl-cysteine (NAC)		100 mg		
Rutin		100 mg		

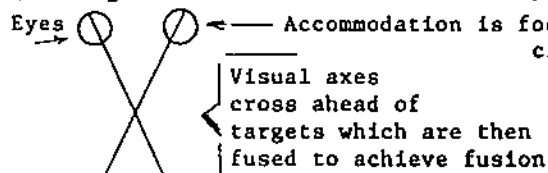
203

INSTRUCTIONS FOR USE OF BR/920H TRANAGLYPH TRAINER

- 1a. Hold trainer at your reading distance in front of a white, well-lighted surface with the notch to the right, the diffusing plate at the back, and the red slider between the holder (which contains the green target) and the diffusing plate. The lips which hold the red slider and diffusing slider are away from you.
- 1b. Place red indicator pointers of the red slider at "0". Put on red-green glasses, red filter before the right eye. Green target will be seen with the right eye. Red target will be seen with the left eye.
- 2a. You should see X vertically aligned, the and equally bright; neither dimming or disappearing, inner circle ahead of the outer circle (stereopsis,) and all four outer circles present. If you do not achieve the above, you have a binocular vision (fusion) deficiency.
- 2b. If the green targets dim or disappear, you are suppressing your right eye. If the red targets dim or disappear, you are suppressing your left eye. If the X are not vertically aligned, you have fixation disparity.
- 3a. Place notch of holder on the left, red 0 is at the top, words focus and fusion are upside down, indicator on red target is on 0, and lips of holder are behind. Check for suppression, fusion and fixation disparity. Inner circle should be behind the outer circle (stereopsis) Record any loss of normal achievement.
4. Return trainer to starting position (notch on the right). When you achieve normal responses in 2a, then move the trainer slowly toward you. You should maintain the normal response pattern to 4" from your face. Record any loss of normal achievement.
- 5a. Move trainer slowly away from you to your arm's length. Have an assistant keep moving the trainer away from you to 6 feet. Record any loss of normal achievement.
- 5b. Hold trainer at your reading distance and rotate it in a 10" circular pathway which is parallel to your face. Record any loss of normal achievement.
6. To test your FUSIONAL CONVERGENCE RESERVE, with your left fingers, hold the diffuser and carrier together, and pull the red slider to the right. Determine the number at which you lose the normal fusional pattern - blurred, double vision, suppression. Use the top scale. Return red slider to fusion and record number. MINIMAL GOAL: 20 break point and 16 recovery point. Person's with strong fusional convergence reserve can achieve 40.
7. To test your FUSIONAL DIVERGENCE RESERVE, place the notch in holder to the left, the fusional divergence scale is at the top, the words fusion are upside down and the holding lips are behind. Hold the carrier and diffusing plate together with your right fingers and slowly pull the slider to the left. Determine the number at which you lost the normal response pattern - blurred, double or suppression. Slowly return to fusion and record number. More difficult than fusional convergence reserve for most people. Try to achieve a break point of 11 and a recovery point of 7.
8. If you experience difficulty with any of the testing procedures, report them to your eye doctor. He will test you further for your heterophoria (muscle balance), stereopsis, fusion, fixation disparity, and suppression patterns and prescribe the orthoptics training program you should follow. Also report to him any discomfort you experience.
9. TO TRAIN FUSIONAL CONVERGENCE RESERVE WITHOUT RED-GREEN GLASSES, separate the targets to 12. Hold pencil approx. 6" in front of the trainer so that with the right eye the pencil tip is aligned with the X of the left target and the left eye is aligned with the X of the right target. Concentrate on the pencil tip until you achieve 3 targets. The middle target is the binocular fused target. The inner circle should be ahead of the outer circle. The target should be in focus. Increase the separation of the targets, very slowly, until you can achieve 40.
10. TO TRAIN FUSIONAL DIVERGENCE RESERVE WITHOUT THE RED-GREEN GLASSES, separate the targets to 11. Hold the trainer 4"-5" from your face. Stare thru the trainer until you see 3 targets. The central one is the binocular-fused target. (The inner circle should be behind the outer circle.) Slowly move the target away from you and hold clear and fused vision out to 16". Then increase the separation to determine your maximum achievement. Both of these techniques should be done in front of a plain, well lighted table top and/or wall.

TRAINING IN TRUE SPACE WITH STEREO CIRCLES WITHOUT RED-GREEN GLASSES

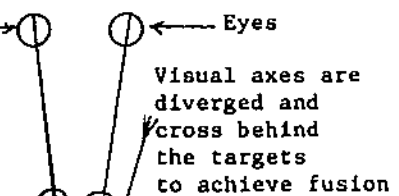
FUSIONAL CONVERGENCE RESERVE TRAINING (Convergence is ahead of accommodation)



The inner circle will be seen ahead of the outer circle

.When fusion is achieved you will see 3 circles
 .When accommodation is focused at 16", vision will be clear.
 .You should see □ X O vertically aligned. This will prove no suppression and no fixational disparity.

FUSIONAL DIVERGENCE RESERVE TRAINING (Convergence is behind accommodation)



Inner circle will be seen behind the outer circle

Goal: To achieve play between accommodation and convergence; to insure comfort when reading and working at near. If the association is too "tight", it causes eyestrain, headaches etc. The numbers on the left side of the page designate the separation of the centers of the targets, measured in centimeters.
 .The numbers on the right side of the page designate the prism diopters of fusional convergence or divergence. 1 cm = 2 1/2 prism diopters.
 .Exophores start with fusional convergence training.
 .Esophores start with fusional divergence training.
 .Your eye doctor can tell you whether you have exophoria or esophoria at near.

FUSIONAL CONVERGENCE TRAINING

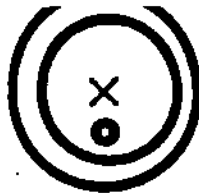
- .Hold the 3 cm. targets at 16".
- Hold a pencil at approx. 10". Adjust the pencil position so that the right eye sees the pencil tip pointing to the X of the left target and the left eye sees the pencil tip pointing to the X of the right target.
- .Concentrate on the pencil tip until you achieve 3 targets. The middle one is the binocular fused target.
- .When the 3 cm. target is achieved, look at the 4 cm. target. When it is achieved, look at the 5 cm. target.
- .When you can easily achieve the 3,4,5 cm. targets, fused and in focus, transfer your training to Fusional Divergence Training.

FUSIONAL DIVERGENCE TRAINING

- .Hold the 3 cm. targets at 16". Look just above the targets at an object which is approx. 4 feet away. Now the right eye should see the distant object behind the right circle and left eye should see the distant object behind the left circle.
- .Concentrate on the distant object until you can see 3 circles in your indirect field. Then look directly at the targets and work to hold the targets fused and clear. If you cannot, you can have an assistant stand behind you and gently pull the outer corners of the lids outward.
- .When you can easily achieve the 3,4,5 cm. targets, fused and in focus, transfer your training to Fusional Convergence Training.

When you can achieve the 3,4,5 cm. targets, transfer your training to the 6,7,8 cm. targets. You should be able to achieve fusional convergence reserve with the 8 cm. target. You may not be able to achieve fusion and clear vision of the 6 cm. target in the fusional divergence range; 5 cm. is the final goal for fusional divergence reserve for most people unless they are exophoric or have very wide set eyes.

3



4

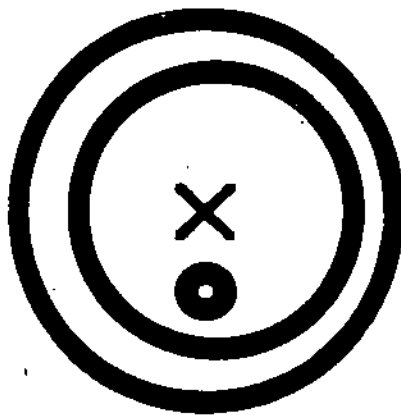
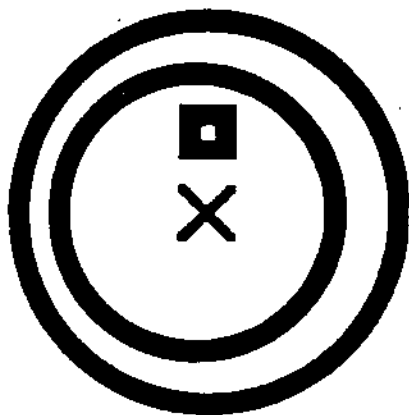


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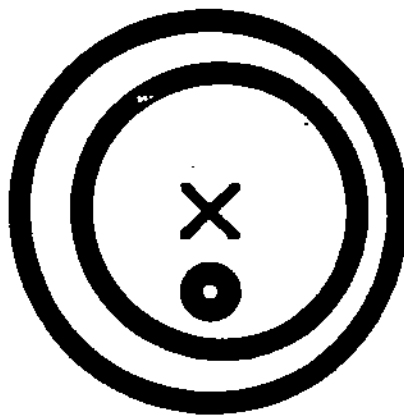
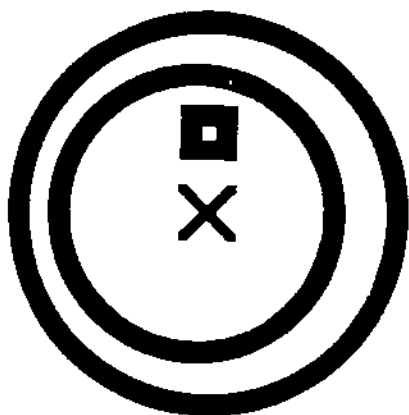
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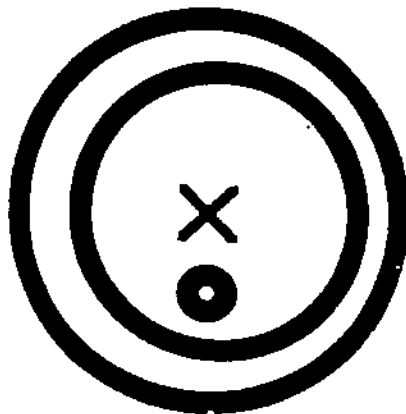
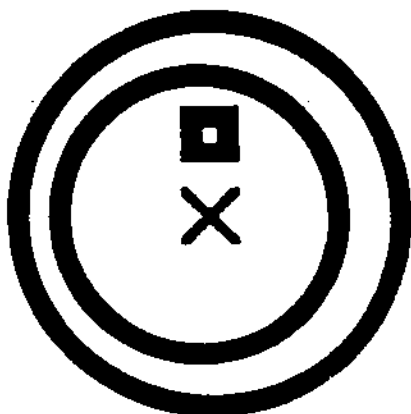
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7



17.5

8



20

The fallacy about drinking water for the minerals it contains

Some people have the mistaken belief that essential minerals are derived from the water they drink. Yes, we do need minerals. But, the source of minerals for the body is the food we eat — not the water we drink. Plants have the unique ability to convert inorganic minerals absorbed from the soil and water into organic forms our bodies can use. Our bodies can use few, if any, of the minerals absorbed in water. These minerals merely contaminate our water and hinder the water from performing its natural functions. According to experts in the field, there are several different kinds of water, and most of them are harmful in some way. These waters carry minerals, metals and inorganic compounds into our body that we can't use. These waters carry 80% of all sickness and disease. They may contain over 700 identifiable chemicals, all of which permeate our systems and may begin accumulating there. When water brought into our bodies is already polluted, its natural cleansing functions are impaired. As a result we may develop health problems as these pollutants build up in our blood vessel, joints and internal organs. Some health specialists believe we experience hardening of the arteries, arthritis, kidney stones, gall stones, vision problems (glaucoma and cataracts), loss of hearing, diabetes, obesity, emphysema and other ailments in greater intensities and more frequently when we live with and consume polluted or contaminated water. Of the several types of water, such as: rain, snow-melt, raw, hard, filtered, soft, de-ionized, boiled and distilled — only distilled water is PURE and virtually free of all contaminants. As a result, distilled water has no taste, no color, no odor, no bacteria, no heavy metals, no acids, no organic minerals, no toxic chemicals, no poisons. **DISTILLED WATER** enters your system clean. It is free to absorb and wash away the poisons your system generates and the poisons that have accumulated.

There's no absolute medical proof that drinking DISTILLED WATER will cure arthritis, heart disease, high blood pressure, hardening of the arteries, or any of the other dozens of infirmities that humans suffer. There's no absolute proof that drinking DISTILLED WATER will remove kidney and gall stones, reduce cataracts or cure emphysema. But, there are hundreds of case histories of people who have enjoyed success in alleviating or overcoming these health problems when they began drinking DISTILLED WATER exclusively.

The preceding are just a few reasons why I drink distilled water. I am not an evolutionist but I do believe that man was created an adaptable organism and that it takes a long time for an organism to adapt to a changing environment. Man has been living on earth for thousands of years. During most of this time he has been adapted to a natural environment getting his water from unpolluted springs, streams and shallow wells. This water has been relatively pure containing only moderate amounts of naturally occurring substances. But conditions have changed. Since the industrial revolution, and especially since World War II, we have dumped synthetic chemicals by the thousands into the environment. We are not adapted to these man-made chemicals. We know that many of them are toxic. We do not know the effects these will have on our bodies or the long range effects they will have on the bodies of our children and the generations to come. Does it not make sense, therefore, to consume only pure water produced by a good quality distiller right in your own home.

Dr. Clifford C. Dennison

For a Healthy Digestive System!

Vitamol®

VITAMOL TABLETS are composed entirely of roots, moss, seaweed and certain parts of milk, grain and yeast. They contain no mineral drugs of any kind. Their objective is threefold:

- ① To add vitamin B and other organic salts to the diet.
- ② To promote the bacteria *Acidophilus* and *Bifidus*.
- ③ To add bulk and roughage to the bowel contents.

Take Vitamol Tablets

to help prevent congestion and crowding of the vital organs caused by a distended stomach and help relieve bowels filled with gas and fecal matter that should be discharged daily.

*From Ind. Botanic Gardens (Dr. Price 4.98)
 50¢ VITAMOL 100 Tabs 9.95
 50¢ VITAMOL 200 Tabs 18.50 (9.25)*

Clifford C. Dennison, Ed. D., has spent most of his life in research into the physical and biological sciences. A native of West Virginia, Dr. Dennison is a graduate of Marshall University and the University of Florida, and has done post-graduate work at Cornell University and the University of Michigan. His lifelong interest in the quality of our water dates from his boyhood practice of quenching his thirst at mountain springs. Dr. Dennison has pioneered the technology of water purification and holds two patents on water distilling equipment. He is a member of *Who's Who in Science and Technology*, *Personalities of the South*, *Outstanding Educators of America*, and is a Fellow of the American Association of Science. Dr. Dennison resides in Cleveland, Tennessee, where he is an Associate Professor at Lea College.

When I was a boy, roaming the hills of West Virginia, it was such a simple matter to quench my thirst by finding a spring of refreshing mountain water. When I go back now, finding a pure mountain spring is not as easy. I can go back to the hills, but I cannot go back in time. You see, pollution has invaded the hills of West Virginia the same as it has every other place on earth. Air and water currents have spread toxic industrial, agricultural and chemical wastes, generated by our modern technological society, to every point on the globe. Even the Arctic and Antarctic ice caps are beginning to accumulate toxic wastes, so it is understandable that America's springs, lakes, rivers, wells and other sources of drinking water have not escaped this evergrowing invasion of pollutants. Scientists have proven over the years that water is one of the most efficient solvents known to man. In fact, water dissolves, absorbs and carries with it something of everything it touches. It is this property of being a universal solvent, that has allowed our drinking water to become loaded with virtually every contaminant dumped into the environment. Today, raw water, even after treatment by our cities, is a toxic chemical brew.

So, where can I go to find that refreshing drink of good, pure water that my body so desperately needs today? Ironically, for the answer we must turn to a product of modern technology — the water distiller, endorsed by the U.S. Department of Agriculture as, "The only proven way of correcting drinking water pollution in the home". The distiller provides me with pure water now, just as the mountain stream served me in the past. It provides me with the most important substance of life and health — good pure water. Now, you might ask, why is pure water so essential to life and good health? The answer is, we are over 70% water. Water, in pure form, is the common ingredient in our bodies, and is part of every cell. It is involved in most, if not all, the chemical activities of life and is so important we could live only about ten days without it. And, for good health we need to drink at least eight glasses of pure water every day.

**Pure Distilled Water
Helps Transport
Substances In My Body**

As one of the greatest solvents known, water helps prepare substances for transport across cell membranes and for distribution through our bodies by way of blood and lymph. This function of water in our bodies is impaired when the water is filled with contaminants that interfere with its ability to dissolve bodily substances efficiently.

**Pure Distilled Water
Helps Keep My Body
Chemistry Regulated
and Functioning Properly**

Metabolic activities depend upon enzymes, coenzymes, trace minerals and other substances which are present in minute quantities. Contaminants and toxic chemicals, introduced into our body through our drinking water, can interfere with normal metabolic activities and enzymatic pathways. We can understand this interference better when we consider that these vital elements may be present in quantities of a few thousand ions or molecules, whereas, just one swallow of water containing one part per million of a toxic chemical will contain six hundred quadrillion (600,000,000,000,000) toxic molecules.

**Pure Distilled Water
Helps Cleanse My Body
of Waste Materials**

Within the body, water acting as a solvent, reaches into every cell to absorb and carry away the poisons that are formed as a part of the life process. Lots of pure water is needed for this task. We all know that it is easier to wash dishes in a sink full of clean water than in a cup full of dirty water. The blood circulates 400 gallons of water through the kidneys each day. Common sense tells us that when the water we consume is pure, it can do a much better job than when it is already contaminated with toxic substances.

**Pure Distilled Water
Helps Keep My Body Cool**

This is accomplished when water in my body evaporates from the skin. If the water in my body is full of contaminants they will be left as residues that will encrust the skin, leaving it rough, dry and a breeding ground for bacteria. Drinking lots of pure water, on the other hand, will help leave the skin soft and pliable.

**Pure Distilled Water
Makes My Food and
Beverages Taste Better**

What a delight it is to drink a glass full of frozen juice made with distilled water! Without the chemicals and minerals in the water, there is nothing to hide the natural fresh taste of the fruit. Many people have told me they cannot drink their favorite beverage made with tap water once they begin using distilled water. And, distilled water also makes foods cooked in water tastier and the colors remain bright like nature intended, since there are no chemicals and other toxic substances to turn them brownish-yellow.

**I Do Not Consume Any
Harmful Substances
When I Drink**

Pure Distilled Water

Chlorine, which has been added to our tap water, may be one of the most dangerous chemicals consumed by man. Research studies indicate that chlorine combines with organic substances found in tap water to produce chlorinated hydrocarbons that may be involved in such insidious diseases as hardening of the arteries, heart attacks, strokes and cancer. I have a chlorine test kit which I use to test for chlorine in my swimming pool. I also use it to test for chlorine in my tap water. Invariably, I find that the chlorine level in my tap water is higher than allowed in my swimming pool. Tap water may be drinkable but don't swim in it!

Preface to the book "Fluoride - The Aging Factor" By Dr. John Yiamouyannis. 3rd Ed. 1913
This is a Must Reading!

Tomorrow, BBC-TV will be flying me to London to do a national television program on fluoridation. And CNN is scheduled to do a program on fluoridation after I get back. Why? Well, much has changed since the second edition of this book was published in 1986. And many of the predictions of the first and second editions of this book have now been confirmed.

The Journal of the American Medical Association (1990-1992) has reported a greater incidence of hip fractures in fluoridated areas in the U.S. and Britain. The New England Journal of Medicine (1990) reported that fluoride treatment of osteoporosis patients resulted in higher hip fracture rates. Government facilities such as Argonne National Laboratories (1988) and the National Institute of Environmental and Health Sciences (1990) have shown that fluoride causes cancer. Former promoters of fluoridation have since found that fluoridation does not reduce tooth decay (1987-1988). In the largest study on fluoridation and tooth decay ever done in the U.S. (1990), it was found that fluoridation is ineffective in reducing tooth decay. Scientists at the U.S. Environmental Protection Agency (1989-1993) have come out against fluoridation because they have confirmed that fluoridation does not reduce tooth decay and that there is clear evidence that fluoridation causes cancer. Animal studies showing fluoride-linked increases in bone cancer and oral cancer have been confirmed by human studies (1991-1993).

The American Chemical Society published a 17-page cover story questioning the safety and effectiveness of fluoridation (1988). The Rand Corporation has debunked claims by the U.S. Public Health Service that fluoride mouthrinse programs reduce tooth decay (1989-1990). Drinking mineral waters such as Vichy and St. Yorre-Royale has resulted in kidney damage and skeletal fluorosis (1989).

But the real reason for the media attention is that they have become aware of the hype that led to the promotion of this outrageous fraud. And the person responsible for bringing this

fraud to their attention was Joel Griffiths. In 1992, Griffiths wrote an article for Covert Action which gave the media what they had been asking for for years — a motive. He revealed how industries benefited from the promotion of fluoridation. Claims that fluoridation was safe and beneficial to health made it difficult for people to complain when polluting industries belched fluoride out into the air and dumped it into waterways. Such indiscriminate and careless handling of fluoride has allowed companies such as Exxon, U.S. Steel, and ALCOA to make tens of billions of dollars in extra profit at our expense.

In this book, I provide you with the compelling up-to-date evidence showing how fluoridation is chronically poisoning millions. I show why many of the professionals, organizations, and agencies we have relied upon for health information and protection from toxic substances, actually promote the addition of fluoride to public water systems — and why they campaign to stop the removal of fluoride from the drinking water, even in areas where they admit that it is having harmful effects. You get an inside look at the crooked bureaucrats, politicians, and businessmen who profit from human misery. You also get a glimpse at the long list of characters who risked their jobs and careers to get the word out to you that fluoride and fluoridation is taking its toll in human health and life.

Most importantly, I tell you how you can help turn things around and make this world a better place to live.

Take these steps:

John Yiamouyannis

May 29, 1993

1. Buy the book.

2. Read and apply it in your every day life.

3. Loan it to your friends and loved ones and encourage them to read it!

Find out who's profiting from the chronic poisoning of over 130,000,000 Americans, and how to recognize and avoid the devastating effects of fluoride. Read: **FLUORIDE - THE SILENT FACTOR** - By Dr. John A. Yamamoto, M.D. Third Edition published 1995. Below are the conclusions of 6 of the chapters of this 22 chapter book of 292 pages. Cost \$4.95

WARNING: Fluoride not only causes the immune system to act like the immune system of an 'old' person, it also causes autoimmune damage to the entire body and accelerates the aging process of that body. The low levels at which fluoride exerts its deleterious effects indicates that there may be no safe level of fluoride.

WARNING: Everyone being exposed to the levels of fluoride found in the fluoridated drinking water is being chronically poisoned. Recurrent 'upset stomachs', arthritis, skin problems, weakness, etc. are diseases which people begin to accept as normal. As these diseases become more severe, they are attributed to 'old age'. Of special interest is the fact that before any disease is even noticeable, the acceleration of the aging process by fluoride is already occurring at the biochemical level (by means of enzyme inhibition, collagen breakdown, genetic damage, and/or disruption of the immune system per se). People who do not experience one or more of the overt fluoride-induced clinical symptoms will invariably be experiencing the fluoride-induced subclinical deterioration of the body commonly referred to as aging.

WARNING: While the visible symptoms of dental fluorosis occur in only 20-35% of those consuming fluoridated drinking water or fluoride supplements during childhood, premature loss of teeth can still be expected to occur even in those who do not exhibit dental fluorosis due to damage caused during tooth development.

WARNING: While arthritis and other clinical manifestations of bone disease do not occur in everyone drinking fluoridated water, processes leading to the premature development of arthritis, osteoporosis, and bone fragility can be expected to occur in all people who drink fluoridated water or who, in any other way, increase their fluoride intake.

By interfering with collagen production, fluoride leads to the production of larger quantities of imperfect collagen and/or other types of protein and thus interferes with the body's normal regulation of collagen mineralization.

The type and array of collagen and collagen-related proteins made by the various collagen-producing cells determine whether or not the collagen framework will be mineralized. During the aging process, cumulative damage to these cells leads to the diseases attributed to 'old age' — arthritis, arteriosclerosis, brittle bones, wrinkled skin, etc. Consumption of fluoride produces the same effects and results in the same diseases.

Fluoride probably acts by interfering with the enzymes essential for setting up the proper conditions for producing intact collagen. Thus, as has already been indicated, larger amounts of imperfect or deformed collagen fibers are formed and the body's ability to regulate collagen formation and mineralization is hindered. Illustrated below is an x-ray of the forearm bone of one of a group of people with a disease attributed to the consumption of 8 to 10 mg of fluoride per day, only twice the amount of fluoride consumed by people living in fluoridated areas in the United States. The hair-like projections constitute an excellent example of collagen synthesis run wild.

Dr. Stephen Greenberg from the Chicago Medical School observed a disturbance of the DNA in white blood cells of animals treated with 5-10 ppm fluoride and observed other changes which he maintained were characteristic of cancer cells.

It is quite clear that fluoride causes genetic damage. The mechanism of action of fluoride cannot be exactly pinpointed because fluoride interferes with a number of physiological processes. Most evidence indicates that fluoride acts on the DNA repair enzyme system. This does not rule out the possibility that fluoride also interferes with DNA synthesis or that it may even act directly on the DNA itself. DNA is composed of two molecular strands held together by hydrogen bonds and fluoride is capable of disrupting these bonds. Such disruption would be expected to result in genetic damage directly and/or interference with DNA synthesis and DNA repair. Fluoride-induced genetic damage may also result from the general metabolic imbalance caused by fluoride selectively inhibiting certain enzymes.

BLOW WATER DISTILLERS REMOVES 99% OF THE FLUORIDE. TO GET RID OF FLUORIDE YOU MUST DISTILL YOUR WATER.

Why does U.S. still favor water fluoridation?

When Gov. Pete Wilson of California signed a bill to fluoridate all of the water supplies in the state, it sent shock waves through every environmentally-concerned community, especially since 12 Nobel Prize winners have termed the process "worthless."

If fluoridation is such a panacea, why have all of these countries discontinued it as ineffective against tooth decay or never started its use in the first place: Austria, Belgium, Chile, Denmark, Egypt, France, Germany, Greece, Holland, India, Italy, Luxembourg, Norway, Spain and Sweden. And why is the U.S. one of the few countries still promoting this discredited technique?

In an article in the November 1995 issue of the *Townsend Letter for Doctors and Patients*, Richard G. Foulkes, M.D., stated that "fluoridation does not prevent tooth decay, but (rather) it contributes to dental fluorosis (brown spots on teeth) and other adverse health effects."

Fluoride is known to be more toxic than lead

He adds that, "fluoride is known to be more toxic than lead and only slightly less toxic than arsenic. Recently, in 1994, N.P. Gritsan, G.W. Miller and G.G. Smalov reported their study on the effect of various pollutants on abnormal plant development in South-east Ukraine. They found that among 17 elements (studied), including fluoride, cadmium, lead and aluminum, fluoride was the most toxic."

He added that, since humans share the same enzyme systems and DNA mechanisms as other biota, and fluoride is a proven enzyme and DNA repair-inhibiting agent, why would anyone think that humans are immune from its toxic effect?

"Standing in the background letting others work for them are those industries that supply the raw materials used for fluoridation or who benefit from the image of fluoride as benign," Foulkes continues.

I have covered similar ground in my recent book, *The Big Family Guide to All the Minerals* (Keats, New Canaan, Conn., 1995), in which I call water fluoridation "the rip-off of the 20th century."

In the meantime, who knows how many hundreds of thousands of Americans have suffered heart attacks, cancer, etc., since fluoridation was introduced 50 years ago. One estimate concludes that fluoridation causes 40,000 cancer deaths annually. For those who live in California, call Patrick von Mauck at the National Health Federation (818-357-2181), George Glasser (813-896-9050) or James Lockhead (805-255-0393) to see what action can be taken to stop fluoridation or to file a class-action suit. In good health!

Frank Murray
Editor of
Better Nutrition
Magazine
Editor

Parasites in water becoming deadly

From South Bend Tribune July 1996

By H. JOSEF HEBERT

Associated Press Writer

WASHINGTON — Faced with an increasingly vulnerable population, federal health and environmental officials are paying closer attention to what once was considered more of a nuisance than major health threat in drinking water: water-borne parasites and bacteria.

These bugs long have been in drinking water but have not gained as much attention as cancer-causing chemical contaminants because they often caused little more than temporary illnesses.

That has changed, however, largely because of changes in population.

"All of a sudden we have a high rate of AIDS patients, we have an aging population," says Jack Sullivan of the American Water Works Association, a coalition of water treatment groups. "By the year 2020 we're going to have a huge percent-

age of our population over 65."

All of these population groups, he said, are especially vulnerable to pathogens in the drinking water, and in many cases in which a person's immune system has been compromised, the results can be fatal.

So when signs of bacteria were found in drinking water in the nation's capital last week, an immediate directive went out advising those most at risk to be their water. The order soon was rescinded, but officials poured more chlorine into the system to clean it out, and on Wednesday the EPA announced it will conduct independent testing in an effort to restore public confidence in city tap water.

Understandably, the public has been squeamish about drinking the city's water all week. The reason

See PARASITES/Page 4

indications that the city's aging water pipes are full of bacteria.

"Most of these organisms have been around for eons," said Dennis Juranek, an expert in parasitic diseases at the federal Centers for Disease Control and Prevention in Atlanta. He said only when people began reporting severe illnesses and even dying from such bugs did they become known to health specialists.

For many years, the microbial problems in drinking water were "put on the back shelf" by federal regulators, said Diane VanDe Hei, executive director of the Association of Metropolitan Water Agencies. She said that only recently has that changed.

According to CDC estimates, between 900 and 1,000 people a year die and 1 million people become sick from microbial illnesses caused by tap water. Other estimates have put deaths as high as 1,200 and estimated illnesses at more than 7 million, many never reported to doctors.

"It is a serious issue, an emerging threat. We think it needs significant focus," EPA Administrator Carol Browner said. Her agency already has shifted some of its focus in dealing with pollutants and plans a five-year, \$50 million effort to learn more about microbial pollution.

Some of the emerging pathogens are still mostly a mystery to health experts and pose a particular problem for water treatment systems because they can't be killed with chlorine — at least at the levels allowed in drinking water.

The health threat crystallized in 1993 when 100 people — most of them elderly or otherwise susceptible to illness — died in Milwaukee in an outbreak of cryptosporidium in the city's drinking water. More than 400,000 others got sick.

But the problem is likely to become more severe before it gets better as vulnerable populations grow and scientists discover yet more pathogens.

Health Effects of Selected Drinking Water Contaminants

On April 12, 1983, the Office of Research of the California State Assembly presented a report to that body dealing with the problem of toxic chemicals in California's underground water supply basins. In that report was a listing of the sites where contamination had been found, the nature of those contaminants, and their probable health effects.

The following information represents excerpts of that list. While we have not verified the validity of that public document, we have reviewed it carefully, including the sources which contributed to its conclusions. We find the claims generally in accordance with the data cited in the documents.

In addition there are more than 150 other potentially harmful chemicals which the United States Environmental Protection Agency has found in our drinking waters. We have included the most common of these in our list and identified them with an asterisk (*).

As a result we are recommending that you evaluate this list, especially in light of the other information we have provided, and then ask yourself, "What is the risk to me?"

CONTAMINANT	PROBABLE HEALTH EFFECTS*
Arsenic.....	Malignant tumors of skin and lungs, cramps, spasms, effects to nervous system
Barium.....	Prolonged stimulant action on muscles, nerve block
Benzene.....	Associated with cancer, leukemia, anemia
Cadmium.....	Bronchitis, anemia, gastrointestinal upsets, cancer in rats
Carbon tetrachloride.....	Central nervous system depression, gastrointestinal effects, liver and kidney damage, coma, death
Chlordane*.....	Carcinogen, liver and kidney damage
Chlorobenzene.....	Irritation to respiratory system, central nervous system depression
Chloroform.....	Possible liver, kidney and heart effects; carcinogenic in at least one animal species
Chromium.....	Kidney damage, cancer
Copper.....	Gastrointestinal tract irritant, possible infant fatality, Wilson's disease
Dichlorobenzene(s)*.....	Suspected carcinogen
1,1-Dichloroethane.....	Central nervous system depression, liver damage, suggested animal carcinogen
1,2-Dichloroethane.....	Nausea, mental confusion, liver and kidney damage
Dichloroethylene*.....	Nausea, dizziness

Ethylethendibromide (EDB) ...	Decreased fertility
Heptachlor.....	Possible tumor induction, carcinogenic in test animals
Lead.....	Damage to nervous system, kidneys, reproductive system; cancer in rats
Lindane.....	Chronic liver damage, anemia, leukemia
Mercury.....	Kidney impairment, possible death
Methylene chloride*.....	Toxic
Nickel.....	Signs of hypoglycemia and gastrointestinal and nervous disorders
Pentachlorophenol (PCP).....	Loss of appetite, respiratory difficulties, anesthetic, coma, death
PCBs.....	Damage to skin and liver; nausea, loss of weight, jaundice, coma, death
Selenium.....	Carcinogen; irritation to mucous membranes, dermatitis
Sulfate.....	Laxative action
Tetrachloroethylene.....	Central nervous system effects; confirmed animal carcinogen, anesthesia, death
Toluene.....	Narcosis, irritation to eyes and respiratory system
Toxaphene.....	Possible liver damage
1,1,1-Trichloroethane.....	Narcosis, depression of central nervous system, unconsciousness, death
1,1,2-Trichloroethane.....	Possible liver and kidney effects, possible carcinogen in animals
Trichloroethylene.....	Central nervous system depression, loss of coordination, unconsciousness; strong irritant and carcinogen
2,4,6-Trichlorophenol.....	Suspected carcinogen
Tribromomethanes (THMs).....	Effects to nervous system and muscles, loss of consciousness
Vinyl chloride.....	Central nervous system depression, dulling of visual and auditory responses, possible death
Xylene.....	Mucous membrane irritant, lung congestion, impairment of kidney functions
Zinc.....	Muscular stiffness and pain, loss of appetite, nausea

*The Assembly Office of Research states that the health effects listed for these substances were compiled from the following sources:

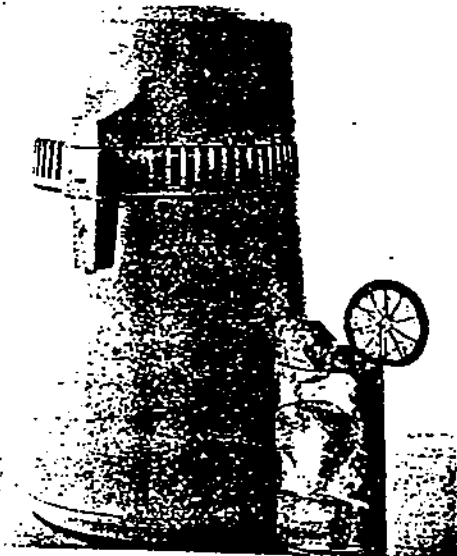
- "Drinking Water and Health", National Academy of Sciences, Safe Drinking Water Committee, 1977
- "Contamination of Ground Water by Toxic Organic Chemicals", U.S. Council on Environmental Quality, 1981.
- "Carcinogenic Hazards of Organic Chemicals in Drinking Water", R.H. Harris, T. Page, and N.A. Reaches, 1977

CONTAMINANTS REDUCTION BY ECOWATER DISTILLERS

CONTAMINANTS REDUCED	
Potential Contaminant	Percent Reduction
Arsenic	96
Bacteria (cfu/ml) ²⁰	> 99
Barium	> 99
Cadmium	96
Chromium	94
Fluoride	> 98
Lead	95
Mercury	87
Nitrate (as N)	99
Selenium	98
Silver	> 98
Lindane	91
2,4,5-TP (Silvex)	55
Trihalomethanes (THM's)	97
Chloroform	93
Bromoform	> 99
Chlorodibromomethane	> 99
Bromodichloromethane	> 98
1,1,1-Trichloroethane	92
1,1-Dichloroethylene	99
1,2-Dichloroethane	91
Benzene	99
Carbon Tetrachloride	> 99
TCE (Trichloroethylene)	99
Turbidity (Turbidity Units)	95
2,4-D	75

OTHER SUBSTANCES REDUCED	
Aluminum	86
Bromide	> 96
Calcium	97
Chloride	> 99
Chlorine (residual)	91
Chlorobenzene	> 99
Cis-1,2-Dichloroethylene	99
Copper	> 99
EDS (Ethylene Dibromide)	99
Iron	97
Magnesium	99
Methylene Chloride	91
Nitrate (as N)	> 94
PCB (Aroclor 1250)	95
PCE (Perchloroethylene)	99
Sodium	98
Strontium	> 99
Sulfate	> 99
Sulfides	> 88
Trans-1,2-Dichloroethylene	> 99
Zinc	> 99
1,1,2-Trichloroethane	99
1,1-Trichloropropane	98
1,2,3-Trichloropropane	98
1,2-Dichloropropane	> 99

FOR COMPLETE INFORMATION REQUEST OUR PERFORMANCE
DATA SHEET FOR ECOWATER DISTILLERS (INCLUDES)
AVERAGE INFLUENT AND MAXIMUM EFFLUENTS)



ONE IN 5 DRINK CONTAMINATED WATER

By LAURA MYERS

Associated Press Writer

WASHINGTON — More than one in five Americans unknowingly drink tap water polluted with feces, lead, radiation or other contaminants, two environmental groups said today. And the problem is growing.

The studies used Environmental Protection Agency statistics for 1993-94 to conclude that 53 million Americans drank water that violated EPA safety standards under the Clean Water Act. That compared with 50 million the year before, and was an increase of 7.6 million over 1991-92.

Nearly 1,000 deaths each year and at least 400,000 cases of water-borne illness may be attributed to

contaminated water, according to the Natural Resources Defense Council and the Environmental Working Group.

The groups predicted that deaths would increase and water quality would worsen if a House-approved bill passes Congress to weaken the 1972 Clean Water Act. President Clinton has promised to veto such a GOP measure.

"When hundreds of thousands if not millions of Americans are getting sick from tap water every year, it's incredible that the only discussion in Congress is to weaken drinking water standards, rather than strengthening and adequately funding them," said Erik Olson, author of one of the reports.

EPA Administrator Carol Browner acknowledged the problem, saying in a statement that "we still have a lot of work to do to protect the most simple necessity of our lives — water. These reports underscore the fact that the job of protecting public health is never done."

New York City residents drank most of the bad water when they weren't drinking Perrier. The city exceeded health standards for turbidity and fecal coliform, affecting more than 6.5 million people, the report said.

Other "drinking water to watch" cities in the reports, in order of the number of people affected, included Tucson, Ariz.; Greenville, S.C.;

Utica, N.Y.; Elizabeth, N.J.; New Port Richey, Fla.; Decatur, Ill.; Lansdale, Pa.; Joliet, Ill.; Springbrook Township, Pa.; Fort Bragg, N.C.; Altoona, Pa.; Rock Hill, S.C.; Oakview, Calif.; Bloomington, Ill.; Shamokin, Pa.; Camden, N.J.; Davis, Calif.; Danbury, Conn.; and Merchantville-Pennsauken, N.J.

"Tap water ought to taste good and smell good too, like it used to before good water came to mean bottled water," complained Kenneth Cook, president of the Environmental Working Group.

But the environmentalists said safety was their biggest concern, with the EPA monitoring such harmful substances as disease-carrying feces, lead, radiation, para-

sites and pesticide residues, among others.

The studies reported 45 million people drank water from systems contaminated with cryptosporidium, for example, a parasite that infected more than 400,000 people and killed more than 100 in Milwaukee in 1993.

Other pollutants, radioactive and chemical, can cause health problems such as cancer and birth defects, the study authors said.

Olson, principle author of the Natural Resources Defense Council study, said the EPA statistics don't reflect the real size of the problem because utilities often fail to report violations. He said about two dozen states and territories didn't mention any violations last

year.

"It is clear that substantially more people are exposed to violations than is indicated in the data in this report," he wrote.

The release of the reports came just days after Clinton pledged to veto a GOP overhaul of the pollution law that tracks such violations. He accused the Republican Congress of trying to create a "Dirty Water Act."

Republicans accused Clinton of being a mouthpiece for environmentalists.

The legislation would revamp the federal government's protection of waterways from urban, industrial and farmland pollution, giving local officials a greater say in meeting water quality standards.

I use this distiller and find it excellent. I'll order one for you if you desire. I have to order 3 at a time, and get them for approx 1/2 of retail price (190.00). Your cost will be approx. 115.00. The Waterman, Inc. advertises them for 239.00 with a regular price of 259.00.
-210-a

Here's to Your Health!

Fluoride Killing the Brains of Our Children

Truth, Study Results Deep Sixed by Medical Establishment, Spokespersons

The medical Establishment and its toadies in the mainstream media like to portray opponents of fluoridation of public water as crackpots. Now a respected British newspaper has broken the traces.

By BOB WOFFINDEN

Fluoride first entered the public consciousness as part of a postwar new dawn, when science would unerringly lead the way to a better life for all. Today, every science textbook refers to its capacity for inhibiting dental decay, especially among children. It was delivered to the population either through the fluoridation of the public water supply or by fluoride in toothpaste.

Fluoridation was essentially a socialist health policy. It made scant difference to the teeth of children from secure backgrounds, who already got nutritious diet and regular dental hygiene, but fluoride looked after all the others. In the phrase often cited by dental professionals, it gave poor kids rich teeth.

There were those who counseled caution on the grounds that fluoride is a cumulative poison and that, in any case, rates of dental decay were falling dramatically even in countries that did not espouse its use. But the concept of fluoride as a supremely benign aid was instilled in generations of dental students.

The idea was an American import. As a whole, Europe has never been persuaded. Only about 2 percent of the continent has artificially fluoridated water, and virtually all of that is accounted for by Britain (10 percent of the country) and Ireland (66 percent). Some areas also have naturally fluoridated water.

On one obvious level, the fluoridation of the public water supply is an absurd concept. We all know what happens to the nation's water: About one third is lost in leakages before it ever gets anywhere; seven eighths of the rest is used by industry, and much of the remainder literally goes down the toilet. The proportion that reaches our teeth is tiny indeed.

And this isn't all that is bizarre about fluoridation. For many years, dental authorities have confidently

asserted that whereas fluoride's impact on the teeth is wonderfully beneficial, its impact on bones, even over a lifetime, is nonexistent. There is now increasing evidence that this is exactly what it seems: an illogical proposition.

During the 1990s, a steady trickle of scientific reports has found a "statistically significant" association between water fluoridation and increased risk of hip fracture. One study found a "small but significant" additional risk of hip fracture among both men and women exposed to artificial fluoridation at one part per million—precisely the level at which water is fluoridated in Britain. A fresh and more alarming study by the University of Bordeaux found that people living their lives in fluoridated areas of southwestern France suffered 86 percent more fractures than those living in non-fluoridated parts.

Fluoride may have other incapacitating effects. Research undertaken in the U.S. for the National Toxicology Program (NTP) in 1990 and 1991 showed "a possible increase in osteosarcomas in male rats" exposed to fluoride. Osteosarcoma is rare, but it is one of the principal cancers of childhood. After the NTP report, the Department of Health in New Jersey commissioned a study that found that in male children under the age of 20, the risk of osteosarcoma was between two and seven times greater in fluoridated water areas. There are also indications that fluoride impairs the functioning of the immune system and that it may have a role in infant mortality and Down's syndrome births.

In the 1980s, Phyllis Mullenix developed a sensitive test using animal models to ascertain the effects of neurotoxins on the central nervous system. She was recruited to head the department of toxicology at the Forsyth Dental Center in Boston. Her research went well until she stepped into politically sensitive territory by using her system to test the effects of fluoride. Mullenix noted disruption to the behavior patterns of rats and concluded that fluoride adversely affected the brain. She went on to show that fluoride accumulated in brain tissue and that its effects depended on the age of exposure—the younger were more vulnerable.

To get her next funding grant, she presented her interim findings to representatives of the major manufac-



Before you start teaching you kid to brush with fluoridated toothpaste, check the label—there may be a poison warning. Inset: the skull and crossbones on a can of sodium fluoride, the "miracle cavity fighter."

turers of toothpaste. She was asked, "Are you telling us that we're reducing children's IQs by putting fluoride in toothpaste?" She replied, "Well, basically, yea."

Mullenix was told that her work was "not relevant to dentistry" and fired from her post at the Forsyth. (She retained an appointment at the Harvard Medical School.) She sued the Forsyth for wrongful dismissal and recently won what is believed to be a substantial settlement.

In the U.S., at the same time the first fluoridation scheme was being introduced, scientists were admitting, in documents now disclosed under the Freedom of Information Act, that they had no idea what the effects of low-level exposure would be. In fact, there has never been a single long-term, scientifically inviolable study of fluoridation.

In New Zealand, Dr. John Colquhoun, chief dental officer of Auckland, examined the dental records of all schoolchildren from 1980-90, the better to promote his objective of fluoridating the whole country. To his surprise and concern, he discovered errors in the study design, some fabrication of statistics, and no advantage at all from fluoridation. He subsequently reversed his opinions about fluoride. Similarly, in Canada, British Columbia's director of dentistry discovered that the records of schoolchildren from fluoridated and non-fluoridated areas suggested that

there was no benefit in fluoridation.

To risk so much for the sake of so little really is extraordinary. Who would want to prevent the occasional filling if children's mental development is at stake? The possible subtle effects of long-term exposure to low levels of fluoride can no longer be ignored. In the first place, no one should be taking fluoride supplements, particularly if they live in a fluoridated area. Second, children should be supervised by parents when brushing their teeth. They should use only a pea-sized amount of fluoride toothpaste—though no one would ever suppose as much from watching the television commercials—and should on no account swallow it.

Since it is difficult not to swallow toothpaste, and since fluoride is in any case absorbed through the gums, parents may want to purchase non-fluoride toothpaste—were it not that this is almost impossible, since the supermarkets and pharmaceutical retailers have severely restricted consumer choice in this matter.

The final irony is that fluoridation, having been introduced to bridge the social economic gulf in society, probably benefits the poor least of all. It is precisely those suffering poor nutrition and hence vitamin and mineral deficiencies who will be most vulnerable to fluoride's toxic effects.

This article first appeared in The Guardian of London, June 7, 1997.

Yogurt and Acidophilus

Yogurt and acidophilus: the bacteria in the colon are described as two types, anaerobic (the good) and aerobic (the bad). We are told that the bacteria in a healthy colon ideally should be at least 85% lactobacteria (good) and no more than 15% coliform bacteria (bad), and that the typical colon bacterial count in our society is reverse (15% good and 85% bad) due to our disastrous SAD (Standard American Diet) and that we must change this ratio from a 15% good and 85% bad to 85% good and 15% bad. There are a great number of different types of good lactobacillus bacteria. One in particular is very important in our digestive tract - - lactobacillus acidophilus. It is so named because it lives and grows in an acid environment. When the lacto-acidophilus (good) thrives the enterobacteria (bad) are unable to flourish. Your goal should be to daily eat an abundance of non-fat plain, home-made yogurt. Avoid most of the commercial yogurts, and the new frozen yogurt craze. If this does not work for you take some acidophilus capsules daily at less than 2 cents per capsule. The container must read, "contains active cultures" of acidophilus. If it is not so labeled you may just drink milk at far less cost. Also please read section on acidophilus.

Some of the important benefits of L. Acidophilus reported are:

1. They produce their own vitamins which are absorbed into the blood. Far better than the vitamins in pills!
2. Potent strains are known to synthesize many of the B vitamins including biotin, folic acid and B-12. If you are a vegetarian, be sure to make lavish use of yogurt, or take acidophilus capsules, Now #2907 2 Billion per capsule. 250 caps. 6.98
3. They increase the efficiency of the absorption of calcium, phosphorous and magnesium. Use yogurt to help prevent osteoporosis. Now #2930 2 Billion acidophilus + Bifidus 60 caps 5.98 2932 " " 120 " 9.98
4. They help normalize cholesterol levels in the blood. If your cholesterol is elevated, eat an abundance of yogurt; get rid of butter, sour cream, and processed cheese.
5. They maintain an anti-biotic environment in the intestinal tract. This natural antibiotic is referred to as acidophilin and it inhibits 27 different types of bacteria including strep, staph and salmonella. They guard against diarrhea whether it is due to an adverse food reaction or the use of antibiotics. Whenever we take an antibiotic it should be followed by a heaping tablespoon (or 2) of yogurt with active cultures, homemade preferred, or an acidophilus capsule. Yogurt does not interfere with the antibiotic.
6. They produce digestive enzymes. If you have difficulty digesting your food, use yogurt to help avoid using antacids which you want to eliminate.
7. Some strains generate lactase (the enzyme which digests milk sugars and thereby help people who are lactose intolerant (milk allergy) to be able to digest dairy products. If milk and cheese give you gas indigestion, nausea, and skin rashes, try eating yogurt.
8. They help maintain bowel regularity. If you're troubled by constipation, eat yogurt.
9. They are considered effective in our fight against acne, allergies, baldness, breast disease, cancer, colon cancer, colitis, constipation, diarrhea, eczema, herpes, cold sores and candida (a fungus infection). It is thought that the bacterial poisons (from bad bacterias) absorbed from the intestines directly or indirectly affect almost every disease.
10. It has been reported that antibiotic therapy destroys the protective acidophilus in the vagina and that women with vaginal infections should take acidophilus.

In view of the above, we can understand why some consider yogurt as a longevity extender!

ENTEROBACTERIA (THE BAD) PREFER AN ALKALINE ENVIRONMENT. When people eat an excess of protein, the body cannot digest it all in the intestines and the undigested protein which reaches the colon provides a perfect food for the bad bacteria to thrive on. Therefore, do not overproteinize: 4 to 6 oz. of chicken, fish or turkey for the entire day is enough for most people. The body cannot store protein. When we ingest an excess amount it converts it to fat. Therefore, we can get fat on protein!

IN THE WOMB, THE BABY'S INTESTINE IS STERILE. Mother's milk contains an abundance of substances which cause the *L. acidophilus* bacteria to thrive. The breast fed baby thereby rapidly develops a stable microflora of good bacteria in its intestinal tract to combat the onset of the bad bacteria which will be very rapidly entering the intestinal tract. For the sake of the baby's health all babies should be breast fed.

YOGURT. Because of its many benefits, it's wise to make non-fat, home-made preferred, plain yogurt a regular part of your daily diet. Use it as a spread to get rid of butter and margarine, use it as a dressing on vegetables, use it to get rid of commercial salad dressings, use it to make up delicious desserts with multi-grain, fruit breads, fresh and plumped-up dried fruits, and cranberries and nuts. Check the labeling on the container, it must read "contains live acidophilus cultures". Some yogurts are pasteurized or heat treated, which destroys the acidophilus bacteria. Refrigerating or freezing doesn't harm them, it just deactivates them. They reactivate once they are in the warmth of the stomach. To make your yogurt, which you are strongly urged to do, you may use whole milk, skim milk, low fat milk, half and half or dry non-fat milk powder which is the most recommended and most economical, and results in a super product. You may heat the milk in your microwave oven or on your range top. Avoid the sweetened, fruit-filled yogurts; they are likely pasteurized and may contain thickeners, chemical additives and 6 to 10 teaspoons or more of refined sugar per 8 oz.

Instructions for making homemade yogurt. 1 quart quantity.

- Use **Non-Fat Dry Milk**. (Non-instant, low heat; much more nutritious than the regular commercial dry milks). Use $\frac{1}{3}$ cup dry milk per 8 oz glass. To make a quart use $\frac{2}{3}$ cup per 1 quart distilled water (1 lb. @ 2.13)
- Heat to just below boiling. (approx 7-8 minutes). Let it cool to approx 112°.
- In the absence of a thermometer, drip some on your wrist; should be comfortably Luke warm. Stir in #2915 Acidophilus Powder, 1oz @ 3.95 1-1/2 teaspoonsful.
- Wrap the Mason jar in a small heating pad set on high. Keep for eight hrs. or until yogurt is made and thick. Check your heating pad for setting that holds 110°

Taste and nutrition enhancers of yogurt. Use fresh or dried fruits and fruit and vegetable juices. Mixing the resultant mixture with your cereal, wheat germ, wheat bran, etc. will help make them more delicious and nutritious.

If your stomach and intestines are very deficient in the lactase enzyme, which is essential to the digestion of milk sugars in dairy products, even yogurt may give you gas. If it does, get your acidophilus from acidophilus capsules (3 cents to 9 cents each), or purchase lactase enzymes and mix it into your yogurt. Many lactose deficient people get by with eating only very small portions (1-2 tblsp.) at a time. Use them to make creamed vegetables. Avoid commercial processed yogurt, the manufacturers may dump in to 8 oz, 6-10 teaspoons of refined sugar, various junk flavors, and chemical additives and thickeners; there are some exceptions like Dannon's plain, non-fat yogurt; hunt them up they will be worth your trouble.

o One cup of yogurt supplies:

Calories	150 gms
Carbohydrates	17 gms
Proteins	12 gms
Fat	4 gms

% RDA	% RDA
Proteins 30	Calcium 40
Vit. A 2	Vit. B 12 20
Vit. B 1 4	Phosphorus 35
Vit. B 2 30	

2910	Acidophilus Caps (REF)	100 Caps
2912	(1 Billion/Cap, Milk Free)	250 Caps
2915	Acidophilus Powder (N, REF)	4 oz.
2917	(1 Billion/Gram whey base)	2 lb.
2920	4 x 6 Acidophilus (N, REF)	60 Caps
2922	(4 billion x 6 strains - Roselle)	120 Caps
2925	4 x 6 Acidophilus (N, REF) 10	3 oz.
	(billion per gram - 6 strains milk-free)	

Each 4x6 Acidophilus Capsule Contains: 300 mg of four billion organisms in the following amounts at the time of manufacture:		
Lactobacillus rhamnosus	50%	Potency 2.0 Billion
Lactobacillus acidophilus	10%	400 Million
Lactobacillus bifidus	15%	600 Million
Streptococcus thermophilus	5%	200 Million
Streptococcus faecium	15%	600 Million
Bifidobacterium longum	5%	200 Million
	100%	4.0 Billion

4x6 Acidophilus is formulated with a maltodextrin base, and is free of milk, wheat, yeast, soy, preservatives, additives, and common allergens.
Manufactured in Canada by Roselle Institute

New #1542 Zinc Gluconate 50mg 100/450 250/450

New Zinc Picolinate 50mg caps. #1550 60/250 155/250 155/250 155/250

Zinc Rich Foods Are Critical To Healthy Life

Zinc Helps:	Food Sources Of Zinc:
• Poor Night Vision	• Turkey 50g 40%
• Prevention & Therapy of Prostatitis	• Chicken Meat 50g 13%
• Loss of Taste And Sense of Smell	• Chicken Meat 50g 27%
• Reduce Inflammation In Synovial Membranes	• Rolled Oats 1/3 Cup 27%
• Clear Acne	• Oat Groats 1/3 Cup 55%
• Decrease Body Odor	• Wheat Germ 1/3 Cup 27%
• Wound Healing	• Oat Bran -0-
• Proper Growth	• Sunflower Seeds 1/4 Cup 13%
• Sexual Maturity	• Cashews 1/4 Cup 10%
• Improve Fertility	• Pumpkin Seeds 1/4 Cup 17%

New #1540, Full Spectrum Minerals will give 33.5mg Zinc for 3 tablets.

- Increase Immunity & Resist -ence To Disease.
- Rheumatic Arthritis.
- Reduce Inflammation.
- Large Amounts Are Toxic.
- Do Not Exceed 50mg. Can Lead To Fever, Nausea, Vomiting, Diarrhea, Depletion Of The Body's Store Of Iron & Copper. RDA = 15mg. Strive for 30-50mg.

FULL SPECTRUM MINERALS

Here's our best (and only!) multiple mineral that includes everything an average person needs.

PER TABLET PERCENT		%RDA*	
Calcium (Carbonate, amino acid chelate, citrate)	1000 mg	100	100
Magnesium (Oxide, amino acid chelate, citrate)	500 mg	125	125
Zinc (amino acid chelate)	22.5 mg	150	150
Iron (amino acid chelate)	20 mg	120	120
Copper (amino acid chelate)	1 mg	50	50
Selenium (L-Selenomethionine)	150 mcg	100	100
Manganese (amino acid chelate)	5 mg	100	100
Chromium (yeast-free, Picolinate)	50 mcg	100	100
Vanadium (amino acid chelate)	50 mcg	50	50
L-Glutamic Acid (HCL)	3 mg	3	3

*Based on U.S. RDA established by the National Research Council (1980).

The following nutrients do not have a U.S. RDA established:

- Potassium (Potassium)
- Molybdenum (amino acid chelate)
- Selenium (L-Selenomethionine)
- Chromium (yeast-free, Picolinate)
- Vanadium (amino acid chelate)
- L-Glutamic Acid (HCL)

Boron

Base ingredients include 70 trace minerals and cofactors derived from ancient soil deposits.

Qty.	Code	Product	Size	ONLY
1540		Full Spectrum Minerals	100 Tabs	5.95
1542			250 Tabs	12.95

3 #1540 Tablets are considered safe. Many people are advised to take 1500mg of calcium, 750mg of magnesium, 2mg of copper, and 50mg of zinc. If you do not want to take 3, there are tablets with

If you are eating a full vegetarian diet, you are getting a vast amount of these minerals and nutrients. Read Dr. Rubens (pg 30)

World-wide, vast numbers are suffering with terrible, devastating, mental illness. The very existence of our world is ^{threatened} by hatred, intolerance and terrorism. Each of us must do all we can to help fight and eliminate these horrendous destructive forces.

The same computer and telecommunication networks that enable millions of Americans to be interconnected through the Internet and World Wide Web, has proven to be a boon for racists, anti-Semites, anti-government extremists and other hatemongers.

In February, 1996, ADL issued *The Web of Hate*, a now acclaimed report documenting a troubling, fast growing phenomenon – the use of the Internet by racists, anti-Semites and other extremists to promote and recruit for their cause, communicate more easily and cheaply and reach new audiences – particularly the young.

Some of those we documented then are no longer active on the Web. Some young activists have apparently renounced the hate-filled messages they were promoting. Others have faded away for no clearly discernable reason, and some have persisted but languished, not growing or adding new content. But this is not the general trend. Since early 1996, both the number and sophistication of hate sites have grown significantly. *Read "Dathering Storm - America's Militia + Rust" by Morris Dees, chief trial counsel for the Southern Poverty Law Center and its militia Task Force. Also read the release of the Simon Wiesenthal Center and the Southern Poverty Law Center, 100 Washington Ave., Montgomery, AL 36104.*

Introduction
In March, 1995, Don Black, an ardent racist, anti-Semite and ex-leader of the Ku Klux Klan, created *Stormfront*, the first and longest lived, extremist hate site on the Internet, a page that quickly became a major on-line source of white supremacist and anti-Semitic propaganda and "hyper-links" (an embedded, easily used command on a Web page that directly connects the viewer to another document or site on the Web) to other groups. Initially, Black could only find a handful of other sites to "link" to that reflected his racist message.

By July 1997 *Stormfront* was claiming that more than 800 people a day were looking at its materials and Black now directly links to about 50 site locations on the Web devoted to anti-Semitism, Holocaust denial, neo-Nazism, racism, xenophobia, homophobia, anti-government conspiracy mongering and other extremist themes. And Black's listing is far from comprehensive.

The growth of hate and extremism the World Wide Web, while deeply disturbing, simply mirrors the juggernaut-like expansion of Internet use. Computers, a fixture in the business world, are becoming more common in homes, schools and libraries in the United States and around the world. So is Internet access. And prices are falling for both.

Beyond low cost and ease of use, the Internet provides a new type of information distribution – always available, instantaneously accessible and international. Time and distance are compressed. The World Wide Web creates the illusion that all information is present in the user's computer at the instant it is needed. Getting information has never been easier.

But the Web has done more – it has turned every user into a potential publisher; it has never been easier for an individual to get their ideas out to the world. As Supreme Court Justice Stevens recently wrote:

... any person with a phone line can become a town crier with a voice that resonates farther than it could from any soapbox. Through the use of Web pages, mail exploders, and news-groups, the same individual can become a pamphleteer.

America Online, by far the biggest Web access provider, gives every subscriber the ability to create a personal Web page and provides free Web publishing tools. Many other Web access providers do the same.

This is a communications revolution as significant as that begun by the development of the printing press in the 15th century. Shrewd bigots of all kinds recognize this and are rushing to use the enormous power of this revolutionary new communications medium to rally their supporters, to preach to the unconverted and intimidate and assault those groups that are the targets of their hatred.

Executive Summary

Almost half the groups and individuals documented in ADL's 1996 encyclopedic study, *Danger: Extremism – The Major Vehicles and Voices on America's Far-Right Fringe*, are represented on the Web either through sites of their own or by someone publishing their writings.

Well-known bigots and hate groups and publications – the Ku Klux Klan, *The Spotlight* (house organ of Willis Carto's Liberty Lobby, the largest anti-Semitic propaganda organization in the United States), incendiary neo-Nazi William Pierce and his National Alliance, as well as David Duke, probably America's best known and most politically active racist – are active on the Web.

Holocaust deniers, peddling anti-Semitism through pseudo-history based upon little more than their longing to shape what Nazi apologist Ernst Zündel describes as the "True World Order with the ideas and concepts born in the minds of the magnificent [German] generation of the 1930s and 1940s," have been particularly eager to embrace the new technology. Denier sites are scattered throughout the world: the U.S., Australia, Sweden and Italy.

Militias, "common law court" activists, modern-day secessionists such as the Republic of Texas, all talking about patriotism without betraying the slightest understanding of the democratic notion of the rule of law, are also using the Internet. The Internet has also become a major source of weapon and survival and military training information.

Add to that a number of neo-Nazi skinhead and white-power music sites, Web pages operated by Identity "churches" which have appropriated the language of Christianity to justify white supremacy, racism and anti-Semitism, as well as a number of independent haters located in the U.S. and countries around the world, and what emerges is a Web of Hate, a nexus of extremist propaganda that pollutes the social and political contexts in which we live.

The rapid growth of the Internet, and its systematic use by haters, raises many difficult political, legal and social questions. Some of these involve constitutional issues about freedom of speech. Others involve privacy and personal and national security issues. Simply as an example, many colleges and universities are now grappling with the issue of whether to regulate hate speech on their computer services.

The Web is a rapidly evolving environment and it is important to understand that the particulars of any one site can, and often do, change overnight. Others just go away. This volatility should not obscure the central and troubling facts: extremists and racists of all sorts have moved their propaganda efforts intensively and skillfully to the Internet, and their Web sites all share one common goal – to stir social unrest and conflict, and to spread the seeds and cultivate the bitter fruits of anti-Semitism and other forms of bigotry.

Conclusion

Hate is polluting the Internet, and bigots of all kinds are rushing to use the enormous power of this new communications medium. Through Web sites and e-mail they intrude into our home, workplace, school and university as never before. ADL intends to match and surpass them, continuing to expose their ugly intent, to hold them up to public scrutiny and to counter their messages of hate.

