



**FOOD AS
MEDICINE**

by Jerry Brunetti

Copyright 2007

Northern Michigan Small Farm Conference

Grayling, MI January 27, 2007



**HEALTH COMES FROM
CONSUMING
FULL- SPECTRUM,
NUTRIENT- DENSE
SUSTENANCE**

Foods are Medicines!



- **POTASSIUM: 8% RDI.** *Helps control normal blood pressure.*
- **FAT FREE, CHOLESTEROL FREE FOOD ... NATURALLY.**

PRUNES/DRIED PLUMS ARE THE #1 ANTIOXIDANT FRUIT!

U.S. Dept. of Agriculture scientists at Tufts University ranked Dried Plums highest in antioxidant power compared to other fruits tested.

FRUIT ANTIOXIDANT SCORE*



*Oxygen Radical Absorbance Capacity is a test tube analysis that measures the total antioxidant power of foods and other chemical substances, per 100 grams. Source: U.S. Department of Agriculture (1999).



Nutrition experts recommend a diet low in fat and high in fiber, which includes at least 5 servings of fruit and vegetables every day for better health.

“SOMEWHERE OVER THE RAINBOW.....”

You will find:

Lutein

Resveratrol

Lycopene

Proanthocyanadins

B-carotene

Ellagic Acid

Tocatrianols

Bioflavinoids

Quercertin

Chlorophyll



Pigments are Powerful

Anti-viral / bacterial
Anti - Oxidants
Immune Fuels
Free Radical Scavengers

Endocrine balancers
Source of Enzymes
Detoxifiers
Tissue Repair



Organic Milk's Grass Pigments

(Danish Institute of Agricultural Research)

- 50% More Vitamin E
- 75% More Beta Carotene
- 200-300% More Lutein & Zeaxanthine

THE GRAPE CURE



Tannins

Caffeic Acid

Resveratrol

Grapes & Japanese Knotweed

- Phytoalexins: Protects Against Plant Diseases, Climatic Stress
 - Blocks Progression of Estrogen Related Cancers
 - Inhibits Metastasis
 - Maintains Normal Estrogen Activity
 - Inhibits, Even Kills Development of Cancer Cells in All Three Phases: Initiation, Promotion, Progression
 - Effective Against Development of Amyloid Beta Protein Deposits in Alzheimers
 - Increases Nitric Oxide to Relax Blood Vessels
 - Reduces Abnormal Blood Clots & Blockages
 - Inhibits COX-2 Inflammatory Response
 - 70% Lower in Grapes Treated with Fungicides



Blueberries

USDA Human Nutrition Center: #1 Rank in Anti-Oxidant Activity vs 40 Fruits & Vegetables

- Anthocyanin (Blue Pigment)
- Protection From Urinary Tract Infection
- Prevents Brain Damage From Strokes
 - Reduce LDL
- Prevents/Reverses Macular Degeneration
- Vitamins A, C, Zinc, Potassium, Iron, Calcium & Magnesium
 - High in Fiber
- Anti-Bacterial/Viral (Especially G.I. Tract)

Strawberries



- **USDA Human Nutrition Center: Rank #2 in Anti-Oxidant Activity vs. 40 Fruits & Vegetables**
 - **Richest Berry in Vitamin C**
 - **High in Anthocyananins & Ellagic Acid**
 - **Inhibit Oxidation of LDL**
 - **High in Folic Acid, Potassium**

Raspberries



- **High in Ellagic Acid- Anti Cancer**
- **High in Coumaric & Ferulic Acid**
- **Rich in Pectins (Lowers Cholesterol)**
- **Protective Against Esophageal Cancer**



Cranberries

- Bacterial Anti-Adhesion (Mannose)
 - Urinary Tract Infections
 - Tooth Decay & Gum Disease
 - Stomach Ulcer
- Inhibits the Growth of Cancers:
Prostrate Colon Cervix Breast Lung Leukemia
- Lowers Total Cholesterol/Raises HDL
- Richest Berry in Phenols



Apples

- 30% Reduced Risk of Asthma (U.K.)
- Very High Levels of Quercetin
- Anti-Oxidant/Bioflavonoid
- Rich in Trace Elements (Including Selenium)



The Healing Power of a Wholesome Diet for Tumor Patients

By

Jeanne M. Wallace, Phd, CNC

www.tbts.org

Anti-Oxidant Capacity of Selected Fruits, Vegetables and Spices in ORAC (oxygen radical absorbing capacity) UNITS

- >3000 Blueberries
- > 2000 Oregano, pomegranate juice, figs, cinnamon
- > 1000 Prunes, pomegranates, turmeric, raspberries, blackberries, Brussels sprouts, green tea, strawberries, spinach, kale
- > 500 Oat bran, oranges, plum, red cabbage, cranberries, broccoli, parsley beets, basil

Sambuca (Elderberries)



Norwegian Study

Types A & B Flu
Recovery

3.1 days (treated)

vs.

7.1 days (placebo)

Cilantro



- **“Dodecenal”**: Twice as Effective as Gentamicin in Killing Salmonella

(University of California)

- Powerful Chelator of Heavy Metals Such As Lead, Mercury, Aluminum

(Dr. Yoshioke Omura- Heart Research Foundation, NYC)



CHERRY JUICE

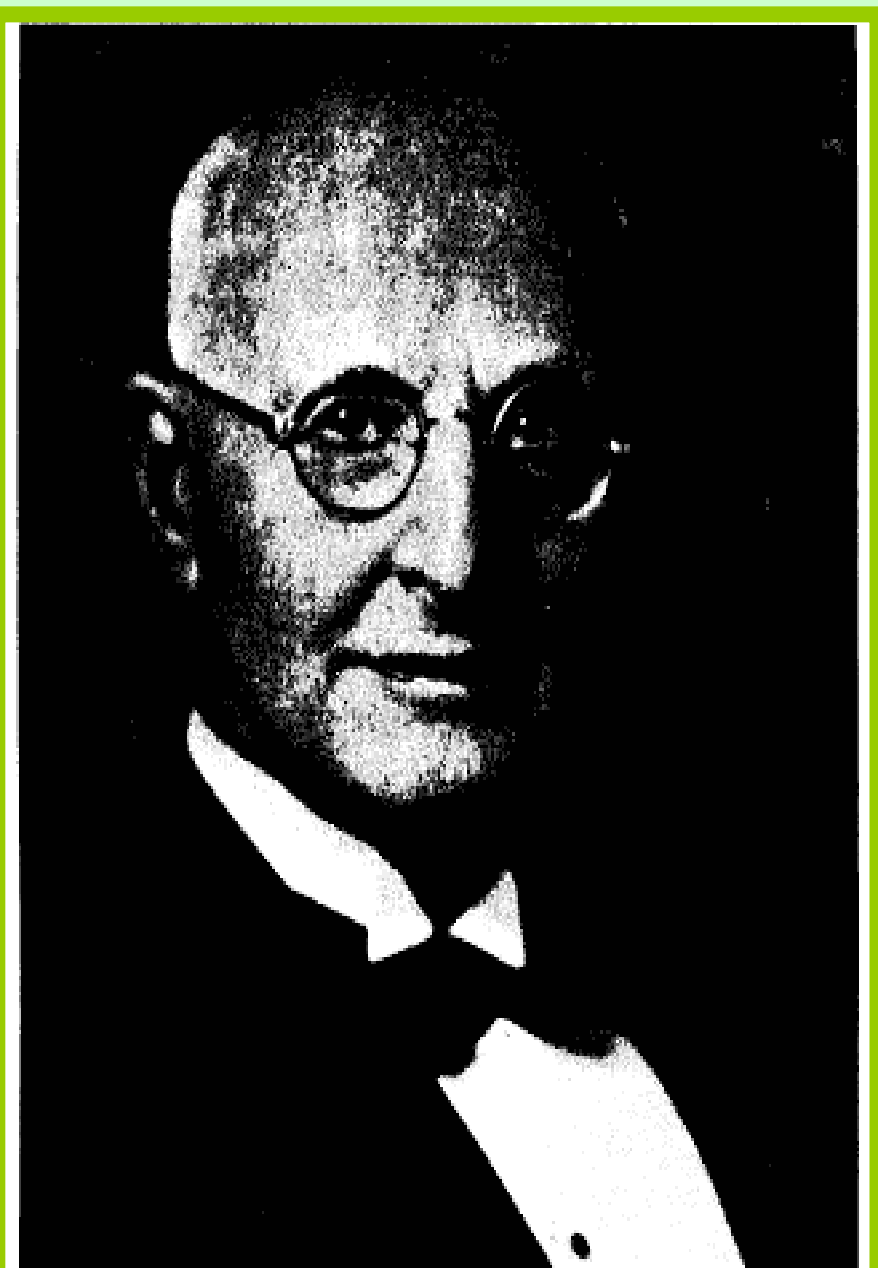
- Rich in Melatonin (45ng/gm)
- High Levels of Perillyl Alcohol (Limoneno)
- Anthocyanins (Cox-1, Cox-2 Inhibitors)
 - (1/2 cup/day; 2 TBL Concentrate)
- Blocked 89% Enzyme Activity Causing Decay
(Forsyth Dental Center, Boston, MA)



Lycopene du Jour



**Tis the season
to eat in season**



Nutrition and Physical Degeneration

6th Edition

Weston A. Price, D.D.S.

With forewords to previous editions by
Earnest A. Hooten, Professor of Anthropology,
Harvard University,
Granville F. Knight, M.D.
and Abram Hoffer, M.D., Ph.D.

Nutrients in Traditional Diets Compared to 20th Century Western Diets (Numbers Represent Percentage Greater in Traditional Diets)

	Calcium	Phosphorous	Magnesium	Iron	Fat-Soluble Vitamins
Eskimo	540%	500%	790%	150%	1,000+%
Swiss	370	220	250	310	1,000+
Gaelics	210	230	130	100	1,000+
Australian Aborigine	460	620	170	5,060	1,000+
New Zealand Maori	620	690	2,340	5,830	1,000+
Melanesians	570	640	2,640	2,240	1,000+
Polynesians	560	720	2,850	1,860	1,000+
Peruvian Indians	660	550	1,360	510	1,000+
African (cattle raising)	750	820	1,910	1,660	1,000+
Africans (agricultural)	350	410	540	1,660	1,000+

(Source: Price, 1938)

SELENIUM

- Potentiates Chemotherapy for Prostate & Colon Cancer
- Drew University of Medicine and Science
 - Significant Increase in Apoptosis and Decrease in DNA Synthesis in Cancers of Breast, Lung, Small Intestines, Colon and Liver
- 10 Year Study on 1312 Subjects
 - Prostate Cancer Reduced 63%
 - Colon Rectal Cancer Reduced 58%
 - Lung Cancer Reduced 46%
- Dose: Use Se-Methylselenocystiene: and Selenium Yeast: 400-600 mcg/day. Take with Vitamin E (Tocotrienols and Gamma Tocophenol) 400-800 IU/day



Traditional Sources of Iodine

**SEA
VEGETABLES
& SEAFOOD**



IODINE (ANION)



- Concentrated in the thyroid and ovaries & lacteal glands
- Involved in energy metabolism, Vitamin A metabolism, body temperature, growth and immune function
- Reproduction: Silent estrus, abortion, extended gestation; depressed libido & poor sperm quality
- Immune Function: Foot Rot, mastitis, respiratory ills, actinomycosis
- Goitrogenic: Brassicas, Soybeans, thiocyanates (clover), nitrates
- Seaweeds: Up to 0.6% I
- Pastures: 60-180 ppb
- Daily intake is 25-50 mg/day
- Ruminant ration ranges from 2.0-5.0 ppm
- Seafood, eggs and free range hens are rich in iodine

Eel	4700 IU
Pilchard	1500 IU
Sardines, fresh	1500 IU
Herring, fresh	1500 IU
Red Salmon	800 IU
Pink Salmon	500 IU
Mackerel	500 IU
Chinook Salmon	300 IU
Herring, canned	225 IU
Chum Salmon	200 IU
Tuna	200 IU
Milk	100 IU

FOODS HIGH IN VITAMIN D

IU/3½ OZ.

Cream & Butter?!

Lard?!

OMEGA 3 FATTY ACIDS IN FRESH SEAFOOD (mg/3½ oz raw)

Roe, Fin Fish	2345 mg
Atlantic Mackerel	2299 mg
Pacific Herring	1658 mg
Atlantic Herring	1571 mg
Pacific Mackerel	1441 mg
Sable Fish	1395 mg
Chinook King Salmon	1355 mg
Spanish Mackerel	1341 mg
Whitefish	1258 mg

Blue Fin Tuna	1173 mg
Sockeye Red Salmon	1172 mg
Pink Salmon	1005 mg
Greenland Turbot	919 mg
Shark (Mixed)	843 mg
Ohio Silver Salmon	814 mg
Blue Fish	771 mg
Striped Bass	754 mg

Percentage of Essential Fatty Acids in Human Body Fat (1991-1992)

Society	% Omega-6	% Omega-3	Ratio
New Zealand Maori	2.6	0.93	2.8:1
Japanese	14.8	3.2	4.6:1
American	10.2	0.58	17.6:1

(Source: Erasmus, 1993)

February 22, 2004

BUSH'S
MILITARY RECORDS
IS DISNEY MOUSETRAPPED?

TIME

THE SECRET KILLER

- The surprising link between **INFLAMMATION** and **HEART ATTACKS, CANCER, ALZHEIMER'S** and other diseases
- What you can do to fight it





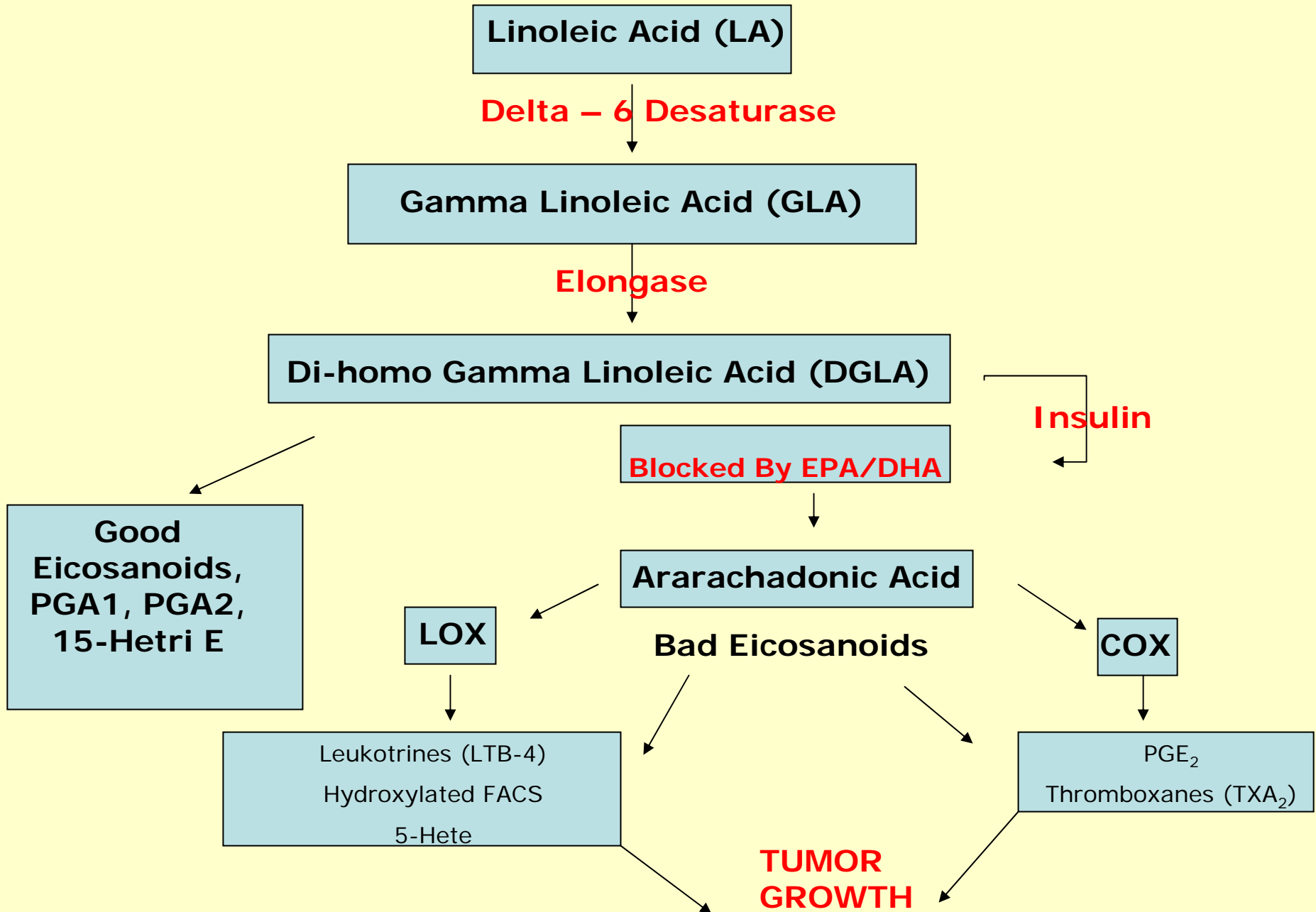
INFLAMMATORY CYTOKINES (Vioxx or Celebrex??!!)

- Result of Excessive Insulin (Sugar!)
- Result of Excessive Omega 6's (Grain)
- Result of Deficiency of Omega 3's

INFLAMMATORY CYTOKINES (Vioxx or Celebrex??!!)

- Tumor Necrosis Factor-alpha (TNF-a)
 - Interleukin 1-beta (IL-1b)
 - Interleukin 6 (IL-6)
 - Interleukin 8 (IL-8)
 - Nuclear Factor Kappa B (NF-kB)

INFLAMMATORY EICOSANOIDS & ENZYMES





VEGETABLES OF THE CROSS

CRUCIFEROUS VEGETABLES

- ◇RADISH
- ◇BROCCOLI
- ◇KALE
- ◇CABBAGE
- ◇CRESS
- ◇CAULIFLOWER
- ◇KOHLRABI
- ◇MUSTARD
- ◇RUTABAGA
- ◇TURNIP
- ◇BRUSSEL SPROUTS
- ◇HORSERADISH

CRUCIFEROUS VEGETABLES

Anti Cancer Compounds: chlorophyll, dithiothiones, flavonoids, indoles, isothiocyanates, phenols (caffeic & ferulic acids),
Vitamins C & E

“Number One” Vegetables in Protecting Against Cancer
(Univ. of Minnesota, Suny-Buffalo, John Hopkins, NCI)

- Stimulates Production of Antibodies
 - Powerful Detoxifiers
 - ◇ Glutathione
 - ◇ Enzymes that attach Glutathione

Affect cancers of: colon, rectum, esophagus, larynx, prostate
and bladder

Eating Cruciferous Vegetables

- University of Hawaii: 1600 Men
 - Cut Prostrate Cancer Risk 40%
 - Cut Colorectal Cancer by 50+%
- Harvard University
 - Cut Bladder Cancer by 50%
- Vanderbilt University: China Study
 - 50% Reduction in Breast Cancer

I3C (INDOLE 3 CARBINOL)

- Inhibits Growth of Estrogen- Receptor Positive Breast Cancer Cells by 90% vs. Tamoxifen @ 60%
- Stops Human Cancer Cells From Growing (54-61%) and Initiated Apoptosis
- Increases Conversion of Estradiol to Estriol by 50% in (1) Week (12 Subjects)
- Prevented Aflatoxin Induced Liver Cancer, Leukemia, Colon Cancer & Chemically Induced Breast Cancer 70-96% (Lab Rats)
- Restores p21 and Other Proteins That Correct Adducts (Tamoxifen No Effect)
- Hoechst Marrion Roussel: New Generation of Indole Drugs to Replace Estrogen Drugs
- Dose 200 mg 2-4x / Day As Per Body Wt.

Soil Sulfur → **Glucosinolates** (14 identified) e.g.
Crobenene, Neoglucobrassin,
Glucoerucin, **Glucobrassicin**,
Glucoraphanin

Glucobrassicin → I3C (Indole 3 Carbinol)
→ Ascorbigen (via **Vitamin C**)
→ Glutathione (via **NAC**)

I3C → **HCL** → I3CA, I3A, ICZ, DIM, Ltr, HI-IM

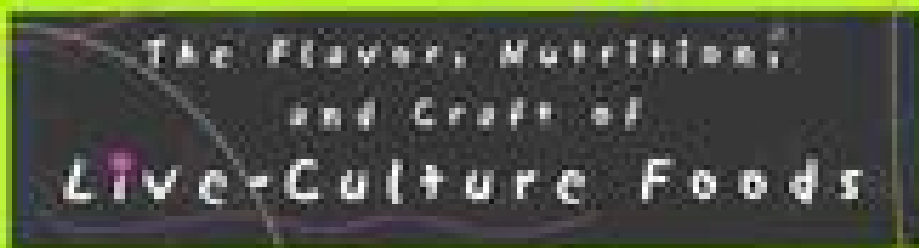
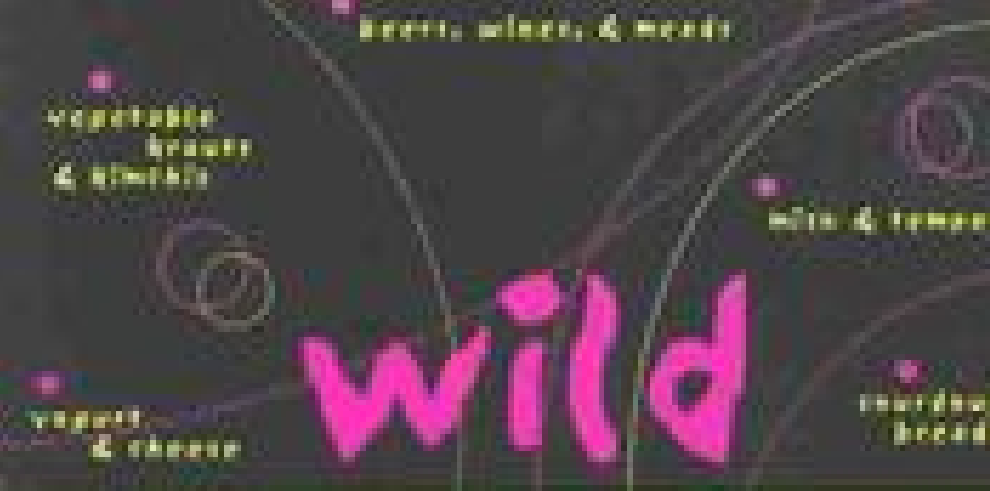
Glucoraphanin → Sulforaphane

Fermented Vegetables Sauerkraut, Kimchi, Relishes, Chutneys



FERMENTATION CHEMISTRY

- LACTIC ACID
- BENZOIC ACID
- LACTOPEROXIDASE
 - NICIN
 - ACIDOLIN
- HYDROGEN PEROXIDE
 - ENZYMES (!)
 - VITAMIN C
 - VITAMIN K₂
 - VITAMIN B-12



Foreword by Sally Fallon, author of *Nourishing Traditions*

Sandor Ellix Katz

- Pre-Digests Foods
- Enlivens Foods
- Creates Nutraceuticals

OPTIMAL DIGESTION

- The G.I. Tract Has More Neurons Than the Spinal Cord
- The G.I. Tract Is The First Defense of Immunity
 - Digestive Secretions (HCL, Bile, Pancreatic Enzymes)
 - Peyer's Patches
 - Probiotic Eco-System: Up to Several lbs. of Microbes (more cells than the human body)
 - Anti-Biotic Secretions
 - Protective Sheath on Villi
 - Decontaminating Enzymes
 - Producers of Vitamin K, B-12

Salicylic Acid

- Found in Most Fruits & Vegetables
- Needed for Senescence, Insect & Disease Protection in Plants
- Anti-Clotting, Anti-Inflammatory without Side Effects of Stroke, G.I. Bleeding
 - Organic Vegetables 6X More S.A. than Non-Organic
 - Contributes to Lower CRP From Mediterranean Diet

Salicylic Acid-Rich Fruits

- Raisins
- Prunes
- Raspberries
- Apricots
- Blackberries
- Boysenberries
- Cantaloupe
- Cherries
- Cranberries
- Currants
- Dates
- Guava
- Grapes
- Loganberries
- Oranges
- Pineapples
- Plums
- Strawberries

Salicylic Acid-Rich Vegetables

- **Broccoli**
- **Chili Peppers**
- **Cucumbers**
- **Okra**
- **Spinach**
- **Squash**
- **Sweet Potatoes**
- **Canned Tomatoes**
- **Tomato Paste/Sauce**
- **Green Peppers**
- **Radishes**
- **Zucchini**

EGGS FROM GRASS: FOOD “OVA-TION”

Primary Source of Essential Fatty Acids

- 1:1 Ratio of Alpha Omega 3's and 6's
- Rich in EPA/DHA (Landlubber Salmon)
 - Arachidonic Acid
 - Cholesterol (!)
- Cysteine- Pre-cursor to Glutathione
 - Fat Soluble Vitamins
 - ◇ Vitamin A (as Retinol vs. Carotene)
 - ◇ Vitamin E
 - Lecithin
- Choline: Necessary for Liver Detox

NUTRITIVE VALUE OF OMEGA EGGS



	Omega Egg 60 g – large egg	Standard Egg 60 g – large egg
Calories	75.0	75.0
Protein	6 grams	6 grams
Carbohydrate	.6 grams	.6 grams
Total Fat	6.0 grams	6.0 grams
Saturated Fat	1.5 grams	2.2 grams
Polyunsaturated Fat	1.35 grams	.90 grams
n-6 Fatty Acids	750 mg	800 mg
n-3 Fatty Acids	350 mg	60 mg
C18:3	250 mg	40 mg
C22:6 DHA	100 mg	20 mg
n-6:n-3 Ratio	2.6	13.0
Monounsaturated Fats	2.8 grams	2.4 grams
Cholesterol	180 mg	210 mg
Vitamin A	660 i.u.	470 i.u.

COMPARED TO STANDARD EGGS

Lutein
 Carotene
 Vitamin E
 Cysteine
 Choline

} ?

Some Beneficial Substances in...

Substance	Effect
Beta-carotene	Antioxidant
Vitamin E	Antioxidant
Chlorophyll (contains magnesium)	Nourishes the heart
Squalene	Protects the heart
Phytosterols	Reduce cholesterol
Oleic Acid (monosaturated)	75%
Saturated	13%
Omega 6	10%

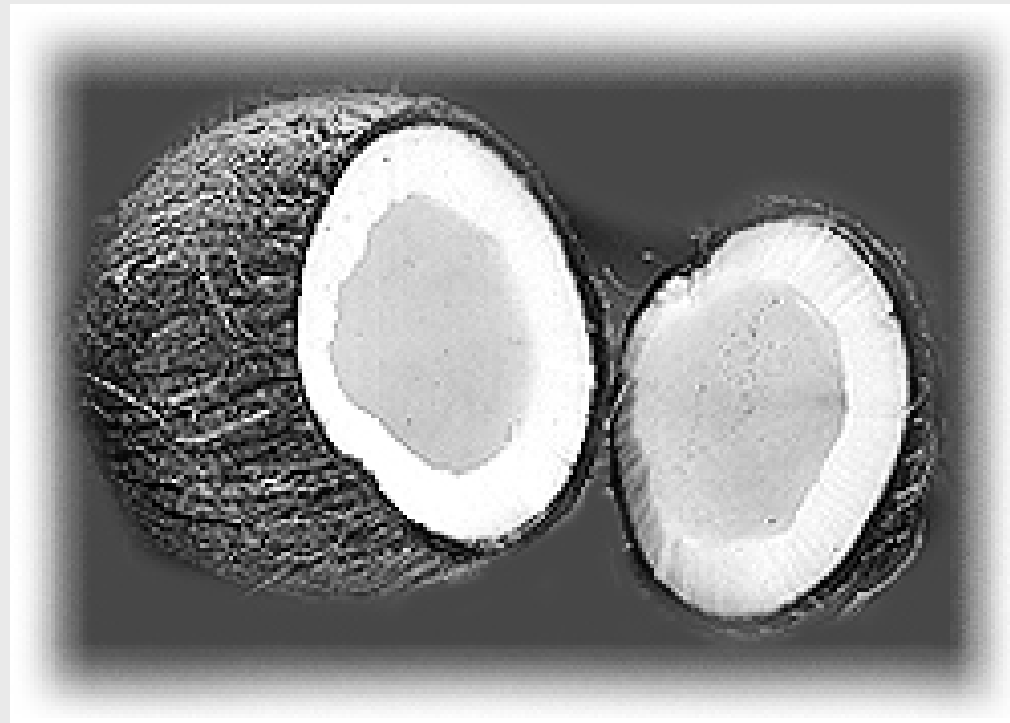
Big, black & beautiful.
Manzanillo olives.



Virgin Olive Oils

COCONUT OIL

- Contains medium chain fatty acids
- Rich in anti-microbial lauric acid
- 92% saturated = very resistant to rancidity



FLAX SEED OIL



- “THE” Omega-3 cereal
57% Omega-3, 16% Omega 6, 18% Omega-9
- Need magnesium, zinc, B-6, Vitamin C to convert to EPA/DHA

Starch from below and above



Don't "Wonder" why you're a success !





MILK
AS
MEDICINE

FRESH & FERMENTED GRASS BASED DAIRY

PURE UNADULTERATED MILK (WHICH IS ALSO “RAW”)

- Fat Soluble **Vitamin A “Retinol”** for Immune Function and Mucosal Membrane Health
- **Vitamin D:** Fat Soluble Premier of Calcium Ionization; The Ultimate Alkalizer and Bone Builder
- **Lactic Acid** Producing Organisms
- Proteins: **22 Amino Acids** Including 8 Essential
- **Fats:** 500 Saturated and Unsaturated Fatty Acids (Needed to Metabolize Protein & Calcium)
- **Minerals:** 100% Metabolically Available (Calcium, Chlorine, Magnesium, Potassium, Phosphorous, Sodium and Sulfur; 24 Trace Minerals)
- **Enzymes:** (35 Identified) Including Phosphatase, Lipase, Lactose, Galactose, Catalase, Diastase, and Peroxidase
- **CLA:** Powerful Anti-Carcinogen, Immune Augmentor 500% Higher in Pastured Cows

Lactoferrin

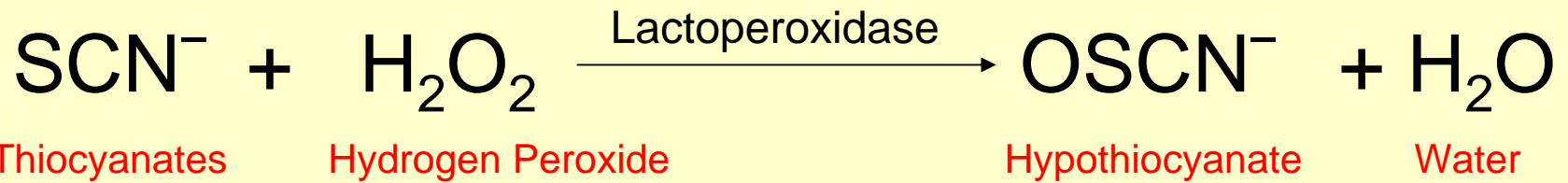
- Effective Anti-Biotic Against *H. pylori*, *Salmonella*, *E. coli*
- Increases Natural Killer Cells & Cytotoxicity of White Blood Cells
- Inhibits Angiogenesis
- Scavenges “Free Iron” Necessary for Growth of Neoplastic Cells & Microbes
- Reduced Incidence of Colon Cancer to 27% vs. Controls in Lab Rats

Lactoferrin

- Toxin Binding
- Platelet Binding
- Wound Healing
- Anti-Inflammatory
 - Anti-HHSV-1

Lactoperoxidase

- Works synergistically with Lactoferrin
- Dental Wound Treatment
- Inhibits Human Herpes Simplex Virus-1
- Most abundant enzyme in milk (50 mg/l)
- Heat stable up to 60°C/30 minutes, or 72°C/15 seconds



(Clover & Brassicas)

OSCN^- oxidizes bacterial enzyme (-SH groups)

Hypothiocyanate

HYPER-IMMUNE MILK “THE ORAL VACCINE”

- The Merck Patent of 1946
- Ralph Stolle’s Immune Milk “The Ohio Survey”
- Dr. William Petersen- University of Minnesota
- Quantum Research and AIE-10 Dr. Jesse Stoff
(NK Increases by 2000%)



Some Beneficial Constituents in Butter



Benefit	Description
Wulzen (anti-stiffness) factor	Protects against degenerative arthritis, hardening of the arteries, and cataracts
Short- and medium-chains fatty acids	About 15 percent of butterfat. Absorbed directly by the small intestine without emulsification by the bile. Antimicrobial, anti-tumor, immune stimulating, antifungal
Conjugated linoleic acid	Anticancer
Glycosphingolipids	Protect against gastrointestinal infections
Trace minerals	Chromium, iodine, manganese, selenium, and zinc

(Source: Fallon, 1995)

CHOLESTEROL'S VITAL IMPORTANCE

- Necessary to synthesize Vitamin D (needed for mineral absorption, insulin production, healthy nerves)
- Synthesis of bile salts
- Production of hormones (anti-stress & sex hormones)
- Cell membrane elasticity & strength
- Anti-oxidant
- Necessary for brain & nerve development
- Serotonin availability to brain

Fat of the land = Fat of the sea



THE MAYO FOUNDATION



J.E. CREWE, M.D – COFOUNDER

“RAW MILK CURES MANY
DISEASES”

Published in 1929

“For 15 years,...(I) have employed the certified milk treatment in various diseases...The results obtained in various types of disease have been so uniformly excellent, that one’s conception of disease and its alleviation is necessarily changed. The method is so simple that it does not greatly interest most doctors...”

J.E. Crewe, M.D.

THE ENZYME CONNECTION

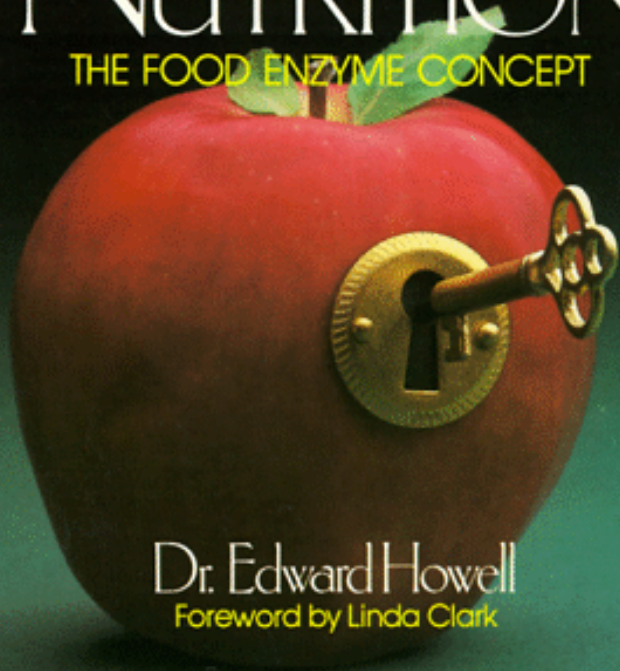
5,000 Known Enzymes: 3 Groups

- **Metabolic Enzymes (Breathing, Talking, Walking, Immune System, Metabolism, Thinking, Vision, Hearing, etc.)**
- **Digestive Enzymes: Assembled Primarily by Pancreas**
- **Food Enzymes: Initiate Digestion in Mouth and Stomach**

UNLOCKING THE SECRETS OF EATING RIGHT
FOR HEALTH, VITALITY AND
LONGEVITY

ENZYME NUTRITION

THE FOOD ENZYME CONCEPT



Dr. Edward Howell
Foreword by Linda Clark

Fully Updated Second Edition
Includes the Five-Step Jump-Start Enzyme Program

*"Dr. Cichoke offers strong testimony that the key
to body power and vitality is enzymes."*

Journal of the American Chiropractic Association

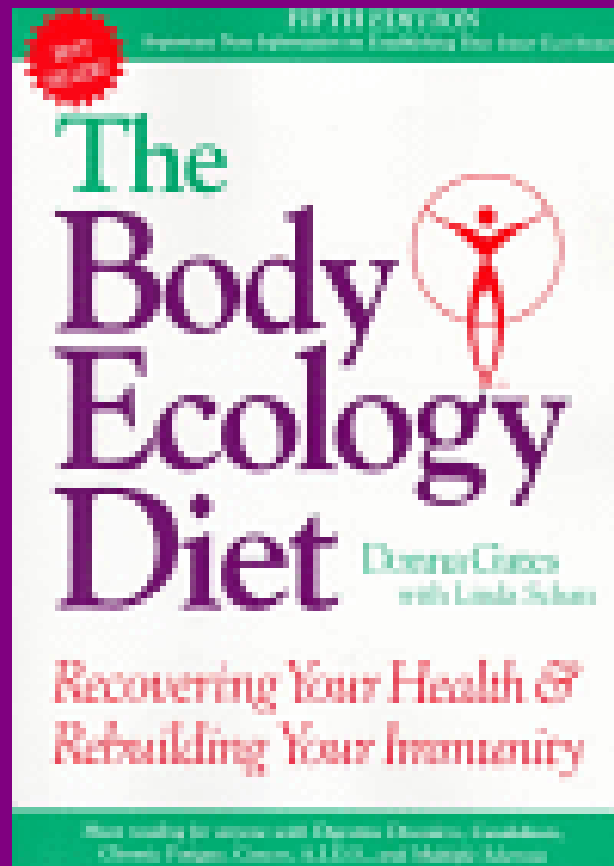
Enzymes & Enzyme Therapy

how to jump start
your way to lifelong
good health

Anthony J. Cichoke, D.C.
Preface by Abram Hoffer, M.D., Ph.D.

OPTIMAL DIGESTION

- The G.I. Tract Has More Neurons Than the Spinal Cord
- The G.I. Tract Is The First Defense of Immunity
 - Digestive Secretions (HCL, Bile, Pancreatic Enzymes)
 - Peyer's Patches
 - Probiotic Eco-System: Up to Several lbs. of Microbes (more cells than the human body)
 - Anti-Biotic Secretions
 - Protective Sheath on Villi
 - Decontaminating Enzymes
 - Producers of Vitamin K, B-12



- The Body-Brain Connection
- Gut Flora: The Most Cellular Organ

FOOD ENZYME DEFICIENCY LEADS TO

- Over Enlargement Of Pituitary Gland
- Brain Size Decreases
- Thyroid Enlargement
- Premature Aging
- Food Enzymes Destroyed Starting At 118°F (48°C)

THE POTTENGER CAT STUDIES

Dr. Francis M. Pottenger M.D.

- Published 50+ Peer-Reviewed Articles on Nutritional Medicine
- President of Los Angeles Medical Association
- President of American Therapeutic Society
- President of American Academy of Applied Nutrition

**TEN YEAR CAT STUDY
(1932-1942)
INVOLVING 900 CATS EVALUATING**

General Vitality

Mortality

Morbidity

Behavior

Microbial/Parasitical Susceptibility

Reproduction

Neo-Natal Survivability

Mothering Instincts

Generation Decline

Manure Quality



**POTTENGER'S
CATS**

A Study In Nutrition

By Francis M. Pottenger, Jr., M.D.

FERMENTATION CHEMISTRY & BIOLOGY

Lactic Acid

Lactoperoxidase

Nicin

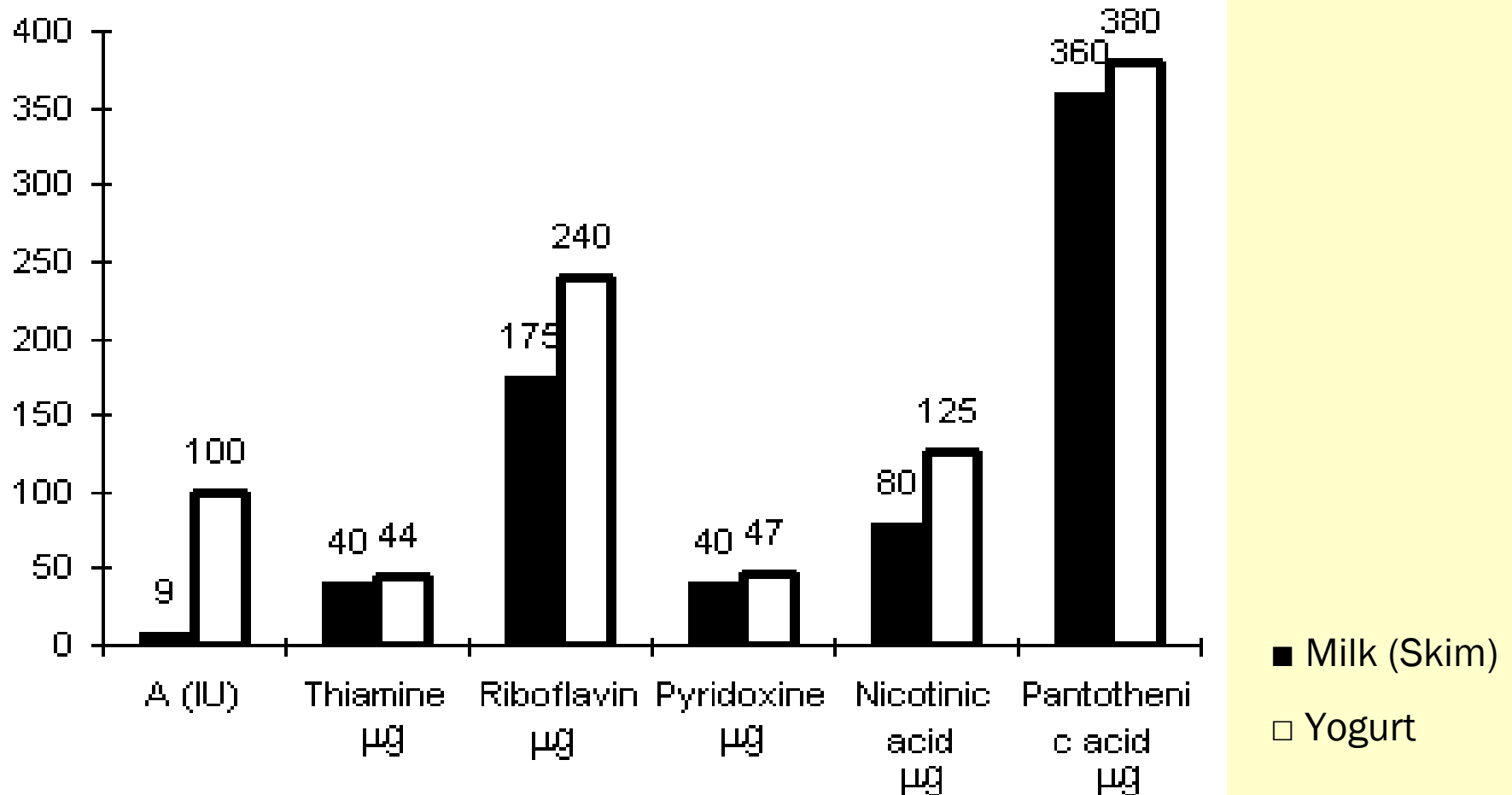
UGF's or Unidentified Growth Factors

Acidolin

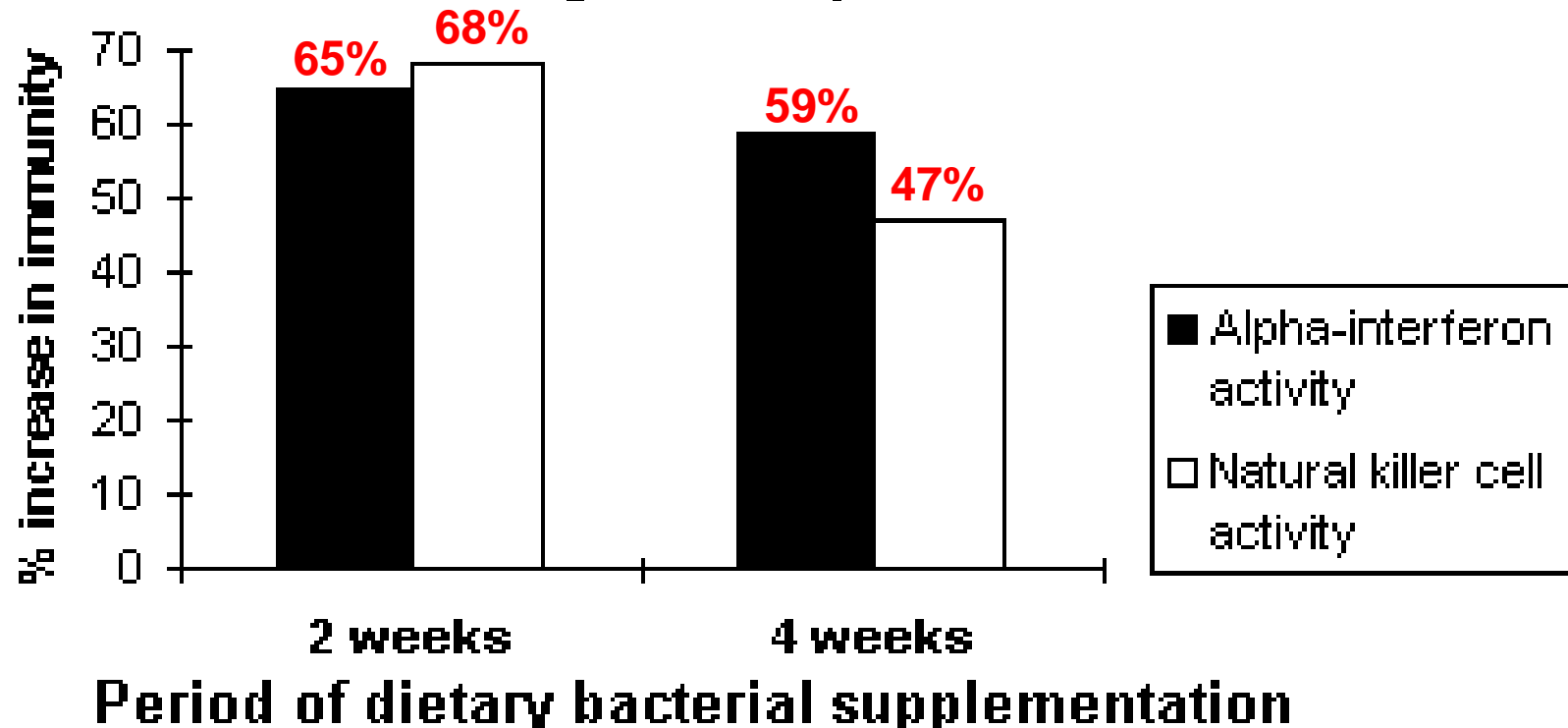
Lactic Acid

B-Vitamins

Vitamin Content of Milk and Yogurt



Effect of dietary *L. brevis* on the immune system response



BACTERIOCINS ISOLATED FROM DIFFERENT LACTOBACILLUS SPECIES

Substance	Producing species	Substance	Producing species
Acidolin	L. acidophilus	Lactolin	L. plantarum
Acidophilin	L. acidophilus	Plantaricin B	L. plantarum
Lactacin B	L. acidophilus	Lactolin 27	L. helveticus
Lactacin F	L. acidophilus	Helveticin J	L. helveticus
Bulgarin	L. bulgaricus	Reuterin	L. reuteri
Plantaricin SIK-83	L. plantarum	Lactobrevin	L. brevis
Plantaricin A	L. plantarum	Lactobacillin	L. brevis

FERMENTATION SOLVES LACTOSE INTOLERANCE

American Journal of Clinical Nutrition

“The use of fermented dairy foods is most common in areas of the world where lactase deficiency is prevalent. Recently, we have shown that **the digestion of lactose in yogurt is enhanced as compared to that from pasteurized milk.**”

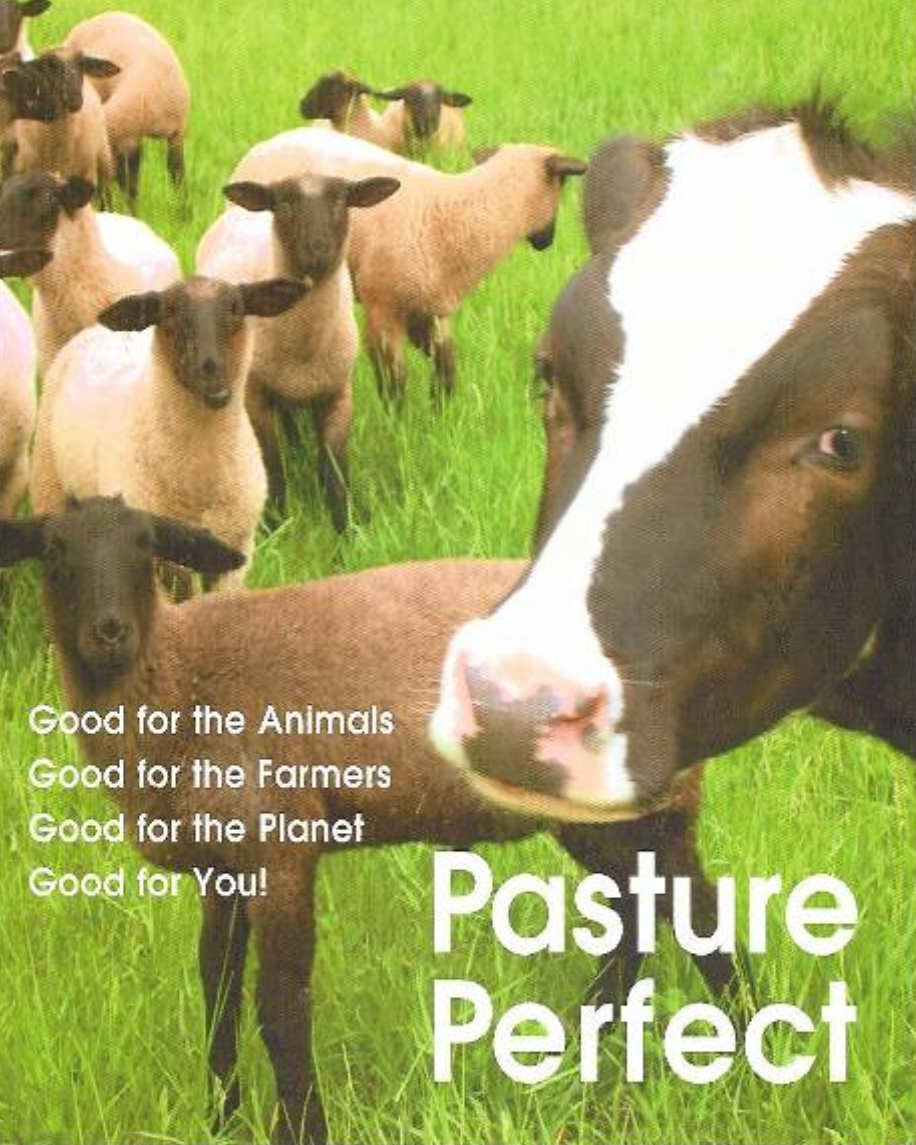
“This enhanced digestion is apparently due to inherent B-galactosidase in yogurt, which is active in the gastrointestinal tract after consumption. **Pasteurization of the yogurt eliminated the enhanced digestion of lactose and reduced the inherent lactase activity of the yogurt by 10 fold.**”

NOTE: Human Breast Milk Has Almost Twice the Lactose as Cow's Milk!

CONJUGATED LINOLEIC ACID



THE CANCER
FIGHTING,
WEIGHT LOSS
FATTY ACID



Good for the Animals
Good for the Farmers
Good for the Planet
Good for You!

Pasture Perfect

The Far-Reaching Benefits of Choosing
Meat, Eggs, and Dairy Products
from Grass-Fed Animals

by **Jo Robinson**

CLA RESEARCH

- First Discovered by Australian Lipid Biochemist Dr. Peter Parodi in Early 1980's
- Continued Research at University of Wisconsin by Biochemist Michael Pariza et. al.

CANCER & CLA

- 1996 Study of 4,697 Women: The More Whole Fat Milk in the Diet (More CLA) = Lower Risk of Breast Cancer. Women Drinking the Most Milk Had a 60% Lower Risk of Breast Cancer

- Rats Fed 1.5% of Calories as CLA = Tumor Size Reduced 60%

- Dr. Tikal Dhiman at Utah State University: One Can Lower Cancer Risk by Consuming Daily, One Ounce of Cheese, One Serving of Grassfed Meat & One Glass of Whole Milk From Pastured Cattle.



WEIGHT LOSS & CLA



**THREE MONTH STUDY: 20
INACTIVE MEN & WOMEN**

**· Treated Group (3 Grams
CLA/Day vs. Control
(Placebo)**

**· CLA Group Lost 5 Pounds
& 15-20% Drop in Body Fat**

**(Lipoprotein Lipase Enzyme
Blocked by CLA)**

MUSCLE GAIN & CLA



- CLA Group of Men Could Bench Press 30 Pounds More in 28 Days

- Control (Placebo) Group Improved by 9 Pounds

- Enhances Hormone Sensitive Lipase to Break Down Fat Already Deposited in Cells

**GRASSFED MEAT & MILK HAS 4-5
TIMES MORE CLA THAN GRAIN FED
MEAT: T. DHIMAN PhD, 1996.**



LOS ANGELES TIMES

JANUARY 13, 2004

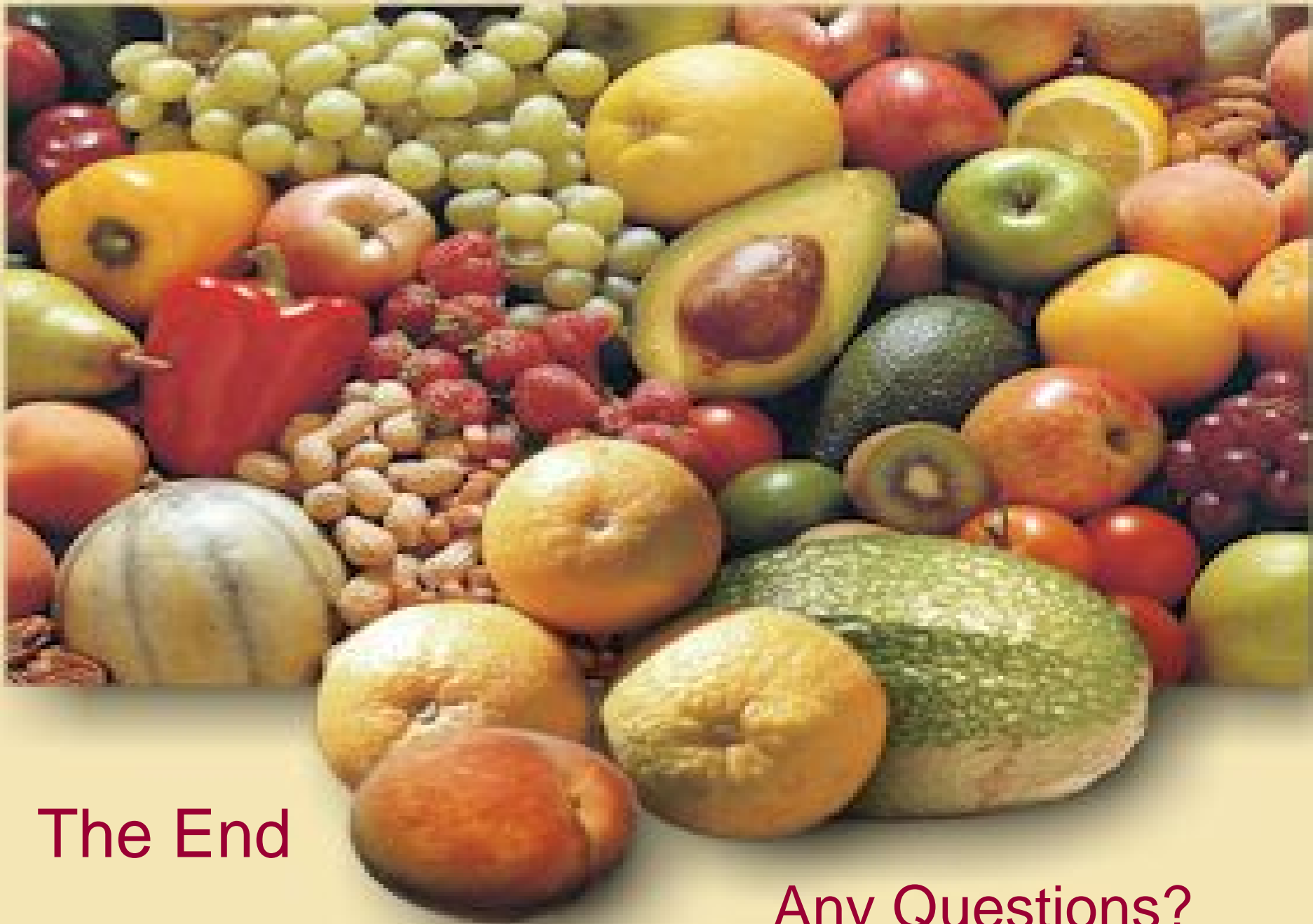
In some respects, the marine diet has made the Inuit among the world's healthiest people.

Beluga whale meat has 10 times the iron of beef, twice the protein and five times the Vitamin A.

Omega 3 fatty acids in the seafood protect the Inuit from heart disease and diabetes. Seventy-year-old Inuit men have coronary arteries as elastic as those of 20-year-old Danes, said Dr. Gert Mulvad of the Primary Health Care Clinic in Nuuk.



Government officials and doctors fear that Inuit will switch to imported processed foods loaded with carbohydrates and sugar, risking malnourishment, vitamin deficiencies, heart disease, diabetes and obesity. "The level of contamination is very high in Greenland, but there's a lot of Western food that is worse than the poisons,"



The End

Any Questions?