"That which is lacking in the Present World is a profound knowledge of the Nature of Things"

Frithjot Schuon
More People Make Their Living From the Cancer Industry than Die From Cancer

Annual Cost of Treating Cancer
Estimated $150 billion

• 99% of Research Funds Primary Tumors, Not Metastatic Illness
CANCER'S BIG FOUR KILLERS

In 1971, when the war on cancer began, 50% of people diagnosed with the disease went on to live at least five years. Today, 33 years and some $200 billion later, the five-year survival rate is 63%, a modest 13-point gain. But a look behind the numbers for the four biggest killers—lung, colon and rectal, breast, and prostate cancer—reveals that progress isn't being made where you might think it is. With the help of early detection and treatment, more patients are living longer. Once a cancer has spread, however, chances of survival are scarcely better now than they were three decades ago.

*Cancer that has spread beyond the primary site region.*
The War on Cancer
An Anatomy of Failure
A Blueprint for the Future

By Guy B. Faguet

U.S. Spent Over $200 Billion on Cancer Research since 1971
<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast (All ages)</td>
<td>41.2%</td>
</tr>
<tr>
<td>Breast (50+ years)</td>
<td>53.9%</td>
</tr>
<tr>
<td>Kidney</td>
<td>40.5%</td>
</tr>
<tr>
<td>Liver</td>
<td>103.7%</td>
</tr>
<tr>
<td>Lung</td>
<td>142.6%</td>
</tr>
<tr>
<td>Malignant Melanoma</td>
<td>155.9%</td>
</tr>
<tr>
<td>Non-Hodgkin’s Lymphoma</td>
<td>87.3%</td>
</tr>
<tr>
<td>Prostate</td>
<td>104.9%</td>
</tr>
<tr>
<td>Testes</td>
<td>66.7%</td>
</tr>
</tbody>
</table>
# Childhood Cancers (1975-1999)

<table>
<thead>
<tr>
<th>Condition</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone and Joint</td>
<td>39.8%</td>
</tr>
<tr>
<td>Brain (0-14 years)</td>
<td>50.2%</td>
</tr>
<tr>
<td>Leukemia (overall)</td>
<td>44.5%</td>
</tr>
<tr>
<td>Acute Lymphocytic Leukemia</td>
<td>61.7%</td>
</tr>
</tbody>
</table>
Disturbing Statistics

• Between 1973 and 1999 Cancer deaths increased 30% (17.7% - 23% of population)

• For the first time (2005), cancer has surpassed heart disease as the top killer of Americans under 85….” (Los Angeles Times, Jan. 19, 2005)

• 1.3 million diagnosed and 570,000 die annually in US

• In the 25-35 year old age group a recent analysis of the National Cancer Institute statistic showed that survival rates have not increased at all since 1975

“Cancer is the leading disease killer in people age 20 to 39…..more than 70,000 young adults get cancer every year……”
The Wall Street Journal, July 5, 2005, page D1
At A Glance

1. Vigorous Immunity
   - Nutrition
     - Fats, Proteins
     - Minerals, Trace Minerals
     - Fat Soluble Vitamins
     - Water Soluble Vitamins
     - Plant Secondary Metabolites

2. Low Toxin Load
   - Metals
   - Viral/Bacterial

3. Low Stress
   - Type B and C Personalities

4. Healthy Hormones (especially Adrenal/Thyroid/Insulin)

5. Contain Inflammation
   - Blood Glucose/Insulin
   - EFA Ratios
   - Antioxidants
   - Healthy G.I. Tract

6. Strategic Conventional Therapy
   - IPT
   - Multi-Drug Resistance
The Brain is an Endocrine Gland

- Encephalins and Endorphins
- Gamma Globulin
- Interferon
- 400 (800-1200?) Brain Secretions
“Anatomy of an Illness”
By Norman Cousins
Illness: Ankylosing spondylitis
Cure: (Laughter and Vitamin C)
Emotional Links to Cancer Risk
“Your Defense Against Cancer” by Henry Dreher

• Difficult childhood, characterized by a lack of closeness to one or more parents (alienation, aloneness, difficulty in establishing and fulfilling relationships)

• Long held sense of despair or hopelessness about achieving meaning in one’s life (work, creativity, relationship)

• Expression of emotions, especially anger is suppressed/repressed
Dr. David Kissen  
(University of Glasgow, Scotland)

• 1950’s/1960’s Evaluation of miners who smoked

• Lung Cancer subjects: poor outlets for emotional discharge
• Psychiatric evaluation on cancer patients, non-cancer patients, (3) control groups
  – “uninvolved parents; cold, not participatory”
  – Live a constricted, bleak life, yet present pleasant interpersonal attitudes
• Predictability of 73% of female cancers, based upon early pap smears and psychiatric evaluations
Dr. Caroline Bedell Thomas  
(Johns Hopkins University) 1946-1978

• 1300 medical students

• 48 cancer patients (versus 150 non-cancer patients): not close to parents when young; negative feelings about early family life
The “Type C” Personality
Dr. Steven Greer: Faith Courtauld Unit for Human Studies in Cancer at King’s College Hospital

• Huge reserves of unexpressed frustration and hostility with possible despair and depression

• Based upon 80 different psychological & psychosocial variables
“Type C” Personality
Lydia Temoshok (psychologist) University of California at San Francisco (150 melanoma patients)

• The “Type C” person experiences negative feelings but doesn’t express them. Internal anxiety and depression have a negative effect on the defense against melanoma growth. Expressing these feelings openly may improve melanoma.

• Type C patients: tumor growth was more aggressive, lesions were thicker
The Genie in your Genes

Dawson Church, Ph.D.
The FIRES Within

Inflammation is the body's first defense against infection, but when it goes awry, it can lead to heart attacks, colon cancer, Alzheimer's and a host of other diseases.

Illustration for TIME by Brian Stuller
The Liver & Inflammation

• Fibrinogen, Homocysteine and C-Reactive Protein produced by liver inflammation and imbalance
• Liver produces Lipoprotein (a) or Lp(a)
  – Prevents breakdown of Fibrinogen \rightarrow Clots
  – Lp(a) is very sticky \rightarrow attracts other plaque promoters
    * High Lp(a) = morning heart attacks
  – Healthy range <30 mg/dl
  – 3 Months to normalize elevated Lp(a)
• Curcumin Reduced Fibrinogen (800 mg/dl) by 50% in 15 days
INFLAMMATORY EICOSANOIDs & ENZYMES

Linoleic Acid (LA)

Δ-6 Desaturase

Gamma Linoleic Acid (GLA)

Elongase

Di-homo Gamma Linoleic Acid (DGLA)

Δ-5 Desaturase

Healthy A.A

Damaged PUFA’s
Insulin
Infection
Injury

Oxidized Arachidonic Acid

Δ-5 Desaturase

5-Lipoxygenase

Leukotrienes (LTB-4)
Hydroxylated FACS
5-Hete

Inflammation Tissue Destruction

Abnormal Platelet Aggregation
“Seal the Wound”

Inflammation & Tissue Destruction
American Diet

15-25 (LA):1 (ALA)

Omega 6 (Linoleic Acid)

Omega 3 (Alpha Linolenic Acid)

Desaturase

Elongase

Desaturase

ArA

EPA (5% of ALA)

E/E/D/B-ox

DHA (1% of ALA)
## Percentage of Essential Fatty Acids in Human Body Fat (1991-1992)

<table>
<thead>
<tr>
<th>Society</th>
<th>% Omega–6</th>
<th>% Omega-3</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand Maori</td>
<td>2.6</td>
<td>0.93</td>
<td>2.8:1</td>
</tr>
<tr>
<td>Japanese</td>
<td>14.8</td>
<td>3.2</td>
<td>4.6:1</td>
</tr>
<tr>
<td>American</td>
<td>10.2</td>
<td>0.58</td>
<td>17.6:1</td>
</tr>
</tbody>
</table>

(Source: Erasmus, 1993)
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 Lab Markers

- C-Reactive Protein < 1.0
- Homocysteine < 7.5
- Fasting Insulin < 5 uIU/ml
- Fibrinogen < 350 mgdl
- IL-6 < 9.8 pg/ml
- Lipoprotein (a): < 10 mgdL
- LDL < 70 mgdL
- HDL > 60 mgdL
- TG’s < 100
- Fasting glucose < 75-85
Digestion

“All Diseases Begin in the Gut”

Hippocrates, 460-370 B.C.
The Gut: “The Second Brain”

• More neural tissue than spinal cord
• Leaky Gut Syndrome → ADD, ADHD, Dyslexia, Dyspraxia, Autism, Allergies, Asthma, Eczema, Schizophrenia
• Absorption of gluteomorphins, casomorphins, miscellaneous toxins, allergens
Healthy vs. Unhealthy Villi
G.A.L.T. (Gut Associated Lymphoid Tissue)

- 70% Immune System located in Gut
- Peyer’s Patches (lymph nodes, 1-25 mm)
  - Alert B-cells, T-cells → Transport antigens to mucosa → macrophage ingestion
  - Filters Lymph (imprisons pathogens)
  - Produces Lymphocytes
Your Inner Ecosystem

In your body, bacteria outnumber your own cells 10 to 1.
Who’s in control?
Microbes maketh man
20,000-25,000 genes

Gut Microbiome
3.3 million genes
Some Promising Anti-Inflammatories

1. **Astaxanthin**: Highest Activity of all Carotenoids (4mg/day)
   - Modulates Immune System
   - Decreases PGE-2, TNF-a

2. **Pycnogenol**: 25-50 mg 1-3x/day (75-150 mg/day)
   - Inhibits NF-kB
   - Reduces Matrix Metalloproteinase-9 (MMP-9)

3. **Curcumin**: 1,000-2,000 mg/day (4-10 gms/day)
   - Inhibits COX-2
   - Inhibits LOX
   - Inhibits Nitric Oxide Synthase (iNOS)

4. **Pterostilbene (Methylated Resveratrol)**: 100 mg/day
   - Superior Absorption
   - Longer Half Life

5. **Omega-3 Fatty Acids**: 4-12 gms/day
   - Re-Esterfied Triglycerides: More Bioavailability
   - Super-Critical Co₂ Extraction Process
     - Lower Temperatures
     - Effectively Removes Impurities (other fats, toxins)

6. **Lycopene & Tocotrienols**: Deprives Cancer Cells of Mevalonate (needed for fast proliferation)

* Antioxidants work differently when taken together vs. individually
Glutathione (GSH)
Cysteine-Glycine-Glutamic Acid

Master Anti-Inflammatory & Detox

- Potent antioxidant
- Primary participant in neutralization/excretion of toxins
- Cofactor of critical enzymes
- Transporter of amino acids across cell membranes
- DNA synthesis & repair
- Protein synthesis
- Super food for immune cells
- Intracellular source of organic sulfur
- Helps maintain integrity of proteins disulfide bonds
- The ultimate electron donor
Glutathione- The Master Tri-Peptide

- Glycine, Glutamic Acid, Methionine
- Necessary for Immunity
  - Glutathione Peroxidase
- Necessary for Liver Detoxification
  - Glutathione-S-Transferase
- Whey Protein
- Bone Broth Soup
- Brassicas
- Eggs
- Fish
- NAC 500 mg 3X/Day
Duodenum Cells Have Highest Concentration of GSH to Begin Neutralizing Toxins in Ingested Food Stuffs

Most GSH Originates From Liver to Intestine
Sugar = Insulin

- Cancer Cells have 6-15 X Insulin Receptor Sites and 10X Insulin Growth Factor Receptor Sites
- Insulin Directs Inflammatory Eicosanoids Pathways
Hormones That Raise Glucose

- Adrenaline
- Glucagons
- Cortisol
- Cortisone
- Corticosterone
- Growth Hormone

**ONLY** Insulin Lowers Glucose!
No Refined Carbohydrates! “Fuel for the Fire”

• 2001 US per Capita Consumption: 170 lbs/year
• 1820 US per Capita Consumption: 10-20 lbs/year


5 Highest B.C. Mortality = Highest Sugar Consumption (U.K., Netherlands, Ireland, Denmark, Canada)

5 Lowest B. C Mortality = Lowest Sugar Consumption (Japan, Yugoslavia, Portugal, Spain, Italy)
Twelve Studies on Glucose Levels and Breast Cancer

5. “Prospective study of hyperglycemia and cancer risk.” Diabetes Care, 2007; 30 (3): 56-7
8. “Fasting blood glucose and cancer risk in a cohort of more than 140,000 adults in Austria.” Diabetologia. 2006; 49(5): 945-52
11. “Hyperinsulinaemia and increased risk of breast cancer…” Cancer Causes Control 2004; 15(3) 267-75
Cancer’s Best Friend: Sugar

- “Insulin and Colon Cancer” Cancer Causes and Control, Vol. 6 (1995), 164-179
- “A Low Carbohydrate, High Protein Diet Slows Tumor Growth and Prevents Cancer Initiation.” Cancer Res. 71 (13), July 1, 2011
- “High Blood Sugar Levels on Older Women Linked to Colorectal Cancer.” British Journal of Cancer, Nov. 29, 2011
How Sugar Affects WBC’s ability to destroy bacteria

<table>
<thead>
<tr>
<th>Teaspoons of Sugar</th>
<th>Number of Bacteria Destroyed</th>
<th>This amount of sugar can be found in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>14.0</td>
<td>----</td>
</tr>
<tr>
<td>6</td>
<td>10.0</td>
<td>1 scoop of ice cream</td>
</tr>
<tr>
<td>12</td>
<td>5.5</td>
<td>1 can of soft drink</td>
</tr>
<tr>
<td>18</td>
<td>2.0</td>
<td>½ malted drink</td>
</tr>
<tr>
<td>24</td>
<td>1.0</td>
<td>1 milk shake</td>
</tr>
</tbody>
</table>

Receptor IMP's

Phosphate Heads

Phospholipid Legs

Cytoplasm (-)

Extracellular (+)

Hydrophilic Region
"water loving"

Hydrophobic Region
"water fearing"

Transport Protein
(Effecter IMP's)
Cellular pH and Electrical Differential

\[ \text{pH} \]

70 mv

6.75 7.4 6.75

? 70 mv 6.75 ?

6.75 70 mv
“The Metabolism of Carcinoma Cells”

by Otto Warburg

The Journal of Cancer Research
Volume 9, pg 148-163 (1925)
The Warburg Effect

Mitochondrial Oxidation (38 ATP)

Glucose → Glucose-6-Phosphate → Pyruvate → Acetyl CoEnzyme A

Pyruvate Kinase (Blocks Pyruvate Dehydrogenase)

Oncoproteins

Pyruvate Dehydrogenase

Lactate (in Cytoplasm)

Anaerobic metabolism = 19X less efficient than aerobic metabolism

Anaerobic Glycolysis (2 ATP)

Cancer Cell 2007 Jan; 11 (1): 37-5
Grains → Lectins → Molecular Mimicry (Human Tissue: cartilage, myelin, retina, kidneys, etc.)

Undigestible polysaccharides → Glucose (!) → Inflammation → Autoimmune Diseases (Crohns, Celiac, RA, Lupus, MS, Type I Diabetes, Allergies, Thyroiditis)

Undigestible polysaccharides → Glucose (!) → Inflammation → Autoimmune Diseases (Crohns, Celiac, RA, Lupus, MS, Type I Diabetes, Allergies, Thyroiditis)

Colonic Putrefaction → Inflammation → Inflammatory Cytokines → TNF-a, IL-1b, IL-6, IL-8, Nf-kB

Damaged Tight Junctions & Microvilli

*USDA RDA: Diet of 60% Carbohydrates = 2 cups of glucose!
## Glycemic Index Versus Glycemic Load

<table>
<thead>
<tr>
<th>Source</th>
<th>Volume</th>
<th>Glycemic Index</th>
<th>Glycemic Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pasta</td>
<td>1 cup</td>
<td>59</td>
<td>3,068</td>
</tr>
<tr>
<td>Apple</td>
<td>1 cup</td>
<td>54</td>
<td>972</td>
</tr>
<tr>
<td>Broccoli</td>
<td>1 cup</td>
<td>50</td>
<td>150</td>
</tr>
</tbody>
</table>

Putting the Brakes On Blood Glucose, Triglycerides & Insulin

- Exercise 20-30 min; 3x/week
- Berberine 300-400 mg; 2-3x/day
- CinSulin (Life Extension)
  - Cinnamon Bark Extract
  - Kelp Polyphenols
  - Shilajit & Phyllanthus Extract
- R-Lipoic Acid 300 mg; 2x/day
- Chromium Picolinate 1,200-2,000 mcg
- Metformin
Interval Exercises

1. 5 minute warm up
2. 30 seconds vigorous exercise
3. 4 ½ minute cool-down
   • Repeat #2 and #3, 4-6 times, no more than 3x weekly
Ketogenic Diet

- Body can only store sugars/starches 24-48 hours
- Switch fuel to FATS ➞ State of Ketosis
- Ketones = Waste Products of Fat Metabolism


(www.nutritionandmetabolism.com/content/2/1/30)
IPT: Whenever Possible

- Conventional Treatment: Only 20% of cells being attacked
- IPT: Insulin Enhances S-Phase Activity → Cells are Dividing/DNA Synthesis
- “Therapeutic Moment”: When Blood Sugar Levels → 40’s, cancer cells are “hungry” for sugar
- Insulin Increases Cell Membrane Permeability: Chemo more readily enters; toxins from dying cell more readily exit.
Low Dose Naltrexone

- www.lowdosenaltrexone.org
- www.ldnresearchtrust.org
- www.ldnscience.org

“The Promise of Low Dose Naltrexone Therapy” by Elaine Moore and Samantha Wilkinson

“Up The Creek With A Paddle” by Mary Boyle Bradley
Low Dose Naltrexone, cont.

- Modulates Immune System
- Raises Endorphins: 2x-3x output
  - HIV/AIDS
  - MS
  - Lupus
  - RA
  - Crohn’s
  - CFS
  - Fibromyalgia
  - Cancer (pancreatic, prostate, etc.)
  - ALS
  - Parkinsons

3 Statistical Surveys
80-85% Efficacy in Preventing Disease Exacerbations
Strengthen Immunity

- Immune Fuels
- Immune Modulators
- Healthy G.I. Tract
# Immune Cells

<table>
<thead>
<tr>
<th></th>
<th>JB</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CD 56</strong></td>
<td>35.98 H</td>
<td>5.75 – 23.08</td>
</tr>
<tr>
<td>Natural Killer Cell and Function</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NK/Lymphs %</td>
<td>21%</td>
<td>6 – 22 %</td>
</tr>
<tr>
<td>Lytic Units</td>
<td>75</td>
<td>20 – 250</td>
</tr>
<tr>
<td>NK Viable %</td>
<td>98%</td>
<td>-</td>
</tr>
<tr>
<td>% CD4</td>
<td>42%</td>
<td>32 – 64%</td>
</tr>
<tr>
<td><strong>Absolute CD4</strong></td>
<td>470</td>
<td>720 – 1440</td>
</tr>
<tr>
<td>% CD8 (cytotoxic/suppression)</td>
<td>22%</td>
<td>14 – 35%</td>
</tr>
<tr>
<td><strong>Absolute CD8</strong></td>
<td>246</td>
<td>315 – 788</td>
</tr>
<tr>
<td>% CD5 (total T cells)</td>
<td>55%</td>
<td>62 – 83%</td>
</tr>
<tr>
<td><strong>Absolute CD5</strong></td>
<td>615</td>
<td>620 - 3650</td>
</tr>
</tbody>
</table>
Immune Modulators

- Beta 1,3 Glucans (Mushroom Extracts, Yeast Wall)
- Low Dose Naltrexone (Rx)
- Arabinogalactan (larch, mushroom)
- Russian Choice Immune
- AVEMAR (AVE) Fermented Wheat Germ Quinones
- Pro-Boost Thymic Hormone
- Hyper-Immune Milk
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%)
Treatment of Multiple Sclerosis With Anti-Measles Cow Colostrum

Medical Microbiology and Immunology (1984) 173: 87-93
Department of Bacteriology, Tohoku University School of Medicine, Sendai, Japan
Department of Neurology, Tohoku University Brain Institute, Sendai, Japan
Faculty of Agriculture Tohoku University, Sendai, Japan
Kawatabi Farm, Faculty of Agriculture, Tohoku University, Sendai, Japan

15 Patients on Hyper-Immune Colostrum
10 Improved
5 Unchanged

5 Patients on Regular Colostrum
2 Unchanged
3 Worsened
Vitamin C Paradox

Anti-Oxidant or Pro-Oxidant

“Then and Now”
### Difference in Average Survival Times of Ascorbate-Treated Patients & Matched Controls

(+) indicates one patient in group survived after May 15, 1978

#### Mean Survival Times, Days

<table>
<thead>
<tr>
<th>Primary Tumor Type</th>
<th>Patient No.</th>
<th>From First Hospital Attendance</th>
<th>From Date of Untreatability</th>
<th>Increased Survival Times of Ascorbate Treated patients, days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Test</td>
<td>A Test</td>
<td>B Control</td>
<td>C Test</td>
</tr>
<tr>
<td>Colon</td>
<td>17</td>
<td>458(+)</td>
<td>316</td>
<td>352(+)</td>
</tr>
<tr>
<td>Bronchus</td>
<td>17</td>
<td>219(+)</td>
<td>118</td>
<td>186(+)</td>
</tr>
<tr>
<td>Stomach</td>
<td>13</td>
<td>286(+)</td>
<td>159</td>
<td>182(+)</td>
</tr>
<tr>
<td>Breast</td>
<td>11</td>
<td>1369(+)</td>
<td>1020</td>
<td>487(+)</td>
</tr>
<tr>
<td>Kidney</td>
<td>8</td>
<td>774(+)</td>
<td>492</td>
<td>38(+)</td>
</tr>
<tr>
<td>Bladder</td>
<td>7</td>
<td>1669(+)</td>
<td>420</td>
<td>355(+)</td>
</tr>
<tr>
<td>Rectum</td>
<td>7</td>
<td>634</td>
<td>336</td>
<td>270</td>
</tr>
<tr>
<td>Ovary</td>
<td>6</td>
<td>884</td>
<td>366</td>
<td>183</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>706(+)</td>
<td>279</td>
<td>278(+)</td>
</tr>
<tr>
<td>All</td>
<td>100</td>
<td>681(+)</td>
<td>360</td>
<td>293(+)</td>
</tr>
</tbody>
</table>
## Median Survival of Hoffer’s 134 Patients

<table>
<thead>
<tr>
<th>Type of Cancer</th>
<th>Months with Vitamins (101)</th>
<th>Without Vitamins (33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>67</td>
<td>28</td>
</tr>
<tr>
<td>Colon</td>
<td>90</td>
<td>25</td>
</tr>
<tr>
<td>Lung</td>
<td>41</td>
<td>11</td>
</tr>
<tr>
<td>Ovary</td>
<td>48</td>
<td>13</td>
</tr>
<tr>
<td>Pancreas</td>
<td>75</td>
<td>6</td>
</tr>
<tr>
<td>Uterus</td>
<td>78</td>
<td>36</td>
</tr>
<tr>
<td>All 30 Types of Cancer</td>
<td>64</td>
<td>29</td>
</tr>
</tbody>
</table>
Pharmacologic ascorbic acid concentrations selectively kill cancer cells: Action as a pro-drug to deliver hydrogen peroxide to tissues

Qi Chen*+, Michael Graham Espey±, Murali C. Krishna±, James B. Mitchell±, Christopher P. Corpe*, Garry R. Buettner§, Emily Shacter+, and Mark Levine*¶

*Molecular and Clinical Nutrition Section, National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Bethesda MD 20892; ± Radiation Biology Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD 20892; § Free Radical and Radiation Biology Program, University of Iowa, Iowa City, IA 52242-1101; and +Laboratory of Biochemistry, Center for Drug Evaluation and Research, Food and Drug Administration, Bethesda, MD 20892

Communicated by J.E. Rall, National Institute of Health, Bethesda, MD, August 2, 2005 (received for review June 1, 2005)

¶ To whom correspondence should be addressed at: Molecular and Clinical Nutrition Section, National Institutes of Health, Building 10, Room 4D52, MSC-1372, Bethesda, MD 20892-1372. E-mail: markl@mail.nih.gov
Ascorbate Findings by RECNAC

- Animals synthesize Vitamin C from glucose in only (4) metabolic steps
- Cancer cells readily absorb and accumulate ascorbate (similar to glucose molecule?)

Glucose

Vitamin C
Ascorbate Findings by RECNAC

- At adequate concentrations (400+ mg/dl) Vitamin C is \textit{selectively toxic} to cancer cells
- Vitamin C behaves as pro-oxidant
  - Interacts with intracellular Fe & Cu
  - Reaction produces H$_2$O$_2$
  - Cancer cells are deficient in catalase
Ascorbate Findings by RECNAC

- IV Vitamin C inhibits hyaluronidase
- IV Vitamin C corrects scurvy in Cancer Patients
- IV Vitamin C induces apoptosis
- IV Vitamin C reduces pain
- IV Vitamin C neutralizes chemo and radiation toxicity without neutralizing their cancer killing effects
- IV Vitamin C helps cancer patients recover faster from treatments and disease
Vitamin C Solution

Ascorbic Acid 100 grams
Sodium Bicarbonate 48 grams
Green Tea or Pomegranate Juice 600 ml (20 oz)
Sweeten with Stevia, Sorbitol, Xylitol

Drink 15 ml (1/2 oz) 4 x daily with meals = 10,000 mg ascorbate
Refrigerated Shelf Life = 4 weeks
When Going “Conventional” Concerns about Surgery

1. Use Regional Anesthesia vs. General Anesthesia
   - Less Morphine
   - Less NK Cell Loss
   - Regional Anesthesia Contains up to 70% of Surgery Induced Metastasis

2. Use Tramadol vs. Morphine
   - Morphine Increases Angiogenesis
   - Morphine Reduces NK levels/activity

3. Use Laproscopic vs. Open Surgery
   - Surgery Breaches Natural Barriers
   - Surgery Suppresses Immunity – up to 50%!
     • elevated CD-8 Suppressor Cells
   - Surgery Initiates Inflammation
   - Surgery Removes Anti-Angiogenic Substances from Primary Tumor
   - Surgery Increases Tumor Cell Adhesion
Pre-Surgical Preparation

• **5 days prior:**
  - 800 mg. per day Cimetidine (*NOT* with meals) to suppress CD-8 Suppressor Cells; to block E-Selectin Adhesion Molecules on surface of blood vessels
  - 15 gms of PectaSol-C (Modified Citrus Pectin) to block adhesion molecules on surface of cancer cells
    • Blocks Metastasis by 90%!
    • Blocks Adhesion Activity by 95%!
  - Take Anti-VEGF Supplements (e.g. Curcumin, EGCG, Stilbene/Resveratrol)
Pre-Surgical Preparation cont.

- Invigorate Immune System
  - Pro-Boost Thymic Hormone
  - Quality Probiotics
  - Vitamins A, D, E, K & C
  - Minerals: Zinc, Selenium, Iodine
  - Anti-inflammatory: EGCG, Resveratrol, Curcumin, Lycopene, Astaxanthan
  - Mushroom Extracts: AHCC, Maitake-D Fraction
  - Low Dose Naltrexone (Rx)
When Going “Conventional” Test For Multi-Drug Resistance!

- MDR-1 Gene Codes for Pgp Pump
  -Removes Chemo Drugs from Cell
  -Resistance Typical @ 8-10th Treatment
- Robert Nagourney, MD (So. California): Biopsy -- www.rationaltherapeutics.com
- Research Genetics Cancer Center (Greece)
  -Circulating Tumor Cells
  -ipapasot@doctors.org.uk
- Target Now Complete Testing
  -www.carislifesciences.com/oncology-target-now
Jerry’s IV Cocktail

1. 100 grams Sodium Ascorbate
2. 5 grams R-Lipoic Acid
3. 800 mg N-Acetyl Cysteine
4. 1 gram Ubiquinol (Co-Q10)
5. 2 mg of Methylcobalamin (I.M.)
Detoxify or Die
by Sherry Rogers, MD

- Average newborns contain 287 pollutants in blood
- Theo Colburn PhD “Our Stolen Future” 80,000 chemicals in the environment; 15% have been tested
- Hair Analysis: Analytical Research Labs Phoenix, AZ
- DMPS Challenge
- RBC Analysis
Detox Modalities

- Coffee Enemas
  - 1-3x Daily to 1-3x Weekly
- Far Infrared Sauna
  - 1-3x weekly
- Detox Baths
  - 2-3 lbs Bentonite Clay in Hot Bath for 30-40 minutes 2-3x Weekly
- Alternate with 1 lb each of Epsom Salts & Baking Soda
- Heavy Metal Detox (esp. mercury, cadmium, lead, arsenic)
  - DMPS push
  - EDTA
  - Detoxamin Suppositories
Some Detox Foods

- Fermented Cruciferous Vegetables
- Steamed Cruciferous Veggies
- Miso Paste
- Bone Broth Soup with Sea Veggies
- Allium Foods (Garlic, Onions)
- Green Drinks (Pure Synergy)
- Fresh Cereal Grasses/Sprouts
- Chlorella
- Kefir
- Fresh Juices: Beet, Celery, Carrot, Ginger, Turmeric
Some Detox Supplements

- Calcium D-Glucarate
- Indole 3-Carbinol (I3-C)
- Di-Indole Methane (DIM)
- N-Acetyl Cysteine (NAC)
- R-Lipoic Acid
- Selenium
- Iodine (Lugol’s/Iodoral)
- Zinc (Chelate)
- Proteolytic Pancreatic Enzymes on Empty Stomach
- Vitamin C (to Bowel Tolerance)
- Quality High Count Probiotics/Prebiotics
  - Thera-Lac
  - Dr. Ohira’s
  - Klaire Labs
  - S. Boulardii
References

- Knockout: Doctors Who Are Curing Cancer by Suzanne Somers
- Cancer & Natural Medicine by John Boik
- Definitive Guide to Cancer by John Diamond, MD, Lee Cowden MD, Burton Goldberg
- Viral Immunity by J.E. Williams, OMD
- Immune Restoration Handbook by M. Konlee & C. LeBeau
- Surviving Terminal Cancer by Ben Williams, PhD.
- Fight Cancer with Vitamins & Supplements by Kedar Prasad, PhD. And K. Che Prasad, MD
- The Whole Body Workbook for Cancer by Dan Kenner, PhD.
Additional Resources

- Weston A. Price Foundation www.westonaprice.org
- Life Extension Foundation www.lef.org
- www.cancerdecisions.org
- www.preventcancer.com (Dr. Samuel Epstein)