The Prime Cause and (Newly Discovered) Prevention of Cancer based on German Nobel Prize-winner Otto Warburg, MD, PhD

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FOCUS on Both Cancer Prevention and as an Adjunct to All Integrative Cancer Therapy Concepts (ICTC)

Safe and effective treatment in conjunction with any chosen integrative patient therapies including:

- Oncothermia (LRH)
- Chemotherapy – significantly increases effectiveness
- Radiation – stops additional radiation-induced cancer
- Cachexia
- Insulin Potentiation Therapy (IPT) – increases effectiveness
- Surgery – 25% - 50% faster healing and recuperation
## FACT:
### American Cancer Rate

**Deplorable:**

* Men 70% Contract Cancer\(^{(a)}\)
  * Women 53% Contract Cancer\(^{(b)}\)

**ON AVERAGE YOU WILL CONTRACT CANCER!**

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\(^a\) National Center for Health Statistics and American Cancer Society

\(^b\) Human and Ecological Risk Assessment: Vol. 7, No. 6, pp. 1619-1650 (2001) for calculation method
Why the Cancer Tragedy?

• “It makes no difference how smart you are, who, made the guess, or what his name is. If it disagrees with real-life results, it is wrong. That is all there is to it.”
  Richard Feynman - Nobel Prize-Winner: Physics

• “Any intelligent fool can make things bigger and more complex. It takes a lot of genius and a lot of courage to move in the opposite direction.”
  Albert Einstein - Nobel Prize-Winner: Physics

• “The intelligence of the answer is directly proportional to the intelligence of the question.”
  Brian Peskin – Founder: L.S.E. Science
“In questions of science the authority of a thousand is not worth the humble reasoning of a single individual.”

Galileo Galilei, 1564-1642

The extraordinary electrical engineer/physicist, Terrence Witt*, states it perfectly:

“A breakthrough theory doesn’t need more data, nor does it need more detailed data. We are drowning in data.”

“What is missing is comprehensive explanation of the measurements. Description and understanding are two entirely different things.”

“We are suffering from a wealth of information, but a poverty of understanding what that information really means.”

Brian Peskin

Let’s start to understand without opinion or pre-conceived notions…
“Belief without understanding is stupidity. Mere generalized statements without sharp, __specific conclusions__ are meaningless.”

Brian Peskin, _Life-Systems_ Engineering Scientist

Let’s start to _understand_ __without opinion__ or pre-conceived notions…
• Cause/Effect Relationships are Mandatory!

• There is little use with mere “associations” found in Epidemiology.

Example: Sun Rises at 6am.
Fats: What are the Differences?

- **Saturated Fatty Acids**
  
  *Note: None in arterial thrombosis.*

- **Unsaturated Fatty Acids**
  - Monounsaturated
  - Polyunsaturated
  - Essential Fatty Acids (EFAs)
  - Transfats

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What is an EFA?

Essential Fatty Acids – Essential because the body can’t make them – they must come from food.

EFAs Come in Two Flavors:

1) Parent omega-6 (linoleic acid – 18:2ω6 – 2 double bonds)
2) Parent omega-3 (linolenic acid – 18:3ω3 – 3 double bonds)

• EFAs Are Polyunsaturated oils.

• Olive Oil is Essentially Omega 9 and is Monounsaturated. Contrary to popular belief, it is NOT Fundamental, NOT Required by the Body, and NOT an EFA.

• Fish oil is NOT an EFA – it contains only derivatives.
PEO: Parent Essential Oils
(Bio-Identical EFAs)

Parent Essential Oils are Parent Omega-6 & -3 EFAs.

I coined this term to clearly delineate between Parent & Derivative EFAs.

- Parent EFAs are Essential
- Derivative “EFAs” are NOT EFAs because the body makes the derivatives (longer chain) such as EPA, DHA, GLA, AA, etc. from the parent oils.
Due to modern growing methods & food processing, EFAs are now lacking in our diets.

PEO Deficient

Most Americans Are Highly Deficient In PEOs

95%
Food Processing For Long Shelf-Life Alters PEOs (LA-Parent omega-6) Into *Trans*fatty Acids and Other Non-Physiologic Entities.

Transfatty acids!
[the opposite of “cis” fatty acids]
### The Prime Cause & (Newly Discovered) Prevention of Cancer

<table>
<thead>
<tr>
<th>Oil</th>
<th>Percentages of Parent Omega-6 to -3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parent Omega-6 (linoleic acid)</td>
</tr>
<tr>
<td>Sunflower Oil (high LA only)</td>
<td>65%</td>
</tr>
<tr>
<td>Safflower Oil (high LA only)</td>
<td>75%</td>
</tr>
<tr>
<td>Flaxseed Oil (about 1:3 omega 6:3 - too unbalanced alone)</td>
<td>20%</td>
</tr>
<tr>
<td>Sesame Oil</td>
<td>45%</td>
</tr>
<tr>
<td>Pumpkin Oil (expensive)</td>
<td>43%</td>
</tr>
<tr>
<td>Hemp Oil (Cannabis)</td>
<td></td>
</tr>
<tr>
<td>Evening Primrose Oil</td>
<td>74%</td>
</tr>
<tr>
<td>Borage Oil</td>
<td>38%</td>
</tr>
<tr>
<td>Corn Oil (hard to find organic and unprocessed)</td>
<td>59%</td>
</tr>
<tr>
<td>Olive Oil</td>
<td>8%</td>
</tr>
<tr>
<td>Canola Oil</td>
<td></td>
</tr>
<tr>
<td>Soy Oil</td>
<td></td>
</tr>
</tbody>
</table>
Why MUST We Care About PEOs?

German Genius Otto Warburg, M.D., Ph.D.

The Oxygen / Cancer Connection
Who was Otto Warburg, M.D. Ph.D.?

• The greatest biochemist of the 20th Century.

• His life’s ambition was to cure cancer.

• He was a medical physicist first, then a top physiologist/biochemist.

• In 1966 Dean Burk, Head of Biochemistry at American National Cancer Institute, stated, “His main interests are Chemistry and Physics of life. In both fields no scientist has been more successful.”

• In 1931 he won the Nobel Prize in Medicine or Physiology: Discovery of the nature and mode of action of the respiratory enzyme (called co-enzymes today) – the chemical constituent of oxygen transferring respiratory ferment.
• Dr. Warburg INVENTED an oxygen manometer to measure the partial pressure of oxygen in tissue. He was first and foremost a pioneer in biochemical methodology.

• Dr. Warburg never lectured students, never served on committees, and never performed administrative work.

• Dr. Warburg NEVER jumped to conclusions – often verifying experiments 10 or more times before publishing.
Chronology of Dr. Warburg’s Tumor and Cancer Discoveries

• The metabolism of tumors (1923-1925)
• The chemical constituent of the oxygen transferring respiratory ferment. (1931 Nobel Prize Award)
• Origin of cancer cells (1956)
• Production of cancer metabolism in normal cells grown in tissue culture (1957-1968)
• Facultative anaerobiosis of cancer cells (1962-1965)
• Prime cause and prevention of cancer (1966-1969)
The Oxygen/Cancer Connection: 

Cancer is always caused by deprivation of oxygen! This is the prime cause of cancer.¹

All secondary causes of cancer, like asbestos, smoking or other carcinogens MUST lead back directly to the prime cause.

Back then, Dr. Warburg didn’t have the most efficient method to get vital oxygen to the cell… Fortunately, today we do!

American Seminal Oxygen/Cancer Verification Experiments

A. Proven in 1953: “…[Goldblatt, an M.D. and Cameron] exposed heart fibroblasts in tissue culture to intermittent oxygen deficiency for long periods… without any oxygen deficiency, no cancer cells resulted.”

B. “… [O]nce damage is too great to the cell, then no amount of oxygen will return the cell’s respiration back to normal—it is forever doomed to a cancerous life.


Current Confirmation of the O₂/Cancer Connection - ALWAYS in every case

A. Published in 1993 and 1999, the cancer medical journal, *Radiotherapy and Oncology*, makes Dr. Warburg's seminal discovery clear. **Intratumoral pO₂ predicts survival in advanced cancer** of the uterine cervix.⁴

B. Also in 1999, the same cancer journal made Dr. Warburg's seminal fact clear again in the article titled, “**Oxygenation of head and neck cancer**: changes during radiotherapy and impact on treatment outcome.”⁵

C. “**Tumor oxygenation affects the prognosis** of head and neck cancer independently of other known prognosis variables.”

D. “**Tumor oxygenation predicts** for the likelihood of distant metastases [cancer spreading] in human soft tissue **sarcoma**.”⁶

E. “**Tumor hypoxia** [too little oxygen in the cell] adversely affects the prognosis of **carcinoma** of the head and neck.”⁷

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Current Cancer Research is Headed in the Wrong Direction

- Cancer is not genetically caused.
- Cancer “vaccines” are based on flawed conclusions — they can’t possibly exist.
- Current Cancer treatments are often archaic and more harmful than good.
- Dietary recommendations (like fruits, vegetables, & fiber) for the prevention of cancer are not based on the physiology of your body and have no scientific foundation.

1999 NEWSFLASH!

Fiber known **NOT** to reduce colon cancer risk!\(^9\)

Regardless, the *incorrect* recommendation is still given by all.

2002 Newsflash: Fiber KNOWN NOT to Reduce Colon Cancer Risk

Once again, a few years later, the truth was published in the medical journals, but you never saw it—because no one in the popular press wanted to admit being wrong:\(^{10}\):

• “...[The researchers administered the patients a] cereal supplement of either 13.5 or 2.0 grams per day.”
• “No protective effect for adenoma [benign glandular tumor leading to cancer] recurrence was observed for those randomized to the high-fiber group as compared to those in the low-fiber group.”
• “The results of this study show that neither fiber intake from a wheat bran supplement nor total fiber intake affects the recurrence of colorectal adenomas, thus lending further evidence to the body of literature indicating that consumption of a high-fiber diet, especially one rich in cereal fiber, does not reduce the risk of colorectal adenoma recurrence.”

LSE Analysis: Six (6) times more fiber in your diet makes no difference in cancer protection; in this study the number of polyps was NOT reduced, and the poor misled patients eating the most fiber “reported side effects such as nausea, diarrhea and abdominal bloating.” Nature is telling us how stupid an artificially high-fiber diet is by making us sick, and we still don’t listen!

10. Jacobs, E.T., et. al, “Intake of supplemental and total fiber and risk of colorectal cancer adenoma recurrence in the wheat bran fiber trial,” Cancer Epidemiology Biomarkers & Prevention, a cancer journal published by the American Association for Cancer Research, Sep;11(9):906-14
Parent Essential Fatty Acids (Bio-Identical EFAs)
Cancer’s Natural Cure

- What is the *prime cause* of cancer?
  * Lack of *cellular oxygen* (Warburg).

- What happened to cause us to become more susceptible to it?
  * Post 1930 food processing adulterating the omega-6 oils.

- What do we need to protect ourselves?
  * Applied Sciences: Focusing on PHYSIOLOGY & BIOCHEMISTRY
The foundation of healthy cellular structure and disease prevention begins with PEOs; in particular, LA.

The Answer…

OXYGEN MAGNETS!

PEOs work like tiny “magnets” drawing oxygen into all cells, tissues, and vital organs.
Reduce oxygen by only 1/3 and a cell turns cancerous forever!
Parent Omega-6 should be in our food, but gets damaged or destroyed due to modern food processing.
PATHWAY SUMMARY

1. **Cell Membrane Physiology:** 100 TRILLION of them… (focus here)
   - Essentially, half of every cell is lipid with lots of PEOs (25% - 33%) and the other half is protein.¹¹
   - Phospholipids (Polar Head & 2 Hydrophobic Tails: w/ Saturated Fat & a PEO ).¹¹

   Note: There is Virtually No Structural Carbohydrate in cell membranes.

2. **Plasma Transport:**
   - Cholesterol Esters are key.¹² (more on this later)

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NEWSPFLASH! Confirmed Again, IT’S NOT GENETIC!

2009: “There is very little reason to be encouraged that prevention strategies can be revolutionized with what we’ve discovered so far [the genetic basis of common diseases].”

NEWSFLASH! Confirmed Again, IT’S NOT GENETIC!

**2011: Revelation**

“So indeed, the genome contains far more inconvenient truths than was supposed a decade ago. The very idea of what we inherit and what we pass on has changed.”*

“...[P]recancerous stem cell (pCSCs) that can either remain benign or become malignant, depending upon environmental cues.

“... pCSCs require some sort of signal, or cue, from their immediate environment that directs them to become benign or malignant.

“‘To cure cancer, we have to eliminate all potential malignant cells—not just the ones within easy reach.’” (Incorrect: we don’t always need to eliminate – just keep the cells benign.)

1. Cancer researcher Robert Weinberg of MIT states: “The connection between inflammation and cancer has moved to center stage in the research arena.” The article continues...

“But biologists and immunologists have begun to realize that progression from diseased tissue to full-blown invasive cancer often requires cells that normally participate in healing cuts and scrapes to be diverted to the environs of the pre-malignant tumor…[Note: Very important fact.]

“…and inflammation is the fuel that feeds it [the malignant cancer]

“In this rewriting of the textbook… This new view implies that rooting out every last cancer cell in the body might not be necessary. Anti-inflammatory cancer therapy instead would prevent pre-malignant cells from turning fully cancerous or would impede an existing tumor from spreading to distant sites in the body. Cancer victims might then be able to survive.
2. 1998: “…Something was very wrong. The notion that a cancer developed through the successive activation of a series of oncogenes [cancer-causing genes] had lost its link to reality.”

3. “The myth of the all-powerful gene is based on flawed science that discounts the environmental context in which we and our genes exist.”

4. “[T]here is not a single case of successful gene therapy in which a normal form of a gene has become stably incorporated into the DNA of a patient and has taken over the function that was defective…”

5. 2007: “…So tangled is the cancer-genetics puzzle that a growing number of scientists, including McKeehan [a Prof. at Texas A&M’s Institute of Biosciences & Technology at Houston Medical Ctr]. believe solving it may be hopeless.” McKeehan states: “We need some new ideas.”

Note: President of M.D. Anderson Cancer Center says genome mapping isn’t productive.

The Genetic Fallacy is Exposed Again–Internationally: Cancer Comes Full Circle

“This study demonstrates how structure and function [physiology] in a tissue are intimately related...’ says Mina Bissell, who pioneered the view that a cell’s environment is as important as its genes in determining the formation and progression of tumors.

“...But a number of investigators, including Bissell and her colleagues, have shown that the genetic alterations of oncogenes, are not, as once believed, sufficient in themselves to cause cancer. Even activated oncogenes require changes in the tissue structure to produce cancer.”

The Genetic Fallacy is Exposed Again in Houston (USA) at the World’s Largest Cancer Center

• “If it could have happened, it would have already happened with genetic mutations.”

  William Brinkley, senior vice-president at Baylor who says other research should take precedence over the cancer genome project….

• Dr. John Mendelsohn – president of M.D. Anderson Cancer Center states: “Any claims that this [human genome project] is going to be the key to curing cancer are not appropriate.”

More Proof It’s NOT Genetic in 2009 and 2008 …

2009: Newsflash — M.I.T. reports How Genetics Fails Again and Again!

• “There is very little reason to be encouraged that prevention strategies can be revolutionized with what we've discovered so far [on the genetic basis of common diseases].” David Goldstein, Director, Center for Population Genomics and Pharmacogenetics Duke University, Durham, N.C”

• “But the greatest challenge in the next phase of the human genome is likely to be interpreting the meaning of the seemingly endless array of variations that will be uncovered. [I]t’s often impossible to tell which class a variation falls into just by looking at it.”

• “[T]he easier it gets to sequence a genome, the harder it becomes to make sense of the complexity the sequences reveal. As Collins [former director of the National Human Genome Research Institute and a leader of the Human Genome Project] puts it, ‘The Human Genome Project was perhaps a simple undertaking compared to what we face next.’”

Newsflash 2008: Case Closed, Closed, Closed...IT is NOT Genetic

• “But the oncogene/tumor suppressor gene hypothesis has also failed, despite three decades of effort, to identify a particular set of gene mutations that occurs in every instance of any of the most common and deadly kinds of human cancer.”

• “For many years, geneticist Lawrence Loeb suggested that ‘early during the genesis of cancer there are enormous numbers of random mutations—10,000-100,000 per cell,’ but he had little evidence to support the idea.”

• In 2006, researchers actually measured the number of mutations and it was a mere “65 - 475 mutations per 100 million nucleotides.”

   [Note: This is .000475% – .000065% — next to nothing; not enough to cause cancer.]

PHYSIOLOGY
+
BIOCHEMISTRY

Experiments—not epidemiological “associations” are key.

Without the focus of physiology (epigenetics – meaning environmentally-based – NOT genetically-based) no improvements in cancer prevention or cure will be accomplished. Current progress is fruitless and re-affirms the cellular environment is KEY.21

Deficient Parent Omega-6 Causes Cancer

A. “…[W]e have proposed that the cellular lipids may be involved in the facilitation and regulation of the supply of oxygen to the cells…”

B. “We have already reported that, although the saturates, such as palmitates, have little or no affinity for oxygen, the unsaturates [PEOs] are capable of undergoing reversible oxygenation in response to changes in oxygen pressure.
B. (CONT…) Because two unsaturated carbon-carbon bonds are required for the reaction, each linoleic [parent omega-6] molecules can bind with one molecule of oxygen, but two oleic molecules must bind one oxygen between them.”

** Parent omega-6 is twice as effective in oxygen transfer compared to olive oil (oleic acid).*

- “…Interference with the movement of oxygen could then occur at any cell membrane so that there could be a general reduction in the supply of cellular oxygen throughout the body…” [Cancer occurs where this condition occurs.]
- “[S]uch a condition could depress the rate of cellular respiration, phosphorylation, and all energy-dependent processes.
- “…[I]t seems possible that many of their symptoms may result from essential fatty acid (linoleic / LA) deficiency, leading to the decrease in the availability of cellular oxygen for respiration.” [Note: Not just “possible.” It is TRUE.]
In The News: 2009
Nearly a Century Later, New Findings
Support Warburg Theory of Cancer 23  
(Note: Appropriately, this work was supported by the National Cancer Institute and the National Institute on Aging)

• “Seventy-eight years after Warburg received science’s highest honor [the Nobel Prize in 1931], researchers from Boston College and Washington University School of Medicine [St. Louis] report new [additional] evidence in support of the original Warburg Theory of Cancer.”

• “Major abnormalities in CL [cardiolipin] content or composition were found in all tumors.”

• “Hence, our findings in mouse brain tumors provide evidence linking abnormal CL to irreversible respiratory injury.”

L.S.E. Analysis: What is cardiolipin (CL)? It is a fat-based complex phospholipid found in all mitochondrial membranes, almost exclusively in the inner membrane, and it is intimately involved in maintaining mitochondrial functionality and membrane integrity. It is used for ATP synthesis, and consists roughly of 20% lipids. \(^{24}\)

In mammals, the main substrate in CL is parent omega-6 with virtually no parent omega-3 or its derivatives. \(^{25}\)

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Major Newsflash 2009: American Heart Association Champions Omega-6 PUFAs to Counter Popular Nutrition Advice

A great deal of discussion in the world of nutrition has given omega-6 fatty acids a bad reputation, which, according to the American Heart Association is unfounded. The debate came about because one of the components of omega-6 fatty acids, called arachidonic acid, is a “building block” for some inflammation-related molecules. This had led to concern that omega-6 consumption would lead to a greater risk of heart disease.

“That reflects a rather naive understanding of the biochemistry,” says William S. Harris, Director of the Metabolism and Nutrition Research Center of the University of South Dakota Sanford School of Medicine and the nutritionist who led the science advisory committee that issued the report in Circulation.”

“[O]mega-6 PUFAs also have powerful anti-inflammatory properties that counteract any proinflammatory activity,” say the advisory authors. ‘It’s incorrect to view the omega-6 fatty acids as “proinflammatory.”’

Here is what we need to know:

• 50% of every cell membrane is fat and at least 25% are PEOs with significantly more LA than ALA in every cell membrane (factor of 11:1 in favor of LA).

**Omega-6 series:**

- $\text{PGE}_1$ is the body’s most potent natural anti-inflammatory.
- $\text{PGI}_2$, prostacyclin, is the body’s most potent natural anti-aggregatory and prevents platelet adhesion (prevents thrombosis)
Deficient Parent Omega-6 Causes Cancer

A. “…[W]e have proposed that the cellular lipids may be involved in the facilitation and regulation of the supply of oxygen to the cells…”

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Cardiolipin in the News 2009

Nearly a Century Later, New Findings Support Warburg Theory of Cancer

(Note: Appropriately, this work was supported by the National Cancer Institute and the National Institute on Aging)

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• “Hence, our findings in mouse brain tumors provide evidence linking abnormal CL to irreversible respiratory injury.”
Vital biological uses for Parent Essential Oils (PEOs).
Parent to Derivative Ratios—Surprise! The Conversion is Much Less Than Everyone States.  

21st Century Science Shows ≥ 95% of PEOs STAY in the Cell’s Membranes as “Parents” — All 100 Trillion Cells!

Outdated 20th Century analysis (1982) most physicians mistakenly rely on: “…[I]n adult men and women the ‘average estimated conversion of alpha-linoleic acid to n-3 LC-PUFA metabolites and docosahexaenoic acid was 17.3 ± 12.8 and 3.6 ± 3.8 percent, respectively (mean + SD).’ This is likely to be an overestimate of the actual overall conversion rates for several reasons. We see even with this excessive estimate of the parent omega-3 derivative conversion that theoretically no more than 37% of them are converted to derivatives.”

** 21st Century Analysis: ONLY a MERE 1% - 5% derivatives **

EFA Derivatives Made “As Needed”\textsuperscript{28}

“\textit{…which shows the effectiveness of ALA conversion [into DHA and EPA] and accretion into erythrocytes. The amounts of ALA required to obtain these effects are amounts that are easily achieved in the general population} by dietary modification.

There is independent confirmation of conversion amounts, if anyone would care to look…\textsuperscript{29}

“Although an increased intake of dietary ALA might be expected to upregulate ALA conversion, this has . . . \textit{not been found}…”

“Overall conversion rates of LA and ALA, calculated from peak [13C] LCP concentrations adjusted for dietary influences on pool sizes of LA and ALA, were low and of similar magnitude overall for \textit{AA and EPA (0.18\% and 0.26\%}; Table 2). LA→DGLA and AA formation was significantly lower on the FXO diet in each case, with ALA→EPA and DPA formation on average higher on the FXO diet, although the differences were not significant. Conversion of tracers to DHA was much less.” [Note: \textit{We see PEO conversion rates of less than a mere 1\%. The same less than 1\% conversion rates held for DGLA, DHA, and DPA.}]

“Comparison of bolus versus fractionated oral applications of [13C]-linoleic acid in humans,” *European Journal of Clinical Investigation*, Volume 29 Issue 7, Pages 603 - 609, had this to say regarding over-estimations of derivatives:

“**Conclusions:** Using areas under the curve [the simple, standard method of analysis] overestimates the conversion, because different residence times are not considered.”

**Life-Systems** Engineering Science Analysis: PEO derivative supplements are NOT required. They are made from the parent EFAs as needed. Therefore, fish oil is not required for physiologic EPA and DHA and may provide harmful pharmacological overdoses of these substances (EPA/DHA).

**Note: 2,600:1 times more ALA than DHA in the human body**
Wonderful News… We Can Keep Tumors Benign!

- **Benign**: “Respiration in benign tumors suffices to keep disappearance of glycolysis-products.”

- **Malignant**: “Malignant tumors produce three to four times more lactic acid per molecule of oxygen consumed than do benign tumors.”

- “In cancerous tumors respiration is too small.”

- “Benign or malignant depends on the duration of the oxygen deficit.”

What About Fish Oil?

No! NOT Bio-Identical

- Not Adequate.
  - Highly Processed With Chemicals. However, not the most significant problem…
  - Not Enough “Parent” EFAs – Mainly Derivatives.  
  - High Doses of Derivatives & Not Parents – Body’s JOB is to Make Derivatives AS NEEDED.

How do you juice a fish?

Fish Oil Capsules
Completely impossible to get sufficient PEOs & unavoidable pharmacological overload of derivatives.

• Fish have no oil glands, so fish oil is essentially “juiced fish.”
• Fish oil does not contain adequate amount of PEOs
• Fish oil contains almost no parent oils — 20Xs – 500Xs too many omega-3 derivatives = pharmacologic, physiologic, OVERDOSE.
Fish Oil? No, No, No!

- Fish Oil is *completely worthless* in preventing or reversing heart disease.\(^{32,33}\) (known in 1995! Frank M. Sacks, et al., *Journal of the American College of Cardiology* Vol. 25, No. 7, June 1995: 1492-8.)

- Fish Oil *decreases immune response*
  - DHA & EPA even in low doses do this. \(^{34}\)

- Fish Oil *worthless in decreasing inflammation* (CRP)
  - “No evidence for an anti-inflammatory effect as judged by CRP levels…” \(^{35}\)

- Fish Oil creates *abnormalities* [overdoses tissue] *in brain*. \(^{36,37}\)

- Fish Oil *raises blood sugar levels and blunts insulin response*. \(^{38}\)

  Awful for Diabetics - #1 epidemic in the world. (Significant Question: When do you want elevated blood glucose levels?)

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34. Calder,P., Omega-3 Polyunsaturated Fatty Acids, Inflammation and Immunity, Institute of Human Nutrition, University of Southampton, Bassett Crescent End, Southampton, UK.
### Percentages of Linoleic Acid (LA) & Alpha Linoleic Acid (ALA) in Plasma and Classes of Lipids

<table>
<thead>
<tr>
<th>Fatty Acid</th>
<th>Plasma % (Unesterified)</th>
<th>Plasma % Triglycerides</th>
<th>Plasma % Phospholipids</th>
<th>Plasma % Cholesterol Esters</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA (parent omega-6)</td>
<td>17</td>
<td>19.5</td>
<td>23</td>
<td>50</td>
</tr>
<tr>
<td>ALA (parent omega-3)</td>
<td>2</td>
<td>1.1</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Parent omega-6: Parent omega-3 Ratio</strong></td>
<td><strong>8.5:1</strong></td>
<td><strong>17.5:1</strong></td>
<td><strong>115:1</strong></td>
<td><strong>100:1</strong></td>
</tr>
</tbody>
</table>

Note: Most parent omega-3 is oxidized; your body wants very little.

Source: “Plasma free fatty acid and lipoproteins as sources of polyunsaturated fatty acid for brain…”*

**Question**: Plasma lipids have preponderance of parent omega-6. What about tissue?

**Answer**: High predominance of tissue parent omega-6 (11:1 conservatively).

<table>
<thead>
<tr>
<th>Tissue</th>
<th>Percentage of Total Body Weight</th>
<th>Omega-6 PEO</th>
<th>Omega-3 PEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain/Nervous System</td>
<td>3</td>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td>Skin</td>
<td>4</td>
<td>1000</td>
<td>1</td>
</tr>
<tr>
<td>Organs and Other Tissues</td>
<td>9</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Adipose Tissue (bodyfat)</td>
<td>15-35</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Muscles</td>
<td>50</td>
<td>6.5</td>
<td>1</td>
</tr>
</tbody>
</table>

What About These Oils Going Rancid, (Peroxides) in the Body like the literature often “reiterates”?

**WRONG!**


Above Showing that Unadulterated PUFA is Acting as the 1st Stage Scavenger of Reactive Oxygen Species *in vivo*. Note: SOD (body’s natural anti-oxidant) protects, too.
What PEO Ratio is Best?

- A Properly Balanced Supplemental Blend of **Significantly “Parent” PEOs** that Allows the Body to Make Derivatives **AS NEEDED**.
  - Flax is Great for Parent Omega-3 — NOT Parent Omega-6.
  - High LA Sunflower & Safflower are Fine for Parent Omega-6.

- Parent Omega-6/-3 Ratio **MUST BE 2.5:1 – 1:1**
  - NO fish oil and few derivative EFAs
  - (only GLA is recommended).

- High linoleic LA **MUST be used with minimum oleic content**.
  - Don’t we get too much omega 6 in our food?
    - True, but most is adulterated. Therefore, a substantial portion needs to be counted as zero.
  - Isn’t it true LA (Parent Omega-6) promotes tumors?
    - **WRONG**, in vitro (not unadulterated *in vivo*) misunderstanding!

---


Are There any Other Critical Factors?

**YES!**

- Need Low Heat so the Oils Don’t Become *Trans*.
- No Chemical Additives/Processes that Adulterate the Organic Oils (like Hydrogenation).

**How To Proceed?**

- Start Patients (prophylactically as nutritional supplement) w/3 gm of (Unprocessed/organic) Poly-unsaturated Oil as Previously Defined (based on 160# bodyweight).
- **MINIMIZE** *Transfats* – These **INCORRECTLY** Modify the Cell Membrane in Proportion to Ingestion!
- Note: It Can Take Up to a Year or Longer to Solve a PEO Deficiency!
Where Can I Obtain this Blend?

- You can blend yourself but you MUST use: organic, cold-pressed, unprocessed, high LA — NOT high oleic (NOT omega-9 used for frying because there isn’t enough LA) — oils.

- There are companies that formulate correctly based on the science. Seek them out.
The Prime Cause & (Newly Discovered) Prevention of Cancer

**Appetite**
- Less Cravings
- Less Hunger
- Better Appetite Fulfillment

**Heart Health**
- Flexible Arteries
- Clean Arteries
- Fast Blood flow
- Lower Blood Pressure
- Improves Lipids

**Beauty**
- Healthier Skin
- Less Dandruff
- Less Cellulite
- Healthier Hair
- Eczema Improved

**Diabetes**
- Less Sweet Cravings
- Lower Blood Sugar
- Less Neuropathy/Retinopathy

**Anti-inflammation**
- Less Arthritis
- Less Joint Pain/Swelling
- Faster Healing

**Hormones/Endocrine**
- Better Sexual Function
- Smoother Pregnancies
- Less PMS
- Fewer Headaches

**Brain Health**
- Better Clarity
- Better Focus
- Improved Memory
- Helps Improve ADD & ADHD

**Endurance**
- More Energy
- Less Fatigue
- Greater Intensity
- Faster Recuperation
BONUS SURPRISE

STOP CANCER with Cellular $O_2$
&
STOP HEART DISEASE Cold, too
(CVD Disease is Common Complication in Cancer Patients)

Common Connection: Esterified Cholesterol:
Substantially Parent Omega-6
“Healthy” Cholesterol Transports the PEOs

Structure and composition of a low-density lipoprotein.

Textbook of Medical Physiology (9th edition), page 874.
Cancer Kills Via Metastasis: The Cancer/Thrombosis (Blood Clot) Connection

- **Fewer than 10% of cancer deaths** result from tumors that continue to grow at the same site where the original took root.

- **The killers are the metastasis–colonies** of cancer cells that have left the site of the original, elsewhere in the body.\(^{41}\)

- Dr. Summer Wood found that the number of **deaths from cancer is dramatically decreased**–by over 80%–if blood clots are eliminated.\(^{42}\)

- Dr. L. Michaels of Canada studied medical histories of heart and stroke patients kept on **permanent anti-coagulant drug treatment** to protect their blood circulation:
  - *Only one-eighth* (just 12.5%) of the expected number of cancer deaths.
  - *The study covered the equivalent of 1569 patient-years and there was *not a single case of death by cancer metastasis* in the group.*\(^{43}\)

42. American Medical Association Archives of Pathology, Vol. 66, October 1958.
2007 Newsflash: Venous Thromboembolism (VTE) is a Major Complication in Cancer Patients

It was tragic for my friend, as it cost him his life, that neither he nor his physicians knew this fact. Here are the key points from the Medscape article that his oncologists missed:

“Venous Thromboembolism (VTE) is a major complication and increasingly common cause of morbidity and mortality among cancer patients and occurs in 4% to 20% of patients.

“It is also one of the leading causes of mortality [death] in patients with cancer…the burden of VTE seems to be increasing…”

Statin’s Number Needed to Treat (NNT) – the only valid, scientific measure of treatment’s success )
= 80: **Translation**: Statins **FAIL 99% of the Time**: 45

• How can a failure rate of 99% be called success? **Only if you have nothing better. Fortunately, we now have a simple, inexpensive, solution.**

**L.S.E. analysis**: Statins are not the answer to preventing heart disease. Functional Parent Omega-6 is. Parent omega-6 is Nature’s natural “blood thinner” (natural anti-coagulant,) because of its derivative from LA’s (**PGE**₁) and from AA’s (derivative of LA) **PGI**₂, prostacyclin, preventing adhesion. Keeping blood flow high and potential clotting to a minimum is the anti-heart disease answer.

Cause of Thrombosis (Blood Clots): The LDL Connection

• “Cholesterol esters are the predominant lipid fraction in all plaque types…

• “Intimal [innermost arterial lining] macrophages contain substantial amounts of cholesterol esters, which are rich in PUFAs [PEOs].”

Note: The intima is all parent omega-6 – with virtually no parent omega-3.46

More Confirmation It’s the Unadulterated Parent Omega-6…

German physician Clause Weiss, MD, et al. states:

• “In summary, infusion therapy with PGE₁ in patients with peripheral arterial occlusive disease (PAOD) reduces thrombin formation and results in a decrease of fibrin degradation. PGE₁ may thus reduce fibrin (thrombosis) deposition involved in the pathogenesis of atheroclerosis.”47

Solution: Unadulterated PEOs with a predominant LA (Parent Omega-6) component.

Arteries and Blood Vessels

Source: Medical Textbook Prostaglandins in the Cardiovascular System

PEOs reduce platelet clumping

PEOs make the walls flexible

PEOs help resist tears and other damage
Nature’s Natural Statin: Omega-6 series

• **Prostacyclin (PGI$_2$)**: Body’s MOST potent natural blood thinner / platelet anti-coagulant is made from arachidonic acid (AA).\(^{48}\)

• Humans obtain Omega-6 derivative arachidonic acid (AA) either ready-made in foods like meat or made by the body if the parent Omega-6 is UNADULTERATED.

• **PGE$_1$**: Body’s most potent anti-inflammatory – much stronger than Omega-3’s PGE$_3$.\(^{49}\)

**Important Point**: The intima (endothelial inner lining of arterial wall) is all parent omega-6 – with no parent omega-3. Skin contains no omega-3, either; it is all parent omega-6.

PGE$_1$ eicosanoids formed from parent omega-6 are known from the medical textbooks to be fast-acting, anti-inflammatory and to have significant immune-enhancing properties. We need to ensure that plenty of them can be made. *They are much more powerful than omega-3 PGE$_3$.*

Constant LDL-C YET 300% Difference in Death Rates\(^{(a)}\)

- N. Europe 18% vs. 6% in Mediterranean •

**

A 3-fold INCREASE in death with the SAME LDL cholesterol number as reported in the medical journal!

**

L.S.E. Analysis: There MUST be something much more significant than merely LDL-C. The answer: PGE\(_1\) and PGI\(_2\), prostacyclin — both parent omega-6 derivatives.

\(^{(a)}\) “Seven Countries Study” CHD MORTALITY at constant 6 mmol/l cholesterol.
**NEWSFLASH: July 2, 2008!**

Cardiosource American College of Cardiology e-newsletter: Cholesterol Management Clinical Collection

Impact of plasma *oxidized* low-density lipoprotein removal on atherosclerosis:

- “Although plasma total cholesterol, triglyceride, and LDL cholesterol levels were unaffected [remained constant], plasma oxLDL [oxidized LDL-C] was markedly and transiently decreased in LOX-1 mice.

- “...Atherosclerotic progression was almost completely inhibited by hepatic LOX-1 expression....resulting in complete prevention of atherosclerotic progression despite the persistence of severe LDL hypercholesterolemia and hypertriglyceridemia.

- **CONCLUSIONS:** OxLDL [oxidized LDL-C] has a major atherogenic impact, and oxLDL removal is a promising therapeutic strategy against atherosclerosis.” (Emphasis added.

**PATHWAY SUMMARY**

**Eicosanoids**: Critical prostaglandins, etc. from parent omega-6 AND omega-3: Cell-by-cell hormone analogy (PGE$_1$ – PGE$_4$, etc.) - very short half-life

Very Significant in Vascular Function
Lipoxygenase (LOX) from Arachidonic acid (AA) — made by body as needed from the PEO parent omega-6.

Lipoxygenase activation via PEOs is a much more powerful approach than the current “statin/cox-2 inhibitor” therapy failing today!
Note: Most parent omega-3 is oxidized; your body wants very little.

Source: “Plasma free fatty acid and lipoproteins as sources of polyunsaturated fatty acid for brain…”

“Healthy” Cholesterol Transports the PEOs

Structure and composition of a low-density lipoprotein.

Textbook of Medical Physiology (9th edition), page 874.
Solve cancer and you automatically stop heart disease; Solve heart disease and you automatically stop cancer!
Wonderful Life-Extension with PEO Primary and/or Adjunct Therapy Preventing Cancer and CVD Deaths

(a) – see next slide

<table>
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<th>Age</th>
<th>% Lives Saved</th>
<th>Expected value*</th>
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<td>at least 8 more years of life</td>
</tr>
<tr>
<td>+</td>
<td>+</td>
<td>+ many more years</td>
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</tbody>
</table>

* These are general approximate expected values (means) for the general population.

• Given that PEOs improve oxygenation and are fundamental to so many life-processes, expected values will be greater.
Real-Life Results with PEOs

a) Surgeon, Dr. Roncarati Andrea (Italy) proved PEOs:

1. Significantly decrease recuperation time,
2. Promote much faster healing,
3. Less inflammation,
4. Less pain,
5. Less scar tissue.

Imagine the patient’s prophylactic protection when not undergoing surgery!
In my practice as a Plastic Surgeon, I have found myself understanding that to obtain good post operative results according to the intensity that varies from minor to major operations (the majority are very intense operations) the repair flogistic resolution, edema and the scar tissue are all key factors to success.

My results have improved according to the use of new surgical techniques as well as the use of antibiotics and antiflogistic drugs. However, I must point out a new major factor that improved greatly my patients’ surgical results after introducing certain “essential fatty acids” 15 days prior to 30 days after surgery.

The level of tissue repair is what I look for especially in my practice and having the trial opportunity of five patients using Brian Peskin’s EFA recommendations, I found in all five patients an enormously improved result with better recovery by just assuming a simple prescribed medical therapy with his EFA-based recommendations.
Unlike fish oil which causes excessive bleeding, Brian Peskin’s Protocol does not cause excessive bleeding. In fact, it makes surgery easier and improves patient recovery.

This improved recovery included:

1. Faster healing
2. Less inflammation
3. Less scar tissue and
4. Less pain to the patient.

I finally believe and feel it is necessary to continue this very interesting tissue repair in the near future.

Dr. Roncarati Andrea (ITALY)
Real-Life Results with PEOs (continued)

b) 4 week PEO Pre-treatment =
   Epigenetic (environment enhancement) =
   Significant DECREASE in TUMOR GROWTH over 50 days!

• with 2,000,000 cancer cells (42% DECREASE in tumor size with pre-treatment) compared to no treatment!
Real-Life Results with PEOs (continued)

IOWA EXPERIMENT (2010):

c) Significant Arterial Compliance (increased arterial flexibility) decreased biological age by 11 years compared to fish oil!

Investigating Oils With respect to Arterial health (IOWA) Experiment with *photoelectric plethysmographs* (PTG) — similar to pulse oximeter. “Arterial stiffness measured by pulse wave velocity (PWV) is an accepted strong, independent predictor of cardiovascular events and mortality.”* Anesthesiologists are well aware of this technology, used for monitoring purposes, but most other medical disciplines are not aware.

2010 MAJOR SUCCESS—PEOs versus Fish Oil

IOWA: Investigating Oils With Respect to Arterial Flexibility

Significant differences in biological age compared to physical age

Brian Peskin, BSEE: Founder Life-Systems Engineering Science
with David Sim, M.D., Interventional Cardiologist

Subjects Discontinued Fish Oil Supplementation, replacing it with PEO Formulation

**Significant** differences (*p 0.0001*) with an experimental error of the mean +/− 5 years. Subjects’ cardiovascular biological age (average of) 11.1 years lower than their actual physical age. NOTE: Taking fish oil leads to a greater improvement than taking nothing. **Conclusion:** *fish oil makes patient cardiovascular systems WORSE!*

The effects of the PEOs were evaluated in subjects who ceased fish oil supplementation, replacing it with a daily dosage of 2,900 mg PEO formulation. The effects of the PEO formulation were measured in 15 subjects: seven (7) male subjects and eight (8) female subjects aged 46-74, with a mean age of 60-years-old, utilizing the formulation an average duration of 3.5 months. Vascular assessment was made via Photoplethysmography measuring arterial flexibility.
Appendix XI

Peskin Protocol: Adjunct Therapy for Use with Chemotherapy and Radiation

Many readers of this book unfortunately are undergoing treatment with radiation and chemotherapy. In May 2008 it was brought to my attention by the superb radiologist, Robert Kagan, M.D., Medical Director of MRI Scan & Imaging Centers in Ft. Lauderdale, Florida, that increased cellular oxygen increases the effectiveness of both chemotherapy and radiation treatments in destroying cancer cells.

It was extremely gratifying to learn of this, since the Peskin Protocol was designed to increase cellular oxygen throughout the body, including at cancerous sites.

Therefore, in addition to the capability of increased oxygenation to prevent cancer’s initial occurrence and to arrest it at existing sites, it also makes current oncological treatments more effective. Here’s what James E. Mitchell, Ph.D., head of the tumor biology (NCI-radiation biology branch) section at the National Cancer Institute, reported in an article published by Radiological Society of North America (4/23/2008):

• “...[T]hey were able to successfully measure oxygen levels in tumors, which could be important because ‘tumors with higher concentrations of oxygen [are] more susceptible to radiation.’

• “Lower oxygen level ‘in the tumor allows tumor cells to survive more easily by making the DNA destruction more difficult.’
• "Chemotherapy drugs also don't work as well when tumors have less oxygen." (Emphasis added.)

I immediately began searching medical journal articles to see if this critical concept was well understood. The following comments comprise a representative sample of what I found:

• "A priori knowledge of spatial and temporal changes in partial pressure of oxygen (oxygenation; $pO_2$) in solid tumors, a key prognostic factor in cancer treatment outcome, could greatly improve treatment planning in radiotherapy and chemotherapy." (Emphasis added.)

• "Despite significant evidence of a role of hypoxia [low cellular oxygen] in cellular resistance to ionizing radiation-induced toxicity, the underlying molecular mechanisms remain unclear. This study focused on the influence of hypoxia on radiation-induced signals in TK6 human lymphoblastoid cells." (Emphasis added.)

• "A large body of published evidence points to tumor hypoxia as a major obstacle to effective treatment of tumors using ionizing radiation, because cells exposed to radiation under hypoxic conditions are approximately three times more resistant than when treated under aerobic conditions." (Emphasis added.)

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"In an attempt to enhance the efficacy of clinical radiation therapy, hypoxic cells were a major target because it takes approximately three times the radiation dose to achieve the same proportion of cell survival under hypoxia compared to cells in normoxic [normal] conditions. The biochemical role of oxygen was in fixing, or making permanent, the damage done to the critical DNA target." (Emphasis added.)

"Solid tumors frequently contain large regions with low oxygen concentrations (hypoxia). The hypoxic microenvironment induces adaptive changes to tumor cell metabolism, and this alteration can further distort the local microenvironment. The net result of these tumor specific changes is a microenvironment that inhibits many standard cytotoxic anticancer therapies ['chemotherapy'] and predicts for a poor clinical outcome." (Emphasis added.)

"Hypoxia and anemia (which contributes to tumor hypoxia) can lead to ionizing radiation and chemotherapy resistance by depriving tumor cells of the oxygen essential for the cytotoxic activities of these agents. Hypoxia may also reduce tumor sensitivity to radiation therapy and chemotherapy through one or more indirect mechanisms that include proteomic and genomic changes." (Emphasis added.)

"Poor and fluctuating blood flow (which leads to acute hypoxia) as well as increased diffusion distances (which lead to chronic hypoxia) can result in the diminished and erratic distribution of chemotherapeutic agents, with a consequent effect on their therapeutic efficacy." (Emphasis added.)

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9 Ibid.
The Hidden Story of Cancer

- "Also, some chemotherapeutic agents, for example, cyclophosphamide, carboplatin (ParaplatinR; Bristol-Myers Squibb; Princeton, NJ), and doxorubicin (AdriamycinR; Bedford Laboratories; Bedford, OH), have been shown to be oxygen dependent under both in vivo [inside the body] and in vitro conditions."10,11,12,13,14 (Emphasis added.)

Since this information is critical in your fight against cancer, I am making these pages simple to print via www.Pinnacle-Press.com/HiddenStoryofCancer/oncology.pdf so you can discuss this with your oncologist at your next appointment prior to treatment.

10 Ibid.
Cod Liver Oil Significantly Increases Risk of Melanoma

“A significant risk was found in women who used cod liver oil supplement. [W]e found a strong increased risk for the women using cod liver oil, a supplement rich in omega-3 fatty acids (EPA and DHA).” [There was approximately 3xs more incidence of melanoma (the most dangerous type of skin cancer) in the cod liver oil users.]

“The increase is considered to be real and not due to chance.”

“Mean time of follow-up was 12.4 years….” [Note: Sufficient time for an excellent analysis.] “The strengths of the study are the high number of participants selected in an unbiased manner, the high participation and response rate, the prospective design with dietary data collected prior to onset of cancer and a complete follow-up with regard to incidence of cancer, deaths, and emigration. The complete follow-up is secured by the procedure established by the Cancer Registry, ensuring that all physicians, hospital departments and histopathology laboratories in Norway are obliged to report malignant diseases to the Registry: as many as 98% of the cases were histologically [microscopic tissue analysis] verified.” [Note: This guarantees superb tracking and confirmation of cancer cases.]

2010: Four more fish oil FAILURES: There are NO metabolic pathways leading to “spectacular” results. To the contrary, they led to FAILURE...

In 2010 there were 4 major failures in experiments using DHA, the “active ingredient” in fish oil to either prevent or reverse disease:

**FAILURE 1:** Nov. 2010 **DHA** (also found in krill oil, algae, mussels, etc.) failed to improve cognitive impairment in Alzheimer disease victims.¹

- “Conclusion: Supplementation with DHA compared with placebo did not slow the rate of cognitive and functional decline in patients with mild to moderate Alzheimer Disease.

- “This study was designed to determine of supplementation with DHA would slow the rate of cognitive and functional decline in patients with mild to moderate Alzheimer Disease. Despite enrollment of the target population of individuals with low baseline DHA…

Continued…

• “The hypothesis that DHA slows the progression of mild to moderate Alzheimer Disease was not supported, so there is no basis for recommending DHA supplementation for patients with Alzheimer Disease.

• “In summary, these results indicate that DHA supplementation is not useful for the population of individuals with mild to moderate Alzheimer Disease.”

**Life-Systems Engineering Science Commentary**: Once again, a carefully controlled study **FAILS** to show that the active ingredient in fish oil has little benefit for a human being. The EFA derivative Docosahexaenoic acid (**DHA**) is the most abundant long-chain polyunsaturated fatty acid in the brain. If fish oil was beneficial, we should certainly see a positive result in Alzheimer’s patients. The length of time is sufficient to see an improvement. There wasn’t any improvement. **This negative result shows that the EFA-derivative DHA offers nothing to “solving the Alzheimer’s problem.”**
FAILURE 2: March 2010 Newsflash: Fish Found Worthless in Decreasing Abnormal Heart Rhythm (AF—atrial fibrillation)

FAILURE AGAIN: Contrary to many report claims, the American Journal of Cardiology reported in 2010 that eating lots of fish did nothing to help an abnormal heartbeat.

However, in contrast to omega-3’s FAILURE, parent omega-6 is effective, as reported in the world’s leading medical journal, Lancet (Riemersma, RA, et al., “Dietary fatty acids and ischemic arrhythmias,” Lancet, 1988;i:285-6). Parent omega-6 did help reverse AF.

“Consuming higher amounts of **omega-3 fatty acids [derivatives]** does not appear to lower heart disease risk for women with type 1 diabetes, according to a University of Pittsburgh Graduate School of Public Health study presented at the 70th Scientific Sessions of the American Diabetes Association.

“Omega-3 fatty acids [omega-3 derivatives], primarily found in fish, [supposedly] promote heart health by preventing the buildup of cholesterol in the arteries. Little is known about the effect of consuming omega-3 in people with type 1 diabetes, who are at much greater risk for heart disease.

“Although omega-3 [derivatives] is **typically associated [although not causal]** with decreased risk for cardiovascular disease, this may not be the case for women who have type 1 diabetes….”

**Life-Systems Engineering Science Commentary**

FAILURE AGAIN: We see how fish oil FAILS in preventing heart disease. The population group is Type 1 diabetic women — a treatment group that needs as much assistance as possible because diabetics have a significantly increased risk of cardiovascular disease. Therefore, this is an ideal population and easier to utilize to see if the fish oil stops heart disease.

Once again, fish oil FAILED miserably. The article mentions fish oil’s supposed metabolic pathway of cholesterol reduction and how fish oil is merely “associated” with a supposed reduction in CVD. Mere “associations” in medicine and medical science are meaningless. True experiments showing direct “cause/effect” relationships are required and when these are performed, fish oil FAILS time and time again.

“‘We found that mice developed deadly, late-stage colon cancer when given high doses of fish oil,’ [researcher Fenton] said.”

“More importantly, with the increased inflammation, it only took four weeks for the tumors to develop. “…not only the mice receiving the highest doses of DHA but those receiving lower doses as well.”

“Our findings support a growing body of literature implicating harmful effects of high doses of fish oil consumption in relation to certain diseases, Fenton said.”

“We hypothesized that feeding fish oil enriched with DHA to mice would decrease the cancer risk; we actually found the opposite.”

“Contrary to expectations, DFO [dietary fish oil] induced severe colitis and adenocarcinoma [epithelial tissue cancer of the colon] formation. DFO consumption was associated with decreased CD8+ cell frequency and diminished CD69 expression on CD4+ and CD8+ T-cell populations. Mice consuming DFO also exhibited higher FoxP3+ CD25+ CD4+ T regulatory cell frequency, FoxP3 expression, and altered L-selectin expression during infection.”

“[Fenton] said people already receiving enough omega-3 fatty acids through their normal diet and foods have no need for added supplementation.”

More Fish Oil FAILURES – Continued

• Fenton and her fellow researchers fully expected the fish oil to have the opposite and extremely positive effect of reducing cancer risk — not increasing it like it did!

**DANGER!**: This result is directly aligned with the fact that this cancer, adenocarcinoma, occurs in epithelial-based tissue (such as the lining of the colon). There is no **omega-3 component to epithelial tissue** (just as with skin). Omega-3 supplementation cannot benefit epithelial tissue; a pharmacological overdose of omega-3 derivatives is predicted to harm such tissue, which it does.

• DHA and EPA from fish oil supplements range from a minimum of **20-fold overdoses of DHA** to **250-500-fold overdoses of EPA** — far more than your body would ever produce on its own. Even so-called “low dose” fish oil supplementation approaches these overdose values.

• It is also significant that Fenton points out that her findings “**support a growing body of literature implicating harmful effects of high doses of fish oil consumption in relation to certain diseases.**”
There aren’t supporting metabolic pathways
DHA/Fish Oil FAILURE – a long history of FISH FAILURES

• FAILURE 1995: Fish Oil is completely worthless in preventing or reversing heart disease. (Frank M. Sacks, et al., “Controlled Trial of Fish Oil for Regression of Human Coronary Atherosclerosis,” Journal of the American College of Cardiology Vol. 25, No. 7, June 1995: 1492-8.)
  * The daily dose was 6 grams of fish oil vs. 6 grams of olive oil in the control group.
  * “Fish oil treatment for 2 years DOES NOT promote major favorable changes in diameter of atherosclerotic coronary arteries.”

• FAILURE 1999: Again, Fish Oil is shown to be completely worthless in preventing heart disease. (“Clemens von Schacky, et al., The Effect of Dietary Omega-3 Fatty Acids on Coronary Atherosclerosis: A Randomized, Double-Blind, Placebo-Controlled Trial, ”Annals of Internal Medicine;130:554-562, 1999.)
  * “Ingestion of fish or other sources of omega-3 fatty acids, such as fish oil capsules, has been called a comprehensive strategy toward the prevention of atherosclerosis.”
  * However, at the end of 2 years, BOTH groups had worsened clogging. The same NEGATIVE result as in 1995 above.
Fish Oil Makes CVD WORSE!
There is a defined metabolic pathway explaining why – fish oil suppresses PGI₂ synthesis!


- “...In patients with atherosclerosis, prostacyclin biosynthesis fell by a mean [average] of 42% during the fish-oil period.”

Prostacyclin (PGI₂) is the body’s natural blood thinner and keeps platelets apart naturally. The last thing a CVD patient needs is a reduction in this critical substance. CVD patients require more, NOT less PGI₂. Decreased PGI₂ significantly increases – not decreases – the risk and severity of any heart attack.
Fish Oil Fails and Fails and FAILS …

DHA/Fish Oil FAILURE -- there is a long history of FAILURE to prevent or reverse cardiovascular disease (CVD)


* The daily dose was 1.65 grams of fish oil vs. 6 grams of olive oil (no DHA-EPA) in the control group.

* “In this group of selected patients with documented coronary artery disease, omega-3 PUFA [fish oil polyunsaturated fatty acids] given for 2 years did not demonstrate an effect on slowing progression of atherosclerosis in carotid arteries as measured by ultrasound.”

• FAILURE 2003: Fish (oily fish) itself is worthless and fish oil had adverse effects in preventing or reversing heart disease. (Burr, et al., “Lack of benefit of dietary advice to men with angina: results of a controlled trial,” Eur J Clin Nutr 2003, 57:193-200.) This study looked at patients with angina (severe heart pain caused by restricted blood flow) to be divided into two groups; those consuming more fish and those consuming fish oil supplements:

- Those patients eating two servings of fish weekly, had no “protection” benefit from death due to cardiovascular causes. If consuming fish helped heart-related health then one would expect to see fewer deaths from the fish eaters. This did not happen.

- Those patients consuming three (3) fish oil capsules (omega-3-derivatives) daily had an adverse (negative) effect! The fish oil capsules harmed them because this group had more cardiovascular-related deaths.
Fish Oil Has Limited Benefits

*Most notably mimicking the immune suppression properties of a steroid!*

• **FAILURE 2000:** Fish Oil decreases immune response

  • “...[S]tudies indicate that at the levels used, fish oil [omega-3 derivatives] decrease a wide range of immune cell responses (natural killer cell, cytotoxic T lymphocyte activities, lymphocyte proliferation and production of IL-2 and IFN-y (1,2))....

*  “...Recent studies have indicated that relatively low levels of the long chain omega-3 fatty acids (EPA or DHA)...are sufficient to bring about some of the suppressive effects ...”

** WARNING: DHA & EPA even in low doses cause these immune suppressive effects. **

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Fish Oil Decreases Immunity

Confirmation of lowered immunity from fish oil:

A drug called Omacor® (Lovaza)* consists of approximately 90% active fish oil (omega-3 derivatives). It is used to reduce high levels of triglycerides.

However, according to the manufacturer’s 2005 medical brochure:

• Under “Adverse Reactions,” there were double the number of people who developed infections (reduced immunity) while taking the drug compared with those not taking the drug!

• Users suffered more flu syndrome, indicating a lowered immune system.

• 4 times more people suffered skin rash while taking the drug.” Note: You will discover why the skin rash result is predicted based on their oil EFA-based formulation.
Fish Oil decreases Inflammation doesn’t it?
No, but it does cause harmful brain abnormality

  
  “No evidence for an anti-inflammatory effect as judged by CRP levels…”

• **FAILURE 1992, 1990, 1988**: Fish Oil creates abnormalities [tissue] in brain.a

  “Feeding of fish oil [omega-3 “derivatives”] to adult rats resulted in a rapid increase in levels of 22:5n-3 and 22:6n-3 as well as 20:5n-3 [omega 3 series] (which is usually present in brain in only trace amounts) with corresponding decreases in 22:5n-6 as well as 20:4n-6 [omega-6 series]…”

  “Nevertheless, the findings may be of relevance to questions concerning the provision of long-chain n-3 FA [from fish oil] in human infant feeding.”

Fish oil is exclusively omega-3 derivatives with enormous supra-physiologic overdose factors of plasma EPA and DHA. Therefore, prophylactic use has no basis in human physiology whatsoever.
Fish Oil for diabetics? No. Fish Oil is AWFUL for Diabetics!

• FAILURE 1988, 1989, 2003:

Fish Oil raises blood sugar levels and blunts insulin response.\(^a\)

* “The glycemic [blood sugar] control of [all of] the four insulin dependent diabetic patients worsened during the fish oil administration.”

* “Glucose tolerance during the mixed meal profile also deteriorated significantly.”

* “…[T]he insulin dose of the subjects had to be increased throughout the six-month period of fish oil administration to maintain constant blood glucose …”

* “Another important finding of our investigation was that consumption of a fish oil-enriched diet worsens glycemic tolerance.”

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Fish Oil? AWFUL for Diabetics! - continued

“It is concluded that fish oil reduced Rd [rate of glucose disappearance] glucose by 26% by reducing glucose metabolic clearance rate …” “[It was observed in healthy human subjects] that a 3-week supplementation of the diet with fish oil (6g/day) decreased by 40% the insulin response to an oral glucose challenge without altering either endogenous glucose production or plasma glucose utilization.”

“[N]-3 long-chain fatty acids are incorporated into membranes whose composition remains altered at least 18 weeks after interruption of fish-oil supplementation…”

Fish Oil INCREASES Tumor Proliferation!

- After one week, rats fed fish oil had an amazing 7-fold (700%) increase in metastases (secondary growths of cancer) in their livers after colon cancer cells were administered.

- At three weeks, the fish oil group had a staggering 10-fold (1,000%) more tumors.

Fish Oil Causes Cancer Infiltration into Spleens of Mice

- The second article (Brit. J of Nutrition, 2009, 102) mirrors and substantiates the first. It reports that fish oil enhanced the metastatic (spreading of cancer) potential of T lymphoma lines in mice compared to those fed maize (corn) oil. The authors cautioned physicians by warning that the “high pro-metastatic effect of dietary omega 3 fatty acids (fish oil) rules out the generalization that these [fish] oils inhibit tumor growth and progression.” That conclusion needs to be repeated…fish oil does NOT inhibit cancer growth and progression — it makes it much worse!

Fish Oil Damages Mitochondria!

It was on live animals, not in a lab dish. Rats were fed fish oil or an equivalent fat—beef tallow. The scientists then examined the activity of critical mitochondrial enzymes from their kidney cells. The beef tallow-fed animals suffered a 45% enzyme loss compared to the fish oil-fed animals’ incredible 85% loss. (The beef tallow contained an insignificant amount of critical parent essential oils—PEOs—less than 4%) Fish oil caused a whopping 40% net additional reduction in enzyme production. Once again fish oil failure and harm.

Fish Oil Uncouples energy from oxygen production


2012: Efficacy of Omega-3 Fatty Acid Supplements (Eicosapentaenoic Acid and Docosahexaenoic Acid) in the Secondary Prevention of Cardiovascular Disease

“To date [as of 2012], there is no conclusive evidence to recommend fish oil supplementation for primary or secondary prevention of CVD.”

Harvard Medical School investigators Frank B. Hu, MD and JoAnn E. Manson, MD, DrPH

Follow Harvard Medical School’s Recommendation – It’s time to discard fish oil and adopt a rational approach to EFA supplementation.
2009: Fish oil does not decrease inflammation.ª

In a 12-week, randomized, double-blind trial administered to healthy, middle-aged individuals, each received 3.5 grams per day of either fish oil or a placebo. The effect of fish oil was measured by monitoring 19 serum inflammatory markers—substances which increase in blood plasma when inflammation is present.

The result was that the participants did not benefit from fish oil as an anti-inflammatory agent. In fact, fish oil supplementation was followed by a slight increase in all serum inflammatory markers.

2011: Fish Oil Blunts Chemotherapy’s Effectiveness

Researchers at the University Medical Centre Utrecht in the Netherlands issued a major new warning in September 2011 of Cancer Cell to stop taking fish oil because it can make chemotherapy drugs ineffective.

Cisplatin, a platinum-containing chemotherapy drug is the cornerstone of many treatments and is used for sarcomas and carcinomas (small cell lung and ovarian).

“In experiments conducted in mice, the tumors became insensitive to chemotherapy after administration of normal amounts of fish oil. Natural products that include fish oil are frequently used by cancer patients in addition to their regular treatment. Don't use these products.”
Why the Continued Fish Oil Failures?

- There never were significant metabolic pathways that would allow such inflated claims.
- Fish oil was “reverse engineered” to deal with and sell lots of waste products, including spoiled fish, to the “nutritional” supplement market.

**Capsule Calculation:**

1. A fish portion is 4 oz – 113g
2. 1 g of crude fish oil is equal to eating about one-sixth portion (6% oil content).
3. 1 g of crude fish oil yields about 250 mg of health-grade fish oil. Consuming 1 g of health-grade fish oil is equal to eating about 70% portion (4:1 factor) – 1/6 \( \times 4 = 2/3 \) rd portion.
4. 100 g of “health-grade” fish oil yields 1 g of “pharmaceutical grade” fish oil (“super pure” omega 3, EPA, DHA, etc.) then one would need to consume about 71 fish portions = 17 POUNDS of unprocessed FISH per capsule!

 Believe it or not, it takes a WHOPPING 17 Pounds of FISH to fill just 1 PROCESSED Pharma-grade Fish Oil Capsule.
Fish oil is exclusively omega-3 derivatives with enormous supra-physiologic overdose factors of plasma EPA and DHA. Therefore, prophylactic use has no basis in human physiology whatsoever.
I hope I have made a compelling case for incorporation of the Peskin Protocol into your practice.

Thank you