



News Release

May 29, 2013

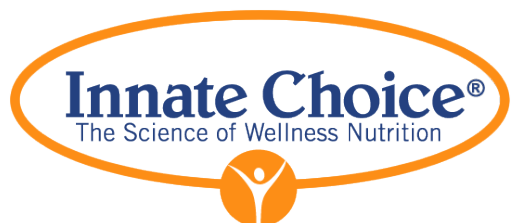


Exposing the Pseudoscience, False Claims, and Misrepresentations of the Fish Oil Detractors

The main proponent of the anti-fish oil movement appears to be "professor" Peskin. Most of Peskin's absurd and unsubstantiated claims about the ineffectiveness and dangers of fish oil can be found summed up in his poorly written essay "FISH OIL STINKS: Omega-3 Derivative Oils from Fish Extract Finally Put in their 'Proper' Place".

The fact of the matter is that Peskin's claims STINK. Peskin's claims are either catastrophically ignorant or deliberately misleading and either way they are most certainly dangerous. He should be ashamed of himself and his statements and claims (about both his credentials and fish oil) because neither are defensible. Unfortunately he is building an audience because he uses good marketing techniques by incorporating bold headlines making outrageous claims about his own scientific prowess and "scientific" findings about fish oil that evoke emotional responses. He is sly enough to know that most make decisions based on emotions. He is also sly enough to pretend to be scientific and pretend to be a professor. He even cites a few articles that he knows most won't bother to read and, as you will see below, he almost certainly has either not read or clearly not understood.

Well I read them and I did understand them. Below is his list of cited references for his paper entitled "FISH OIL STINKS: Omega-3 Derivative Oils from Fish Extract Finally Put in their "Proper" Place".



News Release

May 29, 2013

Peskin's Entire Reference List from FISH OIL STINKS: Omega-3 Derivative Oils from Fish Extract Finally Put in their "Proper" Place".

1. March 30, 2009, Bloomberg News, Orlando, Florida Cardiology Convention.
2. Heartwire 2009, © 2009 Medscape, January 28, 2009 (Dallas, Texas), based on Journal of the American Heart Association, Ref.: AHA Science Advisory, Harris WS, Mozaffarian D, et al., "Omega-6 Fatty Acids and Risk for Cardiovascular Disease: A Science Advisory From the American Heart Association Nutrition Subcommittee of the Council on Nutrition, Physical Activity, and Metabolism; Council on Cardiovascular Nursing; and Council on Epidemiology and Prevention"; Circulation, February 17, 2009; 119(6): 902 - 907; and American Academy of Anti-Aging Medicine referenced February 2, 2009 at worldhealth.net/news/concern_about_omega-6_fatty_acids_lead.in.
3. Hannia Campos, PhD; Ana Baylin, MD, Dsc; Walter C. Willett, MD, DrPh, Circulation, 2008; 118:339-345.
4. American Journal of Clinical Nutrition, Vol. 88, No. 3, 801-809, September 2008 and Hussein, Nahed, et al., "Long-chain conversion of linoleic acid and alpha-linolenic acid in response to marked changes in their dietary intake in men," Journal of Lipid Research, Volume 46, 2005, pages 269-280.
5. 2008 meeting of the Society for Nuclear Medicine—Advancing Molecular Imaging and Therapy (reported New York (Reuters Health) June 23, 2008).

I actually went through all his stuff years ago when somebody asked me about it but it was so ridiculous that I just stopped wasting my time. It is only now that he seems to be gathering more momentum and a few zealot followers that I decided it was time to expose the fraudulent, pseudoscientific claims and the quacks making them. If people believe this and avoid sufficient intake of long chain omega-3 fatty acids they will suffer ill-health as a result. I decided the threat was becoming real and that it was my moral obligation to take the time to write the truth.



News Release

May 29, 2013

Now, let's go through his list of references for his bold statements and his outrageous conclusions, claims, and sales pitches.

1. March 30, 2009, Bloomberg News, Orlando, Florida Cardiology Convention.

Well nice start. This is not even a reference. No author, no title of presentation or paper, no traceable information at all. When I tried looking for it the only references to this that came up were from Peskin himself. I cannot even comment on this citation because it is impossible to find it. How scientific!

2. Harris et al. (2009) Omega-6 Fatty Acids and Risk for Cardiovascular Disease. Circulation. 119: 902-907

First of all nobody who is evidence-based has EVER claimed that humans don't require omega-6 fatty acids or that they are not essential fatty acids. Innate Choice has ALWAYS quoted the science accurately and stated that a 1:1 ratio of omega-6:omega-3 fatty acids is required. Unfortunately, as reported in the peer-reviewed literature, the dietary intake ratio for most people living in industrialized countries is more like 10-20:1 of omega-6 to omega-3.

Some have mistakenly interpreted this to mean that omega-6 fatty acids are harmful and inflammatory. This is not true. However, too much omega 6 compared to omega 3 is pro-inflammatory and also unhealthy for many other reasons.

I have often pointed to hunter-gatherers such as Australian Aborigines to point out that they consume a copious amount of meat which contains large amounts of omega-6 fatty acids yet have no chronic inflammation or heart disease. Why? Because the meat they consume also contains so much long chain omega 3 fatty acids (EPA and DHA). The red meat consumed by Industrial humans is from animals fed corn and soy and wheat and thus contains no omega 3 fatty acids and this is why it is so pro inflammatory and unhealthy (in addition to the antibiotics and hormones).

The truth is that both long chain omega-6 and long chain omega-3 fatty acids are essential and they are both required in EQUAL amounts.



News Release

May 29, 2013

In the study cited above the authors argue the importance of LA (parent omega 6 fatty acid) not because this is the most important omega 6 fatty acid or because the longer chain omega 6 fatty acids are not essential but "Because LA accounts for 85% to 95% of the dietary omega-6 PUFA, this advisory focuses primarily on this fatty acid" and then point out that "LA comes primarily from vegetable oils (eg, corn, sunflower, safflower, soy).

Before I go any further let me just ask you a question. If, as Peskin so absurdly claims, humans do not require the longer chain ESSENTIAL omega 6 (arachidonic acid) and omega 3 (EPA and DHA) fatty acids but only the "parent" omega 6 fatty acids (LA from vegetable oils) and omega 3 fatty acids (LNA from flax oil) how would any of our ancestors have consumed sufficient amounts? Before agriculture and the development of the equipment necessary to grow, harvest, and manufacture vegetable and seed oils how would any human have been able to consume sufficient amounts of these parent fatty acids from vegetable oils? How is it possible that the Aborigines in Australia and the Inuit in Greenland and all the other inflammation-free, heart disease-free Hunter-Gatherer peoples that have been studied and that we know consumed NONE of these "parent" fatty acids from vegetable oils and seed oils were so healthy? The answer, IF you are a scientist and actually read the literature, is obvious. They consumed the longer chain ESSENTIAL omega 6 and omega 3 fatty acids.

So the mistake is not assuming we require the long chain ESSENTIAL omega 3 fatty acids in fish oil (EPA and DHA), the mistake is in assuming we need just these or that we should avoid omega 6 fatty acids. Again, the science and the truth are clear; we need BOTH and we need them in EQUAL amounts.

Curiously this study which Peskin cites in his sermon-like "Fish Oil Stinks: Omega-3 Derivative Oils from Fish Extract Finally Put in their "Proper" Place" essay, does anything but support his absurd, unscientific, dogmatic and dangerous claims.

The study clearly states that the conversion of LA from vegetable oils (a source of "parent" fatty acids not available to the human species for the vast majority of our existence, to AA is only 0.2%. This by the way is also true of the conversion of the short chain "parent" omega 3 fatty acids. LNA is converted to EPA and DHA at about the same percentage. This is because humans never genetically developed the ability to get our ESSENTIAL long chain fatty acids by converting



News Release

May 29, 2013

vegetable oils (which I remind you again, never existed as a food source for most of the history of our species). Humans always obtained their long chain fatty acids by consuming them directly in the flesh of animals that were genetically capable of converting them. Humans neither developed nor require sufficient enzymatic pathways to convert the short chain omega 3 and omega 6 fatty acids to long chain fatty acids; we didn't need to, we always had dietary sources of these long chain fatty acids AND, to be clear, we did NOT have dietary sources of the shorter chain or "parent" omega 3 and omega 6 fatty acids.

Further, and most importantly, this study not only does not suggest reducing the intake of omega-3 fatty acids or contain a single mention of the negative effects of omega 3 fatty acid consumption, it actually confirms their benefit. "Although increasing omega-3 PUFA tissue levels does reduce the risk for CHD, it does not follow that decreasing omega-6 levels will do the same." I couldn't agree more. Again, we need them BOTH and we need them in EQUAL amounts.

I remain curious how Peskin could use this article as evidence for any of his bizarre claims regarding the harm or lack of necessity of long chain omega 3 fatty acid consumption from fish oil? Perhaps he was counting on the fact that most people would not read the article or be able to understand it. What is obvious is that he either did not read it or did not understand it.

3. Campos, H. et al. (2008) α -Linolenic acid and risk of nonfatal acute myocardial infarction. *Circulation*. 118 (4): 339-345

Let's look at one of the other studies Peskin cites in his sermon regarding the dangers and uselessness of long chain fatty acids from fish oil. Here is a direct quote from the study. "Numerous clinical and epidemiological studies show that greater intake of long-chain n-3 fatty acids from fish, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), reduce all-cause mortality, cardiac and sudden death, and stroke." Not exactly in line with Peskin's absurd claims!

What this study actually looks at is the effect of substituting soybean oil for palm oil in a population in Costa Rica. "Since the early 1980's, Costa Rica has experienced a decrease in the intake of palm oil and an increase in the intake of soybean oil." Well since we know that palm oil increases the risk of heart disease it should come as no surprise that reducing its intake would lower risk of heart disease. The fact that palm oil was replaced with soybean oil and that this



News Release

May 29, 2013

was associated with a reduced risk of heart disease is not proof of the benefit of soybean oil, it is more evidence of the harmful effects of palm oil and the benefit of reducing its intake!

By the way, in this study the more EPA and DHA that was consumed, the greater reduction of risk of myocardial infarction (the variable they were measuring). In other words, even though the availability of fish was very minimal in this population, those who could get it, even in small amounts, derived benefit! What is Peskin talking about?! Did he read this study? Does he understand research methodology or how to read results of statistical analysis? Is he deficient in EPA and DHA?!

Basically the whole premise of this paper is that fish oil is best but that it is not available to much of the developing world so we should start looking to see if vegetable sources, which are available, might at least offer some of the benefits of fish oil. "CHD (cardiovascular heart disease) is generally high in countries where the estimated intake of EPA and DHA is extremely low (long chain n-3 fatty acid intake < 0.07% energy). Because of price, availability, or cultural preference, many of these countries have little or no possibility of increasing fish intake." "Because of the large number of people living in these countries, the potentially protective effects of alpha-linolenic acid from vegetable oils need to be studied more extensively."

In other words if you can't get long chain EPA and DHA omega 3 fatty acids from fish oil then taking short chain "parent" omega 3 fatty acids from vegetable oil is better than nothing. A far cry from claiming that fish oil is harmful or that EPA and DHA are not essential fatty acids or not the best option if you can get them. There is not a shred of evidence in this paper indicating a risk from consuming fish oil nor is there a shred of evidence or even a statement suggesting that EPA and DHA consumption from fish oil is not beneficial. Why would Peskin cite this paper as evidence for his absurd claims when this paper refutes his absurd claims and his absurd conclusions regarding fish oil.



4. Harris, W.S. (2008) n-3 Fatty acids and health: Davinci's code. American Journal of Clinical Nutrition, Volume 88, No. 3 801-809.

One can't help but wonder again why Peskin would include a reference that refutes the very claims he makes in the paper in which he cites it? This paper contains a review of three studies showing benefit of dietary intake of long chain omega-3 fatty acids and a glowing endorsement for the importance of long chain omega-3 fatty acids from fish and not a single statement about its harm or the benefits of "parent" omega-3 fatty acids from vegetable oil!

"Together, these findings suggest that dietary habits that include higher versus lower intakes of **long-chain** n-3 fatty acids may bring certain health benefits that short term supplementation cannot provide."

"The 3 studies conducted in the elderly subjects discussed above underscore the potential importance of maintaining high dietary n-3 intakes throughout life."

"Although no specific mechanism of action was identified, a generalized health benefit arising from a prolonged dietary intake of oily fish (the presumed source of the plasma EPA) would surprise no one familiar with the n-3 fatty acid literature."

Clearly Peskin is not one of those familiar with the n-3 literature and quite obviously did not even read this article which debunks all the claims he makes in the very paper in which he cites it! The term buffoon keeps coming to mind.

4b. Hussein, N. et al. (2005) Long-chain conversion of C-linolenic acid and alpha-linolenic acid in response to marked changes in their dietary intake in men. J. Lipid Res. 46: 269-280

This study is looking at the conversion of short chain "parent" omega-3 fatty acids into long chain fatty acids (EPA and DHA) precisely because of the biological and clinical importance of the long chain omega-3 fatty acids EPA and DHA! "The present study was designed to examine the long-chain conversion of both ALA and LA in subjects for whom long-chain conversion of ALA may be of particular importance: middle-aged men with an atherogenic lipoprotein phenotype." In other words they are, like the study by Campos et al. done on Costa Ricans without access to



News Release

May 29, 2013

dietary long chain fatty acids, looking at whether or not it is possible to get the proven benefit of the long chain essential fatty acids (EPA and DHA) by converting vegetable sources. "The influence of these dietary changes on cardiovascular risk factors **known to be responsive to fish oil supplements has been described elsewhere.**" The entire premise of this study is based on recognition of the importance of the essential long-chain EPA and DHA omega-3 fatty acids! It is the furthest thing from supporting Peskin's unscientific claims as could exist!

Further this study once again showed that humans cannot convert the short chain omega-3 fatty acid (parent fatty acid) LNA from flax oil into sufficient amounts of the essential long-chain EPA and DHA omega-3 fatty acids. "Our finding of substantial (but NOT statistically significant) changes in EPA but no change in DHA in membrane phospholipids is consistent with most but not all previous reports of ALA supplementation in adults." "EPA formation was on average increased with the FXO (flax seed oil) diet, although not significantly so, because of the wide variation between the FXO subjects." One more reason to supplement with long-chain essential fatty acids from fish oil!

Most importantly this study contains not a single statement or single shred of evidence to support the idea that fish oil is dangerous or not beneficial. There is nothing in this study that supports any of the claims Peskin makes in the paper in which he cites this study. Again I was left pondering one of two possibilities. Either Peskin did not read this study or he is simply intellectually incapable of understanding it. Sadly he makes bold claims about both his scientific ability and his knowledge of the literature. Upon investigation I must conclude both these claims false.

5. 2008 meeting of the Society for Nuclear Medicine – Advancing Molecular Imaging and Therapy (reported New York (Reuters Health) June 23, 2008).

Well I could not find this reference anywhere and truthfully it is not a proper citing of a reference at all. We get no author's name, no title of the article or blog or whatever this was, and no reference to any scientific study or journal where this might be drawing from. To the good fortune of Peskin and I suspect due to more of his deliberate smoke and mirrors, I could not vet this bogus citation.



News Release

May 29, 2013

For some ACTUAL SCIENCE and some VALID INFORMATION, I invite you to go to the resource section at www.innatechoice.com and review the information there. Thank you for your time and I apologize for having to waste it on such nonsense. The truth can save lives and prevent vulnerable people from being taken advantage of. It is our ethical duty to educate our patients and the public with accurate information.

Yours in evidence-based supplementation and healthcare,
Dr. James L. Chestnut B.Ed., M.Sc., D.C., C.C.W.P.