

Perpetuating Nutritional Ignorance among Doctors and Recycling Bad Science: Another Nail in the Coffin for JAMA's and AMA's Dying Credibility



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- ▶ Major books include *Inflammation Mastery 4th Edition* (and any later versions) printed also in separate and progressive volumes as *Textbook of Clinical Nutrition and Functional Medicine* (2016), with excerpts published as *Brain Inflammation* (2016), *Human Microbiome and Dysbiosis in Clinical Disease* (2015); anticipated new books include *Deciphering the Gut-Brain Axis in Clinical Practice* (2018) from which *Autism, Dysbiosis, and the Gut-Brain Axis* (2017) has been prereleased.
- ▶ Peer-reviewed/independent publications include: *The Lancet.com*, *British Medical Journal (BMJ)*, *Annals of Pharmacotherapy*, *Nutritional Perspectives*, *Journal of Manipulative and Physiological Therapeutics (JMPT)*, *Journal of the American Medical Association (JAMA)*, *Original Internist*, *Integrative Medicine*, *Holistic Primary Care*, *Alternative Therapies in Health and Medicine*, *Journal of the American Osteopathic Association (JAOA)*, *Dynamic Chiropractic*, *Journal of Clinical Endocrinology and Metabolism*, *Current Asthma and Allergy Reports*, *Complementary Therapies in Clinical Practice*, *Nature Reviews Rheumatology*, *Annals of the New York Academy of Sciences*, and *Arthritis & Rheumatism*, the Official Journal of the American College of Rheumatology.

The video of this presentation is archived at ichnfm.org/18, and the transcript in PDF format—which is considered the final and citable version—is archived at academia.edu/36470484; any corrections or updates will be made to the PDF file. The video contains citations which are not replicated in the PDF document; both the video and the PDF transcript should be reviewed for a complete representation of the information. This version was updated on **April 24, 2018**.

Introduction: “Hello everyone, Dr. Alex Vasquez here with a quick video on this JAMA commentary, which was recently published on April 18th, 2018 as “Another Nail in the Coffin for Fish Oil Supplements.”¹

JAMA has been publishing a blitzkrieg of anti-nutrition articles over the past two years, and of course America's corporate media is recycling this misinformation for millions of nutrition-ignorant people, including doctors who, of course, do not receive any training whatsoever on clinical nutrition during their medical school and residency training (see attached excerpt from [Inflammation Mastery](#) for citations).

So, the first question that popped into my mind when I read this article, again, which was published on April 18th, 2018, is “Why are they continuing to talk about a previously published study in January of 2018, in *JAMA Cardiology*?”, which I have already reviewed in video format.

So here we are, ten weeks—a full two-and-a-half months—later, and JAMA is still talking about a publication in one of their other journals. So, the previous publication² which they are referencing was published in January 2018 in *JAMA Cardiology*, which is supposedly one of their specialty journals. And, as I commented in that video review, JAMA is notorious for publishing pro-drug and anti-nutrition articles. These big medical journals and organizations, of course, make multi-million dollar profits from their pro-drug stance, and of course, they have a massive inherent conflict of interest, contrary many times to the science.³

¹ Jennifer Abbasi. JAMA. Published online April 18, 2018. doi:10.1001/jama.2018.2498

² Theingi Aung et al. *JAMA Cardiol.* 2018;3(3):225-234. doi:10.1001/jamacardio.2017.5205

³ Any number of citations could be used here, including Marcia Angell MD's *The Truth About the Drug Companies: How They Deceive Us and What to Do About It* and also Richard Smith's “Medical Journals Are an Extension of the Marketing Arm of Pharmaceutical Companies” <https://doi.org/10.1371/journal.pmed.0020138>

In this case, one of the concerns that I have is that this represents a form of dual-publication. And what that means in this context is, in *JAMA Cardiology* they published what is, in my opinion, a bad meta-analysis and now they are recycling or reprinting that same information over and over again.

So, medical journals, for example, are supposed to follow certain ethical guidelines, and these include avoiding unethical publications, redundant publications, and unreliable research, and plagiarism.⁴ So, when *JAMA Cardiology* published this very poorly-conducted meta-analysis, which I'll briefly review with you in just a moment, that could be considered unethical because the data was so unreliable in the way that it was reviewed, that unreliable data at some point becomes unethical when it's so blatantly incompetent as that meta-analysis was.

Now, as I've already mentioned with this publication, *ten weeks after the original publication*, one could state that this is a form of redundant publication because *JAMA* is rehashing and getting more traction and more popularity by rehashing a previous publication. So, the way a publication *should* work is that the data gets published—let's assume it's good data—the data gets published and it has its *flash in the pan* or its *moment in the sun* or *the spotlight*, so to speak, and then we move on to the next story. In this case, they're recycling the same story, which is based on a bad meta-analysis, and **they're trying to get more traction of out it and trying to convince doctors that fish oil is of no clinical value based on a poorly-conducted meta-analysis**. So they're kind of recycling that same information—in this case, bad information; that could be seen as a form of redundant publication. So, yes these are two separate publications, but they're recycling the same theme now so many times that one could consider that to be a form of redundant publication, which is considered an ethical breach among scientific journals.

And, as if that weren't bad enough, what they've stated here in this brief review is that **they are going to produce more studies using the same flawed methodology**. And, of course, they're going to conclude, from that data, that fish oil has no clinical value. **What really has no value is bad research, such as what they are publishing, and then bad commentary and editorial, such as this article right here, written by a non-physician, which keeps recycling misinformation**. So, bad enough was publishing a poorly-conducted meta-analysis. Equally bad, if not worse, is getting more traction and more publicity from a poorly-conducted meta-analysis which is what they're doing with this article here, *ten weeks after the original publication*.

So, as I already mentioned, I did review the article published in *JAMA Cardiology*. The title of that article, as you can see here, is "Associations of Omega-3 Fatty Acid Supplement Use with Cardiovascular Disease Risks." Supposedly, this was a meta-analysis of 10 trials involving approximately 78,000 individuals.

So, [I did review this previously in video format. I encourage you to take a look at this](#). I reviewed some of my own experience publishing with *JAMA*, and also reviewed, in detail, the information covered within their meta-analysis. And, specifically, I did a "scholarly scrub" of the article, looking for errors, and of course it was loaded with errors. Error number one, that I pointed out here, is that they unjustifiably excluded very important data.

Number two, as you can see here, they included several studies that employed non-therapeutic dosing, and I detail that here, looking at each and every of the studies that they concluded. Seven out of ten used non-therapeutic dosing and therefore, basically had no chance at showing the efficacy of this intervention. Another very important point, that they completely ignored in this meta-analysis, published by University of Oxford no less, they completely ignored what's called the omega-3 Index. Now, the omega-3 index is the percentage in red blood cells of the omega-3 fatty acids of interest here, which are EPA, eicosapentaenoic acid, and DHA, docosahexaenoic acid. What they complete

Imagine a publication dedicated not to informing but to maintaining selective ignorance

The Omega-3 Index has been reviewed and validated since at least **2007**; why was it ignored for a headlining article in *JAMA Cardiology* in **2018**?

"The omega-3 index has been validated as a surrogate for myocardial omega-3 FA composition in the human and as such reflects the omega-3 status of the most critical organ. It can be used to both assess baseline omega-3 status and to check for compliance with recommendations to increase omega-3 intake. Altering the omega-3 index is simple, safe and inexpensive and has been shown in randomized trials to reduce risk for CHD death. The widespread clinical implementation of the omega-3 index will allow clinicians to detect omega-3 "insufficiency", to better stratify patients with respect to risk for SCD, and could ultimately contribute to a reduced burden of CHD."

Harris WS. Omega-3 fatty acids and cardiovascular disease: a case for omega-3 index as a new risk factor. *Pharmacol Res* **2007** Mar

⁴ Committee on Publication Ethics. <https://publicationethics.org/files/retraction%20guidelines.pdf> Accessed 2018 Apr

ignored in this meta-analysis is any mention whatsoever of the omega-3 index, which has been well-established to be the standard for evaluating the efficacy of fatty acid supplementation. So, as I mentioned before, what we want to see, a good, optimal omega-3 index, is approximately 10%, and that requires 1800mg a day of EPA and DHA. Of the studies that were included in this meta-analysis, only three out of ten used a therapeutic dose of 1800mg per day, and you can see that in the information I provided from one of the tables from that article. And the question that I asked during the other review, which I encourage you to take a look at, is *how on Earth can a meta-analysis on omega-3 fatty acids and cardiovascular disease, get published in a specialty cardiology journal in 2018 without any mention whatsoever of the omega-3 index?* And I consider this to have been the intentional creation and propagation of nutritional ignorance.

Furthermore, as you can see here, error number three is that they used unnatural forms of fatty acids. Error number four in this meta-analysis is that their conclusions are at odds with the data. If you actually look at the data presented in their article, they actually show benefit favoring treatment with omega-3 fatty acids of most of the studies. And you can see that here, in figure one. You can see it here, in figure three. It was also shown in figure two. Most of the studies showed benefit, but the news that made the headlines (see video for examples) was that fatty acids were inefficacious when in fact the data actually showed that the fatty acid supplementation was efficacious. Here, we're looking at figure number four; again, we see favoring of treatment in each of the studies, yet the headlines read that fatty acid supplementation was of no value, and that is contrary to the majority of studies published. It's also contrary to the data that they published within their own meta-analysis.

Associations of Omega-3 Fatty Acid Supplement Use With Cardiovascular Disease Risks
Meta-analysis of 10 Trials Involving 77 917 Individuals

Theingi Aung, MBBS, FRCP^{1,2,3}; Jim Halsey, BSc^{1,2}; Daan Kromhout, PhD⁴; et al

► Author Affiliations | Article Information

JAMA Cardiol. Published online January 31, 2018. doi:10.1001/jamacardio.2017.5205

Key Points

Question Does su
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► **Problems with this publication:**

- 1. Unjustified selective exclusion of data**
- 2. Inclusion of studies that employed sub-/non-therapeutic dosing**
- 3. 9 of the 10 studies used in this meta-analysis used synthetic “ester” form of n3 fatty acids; this is in contrast to the natural easier-to-digest triglyceride form**
- 4. Stated conclusion at odds with data**
- 5. Pro-pharma conflicts of interest among the authors and the publishing organization**

So, you can ask yourself why that would be, and my answer, at least in part, is that nearly all medical schools and medical organizations are rabidly pro-Pharma and pro-Chem, and they lovingly accept money from drug and chemical companies, and they promote faculty that are pro-drug and anti-nutrition. Several of the authors of this study were also paid directly by drug companies.

So, when I look at that article, these are the critiques that I have. Problems with this publication include: unjustified selective exclusion of data, inclusion of studies that employed sub- or non-therapeutic dosing. This article took under-dosing to the extreme and completely ignored a foundationally important advance in cardiology and science. And that is, again, the omega-3 index. Nine of the ten studies used in this meta-analysis used synthetic "ester" form of n3 fatty acids; this is in contrast to the natural easier-to-digest-and-adsorb triglyceride form. The states conclusions are at odds with the data. And the pro-Pharma conflicts of interest, among the authors and the publishing organization, are also worthy of note.

So, when we look at this article, "Another Nail in the Coffin for Fish Oil Supplements", I think that this is basically fake news. I think that **it is a disgrace and a disservice to nutritional science and medical science in general, because we, as medical physicians, for example, need to know what is efficacious and non-efficacious, but publishing bad data and then repeating the headlines of that bad data again and again certainly doesn't serve anyone who wants to actually understand the science and treat their patients safely and with high levels of efficacy.**

And as I mentioned previously, this is not the first and only time that *JAMA* has done that. Also, this year, we see a publication here, "Vitamins and Mineral Supplements: What Clinicians Need to Know." This was published March 6th of 2018. And this is another example of a disservice to health care providers. First of all, does any sane and sober adult really think that *JAMA* is capable of reviewing "what clinicians need to know about vitamin and mineral supplements" in 2 pages? I mean, does anybody really think that *JAMA* is going to be able to do that? So why would they even pretend to be able to review what's important to nutrition in *two* pages?

Basically, what they're trying to do here, is keep medical doctors who don't have any training in nutrition, confused about nutrition. And so, **when doctors really want to understand nutrition, obviously, they have to look beyond their training** and for that purpose I would recommend Alan Gaby's book *Nutritional Medicine*. I would also recommend my book, *Inflammation Mastery*, currently in the 4th edition.

Both of these books are more than a thousand pages, with several thousand citations. So in terms of what doctors really need to know about nutrition, I would recommend Alan Gaby's *Nutritional Medicine*, and again, my book, *Inflammation Mastery, 4th Edition*. This article, "Vitamin and Mineral Supplements: What Clinicians Need to Know", I think, is fake news and I think it's a disservice to any clinician who would read it.

So that is my very quick summary of these two articles, and I encourage you to **not** rely on *Journal of the American Medical Association* for your nutritional news. ☒

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About the author: Dr Vasquez holds three doctoral degrees and has completed hundreds of hours of post-graduate and continuing education in subjects including Obstetrics, Pediatrics, Basic and Advanced Disaster Life Support, Nutrition and Functional Medicine; while in the final year of medical school, Dr Vasquez completed a Pre-Doctoral Research Fellowship in Complementary and Alternative Medicine Research hosted by the US National Institutes of Health (NIH). Dr Vasquez is the author of many textbooks, including the 1200-page *Inflammation Mastery, 4th Edition*. (2016) also published (by popular student request) as a two-volume set titled *Textbook of Clinical Nutrition*

Does any sane and sober adult really think that JAMA is capable of reviewing "what clinicians need to know" about vitamin and mineral supplements in 2 pages?

For any doctor who really wants to understand clinical nutrition:

- ▶ Alan Gaby's *Nutritional Medicine*
- ▶ Alex Vasquez's *Inflammation Mastery 4th Edition*

Each/both of these books are more than 1,000 pages with several thousand citations

[and Functional Medicine](#). "DrV" has also written approximately 100 letters and articles for professional magazines and medical journals such as *TheLancet.com*, *British Medical Journal (BMJ)*, *Annals of Pharmacotherapy*, *Nutritional Perspectives*, *Journal of Manipulative and Physiological Therapeutics (JMPT)*, *Journal of the American Medical Association (JAMA)*, *Original Internist*, *Integrative Medicine*, *Holistic Primary Care*, *Alternative Therapies in Health and Medicine*, *Journal of the American Osteopathic Association (JAOA)*, *Dynamic Chiropractic*, *Journal of Clinical Endocrinology and Metabolism*, *Current Asthma and Allergy Reports*, *Complementary Therapies in Clinical Practice*, *Nature Reviews Rheumatology*, *Annals of the New York Academy of Sciences*, and *Arthritis & Rheumatism*, the Official Journal of the American College of Rheumatology. Dr Vasquez lectures internationally to healthcare professionals and has a consulting practice and service for doctors and patients. Having served on the Review Boards for *Journal of Pain Research*, *Autoimmune Diseases*, *PLOS One*, *Alternative Therapies in Health and Medicine*, *Neuropeptides*, *International Journal of Clinical Medicine*, *Journal of Inflammation Research* (all PubMed/Medline indexed), *Integrated Blood Pressure Control*, *Journal of Biological Physics and Chemistry*, and *Journal of Naturopathic Medicine* and as the founding Editor of *Naturopathy Digest*, Dr Vasquez is currently the Editor of *International Journal of Human Nutrition and Functional Medicine* and the Director for International Conference on Human Nutrition and Functional Medicine. Dr Vasquez has also served as a consultant researcher and lecturer for Biotics Research Corporation.

Contextualizing resource—same information in different formats and contexts:

- *Inflammation Mastery, 4th Edition* <https://www.amazon.com/dp/B01KMZZLAQ/> and
- *Textbook of Clinical Nutrition and Functional Medicine, vol. 1: Essential Knowledge for Safe Action and Effective Treatment* <https://www.amazon.com/dp/B01JDIOHR6/>

INFLAMMATION MASTERY
4TH EDITION
 CLINICAL NUTRITION, FUNCTIONAL MEDICINE, MITOCHONDRIAL DYSFUNCTION, MICROBIOME & DYSBIOSIS, FUNCTIONAL INFLAMMOLOGY, PAIN MANAGEMENT, INTEGRATIVE RHEUMATOLOGY, NUTRITIONAL IMMUNOMODULATION, IMMUNONUTRITION & ANTIVIRAL STRATEGIES
 The Colorful and Definitive Guide Toward Health and Vitality and away from the Boredom, Risks, Costs, and Inefficacy of Endless Analgesia, Immunosuppression, and Polypharmacy
 3-Part Learning System of Text, Illustrations, and Video

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Introductory videos:

- Video introduction to books: <http://www.ichnfm.org/im4>
- Current video: <http://www.ichnfm.org/18>
- Conference presentation—introducing the clinical protocol: <http://www.ichnfm.org/video-funct-inflam-1>

Persistent inadequacies in nutrition education/training among physicians

Introduction: Despite the acknowledged importance of diet in the prevention of obesity, diabetes, hypertension and other components of cardiometabolic syndrome/disease, physicians are consistently and systematically untrained in nutrition. A few exemplary citations are summarized per the following:

- **What do resident physicians know about nutrition?** (*J Am Coll Nutr* 2008 Apr²⁹): "OBJECTIVE: Despite the increased emphasis on obesity and diet-related diseases, nutrition education remains lacking in many internal medicine training programs. We evaluated the attitudes, self-perceived proficiency, and knowledge related to clinical nutrition among a cohort of internal medicine interns. METHODS: Nutrition attitudes and self-perceived proficiency were measured using previously validated questionnaires. Knowledge was assessed with a multiple-choice quiz. ... RESULTS: Of the 114 participants, 61 (54%) completed the survey. Although 77% agreed that nutrition assessment should be included in routine primary care visits, and 94% agreed that it was their obligation to discuss nutrition with patients, only 14% felt physicians were adequately trained to provide nutrition counseling. ... CONCLUSIONS: Internal medicine interns' perceive nutrition counseling as a priority, but lack the confidence and knowledge to effectively provide adequate nutrition education." These are impressive results showing that internal medicine doctors—specialists who commonly deal with diabetes, hypertension, obesity, and metabolic syndrome—do not have competence in nutrition, even by weak and basic standards.
- **Relevance of clinical nutrition education and role models to the practice of medicine** (*Eur J Clin Nutr.* 1999 May³⁰): "Yet, despite the prevalence of nutritional disorders in clinical medicine and increasing scientific evidence on the significance of dietary modification to disease prevention, present day practitioners of medicine are typically untrained in the relationship of diet to health and disease."
- **How much do gastroenterology fellows know about nutrition?** (*J Clin Gastroenterol.* 2009 Jul³¹): "The mean total test score was 50.04%. ...CONCLUSIONS: Gastroenterology fellows think their knowledge of nutrition is suboptimal; objective evaluation of nutrition knowledge in this cohort confirmed this belief. A formal component of nutrition education could be developed in the context of GI fellowship education and continuing medical education as necessary."

In sum: The data consistently demonstrate that healthcare providers at the doctorate level are untrained in nutrition when assessed by rather simple standards; their knowledge of functional nutrition at the level of clinical intervention in the treatment of serious disease would reasonably be expected to be approximately zero. Thus, given that doctors are trained neither in musculoskeletal management (despite the fact that all patients have musculoskeletal systems and that related disorders represent no less than 20% of general practice) nor nutrition (despite the fact that all patients eat food and that such dietary habits (and/or the use of nutritional interventions) impact nearly all known diseases in the known universe), one might wonder as to the cause and perpetuation of this *systematically imposed ignorance* on such topics of major importance. Consistent faults in medical education are not accidental.

Dumbing Us Down: The Hidden Curriculum of Educational Systems

"Look again at the seven lessons of school teaching: confusion, class position, indifference, emotional and intellectual dependency, conditional self-esteem, and surveillance. All of these lessons are prime training for permanent underclasses, people deprived forever of finding the center of their own special genius."

Such a curriculum produces physical, moral, and intellectual paralysis, and no curriculum of content will be sufficient to reverse its hideous effects. ... Schools teach exactly what they are intended to teach and they do it well."

Gatto JT. *Dumbing Us Down: The Hidden Curriculum of Compulsory Schooling*, p. 16

Adverse effects of nonsteroidal anti-inflammatory drugs (NSAIDs), COX-2 inhibitors (coxibs)

Introduction: Nonsteroidal anti-inflammatory drugs (NSAIDs) have many common and serious adverse effects, including the promotion of joint destruction. Paradoxically, these drugs *cause* or *exacerbate* the very symptoms and disease they are supposed to treat: joint pain and destruction. In a tragic exemplification of Orwellian newspeak³²,

²⁹ Vetter et al. What do resident physicians know about nutrition? An evaluation of attitudes, self-perceived proficiency and knowledge. *J Am Coll Nutr.* 2008 Apr;27(2):287-98

³⁰ Halsted CH. The relevance of clinical nutrition education and role models to the practice of medicine. *Eur J Clin Nutr.* 1999 May;53 Suppl 2:S29-34

³¹ Raman M, Violato C, Coderre S. How much do gastroenterology fellows know about nutrition? *J Clin Gastroenterol.* 2009 Jul;43(6):559-64

³² Orwell G. 1984. Harcourt Brace Jovanovich: 1949. "Newspeak" is defined by the Merriam-Webster Dictionary (m-w.com) as "propagandistic language marked by euphemism, circumlocution, and the inversion of customary meanings" and as "a language designed to diminish the range of thought," in the novel 1984 (1949) by George Orwell.

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