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Supplements for Coronavirus Probably Won't Help, and May Harm - The New York

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March 23, 2020

Correction • Post-Publication Review • Editing • Public Health • Media • Medical Misinformation

Correcting the Misinforming of Millions in New York Times' "Supplements for Coronavirus Probably Won't Help, and May Harm" published March 23, 2020

critique by Dr Alex Vasquez

Introduction

The scaffolding of our institutionalized ignorance (discussed later) requires structural support from publications and organizations that pretend to inform and empower us while simply leaving us dumber and weaker than before. On March 23 of 2020, New York Times published the article "Supplements for Coronavirus Probably Won't Help, and May Harm: Worried Americans are scrambling to buy wellness products they think will protect against coronavirus. Some may do harm." This critique will sequentially outline the structure and errors of the above-mentioned publication.

Critique en breve

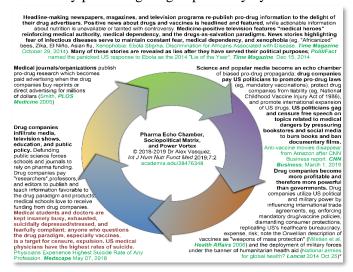
1. Start with zero, and do not advance: The article opens with meaningless trivia and anecdotes. If this article had been intended to actually and legitimately inform its paying readers, then the author would have begun the article with an engaging description of science. Written as it is, the article is neither informative nor engaging; it simply fills space and time, replacing legitimate writing and informing. Not only is the author ignorant of the topic, but the persons cited in the article as interviewees are likewise ignorant; thus, the resulting pseudojournalism is a mixed salad of inconsequential commentary and reflexive opinions.

"A red herring is something that misleads or distracts from a relevant or important question. It may be either a logical fallacy or a literary device that leads readers or audiences toward a false conclusion." Wikipedia

Innuendos rather than science: The statement "Dietary supplement sales have surged nationwide as panicked consumers stock up on vitamins, herbs, extracts, and cold and flu remedies. None of these products have been shown to lower the likelihood of

- contracting the coronavirus or shortening its course, and taking large doses of them can potentially do harm" is the typical sleight of hand and pulling of the rug. The truth of the matter is that nutritional supplements have a long history of use against infectious diseases, and several have shown promise against various infections caused by coronaviruses, as I have recently (March 4, 2020) reviewed in an online video presentation² (Antiviral Strategies for Coronavirus) and previously in my 2014 ebook, Antiviral Nutrition.³
- By starting the article with innuendo and suspicion, everything that follows is tainted: The statement "sales of zinc, a popular remedy for colds and respiratory illness, shot up 255 percent" could have been—but was not—contextualized by the fact that 30% of the world population is zinc deficient and given that zinc sufficiency is necessary for proper immune function and zinc deficiency causes impaired defenses against a wide range of infectious diseases zinc deficiency contributes to more than 1 MILLION deaths every year. While Americans commonly think of nutritional deficiencies as affecting only persons in other countries, the fact is that nutritional deficiencies run rampant (albeit invisibly) throughout the American population; one recent study showed that 30% of American adults were at risk for adverse inflammatory and infectious events due to zinc deficiency. Relatedly, deficiency of the mineral selenium affects 15% of the world population, and deficiency of selenium increases risk for viral infections and mutation of those viruses into more aggressive infections (as documented in Vasquez, Coronavirus video, 2020 and Antiviral Nutrition).
- 4. Insignificant filler chit-chat about vitamin D (and melatonin) leaves readers nonadvanced: Instead, the author could have cited the 2017 meta-analysis and review published in the *British Medical Journal* showing that vitamin D supplementation reduces the risk of respiratory infections. Given that up to 30% of upper respiratory infections in adults are due to coronaviruses, the data showing vitamin D's general effectiveness against respiratory infections *implies* that vitamin D helps against coronaviruses.
- 5. Misunderstanding melatonin: The NYT chose the low-hanging fruit of "the growth in melatonin [sales] was probably related to an increase in stress-related sleep disruptions" instead of crediting buyers with their knowledge that melatonin is—in addition to a natural agent that promotes relaxation and sleep—antiinflammatory, antiviral, and anti-infectious. Their noninforming conversation about melatonin could have been substituted by data showing that melatonin has been used safely and effectively in a wide range of clinical studies, and that melatonin has been proven

- to save lives against infectious diseases such as sepsis in newborns.³
- 6. Positive comments about nutrition are buried in a bog of ambiguity: Positive comments attributed to clinical trials supporting the use of zinc, vitamin D, and elderberry are made impotent within the context of meandering babble written with the intention to dissuade.
- More misinformation among the seemingly positive statements. The statement "Whole foods like fruits, vegetables, fish, poultry, nuts, legumes and milk contain a wide range of vitamins, minerals and phytochemicals — including zinc and vitamin D – that work in synergy to protect your health" appears reasonable and informative until one realizes that food sources (with the exception of cod liver oil) are insignificant sources of vitamin D, the daily requirement for which is approximately 4,000 IU (100 micrograms) per day, or—for larger and obese persons-more than double that amount. The legitimate nutritional need for vitamin D on a daily basis cannot be met by a "healthy diet" but can be met only with regular vitamin D supplementation and/or sun exposure. Again, optimization of vitamin D status for the prevention of infectious disease cannot be attained by diet alone without either supplementation or full-body sun exposure to maintain optimal levels.⁴
- 8. Fearmongering, both unjustified and undefined: The comment "overload their systems with large doses of supplements" is simply fear fodder. This article could have given useful information but instead provides grammatical mush with neither information nor utility. As such, this NYT article services the need of the medical-pharmaceutical echo chamber by 1) wasting time and opportunity that could have been used for reader-productive conversation and 2) directly discounting the importance of nutrition, thereby promoting drug-dependency by default.



<u>Vicious cycle image</u>: from *IJHNFM* 2019 <u>academia.edu/38476348</u> See also citations^{5,6}

Contextualization and Conclusion

For propaganda and misinformation to function, they must have 1) a driving force behind them, 2) a receptive audience, 3) positive feedback, rewards for both parties. The driving forces behind medical misinformation and nutritional nihilism are a) the drug industry that wants patients and doctors to exclusively rely on drugs and injections, b) the medical profession that wants patients and doctors to exclusively rely on drugs, injections, and surgery, c) media outlets such as newspapers, magazines, journals, and television that receive hundreds of millions of dollars from drug companies in advertising revenue and—in the case of medical journals—article reprints that then function as advertisements in the hands of drug company representatives visiting doctors in their offices⁷, d) hack writers and editors—generally without any training in the topics on which they write and approve, respectively—who are mostly trying to keep their jobs and increase profitability of their employing publication. Creating and maintaining a receptive audience for misinformation is numerically more grand but easier in design: 1) start by filling peoples' minds at a young age with illogical stories and impossible false realities to which the child must conform for the sake of approval, love, food and survival so that from childhood forward the now-adult has learned to turn-off critical thinking for the sake of superficial social acceptance, 2) make the process of education both nearly worthless and completely exhausting so that the noun education and the verb study will forever be repugnant and thus critical thought itself will be reflexively shunned, and 3) ensure that the tsunami of misinformation is so permeating and constant that people will either resign to be swept away with the current of simple-minded conformity or will abandon the conversation altogether and withdraw from any meaningful engagement. With either option, dominating power structure maintains control of the disseminated narrative and the structure-serving thought and action that result. Different scripts and entirely different blueprints for practically-achievable positive potentialities are readily available, but people have to disengage from the mainstream zombie trough and seek real and guiding intellectual sustenance elsewhere. In our current situation with the 2020 pandemic, these are issues of justice, law, order, life and death; the alternate narrative to doom, gloom and helplessness is readily available to everyone. I have already reviewed these in **1** Antiviral Nutrition (2014, republished in 2020), 2 the reintroduction to my antiviral nutrition protocol in 2019 (3) hours of video at InflammationMastery.com/antiviral [free access]), and **3** my more recent Antiviral Strategies for Coronavirus video (produced in March 2020).

Postscript regarding our institutionalized ignorance

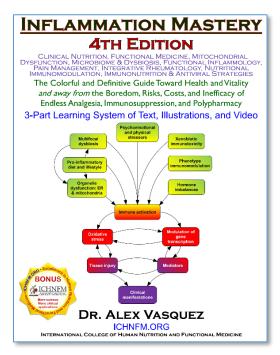
I think the acknowledgement of our "systematized stupidity" is important if we are to deal with and

overcome the same; however, I realize that some readers may bristle at the thought of it so I will provide some citations, experiences, and justification here, concluding with an optimistic solution.

- 1. First, from reflecting on my own educational experiences from ranging from having attended schools that are at least representative of commonplace education all the way to my completion of three doctorate degrees within fully accredited universities in the United States (also including a Pre-Doctoral Research Fellowship funded by the US National Institutes of Health), I can see that none of these educational programs taught anything related to critical analysis or the "higher order thinking" that they braggingly praised in their sales catalogs. All of these programs aimed to produce minimal competence and barely succeeded at that if they did at all.
- 2. Second, anyone can read the popular and well-respected <u>Dumbing Us Down</u> by John Taylor Gatto to gain legitimate insight into the role played by educational systems in keeping students and citizens imprisoned in ignorance and ineffectiveness.
- 3. Third, the influential scholar and educator Noam Chomsky has discussed this situation in some of his works and essays (e.g., How the Young Are Indoctrinated to Obey⁸) and most clearly in a lecture available in various locations online (e.g., youtube.com/watch?v=JVqMAlgAnlo) wherein he discusses his perspective that "Education Is a System of Indoctrination of the Young."
- 4. Fourth, a great example of structured ignorance is the multidecade observation that medical physicians receive zero training in Nutrition⁹ despite the fact that many of the conditions they will treat for the rest of their professional lives are malnutrition-induced and/or modifiable or curable with the skilled use of clinical/therapeutic/functional nutrition. I have discussed these concepts in the more than 100 professional articles (free archive) that I have published in a wide range of journals, several hundred free videos (available at vimeo.com/drvasquez) as well as in my larger textbooks such as the 1200-page Inflammation Mastery: Textbook of Clinical Nutrition and Functional Medicine.¹⁰

The more independent study that one pursues, the more one reads legitimate works of culture and art such as Rand's <u>Fountainhead</u>, Nietzsche's <u>Zarathustra</u>, and even Orwell's <u>Nineteen-eighty-four</u>, then the more obvious becomes the systematic nature of our having been "dumbed down" and the more enthusiastically one can pursue its remediation. We are all undereducated, undertrained, and ignorant in areas where we would benefit from being knowledgeable, and we—individually and collectively—are the only ones who can improve our situation. The solution requires daily action.

About the author and presenter: Alex Kennerly Vasquez DO ND DC (USA), Fellow of the American College of Nutrition (FACN), Overseas Fellow of the Royal Society of Medicine: An award-winning clinician-scholar and founding Program Director of the world's first fully-accredited universitybased graduate program in Human Nutrition and Functional Medicine, Dr Alex Vasquez is recognized internationally for his high intellectual and academic standards and for his expertise spanning and interconnecting many topics in medicine and nutrition. Dr Vasquez holds three doctoral degrees as a graduate of University of Western States (Doctor of Chiropractic, 1996), Bastyr University (Doctor of Naturopathic Medicine, 1999), and University of North Texas Health Science Center, Texas College of Osteopathic Medicine (Doctor of Osteopathic Medicine, 2010). Dr Vasquez 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 Integrative Orthopedics (2004, 2007 2012), Functional Medicine Rheumatology (Third Edition, 2014), Musculoskeletal Pain: Expanded Clinical Strategies (commissioned and published by Institute for Functional Medicine, 2008), Chiropractic and Naturopathic Mastery of Common Clinical Disorders (2009), Integrative Medicine and Functional Medicine for Chronic Hypertension (2011), Brain



Inflammation in Migraine and Fibromyalgia (2016), Mitochondrial Nutrition and Endoplasmic Reticulum Stress in Primary Care, 2nd Edition (2014), Antiviral Strategies and Immune Nutrition (2014), Mastering mTOR (2015), Autism, Dysbiosis, and the Gut-Brain Axis (2017) and the 1200-page Inflammation Mastery 4th Edition (2016) also published as a two-volume set titled Textbook of Clinical Nutrition 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. DrV has served as a consultant, product designer, writer and lecturer for Biotics Research Corporation since 2004. 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, BMC Complementary and Alternative Medicine (all PubMed/Medline indexed), and Journal of Naturopathic Medicine and as the founding Editor of Naturopathy Digest, Dr Vasquez is currently the Editor (2013-) of International Journal of Human Nutrition and Functional Medicine and Editor (2018-2019) of Journal of Orthomolecular Medicine, published for more than 50 consecutive years by the International Society for Orthomolecular Medicine.

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⁹ Abbasi J. Medical Students Around the World Poorly Trained in Nutrition. *JAMA*. 2019 Oct;322(19):1852. doi:10.1001/jama.2019.17297

¹⁰ Vasquez A. <u>Inflammation Mastery</u> (single volume) and <u>Textbook of Clinical Nutrition and Functional Medicine</u> (two volumes). Barcelona; ICHNFM.ORG, 2016 detailed at https://www.inflammationmastery.com/book-nutrition-functional-medicine and https://www.ichnfm.org/im4