Confused About Obesity, Supplements and Organic Food? Here's A Handbook For Busting Nutrition Myths



By Cameron English — February 25, 2020

The internet is brimming with nutritional nonsense. A new book teaches us how to spot the myths.



Credit: Public Domain/Wikipedia [1]

The internet can be a confusing place. A five-minute Google search for nutrition advice is perhaps the best illustration of this fact. Allow me to demonstrate with a classic example. Do GMO crops cause cancer?

"Most GMOs are ... designed to be sprayed with Monsanto's Roundup herbicide ... Glyphosate, the active ingredient in Roundup, is classified as a class 2A carcinogen by the International Agency for Research on Cancer ..."

Or this:

"Science has been studying cancer for a long time, and it has come to a few conclusions. One of which is that there are precious few ways to prevent cancer [2], and avoiding GMOs is not one of them."

The first statement [3] was written by an anti-biotechnology activist with a history of fabricating fears [4] about genetic engineering, the second [5] by a biochemist [6] with 30 years of research experience. Nonetheless, the average consumer or athlete may not know whom to believe at first glance. Faced with this contradictory but seemingly authoritative commentary, what do you do if you really want to know if GMOs boost your cancer risk?

The solution is simple, if not always easy to apply: turn to the experts and think critically about everything you read. To make that task a bit easier in practice, nutrition scientist David Lightsey has produced a helpful handbook to guide curious consumers through the morass dietary nonsense they'll inevitably encounter online: The Myths About Nutrition Science [7] (TMNS).

A food and nutrition science advisor to QuackWatch [8], Lightsey has spent 31 years separating evidence-based information from plain old nonsense. His book, at just over 200 pages, will arm readers with a basic understanding of many perennially important nutritional issues—everything from obesity and supplements to GMO crops and pesticides—and a useful immunization against the junk science peddled online, what Lightsey calls "the quagmire of misinformation which is so pervasive in this area."

This book would have been enormously helpful to me as a budding science journalist a decade ago, but anybody looking for sound nutrition information will get something out of TMNS.

The useless media and "health news"

Arguably the best part of TMNS is its takedown of mainstream health reporting. Citing the now classic 2005 study by physician John Ioannidis, Lightsey begins by pointing out that the bulk of medical research [9] published today is simply incorrect. Eager to publish flashy results in top-tier science journals and desperate for grants (the lifeblood of any working scientist), many academics have resorted to cutting corners to get the results they know will attract attention, and thus more research funding.

If bona fide experts get so much wrong, Lightsey asks, "can a journalist with little or no science background ... accurately assess what he or she is reporting on?" The answer is usually "no," unfortunately. Reporters don't have to be crippled by scientific illiteracy; a dedicated journalist can correct their knowledge deficit by doing some homework before writing a story. The real problem is, few of them do.

Instead, reporters more or less copy their stories from press releases universities distribute to promote research conducted by their faculty. Lightsey cites a 2015 study, for instance, which found that just over 85% of 312 medical news stories were derived from a press release or some other secondary source.

This is sloppy reporting, pure and simple. But science by press release has more lasting

consequences: it exaggerates a study's results and fails to contextualize them among the much larger body of research on the topic in question. This is one of the primary reasons ACSH has caught just about every mainstream media network irresponsibly reporting, for example, that 95% of baby food is "contaminated" [10] with heavy metals.

Misinformation is everywhere

This is a recurring theme throughout Lightsey's book. Whether it's a mainstream reporter, a supplement salesman at the gym or a celebrity athlete, nobody's entitled to our trust when it comes to nutrition. That's not because these sources of information are inherently unreliable, although they often do peddle nonsense. The real reason is that informed consumers should make decisions that comport with the available evidence [11], and not based on the conclusions of a single study or the recommendations of Tom Brady [12]—no matter how many Super Bowls he's won.

Returning to our opening point above, Lightsey pithily sums things up:

"Nutrition 'science' has become so contradictory that one must learn to take every new 'study' which declares to enlighten us about some purported nutritional health threat or benefit with a large grain of salt."

COPYRIGHT © 1978-2016 BY THE AMERICAN COUNCIL ON SCIENCE AND HEALTH

Source URL: https://www.acsh.org/news/2020/02/25/confused-about-obesity-supplements-and-organic-food-heres-handbook-busting-nutrition-myths-14589

Links

- [1] https://en.wikipedia.org/wiki/Human_nutrition#/media/File:FoodSourcesOfMagnesium.jpg
- [2] https://www.skepticalraptor.com/skepticalraptorblog.php/prevent-cancer-12-easy-steps-ok-easy/
- [3] https://responsibletechnology.org/gmos-and-cancer/
- [4] https://geneticliteracyproject.org/glp-facts/jeffrey-m-smith/
- [5] https://www.skepticalraptor.com/skepticalraptorblog.php/journal-retracts-seralinis-controversial-gmo-cancerarticle/#GMOs_dont_cause_cancer
- [6] https://www.skepticalraptor.com/skepticalraptorblog.php/about/
- [7] https://www.routledge.com/The-Myths-About-Nutrition-Science-1st-Edition/Lightsey/p/book/9780367354299
- [8] https://www.quackwatch.org/
- [9] https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0020124
- [10] https://www.acsh.org/news/2019/10/22/95-baby-food-tainted-toxic-metals-dont-panic-14354
- [11] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2709979/
- [12] https://www.wnd.com/2017/10/13-bits-of-nutritional-hooey-in-tom-bradys-book/