

Terry Talks Nutrition

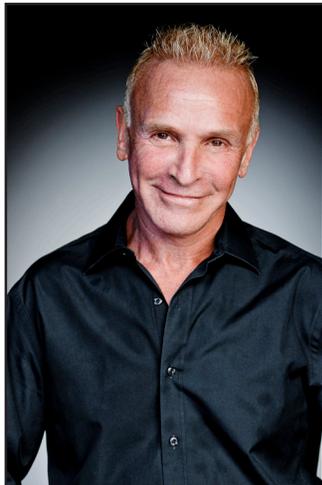
IMPROVING THE HEALTH OF AMERICA



Media Madness:

Fish Oil Supplements and Prostate Cancer

By Jonny Bowden, PhD, CNS



Jonny Bowden, PhD, CNS, (aka “The Rogue Nutritionist”) is a nationally known expert on weight loss, nutrition and health. Dr. Bowden has a Master’s Degree in psychology and counseling and a PhD in nutrition, and has earned six national certifications in personal training and exercise. He is board certified by the American College of Nutrition, a member of the prestigious American Society for Nutrition, and a much in-demand speaker at conferences and events across the country.

A frequent guest on television and radio, Dr. Bowden has appeared on Fox News, CNN, MSNBC, ABC, NBC, and CBS as an expert on nutrition, weight loss, and longevity. He is a past member of the Editorial Advisory Board for *Men’s Health* magazine, is the Nutrition Editor for *Pilates Style*, and is a regular contributor to AOL, *Vanity Fair Online*, *Clean Eating Magazine*, *Better Nutrition*, and *Total Health Online*.

Dr. Jonny has contributed to articles for dozens of national publications (print and online) including *The New York Times*, *The Wall Street Journal*, *Forbes*, *The Daily Beast*, *The Huffington Post*, *Vanity Fair Online*, *Time*, *Oxygen*, *Marie Claire*, *Diabetes Focus*, *GQ*, *US Weekly*, *Cosmopolitan*, *Self*, *Fitness*, *Family Circle*, *Allure*, *Men’s Health*, *Prevention*, *In Style*, *Natural Health*, and many other publications. He appears regularly as an expert on ABC-TV Los Angeles.

Reviewing the new study (**LINK: <http://aje.oxfordjournals.org/content/173/12/1429.full>**) that’s been widely reported as showing fish oil supplements increase the risk of prostate cancer puts me in mind of a recent review of a Kenny G album:

“There’s a lot to criticize in the music of Kenny G. For example, everything.”

I found that pretty amusing.

This study? Not so much.

There’s nothing amusing about this study, and what the media has done with it is—to paraphrase Samuel Jackson in *Pulp Fiction*—“*very (blank)-ing far from funny*”.

Before we get to the study itself—and we will—let’s talk about the media, whose reporting here is disgraceful, incompetent, and scientifically illiterate. Here’s an example of some of the headlines, the idiocy of which will become clear in just a moment.

- “Omega-3 supplements linked to prostate cancer” (Fox News)
- “Omega-3 supplements ‘could raise prostate risk” (Telegraph)
- “Fish oil supplements linked to prostate cancer” (Health News)
- “Men who take omega-3 supplements at 71% higher risk of prostate cancer” (NY Daily News)
- “Omega-3 supplements may trigger prostate cancer” (Nursing Times)
- “Hold the salmon: Omega-3 fatty acids linked to higher risk of cancer” (CNN)

So, reading this, you might well think that researchers divided a population of men into two groups, gave one group fish oil supplements and the other a placebo, and found that the ones who took the fish oil supplements got way more prostate cancer than the ones who didn’t. Right?

Wrong.

The first thing you need to know is that *no fish oil supplements—or any other kind of supplements, for that matter—were given in this study*. None. This study looked at blood levels of long-chain fatty acids such as those found in fish (EPA and DHA). And even there, the association between higher blood levels and prostate cancer—which we’ll get to in a minute—was only found for DHA. No association was found between EPA and prostate cancer, nor between prostate cancer and ALA (the omega-3 found in flax and chia).

How do you explain the fact that reporter after reporter and news outlet after news outlet conveniently equated *higher blood levels of DHA* with “*fish oil supplement taking*”? There’s almost no other explanation other than a strong anti-supplement bias and a desire for shocking headlines. And any doubt about the objectivity of the researchers should have been abandoned after one of them—Dr. Alan Kristy—told reporters, “We’ve shown once again that use of nutritional supplements may be harmful”. (LINK: http://www.huffingtonpost.co.uk/2013/07/11/supplement-linked-to-aggressive-cancer_n_3577523.html)

So let’s be clear. Supplements weren’t a part of the study and weren’t given to the participants. Period.

No, like so many studies these days, this was an observational study (based on nested data from participants in the Prostate Cancer Prevention Trail from 1994-2003). There was no experiment, just an observation about what things were found together in this particular population.

Stranger than Fiction: Trans Fats Protective!

Want to know what else the researchers found? Participants who had the highest levels of trans fats in their blood also had the least risk for prostate cancer.

So, if you want to jump to conclusions and take action immediately, here are two things you should do right now to protect your health:

- 1) Stop eating fish
- 2) Start eating trans fats

No one in the media is dumb enough to tell us to do that. These same folks are, however, perfectly OK casting doubt about the safety of omega-3 supplements, which—in case you happened to miss this the first two times I mentioned it—were not used in the study.

If blood levels of omega-3’s are the problem, fish should be just as “dangerous” as fish oil supplements. And—so far, at least—I haven’t heard any media pundits advise us to stop eating salmon and start scarfing down donuts and margarine—because they’re so rich in “protective” trans fats.

Study Debunking 101: Why Were DHA Levels High?

The best study debunker in the business—Denise Minger—(LINK: <http://rawfoodsos.com/category/omega-3/>)—points out that DHA levels in the blood do not necessarily track with dietary intake. The men with the higher levels of DHA weren’t necessarily eating more fish, and we pretty much know that the majority weren’t taking supplements (because the researchers said as much). Though DHA levels in the blood go up when you consume lots of omega-3’s, they can also go up for other reasons, *one of them being a low-fat diet* (LINK: <http://jn.nutrition.org/content/131/2/231.full>).

Think about that for a minute.

Minger also points out that the “highest levels of serum DHA” were based on percentage values, not absolute values. Let’s just say that percentage-based measurements can be....well, misleading. A higher percentage of DHA might mean a lower percentage of something that the researchers

didn't investigate. (They only looked at 8 fatty acids.) "Expressing plasma phospholipid fatty acid composition as a percentage of the total is meaningful only when the total fatty acid content is identical for all subjects", *writes Dr. Ching Kuang Chow in the American Journal of Nutrition*. (LINK: <http://ajcn.nutrition.org/content/89/6/1946.1.full>)

Write One Hundred Times on the Blackboard: Correlation is not Causation

It's worth repeating—and repeating, and repeating- that correlation is not causation. Observational studies like this one are not randomized controlled studies. They simply point to associations—like the fact that people who have “yellowish fingers” tend to have higher rates of lung cancer. But association studies like this never tell us why those associations exist. (Yellow finger syndrome is a “side-effect” of holding cigarettes in your hand all day long. Clearly, yellow fingers don't “cause” lung cancer, but there's a strong positive association between the two.)

In this study, we have no idea why higher blood levels of DHA were found to be associated with higher levels of risk for aggressive prostate cancer. DHA might be a *marker* for something else, just as “yellow fingers” are a “marker” for smoking. Researchers say they like to “control” for extraneous variables, but for reasons unknown, these researchers did not “control” for such variables as age and race and... oh yes, diet. God knows what else they didn't “control” for.

As Minger puts it:

“This is a classic case of correlation clashing with biological plausibility – and it highlights why observational studies, with their slew of undocumented variables and contradictory findings, can't tell us anything definitive about food and disease.”

And while we're on the subject of confounding variables consider these statistics from the study, courtesy of my friend Bob Roundtree, MD, Medical Director for Thorne Research:

1. 53 percent of the subjects with prostate cancer were smokers.
2. 64 percent of the cancer subjects regularly consumed alcohol.
3. 30 percent of the cancer subjects had at least one first-degree relative with prostate cancer.
4. 80 percent of the cancer subjects were overweight or obese.

Context is Everything

Finally, let's put this study in context. There have been literally thousands of published studies on omega-3 fats, spanning the course of over three decades and including not just observational studies, but randomized controlled trials as well.

The *overwhelming* majority of them have been positive, so much so that when it comes to fish oil, even mainstream medicine has overcome its default bias against vitamin supplements. Major establishment health organizations now recommend fish eating and, often, fish oil supplementation. Even Big Pharma is getting in on the act, with pharmaceutical companies (GlaxoSmithKline) marketing prescription fish oil products (Lovaza).

Jumping to the opposite conclusion from one or two observational studies—particularly observational studies that contradict the bulk of the research, leave out a number of critical variables like diet, and postulate no biological mechanism that could explain the odd findings—certainly makes for good headlines.

It doesn't, however, make for good sense.

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