Fish oil declared worthless for heart disease . . . until it became a profitable drug!

We've long been convinced that fish oil was heart-healthy. It totally makes sense. The first intimation that it was beneficial came in the 70s from epidemiological studies of Eskimos who, consuming massive amounts of oily fish and whale and seal blubber (rich sources of EPA), were found to be virtually immune from heart disease.

Mechanistically, it was logical. Fish oil is a blood thinner, preventing the platelets that cause blood clots from sticking

together; it lowers harmful triglycerides and raises HDL; it exerts an anti-inflammatory effect on the arterial wall; some studies even suggest that it has an anti-arrhythmic effect. The standard of care in European countries for recipients of coronary artery stents is a lifetime prescription of fish oil capsules, and countless health authorities tell us oily fish is heart-healthy.

In 2010 I wrote a balanced review of the controversy over fish oil's benefits for heart health for a medical journal, *Clinical Advisor*.

But as with many of our cherished supplements, the naysayers have put fish oil squarely in their cross-hairs. Here's some overheated rhetoric from the American Council on Science and Health (ACSH)from earlier this year:

"Time To Throw The Fish Oil Back: *Another one bites the dust. At some point perhaps dietary supplement fans are going to wonder why they spent so much money on a bunch of stuff which ended up being useless once properly evaluated in human trials. Probably just about the time that Niagara Falls changes direction. Which would make it a whole lot easier for the fish to swim upstream."*

Clever! Note the hilarious play on words.

But ACSH has long been known to be an industry shill against environmentalists, advocates of organic natural foods, and anything that smacks to them of New Age "quackery" that threatens the bottom line of corporations. It was ACSH that spearheaded attacks on Dr. Oz; their funding is from chemical companies, grocery conglomerates, beverage makers, cigarette companies and BigPharma.

ACSH claims the mantle of "consumer watchdog," but true consumer advocate Ralph Nader once said of ACSH:

"A consumer group is an organization which advocates the

interests of unrepresented consumers and must either maintain its own intellectual independence or be directly accountable to its membership. In contrast, ACSH is a consumer front organization for its business backers. It has seized the language and style of the existing consumer organizations, but its real purpose, you might say, is to glove the hand that feeds it."

The New York Times, while less snarky, also broadcast the news that fish oil was worthless:

*"**Fish Oil Claims Not Supported by Research:** The vast majority of clinical trials involving fish oil have found no evidence that it lowers the risk of heart attack and stroke."*

The *Times* article goes on to reference several "meta-analyses" that, in aggregate, found that fish oil didn't reduce cardiac events.

But the aforementioned ACSH recently heralded **"Media Should Have Far Less Confidence In Meta-Analysis Claims Than They Do!"**. They argue "Meta-analyses are not objective."

Unless, I suppose, they demonstrate the lack of efficacy of supplements!

The *Journal of the American Medical Association (JAMA)*—not known for its congeniality toward supplements—went even further in its rhetorical denunciation of fish oil: **"Another Nail in the Coffin for Fish Oil Supplements,"** they proclaimed in a May 2018 editorial.

I guess that means they won't be accepting lucrative drug ads from Amarin Pharmaceuticals for its EPA product Vascepa.

Fast-forward to last week's headlines: **"Amarin Soars as Fish Oil Pill Cuts Risk of Strokes in Long-Awaited Study."** The article, aimed at medical investors, touts the soon-to-be-released results of a study on a drug company's version of

EPA:

"Vascepa lowered the risk of heart attacks and strokes in patients with very high levels of triglycerides—a type of fat in the blood—and whose cholesterol levels were already held in check by drugs called statins. Patients on Vascepa had a 25 percent reduction in the relative risk of a heart attack, stroke, cardiovascular death, or hospitalization for unstable angina or bypass surgery after a median of 4.9 years of treatment, compared to those on statins and a placebo."

The article reports: "Shares of Amarin boomed 307 percent in pre-market trading on Monday morning, to $12.17 apiece."

Double-standard much?? When fish oil is sold in health food stores it's worthless, the barb of snarky headlines. But when it's packaged as a profitable prescription drug—well now that's news we can use!

The average Vascepa price without insurance is about **$311** for a supply of 120 one-gram capsules. To achieve the heart-protective dose of four grams per day, a bottle would last you a month. A comparable 120 count bottle of Carlson Elite EPA Gems—also 1000 mg of EPA—retails for $68. The difference is that insurance companies and Medicare will be asked to foot the bill for Vascepa—although anticipate a hefty co-pay for the consumer.

Why the disparity between the ordinary fish oil studies and Vascepa's successful trial? The devil is in the dosage, and as I've often pointed out, most fish oil studies used a mere pill or two a day—not enough to generate a statistically meaningful result. When four grams of highly-concentrated fish are used, the cardiovascular benefits of fish oil stand out. Or maybe it's just that a drug-company-sponsored study has more street-cred!

Let this serve as a case study illustrating the bias inherent in supplement reporting by the mainstream media—and as a

lesson in the woeful medical economics that threatens to bankrupt our health care system!