Those trying to link fish oil and cardiovascular health come up with an empty hook

By ACSH Staff — March 31, 2015

Supplements have been a hot topic lately, most recently when GNC, Target, Walmart and Walgreens were forced to pull supplement products from their shelves by New York state attorney general, Eric T. Schneiderman.

As we wrote about yesterday, the AG's office solicited advice from both ACSH's Dr. Josh Bloom, the director of chemical and pharmaceutical sciences, and ACSH advisor Dr. David Seres, the director of nutritional medicine at New York Presbyterian Hospital. Well, new day, new supplement story, this time targeting fish oil, the third most widely used supplement in the United States.

According to the National Institutes of Health, 10 percent of Americans take fish oil daily under the assumption that fish oil has protective effects on cardiovascular health because these supplements contain omega-3 fatty acids. In an article in the New York Times Science section, Anahad O Connor points out the flaws in this assumption. In fact, he says, the big problem is that the vast majority of clinical trials involving fish oil have found no evidence that it lowers the risk of heart attack and stroke. He says that of the at least two dozen studies conducted between 2005 and 2012 looking at the relationship between fish oil and cardiovascular events in high-risk populations, only two showed some benefit.

An additional study, a large five-year trial published in 2013 in the New England Journal of Medicine (which we covered when it was released) examining the benefits of the supplement with regard to cardiovascular outcome, came up with a very empty hook, effectively relegating omega-3 fish oil to the ever-growing supplement trash heap. Furthermore, the studies done in the 1970s when enthusiasm for fish oil first began suggesting benefits of fish oil conducted by a team of Danish researchers, were shown to be flawed by the authors themselves.

It has long been suggested that consumption of omega-3 fatty acids is associated with a decreased risk of numerous cardiovascular events, and previous studies have suggested that, if obtained from dietary sources, these fatty acids may indeed have some beneficial effects.
Dr. James Stein, the director of preventive cardiology at University of Wisconsin Hospital and Clinics, urges his patients to avoid fish oil supplements and focus instead on eating fatty fish at least twice a week, in line with federal guidelines on safe fish intake, because fish contains a variety of healthful nutrients other than just EPA and DHA [those found in most fish oil supplements]. There is currently a trial the Vital Study being conducted by Dr. JoAnn Manson, chief of preventive medicine at Brigham and Women's Hospital in Boston and colleagues looking at the effects of taking fish oil and vitamin D on prevention of heart disease.

The study will be completed next year.

As ACSH's Dr. Josh Bloom has said on the topic of supplements previously [7], the more you read, the worse the entire concept of dietary supplements looks. This is not surprising, since the legislation that provided supplements with immunity from FDA regulation (the Dietary Supplement Health and Education Act [8] signed by President Clinton in 1994) was so obviously anti-scientific and money-driven that it was inevitable that untested junk in a bottle would turn out to be useless and sometimes harmful.