BY KELLY DORFMAN

Frenzy Over Fish Oil

Making sense of media reports

The e-mail was marked 'urgent.' Concerned, I clicked on it to find a frantic message from Stephanie. She had taken her whole family off fish oil, she wrote, because of the frightening news saturating the airwaves. According to numerous reports, a study had just found that fish oil can cause prostate cancer. Stephanie's e-mail was the first of many frantic calls and inquiries from my clients.

Fish oil is the latest victim in a stream of sensational media reports on the alleged dangers of supplements. In recent years, similar patterns occurred with calcium, multiple vitamins and vitamin E. Exciting and encouraging studies, such as the one finding people who took fish oil lived longer or another linking multiple vitamin use with lower levels of cancer, don't seem to garner as much coverage.

When it comes to reporting on a study, the devil is in the details. Critical information can be lost in the headline rephrasing of a study's results.

Let's look at this fish oil study as a case in point. The research was published in the July 2013 *Journal of the National Cancer Institute*. From headlines such as "Omega 3 Supplements May Trigger Prostate Cancer" (*Nursing Times*) to "Hold the Salmon: Omega 3 Fatty Acids Linked to Higher Risk of Cancer (*Time*), one assumes that this study focused on the effects of fish oil on cancer risk. In fact, the conclusions were culled from data collected for the Selenium and Vitamin E Cancer Prevention Trial or SELECT.

When sorting through piles of data, the researchers noticed men who had higher percentage in the blood of one type of fat found in fish (DHA) also seemed to have higher risk of developing prostate cancer. There was no data on the study participants' food consumption. According to the researchers' limited information, almost none of the participants took fish oil supplements. Of further interest, 80 percent of the men in the study were overweight and over half of them smoked.

One rule of science is proximity does not equal causation. Just because two things happen together doesn't mean one caused the other. Since there was no information about the participants' diet and scant fish oil consumption in this group, the conclusion to hold the salmon or stop supplements makes a catchy headline but no scientific sense. An observation at this level is meant to generate questions, not establish cause and effect.

The data prompts many questions. Why would a bunch of guys who don't take fish oil supplements have a high percentage of a certain type of fat usually found in fish in their blood. Does DHA—or something associated with DHA--increase prostate cancer risk? The picture is muddy. DHA can be made from other fats in the diet. The process associated with making it can be negatively altered by certain lifestyle habits or other risk factors. For example, the blood fat levels of those with obesity (a known risk factor for prostate cancer) might contain a higher percentage of DHA.

Detailed analyses are not readily available in the short, snappy articles reporting the latest supplement or food threat. Before tossing out your supplement program, put the new information into context. The following questions can help you decide how to proceed.

How does the new information jive with previous information?

Using the fish oil example, decades of studies attest to its anti-inflammation and life-supporting properties. How does this study measure up against those?

What are critics of the study saying?

Hearing both sides can frame the issue more clearly. Several doctors published critiques of this study, citing some of the points made above, along with technical analyses of the study's design.

What are the details of the study?

Before you make a potentially health-altering decision, examine the actual study or a detailed analysis of it or talk to a nutritionally trained health care provider. (Make sure your professional does his or her homework and isn't relying on media reports.)

How does this study apply to you personally?

After hearing about the study, Stephanie (mentioned above) took her child with attention issues off fish oil. Other studies have found that children with ADHD are low in the fats found in fish. Stephanie's child was benefiting from taking supplements. Even if the information in the prostate cancer study were credible, it was about adult men and did not apply to her school-age child.

After going through this study carefully, my personal take-away is to continue to supplement with purified fish oil and be more careful about the source of the fish I eat. (Some research links the consumption of farm-raised fish to higher cancer risk due to industrial contaminates.)

By the time this article is published, the fervor over fish oil and prostate cancer will be old news. Whatever new worry or drama is heralded next in the press, take a deep breath and examine the information carefully. **LW**

Licensed clinical nutritionist/dietitian Kelly Dorfman (kellydorfman.com) is author of Cure Your Child with Food *(Workman Publishing).*