

The Omega-3 Factor

CAM stands for Complementary and Alternative Medicine, a group of diverse therapies and products that are neither part of conventional medicine as taught in U.S. medical schools, nor generally available at U.S. hospitals. The practice of using an unconventional therapy together with conventional medicine is called “complementary medicine.”

Fat is an essential nutrient for the body. But as food ads endlessly trumpet, some are deemed “good” and others “bad.” Polyunsaturated fat is commonly considered a “good” one. Compared to saturated and trans fats, which may raise blood cholesterol, polyunsaturated fat may help lower cholesterol and may therefore reduce the risk of heart disease.

Polyunsaturated fat contains two major types of polyunsaturated fatty

acids (PUFAs)—omega-3 and omega-6—which the body needs but does not make for itself. Omega-3 fatty acids are found abundantly in certain fatty fish, such as salmon, mackerel, herring, and sardines, and in fish oil products. Smaller amounts are found in a few other sources: canola oil, flaxseed, and walnuts.

Fishy benefits?

Polyunsaturated fat, particularly omega-3 fatty acids, has been the focus of a number of studies involving people who have MS. There’s some evidence that they may be beneficial for the relapsing-remitting form of MS.

Two placebo-controlled clinical trials studied omega-3 fatty acid supplementation. A large, two-year study followed 312 people with MS. The group taking 10 grams of fish oil daily had less disability progression and fewer relapses than those taking a placebo (a “dummy pill”). However, the difference between the fish oil group and the placebo group was not “statistically significant.” In other words, the more positive results in the fish oil group could have occurred due to chance alone. Technically though, there was a trend favoring the fish oil group.

It’s important to tell your physician about any dietary supplements you are considering or taking. It’s equally important that your physician listen respectfully to your questions and concerns regarding this or any other CAM (complementary and alternative medicine).

A small, one-year study looked at whether taking fish oil supplements along with consuming less saturated fat (found in meat and dairy products) would benefit people with MS. All 31 participants were taking one of the FDA-approved MS medications. As in the other study, the group taking fish oil did better but, again, the difference was in a range that might have occurred due to chance alone. Results from the quality-of-life survey on physical functioning found that the trend favored the fish oil group.

There is other evidence to consider as well. Specifically, omega-3 fatty acids are known to cause changes in the immune system that would theoretically be beneficial in people with MS.

Getting a dose

Omega-3 fatty acids found in fish oil have some smaller components: eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). In the larger trial described above, the combined dose of EPA and DHA was 2.85 grams. In the smaller trial, 3 grams of combined EPA and DHA were used. While omega-3 fatty acids can be obtained from food, it is difficult to get these amounts of EPA and DHA from diet alone. Plus eating large quantities of fish carries other risks

such as ingesting toxic levels of mercury.

Fish oil supplements, in pill or liquid form, are the richest sources of omega-3 fatty



acids. A daily intake of up to 3 grams of EPA and DHA is usually considered safe. For people who may get EPA and DHA from their diets, it is sometimes recommended that no more than 2 grams be obtained from supplements. Check to see that the oils are of high quality.

The cautions

Omega-3 fatty acid supplements may have a mild blood-thinning effect. People who have bleeding disorders or who are planning surgical procedures should consult a health-care professional. Drug interactions may occur with anticoagulant medications such as warfarin (Coumadin), enoxaparin (Lovenox), heparin, aspirin, and other drugs with aspirin-like effects such as clopidine (Ticlid) and clopidogrel (Plavix).

Omega-3 fatty acids may also decrease the effectiveness of insulin, oral diabetes medicine, and high blood pressure medications. This supplement may also cause vitamin E deficiency and mild side effects such as loose stools and nausea.

Fish oils of halibut, shark, and especially cod liver have relatively high levels of vitamin A in addition to omega-3 fatty acids. Take care not to exceed 10,000 IU of vitamin A daily from all sources, especially during pregnancy.

The safety and effectiveness of omega-3 supplementation in combination with Copaxone, Avonex, Betaseron, or Rebif

have received only limited study. It is possible, though unlikely based on current evidence, that omega-3 fatty acid supplements could decrease their effectiveness. Omega-3 fatty acid has not been studied with Novantrone or Tysabri.

To take or not to take?

It's not clear if omega-3 fatty acids really improve outcomes in MS. Clinical trials are under way that may clarify this in a few years. For those who prefer to use only proven methods, it doesn't make sense to take omega-3 fatty acids. The studies so far have involved people with the relapsing-remitting form of MS, so there is little evidence to support its use among people with progressive MS.

However, there is a scientific rationale for this supplement and some hints of effectiveness. For those who are willing to accept weak evidence, taking a reasonable dose of fish oil supplements should be safe as long as there are no medical issues restricting its use (see cautions above). When taking this supplement, it may make sense to also take a low dose of vitamin E (100 IU daily).

Omega-3 fatty acids should never be used **instead of** the conventional MS medications or treatments. ■

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For a complete list of 12 published studies supporting this article, go to nationalmssociety.org/omega-3factor.