

Are you getting enough omega-3 fatty acids?

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Omega-3 fatty acids play an important role in heart and brain health. They've been linked to a stronger immune system, reduced inflammation and lower blood pressure and triglycerides, reducing the risk for heart disease and cognitive decline. But most people in the U.S. don't include enough omega-3s in their diets.

"Intakes in the U.S. are abysmally low," said Ann Skulas-Ray, an assistant professor in the School of Nutritional Sciences and Wellness at the University of Arizona in Tucson.

There are three main types of omega-3 [fatty acids](#): alpha-linolenic acid, or ALA; docosahexaenoic acid, or DHA; and eicosapentaenoic acid, or EPA. The human body can convert small amounts of ALA into EPA and DHA, but the main way people increase levels is to consume foods and supplements that contain omega-3s. Yet survey data suggests U.S. adults typically consume very little EPA and DHA, with average intake about 0.1 gram per day.

U.S. health agencies offer no guidelines for how much EPA and DHA a person should include in their daily diet. However, there are recommendations for daily consumption of ALA, based on age and gender. The [National Academy of Medicine recommends](#) men consume 1.6 grams of ALA daily and 1.1 grams per day for women. Individuals who are pregnant or breastfeeding need more.

ALA is found in walnuts and some plant oils, such as flaxseed, soybean and canola. EPA and DHA are high in oysters and fatty fish such as salmon, sardines, mackerel, herring, lake trout and albacore tuna. The American Heart Association [recommends eating two servings of fish](#), particularly fatty fish, per week to help reduce heart disease and stroke risk. Two servings equal 6 ounces cooked.

People should ideally get their nutrients from food. But [dietary supplements](#), such as fish oil, are another way people can consume these healthy fats, especially if they don't eat fish. An [AHA science advisory in 2017](#) said omega-3 fish oil supplements may slightly lower the risk of dying after heart failure or a recent heart attack, but they do not prevent heart disease.

The AHA [issued a separate science advisory](#) in 2019 saying 4 grams per day of prescription fish oil supplements were a safe and effective way to lower triglycerides, the most common type of fat in the body, in people with elevated levels. The same advisory warned consumers not to take unregulated supplements.

And a [2022 analysis](#) published in the *Journal of the American Heart Association* found consuming 3 grams each day of EPA and DHA, in food or supplement form, may be the ideal dose to help [lower blood pressure](#). About 4 to 5 ounces of Atlantic salmon provides 3 grams of omega-3 fatty acids. Fish oil supplement doses can vary but typically provide about 0.3 gram per pill.

A new analysis, published in June in the *Journal of the American Heart Association*, found taking more than 2 grams per day of DHA and EPA combined in supplement form may lower triglycerides and non-HDL cholesterol, but not LDL cholesterol. Non-HDL level is someone's total cholesterol minus their HDL, the "good" cholesterol that helps the body get rid of some of the harmful LDL.

"People with high levels of LDL cholesterol need to seek alternative medications, such as statins, to reduce the blood level of LDL cholesterol," said the study's senior author, Dr. Xinzhi Li, a pharmacy professor at Macau University of Science and Technology in China.

Omega-3 supplements may be especially beneficial for people who are overweight or have obesity, the new findings show.

Because U.S. adults typically don't get the recommended daily amount of omega-3 fatty acids, "any amount of supplement has the potential to help, even if it doesn't lower triglycerides," said Skulas-Ray, who was the lead author on the AHA's 2019 advisory.

"For the average person, taking dietary supplements is really correcting the nearly absent EPA and DHA in the American diet," she said.

"Dietary [supplements](#) are a completely viable option for people who don't eat oily fish." People should first talk to a health care professional before starting a new supplement.

Low doses may be less likely to lower triglycerides, she said, "but they're still worth taking because people aren't getting enough. They help to support optimal immune function, wellness and aging. And that's really the goal."

More information: Tianjiao Wang et al, Association Between Omega-3 Fatty Acid Intake and Dyslipidemia: A Continuous Dose–Response Meta-Analysis of Randomized Controlled Trials, *Journal of the American Heart Association* (2023). [DOI: 10.1161/JAHA.123.029512](#)

Provided by American Heart Association

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