

# Choosing an Omega-3 Supplement

The good news is that hundreds of scientific studies provide evidence-based support for omega-3 supplementation in a variety of health conditions. Still, choosing an omega-3 supplement can be challenging—doses and prices vary widely. It's important to choose a supplement that is **free of heavy metal contaminants** and provides the right kinds and amounts of omega-3 fatty acids. Look for the **bioactive ingredients—EPA and DHA**—these are the key omega-3 fatty acids found in fish. Many experts recommend getting **at least 650 milligrams/day of these key omega-3 fats**. Be sure to store in the refrigerator, or a cool/dark place, take with your dinner or at bedtime, and DON'T take with soda or coffee.

## Q. What's the difference between the different types of omega-3 fats? And how much do you need?

A. There are three key omega-3 fats—EPA and DHA (primarily found in fish) and ALA (primarily found in plant foods such as flax meal or canola oil).

When you hear news studies touting the health benefits of omega-3 fats, they are usually referring to EPA and DHA. These potent omega-3s are bioactive and regulate mood, inflammation, heart rate, blood flow, and effect learning, just to name a few benefits. By contrast, ALA is a building block that helps create EPA and DHA in the body, but only when the conditions are right, and even then it's a very inefficient process. In terms of power and potency, if EPA and DHA were considered to be the biological equivalent of a car battery for your body, then ALA would be the equivalent of a flashlight battery.

International guidelines published by the International Society for the Study of Fatty Acids and Lipids, (ISSFAL) recommend a minimum adult intake of 650 milligrams of the type of omega-3s found in fish (EPA and DHA). Out of the 650 milligrams, there should be at least 220 milligrams from EPA and 220 milligrams from DHA. To put this into perspective, 6-ounces of cooked salmon provides 1800 milligrams of EPA and DHA, combined.

## Q. How much fish oil for various health conditions?

A. Unfortunately, Americans only eat an average of 57 milligrams of DHA and 28 milligrams of EPA. Together that is only 85 milligrams of the needed 650 milligrams, so most Americans are deficient in EPA and DHA! But, you can get the essential omega-3s by eating fish at least twice a week. As for the plant-based omega-3, ALA, the recommended amount is 2200 milligrams/day—the amount in almost one ounce of walnuts.

The chart below lists the amount of omega-3 fats recommended for different conditions. Remember to always check with your physician before taking fish oil, especially in amounts exceeding 3000 milligrams (the level deemed *Generally Recognized as Safe* by the FDA).

**“Official” Recommendations by Scientific Organizations** (These fish oil recommendations are issued by scientific organizations, based on expert review committees).

Condition	EPA + DHA	Organization	Source
Elevated Triglycerides	2000-4000mg/day	Am. Heart Association	Kris-Etherton et al: Fish consumption, fish oil, omega-3 fatty acids and cardiovascular disease. Circulation. 2002
Heart Disease	1000 mg/day	Am. Heart Association	Kris-Etherton. Circulation. 2002
Patients w/ Mood, Impulse-Control or Psychotic Disorders.	1000mg/day	Am. Psychiatric Assoc.	Freeman MP et al: Omega-3 fatty acids: evidence basis for treatment and future research in psychiatry. J Clin Psych 2006
Mood Disorders	1000-3000mg/day	Am. Psychiatric Assoc.	Parker G et al: Omega 3 fatty acids & mood disorders. Am Jnl Psych 2006

**Q. I am vegan, (which means I don't eat any fish, dairy, eggs, meats or poultry). I keep hearing how omega-3s are important for health. What are good sources of omega-3?**

**A.** There are many different types of omega-3 fatty acids with different functions (just like there are many different B-vitamins that have different actions in the body). The plant-based omega-3, ALA, is rather easy to get in the diet (flax meal, flax oil, walnuts, green leafy vegetables). As previously mentioned, the marine-based omega-3 fatty acids, EPA and DHA, are the key omega-3s associated with health benefits ranging from mood, inflammation and heart disease. International guidelines recommend getting an average of 650 milligrams, daily, of a combination of EPA + DHA.

While ALA can technically be converted to EPA in the body, it's very inefficient—so you can't rely on it to meet all of your omega-3 needs. [1]. For example, if you eat 1000 milligrams of ALA, it will only make about 27 milligrams of EPA. This means it's important to get direct sources of *both* EPA and DHA, which for vegans means an algae-based supplement. There are many excellent brands of vegan DHA, but only one brand that contains both EPA and DHA:

**V-Pure** is one of the few brands that contain vegan/algae EPA. Two caps provide:  
Eicosapentaenoic Acid (EPA) – 50 milligrams and Docosahexaenoic Acid (DHA) – 350 milligrams

**For vegans: steer clear from supplements that add Omega-6 and/or Omega-9 fats. Too many omega-6 fats interfere with the benefits of omega-3 fats.** The typical western diet, (including vegetarian diets) are already high in omega-6s—found in vegetable oils, especially soybean oil, cottonseed oil and corn oil. There's nothing wrong with omega-9 fats—it's just an unnecessary expense. Olive oil is high in omega-9 fatty acids.

**Q. How do I Reduce Omega-6 Fats?**

**A.** Omega-6 fat is abundant in many processed foods, fast foods, nuts, seeds, oils, salad dressings and margarine. Soybean Oil, high in Omega-6 is the greatest contributor in the American diet. To reduce your consumption of Omega-6 use Canola oil and Olive oil. Flaxseed oil is low in omega-6 fats—try as avinaigrette.

**Q. What is Krill oil—and is it better than fish oil for omega-3 fats?**

**A.** There's no clear advantage of taking krill oil over other fish oil supplements. The vast health benefits of fish oil, specifically its bioactive components, EPA and DHA, have been documented in studies using: fish oil, EPA concentrates, DHA concentrates, and not to mention, eating fish itself. In addition, most fish oil is produced from sardines and anchovies, which are in abundant supply. Krill however, are a critical link in the marine food chain and is becoming endangered. While there is no direct physical harm to humans from taking krill supplements, it is best to choose a supplement that provides the right kinds of omega-3 and in the right amount.

#### **Other References:**

[1] Brenna JT. et al: Alpha-Linolenic acid supplementation and conversion to n-3 long-chain polyunsaturated fatty acids in humans. *Prostaglandins, Leukotrienes and Essential Fatty Acids* 2009

Covington M: Omega 3 Fatty Acids. *American Family Physician* 2004

Logan AC: Omega 3 fatty acids and depression: a primer for the mental health professional. *Lipids in Health and Disease*. 2004

[www.EvelynTribole.com](http://www.EvelynTribole.com), Nutrition Info 411: Solutions for Your Health by Evelyn Tribole, MS, RD.

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