

NUTRITION NEWSLETTER

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What is Omega-6 fat and what foods will I find it in?

Omega-6 (along with omega-3) belongs to a family of fats called essential fatty acids. These EFAs are found in polyunsaturated fats.

Omega 6 - Linoleic Acid (LA) - is the essential fatty acid in ample supply. According to experts, our current consumption of this fatty acid has doubled from what it was in 1940. Excess intake of omega 6 can cause increased water retention, raised blood pressure and raised blood clotting. It is important to know that it is usually not necessary to supplement the diet with Omega 6 as we get enough in our diet.

For example, Sodium from salt is also essential (in other words, we have to get it through the diet as we do not manufacture it), but we do not usually supplement our diet with it as we get enough naturally in our diets.

By comparison, our intake of omega 3 fatty acids has shrunk to one sixth of 1850 levels.

We should **REDUCE** our consumption of omega-6 fatty acids and **INCREASE** our consumption of **omega-3 fatty acids**.

Food Sources of Omega-6 Essential Fatty Acids

Include:

- Safflower oil - the richest natural source
- Sunflower oil
- Corn oil
- Sesame oil
- Hemp oil (best balance of omega 6:3)
- Pumpkin oil
- Soybean oil
- Walnut oil
- Wheatgerm oil
- Evening Primrose oil

Omega 6:3 Balance

Omega 6 and Omega 3 essential fatty acids are best consumed in a ratio of about 3:1 - three omega 6 for one omega 3.

Most Western diets range between 10 and 20 to 1 in favor of omega 6, which is not good for health. We eat too much omega 6 fat and not enough omega 3 fat.

Essential Fatty Acids - Spoilage

Essential fatty acids turn rancid and go off very quickly. They should be kept away from light, heat and air - they last up to a week or so in the fridge once opened. Also, they are destroyed by commercial processing, so always buy FRESH COLD PRESSED. Finally, pesticides often gather in fats and oils, so buy ORGANIC whenever possible.

The Power of Fish: Omega 3 Fatty Acids

Early Arctic explorers noted that the Eskimos, despite their consumption of high fat and high cholesterol foods, had a very low incidence of heart disease. Scientists and physicians were stumped at this and considered it a paradox; until, that is, they looked at their diets. What they found has changed the way nutrition and health care professionals prevent and treat heart disease today. **The Eskimo's diets were rich in omega-3 fatty acids.**

What are omega-3 fatty acids?

Omega-3 fatty acids, found in fish, are called essential fatty acids because the human body needs them to survive. Two kinds of omega-3 fatty acids are found in fish, including eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA).

The body cannot produce omega-3 fatty acids on its own, so they must be consumed in the diet. The role of omega-3 fatty acids in the prevention of cardiovascular disease has been extensively studied.

How are omega-3 fatty acids beneficial?

Here's how omega-3 fatty acids may protect you from cardiovascular disease:

- **Reduces blood clot formation.** Omega-3 fatty acids act as a natural anticoagulant by altering the ability of platelets in your blood to clump together.
- **Inhibits the growth of plaque.** Omega-3 fatty acids help keep the lining of the arteries smooth and clear of damage that can lead to the thickening and hardening of the arteries.
- **Decreases triglycerides and very low-density lipoprotein (VLDL).** High triglyceride values and VLDL cholesterol are associated with increased risk for heart disease. Omega-3 fatty acids decrease the rate at which these two substances are produced in the liver.
- **May increase levels of the good cholesterol, high-density lipoprotein (HDL).** Because omega-3 fatty acids lower triglyceride levels, they may also increase HDL, the "good" cholesterol that protects against the development of heart disease.

- **Have anti-inflammatory properties.** The development of atherosclerosis (hardening of the arteries) is thought to involve your body's inflammatory response. Omega-3 fatty acids reduce the production of substances that are released during the inflammatory response and in doing so, prevent substances from accumulating and sticking to the lining of the arteries.
- **May lower blood pressure.** Several studies have examined the effect of omega-3 fatty acids on blood pressure. Those who eat fish tend to have lower incidence of high blood pressure.

Cold water varieties of fish like mackerel, tuna, salmon, sardines and herring contain high amounts of omega-3 fatty acids.

What if I don't like fish, have an allergy to fish, or am vegetarian?

There are some plant sources that contain a precursor to omega-3 fatty acids in the body, called alpha-linolenic acid (ALA). However, alpha-linolenic acid is not converted to omega-3 fats as efficiently in the human body as fish sources of omega-3.

Good plant sources of ALA are flaxseeds, flax oil, canola oil, walnuts, soybean oil and tofu. Currently, there are no established serving size recommendations, but focus on adding these foods to your diet regularly, as they provide additional heart-health benefits. For example, some health professionals recommend adding 2 tablespoons of ground or milled flaxseed to your diet each day because it's also a good source of fiber and cancer-fighting lignin.

How much omega-3 is recommended?

The American Heart Association recommends that patients without documented coronary heart disease eat a variety of fatty fish (see list below) and aim for **2 servings per week**.

If you have heart disease, your health care professional may recommend you increase your food sources of omega-3 to reach a daily goal of one gram of EPA +DHA. If this amount is too difficult to achieve from diet alone, your health care provider may suggest taking a fish oil supplement.

If you have high triglyceride levels (including those who are taking triglyceride-lowering medications), your health care provider may also recommend you increase food sources of omega-3. If these strategies are not effective, your provider may tell you to incorporate fish oil supplements into your diet. To effectively lower triglycerides, 2-4 grams of EPA+DHA are recommended daily. However, anyone who takes more than 3 grams of omega-3 fatty acids from supplements should be under a physician's care. A high intake of omega-3 fatty acids could cause bleeding in some people.

Amount of Omega-3 Fatty Acids in Selected Fish and Seafood

Fish	Serving Size	Amount of Omega-3 Fat
Atlantic Salmon or Herring	90g cooked	1.9 grams
Blue Fin Tuna	90g cooked	1.5 grams
Sardines, canned	100g. in tomato sauce	1.5 grams
Anchovies, canned	60g drained	1.2 grams
Atlantic Mackerel	100g cooked	1.15 grams
Salmon, canned	100g drained	1.0 gram
Swordfish	100g cooked	0.9. gram
Sea Bass (mixed species)	100g cooked	0.65 gram
Tuna, white meat canned	100g drained	0.5 gram
Sole, Flounder, Mussels	100g cooked	0.4 gram
Wild Catfish, crabmeat, clams	100g cooked/steamed	0.3 gram
Prawns (jumbo shrimp)	6 pieces	0.15 gram
Atlantic Cod, Lobster	100g cooked/steamed	0.15 gram
Trout, Orange roughy	100g cooked	<0.1 gram

Fish Oil Supplements

To determine how many grams of omega-3 fats are in a capsule, look for the words "EPA" and "DHA" on the supplement label. Adding up the number of grams or milligrams (mg) of EPA and DHA will tell you how much omega-3 fat is in each capsule. For example, a 1 g capsule may contain 250 mg EPA and 250 mg DHA, which adds up to 500 mg or 0.5 g of omega-3 fat. Choose supplements that contain the largest amount of EPA and DHA per capsule

FOR ADVICE ON SUPPLEMENTS CALL

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