

# Fish Oil Supplements

*Expertise in Matters of the Heart*

## Omega-3 fatty acids

Omega-3 fatty acids are an essential nutrient for the body and include two long chain fatty acids: eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) which are animal (fatty fish and omega-3 fortified eggs) sources of omega-3. Plant sources of omega-3 found in flaxseed, green leafy vegetables, canola oil, walnuts and walnut oil, soybeans and soybean oil are referred to as alpha-linolenic acid (ALA). Omega-3 fatty acids protect against heart disease in a variety of ways:

- Omega-3 fats make platelets (important clotting factors in the blood) less sticky. The blood is therefore more fluid, less likely to clot inappropriately inside the body.
- Omega-3 appears to lower blood fat levels, thus decreasing the likelihood of atherosclerosis, the buildup of fatty deposits in the arteries.
- Lowers triglycerides by interfering with how triglycerides are produced in the liver.
- Relaxes blood vessels to help improve blood pressure.
- Reduces the risk for sudden death caused by dangerous cardiac arrhythmias.

## RECOMMENDATIONS

Population	Recommendation
Patients without documented coronary heart disease (CHD)	Eat a variety of (preferably fatty like salmon or tuna) fish at least twice a week. Include oils and foods rich in alpha-linolenic acid (flaxseed oil, canola oil, soybean oil, walnuts, flaxseed).
Patients with documented CHD	Consume about 1 gram of EPA+DHA per day, preferably from fatty fish. EPA+DHA in capsule form could be considered in consultation with the physician.
Patients who need to lower triglycerides	2-4 grams of EPA+DHA per day provided as capsules under a physician's care.

Source: American Heart Association Nutrition Committee. Diet and Lifestyle Recommendations Revision 2006. Circulation. 2006;114:82-96.

## Caution

- Patients taking more than 3 grams of omega-3 from supplements should do so only under a physician's care. High intakes may cause excessive bleeding in some people.
- Consult your physician about possible interactions with fish oil supplements and herb supplements or medications especially blood thinners such as Coumadin or Plavix.
- Fish oil supplements are recommended instead of flax oil supplements as fish oil omega-3 is more cardio-protective gram per gram than flax oil. Current studies suggest you would have to take up to 7 grams of flax oil to get the same effect as 1 gram EPA+DHA fish oil.
- Supplements that contain omega-6 and omega-9 have no proven health benefits. Choosing fish oil supplements that primarily contain omega-3 fats provide the desired heart healthy benefits.

## Note on Methyl Mercury and PCP's

Several recent studies by both ConsumerLab.com and Consumer Reports found no detectable levels of polychlorinated biphenyls (PCBs), dioxins or heavy metals such as mercury in the brands they tested.

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### Suggestions to prevent an upset stomach

- Divide the fish oil supplement dose throughout the day.
- Take fish oil supplements with a meal or within an hour of eating.
- Take the supplements in the evening with a meal or at night with a snack.
- Store supplements in the refrigerator. Fish oil supplements are often better tolerated when they are chilled.

### Choosing an Omega-3 supplement

- The amount of EPA+DHA the supplement contains per dose is the most important thing to look for on the bottle. There are often other ingredients in each soft gel (such as vitamin E as a preservative), so size (mg) of the pill or dose does not imply that the entire pill or dose is EPA+DHA. The amount of EPA+DHA per dose can generally be found on a nutrition facts label on the back of the pill bottle or package.
- To get the best value for your supplement dollar, compare several brands to see how many pills or doses you will have to take to attain your recommended amount of EPA+DHA.
- We have put together a chart below to give you a few examples if your doctor recommends you get 2000mg omega-3 per day.

Brand	EPA+ DHA (mg) per dose on bottle	Recommended dose on bottle	Recommended dose to get ~2000mg EPA+DHA per day
Nordic Naturals Liquid	1375	1 teaspoon	1.5 teaspoons
Nordic Naturals Ultimate	1100	2 soft gels	4 soft gels
Spring Valley Fish Oil	880	2 soft gels	5 soft gels
Lovaza	840	1 soft gel	2 soft gels
Bumble Bee enteric coated	720	2 soft gels	6 soft gels
Nature Made Fish Oil	720	2 soft gels	6 soft gels
Spectrum	600	2 soft gels	7 soft gels
Natural Factors Rx Omega	600	1 soft gel	3 soft gels
Coromega-flavored gel	580	1 gel packet	3 gel packets
Carlson Fish Oil	500	1 soft gel	4 soft gels
Blue Bonnet	100mg DHA	1 soft gel	10 soft gels
Whole Foods Neuromins	100mg DHA	1 soft gel	10 soft gels
Solaray Neuromins	100mg DHA	1 soft gel	10 soft gels
Nature's Way efa Gold	100mg DHA	1 soft gel	10 soft gels

There are many brands of omega-3 supplements available on the market; the ones listed above are just a few. Doses or formulas may change without notice, so always be sure to check the labels of the brand you purchase to be sure you are getting consistent dosing of omega-3.

If your supplement has the USP symbol on it, you can be assured that the amounts of omega-3 listed of the bottle are correct as that supplement has been independently tested by the US Pharmacopeia, an independent lab which tests the potency and ingredients of supplements.



For more information call (970) 221-1000, (800) 459-4241, or visit [www.heartcenteroftherockies.com](http://www.heartcenteroftherockies.com)