

Omega-3 Fats for Heart Health

What are omega-3 fats?

Omega-3 fats are healthy fats. It's important to get them from food because our bodies can't make them.

The 3 main types of omega-3 fats are:

- eicosapentaenoic acid (EPA)
- docosahexaenoic acid (DHA)
- alpha-linolenic acid (ALA)

Why are omega-3 fats important?

EPA and DHA

EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) have many health benefits:

- For your heart:
 - lower your risk for heart disease
 - reduce blood pressure
 - help keep blood vessels (arteries) from becoming stiff
 - help prevent blood clots
 - help lower triglycerides (fats in your blood)
- For general good health:
 - reduce inflammation
 - important for brain and eye development in infants and during pregnancy

More studies are needed to know how omega-3 fats might help rheumatoid arthritis, mental health, or other diseases.

ALA

Foods higher in ALA (alpha-linolenic acid) are a source of healthy fat. However, they don't improve your heart health as much as foods with EPA and DHA.

ALA is changed to EPA and DHA in our bodies, but this happens in very small amounts.

How much omega-3 do I need?

All healthy adults, adults at risk for heart disease, and adults with heart disease need the amounts below:

	Every day	Every week
EPA and DHA	200–500 mg	1400–3500 mg
ALA	1100–1600 mg	8000–11000 mg

Where can I get omega-3 fats?

The best way to get omega-3 fats is from food.

EPA and DHA:

All fish have some EPA and DHA, but fatty fish are the best sources:



- Arctic char
- herring
- mackerel
- salmon
- sardines
- trout

Vegetable sources of EPA and DHA: kelp and seaweed (wakame)



ALA

ALA is found in plant foods:

- Nuts: walnuts
- Seeds: flax, chia, hemp
- Oils: canola, soybean, walnut, flaxseed
- Other: soybean products

Some foods may be fortified with EPA, DHA, or ALA: eggs, milk, yogurt, margarine, and juice.



Check the Nutrition Facts table on the package to find out how much omega-3 fat is in 1 serving of the product. Omega-3 amounts on the Nutrition Facts table are in grams: 1 gram = 1000 mg.

Increase omega-3 fats in your diet

The best way to increase omega-3 fats in your diet is to choose fish more often.

Eat at least two 3½ ounce (100 gram) servings of fish each week. Choose fatty fish from the *Food sources* table on this page.



If you don't eat fish, you can get some EPA and DHA from eating kelp and seaweed (wakame).

You can get ALA from the nuts, oils, and soy products in the chart. Foods higher in ALA are sources of healthy fat, but they don't lower your heart disease risk as much as fatty fish.



Omega-3 fats are healthy fats and, like other fats, are high in calories. You may need to adjust your serving sizes of other food to prevent weight gain. Use the serving sizes in the *Food sources of omega-3 fats* table.

Food sources of omega-3 fats

	EPA/DHA (mg)	ALA (mg)
Fish (3½ ounces, 100 g, cooked)		
Salmon, farmed	1713	95
Herring, pickled	1389	0
Salmon, canned	1340	74
Mackerel	1175	79
Salmon, wild	1059	55
Trout	1026	156
Sardine, canned in oil	982	498
Arctic char	900	100
Mussels	782	40
Sole	501	16
Halibut	465	83
Shrimp	315	12
Tuna, light, canned in water	270	0
Cod	217	1
Imitation crab (surimi)	22	7
Nuts (¼ cup, 30–40 g)		
Walnuts	0	2760
Pecans	0	277
Seeds (1 Tbsp, 15 g)		
Flaxseed, ground	0	2464
Chia	0	1896
Hemp	0	870
Oils (1 Tbsp, 15 g)		
Flaxseed oil	0	7742
Walnut oil	0	1434
Canola oil	0	1296
Margarine, non-hydrogenated	0	732
Avocado oil	0	136
Soy products (meat alternatives)		
Tofu, raw, ½ cup (133 g)	0	480
Meatless fish, 3½ oz (100 g)	32	170
Soybeans, dry roasted, ¼ cup (29 g)	0	420
Meatless ground round, 55 g (⅓ cup/75 mL)	0	410
Edamame (soybean), ½ cup (95 g)	0	337
Other sources		
Seaweed (wakame), raw (½ cup/125 mL)	79	1
Omega-3 eggs, 2 (53 grams each)	150–500	500–540

1000 mg = 1 gram

What about omega-3 supplements?

The best way to get omega-3 fats is from food. Some people may have trouble meeting their EPA and DHA needs from fish and fortified foods.

Talk to your dietitian, doctor, or pharmacist before starting an omega-3 supplement.

Your doctor or dietitian may suggest you take more EPA and DHA if you have high triglycerides. Some people with high triglycerides may be asked to take 2000–4000 mg (2–4 grams) a day.

Tips about omega-3 supplements:

- Choose supplements with EPA and DHA, not ALA.
- Look for a Drug Identification Number (DIN) or a Natural Product Number (NPN) on the bottle. These numbers tell you that Health Canada has reviewed and approved the product.
- Fish oil supplements rarely contain mercury.
- If you're allergic to fish or shellfish, or don't eat them for other reasons, look for kelp- or seaweed-based supplements with EPA and DHA. Avoid supplements made with fish oil or krill oil. Read the ingredient list on the package.
- **Omega-3-6-9 supplements are not better than omega-3 supplements.** No health benefits have been shown from taking supplements with omega-6 and omega-9 fats.

If your fish oil supplements have a “fishy” aftertaste, try:

- storing them in the freezer and taking them when they're frozen
- using a supplement with a special coating (enteric coating). Look for the word *enteric* on the label
- taking the supplement with a meal

How much EPA and DHA do supplements really have?

Below is an example of a fish oil supplement with EPA and DHA omega-3 fats.

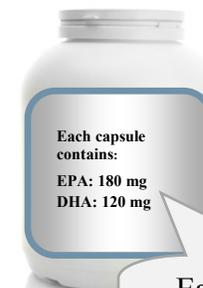
Front of the bottle



The *1000 mg* (1 g) on the front of the label doesn't mean there's 1000 mg of EPA and DHA in each capsule. Most supplements have a mix of EPA, DHA, and other fats. 1000 mg is the total of all the fats in each capsule.

On a supplement bottle,
1000 mg = 1 gram

Back of the bottle



Look at the back of the label to find how much EPA and DHA are actually in each capsule.

Each capsule contains:
EPA: 180 mg
DHA: 120 mg

Add the EPA and DHA together:

180 mg (0.18 grams) EPA
+ 120 mg (0.12 grams) DHA
= 300 mg (0.3 grams) total EPA and DHA in each capsule

Cautions:

- Supplements with fish liver oil (such as cod liver oil) may have high amounts of vitamin A and D. These vitamins can build up in your body and become toxic for some people. If you're pregnant, don't take omega-3 supplements that have vitamin A.
- People who take blood thinners (such as warfarin) should talk to their doctor before taking omega-3 supplements.

