

Omega-3 fatty acids

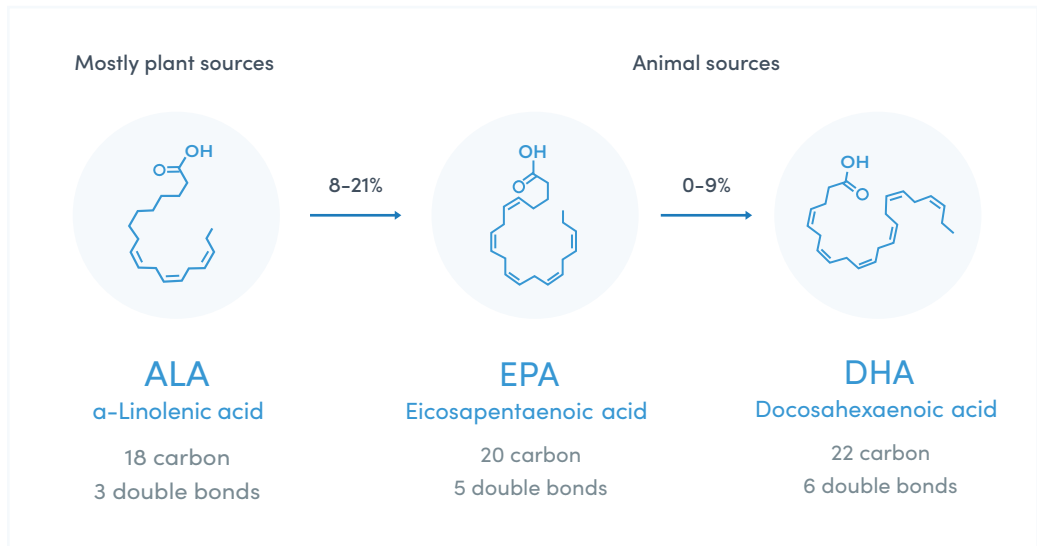


What are they?

Commonly referred to as omega-3s or essential fatty acids, omega-3 fatty acids are polyunsaturated fatty acids (PUFAs) consisting of long carbon chains with two or more double bonds. They are known as essential fatty acids because they are a required component of every diet and are necessary to maintain human health.

There are three key omega-3 fats, which include alpha-linolenic acid (ALA), docosahexaenoic acid (DHA), and eicosapentaenoic acid (EPA). ALA, typically derived from plant sources, is converted to DHA and EPA in the body. However, this conversion is limited, making it important to consume DHA and EPA from other sources. Omega-3 fatty acids support the health of many key body functions including cardiovascular, immune, brain, and more.

Conversion rate of ALA to EPA and DHA



Omega-3 vs. omega-6 fatty acids

Similarly to omega-3s, omega-6 fatty acids are essential polyunsaturated fats. However, when consumed in excess, omega-6s may contribute to health complications. Diets high in omega-6 and low in omega-3 fatty acids are associated with chronic inflammation and an increased risk of certain chronic diseases, including cardiovascular disease and cancer.

To reduce omega-6 fatty acid intake, minimize consumption of certain oils, including corn, grapeseed, safflower, sesame, and sunflower oil. Focus on foods with a low omega-6 to omega-3 fatty acid ratio, preferably 4:1 or below. Fatty fish are among the best sources of omega-3 fatty acids, however, certain plant-based foods, including flax seed, hemp seeds, and leafy greens, also offer higher amounts of omega-3s.

Common applications and benefits of omega-3s

- Cardiometabolic health
- Cognitive function and cognitive decline prevention
- Inflammation and pain disorders
- Liver health
- Neurological health
- Prenatal and infant/child health and development
- Psychological health
- Renal health

Adequate intakes for omega-3 fatty acids

Adequate intake (AI) recommendations for omega-3 fatty acids are provided by the National Academy of Medicine and outline the recommended daily nutrient intake level based on experimentally gathered data and average intakes among different populations of healthy individuals.

Age	Male	Female
0-1 years	0.5 g	0.5 g
1-3 years	0.7 g	0.7 g
4-8 years	0.9 g	0.9 g
9-13 years	1.2 g	1.0 g
14+ years	1.6 g	1.1 g

Dietary sources of omega-3s

 Grass-fed beef 0.04 g of ALA/3 oz	 Kidney beans 0.10 g of ALA/1/2 cup	 Edamame 0.28 g of ALA/1/2 cup	 Walnuts 2.57 g of ALA/oz	 Flaxseeds 2.35 g of ALA/tbsp
 Flaxseed oil 7.26 g of ALA/tbsp	 Oysters 0.14 g of ALA/3 oz 0.23 g of DHA/3 oz 0.30 g of EPA/3 oz	 Wild-caught trout 0.44 g of DHA/3 oz 0.40 g of EPA/3 oz	 Herring 0.94 g of DHA/3 oz 0.77 g of EPA/3 oz	 Wild-caught salmon 1.22 g of DHA/3 oz 0.35 g of EPA/3 oz

 Vegetarian and vegan-friendly

Omega-3 supplements

Increasing your intake by consuming foods rich in omega-3s is ideal. However, omega-3 fatty acids can also be consumed in supplement form. Omega-3 supplements are commonly produced from various seafood sources and vegetarian-suitable algae.



Algal oil



Krill oil



Fish oil



Cod liver oil

When selecting an omega-3 supplement, search for brands that have been third-party certified for quality and safety. Consult your integrative healthcare provider regarding dosing and to determine whether omega-3 supplements are right for you.



National Sanitation
Foundation



United States
Pharmacopeia



International Fish
Oil Standards

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