Nature Made®

Omega-3s

Help support a healthy heart with omega-3s†

WHAT ARE OMEGA-3 FATTY ACIDS?

Omega-3 fatty acids are a sub-category of polyunsaturated fats that exist under the larger umbrella of dietary fats.[1] Although sometimes the term "fat" is discussed within a negative context, omega-3 fatty acids are recognized as healthy fats that should be included in the diet. From a nutritional and overall health perspective, collective research to date has demonstrated key support roles in the body for three omega-3 fatty acids: eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA) and alpha-linolenic acid (ALA).

EPA and DHA are long-chain omega-3 polyunsaturated fatty acids that are mainly supplied to the diet from marine-based sources such as salmon, tuna and sardines; these fish incorporate EPA and DHA into their fatty tissue by consuming algae. In contrast, ALA is an omega-3 polyunsaturated fatty acid that can be found in certain plant and plant oil sources like flaxseeds, walnuts, and olive oil. ALA is considered an "essential" fatty acid because it cannot be synthesized in the body and must be obtained through the diet.[1] Although ALA can be converted to EPA and DHA, this conversion process is very inefficient, so ALA should not be considered a substitute to EPA and DHA consumption. Regularly consuming foods rich in EPA, DHA and ALA and/or taking fish oil and flaxseed oil supplements to help fill dietary gaps[2] are important health practices.

WHY DO I NEED OMEGA-3 FATTY ACIDS?

Omega-3s are incorporated into all cell membranes in the body, providing support for their structural integrity and fluidity, which is necessary for effective cellular function and communication.† These healthy fats are lacking in the average American diet.[2] Most people do not consume the recommended 1–2 servings per week of oily fish[3] (e.g. salmon, tuna, halibut, mackerel, sardines). National survey data shows that the average American consumes 86 mg/day of EPA + DHA, which is only 17% of the 500 mg/day recommended amount for healthy adults (equivalent to 2 servings of oily fish per week).[2–3] ALA, found in plant-based sources (e.g. flaxseeds and flaxseed oil, chia seeds, walnuts, canola oil, soybean oil)[4] is more widespread in the American diet. Omega-6 fatty acids— found in safflower oil, corn oil, and other vegetable oils commonly used in cooking—are consumed in abundance. In fact, this imbalanced intake ratio of omega-6s to omega-3s may be as high as 10:1 for some and is associated with inflammation processes.[5]

HOW DO WE KNOW OMEGA-3S ARE IMPORTANT FOR OUR HEALTH?

To date, the weight of the totality of research evidence supports the important roles of EPA and DHA from fish and fish oil for cardiovascular health.[6-7†] In fact, the research literature demonstrating the link between omega-3s and heart health support is so abundant that the FDA approved a qualified health claim, which states that "supportive but not conclusive research shows that consumption of EPA and DHA omega-3 fatty acids may reduce the risk of coronary heart disease."[8] While the role these omega-3s play in heart health is by far the most extensively studied, DHA has also been shown to be essential for perinatal health (pregnancy, lactation and infancy), as DHA is involved in normal eye and brain development.[9†] Ongoing research is also investigating non-traditional roles of omega-3s in skin, joint, cognitive and eye health.

HOW MUCH OMEGA-3 FATTY ACIDS DO I NEED?

Currently, an Institute of Medicine (IOM) Dietary Reference Intake (DRI) exists for ALA (1.6 grams/day for males; 1.1 grams per day for females),[1] and the development of DRIs for EPA and DHA is under discussion and may be issued in the near future.[10] To provide guidance for consumers and healthcare practitioners, experts have spent time vetting decades of fish and fish oil research in order to create intake guidelines for EPA and DHA. As a result, national and international guidelines have converged on the following evidence-based recommendations:[3,7,11–13]

- 250–500 mg/day of EPA + DHA for the general adult population
- 1,000 mg/day or more of EPA + DHA for individuals with heart health concerns

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Greater fish oil amounts, up to 4 grams/day of EPA + DHA,[6–7] are often recommended for individuals with high triglycerides in conjunction with input from their healthcare professional. All patients are encouraged to consult their primary healthcare professional regarding proper dosing. Since these recommendations are set for EPA + DHA, it is important to read the Supplement Facts panel to ensure the patient is receiving the appropriate level of omega-3s for their individual regimen.

OMEGA-3 SUPPLEMENTS: KNOW THE DIFFERENCES

FISH OIL:

Fish Oil is a source of EPA and DHA omega-3s. Fish oil formulas are available in a variety of strengths and sizes. It can be enteric-coated to reduce a fishy flavor or aftertaste ("fish burp") that some people experience. Anchovies, sardines and mackerel are among the most common sources used for fish oil. Fish oil goes through a rigorous purification process to reduce the levels of contaminants, which may be present in the fish themselves, to negligible levels.

KRILL OIL

Krill Oil, extracted from the small crustacean, is also a source of EPA and DHA, although at significantly lower levels than fish oil. At best, on a gram per gram basis, krill oil will have 67% the content of EPA and DHA compared to fish oil due to it being in the phospholipid, rather than the triglyceride, form.[14-15] This makes achieving the recommended 250-1,000 mg/day of EPA + DHA[3] very challenging from krill oil alone. Additionally, krill oil contains a small amount of the carotenoid astaxanthin and is recognized for having no fishy aftertaste or odor.

ALGAL OIL:

Also known for having no fishy aftertaste or odor, algal oil, made from algae, is one of nature's original sources of DHA and EPA. Unlike other sources of DHA and EPA, algal oil is a fish-free source of omega-3s, making it a wonderful option for vegetarians, vegans and those who avoid fish in their diet.

FLAXSEED OIL:

Flaxseed Oil is a plant-based source of the omega-3 fatty acid ALA, and is especially convenient for people who avoid fish and shellfish in their regular diet.

TRIGLYCERIDE VS. ETHYL ESTER FISH OIL

Fish oil supplements are available in either the triglyceride or the ethyl ester form, depending on the molecular structure of the oil. Fish oil in the triglyceride form is the form found in nature and is composed of three fatty acids bonded to a glycerol backbone. Ethyl ester fish oil, in which the glycerol backbone is chemically removed in order to concentrate the fatty acids, allows for the inclusion of higher amounts of EPA + DHA in a smaller capsule size than the triglyceride form. Along with some fish oil supplements, prescription forms of fish oil also utilize the ethyl ester form. Ethyl ester fish oil products should be consumed with a meal of adequate fat content for optimal absorption.[16–17]

OMEGA-3 SAFETY

Due to the potential, slight blood-thinning effect seen with omega-3 oils at high levels (at omega-3 levels ≥ 3,000 mg/day)[18], omega-3 supplements should be used with caution in individuals who are pregnant or nursing, taking blood-thinning medications, facing surgery, with bleeding problems or undergoing any other treatment which may affect the ability of blood to clot. These individuals should consult their healthcare professional before supplementing.

ABOUT NATURE MADE®

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**Based on 2017 U.S. News & World Report - Pharmacy Times Survey

†These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

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