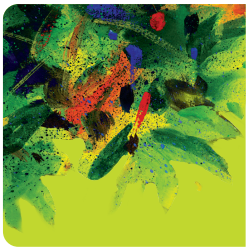

Whole Earth & Sea®

PURE FOOD MARINE DHA

Vegan Omega-3 · 295 mg

NPN 80088341

RESEARCH INFORMATION

Feature summary

The docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) found in fish oil originate in the algae consumed by fish. Whole Earth & Sea Pure Food Marine DHA Vegan Omega-3 provides the benefits of these omega-3 fatty acids in a sustainably harvested, non-GMO formula derived from algae. Extracted from specially selected microalgae that naturally produce pure DHA and EPA, this algae-based source of omega-3 has no fishy smell or aftertaste. It is an excellent vegetarian and vegan alternative to fish oil supplements.

DHA supports healthy eyes, vision, and brain function and is vital for healthy eye and brain development in children. It also promotes cardiovascular health and cognitive function.

While the body can convert some shorter-chain omega-3 essential fatty acids (EFAs) to DHA and EPA, only a small amount is converted. As a result, obtaining these fatty acids through supplementation is often recommended. Marine DHA contains 295 mg of omega-3s per softgel. Unlike plant-sourced omega-3s, algae-sourced omega-3s do not require conversion and are more easily used by the body. Marine DHA Vegan Omega-3 is guaranteed to be free of ocean-born contaminants, including heavy metals, pesticides, and other environmental pollutants.

How it works

Microalgae are a key source of omega-3 EFAs, especially DHA and EPA. Other plant sources, such as flax, chia, and hemp seeds, contain alpha-linolenic acid (ALA), a shorter-chain omega-3, which the body must convert into EPA and DHA – a process that is not very efficient.

DHA and EPA support cognitive health and brain function. They are also transformed into prostaglandins to help regulate heart, digestive, and kidney function, as well as inflammation and hormone production.

DHA makes up over 90% of the omega-3 fatty acids in the brain and 30–40% of the long-chain polyunsaturated fatty acids in the cerebral cortex (Weisser et al., 2016; Tanaka et al., 2012). It is highly concentrated in the cell membranes of the retina and brain, especially the synapses (Tanaka et al., 2012; Bradbury, 2011). It facilitates the healthy structure and function of cells, and affects the regulation of neurotransmitters such as dopamine, serotonin, and norepinephrine (Tanaka et al., 2012).

Research

EPA and DHA are essential for maintaining good health across the lifespan, beginning with proper fetal development through to healthy aging in older adults (Swanson et al., 2012). Algal oil provides a non-fish source of EFAs for people who are vegan or vegetarian, or who prefer not to consume fish products for other reasons, such as sustainability. A randomized pilot study found that the bioavailability of DHA sourced from algal oil was equivalent to fish oil when consumed at a level of 600 mg daily for two weeks. Both oils resulted in similar blood DHA concentrations (Ryan et al., 2015).

DHA is highly concentrated in nerve cells in the brain and retina of the eye. It is an important nutrient for maintaining macular health and good vision. Low intake of DHA and EPA, among other nutrients, is a risk factor for age-related macular degeneration (AMD), one of the leading causes of vision loss. A study found that people at high risk for AMD had a 30% lower rate of progression over a 12-year period if DHA and/or EPA (primarily from fish sources) made up at least 0.11% of their total calories. This was in comparison to participants with low dietary intakes of DHA and/or EPA (SanGiovanni et al., 2009).

Omega-3 fatty acid deficiency is also linked to symptoms of dry eye syndrome, an uncomfortable eye condition aggravated by inflammation. In a placebo-controlled clinical study, dry eye patients were supplemented with a dose of 180 mg of EPA and 120 mg of DHA from fish oil twice daily. After 30 days, patients experienced improvements in tear evaporation and their ability to secrete tears (Kangari et al., 2013).

Low blood levels of DHA are associated with a range of brain conditions, including memory loss and cognitive impairments (Swanson et al., 2012). A randomized, double-blind, placebo-controlled trial evaluated the effect of giving healthy 55–64-year-old Japanese men a long-chain polyunsaturated fatty acid oil supplement containing 300 mg of DHA, 100 mg of EPA, and 120 mg of ARA (arachidonic acid) daily. After four weeks, the men had improved measures of cognitive processing speed and increased levels of DHA in their plasma phospholipids (Tokuda et al., 2015).

DHA is an important omega-3 fatty acid for prenatal brain and eye development. Significant concentrations are incorporated into the fetal brain during the last trimester of prenatal life and the first year of postnatal life. A randomized trial of maternal DHA intake found that supplementation with 400 mg of DHA daily from algal oil while pregnant is positively associated with performance in language and short-term memory tasks during childhood (Mulder et al., 2018).

DHA and EPA support cardiovascular health. Clinical trials using doses of 0.7–3 g of DHA daily demonstrate that algae-based omega-3s offer the same benefits for heart health as typically seen with omega-3s from fish oil (Bernstein et al., 2012). A meta-analysis of clinical studies calculated that consuming an average of 1.7 g of DHA daily from algal oil is associated with a 15% reduction in blood triglycerides, a 5% increase in HDL cholesterol, and an 8% increase in LDL cholesterol (Bernstein et al., 2012). Similarly, an overview of 16 clinical studies found that taking 1–2 g of algal DHA oil daily helped lower blood triglyceride concentrations by up to 26% in participants with or without elevated triglyceride levels (Ryan et al., 2009).

Ingredients

Each softgel contains:

Microalgae *Schizochytrium* oil (*Schizochytrium* spp.) (whole)	750 mg
Providing:	
Omega-3 fatty acids	295 mg
Docosahexaenoic acid (DHA)	288 mg
Eicosapentaenoic acid (EPA)	7 mg

Dosage

Recommended adult dose: 1 softgel daily or as directed by a health care practitioner.

Cautions

Keep out of the reach of children.

References

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