



OMEGAFACTORS® WILD FISH OIL

Supports cognitive and cardiovascular health

FOR HEALTH PROTECTION AND DISEASE PREVENTION

Our current North American diet provides an overabundance of saturated fatty acids and the omega-6 fatty acid, arachidonic acid, which promotes inflammation and contributes to disease. At the same time, our diet is largely deficient in the beneficial essential fatty acids (EFAs).

Particularly important to good health are the long-chain omega-3 EFAs, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), which exhibit numerous beneficial effects. While the body can convert alpha-linolenic acid (ALA – found in high amounts in flaxseed and flaxseed oil) into EPA and DHA, the conversion is often difficult and inefficient, leading to EPA and DHA deficiencies. EPA and DHA are found in high amounts in fish, especially cold-water fish such as anchovy, sardine, mackerel, herring, halibut and salmon. OmegaFactors Wild Fish Oil provides 180 mg of EPA and 120 mg of DHA from molecularly-distilled, ultra-purified fish oil concentrate.

HOW FISH OIL WORKS

The health benefits of EPA and DHA are due to a number of factors, including their ability to modify cell membrane structure and function, and balance the production of bio-active eicosanoids that regulate key processes, such as inflammation and dilation of blood vessels, learning, and neuroprotective activity. Specific and unique protective compounds, such as resolvins, protectins, and neuroprotectins, are derived from EPA and DHA. These protective compounds suppress the activity and production of inflammatory mediators in the brain and nervous system, decrease oxidative stress and cell death in brain tissue, and protect the brain and nervous system against disease and degeneration.

THE MANY BENEFITS OF EPA AND DHA

- Critical components for growth and development
- Improve cognitive and visual function
- Support heart health
- Normalize the inflammatory response, helping to prevent joint and autoimmune diseases
- Protect against bone loss, especially after menopause

BRAIN, EYE AND NERVOUS SYSTEM SUPPORT

EPA and DHA play a key role in brain, retinal, and central nervous system development, and neurological health. While DHA is essential for the proper development of the infant brain, it also plays a vital role in the ongoing structure and function of the adult brain. It is also a component of several important phospholipids which maintain

healthy cognitive functions (Stillwell, *et al*). While not as structurally significant as DHA for brain development, EPA has more of a functional role. EPA increases blood flow and positively influences hormones and the immune system, which support the developing brain. For this reason, EPA is more influential for learning, behaviour, and mood.

An increasing number of cognitive dysfunction diseases and associated mental health disorders have been linked to dietary deficiencies of EPA and DHA. This includes depression and postpartum depression, bipolar disorder, Alzheimer's, dementia, aggression, schizophrenia, and behavioural and learning disorders, including dyslexia and attention deficit disorder (ADD). EPA and DHA supplementation can help alleviate mental disorders, including bipolar disorder, depression, dementia and schizophrenia. Omega-3 EFAs, used in high doses as adjunctive therapy in treatment-resistant depression, may be as effective as anti-depressant drug therapy.

HEART-PROTECTIVE EFFECTS

The beneficial effects of omega-3-rich foods on cardiovascular health have been studied for more than 30 years. Over 500 clinical and scientific investigations have confirmed the protective effect of fish oil consumption against heart disease, both in patients with a history of cardiovascular disease and in healthy individuals. The use of fish oil supplements may reduce overall cardiovascular mortality by as much as 45%. The evidence supporting the heart-healthy benefits of EPA and DHA is so strong that the American Heart Association (AHA) recommends: that healthy individuals consume 300-500 mg of EPA and DHA combined per day, in the form of fish and fish oils; that patients with documented coronary heart disease consume 1 g of combined EPA and DHA per day; and that individuals with high triglycerides consume 2-4 g of combined EPA and DHA per day.

The heart-healthy benefits of supplementing with omega-3 EFAs begin within weeks, and increase with long-term use. EPA and DHA are comparable or superior to statins in preventing secondary cardiac events. Fish oil may be used by patients already taking drugs for heart conditions and high cholesterol, although doses of these drugs may need to be decreased.

EPA and DHA may be the most important nutritional factors in preventing the development of coronary heart disease (Harris).

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Increased intake is so valuable for the prevention of vascular disease, that it should be recommended in all patients with coronary heart disease (Tziomalos).

NORMALIZING THE INFLAMMATORY RESPONSE

Increased production of inflammatory compounds in the body occurs in a variety of inflammatory and autoimmune disorders, including arthritis, ulcerative colitis, Crohn's disease, asthma, and multiple sclerosis. Other conditions are characterized by varying degrees of inflammation, including heart disease, Alzheimer's, depression, obesity, insulin resistance, and cancer.

Dietary supplementation with combined EPA and DHA is beneficial in several inflammatory disorders, including rheumatoid arthritis, Crohn's disease, ulcerative colitis, inflammatory bowel disease, psoriasis, lupus erythematosus, multiple sclerosis, periodontal disease and migraine headaches (Simopoulos). Clinical benefits are generally apparent after 12-24 weeks of therapy, and symptoms continue to improve with long-term use. In rheumatoid arthritis patients, fish oil supplementation has been found to significantly reduce the number of tender joints and the duration of morning stiffness. Omega-3 EFAs may be acting as disease-modifying, antirheumatic drugs (DMARDs), as they have been found to suppress the destruction of cartilage and inflammatory mediators, and may prevent the onset of inflammatory conditions (Cleland).

Enteric-coated fish oil softgels have a unique advantage in the management of inflammatory bowel disease. Enteric coating ensures the softgels pass through the stomach and into the small intestine. The fish oil is absorbed in the intestine, where it can directly reduce the inflammatory lipid mediators there, reducing bowel inflammation more effectively.

PHARMACEUTICAL GRADE FISH OIL

Each OmegaFactors Wild Fish Oil softgel contains 1,000 mg of pure fish oil, providing 180 mg EPA and 120 mg DHA, and the optimal amount of

natural vitamin E as a preservative. The oil is sourced from wild anchovies and sardines, which have one of the highest levels of EPA and DHA and, since they are low on the food chain and short lived, are less likely to be exposed to toxins. Wild fish are superior to farmed fish as they not only have more omega-3s, but contain less saturated fat and no antibiotic or hormone residues.

OmegaFactors Wild Fish Oil contains the highest quality pharmaceutical grade fish oils. The oils are molecularly distilled, ultra-purified, and tested to meet strict purity guidelines, ensuring the oils contain no lipid peroxides, pesticides, heavy metals (such as mercury), environmental contaminants, dioxins, and other harmful compounds.

DOSAGE

3 softgels daily or as directed by a health care practitioner. Individuals who smoke have been found to have lower levels of DHA, and may wish to take more than the minimum recommended dose. For general cardio-protective effects, a minimum of 3 softgels daily should be consumed. For lowering cholesterol or triglycerides, and to normalize the inflammatory response, 6-12 softgels daily are recommended. Softgels should be taken in divided doses, ideally with meals. The enteric coating significantly reduces the chance of fishy aftertaste or reflux, particularly in people with poor digestion, or who produce excess acid in their stomach.

SAFETY

Fish oil supplements can be consumed in large amounts, up to 15-20 g per day, with no serious side effects.

Pregnancy and lactation: Fish oil that is free from mercury and other contaminants is considered safe during pregnancy and lactation.

Children: Suitable for children at one-half the adult dose.

Drug interactions: Since EFAs may increase the blood-thinning and antiplatelet-aggregating effects of certain medications, individuals on blood thinners, anticoagulants, or

antithrombotic drugs should consult their health care practitioner.

Contraindications: Due to the blood-thinning effects of EFAs, individuals undergoing surgery should discontinue fish oil supplementation one week before surgery, and resume upon the recommendation of their health care practitioner. Side effects, such as mild stomach upset, burping, flatulence, soft stools and diarrhea are rare with enteric-coated fish oils, but occur more often at higher doses, and generally lessen with continued use. To minimize the possibility of side effects, fish oil softgels should be taken with food, in divided doses, and the dose should be increased gradually to the desired level over a period of one or more weeks.

OmegaFactors Wild Fish Oil provides the beneficial EPA and DHA fatty acids in an enteric-coated softgel for optimal delivery and effectiveness. EPA and DHA are an essential component of cognitive and cardiovascular health, and overall well-being.

KEY REFERENCES

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