

Purified & Clear Omega 3 Fish Oil

**Doctor's
BEST**
Science-Based Nutrition™



INGREDIENTS

Doctor's Best Purified & Clear Omega-3 Fish Oil contains certified pure Southern Pacific Anchovy oil,⁷ which is produced by a patented, state-of-the-art filtration process, resulting in a very low TOTOX value (indicator of marine oil freshness). The lower the TOTOX value, the better the quality of the oil. The light color is also an indication of its purity.* The sustainably-sourced clear omega-3 fish oil has full traceability of its high purity and quality, and contains a minimum of 800 mg EPA and 400 mg DHA per serving. Total omega-3 fatty acids support the heart, eye, brain, and joint health.*

Omega-3 fatty acids are long-chain polyunsaturated fatty acids (PUFAs also known as n-3 fatty acids) vital to human health. There are two very important omega-3 fatty acids: EPA (Eicopentaenoic Acid) and DHA (Docosahexaenoic Acid). Because the human body does not produce enough quantity of EPA and DHA on its own, these important nutrients must come from the foods we eat and the supplements we consume. The main origins of EPA and DHA are naturally found in marine sources such as fatty fish – salmon, anchovy, tuna – shellfish, and marine algae. Epidemiological and clinical studies have established that EPA and DHA collectively support cardiovascular health, cognitive function, mental well-being, vision function and healthy eyes, and joint health.*¹⁻³ Because of the overall health benefits of EPA and DHA on humans and since there is a common trait of low intake of these essentials fatty acids in many countries, health authorities around the world recommend the general population to consume at least two oily fish meals per week. For those who cannot get enough EPA and DHA from marine foods or have heart problems, they recommend taking dietary supplementation of these omega-3 fatty acids.*⁴⁻⁶

The FDA has designated the fatty acid omega-3 DHA as Generally Recognized As Safe (GRAS) meaning that this nutrient is considered safe for human consumption.⁵

BENEFITS

- Helps support cardiovascular health*
- Helps support eye and brain health*
- Helps support joint health*
- Non-GMO, Gluten Free

EXTENDED BENEFITS

Helps Support Cardiovascular Health*

The relationship between marine-derived omega-3 polyunsaturated fatty acids and cardiovascular related-health issues originated from the early studies of Greenland's Inuit population. From these studies, it was concluded that low incidence of heart problems was linked to a dietary pattern comprised primarily of whales, seals, sea birds, and fish.*^{8,9} Since then, numerous research and clinical trials have demonstrated the importance of omega-3 fatty acid intakes such as DHA and EPA for cardiovascular health supporting the fact that consuming DHA plus EPA may be inversely related to the risk of heart problems.*¹⁰⁻¹² Evidence obtained from various studies suggests that omega-3 PUFAs affect numerous cellular functions improving endothelial function, promoting vasodilatation through relaxation of smooth muscle cells, decreasing wall stiffening and delaying the formation of plaques and improving overall vascular function and cardiovascular health.*¹³

Helps Support Eye and Brain Health*

DHA is vital for the growth and functional development of the brain. Being a structural constituent of membranes specifically in the central nervous system, DHA accumulates in the fetal brain mainly during the last trimester of pregnancy.¹⁴ Since the endogenous formation of DHA is relatively low, DHA intake from foods and supplements may contribute to optimal conditions for brain development. DHA helps facilitate the electric signals that are the basis of neuron communication supporting not only cognitive functions and brain health but also mental health.*¹⁵⁻²⁰ Moreover, to cope with the risk of mood and cognitive decline that affect the quality of life of the aging population, healthy diet is one option that may contribute to the improvement of neurodegenerative states. Among the dietary nutrients associated with the optimal development and function of the brain, DHA and EPA appear to play a bigger role than expected.²¹ Based on many clinical studies, these two omega-3 fatty acids hold a key role in promoting executive memory, learning, and mental processing for adults and children.*²²⁻²⁸

Supplement Facts

Serving Size 2 Marine Softgels
Servings Per Container 60

	Amount Per Serving	% Daily Value
Calories	20	
Total Fat	2 g	3% **
Fish Oil from Anchovy (<i>Engraulis ringens</i>)	2000 mg	†
Total Omega-3 Fatty Acids as Ethyl Esters	1400 mg	†
EPA (EicosaPentaenoic Acid), min.	800 mg	†
DHA (DocosaHexaenoic Acid), min.	400 mg	†

** Percent Daily Values are based on a 2,000 calorie diet.
† Daily Value not established.

Other Ingredients: Softgel capsule (fish gelatin, glycerin, purified water), mixed tocopherols (antioxidant).

Contains Fish (Oil: Anchovy; Gelatin: Tilapia/Carp)

Suggested Adult Use: Take 2 softgels daily with food or as recommended by a nutritionally-informed physician.

WARNING: Consult your physician before use if you are pregnant, breastfeeding, or taking blood thinning medication.

Non-GMO / Gluten Free

Store in a cool dry place, away from light and moisture.

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* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

It is well-known that American diet includes a lot of the bad fats known as omega-6 fatty acids found in fried foods, vegetable cooking oils, and junk foods. Therefore, they do not consume enough of the omega-3 fatty acids known as the good fats that are essential in promoting general health and in particular in promoting eye health and healthy vision.* It has been also well documented that DHA is the most important PUFAs involved in the development of the brain and retina especially during pregnancy in order to support the fetal growth, particularly in the brain and eyes.*^{29,30} Numerous clinical studies have evaluated the effect of EPA and DHA on vision health and have found that these two omega-3 PUFAs may support healthy vision and eyes.*^{31,33}

Helps Support Joint Health*

Like exercise, a healthy diet can help us maintain a healthy weight, but it can also supply the nutrients that will keep our joint healthy. Research has highlighted the importance of omega-3 fatty acids in maintaining joint health and shown the beneficial antioxidative activity of DHA and EPA on joint health.^{34,35} Elderly population, people with joint discomfort and athletes may benefit from taking dietary supplementation rich in omega-3 fatty acids and unlike oral NSAIDs drugs (Nonsteroidal anti-inflammatory drugs known to have serious side effects such as or gastric bleeding, kidney stones), PUFAs have less side effects being more gentle on the gastrointestinal system.*³⁶⁻³⁹

PHARMACOLOGICAL & CLINICAL STUDIES

The Cardiovascular Health Study was conducted to get more information on the potential relation of the dietary intake of DHA and EPA from fatty fish with cardiovascular issues among the elderly population (adults aged ≥ 65 years old). This complex observational study started in 1989 throughout 1999 where participants underwent annual clinical examination and a battery of medical tests. Based on the results, it was concluded that higher combined dietary intake of DHA and EPA could lower the risk of cardiovascular issues in older adults.*⁴⁰

Many cardiovascular events are now treated with statins, a class of lipid-lowering medications prescribed widely by many physicians to lower bad cholesterol. Statins are nevertheless not without harmful side effects (such as muscle pain, liver damage). Therefore, there is a need to find additional options to reduce statin's toxic effects. A randomized clinical trial examined whether high doses of omega-3 PUFAs (subjects in the omega-3 group received a total daily doses of 1.6 g EPA plus 1.5 g DHA for 30 months) added to statin therapy in 285 patients with cardiovascular problems could slow down the course of cardiovascular event compared with statin alone. After detailed analyses of the results over a 30-month trial, the authors concluded that high dose of omega-3 fatty acids could provide additional health benefit to statin treatment in patients with cardiovascular problems allowing to lower doses of statins consequently lessening their toxic side effects.*⁴¹

A research team examined the impact of recommended dietary EPA and DHA intakes on blood pressure and microvascular function in adults by using a retrospective analysis from a multicenter randomized, placebo-controlled, dose response, crossover trial. The study consisted of 3 intervention arms of 8-week long and with a wash-out period between each interventional arm. Participants consumed in random order either 3.2 g of the "placebo" oil (mixture of palm oil and soybean oil), 3.2 g of EPA and DHA (with a ratio of DHA to EPA of 1:4 - approximate ratio found in marine sources), or a 50:50 blend of "placebo" oil and EPA and DHA. The findings from the study showed that even with daily low dose of EPA and DHA, cardiovascular health can be improved with daily dose of omega-3 fatty acids. Based on the outcomes of the study, the research team concluded that dietary supplementation intake of EPA and DHA can lower cardiovascular risk factors in adults with cardiovascular problems.*⁴²

A study evaluated the effects of omega-3 fatty acids and ciprofibrate (a drug that lowers triglycerides) on the vascular structure and function in participants with low and high cardiovascular risk. Participants were randomized to either receive ciprofibrate or omega-3 supplementation 1800 mg daily (EPA plus DHA) for 12 weeks. An 8-week washout period followed the 12-week treatment and then, the participants switched the treatment protocol. Results showed the improvement in arterial stiffness was better in participants with high cardiovascular risk when treated with omega-3 fatty acids than ciprofibrate.

The authors concluded that omega-3 fatty acids presented beneficial vascular effects in high-risk individuals with cardiovascular issues.*⁴³

A single-center randomized double-blind placebo-controlled study evaluated the effects of a combination of DHA and phosphatidylserine (DHA-PS) on cognitive functions. The combination DHA-PS was found to be safe. They concluded that DHA-PS may improve cognitive performance in elderly population with memory complaints.*⁴³ These results were also found when the same research team conducted an open-label extension aiming at evaluating the effect of DHA-PS at a lower dosage.*⁴⁵

A randomized, controlled cross-over study evaluated the effects of five weeks intake of omega-3 PUFAs (3 grams daily) on cognitive performance in healthy individuals. Compared with the placebo, supplementation with omega-3 PUFAs resulted in better cognitive performance. In addition, they found an inverse relation between cardiometabolic risk factors and cognitive performance suggesting a potential option of omega-3 PUFAs to delay onset of cardiometabolic problems while supporting cognitive functions.*⁴⁶

The effects on mobility and cognition of a multnutrient supplement that contains 1 g DHA and other nutrients were assessed in older women (60-84 years). Results showed a significantly higher blood DHA levels, significant positive effects on cognitive tests and mobility with improved habitual walking speed compared to the placebo group. Researchers concluded that a multnutrient supplementation with DHA may play a key role in supporting mobility and cognition functions.*⁴⁷

A randomized controlled trial evaluated the role of dietary supplementation of omega-3 fatty acids on vision health among 518 participants. The omega-3 group was composed of participants who took orally a capsule containing 325 mg EPA and 175 mg DHA twice daily for 3 months while participants in the placebo group received a placebo capsule at the same frequency. After analyzing the data, the authors concluded that EPA and DHA have a definite role in improving symptoms of certain eye problems.*³¹

A randomized, double-blind clinical trial assessed the effect of oral omega-3 fatty acids on tear break-up time to evaluate their effect on eye function. The treatment group received 1 capsule of omega-3 (each containing 180 mg EPA and 120 mg DHA) to be taken twice daily while the placebo group received a dosage of two placebo capsules containing medium-chain triglycerides known to have no effect on the ocular function. The outcomes were measured one month after the intervention and based on several ocular score tests, it was demonstrated that oral consumption of EPA and DHA is associated with positive effect on eye health with an improvement in dry eye symptoms and increase in tear secretion.*³²

A 12-month, double-blind, randomized study was conducted to evaluate the effect of omega-3 fatty acids supplementation in individuals affected with joint concerns. There were 3 different study groups: the placebo group (participants received a total of 6 g of olive oil in 6 capsules), the 1.3-group (participants received a total of 1.3 g daily of omega-3 fatty acids daily and 3 placebo capsules), and the 2.6-group (participants received a total of 2.6 g daily of omega-3 fatty acids). The fish oil capsules were rich in 3-omega fatty acids and consisted primarily of 28% EPA and 6% DHA. Results showed significant improvement of joint health in participants who received 2.6 g daily of omega-3 fatty acids compared to the other groups. Some participants were also able to reduce their concomitant pain medications intake such as NSAIDs. The authors concluded that daily supplementation with at least 2.6 g of omega-3 fatty acids can significantly improve joint issues and reduce the concomitant of pain medications like NSAIDs.*³⁶



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