

Omega 3 Pure™

Certified Fish Oil in Triglyceride Form

Available in 60 softgels

Discussion

Omega 3 Pure's anchovy oil delivers substantial levels of ultra-pure and potent EPA/DHA. Our proprietary purification process concentrates the beneficial omega-3s while removing potential contaminants to exceed the highest quality standards.

What sets 100% Nutrition oil apart:

- Sourced from sustainable anchovy stocks and processed within hours for optimal freshness
- Molecular distillation removes impurities and concentrates EPA/DHA levels
- Advanced thin-film deodorization preserves freshness and minimizes oxidation
- Triglyceride synthesis converts oil to most natural and bioavailable form
- Purity levels significantly lower than industry limits for toxins
- Exceptional taste and smell prove the oil's pristine quality

Every production batch undergoes over 210 purity tests to verify exceptional results. 100% Nutrition anchovy oil is a high-potency fish oil concentrate verified for sustainability, efficacy, and purity. Our proprietary methods ensure you receive the highest quality omega-3 supplement possible.

Processing for Purity and Quality

The fish oil used in OmegaPure 900-TG is produced under state-of-the-art GMP guidelines approved by international regulatory authorities, including the FDA. To arrive at a high-quality, pure fish oil supplement, several aspects must be considered during the processing of the crude oil:

Contaminants

Heavy metals and persistent organic pollutants (POPs), such as dioxins, dichlorodiphenyltrichloroethane (DDT), polychlorinated biphenyls (PCBs), and brominated flame retardants (BFRs) accumulate in the marine food chain. Proprietary manufacturing procedures, including triple distillation or stripping of the starter oil, reduce these aforementioned contaminants and other POPs to extremely low levels. Every batch is controlled to less than half of the limits set in the current guidelines (e.g., European Pharmacopoeia, Global Organization for EPA and DHA (GOED), United States Pharmacopoeia), and actual POP levels typically show values close to or below detection limits.

Oxidation

Fish oil is highly susceptible to oxidation. If the oil becomes oxidized during processing, the oil's health benefits may be diminished. Closed production under nitrogen or low pressure from first refining to finished drumming ensures low oxidation, which is indicated by anisidine values that fall well below other oils on the market. Every batch is tested for oxidation products before release.

Crude fish oil contains approximately 30% of the active omega-3 fatty acids **Potency** eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). This means that 70% is made up of various fatty acids with different properties. By concentrating the amount of EPA and DHA to high levels, we assure optimal delivery of the fatty acids that are associated with clinical benefits.*

Clinical Applications

- » Affects the Production of Arachidonic Acid-Derived Eicosanoids*
- » Helps the Body Generate Specialized Proresolving Lipid Mediators, Such as Resolvins and Protectins*
- » Supports Cardiovascular Health*
- » Supports Healthy Mental Functioning*
- » Supports Healthy Glucose and Insulin Metabolism*

*Omega 3 Pure™ is International Fish Oil Standards (IFOS) five-star certified, which assures the highest level of purity, stability, and potency in fish oils. Each fish gelatin softgel contains concentrated Peruvian Anchovy fish oil that provides 1280 mg of EPA and DHA omega-3 fatty acids in triglyceride form. To assure maximum purity and freshness, the oil is stabilized with mixed natural tocopherols. EPA and DHA from fish oil have been extensively researched for their health benefits. They promote wellness by supporting cardiovascular health, normal platelet aggregation, cytokine balance, joint health, and brain and nervous system function.**

When these aspects are treated with exacting standards during processing, the product can be awarded third-party IFOS (International Fish Oil Standards) certification.

IFOS Five-Star Certification

OmegaPure is sourced from Peruvian Anchovy fish oil that is IFOS five-star certified. IFOS is the only third-party testing and certification program for omega-3 fish oil products; it sets the gold standard for analyzing products for comparison to the highest industry standards with regard to contaminants, heavy metals, stability, and potency. Furthermore, IFOS provides detailed results for all testing categories on each individual lot tested. These assays are displayed on the IFOS website.^[1] IFOS is exclusively focused on omega-3 fish oil products, and it has long-standing experience with testing fish oil at all points along the supply chain. Five-star certification means:

- Product complies with all CRN⁺/GOED⁺⁺/WHO⁺⁺⁺ testing categories
- Quantity of active ingredients matches the label claim
- Oxidation level is below the CRN/GOED standard by at least 75%
- PCB levels are below the CRN/GOED standard by at least 50%
- Dioxin levels are below the WHO standard by at least 50%

Triglyceride Form

A triglyceride (or triacylglycerol) consists of three fatty acids bound to a glycerol backbone. Unrefined fish oils naturally contain triglycerides with varying amounts of DHA and EPA attached to glycerol. During the production of concentrated fish oils, the fatty acids are liberated into free ethyl ester (EE) form. The EE form can be maintained or the free fatty acids can be re-esterified to produce the triglyceride (TG) form. Both TG and EE forms, as found in *concentrated* fish oils, are classified as esters. Omega 3Pure delivers **900 mg of EPA and DHA as a 70% TG formula.**

Bovine Capsules – No Enteric Coating

By using 100% gelatin softgels (bovine). To allow for natural digestion of the TG molecule, no enteric coating is used to cover the gelatin softgel. Furthermore, the oil is stabilized with natural vitamin E (as d-alpha tocopherol) to help ensure maximum purity and freshness.

Continued on next page

Omega 3 Pure™ Supplement Facts

Serving Size: 2 Softgel

	Amount Per Serving	%Daily Value
Calories	10	
Total Fat	1 g	1%†
Fish Oil Concentrate	1.286 g	**
Total Omega-3 Fatty Acids	964 mg	**
EPA (eicosapentaenoic acid)	634 mg	**
DHA (docosahexaenoic acid)	257 mg	**

† Percent Daily Value based on a 2,000 calorie diet.

** Daily Value not established.

Other Ingredients: Softgel (tilapia fish gelatin, vegetable glycerin, and purified water) and mixed natural tocopherols.

Contains: Fish (Alaska pollock [source of fish oil], tilapia [source of fish gelatin]) from certified sustainable sources.

DIRECTIONS: Take one softgel daily, or use as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking blood thinners or other medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

STORAGE: Keep closed in a cool, dry place out of reach of children.

DOES NOT CONTAIN: Wheat, gluten, corn, yeast, soy protein, dairy products, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.

Third-Party Certificate of Analysis (COA) for this specific lot can be found by scanning the QR code.

Health Benefits of EPA/DHA

Research and studies have shown that omega-3 fatty acids antagonize arachidonic acid-induced eicosanoid formation and help generate resolvins and protectins to aid the body's "cleanup" response to the arachidonic acid cascade.^[2-6] EPA and DHA also support neurological health, a balanced immune response, and healthy glucose and insulin metabolism.^[7-12]

Supportive but not conclusive research shows that consumption of EPA and DHA omega-3 fatty acids may reduce the risk of coronary heart disease.^[13-17] One serving of OmegaPure provides 900 mg of EPA and DHA omega-3 fatty acids.*

Research suggests that it takes 1.2 g/day of DHA supplementation over a period of a month to saturate the plasma and three to six months of supplementation to saturate the tissues. Concentrations of DHA increase in breast milk within less than a week of supplementation.^{*[17]}

† Council for Responsible Nutrition

†† Global Organization for EPA and DHA Omega-3

††† World Health Organization

References

1. IFOS Consumer Reports. <http://www.ifosprogram.com/consumer-reports.aspx>. Accessed August 18, 2014.
2. Storey A, McArdle F, Friedmann PS, et al. Eicosapentaenoic acid and docosahexaenoic acid reduce UVB- and TNF alpha-induced IL-8 secretion in keratinocytes and UVB-induced IL-8 in fibroblasts. *J Invest Dermatol*. 2005 Jan;124(1):248-55. [PMID: 15654981]
3. Oh da Y, Walenta E. Omega-3 fatty acids and FFAR4. *Front Endocrinol (Lausanne)*. 2014 Jul 16;5:115. [PMID: 25076939]
4. Maroon JC, Bost JW. Omega-3 fatty acids (fish oil) as an anti-inflammatory: an alternative to nonsteroidal anti-inflammatory drugs for discogenic pain. *Surg Neurol*. 2006 Apr;65(4):326-31. [PMID: 16531187]
5. Weylandt KH, Chiu CY, Gomolka B, et al. Omega-3 fatty acids and their lipid mediators: towards an understanding of resolvins and protectin formation. *Prostaglandins Other Lipid Mediat*. 2012 Mar;97(3-4):73-82. [PMID: 22326554]
6. Kremmyda LS, Tvrzicka E, Stankova B, et al. Fatty acids as biocompounds: their role in human metabolism, health and disease: a review. part 2: fatty acid physiological roles and applications in human health and disease. *Biomed Pap Med Fac Univ Palacky Olomouc Czech Repub*. 2011 Sep;155(3):195-218. [PMID: 22286806]
7. Frangou S, Lewis M, McCrone P. Efficacy of ethyl-eicosapentaenoic acid in bipolar depression: randomized double-blind placebo-controlled study. *Br J Psychiatry*. 2006 Jan;188:46-50. [PMID: 16388069]
8. Kankaanpaa P, Sutas Y, Salminen S, et al. Dietary fatty acids and allergy. *Ann Med*. 1999 Aug;31(4):282-87. [PMID: 10480759]
9. Stonehouse W. Does consumption of LC omega-3 PUFA enhance cognitive performance in healthy school-aged children and throughout adulthood? Evidence from clinical trials. *Nutrients*. 2014 Jul 22;6(7):2730-58. [PMID: 25054550]
10. Gow RV, Hibbeln JR. Omega-3 fatty acid and nutrient deficits in adverse neurodevelopment and childhood behaviors. *Child Adolesc Psychiatr Clin N Am*. 2014 Jul;23(3):555-90. [PMID: 24975625]
11. Ebbesson SO, Risica PM, Ebbesson LO, et al. Omega-3 fatty acids improve glucose tolerance and components of the metabolic syndrome in Alaskan Eskimos: the Alaska Siberia project. *Int J Circumpolar Health*. 2005 Sep;64(4):396-408. [PMID: 16277123]
12. Nettleton JA, Katz R. n-3 long-chain polyunsaturated fatty acids in type 2 diabetes: a review. *J Am Diet Assoc*. 2005 Mar;105(3):428-40. [PMID: 15746832]
13. Weitz D, Weintraub H, Fisher E, et al. Fish oil for the treatment of cardiovascular disease. *Cardiol Rev*. 2010 Sep-Oct;18(5):258-63. [PMID: 20699674]
14. Psota TL, Gebauer SK, Kris-Etherton P. Dietary omega-3 fatty acid intake and cardiovascular risk. *Am J Cardiol*. 2006 Aug 21;98(4A):3i-18i. [PMID: 16919512]
15. Sasaki J, Yokoyama M, Matsuzaki M, et al. Relationship between coronary artery disease and non-HDL-C, and effect of highly purified EPA on the risk of coronary artery disease in hypercholesterolemic patients treated with statins: sub-analysis of the Japan EPA Lipid Intervention Study (JELIS). *J Atheroscler Thromb*. 2012;19(2):194-204. [PMID: 22186099]
16. Zhang J, Wang C, Li L, et al. Inclusion of Atlantic salmon in the Chinese diet reduces cardiovascular disease risk markers in dyslipidemic adult men. *Nutr Res*. 2010 Jul;30(7):447-54. [PMID: 20797476]
17. Arterburn LM, Hall EB, Oken H. Distribution, interconversion, and dose response of n-3 fatty acids in humans. *Am J Clin Nutr*. 2006 Jun;83(6 Suppl):1467S-1476S. Review. [PMID: 16841856]

Additional references available upon request

All XYMOGEN® Formulas Meet or Exceed cGMP Quality Standards.

*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.

© XYMOGEN
DRS-287
Rev. 03/26/19

