

## Super Omega-3 EPA

Stock #1515-7 (60 capsules)



While many well-recognized health problems are associated with excessive intake of dietary fat, modern research shows that omega-3 fatty acids, specifically fish oils, are crucial to the prevention and treatment of disease. Each year, scientific evidence grows stronger in linking a chronic dietary deficiency of omega-3 fatty acids with an increased risk of death from coronary heart disease—narrowing of the small blood vessels (coronary arteries) that supply blood and oxygen to the heart. Recently, a United States federally mandated evidence-based review concluded that omega-3 fatty acids, particularly eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), demonstrate clear cardioprotective (heart-protecting) effects. As a result, national and international expert panels and health organizations have begun to recommend increased EPA and DHA intakes: between 450 and 1000mg per day for those without and with known coronary heart disease, respectively. EPA and DHA are found almost exclusively in seafood—higher amounts of omega-3 fatty acids are found primarily in "oilier" cold-water fish such as salmon, mackerel, herring, cod and tuna. In addition, the American Heart Association's Nutrition Committee now recommends

that individuals with coronary heart disease consume about 1 gram (1,000mg) of EPA and DHA daily, either in the form of "oily fish" or as an EPA/DHA supplement.<sup>1-4</sup>

Epidemiologic studies suggest that a higher intake of EPA and DHA is associated with a reduced risk of cardiovascular disease, which includes coronary heart disease, stroke, hypertension (high blood pressure), and rheumatic heart disease. In fact, controlled intervention trials with EPA- and DHA-enriched fish oil supplements have demonstrated their potential to reduce mortality (death rate) in post-myocardial infarction (heart attack) patients with a substantial reduction in the risk of sudden cardiac death. In one such study, over 2,800 Italian heart attack survivors were given EPA and DHA in capsule form daily for 3½ years. Results showed that mortality from any cause was reduced by more than 25% and sudden deaths (presumably from a second heart attack) decreased by more than 45% compared to patients not given the omega-3 oils.<sup>2,5-7</sup>

Research also indicates the beneficial role of omega-3 fatty acids in atherosclerosis (narrowing and hardening of the arteries). Randomized controlled trials have demonstrated that omega-3 fatty acid supplements can decrease or even reverse the progression of atherosclerosis in coronary patients. For example, a 2-year randomized, double-blind, placebo-controlled study confirmed that patients with angiographically proven coronary artery disease (i.e. significant blockages in their heart arteries) who received omega-3 fish oil capsules demonstrated a statistically significant difference in favor of fish oil over those receiving a placebo. Specifically, among those in the fish oil group, 31% showed mild to moderate regression of atherosclerosis, compared to those in the placebo group, of which 13% showed only mild disease regression.<sup>8-12</sup>

In addition, there have been a number of clinical trials assessing the benefits of fish oil supplementation in several inflammatory and autoimmune diseases in humans, such as rheumatoid arthritis, Crohn's disease (a chronic inflammatory disease of the gastrointestinal tract), lupus erythematosus, migraine headaches, multiple sclerosis and psoriasis. Many of the placebo-controlled trials using fish oils in chronic inflammatory diseases have revealed significant benefits, including decreased disease activity and reduced use of anti-inflammatory drugs.<sup>1,9,11,13-19</sup>

Furthermore, epidemiological and experimental data indicates that omega-3 fatty acids, specifically fish oil, inhibit the development and progression of a variety of human cancers. Research shows that EPA's antitumor effects are primarily related to suppression of cell proliferation (growth), while DHA's effects are related to its ability to induce apoptosis (cell death). Supplementation with EPA and DHA in the form of fish oil has been shown to suppress both breast and colon cancer tumor growth and metastasis. A recent study also suggests that EPA and DHA intakes may reduce the risk of total and advanced prostate cancer.<sup>1,20</sup>

Dietary supplementation with omega-3 fish oils is generally safe and well-tolerated. Few side effects have been reported, although diarrhea may occur with high dosages. The FDA has ruled that intakes of up to 3 grams per day of omega-3 fatty acids are GRAS (Generally Recognized As Safe). The FDA's ruling included specific consideration of the reported effects of omega-3 fatty acids on glycemic control in patients with diabetes, on bleeding tendencies, and on LDL cholesterol. The FDA has also approved a qualified health claim for EPA and DHA omega-3 fatty acids in dietary supplements.<sup>1,10</sup>

It is important to note that a placebo-controlled, randomized, double-blind study conducted by researchers at the University of Texas determined that fish oil supplementation in doses of 3-6 grams per day did not have a statistically significant effect on the anticoagulation (prevention of blood clots) status of 11 patients receiving chronic warfarin therapy—a drug that inhibits blood clotting. However, a recent isolated case reported in *The Annals of*

*Pharmacotherapy* involving a 67-year-old woman suggests that fish oil supplementation could have provided additional anticoagulation in conjunction with the patient's warfarin therapy. Thus, patients taking warfarin may want to have their blood checked regularly.<sup>21,22</sup>

Each softgel capsule of Super Omega-3 EPA provides 380mg of EPA and 190mg of DHA. Natural lemon oil has been added to reduce the aftertaste of fish oil.

References:

- <sup>1</sup>Fish Oil." *Alternative Medicine Review*; 2000, 5(6):576-580.
- <sup>2</sup>Harris PhD, W.S. "Answering the Fish or Flax Question." *Natural Foods Merchandiser*; June 2003.
- <sup>3</sup>Harris, W.S. & von Schacky, C. "The Omega-3 Index: a new risk factor for death from coronary heart disease?" *Preventative Medicine*; 2004, 39(1):212-220.
- <sup>4</sup>Harvey PhD, P.W. in Gailing CN, S. "Which Health Claim Should The FDA Approve Next?" *Nutrition Science News*; November 2000.
- <sup>5</sup>Djousse, L, et. al. "Relation between dietary linolenic acid and coronary artery disease in the National Heart, Lung, and Blood Institute Family Heart Study." *American Journal of Clinical Nutrition*; 2001, 74(5):612-619.
- <sup>6</sup>Holub, D.J. & Holub, B.J. "Omega-3 fatty acids from fish oils and cardiovascular disease." *Molecular and Cellular Biochemistry*; 2004, 263(1-2):217-225.
- <sup>7</sup>"Dietary supplementation with n-3 polyunsaturated fatty acids and vitamin E after myocardial infarction: results of the GISSI-Prevenzione trial. Gruppo Italiano per lo Studio della Sopravvivenza nell'Infarto miocardico." *Lancet*; 1999, 354(9177):447-455.
- <sup>8</sup>von Schacky, C., et. al. "The effect of n-3 fatty acids on coronary atherosclerosis: results from SCIMO, an angiographic study, background and implications." *Lipids*; 2001, 36 Suppl:S99-102.
- <sup>9</sup>Mori, T.A. & Beilin, L.J. "Omega-3 fatty acids and inflammation." *Current Atherosclerosis Reports*; 2004, 6(6):461-467.
- <sup>10</sup>Kris-Etherton, P.M., et. al. "Fish consumption, fish oil, omega-3 fatty acids, and cardiovascular disease." *Arteriosclerosis, Thrombosis, and Vascular Biology*; 2003, 23(2):e20-30.
- <sup>11</sup>Podell M.D., R.N. "Fish Oil Reduces Atherosclerotic Blockages." *Nutrition Science News*; October 1999.
- <sup>12</sup>von Schacky, C., et. al. "The effect of dietary omega-3 fatty acids on coronary atherosclerosis. A randomized, double-blind, placebo-controlled trial." *Annals of Internal Medicine*; 1999, 130(7):554-562.
- <sup>13</sup>Simopoulos, A.P. "Omega-3 fatty acids in inflammation and autoimmune diseases." *Journal of the American College of Nutrition*; 2002, 21(6):495-505.
- <sup>14</sup>Kremer, J.M., et. al. "Effects of high-dose fish oil on rheumatoid arthritis after stopping nonsteroidal antiinflammatory drugs. Clinical and immune correlates." *Arthritis and Rheumatism*; 1995, 38(8):1107-1114.
- <sup>15</sup>Cleland, L.G., et. al. "A biomarker of n-3 compliance in patients taking fish oil for rheumatoid arthritis." *Lipids*; 2003, 38(4):419-424.
- <sup>16</sup>Belluzzi, A., et. al. "Effect of an enteric-coated fish-oil preparation on relapses in Crohn's disease." *New England Journal of Medicine*; 1996, 334(24):1557-1560.
- <sup>17</sup>Duffy, E.M., et. al. "The clinical effect of dietary supplementation with omega-3 fish oils and/or copper in systemic lupus erythematosus." *The Journal of Rheumatology*; 2004, 31(8):1551-1556.
- <sup>18</sup>Nordvik, I., et. al. "Effect of dietary advice and n-3 supplementation in newly diagnosed MS patients." *Acta Neurologica Scandinavica*; 2000, 102(3):143-149.
- <sup>19</sup>Harel, Z., et. al. "Supplementation with omega-3 polyunsaturated fatty acids in the management of recurrent migraines in adolescents." *The Journal of Adolescent Health*; 2002, 31(2):154-161.
- <sup>20</sup>Leitzmann; M.F., et. al. "Dietary intake of n-3 and n-6 fatty acids and the risk of prostate cancer." *American Journal of Clinical Nutrition*; 2004, 80(1):204-216.
- <sup>21</sup>Bender, N.K., et. al. "Effects of Marine Fish Oils on the Anticoagulation Status of Patients Receiving Chronic Warfarin Therapy." *Journal of Thrombosis and Thrombolysis*; 1998, 5(3):257-261.
- <sup>22</sup>Buckley, M.S., et. al. "Fish oil interaction with warfarin." *The Annals of Pharmacotherapy*; 2004, 38(1):50-52.