

# Omega-3 Super Concentrate 1170 mg Softgels



## Product Summary:

This product contains salmon oil that provides omega-3 fatty acids in a ratio of approximately 40% eicosapentaenoic acid (EPA) to 20% docosahexaenoic acid (DHA).

The fish oil in this product is from MEG-3<sup>®</sup> brand fish oil concentrate.

## Properties/Uses:

The claim as approved by the *Natural Health Products Directorate* (NHPD): Omega-3 fatty acids help promote cardiovascular health and brain function.



CARDIOVASCULAR



## Pharmacology:

The principal reason people supplement with fish oil is to increase the intake of ready made omega-3 EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid), by-passing their natural endogenous production from alpha-linolenic acid. EPA and DHA are the most physiologically important members of the omega-3 family of fatty acids.<sup>1</sup>

The omega-3 nutritional category has been associated with heart health because EPA provides some ability to lower cholesterol. More importantly, EPA provides an anti-inflammatory effect in the lining of the coronary arteries of the heart. Coronary inflammation is now considered as a central factor in the promotion of heart disease. A chronic pro-inflammatory state in the coronary arteries drives the formation of atherosclerosis [artery plugging build-up]. Furthermore, EPA has a beneficial blood thinning effect that lowers the risk of an inappropriate blood clot<sup>1</sup>. When EPA is chronically lacking in the cardiovascular system, a pro-thrombotic state can emerge, significantly raising the risk for inappropriate blood clotting [thrombosis] in the coronary arteries producing a heart attack. A chronic lack of EPA also raises the risk of stroke and pulmonary embolism. All such inappropriate blood clots are life threatening, and at the least significantly compromise life-quality.<sup>1</sup>

DHA is very important to the brain, retina, testes, and adrenal glands for facilitating optimal functioning. Inadequate DHA in the brain is thought to be an important contributing factor in many neurological functional problems. Intriguing brain research has drawn a possible connection between DHA and arachidonic acid (AA) and some of the more difficult childhood learning and behavioral problems seen in the early pre-school or elementary school years, and even in early adolescence. These problems include dyslexia, attention deficit disorder (ADD), and attention deficit hyperactivity disorder (ADHD). They are associated with learning, psychological, and social disruptions in the normal life quality and development of a child or young person, with possible life long repercussions. Parents and teachers are challenged to provide effective learning and to shape appropriate behavior. This brain research is pointing to new nutritional ways to address these difficult learning and behavioral problems with neurologically active DHA and omega-6 gamma-linolenic acid (GLA) and arachidonic acid (AA).<sup>1</sup>

Researchers have found that the fatty acids DHA and AA are highly concentrated in the synaptic membranes, the juncture where neurons exchange and process information, where learning and behavior are forged<sup>2</sup>. Researcher Laura J. Stevens, PhD, and her fellow scientists at Purdue University have shown that DHA levels in the blood of 53 boys suffering from ADHD was significantly lower than DHA levels found in 43 matched boys without ADHD. This has been interpreted to mean that ADHD sufferers may not make DHA well enough to facilitate the optimal construction of the synaptic membranes, thereby impairing the brain's management of childhood control over responses to environmental stimuli, leading to hyperactivity, inattentive, and impulsive behavior. The researchers concluded that supplementing with DHA and arachidonic acid may be useful in treating or managing ADHD. Note this product size means that only adults suffering from ADHD should be treated with this particular product.





## Manufactured product information:

**Manufacturer:**

WN Pharmaceuticals® Ltd.

**Size/UPC:**

80's ..... 7 77747 10305 8

**NPN:**

80003017

**Expiry Date:**

36 months from date of manufacture

**Active Ingredients:**

Each softgel contains :

Fish Oil (anchovy, sardine and/or mackerel) .....	1170 mg
Omega-3 Fatty Acids .....	630 mg
Eicosapentaenoic Acid (EPA).....	400 mg
Docosahexaenoic Acid (DHA) .....	200 mg

**Non-Medicinal Ingredients (in descending order):**

Softgel capsule (gelatin, glycerin, purified water), natural tocopherols.

**Appearance:**

Clear yellowish oil encapsulated in an oblong soft gelatin shell.

**Packaging:**

300 cc white round bottle with safety seal under a 45 mm white round induction sealed cap with vented interior seal and a label applied to the bottle. Lot number and expiry date are printed on the label applied to the exterior of the bottle.

**Storage:**

Preserve in tight containers and store at room temperature. Protect from light.





## Dose:

As per the NHPD Monograph for fish oils, the daily adult dose of combined EPA and DHA is 100 – 3000 mg.

## Directions:

**(Adults):** 1 softgel 3 times daily with meals or as recommended by a physician.

## Caution:

The caution as approved by the *Natural Health Products Directorate* (NHPD): KEEP OUT OF THE REACH OF CHILDREN. STORE AT ROOM TEMPERATURE IN A DARK, DRY PLACE. DO NOT USE IF SEAL UNDER CAP IS BROKEN OR MISSING.

## Deficiency Symptoms:

A deficiency in omega-3 can lead to host of health issues including cardiac and circulatory disorders, disorders of the skin (eczema), disorders of the kidneys and liver, with various inflammatory problems, arthritis, weight disorder and failure of the immune system.



## Drug Interactions/Contraindications:

The contraindication to appear on the label as submitted to the *Natural Health Product Directorate* (NHPD) is: Consult a physician prior to use if you are pregnant or breastfeeding. Note that the NHPD Monograph lists no risk information required so the pregnancy and lactating caution may be removed when we receive our NPN.

\*Note that the NHPD Monograph lists no risk information required so the Drug Interactions/Contraindications listed below would be considered either rare or unlikely.

Ocean fish oils may predispose a person to post-surgical bleeding problems. It is prudent to recommend that fish oil supplements be discontinued at least one week before surgery, and resumed upon the recommendations of the patient's physician.

*Anticoagulant/ antiplatelet drugs:* Concomitant use may increase the risk of bleeding.

*Antihypertensive drugs:* Fish oils can lower blood pressure and might have additive effects in patients taking antihypertensive.

*Contraceptive drugs:* There is some evidence that contraceptive drugs might interfere with the triglyceride lowering effects of fish oils.

*Vitamin E:* Fish oils can reduce vitamin E levels.

*Bipolar disorder and depression:* Symptoms of hypomania can develop in patients taking fish oils who have bipolar or major depressive disorders.

*Cirrhosis:* Theoretically, fish oils may lower mean arterial pressure and may increase risk of bleeding.


*Diabetes:* in doses greater than 3 grams per day, fish oil can increase blood glucose levels. However, lower doses do not affect blood glucose.

*Hypertension:* Fish oil can lower blood pressure.

*Immunodeficiency:* higher doses of fish oils might cause suppression of immune and inflammatory responses.

## Toxicity/Adverse Reactions:

Orally, fish oils are generally well tolerated at doses of 3 grams or less per day. Fish oils sometimes have a fishy taste and can cause belching, halitosis, heartburn and gastrointestinal upset. High doses can cause nausea and loose stools. Some gastrointestinal side effects can be minimized if fish oils are taken with meals, if the product is enteric coated and if doses are started low and gradually increased.





## Allergen Content/Ingredient Sensitivity:

NO	YES
Artificial Colors	Fish
Artificial Flavors	Sulphites (<10 ppm)
Artificial Sweeteners	
Corn Products	
Egg Products	
Gluten	
Hydrolyzed Plant Protein	
Lecithin	
Milk Products	
Peanuts	
Preservatives	
Sesame Products	
Soy Products	
Starch/Modified Starch	
Tartrazine	
Tree Nuts	
Wheat Products	
Yeast	

### NOT ACCEPTABLE FOR THE FOLLOWING DIETARY RESTRICTIONS:

Free of animal products

Kosher





**References:**

1. NMCD Database. Omega-3 Fatty Acids [internet]. 2006 [cited July 18/06]. Available from: [http://www.naturaldatabase.com/\(S\(rfghbd45vz zhug553xgvxz55\)\)/nd/Search.aspx?li=1&st=2&cs=CEPDA&s=ND&pt=100&id=1035&fs=ND&searchid=1042829](http://www.naturaldatabase.com/(S(rfghbd45vz zhug553xgvxz55))/nd/Search.aspx?li=1&st=2&cs=CEPDA&s=ND&pt=100&id=1035&fs=ND&searchid=1042829)
2. Stevens, Laura J., et al, Essential fatty acid metabolism in boys with attention-deficit hyperactivity disorder, American Journal of Clinical Nutrition,62 (2): 761-768, 1995
3. NHPD Fish Oil Monograph

**Revision # 00**

