

Omega 3-6-9 1200 mg Softgels



Product Summary:

Omega 3-6-9 provides an optimal blend of essential fatty acids to support the cardiovascular system, the nervous system, brain health and skin health. Balanced omega 3-6-9 oils can help improve skin conditions like eczema and dull hair, relieve digestive disorders, support brain function and development, improve blood pressure and lower cholesterol and triglyceride levels, and relieve PMS and cramps. Omega 3-6-9 is recommended for anyone who would like to balance their essential fatty acid profile.

Properties/Uses:

The claim as approved by the *Natural Health Products Directorate* (NHPD): Source of essential fatty acids for the maintenance of good health. Helps support cardiovascular health and brain function.



CARDIOVASCULAR



Pharmacology:

Health leaders continue to admonish us to reduce our consumption of saturated animal fats while using more vegetable oil, and to reduce our total calories from all fats and oils in order to build and safeguard good health. This general message to reduce dietary fat while selecting vegetable oil over saturated fat has been widely accepted. However, adequate attention has not been given to the importance of balancing the intake of the various polyunsaturated vegetable oils, in order to control the ratio of the two omega essential fatty acids found in polyunsaturated oils. This ratio is foundational to good health. Furthermore, adequate attention also has not been given to the importance of choosing monounsaturated oils over polyunsaturated oils as a practical way to curb omega-6 intake, thus avoiding lop-sided ratios of the essential fatty acids associated with our cultural preoccupation with polyunsaturated oil. The majority of the public simply lump all vegetable oils together, without being taught to recognize health related qualitative differences, and without thinking in terms of the two critically important health related omega essential fatty acids.¹

The two dietary essential fatty acids are the heads of two lines of fatty acid derivatives formed in the body, culminating in the three eicosanoid series shown in the flow chart illustration above. These lines are referred to as the Omega-6 and the Omega-3 Families of fatty acids. The eicosanoids are derived only from these two lines. The eicosanoid derivatives comprise the chemical managers that regulate most of our metabolism. As you can see in the chart below, the eicosanoids are divided into three separate groups or series, each comprised of its own host of chemical managers, the most common ones being the prostaglandins, the leukotrienes, and the thromboxanes.

The eicosanoids in Series 1 & 3 work in tandem to express metabolic effects that are opposite to metabolic effects expressed by the eicosanoids in Series 2.¹⁻³ This is like the right hand and the left hand on the steering wheel of an automobile, acting in opposition to each other to negotiate the road. So in like manner, the body is able through its eicosanoid managers to metabolically negotiate moment by moment the changes that our metabolism must go through on the road of life. Failure to metabolically negotiate the road of life effectively is the basis of illness and the pathway to failing health.

To illustrate the opposite actions of the eicosanoids and the way this impacts on health, consider the following illustration. There are Series 2 chemical managers that cause blood to clot. Under the right conditions, blood clotting would be life saving and therefore desirable. However, the opposite action of the Series 1 and 3 chemical managers prevent blood clotting. This too is important, in order to prevent an inappropriate thrombus from lodging in a narrowed coronary heart artery, or in the brain or lungs. So there is a constant tug-a-war in the blood stream between chemical managers committed to forming blood clots and chemical managers committed to preventing blood clots. The dietary ratio of omega-6 linoleic acid to omega-3 linolenic acid will influence this tug-a-war for good or bad.





A diet that is overly rich in omega-6 linoleic acid could lead to a more prominent action of the Series 2 eicosanoid chemical managers that execute blood clotting. By the same token, a diet overly rich in omega-3 linolenic acid could lead to unwanted bleeding episodes due to a more prominent action of the Series 3 eicosanoid chemical managers. North Americans are known as blood clotters, with their very high consumption of omega-6 polyunsaturated oil, suffering over 500,000 heart attacks deaths per year due to coronary thrombosis. On the other hand, many Inuit people, living on their ancestral diet of ocean fish and sea mammals, have extraordinarily high intake of omega-3 oils and are known as bleeders because they demonstrate an inordinate predisposition to bleeding.¹

Fortunately, our bodies do not require large quantities of the two essential fatty acids. Omega 3-6-9 is formulated with quality polyunsaturated oils to approximate an omega-6 to omega-3 ratio of 1.25:1.00. Flaxseed oil provides a vegetable source of alpha-linolenic acid (ALA). Borage seed oil contains an omega-6 essential fatty acid called gamma-linolenic acid (GLA). Fish oil provides the omega-3s EPA and DHA.

By using extra virgin olive oil as one's household vegetable oil, with its low omega-6 linoleic acid content (8–10%), the customer can use omega 3-6-9 as his or her principal or controlled source of these two essential fatty acids. This allows the customer to avoid the typical North American daily flood of omega-6 polyunsaturated oils, and the risk for exaggerated Series 2 eicosanoid expression. Avoidance of margarine is urged, because it is a source of omega-6 polyunsaturated oil. Butter is better in moderation. It will take a number of months to reestablish eicosanoid balance in one's body if there has been a history of consuming the industrially processed and mass merchandized polyunsaturated oils and margarine.

The metabolic relationship between omega-3 and omega-6:

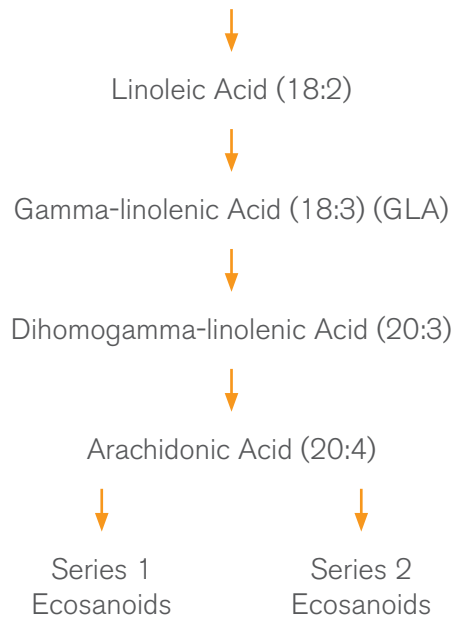
The optimal ratio between omega-6 and omega-3 is thought to be 4:1, in favour of omega-6.¹ Omega-6 is supplied in all of the common oils consumed in North America, while omega-3 is supplied only in canola, soy and flaxseed oils. Unfortunately, the ratio for most people is closer to 10-20:1 in favour of omega-6, a situation now recognized to be a major contributing factor in the leading health problems that plague North America. Such health problems as heart disease and diabetes arise in part by virtue of eicosanoid imbalance in favour of the Series 2 Eicosanoids, the so called "bad" prostaglandins, leukotrienes, and thromboxanes.^{1,3} In many cases, omega-6 Evening Primrose oil is being used when there is already a dietary omega-6 overload.³

The flow chart below illustrates how the dietary intake of the two essential fatty acids controls the relative concentrations of the eicosanoid metabolic regulators, the prostaglandins, leukotrienes, and thromboxanes.²

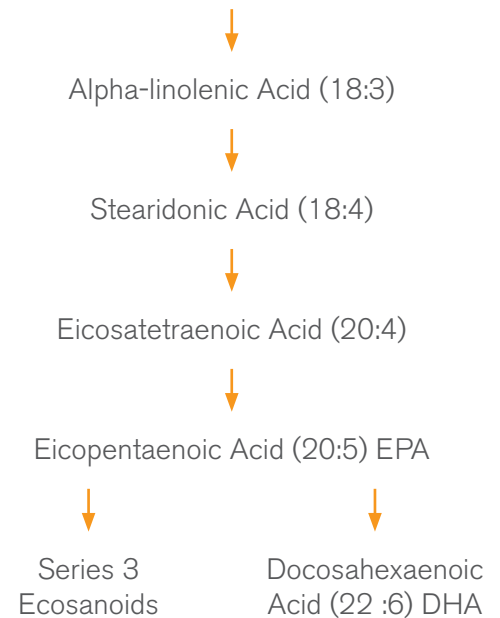


diem

OMEGA-6 FAMILY



OMEGA-3 FAMILY



The Series 2 eicosanoids are referred to as “bad” because they are associated with inducing metabolic conditions that can ultimately cause tissue damage when overly expressed, such as inflammation or blood clotting. Obviously, the Series 2 eicosanoids are not bad, because there are times when inflammation or blood clotting are required. The “badness” is in the eicosanoid imbalance that allows an over expression of Series 2 eicosanoids. Fish oil has a reputation of health enhancement because it provides eicosanoid balance by providing ready-made EPA that is metabolized into the “good” Series 3 eicosanoids, providing balance. Series 1 eicosanoids also are known as “good” eicosanoids because they also balance Series 2. The right concentration of Series 1 eicosanoids is favoured over Series 2 when the dietary omega-6 content is not constantly in excess of the ideal ratio between omega-6 and omega-3.

Some people in general seem unable to begin with dietary linolenic acid and arrive at sufficient EPA and DHA. These same people likely will have problems in converting linoleic acid to arachidonic acid, which is also important in phospholipid composition on the omega-6 side. This presents a possible lifetime struggle to obtain adequate EPA, DHA, and AA, and the health enhancement tied to these fatty acids. This situation in particular may characterize the older person who suffers from age-related metabolic decline. The problem arises from a compromised ability to form the first metabolic derivatives past the linoleic acid and linolenic acid starting points.

This product serves as a preserved and balanced source of the two essential fatty acids that are required daily. It allows the consumer to obtain the essential fatty acids without having to rely on the typical grocery store oils that are overprocessed and overly abundant with omega-6 polyunsaturated oils. This product is intended for use with extra virgin olive oil (which has only 8 to 10 percent omega-6 content) as the household dietary oil.



Benefits of essential fatty acids:

Improves skin conditions

Relieves digestive disorders

Supports brain function and development

Improves blood pressure and lower cholesterol and triglyceride levels

Relieves PMS and cramps.

Individuals with minimal vegetable oil intake

Individuals at risk for cardiovascular disease

Individuals with high triglyceride levels and/or high blood pressure

Individuals with eczema and/or dull hair

Individuals with digestive disorders

Women with PMS





Manufactured product information:

Manufacturer:

WN Pharmaceuticals® Ltd

Size / UPC:

200's7 77747 10306 5

NPN:

80009564

Expiry Date:

36 months from date of manufacture

Active Ingredients:

Each softgel contains:

Flaxseed Oil (Linum usitatissimum) (seed).....	400 mg
Omega-3 – Alpha-Linolenic Acid (ALA).....	200 mg
Omega-9 – Oleic Acid (OA).....	52 mg
Fish Oil Concentrate (anchovy, sardine and/or mackerel).....	400 mg
Omega-3 – Eicosapentaenoic Acid (EPA).....	70 mg
Omega-3 – Docosahexaenoic Acid (DHA).....	45 mg
3Borage Oil (Borago officinalis) (seed).....	400 mg
Omega-6 – Gamma-Linolenic Acid (GLA).....	75 mg
Omega-9 – Oleic Acid (OA).....	56 mg

Non-Medicinal Ingredients (in descending order):

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

Appearance:

Clear yellow oil with brown particulate encapsulated in a size 22 oblong brownish colored soft gelatin capsule.

Packaging:

625 cc white round bottle with safety seal under a 53 mm white 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:

Store in a tightly sealed container in a dry place at 15 – 25° C.





Dose:

As per the NHPD Monograph for fish oils, the daily dose of combined EPA and DHA for children 1-8 years old is 100 – 1500 mg; for adolescents 9-13 years old is 100 – 2000 mg; for adolescents 14-18 years old is 100 – 2500 mg; and for adults (>18 yrs) is 100 – 3000 mg.⁴

As per the NHPD Monograph for flaxseed oil, the daily dose for children 2-4 years old is 0.04 – 5.33 g; for children 5-9 years old is 0.06 – 8 g; for adolescents 10-14 years old is 0.12 – 16 g; and for adolescents and adults 15 years and older is 0.23 – 32 g.⁵

As per the NHPD Monograph for borage oil, the daily dose for adults is 3.7 – 5 g.⁶

Directions:

(Adults): 2 softgels 3 times daily 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. Consult a physician prior to use if you are taking blood thinners. STORE AT ROOM TEMPERATURE IN A DARK, DRY PLACE. DO NOT USE IF SEAL UNDER CAP IS BROKEN OR MISSING.

Deficiency Symptoms:

It is recognized that the human body requires a large variety of nutritional substances necessary for optimal growth and development. Among these crucial elements, omega-3 and omega-6 fatty acids are termed 'essential' because they are necessary for good health. Since the human body cannot make them on its own, the essential fatty acids must be supplied in the diet.

A deficiency in omega-3 can lead to a 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.

People with diabetes cannot synthesize GLA easily, so their production of both Series 1 and Series 2 eicosanoids will suffer. By adding GLA to their diet as a supplement, this metabolic problem can be minimized. An optimal level of GLA in the diabetes management of complications lowers the risk of neuropathy or ameliorates the complication.¹





Drug Interactions/Contraindications:

Vitamin E should be taken when oil supplements are used, in order to reduce the risk of peroxidation of unsaturated fatty acids.

Flaxseed oil and Borage oil are natural blood thinners. Those taking pharmaceutical blood thinners or high or frequent doses of ASA and/or NSAIDS, should discuss supplementation with their physician for dosage advice.^{1,3,7}

Diabetics using this product may experience better blood sugar control that gradually reduces their insulin requirement, and should be aware of any changes to avoid hypoglycemic episodes.

Because this product contributes in some degree to blood thinning, it is contraindicated unless prescribed by a physician.

Toxicity/Adverse Reactions:

The food oils contained in this product are extremely safe and adverse side effects are rarely associated with them. Allergies are known to occur with some food oils.

The optimal ratio of the two essential fatty acids is considered to be 1:1, ranging to 4:1 in favor of omega-6 linoleic acid. *Diets that are high in omega-6 polyunsaturated vegetable oils, as is common in North America, will frustrate the purpose of this product.* Consumers are cautioned to use only extra virgin olive oil as their household oil choice, since it contains only 8–10% omega-6 content and no omega-3 content. Olive oil is principally an omega-9 oil (75%) and therefore does not influence metabolic regulatory trends via an eicosanoid pathway.



Allergen Content/Ingredient Sensitivity:

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

NOT ACCEPTABLE FOR THE FOLLOWING DIETARY RESTRICTIONS:

Free of animal products

Kosher





References:

1. Simopoulos, Artemis P., Robinson, Jo, *The Omega Plan*, HarperCollins Publishers, New York, 1998
2. Murray, Michael T., *Encyclopedia of Nutritional Supplementation*, Prima Publishing, Rocklin ,CA, 1996
3. Erasmus, Udo, *Fats That Heal Fats That Kill*, Alive Books, Burnaby, BC, 1993
4. Health Canada, Fish Oil Monograph, Accessed March 10, 2011
[Available from: <http://www.hc-sc.gc.ca>]
5. Health Canada, Flaxseed Oil Monograph, Accessed March 10, 2011
[Available from: <http://www.hc-sc.gc.ca>]
6. Health Canada, Borage Oil Monograph, Accessed March 10, 2011
[Available from: <http://www.hc-sc.gc.ca>]
7. Horrobin DF. Fatty acid metabolism in health and disease: The role of delta-6-desaturase. *Amer J Clin Nutr* 1993;57(Suppl): 732s- 736s.

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