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ESSENTIALS

SUPER OMEGA 3-6-9

A balanced blend of Omega, 3,6 & 9 fatty acids.

Nutritional Information

Three Capsules provides:

*%NRV

Evening Primrose / Borage Oil / Fish Oil	640 mg		
of which:			
-LA (Linoleic acid)	170 mg		
-GLA (Gamma Linolenic acid)	100 mg		
-OA (Oleic acid)	85 mg		
-EPA (Eicosapentaenoic acid)	85 mg		
-DHA (Docosahexaenoic acid)	65 mg		
Non-GM natural source Vitamin E (20 I.U.)	13.4 mg	α -TE	112

Not intended for long term use.

α -TE = Alpha tocopherol equivalent, *NRV = Nutrient Reference Values

Take two to three capsules daily with food. Swallow with water.



SUMMARY

- A balanced blend of Omega, 3, 6 & 9 fatty acids

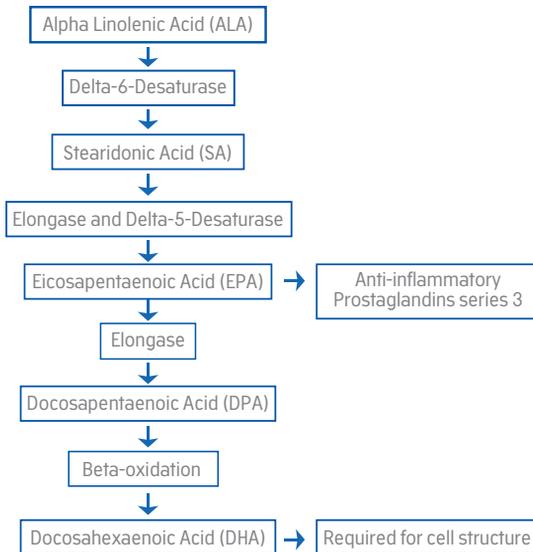
DESCRIPTION

Omega 6 gamma linolenic acid (GLA) and linoleic acid (LA) from evening primrose and oleic acid from borage oil combined with omega 3 fatty acids eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) from fish oil. EPA and DHA found in fish oil contribute to the normal function of the heart and have anti-inflammatory actions helping to support joint health, reduce pain and stiffness and improve mobility. Gamma linolenic acid (GLA) is an essential omega 6 fatty acid that supports hormonal balance during a woman's monthly cycle to help reduce PMS symptoms and is indicated in the symptomatic relief of atopic dermatitis. GLA is also involved in inflammatory responses in the body, normal blood coagulation processes and general skin health. It is recommended that post-menopausal women and the elderly consider supplementing with essential fatty acids to protect heart, skin and joint health. Omega 9 oleic acid helps with the control of diabetes type 2 and has anti-inflammatory properties.

OMEGA 3

Fish oil contains a unique form of omega 3 poly-unsaturated fatty acids (PUFA) called docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA). This differs from plant omega 3 – alpha linolenic acid (ALA) as it is further down the conversion cascade. ALA needs to be converted into EPA via 3 enzymes: delta-6-desaturase, elongase-5 and delta-5-desaturase. The enzymes themselves may not be sufficient in some individuals meaning that EPA and DHA from fish oil are necessary for health¹.

CONVERSION PATHWAY OF OMEGA 3



Joint health: Multiple studies confirm the benefits of omega 3 on joint health², particularly for rheumatoid arthritis, osteoarthritis, morning stiffness, relieving pain² and increasing joint mobility. A major part of the therapeutic effect on osteoarthritic joints is its anti-inflammatory action, and its ability to prevent the degradation of cartilage³ by blocking interleukin-1-mediated cartilage degradation⁴. Rheumatoid arthritis is characterised by systemic inflammation as well as joint inflammation, both of which can be improved by omega 3 fatty acids. Fish oil is able to suppress the production of proinflammatory cytokines found in rheumatoid arthritis patients⁵. One review found that 12 weeks of fish oil supplementation helped to decrease joint tenderness, tender joint counts and the duration of morning stiffness in patients with rheumatoid arthritis⁶.

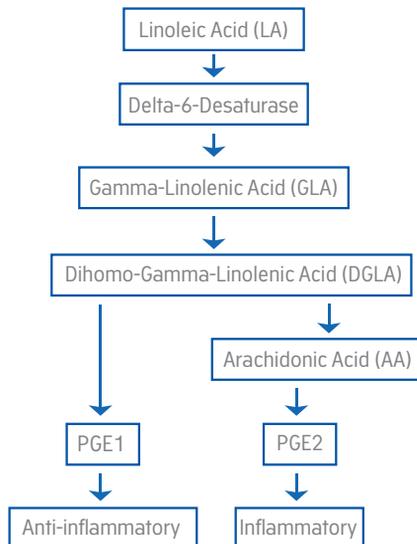
Heart health: Multiple studies confirm the benefits of fish oil on cardiovascular health^{7,8,9,10,11}. Fish oil decreases the level of serum triglycerides^{8,9,10,11}, which leads to a reduction in the risk of developing arterial plaques⁷, ischemic heart disease⁹ and lowers the risk of fatality after myocardial infarction¹². Fish oil reduces serum triglycerides by reducing very low-density lipoprotein¹³ (VLDL). VLDL transports cholesterol and triglycerides around the body, and high concentrations are considered detrimental. High levels of blood triglycerides that become oxidised, start to accumulate on the blood vessel walls and may develop into atherosclerotic plaques increasing the potential for pieces to break off, leading to blockages and myocardial infarction. Atherosclerotic plaques also harden the arteries and can be a causative factor of high blood pressure and poor blood flow. In patients that take omega 3 fish oil, the PUFA competes with omega 6 arachidonic acid for incorporation into the platelets. This decreases platelet aggregation and clot formation^{14,15}.

Skin: As a PUFA, fish oil becomes incorporated into the skin cell membrane which increases flexibility of the cells and ultimately the skin. PUFA takes the place of saturated fats which are inflexible and can lead to fragile and cracking skin. Omega 3 fish oil can help control inflammatory skin disorders such as, psoriasis and acne. One study concluded that just 8 weeks of omega 3 supplementation was enough to improve itching, scalp lesions and scaling in psoriasis patients¹⁵. The evidence on omega 3 and acne is also impressive. Omega 3 supplementation were given to patients with acne vulgaris, and after just 2 months a significant improvement was noted. The average lesion count decreased from 62.8 to 42.4, and skin inflammation had significantly improved¹⁶.

Brain function: The nervous tissue in the body, including in the brain has a high fat content, and requires an adequate amount of dietary fats. DHA is an integral structural part of nerve cells, and EPA, much like in the skin is required to keep the membranes flexible which aids with nerve-to-nerve communication. Low fat diets can effect moods¹⁷ and supplementation may have a positive effect on mood disorders. In one study omega 3 made a difference in the mental outlook, emotional and social wellbeing which improved by 24% over two months¹⁸. Other studies report that a decrease in red blood cell DHA levels are associated with smaller brains and cognitive impairment in people free from dementia¹⁹.

OMEGA 6

Evening primrose oil contains many beneficial constituents, including beta-sitosterol, caffeic acid, campesterol, ellagic acid, gallic acid and kaempferol²⁰. The main therapeutic action from evening primrose oil however, comes from its constituent gamma linolenic acid (GLA). GLA is a long chain omega 6 fatty acid with an anti-inflammatory action. GLA converts into dihomo-gamma-linolenic acid (DGLA) which then converts into prostaglandins series 1 (PGE1), an anti-inflammatory hormone. Omega 6 fatty acids also convert into prostaglandins series 2 (PGE2), an inflammatory hormone, however it first converts into arachidonic acid, and therefore, PGE2 creation is much slower than PGE1, meaning that GLA has an anti-inflammatory effect²¹.



Diabetes: Multiple studies conclude the beneficial effects of evening primrose oil in patients with diabetic neuropathy. Taking evening primrose oil can slow the progression of, and even improve neuropathy in diabetics^{22,23}. Gamma linolenic acid and linoleic acid are both essential components of the myelin sheath and nerve cell membranes, adequate dietary intakes are needed for their maintenance. Supplementation has been shown to decrease the breakdown of myelin^{22,24}. A randomized, double blind placebo-controlled study involving 22 patients with type 1 and type 2 diabetes mellitus and diabetic neuropathy received GLA or a placebo for 6 months. Patients receiving GLA had statistically significant improvements in nerve function measurements²³. Both types of diabetics have compromised enzymatic activity. This reduces the functional activity of delta-6-desaturase, required for the conversion of linoleic acid into gamma linolenic acid. Evening primrose oil contains gamma linolenic acid, reducing the need for delta-6-desaturase.

Skin health: The skin cells require an abundance of unsaturated fatty acids to function well. The cell membrane requires flexible fats in order for the cell to maintain a certain degree of flexibility and to displace any saturated / inflexible fats that may contribute to cracking and flaking. A study looking at age related changes in structural and functional aspects of the skin concluded that evening primrose oil significantly improved markers of elasticity, firmness, fatigue resistance and roughness after just 12 weeks²⁹. Research suggests that people with eczema and other atopic disorders have a lesser ability to convert linoleic acid into gamma linolenic acid. This is due to a reduction in the enzyme activity of delta-6-desaturase²⁶. The inability to process fats effectively means that the skin cell membrane does not receive the building blocks it needs to function well. There is also an increase in inflammation in the absence of anti-inflammatory prostaglandins which is part of the pathology. Atopic eczema patients have a higher blood linoleic acid ratio and require GLA supplementation for correction²⁷. In a double-blind trial, evening primrose oil showed statistically significant improvements in inflammation, surface area affected, dryness and itching in patients with eczema. Blood levels of DGLA were also significantly increased²⁸. Another placebo-controlled study where the symptoms of eczema were assessed by both doctors and patients showed a significant therapeutic action of evening primrose oil, especially in itch markers. The improvements correlated to an increase in plasma DGLA²⁹.

PMS: Some women who suffer from premenstrual syndrome have an increased amount of the hormone prolactin, while others may have an increased sensitivity to normal levels of prolactin, causing the many unpleasant symptoms typically presented in PMS. Prolactin is produced by the pituitary gland and is regulated by dopamine. Decreased concentrations of PGE1 causes prolactin to have an exaggerated effect and cause symptoms of PMS. Studies demonstrate that evening primrose oil is a highly effective treatment for the symptoms of PMS, including depression, irritability, breast pain and tenderness, and fluid retention²⁵. The mode of action is the increase of PGE1 seen with GLA supplementation which decreases any exaggerated effect caused by prolactin.

OMEGA 9

Borage oil contains oleic acid, an omega 9 fatty acid. Omega 9 oleic acid is a monounsaturated fatty acid (MUFA). Oleic acid is the starting point for the synthesis of many other unsaturated fatty acids. The conversions happen via elongation or desaturation. Although omega 9 fatty acids are not essential in the diet, their consumption does provide some health benefits. Oleic acid is highly stable and resistant to oxidative damage. Oleic acid is incorporated into the cell membrane phospholipids and alters the membrane structure and properties.

Type 2 diabetes: Research suggests that diets high in monounsaturated fatty acids improves glycaemic control and lipoprotein levels in those with type 2 diabetes. Plasma VLDL is reduced and HDL is increased. The research found no evidence that a high monounsaturated fatty acid intake induced weight gain³⁰. Other studies confirm the findings that monounsaturated fatty acids increase insulin sensitivity³¹. Oleic acid was also shown to decrease food intake, independent of leptin. Oleic acid also caused a decrease in the hypothalamic expression of neuropeptide Y (an appetite stimulatory peptide)³².

Cardiovascular disease risk: Oleic acid is beneficial for reducing the risk of cardiovascular disease. It significantly reduces total blood triglyceride and LDL cholesterol levels³³. Oleic acid increases HDL levels. Oleic acids work well with omega 3 to significantly decrease cardiovascular disease risk.

Anti-inflammatory: Omega 9 has anti-inflammatory properties. Studies conclude that when combined with omega 3, LTb4 and CRP inflammatory markers are significantly decreased in patients with sepsis³⁴. Decreasing inflammation is beneficial for a wide range of health conditions, particularly systemic diseases.

ARE THERE ANY PRECAUTIONS BEFORE TAKING SUPER OMEGA 3-6-9?

Super omega 3-6-9 is intended exclusively for adults and may pose as a choking hazard if given to young children

FEATURES

- A balanced blend of Omega, 3,6 & 9 fatty acids
- Omega 3 in the form of DHA and EPA
- Omega 6 in the form of GLA
- Omega 9 in the form of oleic acid
- Dairy free
- Gluten free

HEALTH NEEDS



EVERYDAY HEALTH
& WELLBEING



JOINTS &
MUSCLES



WOMEN'S
HEALTH



HEART &
CIRCULATION



SPECIALIST
HEALTH

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