



OMEGAFACTORS® ULTRA PRIM® EVENING PRIMROSE OIL

A source of omega-6 essential fatty acids

THE KING'S CURE-ALL

Evening primrose, called “the King’s cure-all” by early European settlers, was used by Native Americans for healing long before its therapeutic seed oil was discovered. Evening primrose oil (EPO) is unique. It is one of the few oils that contain high levels of gamma-linolenic acid (GLA) – up to 9%. GLA is essential to good health because the body needs it to make a family of hormone-like compounds called prostaglandins that influence every organ in the body and regulate many biological functions. Prostaglandins (PGs) help alleviate many health problems ranging from heart disease and arthritis to skin disorders. OmegaFactors Ultra Prim Evening Primrose Oil provides therapeutic amounts of GLA to support optimum health.

QUALITY WITHOUT QUESTION

OmegaFactors Ultra Prim is made from the highest quality EPO, extracted by cold pressing – also called expeller pressing. This gentle method crushes the seed to release its nutritional oil without the use of external heat or harsh solvents. Researchers have identified natural compounds (esters) in cold-pressed EPO that have free-radical-scavenging capacity and the ability to inhibit oxidative enzyme activity (Zaugg, *et al*). OmegaFactors Ultra Prim is also ultra-purified to remove any organic residues or impurities, creating a highly-stable product without preservatives.

EPO FOR HEALTHY PROSTAGLANDIN LEVELS

PGs are very short-lived chemicals that regulate and control every cell and organ in your body on a moment-to-moment basis. Researchers have identified and isolated over 30 PGs, and each has different and highly-specific functions. By far the most important and well-researched PG is PGE1. Some of the primary functions of PGE1 are: relaxes blood vessels, improves circulation, lowers blood pressure, decreases inflammation, improves nerve function, and makes insulin work better.

According to Dr. David Horrobin, an expert in fatty acid research, “The level of PGE1 is of crucial importance to the body. A fall in the level of PGE1 will lead to potentially catastrophic consequences including increased vascular reactivity, enhanced blood clotting, elevated cholesterol production, enhanced risk of auto-immune disease, enhanced risk of inflammatory disorders, and susceptibility to depression” (Passwater).

Linoleic acid (LA) is abundant in the seeds and oils of sunflower, soybeans, safflower, corn and flax, and is the starting point for PGE1 formation. However, in order to be biologically active, LA must first be converted to GLA, with the help of the enzyme delta-6-desaturase. GLA is then converted to dihomo-gamma-linolenic acid (DGLA), the forerunner of PGE1. To facilitate the formation of PGE1, zinc, magnesium, and vitamins C, B3, and B6 must also be present. However, various nutritional and metabolic factors – like excess consumption of sugar, alcohol and trans/saturated fats, as well as aging, diabetes, and dietary deficiencies – can block or interfere with the enzyme needed to convert LA to GLA. Since EPO already contains GLA, your body can make all the PGE1 it needs without first having to convert dietary LA to GLA.

HEART DISEASE AND EPO

EPO has been used to decrease the risk of heart disease by lowering cholesterol, decreasing the risk of blood clots (decreasing platelet aggregation), regulating blood pressure, and maintaining healthy circulation. For example, supplementing with 3 g of GLA daily for 4 months has been shown to decrease triglyceride levels by 48%, increase HDL (“good” cholesterol) by 22%, and notably reduce LDL (“bad” cholesterol) and total cholesterol (Guignard, *et al*).

EPO FOR PMS

A review of rigorously-controlled studies, which examined the efficacy and safety of herbal medications used to treat common women’s health conditions, was conducted at Cedars-Sinai Hospital, and concluded that EPO may be a reasonable natural alternative for some patients with PMS (Hardy).

EPO FOR OPTIMAL SKIN HEALTH

A randomized, double-blind, placebo-controlled study in healthy adults, conducted in Switzerland, assessed the effects of EPO on age-related structural and functional changes in skin tissues (Muggli). Researchers looked at the effects of taking 3,000 mg EPO daily (3 x 500 mg twice daily) on skin moisture, transepidermal water loss, redness, firmness, elasticity, fatigue resistance, and roughness. The two treatment groups did not differ at baseline or at week four. At week 12, all measured variables, with the exception of skin redness, were significantly improved in the EPO group compared with the placebo group. Skin moisture, transepidermal water loss, elasticity, firmness, fatigue

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resistance and roughness had significantly improved. The researchers concluded that GLA is a conditionally essential fatty acid for the skin and that under certain conditions, the skin is unable to synthesize GLA, and therefore depends on preformed GLA for optimal structure and function.

The global incidence of atopic eczema is escalating. EPO was proven efficacious in a 1989 meta-analysis of randomized, double-blind, placebo-controlled clinical trials. A decade of further testing and subsequent independent re-analysis of 26 clinical studies, including 1,207 patients, establishes that EPO has beneficial effects on itching, crusting, edema and redness. These improvements became apparent between four to eight weeks after treatment began (Morse, *et al*). A recent study found that EPO may also be a promising natural treatment for scleroderma (Gaby).

EPO FOR EYE HEALTH

A randomized, double-blind, placebo-controlled clinical study with 76 female soft contact lens wearers conducted by the Sussex Eye Hospital in the UK, found significant positive results with EPO for easing dry eyes associated with the use of contact lens (Kokke, *et al*). Symptoms of dry eyes are commonly reported in contact lens wearers. The EPO group showed a significant improvement in the specific symptom of "dryness" at three and six months, and also a significant improvement in overall lens comfort at six months.

EPO FOR CHRONIC FATIGUE SYNDROME

Researchers at Hammersmith Hospital in London suggest that cold-pressed, non-refined EPO may be effective in treating chronic fatigue syndrome (Puri). Evidence suggests that Myalgic encephalomyelitis, also known as chronic fatigue syndrome, may be associated with a persistent viral infection that impedes biosynthesis of eicosanoids from certain long-chain polyunsaturated fatty acids, and offers an explanation for some of the symptoms and signs of chronic fatigue.

EPO MAY HELP PREVENT SEIZURES

Studies carried out at the Imperial College in London found that EPO may have anticonvulsant activity (Puri). Research shows that linoleic acid and gamma-linolenic acid are safe in epilepsy, with prolonged oral administration of linoleic acid and gamma-linolenic acid (in a 4:1 mixture) protecting rats from having seizures in four different epilepsy models. EPO-derived arachidonic acid inhibits sodium ion currents and synaptic transmission, while the EPO-derived eicosanoid prostaglandin E(1) appears to have anticonvulsant activity.

EPO AND FISH OIL FOR PERINATAL HEALTH

Recent studies carried out in Munich, Germany, have shown that co-supplementation with fish oil and EPO increases plasma docosahexaenoic acid (DHA), GLA, and DGLA levels in healthy women without reducing arachidonic acid (AA) concentrations (Geppert, *et al*). Fish oil supplementation during pregnancy improves maternal and neonatal DHA status. These studies provide a basis for testing fish oil and EPO blends in pregnant women for their effects on maternal and neonatal fatty acid status and infant development.

DOSAGE

OmegaFactors Ultra Prim Evening Primrose Oil is available in 500 mg and 1,000 mg softgels.

Recommended adult dose: 500 mg potency: 4-6 softgels daily or as directed by a health care practitioner.

1,000 mg potency: 2-3 softgels daily or as directed by a health care practitioner.

SAFETY:

EPO is exceptionally safe and therapeutic.

Pregnancy and lactation: Suitable for pregnant or lactating women

Children: Suitable for children at one quarter to one half the adult dose

Drug interactions: Consult a health care practitioner prior to use if you

are taking blood thinning or anti-psychotic medications

Contraindications: Do not use if you are taking chasteberry, phenothiazines or if you have any seizure disorder, mania and/or schizophrenia

GLA's role as a critical co-factor in prostaglandin formation makes it an important factor in human nutrition. Cold-pressed, hexane-free OmegaFactors Ultra Prim Evening Primrose Oil is an excellent source of GLA, and recommended for the maintenance of good health.

KEY REFERENCES

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