OPHTHALMOLOGIST RECOMMENDED

LASINE®

Dietary Supplement for Pre- and Post-Operative Eye Surgery Patients†
Supports Healthy Eyes Before and After Eye Surgery†

DESCRIPTION

LASINE is a unique dietary supplement developed in conjunction with leading ophthalmologists for use by patients prior to and following eye surgery. It is designed to help prepare and improve the ocular surface before surgery and support cornea/tear film health during the post-operative period. The LASINE formulation utilizes quality fish oils; Supercritical CO2 extracted omega fatty acids, EPA and DHA, for ultimate purity and absorption, along with organic borage seed oil that yields the omega fatty acid, GLA, for the healthy production of tears and moisture in the eyes. The addition of astaxanthin, an important carotenoid, helps to further support eye health and systemic regulatory processes. †

FUNCTIONS

Ocular discomfort characterized by an itchy, irritated and burning sensation that may also be accompanied by blurred vision that affects the tear film is a relatively common eye complaint. To better understand this eye complaint, it is important to understand that tears are composed of more than just water, and in fact contain proteins, mucus, salts and certain types of fat; all of these components work together with help of the lacrimal gland to lubricate and protect the eye. Eyes that are dry and irritated can result from living in certain climates, such as those that are particularly dry, but also can occur in association with other factors, e.g., use of contact lens, eye surgery, medications, nutrient deficiencies, and normal aging.

Research has shown that specific essential fatty acids found in certain plants and fish can play a role in helping to support natural tear production and tear film integrity. In particular, the omega fatty acids EPA, DHA and GLA help to promote moisture retention and regulatory balance in the eye.† EPA and DHA also promote healthy prostaglandin and cytokine balance to help protect the secretory function of the lacrimal glands.

LASINE provides the omega-3 fatty acids EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) from Supercritical CO2 extracted triglyceride fish oil, as well as GLA (gamma-linolenic acid) from organic borage seed oil. Supercritical CO2 oil, QÜELL Fish Oil, is unique among other fish oils for its critical extraction, purity, bioavailability and high concentrations. This extraction method of fish oil uses less heat and no chemical solvents when compared to molecular distillation, resulting in fewer unwanted isomer formations and “cleaner” oil. Heavy metals, PCBs, peroxides and other contaminants are also exceptionally low as a result of the extraction process levels. Recent data have demonstrated that omega-3 fatty acids delivered in a triglyceride form may result in greater plasma levels and a higher omega-3 index compared with omega-3 fatty acids delivered in the form of ethyl esters. GLA (gamma-linoleic acid) is an omega-6 fatty acid and precursor of prostaglandin PGE1, an eicosanoid with well-known beneficial properties. Clinical study results suggest that modulation of fatty acid composition and prostaglandin production with GLA supplementation supports the conjunctival epithelium of the eye. †

Astaxanthin is a potent antioxidant and free radical scavenger, even more potent than lutein and zeaxanthin, and is a carotenoid known to cross the blood-brain barrier and the blood-retinal barrier. Animal research shows that retinal photoreceptors of animals supplemented with astaxanthin sustain less damage from UV- light and recover more quickly than animals not supplemented with this carotenoid. Studies show that astaxanthin supports healthy biomarkers such as nitric oxide synthase (NOS), prostaglandin E2 (PGE2) and tumor necrosis factor. Additionally, astaxanthin suppressed NF-kB activation by free radicals in a rat model to help improve eye fatigue. †

Vitamin C, due to its antioxidant properties, protects the retina from excessive light energy. High levels of vitamin C are found in human retinal tissues. Vitamin A is found in the tear film of healthy eyes and plays an important role in the production of the tear film mucous layer. Vitamin B6 is included because it aids in the proper absorption of magnesium. Magnesium helps the body produce the hormone prostaglandin E-7 which helps to produce tears. Vitamin D-3 plays a key role in immune regulation and may help protect against the aging process. A recent study showed a significant improvement in visual function after supplementation, suggesting that vitamin D-3 supports the retina and age-related vision. †

INDICATIONS

LASINE is indicated as a dietary supplement for individuals that desire the essential nutrients for healthy tear production, ocular moisture retention, and retinal health.

FORMULA

Serving Size - 2 Softgels

Vitamin A	500 IU	Omega-3 Supercritical CO2 Triglyceride Concentrate	750 mg
Vitamin C	50 mg	Providing:	
Vitamin D3	1,000 IU	EPA (Eicosapentaenoic acid)	340 mg
Vitamin B6	25 mg	DHA (Docosahexaenoic acid)	220 mg
Magnesium	100mg	GLA (from organic borage seed oil)	100 mg
Astaxanthin	1.5 mg		

Other ingredients: Sunflower lecithin, beeswax, capsule (gelatin from fish [tilapia], glycerin, water, carob). This product contains fish oil (anchovies, sardines, mackerel)

SUGGESTED USE

As a dietary supplement, adults take 2 softgels daily or as directed by your healthcare professional.

SIDE EFFECTS

No adverse effects have been reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES

Neubronner J. Eur J Clin Nutr. 2011 Feb;65(2):247-54. [Omega-3].

Creuzot C, Passemard M, Viau S, Joffre C, Pouliquen P, Elena PP, Bron A, Brignole F. [Article in French] J Fr Ophtalmol. 2006 Oct;29(8):868-73. [Omega-3].

Miljanovic B, et al. Am J Clin Nutr. 2005 Oct;82(4):887-93. [Omega-3 and Omega-6].

Barabino S, et al. Cornea. 2003 Mar;22(2):97-101. [Gamma-linolenic acid].

Rand AL, Asbell PA. Curr Opin Ophthalmol. 2011 Jul;22(4):279-82.

Aragona P, et al. Investigative Ophthalmology and Visual Science 46:4474-9, 2005. [Omega-6].

Brignole-Baudouin F, et al. Acta Ophthalmol. 2011 Nov;89(7):e591-7. [Omega-3 and Omega-6].

Kangari H,et al.Ophthalmology. 2013 Nov; 120(11):2 191-6. doi: 10.101 6/j.ophtha.201 3.04.006. [Omega-3].

Viau S, et al. Graefes Arch Clin Exp Ophthalmol. 2012 Feb;250(2):21 1-22. [PUFAs].

Suzuki Y, et al. Exp Eye Res. 2006 Feb;82(2):275-81. Epub 2005 Aug 26. [Astaxanthin].

Ohgami K, et al. Invest Ophthalmol Vis Sci. 2003 Jun;44(6):2694-701. [Astaxanthin].

Kim EC, Choi JS, Joo CK. Am J Ophthalmol. 2009 Feb;147(2):206-213.e3. [Vitamin A].

Horrobin DF, Campbell A. McEwen CG. Prog Lipid Res 8(4). 263-4, 1981. [E.F.A., Pyroxidine, and Vitamin C].

Lee V. Neurobiol Aging 2011; 33: 10. [Vitamin D].

Peponis V, et al. Br J Ophthalmol. 2002 Dec;86(12):1369-73.

Boylan LM, Spallholz JE. Magnes Res. 1990 Jun;3(2):79-85. [Magnesium and vitamin B-6].

Woodward AM, Senchyna M, Argüeso P. Exp Eye Res. 2012 Jul;100:98-100.

For more information on LASINE® visit www.mediniche.com

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Manufactured for:

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