Vita Aid®
Professional Nutrition Product

OptiFort

VA-089

Improves vision and protects against AMD and cataracts

Key Points:

- Synergistic combination of highly potent phyto-antioxidants, vitamins A, C, E and zinc to nourish the eye, protect against free radicals, and prevent AMD & cataracts.
- European bilberry third party tested to contain minimum 25% anthocyanidins and 36% anthocyanosides.
- Highly stable and bioavailable ester form of lutein exerts better antioxidant effect.
- Promotes rapid recovery and adaptation for eye fatigue and night vision adjustment.

Indication:

To improve visual function, including visual acuity, glare and contrast sensitivity, and contrast acuity, and to promote eye health.
Protects against age-related macular degeneration and cataracts.

Quantity: 56 | Dosage Form: Vegetarian Capsules

Ingredients (per capsule):

Bilberry Extract 100:1 (*Vaccinium myrtillus*) (fruit) (Standardized to 25% anthocyanidins and 36% anthocyanosides)	80 mg
Marigold Extract (*Tagetes erecta*) (FloraGLO®) (petals) (Standardized extract containing 5% lutein (6 mg) and 0.22% zeaxanthin (264 mcg))	120 mg
Vitamin A (from vitamin A acetate) (equivalent to 300 mcg vitamin A)	1000 IU
Vitamin C (from calcium ascorbate)	60 mg
Vitamin E (from d-alpha tocopheryl acetate) (equivalent to 20 mg d-alpha tocopherol)	30 IU
Zinc (from zinc gluconate)	5 mg

Non-Medicinal Ingredients:
Organic apple fiber, silicon dioxide, L-leucine, pullulan (capsule)

Suggested Use:
Take 2-4 capsules daily with meals or as directed by a health care practitioner.

Vegetarian formulation.

Description:

OptiFort contains the essential vitamins A, C, E, and zinc that work in synergy with the anthocyanidins from bilberry, and lutein and zeaxanthin from marigold extract, to prevent visual display terminal induced eye fatigue and night blindness. It can promote blood circulation to improve oxygen and nutrient delivery to ocular cells.

OptiFort also nourishes and increases the optical density of the macular pigment that protects the underlying photoreceptor cell layer from light-induced damage initiated by free radicals during photosensitized reactions.[1] By maintaining the antioxidant status in the eye and reducing eye fragility, OptiFort provides overall eye protection, especially against ocular diseases such as age-related macular degeneration (AMD), cataracts, glaucoma, and retinopathy.

Bilberry

The therapeutic properties of bilberry are attributed to the presence of anthocyanosides, which are potent antioxidants.[2] It is suggested that the mechanism by which bilberry enhances visual acuity is through inhibition of free radicals, modulation of retinal enzymes activity, and improving microcirculation.[3] Through these mechanisms, bilberry enhances collagen structures and stimulates healthy supply of oxygen and nutrients to nourish the eye. Many studies have reported beneficial effects of bilberry in improving glaucoma, halting cataract formation, and maintaining visual health.

Anthocyanosides supplementation has been shown to prevent ocular degeneration. The rapid spread of computers and video display terminals (VTDs) in the home and workplace has led to an increase in ocular and visual problems, including eye discomfort, blurring of distant objects, eye strain, and asthenopia (visual fatigue). Subjects who received 50 mg of anthocyanosides experienced no decline in visual health, whereas the placebo group did. In addition, anthocyanosides promoted recovery from VDT work-induced visual alteration and fatigue.[4]

Marigold Flower

The marigold flower contains eye antioxidants, lutein and zeaxanthin, that are present in great amounts in the macular region of the retina. Lutein and zeaxanthin have been shown to increase macular pigment density optical (MPOD), which absorbs and attenuates the amount of blue light striking the retina, providing protection from damaging short wavelength light and reducing the effects of scattered

light.[5] Lutein and zeaxanthin also maintain the integrity and function of blood vessels that supply the macular region of the retina.

Many clinical trials report the benefits of lutein and zeaxanthin supplementations in improving visual functions, and preventing age-related macular degeneration (AMD) and cataracts. One clinical study investigated the effects of carotenoids supplementation, specifically lutein and zeaxanthin, by comparing 356 subjects aged 55 – 80 years who developed advanced AMD and 520 control subjects with other ocular diseases. A higher dietary intake of carotenoids, lutein and zeaxanthin, was associated with a statistically significant 43% lower risk of AMD and other ocular complications when compared with those who consumed the lowest levels of carotenoids.[6]

Various other studies confirmed that dietary supplementation of lutein and zeaxanthin improve contrast acuity thresholds, MPOD, and colour sensitivity which contribute to visual health.

Vitamin A

Vitamin A, the precursor of rhodopsin, helps to maintain healthy eyesight. Rhodopsin regeneration plays an important role in proper night vision.[7] Vitamin A deficiency is characterized by failure or delayed recovery of vision in the dark following a light flash, also known as night blindness.

Vitamin A is also a potent antioxidant for sight and promotes healthy surface linings of the eyes to protect against bacteria and viruses.

Vitamin C

Vitamin C malnutrition is the leading contributor to various eye abnormalities, including glaucoma, cataracts and macular degeneration. Vitamin C contributes to visual health by acting as an antioxidant that scavenges free radicals to prevent oxidative damage to the eye. High blood level of vitamin C is associated with 64% reduced chance for cataract development.[8]

Vitamin E

The synergistic combinations of fat-soluble vitamin E and water-soluble vitamin C can significantly reduce the risk of age-related macular degeneration by the inhibition of free radicals to support the integrity of the aging eye. In age-related eye disease study (AREDS) involving nearly 5000 people, researchers discovered that vitamin E along with other antioxidants lowers the risk of developing advanced AMD by 25%.[9]

Zinc

Zinc is required to synthesize retinol binding protein, which transports vitamin A. Zinc is an essential mineral that stimulates the activity of approximately 100 enzymes, including the enzyme that converts retinol to retinal for the synthesis of rhodopsin involved in dark adaptation. Zinc deficiency is associated with a decreased release of vitamin A from the liver, which may contribute to symptoms of night blindness that are seen with zinc deficiency.[10]

Cautions:

Zinc supplementation can cause a copper deficiency. Consult a health care practitioner prior to use if pregnant or breastfeeding.

References:

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4. Nakaishi H, Matsumoto H, Tominaga S, and Hirayama M. Effects of black currant anthocyanosides intake on dark adaptation and VDT work-induced transient refractive alteration in healthy humans. *Alternative Medicine Review*. 2000; 5(6): 553 - 562.

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8. Valero MP, Fletcher AE, Stavola BLD, Vioque J, and Alepuz VC. Vitamin C is associated with reduced risk of cataract in a Mediterranean population. *J Nutr*. 2002; 132: 1299-1306.

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