



ADVANCED
ORTHOMOLECULAR RESEARCH

AOR CODE: AOR04177

Premium

Vision Support II

\$61.95 CAD

Reduce Your Risk of Age-Related Macular Degeneration

- Targeted blend of vitamins and botanicals for optimal eye health
- Protects eyes against damage from UV light, blue light & high blood sugar
- Oil based delivery system for optimal absorption



 Gluten Free  Absorbables Eye Health

AOR Code	Variant	Price
AOR04177	60 SOFTGELS	\$61.95

Details

Vision Support II is a combination of the most advanced nutrients clinically demonstrated to help support eye health and fight age-related macular degeneration (AMD). AOR's Vision Support II provides lutein, zeaxanthin, benfotiamine and black soybean hull extract in an olive oil suspension to enhance the absorption of these ingredients. The effectiveness of Vision Support II can be maximized with a complete, high-quality multivitamin/mineral formulation.

Vision Support II is primarily designed to protect against age-related macular degeneration (AMD), and can also protect against the development of cataracts. Ultraviolet light and blue light contribute to damage in the lens and macula, and lutein and zeaxanthin are pigments found in the eyes whose main function is the filtration of UV light. Benfotiamine is a highly bioavailable form of vitamin B1, and studies have shown that it helps prevent the formation of AGEs (advanced glycation end-products), which are damaged proteins that accumulate in the lens and can result in cataracts.

Overall, Vision Support II is especially beneficial for those with a family history of macular degeneration, those with cataracts, for active people who spend a lot of time outside in the sun, and for those at risk of computer vision syndrome such as office workers or students.

Label Info

Discussion

Vision Support II™ is a combination of the most advanced nutraceuticals clinically demonstrated to support eye health in conditions (associated with sunlight damage) such as age-related macular degeneration.

Product Variation

Product Code	Size
AOR04177	60 SOFTGELS

Supplements Facts

Serving Size: 1 Softgel	Amount	% Daily
Lutein	7.5 mg	
Zeaxanthin	7.5 mg	
Benfotiamine	80 mg	
Astaxanthin	2 mg	
Black Soybean hull extract (10% cyanidin-3-glucosides)	60 mg	

extra virgin olive oil, safflower oil, corn oil, mixed tocopherol concentrate. *Softgel*: caramel, gelatin, glycerin.

Guarantees

AOR™ guarantees that all ingredients have been declared on the label. Contains no wheat, gluten, nuts, peanuts, sesame seeds, mustard, dairy, eggs, fish or shellfish.

Adult Dosage

Take 2 softgels per day with food, or as directed by a qualified health care practitioner.

Cautions

Consult a health care practitioner prior to use if you are pregnant, breastfeeding, taking blood thinners or for use beyond 4 weeks. Contains soy and sulphites. Do not use if you have a soy or sulphite allergy.

Source

- Lutein and Zeaxanthin – Marigold (*Tagetes erecta*)
- Benfotiamine – Pharmaceutical synthesis
- Astaxanthin – Algae (*Haematococcus pluvialis*)
- Cyanidin-3-Glucosides – Black soybean hull

Main Application

- Age-related macular degeneration (AMD)
- Eye health
- Cataracts
- Eye fatigue

Disclaimer

The information and product descriptions appearing on this website are for information purposes only, and are not intended to provide or replace medical advice to individuals from a qualified health care professional. Consult with your physician if you have any health concerns, and before initiating any new diet, exercise, supplement, or other lifestyle changes.

Research

Background

Introducing Vision Support II

Vision Support II is the most effective oral eye health formula available to help prevent age-related macular degeneration and cataracts as well as relieve day-to-day eye fatigue. Astaxanthin is a carotenoid that is valuable in relieving symptoms of weary eyes—a condition known as asthenopia; black soybean hull extract is also effective for symptoms of asthenopia. Zeaxanthin and lutein are carotenoids which have proven beneficial for relieving symptoms of cataracts and macular degeneration. Benfotiamine a form of the b-vitamin thiamine which is effective in preventing the formation of advanced glycation end products, which contribute to cataract formation. Vision Support II provides the ultimate protection when combined with a high-quality multivitamin/mineral and/or acetyl-L-carnosine eye drops.

Macular Degeneration – The Leading Cause of Blindness

Our vision – its immeasurable value is matched only by our propensity to take it for granted. This is the kind of double-standard that is at the root of all things that are impossible to appreciate until they are gone. The World Health Organization has some sobering statistics for us: every legally blind individual requires two able-bodied ones to look after him or her; macular degeneration (MD), by far the leading root cause of blindness in North America, affects the majority of us in some form or another as we age. Its more dire manifestation of Age-Related Macular Degeneration (AMD) can indeed lead to blindness, and in only 10% of those instances can vision be saved. Other threats to vision (ocular) health include cataract formation, asthenopia (eye fatigue) and glycation.

Prevention is Key

One would be hard-pressed to find a more appropriate application for the old adage “an ounce of prevention is worth a ton of cure” than in preventative vision health. Indeed, the simplicity of such nutrients as manganese, grape seed, and vitamin C are in sharp contrast to their contributions to ocular health. However, more recent research has allowed us to better understand certain mechanisms of vision degeneration as well as new nutrients that may help prevent this degeneration.

Research

Astaxanthin

This maritime carotenoid has distinguished itself in recent years in a number of roles, one of which is asthenopia. This increasingly common condition is often caused by overexposure to visual display

terminals (VDT's), and human studies have shown that astaxanthin can alleviate asthenopia symptoms (such as eye strain, redness, and blurred vision) by 54%. Scientists believe the mechanism of action for these benefits is based on the increased ciliary body accommodation, increased retinal blood flow, and anti-inflammatory properties associated with astaxanthin supplementation. The ciliary body is composed primarily of an ocular muscle that stretches across the vitreous humour between the lens and the pupil. Accommodation refers to the ability of the ciliary body to manipulate the thickness of the lens in order to focus light on the retina. If the eye is required to focus on a fixed object for extended periods of time, muscle spasms and other signs of fatigue may occur. Factors such as the speed at which the ciliary body reacts to a change in visual focus are used to evaluate improvements (if any) in the accommodation response. Two clinical studies conducted in 2005 determined that the speed of the ciliary body's reactions in the astaxanthin group were approximately 46% faster than those in the placebo group. This means that those taking astaxanthin were able to spot moving objects that much faster than those who were not. Furthermore, another placebo-controlled clinical study determined that astaxanthin can increase retinal blood flow by approximately 11% while yet another study (with laboratory rats) found that astaxanthin can reduce ciliary cell inflammation by nearly 80%.

Black Soybean Hull Extract

Asthenopia can arguably be considered part of the information age since it is so closely associated with overexposure to visual display terminals (VDTs). Nowhere is this reality more acute than in Japan, home of the most automated economy in the world. It seems fitting, therefore, that so many of the latest clinical studies dealing with Asthenopia originate there. The aforementioned astaxanthin clinical studies are one example, and those concerning black soybean hull extract are another. One such study in 2004 demonstrated black soybean hull extract 'significantly' improved the symptoms of Asthenopia among 32 healthy adults who regularly engage in VDT work. Black soybean hull extract is another example of 'pushing the envelope' to develop the most advanced ocular health nutraceuticals possible.

Benfotiamine

Very simply put, glycation is the bonding of sugar molecules to proteins or lipids in the body without the mediating action of an enzyme or coenzyme, and is a natural part of the aging process. The end result is the formation of Advanced Glycation Endproducts (AGEs) – stiff tissue that can affect any cell in the body. The cells of the retina are particularly vulnerable, because when blood sugar levels rise, some key cells high in metabolic activity (such as the retina cells and the filtering cells [glomeruli] of the kidney) are flooded with glucose. Thiamin pyrophosphate (TPP) is the active coenzyme form of thiamin, and maintaining high TPP levels will cause an enzymatic reaction that alleviates the effects of this glucose backlog, thus inhibiting the formation of AGEs. Benfotiamine is a lipid-soluble version of thiamin that is at least 5 times more bioavailable than regular thiamin supplements, and is the most efficient method known for effectively raising TPP levels in body tissues other than the brain.

Lutein and Zeaxanthin

This 'dynamic duo' of ocular health is by no means new. In nature, these are pigments that give vegetables such as corn and spinach their color, but in the human body, these are fat-soluble carotenoids (structurally similar to vitamin A) that are found primarily in the retina. This fact has always served to define their antioxidant capacities specifically within the realm of ocular health, with

clinical and observational studies demonstrating their effectiveness in dealing with the symptoms of Age-Related Macular Degeneration (AMD) and cataract formation. AMD refers to the age-related deterioration of the central part of the retina (namely the macula), which is adjacent to the optic nerve and contains the fovea, which is at the center of the macula and is responsible for detailed central vision. Like glycation, AMD is a normal part of the aging process and can vary greatly in degrees of severity. Prevention is key of course, and the latest clinical studies using lutein and zeaxanthin have taken an unmistakable trend: the dosages have been increasing and more emphasis has been made on absorption. Indeed, one very encouraging study used 30 mg daily of both lutein and zeaxanthin (in a base of canola oil) to raise macular pigment optical density(OD) in healthy human subjects by as much as 40% in a dose-dependent manner.

Market Trends

The most popular eye-health nutrients are vitamin A and beta-carotene. Some other common supplements that are taken to promote eye health include vitamin C, lutein, zeaxanthin, phytochemical antioxidants and bioflavonoids.

AOR Advantage

AOR's Vision Support II formula includes a variety of nutrients that have a positive impact on eye health. These include lutein and zeaxanthin, natural pigments called xanthophylls, which help filter UV light entering the eye, preventing damage to the lens. The formula also contains astaxanthin and black soybean hull extract – both of which are extremely powerful antioxidants, and benfotiamine, a form of vitamin B1 that prevents protein glycation – a process that is extremely damaging to the eyes. These ingredients are delivered in an oil-based delivery system for improved absorption.

References

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Scharrer A, Ober M. Anthocyanosides in the treatment of retinopathies. *Klin Monatsbl Augenheilkd* 1981 May; 178(5): 386-9.

Abstract

Clinical study with black soybean extract on ocular function

Japanese Review of Clinical Ophthalmology 2004, V.98;N.11;Pg.982-986

Sakimoto T, et al.

The effect and safety of extract of black soybeans hull on several ocular functions in 32 healthy adults with asthenopia who engages in visual display terminals (VDT) work were investigated by single open study given orally for 4 weeks. The improvement was obtained significantly in sight, accommodation, flicker frequency and subjective symptoms at Week 4. No adverse reactions and worse cases in this study were observed, so that the safety of this extract was confirmed.

Lutein and zeaxanthin dietary supplements raise macular pigment density and serum concentrations of these carotenoids in humans

J Nutr. 2003 Apr;133(4):992-8. Erratum in: J Nutr. 2003 Jun;133(6):1953.

Bone RA, et al.

Age-related macular degeneration (AMD) is thought to be the result of a lifetime of oxidative insult that results in photoreceptor death within the macula. Increased risk of AMD may result from low levels of lutein and zeaxanthin (macular pigment) in the diet, serum or retina, and excessive exposure to blue light. Through its light-screening capacity and antioxidant activity, macular pigment may reduce photooxidation in the central retina. Lutein supplements, at 30 mg/d, were shown previously to increase serum lutein and macular pigment density in two subjects. In this study, we compared the effects of a range of lutein doses (2.4- 30 mg/d), as well as a high zeaxanthin dose (30 mg/d), on the serum and macular pigment in a series of experiments. Serum carotenoids were quantified by HPLC. Macular pigment densities were determined psychophysically. Serum lutein concentrations in each subject reached a plateau that was correlated with the dose ($r = 0.82$, $P < 0.001$). Plateau concentrations ranged from 2.8×10^{-7} to 2.7×10^{-6} mol/L. Zeaxanthin was less well absorbed than an equal lutein dose, resulting in plateaus of 5×10^{-7} mol/L. The rate of increase in macular pigment optical density was correlated with the plateau concentration of carotenoids in the serum ($r = 0.58$, P

< 0.001), but not with the presupplementation optical density ($r = 0.13$, $P = 0.21$). The mean rate of increase was $(3.42 \pm 0.80) \times 10^5$ mAU/d per unit concentration (mol/L) of carotenoids in the serum. It remains to be demonstrated whether lutein or zeaxanthin dietary supplements reduce the incidence of AMD.

Effects of Astaxanthin on accommodation, critical flicker fusions, and pattern evoked potential in visual display terminal workers.

J. Trad. Med. 2002, 19(5): 170-173.

Nagaki Y, et al.

We evaluated the effects of astaxanthin, a red carotenoid, on accommodation, critical flicker fusion (CFF), and pattern visual evoked potential (PVEP) in visual display terminal (VDT) workers. As controls, 13 non-VDT workers received no supplementation (Group A). Twenty-six VDT workers were randomized into 2 groups: Group B consisted of 13 subjects who received oral astaxanthin, 5mg/day, for 4 weeks, and Group C consisted of 13 subjects who received an oral placebo, 5mg/day, for 4 weeks. No significant difference in age was noted among the 3 groups. A double-masked study was designed in Groups B and C. Accommodation amplitude in Group A was 3.7. \pm 1.5 diopters. Accommodation amplitudes (2.3. \pm 1.4 and 2.2. \pm 1.0 diopters) in Groups B and C before supplementation were significantly (p

Anthocyanosides in the treatment of retinopathies

Klin Monatsbl Augenheilkd 1981 May; 178(5): 386-9.

Scharrer A, Ober M.

Thirty-one patients with various types of retinopathy were investigated with regard to the effect of anthocyanosides on the retinal vessels. Especially in patients with diabetic retinopathy, a positive influence on the permeability and tendency to hemorrhage was observed. The importance of internal treatment of the primary disease is pointed out.