

How Diet and Nutrition Are Keys to Healthy Eyes

Posted On 20 Nov 2014 Dr. David Ardaya

Learn more about the connection between nutrition and eye health from optometry expert and media spokes-doctor for the California Optometric Association, Dr. David Ardaya.



The key to healthy eyes has a lot to do directly with what type of nutrition your body is getting. By adding powerful antioxidants to your diet, you can greatly improve your health, especially for your eyes. Researchers have linked nutrients such as lutein, vitamin C, and zinc to reducing the risk of certain eye diseases, including macular degeneration and cataracts.

Emerging research in the last 20 years has linked diet and nutrition with a decreased risk of age-related macular degeneration.

Leading Causes of Visual Impairment for Aging Populations

Eye health is very important for seniors. Seniors can face certain degenerative eye-related issues that can stop them from normal day-to-day activities. Some degenerative eye-related issues that older adults can face include Age-Related Macular Degeneration and Cataracts.

1. Age-Related Macular Degeneration

The [American Optometric Association \(AOA\)](#) defines [Age-Related](#)

Macular Degeneration (AMD) as an acquired ocular disorder and a leading cause of legal blindness in persons over 60. AMD affects the macula, the central part of the retina, which is responsible for providing clear, sharp vision needed for reading, writing, driving and other visually-demanding activities. According to the AOA, approximately 10 million Americans suffer from early signs of AMD and almost a half million people have significant visual loss from late-stage AMD.

Research has now suggested that the development of AMD is linked to a depleted level of macular pigment. This retinal layer efficiently filters out harmful blue wavelengths of light, and also reduces the amount of free radicals. It is suggested that certain antioxidant compounds reduce the effect that these free radicals have on the macular pigment, and may have an impact on the development of AMD. These antioxidants have demonstrated their effectiveness in building and maintaining the thickness of the retinal pigment layer, and are known as carotenoids, a family of colored compounds found in fruits and vegetables. Lutein and zeaxanthin are carotenoids found in many vegetables and fruits; they are found in the highest concentration in dark, leafy green vegetables such as spinach, collard greens, and kale. Studies have shown that a diet high in these materials have some effect on delaying the advancement of AMD.

2. Cataracts

Another leading cause of visual impairment among aging Americans and a **key quality of life issue is cataracts**. Cataracts develop when the proteins in the lens of the eye are damaged, causing them to become translucent. Research also shows that there are several risk factors for cataracts that we can control by changing certain behaviors. These preventive actions include: not smoking, reducing exposure to sunlight by wearing UVA/UVB protective eyewear and wide brimmed hats, controlling other diseases such as diabetes and eating a healthy diet. Nutrition is one promising means of preventing or delaying the progression of cataracts.

According to the AOA, several research studies show that the antioxidant properties of vitamins C and E may protect against the development and progression of cataracts. Early evidence also suggests that the carotenoids lutein and zeaxanthin, which are also antioxidants, may also be protective against cataracts.

Given the positive association between nutrition and cataracts, it's essential for seniors to increase the amount of certain antioxidants in their daily diet. Eating five servings of fruits and vegetables each day as currently recommended by the National Cancer Institute and U.S. Department of Agriculture can provide more than 100 mg vitamin C and 5 to 6 mg of carotenoids, including lutein and zeaxanthin, given wise choices of fruits and vegetables.

Top 5 Nutrients That Will Greatly Improve Your Eye Health

1. Lutein and Zeaxanthin

Are important nutrients found in green leafy vegetables, as well as other foods, such as eggs. Many studies have shown that lutein and zeaxanthin reduce the risk of chronic eye diseases, including age-related macular degeneration and cataracts.

2. Vitamin C

Vitamin C is an antioxidant found in fruits and vegetables. Scientific evidence suggests vitamin C lowers the risk of developing cataracts, and when taken in combination with other essential nutrients, can slow the progression of age-related macular degeneration and visual acuity loss.

3. Vitamin E

Vitamin E in its most biologically active form is a powerful antioxidant found in nuts, fortified cereals and sweet potatoes. It is thought to protect cells of the eyes from damage caused by unstable molecules called free radicals which break down healthy tissue.

4. Essential Fatty Acids

Fats are a necessary part of the human diet. They maintain the

integrity of the nervous system, fuel cells and boost the immune system. Two omega-3 fatty acids have been shown to be important for proper visual development and retinal function.

5. Zinc

Zinc is an essential trace mineral or 'helper molecule.' It plays a vital role in bringing vitamin A from the liver to the retina in order to produce melanin, a protective pigment in the eyes. Zinc is highly concentrated in the eye, mostly in the retina and choroid, the vascular tissue layer lying under the retina.

The most important and proactive thing that caregivers and adult children can do for their aging parents is to make sure to always have a comprehensive eye exam every year. California residents can visit www.eyehelp.org to find a COA optometrist, and anyone at all can visit the American Optometry Association's website to find a local doctor or their state optometric association.

About the Author



In 2003, Dr. David Ardaya graduated as a Doctor of Optometry from Pacific University a while a member of the Beta Sigma Kappa honor society. Prior to his optometric education, Dr. Ardaya was awarded the President's Scholarship given to the class valedictorian and was accepted into the honors college at the University of Arizona where he graduated in 1998 with a Bachelors of Science in Physiological

Sciences.

Dr. Ardaya currently serves as the Immediate Past President of the Orange County Optometric Society (OCOS) and was recognized as Young Optometrist of the Year, 2009 by the largest optometric organization in the state, the [California Optometric Association](#). In addition, Dr. Ardaya is the legislative chairperson for OCOS and is the treasurer of a political action committee (LSCOA-PAC) that promotes optometrists' and patients' legislative rights and is a member of the American Optometric Association.

Dr. Ardaya is also a published author in Optometry magazine and has appeared in various newspaper articles regarding optometric and vision issues. He also is a media spokes-doctor for the California Optometric Association and has been heard on radio promoting access to vision care for children.