

Aging and Vision Loss: Cataracts



Cataracts are one of the four leading causes of visual impairment among older adults in the United States. A cataract alone may cause visual impairment, or it may develop as a complication of other eye diseases such as glaucoma or diabetic retinopathy.

A cataract is a clouding of the lens of the eye, which is normally clear. Light can no longer pass through the lens easily, and vision becomes hazy or blurred. The amount and pattern of cloudiness varies, and it is possible to be unaware of a cataract's presence if the center of the lens is not clouded. How quickly a cataract develops varies among individuals. Most cataracts associated with aging develop gradually over a period of years. Cataracts that develop in younger people, or those with diabetes, may progress more rapidly.

Common symptoms of cataracts include:

- Blurred or double vision,
- Frequent changes of eyeglass prescriptions,
- Problems with light (sensitivity to light or glare, needing brighter light for reading or close work, or poor night vision)
- Seeing yellow or faded colors.

However, a comprehensive examination by an eye care physician can detect the presence and extent of a cataract, as well as determine whether any other visual problems exist.

The most common type of cataract develops as the eye ages. Other causes include heredity, medical problems such as diabetes, eye injuries and previous eye surgery, medications such as steroids or, possibly, long-term unprotected exposure to sunlight.

Protecting the eyes from excessive sunlight may help prevent or slow the development of cataracts. Sunglasses or sunshields that screen out ultraviolet (UV) light rays or regular glasses with a clear anti-UV coating offer this protection. No medication, exercise or optical device has been shown to prevent or cure cataracts.

Cataracts and Nutrition

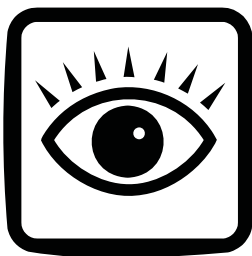
Recent studies suggest that the development of cataracts may be more influenced by nutritional factors than previously thought. A study published in the American Journal of Clinical Nutrition found that woman might be able to reduce the risk for early onset of cataracts by making sure they get plenty of Vitamin C. Women who took Vitamin

C supplements for 10 years or more reduced the development of cataracts by 60% compared with the women who did not take Vitamin C. Overall, in women who had never smoked, and in those who consumed foods with high amounts of antioxidants, cataracts were considerably less likely to develop.

A study published in the journal "*Ophthalmology*" highlights the growing understanding of the role of nutrition. The article cites earlier studies which showed that antioxidants such as Vitamins A, C and E, seem to protect against the development of **nuclear cataracts**. The study also found that by increasing consumption of polyunsaturated fats, you might reduce the prevalence of **cortical cataracts**; while eating foods high in protein and some of the B vitamins significantly reduce the risk for developing nuclear cataracts.

In summary, it now appears that diets high in the antioxidants, particularly Vitamin C, high in Vitamins B-1 and B-2, and high in the healthy fats, may help prevent the development of cataracts. Non-smokers are also less likely to develop cataracts.

Cataracts Treatment



The only current treatment for cataracts is surgery, which is safe and highly successful. When surgery is appropriate, and how successful the outcome may be, varies from person to person. If macular degeneration, diabetic retinopathy, or glaucoma is already present, the development of a cataract complicates these conditions and makes the decision whether to have surgery more complex. The eye care physician must evaluate which condition is creating the most visual difficulty, and then discuss with the patient the risks, benefits and possible outcomes of surgery. Although cataract surgery will remove the cataract, it will not restore vision already lost because of other eye conditions.

Cataract symptoms may be mild enough that a change in eyeglass prescription, special magnifiers, or sunshields may relieve them. When a cataract begins to interfere with everyday activities such as reading, cooking, driving safely or taking medications, surgery should be discussed with your eye care physician. It is important to actively share in the decision-making process because only you know how much your vision problem is affecting the quality of your life and your ability to perform activities and tasks.

In most cataract surgeries, the natural lens is removed and replaced with an intraocular lens implant. Less commonly, contact lenses or cataract eyeglasses are used instead of an implant. If the natural capsule supporting the intraocular lens becomes cloudy, a condition called "after cataract," a laser is then used to open up the capsule and reduce the cloudiness.

According to the American Academy of Ophthalmology, more than 1.4 million people in the U.S. have cataract surgery every year, 95 percent without complications. Improved

vision is the result in more than 90 percent of cases, unless there are problems with the cornea, retina, or optic nerve. When other eye conditions are present, low vision devices may still be needed after surgery. The low vision rehabilitation process can assess remaining vision and provide training in new visual skills using these special devices.

For more information talk to your eye care physician, CSBPS staff, the Lighthouse National Center for Vision and Aging (800) 334-5497, or Prevent Blindness America (800) 331-2020.

Vitamin & Mineral Supplements and Your Eyes

Background

Scientists have long debated whether taking vitamin and/or mineral supplements could help prevent, treat or cure certain eye conditions. Some early scientific studies seemed to show supplements had the potential to prevent or slow the progression of cataract and age-related macular degeneration (AMD), although a more complete study was needed to answer some important questions:



- Which supplements are helpful for which condition(s)?
- Which patients will benefit from supplementation?
- What doses of supplements would benefit patients?
- What other effects might these supplements have on the body?

A recent study, the Age-Related Eye Disease Study (AREDS), sought to address these questions, and seems to have given us some (but not all) of the answers.

What is AREDS?

The Age-Related Eye Disease Study (AREDS) is a major study sponsored by the National Eye Institute (NEI), one of the Federal government's National Institutes of Health, and was conducted at 11 major medical center research facilities around the country.

Should I Take Nutritional Supplements?

If you have intermediate or advanced AMD (in one eye only), talk to your physician about taking nutritional supplements. He or she can help you determine if they may be beneficial - and safe - for you, and what types and doses of supplements to take. It is very important to talk with your physician before taking large dose supplements, and to follow the dosage recommendations carefully. Some supplements may interfere with each other or other medications.

Smokers and ex-smokers should probably not take beta-carotene, as studies have shown a link between beta-carotene use and lung cancer among smokers.

Where Can I Get More Information?

For additional resources and information, contact your eye physician, CSBPS Low Vision Services staff, **The Association for Macular Diseases, Inc.** www.macula.org (210 East 64th Street, New York, NY 11021, (212-605-3719)), **Foundation Fighting Blindness**, [www. Blindness.org/Macular Degeneration](http://www.Blindness.org/Macular Degeneration), (11435 Cronhill Drive, Owings Mills, MD 21117 -2220, (800-683-5555)).

More information on AREDS is available from the **National Eye Institute of the National Institutes of Health** at www.nei.nih.gov/amd. Another excellent source is the **American Academy of Ophthalmology's** partner web site, **Medem** www.medem.com under the Medical Library link.

C•S•B•P•S

Programs and Services

- Low vision clinic and low vision rehabilitation
- Instruction in independent living skills
- Professional counseling and support groups
- Safe travel and orientation training
- Education, information and referral services
- Assistive Technology resources
- Adaptive aids specialty store, SightConnection

Since 1965, our mission has been to work with individuals, families and communities to restore, maintain and enhance the independence and well-being of people with impaired vision.

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