Healthy Living and Macular Degeneration: Tips to Protect Your Sight

The nonprofit BrightFocus Foundation is an international leader in supporting innovative research to find cures for Alzheimer’s disease, macular degeneration, and glaucoma. Guided by scientific review panels of world-class researchers, we invest in promising and rigorous science to end diseases of mind and sight. Through free publications such as this one, we share research findings and helpful tips with those impacted by these diseases, including families and caregivers.

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Age-related macular degeneration (AMD) is a leading cause of irreversible vision loss among Americans age 60 and older.

A healthy lifestyle may help reduce your risk of getting AMD, or help protect remaining vision if you already have AMD. In either case, healthy living contributes to overall well-being.

Healthy Lifestyle Choices

Don’t Smoke. The U.S. Centers for Disease Control and Prevention (CDC) says that smoking is as bad for your eyesight as it is for the rest of your body. Smokers are more than twice as likely as nonsmokers to get AMD. Smoking causes a narrowing of the blood vessels, which reduces blood supply to the eyes. If you smoke, make a practical plan to quit with your doctor’s help.

Exercise Regularly. Exercise may reduce inflammation, which is a key contributor to AMD. It can also help lower eye pressure, which improves blood flow to the retina and optic nerve. Before beginning any exercise program consult with your doctor. If you have AMD, an occupational therapist or other specialist can help you adjust your exercises to ensure safety.

Eat a Varied and Nutritious Diet. Your eye health and overall well-being benefit from a nutritious diet rich in the vitamins and minerals your body needs. This includes dark leafy greens, yellow and orange fruits and vegetables, fish, and whole grains. (See the chart on page 5 for examples of eye healthy foods.)

Maintain Normal Blood Pressure and Cholesterol Levels. High blood pressure leads to narrowing of the blood vessels that nourish the retina, negatively affecting its health. Deposits of cholesterol in the eye contribute to AMD. Get regular check-ups with your primary doctor, who can help you monitor or treat blood pressure and cholesterol levels.

Maintain a Healthy Weight. Being overweight not only contributes to AMD, it increases your risk of other conditions such as heart disease and diabetes. Ask your doctor for assistance in developing a plan for a healthy diet and lifestyle.

Protect Your Eyes Outdoors. Sunlight exposure may increase the risk of AMD. To prevent overexposure to sunlight, wear wide-brimmed hats when outdoors, and use high-quality sunglasses with a UVA and UVB rating of 99 to 100 percent.
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Tracking Eye Health

Getting comprehensive regular eye exams as directed by your doctor and monitoring your vision with at-home tests may help with early detection of eye problems or slow the progression of AMD.

Here are some ways to keep track of eye health.

**Schedule Regular Visits to an Eye Doctor.**
Get regular, comprehensive eye exams, which include pupil dilation, by your eye doctor. Early diagnosis and treatment may help control progression of AMD, since a doctor may be able to detect subtle symptoms before you would notice them yourself. Ask your doctor how often you should be examined.

**Perform Amsler Grid Tests at Home.**
The Amsler grid is a square with intersecting horizontal and vertical lines. (See illustration at left, not actual size.) This test can detect early signs of AMD and can help monitor changes in vision after diagnosis. If the lines appear to you to be wavy, dim, irregular, or fuzzy, contact your eye care specialist. Visit www.brightfocus.org/amslergrid to download an Amsler grid or call 1-855-345-6637 for a free magnetic Amsler grid you can put on your fridge.

**If Eligible, Consider a Home Monitoring Device.**
The US Food and Drug Administration has approved, and the Medicare program covers, the prescription use of a home telemonitoring device known as ForeseeHome™. It can be used by persons diagnosed with dry AMD who are at risk for developing wet AMD, a more advanced form of the disease. The device helps detect wet AMD at its earliest stage, when treatment is usually most effective. A patient performs small tasks on a screen. If the system detects changes in the patient, a doctor will be alerted to schedule an eye exam. For more information, visit www.foreseehome.com.

**Would You Benefit from Nutritional Supplements?**
Studies by the National Eye Institute of the National Institutes of Health found that certain nutritional supplements could delay and possibly prevent intermediate AMD from progressing to the advanced stage in which vision loss occurs.
Patients who should consider taking the formula (after consultation with their doctor) include those with intermediate macular degeneration in one or both eyes or advanced macular degeneration (dry or wet) in one eye but not the other eye.

The supplements are a specific high-dose formula of antioxidants (such as vitamins C and E) and minerals like zinc and copper. The current formulation, known as AREDS2 (after its particular clinical trial) is as follows:

### The AREDS2 Formula
- 500 milligrams of vitamin C
- 400 international units of vitamin E
- 10 milligrams of lutein
- 2 milligrams of zeaxanthin
- 80 milligrams* of zinc, as zinc oxide
- 2 milligrams of copper, as cupric oxid

* 25 milligrams of zinc, as zinc oxide, was also found effective in AREDS2

Supplement products with the AREDS2 formula are available over-the-counter in pharmacies and supermarkets. Check to make sure the products have the AREDS2 dosages above.

Note: AREDS2 supplements do not replace regular multivitamins, but may be taken in conjunction with them. Always consult a doctor, however, before taking any supplements. The AREDS2 formula may conflict with other medications.

### Foods for Eye Health
A diet that includes fresh leafy green vegetables, fruits, whole grains, fish, and other foods containing vitamins C, D, and E, lutein, zeaxanthin, and omega-3 fatty acids may contribute to better vision. Try some of these options.

**Dark Leafy Greens**
Collard greens, kale, spinach, arugula

**Green, Yellow, and Orange Vegetables and Fruits**
Vegetables: broccoli, Brussels sprouts, carrots, corn, squash, sweet potatoes
Fruits: citrus fruits, cantaloupe, grapes, kiwi, mango, strawberries

**Whole Grains**
Whole grain cereals and whole grain bread, wheat germ, brown rice, whole grain pasta

**Sources of Omega-3 Fatty Acids**
Flaxseed oil, tuna, sardines, walnuts, wild salmon
BrightFocus is at the forefront of brain and eye health, supporting innovative research around the world and promoting better health through our three programs:

Alzheimer's Disease Research
Macular Degeneration Research
National Glaucoma Research