

VITEYES A Consumer Eye Health Guide to Age-Related Macular Health

What Is Macular Degeneration?

Age-Related Macular Degeneration (AMD) is the leading cause of irreversible blindness in Americans over age 60. In AMD, the macula—the central part of the retina of the eye—is damaged. Every time you look directly at something, you are using the macula, so a damaged macula affects the central fine vision needed for "straight ahead" viewing, such as reading or driving.

There are two types of macular degeneration

<u>Dry macular degeneration</u> - the most common form of AMD is characterized by small yellow deposits called "drusen" and alterations in the pigment of the macula that can result in loss of central vision.

Wet macular degeneration – Dry macular degeneration can lead to wet macular degeneration, which is responsible for most macular degeneration-related vision loss. Wet macular degeneration occurs when new fragile abnormal blood vessels develop under the retina causing hemorrhaging, swelling, and scarring that damages the macula, resulting in central vision loss.



Signs of AMD

Typically in the dry state, it's possible that no symptoms will be experienced. However, drusen under the macula can be detected during a dilated exam, so an eye doctor usually notices the first indicator of this disease during a routine visit, which is why regular eye checkups are so important.

Signs can become more severe if not caught early. Patients may experience loss of central vision, difficulty reading, difficulty performing tasks that require the ability to see detail, or distorted vision that makes straight lines appear to be wavy.

What is AREDS 2?

AREDS 2 is a 5-year follow up to the original 10-year AREDS study. These studies were completed by the National Institutes' of Health's National Eye Institute (NEI). The 2001 AREDS study suggested a formulation of antioxidants and zinc could lower the risk of progression to advanced AMD by 25%. In 2013, the follow up AREDS 2 study, showed that a revised formula could lower the risk by 18% compared to the original AREDS study recommendations.



Not everyone develops macular degeneration as they age. There may be a genetic predisposition to developing it; however, regardless of whether or not this condition runs in your family, there are certain risk factors you need to be aware of.

What are the Top Risks?

- **Smoking:** This habit constricts blood vessels, reducing the supply of blood to the eyes and consequently limiting the level of healthy nutrients the retina can receive.
- Weight: Research suggests that having a high body mass index (BMI) can increase the chances of developing age-related macular degeneration.
- **Heart Disease:** Evidence also exists linking AMD and heart disease.
- **High Blood Pressure:** There also appears to be a link between high blood pressure and AMD in some people.

How You Can Help Reduce The Risk

If you smoke, do everything in your power to quit the habit. You'll benefit healthwise in many ways, including reducing your chances of developing age-related macular degeneration.

If you are overweight or obese, taking measures to reduce your weight will benefit your overall health while reducing your risk of getting AMD.

Changing your diet can have a healthful effect on your eyes and your heart as well, reducing heart disease and AMD risks. Avoid saturated fats, and eat plenty of fruits, vegetables, and other fiber-rich foods for your heart and eye health.

If you have high blood pressure, controlling it through relaxation techniques and medicine prescribed by your physician can have positive effects on your vision as you age.

Lutein & Zeaxanthin

Lutein and zeaxanthin, both carotenoids, are found to be highly concentrated in the macula. These carotenoids are found in foods such as egg yolks and dark, leafy green vegetables (e.g. spinach and broccoli). Lutein and zeaxanthin cannot be made by the body; therefore, they must be obtained from food or dietary supplements. Approximately half of Americans only get 1-2 mg each day from their diet—a fraction of the 10 mg needed to replenish levels in the eye. That is why it is necessary to enhance your daily diet or take supplements with lutein.



Lutein and Zeaxanthin were part of the AREDS 2 study. This study stated that, compared to the AREDS formula, removing beta-carotene and adding lutein and zeaxanthin may lower the risk of developing advanced stages of AMD by an additional 18.3%. In addition, those participants who began the study with a low intake of lutein and zeaxanthin in their diet and were supplemented with lutein and zeaxanthin during the study were 25% less likely to develop advanced AMD compared to participants with similar dietary intake who did not take lutein and zeaxanthin.

Nutrition for Eye Health

Nutritious foods are the building blocks for health, including your eyes. Most people are aware that carrots are good for their eye health, but are unaware of any other sources of vitaming that may be good for the



sources of vitamins that may be good for their eyes.

Try these 3 steps to eating better for your eye health.

Eat the Rainbow

Did you know that 8 out of 10 Americans do not eat enough color? Eating a variety of fruits and vegetables - the colors of the rainbow - helps to ensure the widest array of nutrients, vitamins, and minerals to protect your vision and long-term health.

Don't count it out. Add it in!

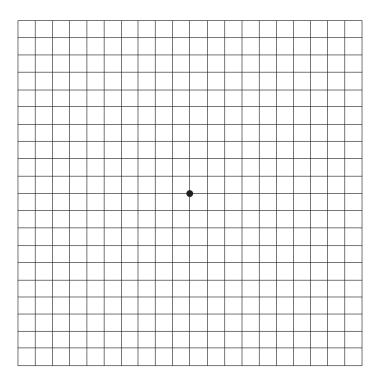
When it comes to nutrition think of them both in terms of "adding," rather than subtracting. Adding in more veggies (as many greens as you can!), more protein, more exercise, more fruit, more water, etc. It's healthier that way, especially mentally, than starting by simply subtracting certain foods.

Remember your Lutein

Lutein is a carotenoid that is found to be highly concentrated in the macula of the eye. The body does not produce lutein on its own. It is found in foods such as kale, spinach and egg yolks. Americans typically only get 1-2 mg each day from their diet. Studies show you should eat 10 mg of lutein per day!

Amsler Grid

The Amsler Grid may be useful in revealing signs of macular degeneration. It is not a substitute for a regular eye examination.



Directions

- 1. If you wear glasses or contact lenses for reading leave them on but do not wear varifocals or distance glasses.
- 2. Hold the Amsler Grid approximately 30 cm in front of your eyes in a well lit room.
- 3. Cover one eye with the palm of your hand and focus on the center dot with your uncovered eye.

If you see wavy, broken or distorted lines, blurred or missing areas of vision, you may be displaying symptoms of AMD and should contact your eye doctor as soon as possible (within a week).

4. Repeat with the other eye.

SEE THE DIFFERENCE VITEYES® CAN MAKE

Viteyes[®] offers a range of AREDS 2 supplements to support your macular health. Visit Viteyes.com or call 1-800-890-3937 for more information.



My eye doctor wanted me to have the best vitamin for my eyes and VITEYES is the very best. I have been taking them for over 3 years now and they have helped my eyes, even my eye doctor is happy.

- Rosemary H.

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