



Macular Degeneration (AMD)

Age related macular degeneration (AMD) is the leading cause of poor vision after age 60. AMD is a deterioration or breakdown of the macula. The macula is a small but important area at the center of the retina that allows us to see fine details clearly and perform activities such as reading and driving.

The visual symptoms of AMD involve loss of central vision. While peripheral (side) vision is usually unaffected, one loses the sharp, straight-ahead vision necessary for driving, reading, recognizing faces, and looking at detail. Unfortunately, symptoms do not occur until vision loss has occurred. It is important to detect AMD before symptoms occur. Therefore, one should have an annual eye examination with dilation of the pupils every year at the age of 60 and then as directed by your eye care provider.

Although the specific cause is unknown, AMD seems to be part of aging. While age may be the most significant risk factor for developing AMD, heredity, blue eyes, high blood pressure, cardiovascular disease, and smoking have also been identified as risk factors. AMD accounts for 90 percent of new legal blindness in the US.

Nine out of 10 people who have AMD have the dry form (called atrophic), which results in thinning of the macula. Dry AMD takes many years to develop. Currently there is no treatment for this form of AMD, but nutritional supplements can slow its progression.

The wet form of AMD (called exudative) is less common (occurring in one out of 10 people with AMD), but is more serious. In the wet form of AMD, abnormal blood vessels grow in a layer beneath the retina, leaking fluid and blood and creating distortion or a large blind spot in the center of your vision. Your retina specialist can direct the treatment that is best for your eyes and general health. Older and new treatments can be used to prevent further vision loss and often can lead to improvement.

Since there is no cure, prevention is critical. Some research shows that sunlight exposure may increase the risk of AMD, so routine use of sunglasses with UV filters is recommended outdoors. Other research shows that daily supplementation with antioxidant vitamins may prevent vision loss in certain individuals who have moderately advanced AMD.

Among people at high risk for late-stage macular degeneration (those with intermediate AMD in both eyes or advanced AMD in one eye), a dietary supplement of zinc, vitamins C, E and beta carotene, lowered the risk of the disease progressing to advanced stages by about 25 to 30 percent. However, the supplements did not appear to benefit people with minimal AMD or those who have no evidence of macular degeneration.

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Light may affect the eye by stimulating oxygen, leading to the production of highly reactive and damaging compounds called free radicals. Antioxidant vitamins (vitamins C and E and beta carotene) may work against this activated oxygen and help slow progress of macular degeneration.

Zinc, one of the most common minerals in our body, is very concentrated in the eye, particularly in the retina and macula. Zinc is necessary for the action of over 100 enzymes, including chemical reactions in the retina. Studies show some older people have low levels of zinc in their blood. Because zinc is important for the health of the macula, supplements of zinc in the diet may slow down the process of macular degeneration.

It is very important to remember that vitamin supplements are not a cure for AMD, nor will they restore vision you may have already lost from the disease. However, specific amounts of certain supplements do play a key role in helping some people at high risk for advanced AMD to maintain their vision

Promising AMD research is being done on many fronts. In the meantime, high-intensity reading lamps, magnifiers and other low-vision aids help people with AMD make the most of their remaining vision.