

Omega-3 May Help Prevent Age-Related Macular Degeneration

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A diet high in omega-3 fatty acids may prevent the development of age-related macular degeneration (AMD), the leading cause of blindness in the over-50s, suggests a new study.

Researchers from the National Eye Institute in Bethesda found that a diet rich in omega-3 fatty acids could retard the progression of lesions in a mouse model of AMD. The fatty acids were also associated with an improvement in some lesions.

“The results in these mice are in line with the epidemiological studies of AMD risk reduction by long chain omega-3 fatty acids,” wrote the researchers in the *American Journal of Pathology*.

It is known that omega-3 fatty acids, and particularly DHA, play an important role in the layer of nerve cells in the retina, and studies have already reported that omega-3 may protect against the onset of AMD.

Indeed, a meta-analysis published in the June 2008 issue of the *Archives of Ophthalmology* found that a high intake of omega-3 fatty acids and fish may reduce the risk of AMD by up to 38%. Scientists from the University of Melbourne in Australia reported that the benefits were most pronounced against late (more advanced) AMD, while eating fish twice a week was associated with a reduced risk of both early and late AMD.

AMD is a degenerative retinal disease that causes central vision loss and leaves only peripheral vision. It is the leading cause of legal blindness for people over 55 in the Western world, according to AMD Alliance International.

The Bethesda-based researchers, led by Dr. Chi-Chao Chan, found that mice fed a high omega-3 fatty acid diet displayed a slower development of lesions in their retina, compared to animals fed a low omega-3 diet. Furthermore, some of the mice in the omega-3 group displayed some reversion of the lesions.

“A diet enriched in EPA and DHA can ameliorate the progression of retinal lesions in their mouse model of AMD,” wrote the researchers. “This murine model provides a useful tool to evaluate therapies that might delay the development of AMD,” they concluded.

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