

# Clinical Update

## **Study finds that higher levels of omega-3 fatty acids and vitamin D cut the risk of age-related macular degeneration.**

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Eating plenty of fish rich in omega-3 fatty acids -- such as tuna and salmon -- may reduce the risk of advanced age-related macular degeneration, a new study says.

The study findings are published in the May issue of the journal Archives of Ophthalmology.

A second study in the same issue of the journal found that people with higher blood levels of vitamin D may reduce their risk of early stage age-related macular degeneration (AMD), the most common cause of blindness among older adults in the United States. AMD occurs when the macula, located at the back of the retina, deteriorates over time.

The first study included 4,519 people who were 60 to 80 years old when they enrolled between 1992 and 1998. Their eyes were checked to determine if they had AMD, and they were also asked about their eating habits.

The researchers compared the 1,115 people who had no sign of AMD with those who did, including 658 with neovascular (severe) AMD.

"Dietary total omega-3 long-chain polyunsaturated fatty acid intake was inversely associated with neovascular AMD, as was docosahexaenoic acid (DHA)," the study authors wrote. DHA is a fatty acid believed to affect the retina.

"Higher fish consumption, both total and broiled/baked, was also inversely associated with neovascular AMD," the authors wrote.

They said that eating more than two medium (4-ounce) servings of fish a week, or more than one medium serving of broiled or baked fish, was associated with a lower risk for advanced AMD.

Omega-3 fatty acids may help ensure proper blood vessel function in the retina and also reduce inflammation and maintain energy balance, the researchers said.

In the second study, U.S. researchers looked at 7,752 people, including 11 percent with AMD, and found that levels of "serum vitamin D were inversely associated with early AMD but not advanced AMD."

Those with the highest levels of vitamin D in their blood had a 40 percent lower risk of early AMD than those with the lowest levels of vitamin D.

The researchers said that vitamin D may lower the risk of AMD by reducing inflammation or preventing the growth of new blood vessels in the retina, which contributes to some forms of the eye disease.