Omega-3 Long-Chain Polyunsaturated Fatty Acid Intake Inversely Associated With 12-Year Progression to Advanced Age-Related Macular Degeneration

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FROM ABSTRACT:

Age-related macular degeneration is a leading cause of vision loss.

Age-Related Eye Disease Study participants reporting the highest intake of omega-3 long-chain polyunsaturated fatty acids (LCPUFAs) were approximately half as likely as their peers reporting the lowest intake of these nutrients to have age-related macular degeneration at baseline or to progress across a 6-year period.

THESE AUTHORS ALSO NOTE:

The Age-Related Eye Disease Study, from which this data was obtained, is the largest longitudinal sample collected and classified with standardized methods as part of a natural history study on age-related macular degeneration.

"Participants reporting the highest baseline consumption of omega-3 LCPUFAs were approximately 30% less likely than their peers reporting the lowest omega-3 LCPUFA consumption to develop advanced age-related macular degeneration by the end of the 12-year follow-up period.

"Omega-3 LCPUFAs and their metabolites have the capacity to act on processes implicated in age-related macular degeneration pathogenesis."

"Because the concentration of retinal omega-3 LCPUFAs is modifiable by and dependent on dietary composition, these nutrients may represent an easily implemented approach to modifying risk of age-related macular degeneration progression."

KEY POINTS FROM DAN MURPHY

1) This study is part of the largest longitudinal sample collected and classified on natural history of age-related macular degeneration.

2) Age-related macular degeneration is a leading cause of vision loss.
3) After a 6 year period, participants reporting the highest intake of omega-3 long-chain polyunsaturated fatty acids were approximately half as likely as their peers reporting the lowest intake of these nutrients to have age-related macular degeneration.

4) After a 12 year period, participants reporting the highest baseline consumption of omega-3 LCPUFAs were approximately 30% less likely than their peers reporting the lowest omega-3 LCPUFA consumption to develop advanced age-related macular degeneration.

5) “Omega-3 LCPUFAs and their metabolites have the capacity to act on processes implicated in age-related macular degeneration pathogenesis.”

6) “Because the concentration of retinal omega-3 LCPUFAs is modifiable by and dependent on dietary composition, these nutrients may represent an easily implemented approach to modifying risk of age-related macular degeneration progression.”