

Omega-3 again linked to healthier eyes

13-Aug-2008 - **Eating one portion of omega-3 fatty acid-rich fish per week may reduce the risk of age-related macular degeneration by over 50 per cent, suggests a new study.**

An increased consumption of the omega-3 fatty acids DHA (docosahexaenoic acid) and EPA (eicosapentaenoic acid) reduced the risk by about 70 per cent, according to the study published in this month's *American Journal of Clinical Nutrition*.

"This is the first study in Europeans to show a beneficial association on wet AMD from the consumption of oily fish and is consistent with results from studies in the USA and Australia," said researchers from the London School of Hygiene & Tropical Medicine.

Indeed, only recently a meta-analysis by Australian scientists reported that a high intake of omega-3 fatty acids and fish may reduce the risk of AMD by up to 38 per cent (*Archives of Ophthalmology*, June 2008, Vol. 126, pp. 826-833).

Age-related macular degeneration (AMD) is the leading cause of legal blindness for people over 55 years of age in the Western world, according to AMD Alliance International.

There are two types of AMD, wet and dry. Of the two, wet AMD is the main cause of vision loss.

Despite the fact that approximately 25 to 30 million people worldwide are affected by AMD, awareness of the condition is low, according to AMD Alliance International. And as the generation of Baby Boomers gets older, the Alliance expects incidence to be on the rise and triple by 2025.

AMD is a degenerative retinal disease that causes central vision loss and leaves only peripheral vision. Early detection is cited as a means of prevention so that treatment or rehabilitation can be undertaken early enough. However, links to diet have also been underscored.

And since omega-3 fatty acids, and particularly DHA (docosahexaenoic acid), play an important role in the layer of nerve cells in the retina, studies have already reported that omega-3 may protect against the onset of AMD.

Study details

Researchers recruited 105 people (65 years old) with wet AMD and 2170 healthy people to act as controls, and compared their dietary habits using questionnaires. Only dietary sources of omega-3 were considered, and the researchers could not comment on the potential results of supplementation.

Habitual consumption of at least one serving of oily fish per week was associated with a 50 per cent reduction in the risk of developing wet AMD, said the researchers, compared to people who consumed less than one portion per week.

Moreover, people who consumed at least 300 mg per day of DHA and EPA were 68 and 71 per cent less likely to have wet AMD, than those with lower consumption.

"Eating oily fish at least once per week compared with less than once per week was associated with a halving of the [risk] for [wet]-AMD," concluded the researchers.

The study was funded by the European Commission, the Macular Disease Society UK and the Thomas Pocklington Trust.

The need for clinical trial confirmation

Following the recent meta-analysis, the Australian researchers reported that no randomised clinical trials (RCTs) to date have focussed on the potential of omega-3 fatty acids to reduce the incidence or risk of AMD, and therefore the results of their meta-analysis should be treated with caution.

"While our review suggests that consumption of foods rich in omega-3 fatty acids and fish intake twice or more per week may play important roles in the primary prevention of AMD, in the context of the limited literature available, particularly for late AMD and conclusions from other reviews, routine recommendation of omega-3 fatty acid and fish intake for AMD prevention is not warranted until additional information from prospective studies and RCTs emerges," concluded researchers.