

Omega-3 May Protect Against Hearing Loss

Increased intakes of omega-3 fatty acids from supplements and dietary sources may reduce the risk of age-related hearing loss, according to a new study from the University of Sydney.

At least two servings of fish per week was associated with a 42 per cent reduction in the risk of hearing loss for people over 50 year-olds compared with people who average less than one serving per week, according to findings published in the American Journal of Clinical Nutrition. Previous studies on omega-3 supplements have shown similar reductions in age related hearing loss. "Dietary intervention with omega-3 polyunsaturated fatty acids could prevent or delay the development of age-related hearing loss," wrote the researchers, led by Paul Mitchell.

Mitchell and his co-workers analyzed data from 2,956 participants of the Blue Mountains Hearing Study. Dietary intakes of fish, and the omega-3s they contain, using food-frequency questionnaires. Results showed an inverse association between total and long-chain omega-3 intakes and hearing loss, while increasing fish intakes also indicated a reduction in the risk of presbycusis, said the researchers. Correlation is not causation, however, and significant further research is needed, including human intervention trials.

Other micronutrients have been linked to a reduced risk of age-related hearing loss. In 2007 scientists from Wageningen University reported that folic acid delayed age-related hearing loss in the low frequency region in a study of 728 men and women between the ages of 50 and 70 (Annals of Internal Medicine, Vol. 146, pp. 1-9).

Another study, published earlier this year indicated a role for beta carotene and vitamins C and E, and the mineral magnesium in preventing prevent both temporary and permanent hearing loss in guinea pigs and mice. The animal study was presented at the Association for Research in Otolaryngology's annual conference in Baltimore in February 2009.

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"Consumption of omega-3 fatty acids and fish and risk of age-related hearing loss"

Authors: B. Gopinath, V.M. Flood, E. Rojchchina, C.M. McMahon, P. Mitchell

Flax vs. Fish? If Omega-3 Support is the Goal There is no Comparison

Both fish oil and flaxseed oil contain omega-3, but only fish oils contain EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid). These long-chain omega-3s play an extremely important role in the normal function of the heart, brain, eyes, nervous system, kidney and liver. (DHA is also a key constituent of cell membranes, especially in the brain and eyes.) Flaxseed oil, on the other hand, contains ALA, a short-

chain omega-3. In order to derive any health benefits from flaxseed oil, the human body must first go through an extra step converting the ALA to EPA/DHA.

Unfortunately, the standard American diet makes it especially hard for the body to convert the ALA in flaxseed oil to the EPA/DHA it needs. According to quite a few studies, the body will convert only a very small amount of the ALA found in flaxseed oil into DHA and EPA with some people unable to convert ALA to DHA at all. One of the studies found a conversion rate from ALA to DHA as low as 0.2%! Thousands of investigations have proven the benefits of fish oil, but only a relative few have been done on the benefits of flaxseed oil.

Another serious issue to consider in the great fish oil vs. flax debate is that, while flaxseed oil consists of about 54% ALA (which can at least be converted to EPA), the remaining 46% is made up of the pro-inflammatory omega-6 called LA (linoleic acid), which Americans already over-consume. LA also competes with omega-3s like EPA/DHA when it comes to incorporation into cell membranes, where omega-3s exert most of their benefits.

While it does seem that flaxseed oil has some positive effects, the omega-3s in fish oil enjoy much stronger, more abundant evidence of health benefits and are already in the format your body needs to start putting them to good use right away.

For further information on this topic, please see:

[a-Linolenic acid supplementation and conversion to n-3 long-chain polyunsaturated fatty acids in humans](#)
the International Society for the Study of Fatty Acids and Lipids, ISSFAL

The full article can be linked to [here](#).

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