

Clinical Update

Omega-3 may slash risk of heart failure: Study

Increased intakes of fatty fish, and the omega-3s they contain, may reduce a woman's risk of heart failure by about 25%, according to new findings from the US and Sweden.

(European Journal of Clinical Nutrition, March 2010)
(European Heart Journal, June 2009)

The benefits appear linked to the omega-3 content of the fish, report researchers in the *European Journal of Clinical Nutrition*. The highest intake of marine omega-3 fatty acids linked to a reduction in the risk of heart failure of 25%.

The heart health benefits of consuming oily fish, and the omega-3 fatty acids they contain, are well-documented, being first reported in the early 1970s by Jorn Dyerberg and his co-workers in *The Lancet* and *The American Journal of Clinical Nutrition*. To date, the polyunsaturated fatty acids (PUFAs) have been linked to improvements in blood lipid levels, a reduced tendency of thrombosis, blood pressure and heart rate improvements, and improved vascular function.

Beyond heart health, omega-3 fatty acids, most notably EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid), have been linked to a wide-range of health benefits, including reduced risk of certain cancers, good development of a baby during pregnancy, joint health, and improved behaviour and mood.

Building the science

The new study adds to previous data in men from the same researchers and published in the *European Heart Journal* (Vol. 30, pp. 1495-1500). That study, said to be one of the largest studies to investigate the association between fatty fish and omega-3 intake, and heart failure, found that omega-3 fatty acids may reduce the risk of heart failure by 33%.

Heart failure, which arises when the heart can no longer pump enough blood to meet the body's needs, is the leading cause of hospitalisation among the over 65s, and is characterized by such symptoms as fatigue and weakness, difficulty walking, rapid or irregular heartbeat, and persistent cough or wheezing.

According to Emily Levitan and her co-workers, consuming one portion of fatty fish per week could offer benefits for women by reducing the risk of developing heart failure by up to 30%, compared with women who ate no fatty fish.

The researchers analysed data from 36,234 women participating in the Swedish Mammography Cohort. Dietary intakes for the women, aged between 48 and 83 was obtained using 96-item food-frequency questionnaires.

Over the course of 18 years of study, 651 cases of heart failure were documented. Eating one serving of fatty fish per week was associated with a 14% reduction in the risk of heart failure, compared with women who did not eat any fatty fish. Furthermore, eating two servings of fatty fish per week was associated with a 30% reduction. The association for omega-3 fatty acids was stronger, said the researchers, with the highest intakes of omega-3 associated with a 25% reduction in risk.

Being an observation study, the data does not prove causality, however, and additional studies are needed to support the apparent link.

Benefitting from omega-3-containing supplements has never been easier: Omega-3 is one of the nutrition industry's major successes, with the ingredients market valued at a whopping \$1.6 billion by Frost & Sullivan.

Source: www.nutraingredients.com

