

## **Fatty fish may slash men's heart failure risk**

By Stephen Daniells, 23-Apr-2009

**One portion of fatty fish per week may reduce a man's risk of heart failure, according to new research from the US and Sweden.**

The benefits appear linked to the **omega-3** content of the fish, report researchers from Beth Israel Deaconess Medical Center (BIDMC) and the Karolinska Institute in Sweden in the *European Heart Journal*. The highest intake of marine omega-3 fatty acids linked to a reduction in the risk of **heart failure** of 33 per cent. However, larger intakes did not appear to offer any additional benefit.

*"Previous research has demonstrated that fatty fish and omega-3 fatty acids help to combat risk factors for a range of heart-related conditions, such as lowering triglycerides [fats in the blood] reducing blood pressure, heart rate and heart rate variability,"* said lead author Emily Levitan, PhD.

*"Collectively, this may explain the association with the reduced risk of heart failure found in our study,"* she added.

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

The new study is said to be one of the largest studies to investigate the association between fatty fish and omega-3 intake, and heart failure:



Almost 40,000 Swedish men between the ages of 45 and 79 were followed between 1998 and 2004.

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 Levitan and her co-workers, consuming one portion of fatty fish per week could offer benefits for men by reducing the risk of developing heart failure by 12 per cent, compared with men who ate no fatty fish. The researchers are quick to note, however, that this association was not statistically significant.

### **Study details**

The researchers analysed data from 39,367 middle-aged and older Swedish men with no previous history of heart disease or diabetes. During the course of the study, 597 men developed heart failure, and 34 men died.

In addition to the trend for a reduced risk of heart failure for men who ate one portion of fish per week, men who consumed approximately 0.36 grams per day of omega-3 fatty acids were 33 per cent less likely to develop heart failure than the men who consumed little or no marine omega-3 fatty acids, added Levitan and her co-workers.

*"The higher rates of heart failure in men who consumed the most fatty fish or marine omega-3 fatty acids compared with the men who had moderate consumption may be due to chance," explained Levitan.*

*"Our study reinforces the current recommendations for moderate consumption of fatty fish," she added.*

*"Current guidelines from the American Heart Association recommend eating fatty fish twice a week. It will be important, going forward, to replicate these findings in other populations, particularly those including women, as our study looked at men only."*

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Source: *European Heart Journal* Published online ahead of print, 21 April 2009, doi: 10.1093/eurheartj/ehp111 "Fish consumption, marine omega-3 fatty acids, and incidence of heart failure: a population-based prospective study of middle-aged and elderly men" Authors: E.B. Levitan, A. Wolk, M.A. Mittleman