

A recently published meta-analysis provides evidence that a higher intake of dietary marine omega-3 fatty acids is associated with a lower risk of breast cancer.

## Higher intake of omega-3 fatty acids from fish is associated with a decrease in breast cancer risk

**B**reast cancer is one of the most common cancers among women, accounting for nearly a quarter of total cancer cases. Many epidemiological studies have suggested that diet and lifestyle can significantly affect breast cancer risk, and dietary fat is one of the most studied dietary factors related to risk.

In a new study published in the *British Medical Journal*, researchers analyzed the association between intake of fish and omega-3 fatty acids and the risk of breast cancer. They also sought to determine whether there is a dose-response relationship between omega-3s and cancer risk.

In this meta-analysis, researchers included 21 different studies that evaluated fish intake and the incidence of breast cancer. The studies included a total of 883,585 women from the U.S., Europe and Asia. There were 20,905 women diagnosed with breast cancer over a follow-up period of up to 20 years.

When compared to the group with the lowest intake, there was a 14% reduction in the risk of breast cancer among women with higher fish intake. In addition, for every 0.1 gram per day increase in intake, there was a 5% lower risk of breast cancer. The relative risk was similar whether it was measured as dietary intake or as tissue biomarkers.

The results of this study provide solid evidence that there is a protective effect of marine omega-3 fatty acids against breast cancer in women. The findings of this study have significant implications, since prevention of breast cancer continues to be an important public health issue.

Ju-Sheng Zheng et al. Intake of fish and marine n-3 polyunsaturated fatty acids and risk of breast cancer: meta-analysis of data from 21 independent prospective cohort studies. *British Medical Journal*. 2013 July 347;7917.