

# Eating a lot of fish may help curb depression risk—at least in Europe

September 10 2015

---



Credit: George Hodan/Public Domain

Eating a lot of fish may help curb the risk of depression—at least in Europe—suggests a pooled analysis of the available evidence, published online in the *Journal of Epidemiology & Community Health*.

The association between a fishy diet and mental health appears to be equally significant among men and women, the first analysis of its kind

indicates.

Depression affects an estimated 350 million people worldwide, and is projected to become the second leading cause of ill health by 2020.

Several previous studies have looked at the possible role of dietary factors in modifying depression risk, but the findings have been inconsistent and inconclusive.

The researchers therefore pooled the data from relevant studies published between 2001 and 2014 to assess the strength of the evidence on the link between [fish](#) consumption and depression risk

After trawling research databases, they found 101 suitable articles, of which 16 were eligible for inclusion in the analysis. These 16 articles included 26 studies, involving 150, 278 participants.

Ten of the studies were cohort studies, which involve monitoring a group of people who don't have the condition in question for a period of time to see who develops it. The remainder were cross-sectional: these look at the association between a condition and other variables of interest in a defined population at a single point in time or over a brief period.

Ten of the studies involved participants from Europe; 7 those from North America; the rest involved participants in Asia, Oceania, and South America.

After pooling all the data together, a significant association emerged between those eating the most fish and a 17% reduction in depression risk compared with those eating the least. This was found in both cohort and cross-sectional studies, but only for the European studies.

When the researchers looked specifically at gender, they found a slightly

stronger association between high fish consumption and lowered depression risk in men (20%). Among women, the associated reduction in risk was 16%.

This is an observational study so no definitive conclusions can be drawn about cause and effect, added to which fish consumption was measured using different dietary assessment methods across the various studies. But there may be a plausible biological explanation for the link, suggest the researchers.

For example, it has been suggested that the omega 3 fatty acids found in fish may alter the microstructure of brain membranes and modify the activity of the neurotransmitters, dopamine and serotonin, both of which are thought to be involved in depression.

Furthermore, the high quality protein, vitamins, and minerals found in fish may help stave off depression, while eating a lot of fish may be an indicator of a healthy and more nutritious diet, suggest the researchers.

"Higher [fish consumption](#) may be beneficial in the primary prevention of depression," they conclude, adding: "Future studies are needed to further investigate whether this association varies according to the type of fish."

**More information:** Fish consumption and risk of depression: a meta-analysis, [DOI: 10.1136/jech-2015-206278](https://doi.org/10.1136/jech-2015-206278)

Provided by British Medical Journal

Citation: Eating a lot of fish may help curb depression risk—at least in Europe (2015, September 10) retrieved 17 December 2023 from <https://medicalxpress.com/news/2015-09-lot-fish-curb->

[depression-riskat.html](#)

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.