

Diet high in n-3-PUFAs linked to lower breast cancer risk

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A diet high in n-3 polyunsaturated fatty acids (PUFAs) is associated with

a reduced risk for breast cancer among women in China, according to a study published online July 26 in *Menopause*.

Zhuo-Lin Zhang, M.D., from Sun Yat-sen University in Guangzhou, China, and colleagues examined the associations between [breast cancer risk](#) and intake of n-3 PUFAs in Chinese women in a case-control study, including 1,589 cases and 1,621 age-frequency-matched controls. A validated food frequency questionnaire was used to assess dietary data.

The researchers observed an association for higher intake of marine n-3 PUFAs and total n-3 PUFAs with a lower risk for breast cancer, with adjusted odds ratios of 0.68 and 0.56 for quartile 4 versus 1, respectively. Inverse associations were also seen for dietary alpha-linolenic acid, [eicosapentaenoic acid](#), docosapentaenoic acid, and docosahexaenoic acid with breast cancer risk, with adjusted odds ratios of 0.51, 0.68, 0.68, and 0.76, respectively. These inverse associations were stronger for premenopausal women and women with estrogen receptor (ER)-positive, progesterone receptor (PR)-positive, and ER-positive PR-positive tumors. In obese/overweight women, but not in women of normal weight, a reduced risk for breast cancer was significantly associated with increasing n-3 PUFA intake. A significant interaction was seen for linoleic acid and marine n-3 PUFAs.

"This study highlights the effect of lifestyle habits and, specifically, dietary intake of [polyunsaturated fatty acids](#) on [breast cancer](#) risk," Chrisandra Shufelt, M.D., president of the The North American Menopause Society, said in a statement.

More information: Zhuo-Lin Zhang et al, Association of dietary intake of n-3 polyunsaturated fatty acids with breast cancer risk in pre- and postmenopausal Chinese women, *Menopause* (2022). [DOI: 10.1097/GME.0000000000001990](#)

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