

## Fish oil and cancer prevention

June 27 2019, by Leigh Macmillan



Credit: AI-generated image (disclaimer)

Increased dietary intake of fish oil, with its "healthy" omega-3 fatty acids, has been proposed to reduce risk of colorectal cancer. How it works is unclear, but it is thought to modify lipid signaling molecules associated with inflammation and carcinogenesis.

Harvey Murff, MD, MPH, and colleagues, conducted a randomized, double-blind, controlled trial of fish oil compared with olive oil



supplementation in participants with a history of colorectal adenomas.

They evaluated levels of urinary and rectal lipid signaling molecules. Fish oil supplementation reduced urinary PGE-M. It did not reduce rectal PGE2 overall, but it did reduce PGE2 in participants not using aspirin or other NSAIDs. A genetic variation that affects cellular fatty acid levels did not modify the effects of fish oil on PGE2.

The findings, reported in the *European Journal of Cancer Prevention*, demonstrate a modest but beneficial effect of <u>fish oil supplementation</u> on molecules associated with colorectal cancer development and support further studies of fish oil <u>fatty acids</u> as cancer prevention agents.

**More information:** Maya N. White et al. Effects of fish oil supplementation on eicosanoid production in patients at higher risk for colorectal cancer, *European Journal of Cancer Prevention* (2019). DOI: 10.1097/CEJ.00000000000000455

## Provided by Vanderbilt University

Citation: Fish oil and cancer prevention (2019, June 27) retrieved 27 April 2024 from <a href="https://medicalxpress.com/news/2019-06-fish-oil-cancer.html">https://medicalxpress.com/news/2019-06-fish-oil-cancer.html</a>

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