

Omega-3 to cut colon cancer: meta-analysis

10/25/2007 - **A pooled analysis of the small but ever-growing body of science of omega-3 and colorectal cancer indicates more fish oil does protect against the cancer.**

The incidence of [colorectal cancer](#) can be cut by 12 per cent by consuming more fish per week, says a new [meta-analysis](#) published in the *American Journal of Epidemiology*.

In addition, for every additional serving of fish consumed per week the risk of developing the cancer could be cut by four per cent, state researchers.

"Existing evidence that n-3 fatty acids inhibit colorectal carcinogenesis is in line with these results, but few data are available addressing this association," wrote researchers.

The research adds to the healthy reputation of [omega-3](#) fatty acids that is seeping into consumer consciousness, based largely on evidence that it can aid cognitive function, may help protect the heart against cardiovascular disease, and could reduce the risk of certain cancers.

In terms of colorectal cancer, a disease responsible for about 492,000 deaths each year around the world, the potential benefits have only been investigated in a small number of studies, note researchers.

A meta-analysis of prospective cohort studies was performed, including 14 studies reporting the effects of fish consumption or n-3 fatty acids and colorectal cancer incidence and four studies reporting colorectal cancer mortality.

The reviewers report that the highest consumption of fish oil was associated with 12 per cent reduction in the incidence of colorectal cancer, while no significant benefits were observed with respect to mortality.

Furthermore, for each extra 100 g of fish consumed per week the risk of colorectal cancer incidence was reported to be reduced by three per cent.

Researchers also report that the benefits were more pronounced for women, although the number of studies could not allow for definitive conclusions to be drawn.

The reviewers noted that animal studies have shown favourable results in terms of omega-3 and colorectal cancer. Indeed, a study by researchers from Harvard Medical School and Charité University Medicine, Germany, published earlier this year in the journal *Carcinogenesis*, reported that supplementation with omega-3 cut inflammation in the colon that may lead to tumour formation by 15 per cent.

The burgeoning body of science supporting the potential health benefits of omega-3 has seen the number of omega-3 enriched or fortified products on the market increase.

However, fears about dwindling fish stocks and the presence of pollutants, such as methyl mercury, dioxins, and polychlorinated biphenols (PCBs), have pushed some academia and industry to start producing omega-3s from alternative sources, such as algae extraction or transgenic plant sources. Most extracted fish oils are molecularly distilled and steam deodorised to remove contaminants.

According to Frost and Sullivan, the European omega-3 market was worth around €160m (£108m) in 2004, and is expected to grow at rates of 8 per cent on average to 2010.