

Omega-3 could reduce neck and back pain

02/05/2006 - **Supplements of omega-3 fatty acids could reduce the incidence of neck and back pain and eliminate the need for medication, says a small US study.**

In the US alone, over 70m people receive prescriptions for nonsteroidal anti-inflammatory drugs (NSAIDs) to reduce [inflammation](#) and relieve pain, but taking such drugs can lead to stomach ulcers, and are the leading cause of morbidity and mortality related to drugs, according to the FDA.

"It is important for patients to know that safer alternatives to pain medications are available," said Joseph Maroon from the University of Pittsburgh Medical Center. *"A fish oil supplement containing EPA and DHA omega-3s is an effective choice with fewer or no side effects."*

Previous studies have reported that [omega-3](#) fatty acids, from both fish and supplemental sources, could reduce and/or prevent inflammation. The new study, published in the April issue of *Surgical Neurology* (Vol. 65, pp. 326-331), adds to this body of evidence.

The researchers supplemented the diets of 125 people with non-surgical spine pain, and who were taking NSAIDs. The volunteers were given daily supplements of 2400 milligrams omega-3 fatty acids for two weeks and then 1200 mg per day thereafter. The supplements (ProEPA) were manufactured by [Nordic Naturals](#) and contained 200 mg DHA, 850 mg EPA, and 180 mg other omega-3s.

After two weeks, the volunteers were asked to stop their NSAIDs and after one month a questionnaire was sent to the participants to ask about joint and spine pain, side effects and level of NSAID discontinuation.

Fifty-nine per cent of the participants reported that they had stopped completely the NSAIDs medication, and 60 per cent said that their overall level of pain had improved since starting the omega-3 supplements.

"Eighty per cent of the respondents stated they were satisfied with their improvement and 88 per cent stated they would continue to take the omega-3 essential fatty acids," reported the researchers.

The mechanism of anti-inflammatory action of omega-3 fatty acids, say the authors, is well established and involves the conversion of the fatty acids into the anti-inflammatory prostaglandins (PGs) of the PGE3 series.

The study has several obvious weaknesses including being a retrospective, non-placebo controlled. As such, the placebo effect cannot be eliminated. In addition, the survey was very short-term and longer term follow-up is clearly needed.

However, the positive preliminary results and the lack of side effects led the researchers to propose that as many as two-thirds of people currently taking NSAIDs could discontinue this use and benefit from omega-3 fatty acids to alleviate pain from inflammation.

"People should be careful to choose a pharmaceutical-grade fish oil supplement that is fresh and free of potentially harmful heavy metals, such as the mercury, PCBs, and dioxins that can be found in fish," said Maroon.

The risk of such pollutants from oily fish have led to some to advocate a reduction in fresh fish intake, despite others advising that the benefits of fish consumption outweigh the risks.

Such conflicting views on fish intake have seen the number of omega-3 enriched or fortified products on the market increase as consumers seek omega-3s from 'safer' sources. Most extracted fish oil are molecularly distilled and steam deodorised to remove contaminants.

But fears about dwindling fish stocks have pushed some industries to start extracting omega-3s from algae. Indeed, companies such as Martek Biosciences and Lonza are already offering algae-derived omega-3 DHA as a dietary supplement.