

Omega-3 and joint health – more support

31/01/2007 - **Daily high-dose omega-3 supplements were found to decrease the severity of symptoms associated with ankylosing spondylitis, a chronic disease that mainly affects joints of the spine and hips.**

The study adds to an ever-growing body of science linking the marine fatty acids to improved joint health, in addition to a wide-range of health benefits, including cardiovascular health, good development of a baby during pregnancy, behaviour and mood, and certain cancers.

The new small study, randomly assigned 24 patients with [ankylosing spondylitis](#) (AS), also known as Bechterews disease, to receive either high-dose (4.55 g) or low-dose (1.95 g) daily supplement of [omega-3](#) (Epax 5500 TG).

The patients were recruited in the polar and sub-polar regions of Sweden where a genetic marker for AS, the HLA-B27 antigen, is especially common. Indeed, in these regions the genetic pattern is reported to be found in 17 per cent of the population, and the prevalence of AS is 0.5 per cent.

The new study, followed the patients for 21 weeks. Eighteen patients completed the trial, nine in each group.

"The patients in the high-dose group exhibited a significant decrease in disease activity according to the Bath Ankylosing Disease Activity Index, which was not seen in the low-dose group," wrote the researchers.

"Omega-3 fatty acids in adequate doses may have the capacity to decrease the disease activity of AS. However, larger and better controlled studies are needed before any further conclusions can be made on the extent of this capacity," they concluded.

Indeed, the findings of the study are limited by the small number of subjects and the lack of a placebo.

"Perhaps this sheds light on the mystery why Inuits having the genetic marker for developing Bechterews do not develop the disease very often," said researchers in a release.

"Traditionally, the Inuits have a high intake of omega-3 fatty acids by eating salmon and sea mammals that provide a regular daily intake of these fatty acids that have well-documented [anti-inflammatory](#) properties. Such a dietary regimen could be sufficient to curtail a genetic preponderance for developing the disease."

The mechanism of anti-inflammatory action of omega-3 fatty acids has previously been proposed to involve the conversion of the fatty acids into the anti-inflammatory prostaglandins (PGs) of the PGE3 series.