

PLACE/INSTITUTION:	Institute of human nutrition, School of medicine, University of South Hampton, South Hampton, United Kingdom
TARGET SAMPLE:	Patients with rheumatoid arthritis

### **Omega-3 fatty acids reduce pain and stiffness in joints**

#### **SUMMARY**

The joint pain, swelling and stiffness that is associated with Rheumatoid arthritis is caused by inflammation as the body's own immune system attacks the small joints. Inflammation is modulated by signalling chemicals in the body called eicosanoids which can be produced from Omega-3 fatty acids. These signaling chemicals made from omega-3 fatty acids contribute to reducing inflammation in the body. It is therefore possible to reduce inflammation associated with rheumatoid arthritis by increasing dietary intake of omega-3 fatty acids. At least 18 placebo-controlled clinical trials have been conducted in people suffering from rheumatoid arthritis using fish oil as a treatment. These studies show a beneficial effect of omega-3 fatty acid supplementation on symptoms of rheumatoid arthritis such as: a reduction in stiffness; swelling and pain in the joints; improved grip strength; and a reduction in the duration of morning stiffness. Although the dose of omega-3 fatty acids and duration of the treatment vary among these studies, most have used doses of at least 2.5g EPA + DHA and maximal positive effects are seen after 3 months.

#### **CONCLUSION**

A review of the many placebo-controlled, clinical trials testing the effect of omega-3 fatty acid treatment on rheumatoid arthritis reveals that 2.5g of EPA + DHA per day for at least 3 months is effective in reducing pain, stiffness and swelling of the small joints.

#### **REFERENCE:**

*Am J Clin Nutr.* 2006; 83(suppl):1505S-19S  
n-3 Polyunsaturated fatty acids, inflammation and inflammatory diseases. Calder, PC.