



An official website of the United States government

[Here's how you know](#)

FULL TEXT LINKS

[Meta-Analysis](#) [Pain](#). 2007 May;129(1-2):210-23. doi: 10.1016/j.pain.2007.01.020.

Epub 2007 Mar 1.

A meta-analysis of the analgesic effects of omega-3 polyunsaturated fatty acid supplementation for inflammatory joint pain

[Robert J Goldberg](#)¹, [Joel Katz](#)

Affiliations

PMID: 17335973 DOI: [10.1016/j.pain.2007.01.020](#)

Abstract

Between 40% and 60% of Americans use complementary and alternative medicine to manage medical conditions, prevent disease, and promote health and well-being. Omega-3 polyunsaturated fatty acids (omega-3 PUFAs) have been used to treat joint pain associated with several inflammatory conditions. We conducted a meta-analysis of 17 randomized, controlled trials assessing the pain relieving effects of omega-3 PUFAs in patients with rheumatoid arthritis or joint pain secondary to inflammatory bowel disease and dysmenorrhea. Meta-analysis was conducted with Cochrane Review Manager 4.2.8. for six separate outcomes using standardized mean differences (SMDs) as a measure of effect size: (1) patient assessed pain, (2) physician assessed pain, (3) duration of morning stiffness, (4) number of painful and/or tender joints, (5) Ritchie articular index, and (6) nonselective nonsteroidal anti-inflammatory drug consumption.

Supplementation with omega-3 PUFAs for 3-4 months reduces patient reported joint pain intensity (SMD: -0.26; 95% CI: -0.49 to -0.03, p=0.03), minutes of morning stiffness (SMD: -0.43; 95% CI: -0.72 to -0.15, p=0.003), number of painful and/or tender joints (SMD: -0.29; 95% CI: -0.48 to -0.10, p=0.003), and NSAID consumption (SMD: -0.40; 95% CI: -0.72 to -0.08, p=0.01). Significant effects were not detected for physician assessed pain (SMD: -0.14; 95% CI: -0.49 to 0.22, p=0.45) or Ritchie articular index (SMD: 0.15; 95% CI: -0.19 to 0.49, p=0.40) at 3-4 months. The results suggest that omega-3 PUFAs are an attractive adjunctive treatment for joint pain associated with rheumatoid arthritis, inflammatory bowel disease, and dysmenorrhea.

[PubMed Disclaimer](#)

Comment in

[Food and pain: should we be more interested in what our patients eat?](#)

Bell RF.

[Pain](#). 2007 May;129(1-2):5-7. doi: 10.1016/j.pain.2007.01.019. Epub 2007 Feb 27.

PMID: 17329026 No abstract available.

[Fish, seal, and flaxseed oils lessened joint pain.](#)

[No authors listed]

[J Fam Pract](#). 2007 Aug;56(8):615.

PMID: 17674450 No abstract available.

Related information

[Cited in Books](#)

[MedGen](#)

[PubChem Compound \(MeSH Keyword\)](#)

LinkOut - more resources

Full Text Sources

[Elsevier Science](#)

[Ovid Technologies, Inc.](#)

[Wolters Kluwer](#)

Other Literature Sources

[H1 Connect - Access expert opinions and insights on biomedical research.](#)

[The Lens - Patent Citations Database](#)

Medical

[MedlinePlus Health Information](#)