

# FISH OIL

FOR YOUR BACK, NECK, & JOINTS



OMEGA-3 FOR YOUR HEALTH SERIES

A person is shown from the back, holding their neck with their hand, suggesting pain or discomfort. The image is overlaid with a light blue tint.

*Did you know?*  
***Omega-3 Fish Oil...***

- Promotes key anti-inflammatory pathways
- Promotes joint mobility and flexibility
- Is a natural adjunct to conventional therapies
- Is safe for long-term use

***Omega-3 supplementation promotes key anti-inflammatory pathways that naturally support back, neck, and joint health and mobility***



## **What are EPA and DHA?**

Extensive research finds that the most beneficial omega-3s are eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Fish is a good food source of EPA and DHA, but due to concerns about toxins such as mercury, a purified fish oil supplement is the safest and most reliable source of these essential fatty acids.<sup>1,2</sup> In addition, people with health issues often require a minimum of 2–4 grams a day for symptom relief, which is difficult to obtain from food alone.

## **The Difference Between Fish Oil and Flax**

Omega-3 fatty acids fall into two major categories: plant derived (flaxseed) and marine derived (fish). Flaxseed oil contains alpha-linolenic acid (ALA) which can be partially converted to EPA and DHA, but that conversion is somewhat slow and can be inhibited by lifestyle and health factors. Research shows that approximately 5% of ALA converts to EPA, and just 1% converts to DHA, under optimal conditions. While flaxseed and flaxseed oil may contain many health-promoting benefits, they do not provide the necessary amounts of preformed EPA and DHA.

EPA and DHA work together in the body. However, each fatty acid has unique benefits. EPA supports cardiovascular, circulatory, and mood health, and can be beneficial for optimizing immune health. DHA is a crucial foundation for cells in the brain, nervous system, and eyes, and, as a result, benefits cognition, mood, fetal and infant development, and a healthy pregnancy.

***Research shows that the most reliable source of omega-3s is a high-quality fish oil supplement***



## **Fish Oil: A Natural Mobility Enhancer**

Back and neck pain often have many different causes, but typically one underlying factor—inflammation.

Normally a protective mechanism, inflammation can produce many negative health effects when it becomes a long-term or chronic condition—including chronic pain and the breakdown of cartilage and tissue. Many conventional therapies have been developed to treat inflammation and pain—including NSAIDs and COX-2 inhibitors. Omega-3 essential fatty acids naturally address the same inflammatory pathways with safe and positive effects.

### **Reduce Pain**

Several controlled clinical trials have used fish oil to successfully reduce pain associated with inflammatory conditions. Current evidence suggests that 2–3 grams of EPA+DHA daily promotes key anti-inflammatory pathways in the body that can improve pain and inflammation by counteracting the effects of excessive omega-6, a proinflammatory dietary fat common to the typical Western diet.<sup>3,4</sup>

### **A Safe Adjunct Therapy**

A study published in the scientific journal *Surgical Neurology* compared the effects of prescription NSAID medications and fish oil on reducing pain. One hundred twenty-five people who suffered from neck and back pain from disc and arthritic causes took a daily fish oil supplement that contained at least 1 gram of EPA+DHA. After an average of 75 days, 60% of patients saw an improvement in pain, and 59% were able to discontinue use of prescription pain medication. And since there were no significant side effects reported, this study reported that fish oil appeared to be a safe alternative therapy for treating patients' neck or back pain.<sup>5</sup>



## How To Choose A Fish Oil Supplement

There is a wide range of quality among fish oil supplements. Use the following guidelines to ensure a high-quality product:

- **Purity:** purified of mercury, lead, and other harmful toxins
- **Freshness:** minimized oxidation for no fishy taste
- **Taste:** fishy smell or taste means a poorly made oil
- **Triglyceride Form:** for optimal absorption and results
- **Third-Party Testing:** ensures quality, freshness, and purity
- **Sustainability:** responsible fishing protects our seas

### How Much is Enough?

International experts recommend:

500 mg EPA+DHA	for deficiency prevention
1 g EPA+DHA	for proactive support
2–4 g EPA+DHA	for high-intensity support

Omega-3 product labels can often be confusing. Make sure to read the supplement facts to know how much EPA+DHA you are getting. A 1000 mg soft gel refers only to the size of the soft gel, not the levels of EPA+DHA.

Total Omega-3s	1280 mg	†
EPA (Eicosapentaenoic Acid)	650 mg	†
DHA (Docosahexaenoic Acid)	450 mg	†
Other Omega-3s	180 mg	†

# REFERENCES

1. Melanson SF, *et al.* Measurement of organochlorines in commercial over-the-counter fish oil preparations: implications for dietary and therapeutic recommendations for omega-3 fatty acids and a review of the literature. *Arch Pathol Lab Med* 2005;129:74–77.
2. Foran SE, *et al.* Measurement of mercury levels in concentrated over-the-counter fish oil preparations: is fish oil healthier than fish? *Arch Pathol Lab Med* 2003;127:1603–1605.
3. Calder PC. N-3 polyunsaturated fatty acids and inflammation: from molecular biology to the clinic. *Lipids* 2003;38:343–352.
4. Goldberg RJ, Katz J. A meta-analysis of the analgesic effects of omega-3 polyunsaturated fatty acid supplementation for inflammatory joint pain. *Pain* 2007;129:210–223.
5. Maroon JC, Bost JW. Omega-3 Fatty acids (fish oil) as an anti-inflammatory: an alternative to nonsteroidal anti-inflammatory drugs for discogenic pain. *Surgical Neurology* 2006;65:326–331.