

## Fish Oil vs. Krill Oil

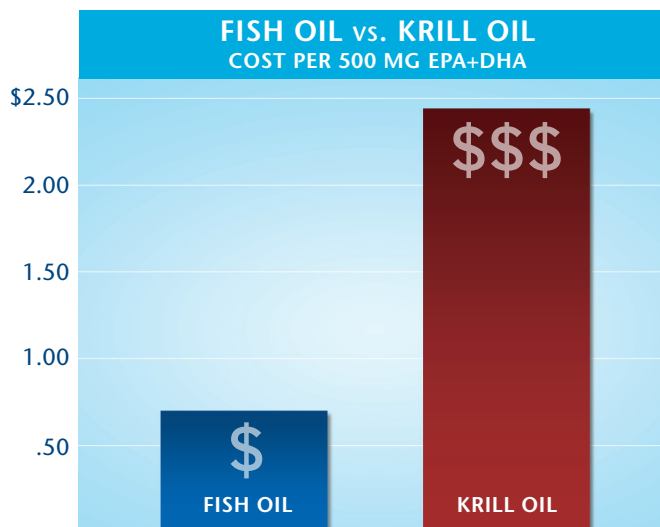
### Evidence-based Considerations

The body of evidence supporting the health benefits of EPA and DHA continues to grow. Cold-water fish are the most common sources for omega-3 supplements. However, small marine crustaceans known as krill are becoming increasingly common. Despite its popularity, there are just a handful of published studies exploring the use of krill oil, while fish oil remains among the most researched supplements ever, with over 10,000 studies published.

One review in the *Journal of the American College of Cardiology* looked at evidence from epidemiologic studies and large randomized controlled trials. The authors concluded that EPA and DHA consumption should be at least 500 mg/day for individuals without underlying, overt cardiovascular disease, and at least 800–1000 mg/day for individuals with known coronary heart disease and heart failure.<sup>1</sup> This conclusion is not unique. Organizations such as the American Dietetic Association (ADA), the Dietitians of Canada (DC), the World Health Organization (WHO), and the American Heart Association (AHA) have reached similar conclusions based upon available evidence.<sup>2–4</sup>

Although krill oil is a source of EPA and DHA, the concentration of EPA and DHA in krill supplements is very low, which makes it difficult and costly to achieve the recommended doses above. So, although other factors such as absorption and antioxidant levels are entering the fish-versus-krill debate, the efficacy of EPA+DHA at levels of at least 500 mg per day is the most important consideration. Quality and cost are also key differentiators.

A 2010 ConsumerLab.com report found that one major krill manufacturer failed quality control testing, while multiple sources cited retail prices for these supplements 3–4 times higher than high-quality fish oils.



Cost comparisons have shown krill oil to be three to four times that of high-quality fish oil.

### New Study Links Very High Intake of EPA+DHA with Reduced Chronic Disease Biomarkers

A 2010 study showed that beneficial biomarkers continued to improve as EPA+DHA consumption increased to very high levels (several grams of EPA+DHA per day).<sup>5</sup> The researchers concluded that setting maximum intake recommendations that are too low may be unwise.

1. Lavie CJ, Milani RV, Mehra MR, Ventura HO. Omega-3 polyunsaturated fatty acids & cardiovascular diseases. *J Am Coll Cardiol* 2009 Aug 11;54(7):585–94.
2. American Dietetic Association and Dietitians of Canada. Position of the American Dietetic Association and Dietitians of Canada: Dietary Fatty Acids. *Journal of the American Dietetic Association* 2007;1599–1611.
3. World Health Organization. Diet, Nutrition and the Prevention of Chronic Diseases. *Technical report series* 916.
4. AHA Scientific Statement: Fish Consumption, Fish Oil, Omega-3 Fatty Acids and Cardiovascular Disease, #71-0241. *Circulation* 2002;106: 2747–2757.
5. Winwood RJ, Cope MB, Rice HB. Reduction in Chronic Disease biomarkers and very high intake of EPA and DHA omega-3 fatty acids. *Advances in EPA & DHA Research* vol 03;(02), 2010.



### NORDIC NATURALS HONORED AS THE 2010 MANUFACTURER OF THE YEAR

*Vitamin Retailer*, a leading publication in the United States natural products industry, has honored Nordic Naturals as the 2010 Manufacturer of the Year.

According to *Vitamin Retailer*, “Nordic Naturals has truly set the standard for purity, freshness, and innovation for fish oils while keeping sustainability, environmentalism, education, and charity all top priorities—on land and at sea.”