



# BIOMEGA™ VS. KRILL OIL

**Omega-3 fatty acids are good.** Study after study notes their benefits for maintaining good health, including providing support for healthy cardiovascular function. For non-vegetarians, the two most popular options are fish oil or krill, and USANA continues to use fish oil in our BiOmega omega-3 fatty acid supplement.\* Why?

## BiOmega Provides Significantly More Cardio-Protective Omega-3s than Krill

Nutrition experts recommend at least 1,000 mg of omega-3 fatty acids per day to protect heart health.<sup>1\*</sup> The cardio-protective effects of omega-3s are largely attributed to DHA and EPA from omega-3 fatty acids, and intakes of at least 650 mg per day or higher are recommended for healthy individuals.<sup>2</sup> This chart shows how BiOmega and some popular krill supplements compare.

## Another Way BiOmega is Good for the Heart

<http://www.msc.org/>

You can feel good knowing that the ultra-pure fish oil used in BiOmega comes from responsible sources. USANA partners only with premium-quality ingredient suppliers. Our BiOmega fish oil comes from a supplier that is Marine Stewardship Council (MSC) certified. MSC is the world's leading sustainable seafood certification and ecolabeling organization. MSC-labeled seafood comes from, and can be traced back to, sustainable sources.

Brand*		DHA+EPA per daily dose	Omega-3s per daily dose	Number of capsules needed to provide 1000 mg of omega-3s per day	Cost per month
<b>USANA® BiOmega™</b>		<b>1050 mg</b>	<b>1200 mg</b>	<b>2</b> 	<b>\$21.45 US</b> (56 tablets)
Schiff MegaRed® Ultra Strength Omega-3 Krill Oil 1000 mg		188 mg	230 mg	<b>5</b> 	\$214.95 US (\$42.99 per 30 count bottle)
Quality of Life® Neptune Krill Oil		95 mg	230 mg	<b>8</b> 	\$199.60 US (\$24.95 per 30 count bottle)
Whole Body Research Premium Antarctic Krill Oil Blend (online only)		240 mg	300 mg	<b>4</b> 	\$59.98 US (\$29.99 per 30 count bottle)
Dr. Mercola® Pure Krill Oil		155 mg	155 mg	<b>13</b> 	\$125.94 US (\$62.97 per 180 count bottle)

\*Trademarks are the property of their respective owners. Information verified online as of 2/26/14.

1. <http://www.crnusa.org/CRNfoundation/HCCS/intakes.html>

2. <http://www.dhaomega3.org/Overview/DHA-EPA-and-the-Omega-3-Nutrition-Gap-Recommended-Intakes>

\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

# FREQUENTLY ASKED QUESTIONS ABOUT KRILL OIL VS. FISH OIL

## Q. Is krill oil significantly more bioavailable than fish oil?

A. Proponents maintain that krill phospholipids are “significantly more bioavailable” than fish oil. The actual data says something else. There are differences in the absorption rates and total amounts of fat absorbed from different forms of fats, but those differences are minor. Even in the best head-to-head experiments comparing fish oil to krill oil, there have been no statistically significant differences. The main difference in absorption may be due to high levels of free fatty acids in the krill oil, not to the phospholipid content.

Another study that looked at krill oil versus fish oil asserted that krill “could be more effective than fish oil” when comparing omega-3 levels in the blood. However, this is likely because the fish oil used in the study was not equivalent to the fish oil used in most supplements. The fish oil was diluted with corn oil, increasing the levels of omega-6 fatty acids in the oil, which would impact the way omega-3s are absorbed. The results likely would have been different if a properly balanced fish oil were used, such as BiOmega, which contains no omega-6s. Scan QR code at right to learn more.



Lipids, 2011 Jan;46(1):37-46. doi: 10.1007/s11745-010-3490-4. Epub 2010 Nov 2.

### Metabolic effects of krill oil are essentially similar to those of fish oil but at lower dose of EPA and DHA, in healthy volunteers.

Ulven SM<sup>1</sup>, Kirkhus B, Lamqlait A, Basu S, Elind E, Haider T, Berge K, Vik H, Pedersen JJ.

#### Author information

#### Abstract

The purpose of the present study is to investigate the effects of krill oil and fish oil on serum lipids and markers of oxidative stress and inflammation and to evaluate

observed in the subjects supplements with n-3 PUFAs as compared with the controls, but there were **no significant differences in the changes in any of the n-3 PUFAs between the fish oil and the krill oil groups**. No statistically significant differences in changes in any of the serum lipids or the markers of oxidative stress

PUFAs between the fish oil and the krill oil groups. No statistically significant differences in changes in any of the serum lipids or the markers of oxidative stress and inflammation between the study groups were observed. Krill oil and fish oil thus represent comparable dietary sources of n-3 PUFAs, even if the EPA + DHA dose in the krill oil was 62.8% of that in the fish oil.

PMID: 21042875 [PubMed - indexed for MEDLINE] PMCID: PMC3024511 [Free PMC Article](#)



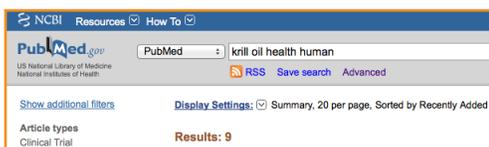
Advertising-monitoring groups have suggested major krill supplement sellers discontinue using comparative claims with fish oil due to lack of substantiation of superiority. Scan QR code at right to learn more.

## Q. Is krill oil better for supporting health?

A. As a source of omega-3 fatty acids, krill can theoretically be beneficial for our health; however, there is not overwhelming proof that it is any better than fish oil.

Quite the opposite. There is substantial evidence that fish oil is good for our health, while evidence for krill oil is scant. PubMed, the US National Library of Medicine run by the National Institutes of Health, currently (as of 3/11/14) lists 3,404 studies related to human health and fish oil, while only 9 studies are related to human health and krill oil.

3,404



Source: US National Library of Medicine, PubMed Central

9

Krill Oil Studies

Fish Oil Studies

# FREQUENTLY ASKED QUESTIONS ABOUT KRILL OIL VS. FISH OIL

## Q. Have USANA scientists looked into developing a krill oil supplement?

A. Yes. Some krill studies showed promising results, so we followed up on them. The results of one particular study that claimed krill provided significant cholesterol benefits looked very good, but there were questionable aspects of the research. So, USANA scientists decided to run the same study (on a smaller scale) in our own in-house lab, using a commonly available krill oil supplement. Unfortunately, we were unable to duplicate the positive results of the krill study. Until USANA can prove the beneficial health effects and the published research is fair and compellingly strong on krill, we stand behind the quality and effectiveness of fish oil, which has ample proof for supporting good health.\*

## Q. What about the astaxanthin in krill oil?

A. Astaxanthin is beneficial. It's a red-tinted carotenoid that helps neutralize free radicals, so an omega-3 supplement with astaxanthin will provide a little extra antioxidant protection. However, in a report that rated the oxidation rates of various carotenoids, astaxanthin ranked behind lycopene, beta carotene, and zeaxanthin, noting that it was slower acting than the others. So, while it can't hurt, the levels of astaxanthin in most krill supplements simply aren't that beneficial. USANA BiOmega delivers 200 IU of vitamin D, in addition to superior levels of omega-3s, for additional health support.\*

Scan QR code at the right to see abstract of the carotenoid study.



**Don't believe the hype. If you are searching for a quality omega-3 supplement to support your health, choose fish oil. Krill simply doesn't measure up. With BiOmega, you get optimal amounts of beneficial omega-3 fatty acids in just two capsules a day, making it a great choice and a great value.**



**USANA**  
INDEPENDENT ASSOCIATE

USANA Health Sciences, 3838 West Parkway Blvd., Salt Lake City, UT 84120

\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

06695 US/EN 04/14