

APPLICATIONS

- Cardiovascular Support
- Skin Support
- Joint/Muscle Support
- Neurological Support
- Ocular Support



INTRODUCTION

Antarctic Krill Oil is sustainably harvested from *Euphausia superba*, commonly known as Antarctic krill. Krill are small shrimp-like crustaceans in the Euphausiidae family, harvested from the pristine Southern Ocean surrounding Antarctica. Antarctic krill are at the bottom of the food chain, feeding primarily on phytoplankton. This allows them to provide nutrients such as omega-3s to other marine animals for which they are a primary food source, making them a keystone species. Antarctic krill are one of the most abundant species in the world, having an estimated biomass more than the global population of humans.¹

NutraMedix Atlantic Krill Oil contains long-chain omega-3 fatty acids (EPA and DHA), phospholipids, choline, and astaxanthin. Omega-3s, designated essential as the body needs but cannot synthesize them, include alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA).² Plant sources of omega-3s contain only ALA and include flaxseed, chia seed, walnuts, and canola oil.² While the body can convert ALA to DHA and EPA, conversion is inefficient and the direct consumption of DHA and EPA is preferred.^{2,3} In a randomized, controlled trial with healthy individuals, increased intake of DHA and EPA supported a healthful omega-3 Index (O3-I) while increased intake of ALA did not.⁴ Dietary sources of the preferred EPA and DHA include cold-water fatty fish such as salmon, herring, sardines, mackerel, and tuna.²

Choline is used to synthesize phospholipids for cell membranes and to produce the neurotransmitter acetylcholine.⁵ Choline is produced in limited amounts in the liver,⁶ and can be found in foods such as beef liver, egg, soybeans and fish.⁵ Astaxanthin is a xanthophyll carotenoid with antioxidant activity and can be found in salmon and shrimp.^{7,8} The astaxanthin in krill oil comes from their diet of phytoplankton, and is a natural-source antioxidant that helps to stabilize the omega-3 fatty acids.*

The primary difference between krill oil and fish oil is that krill oil contains

omega-3s in phospholipid form while fish oil contains omega-3s in triglyceride form. Krill oil additionally contains choline and astaxanthin. EPA and DHA in phospholipid form may be more bioavailable than in triglyceride form, due to an increased affinity with the phospholipid bilayer.^{9,10} In testing the hypothesis that phospholipid content may support bioavailability, krill oil with a higher phospholipid content was found to be more bioavailable than krill oil with a lower phospholipid content.¹¹ Krill oil may also be more effective than fish oil in maintaining the omega-3 index (O3-I) already within the normal range.¹²

NutraMedix Atlantic Krill Oil is 100% traceable from sea to shelf, with each batch labeled with coordinates of origin. It is also certified sustainable by the Marine Stewardship Council (MSC). Starting at the moment of harvest, patented Flexitech™ and Eco-Harvesting® technology eliminates by-catch, reduces environmental impact, and removes unwanted salts and other polar constituents, further concentrating the beneficial components. NutraMedix rigorously follows current good manufacturing practices (cGMP), as do our suppliers, and our products undergo stringent ID testing, microbial testing, and heavy metal testing. Atlantic Krill Oil has been extensively tested and found to be free of contaminants such as dioxins, dioxin-like PCBs (polychlorinated biphenyls), furans, organochlorine pesticides, polybrominated diphenyl ethers (PDBEs), polycyclic aromatic hydrocarbons (PAHs), fluoride, arsenic, trans-fatty acids, marine algal toxins, and heavy metals.¹³

CARDIOVASCULAR SUPPORT

Krill oil may help with cardiovascular support.¹⁴ While it is widely accepted that optimal omega-3 levels help to support cardiovascular health, levels are often suboptimal. In a cross-sectional study with 200 U.S. and German adult participants ages 18-80, only four of the German participants and none of the U.S. participants had omega-3 index (O3-I) blood values within the optimal range.¹⁵ The O3-I is the percent of erythrocyte fatty acids that are DHA and EPA.² It is a predictor of cardiovascular health, and thus, of potential risk.¹⁶ An O3-I ≥8 is most cardioprotective while an O3-I ≤4% is least cardioprotective.¹⁷

Krill oil may help to maintain blood C-peptide levels, HDL levels, and HOMA scores already within the normal range.¹⁸ It may also help to maintain CRP levels, apolipoprotein A1 levels,¹⁹ triglyceride levels,²⁰ VLDL levels, and chylomicron levels already within the normal range.²¹ In a systematic review and meta-analysis of seven randomized, controlled trials with a total of 662 participants, researchers concluded that krill oil may help to maintain LDL, HDL, and triglyceride levels already within the normal range.²²

SKIN SUPPORT

Oral krill oil may help to maintain uniform skin pigmentation.²³ Oral consumption of EPA, such as found in krill oil, may help to maintain dermal EPA and arachidonic acid levels already within the normal range, which may support healthy photoprotection.²⁴ In combination with other ingredients in an oral superoxide dismutase-containing formula, krill oil helped to support normal photoprotection and healthy skin elasticity.²⁵

OTHER USES

Joint/Muscle Support

Krill oil may support healthy joints, helping to maintain CRP levels and WOMAC scores already within the normal range.²⁶ It may also help to support knee comfort while sleeping and during standing, and help to maintain normal range of motion (ROM).²⁷

Neurological Support

Krill oil may help with neurological support.* In a double-blind, randomized, controlled, parallel trial with healthy male volunteers ages 61-72, krill oil, sardine oil, and medium-chain triglycerides were compared. The effects of krill oil (omega-3s in phospholipids) were compared to the effects of sardine oil (omega-3s in triglycerides) and to the effects of medium-chain triglycerides (placebo). Compared to placebo, both krill oil and sardine oil supported normal oxyhemoglobin levels in the cerebral cortex during memory and calculation tasks, and krill oil was the most effective at maintaining healthy cognitive

function.^{*28} Krill oil may also help to support normal processing speed.^{*29}

Ocular Support

Krill oil may help with ocular support.^{*30} While both fish oil and krill oil may help maintain healthy tear osmolarity, krill oil is superior at maintaining a healthy OSDI score already within the normal range.^{*30}

SAFETY AND CAUTIONS

Krill oil is generally well tolerated and has been used safely in doses up to 4 grams daily for as long as 3 months.²⁰ There is insufficient data available on safety in pregnancy and breastfeeding.³¹ Side effects may include gastrointestinal symptoms such as upset stomach, nausea, heartburn, decreased appetite, bloating, flatulence or diarrhea, though at a lesser incidence than with fish oil.³¹ One patient in one trial developed hypertension after taking krill oil, though this has not been seen elsewhere in the literature.²⁰

Krill oil may theoretically increase the risk of hypoglycemia when taken with hypoglycemic drugs.³¹ It may also, theoretically, increase the risk of bleeding if used concurrently with anticoagulant or antiplatelet drugs.³¹ Krill oil should be discontinued at least two weeks before elective surgery.³¹ Those allergic to seafood may also be allergic to krill oil, though the likelihood of this is currently unknown.³¹ Krill oil should be avoided, or used with caution, in those with seafood allergy.³¹

Safety not documented in breastfeeding or pregnant women, or in children under 3 years of age due to insufficient safety research.

*** This statement has not been evaluated by the Food and Drug Administration. This product is not intended to treat, cure, or prevent any diseases.**

The image shows the packaging label for NutraMedix Antarctic Krill Oil. The label is primarily green and white. At the top, the NutraMedix logo is displayed. Below it, the product name "ANTARCTIC KRILL OIL" is written in large, bold, green letters. Underneath, it says "OMEGA-3 EPA/DHA/ASTAXANTHIN" and "SUPPORTS HEART, BRAIN & SKIN HEALTH". The label includes a "Supplement Facts" table, a barcode, and various safety and usage instructions. The text "KEEP OUT OF REACH OF CHILDREN" is prominently displayed. The label also mentions "POWERED BY SUPERBA Boost" and "60 Softgels".

KEEP OUT OF REACH OF CHILDREN

STORAGE: Keep tightly closed in a dry place at room temperature (59-86°F or 15-30°C)

SUGGESTED USE: Take one softgel once or twice daily after a meal or as directed by your physician. Do not use if you are allergic to shellfish, or taking anticoagulant medication. Do not use if pregnant or nursing. Stop use if adverse reactions develop.

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†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.

Supplement Facts

Amount Per Serving	% DV
Choline	90mg 5%
Superba Boost® Krill Oil	500mg *
Phospholipids	25mg *
Omega-3 Fatty Acids	135mg *
EPA (eicosapentaenoic acid)	75mg *
DHA (docosahexaenoic acid)	60mg *
Astaxanthin	45mcg *

*Daily Values (DV) not established

Other Ingredients: Gelatin (Bovine), Glycerol, Sorbitol, Water and Ethyl Vanillin

Contains: Crustacean shellfish (Antarctic krill)

NutraMedix
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561-745-2917

POWERED BY
SUPERBA Boost

Dietary Supplement
60 Softgels

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