



Boat-to-Bottle Vertical Integration Backgrounder

OVERVIEW

Vertical Integration is Foundational to Our Success

Since 1995, Nordic Naturals has been passionately committed to bringing forward a new definition of fish oil. Privately owned by Norwegian-born Joar Opheim, Nordic Naturals is on a mission to deliver the world's safest, most effective omega oils, and to ultimately correct one of the most pressing public health concerns of the 21st century—the global omega-3 deficiency.

Nordic Naturals is the #1 fish oil in the United States according to scan data from SPINS, the leading analytics reporting service for the Natural, Organic, and Specialty Products industry.

Foundational to the company's success, and to the exceptional freshness, stability and efficacy of their products is Nordic Naturals' unique boat-to-bottle vertical integration. Nordic Naturals begins its manufacturing process with the end in mind, carefully managing every step in order to deliver the highest quality fish oil.

Guiding Principle #1: IT ALL BEGINS AT SEA

Source the best raw materials, while protecting the future of our marine resources, along with the livelihoods of those who depend on them.

Committed to Sustainability

Since its founding, Nordic Naturals has been committed to the health of the oceans. Environmental stewardship is a core value for Nordic Naturals.

Sourcing: Nordic Naturals sources wild-caught, omega-rich fish—Arctic Cod (Skrei) from the Norwegian Sea and sardines and anchovies from the South Pacific Ocean off the coast of Peru. Both fisheries comply with the stringent Norwegian Fisheries Management system. They employ quotas, minimum fish-size restrictions, and GPS tracking (for all boats over 50 feet), while monitoring spawning stock (in Norway), the juvenile population, predators, and fishing methods to ensure flourishing fish stocks.

In 2014, Arctic Cod stocks are at an all time high, and strong spawning cod activity points to a healthy future. In Peru, the sardine and anchovy biomass is the most robust recorded in nearly 20 years.

Fishing: In addition to sustainable sourcing, Nordic Naturals employs responsible fishing gear and methods in order to protect against bycatch of unintended species and to prevent seafloor and ecosystem damage.

No Waste: In both Norway and Peru, no part of the fish is wasted. Cod livers are taken from fish that is used entirely for human consumption. Sardines and anchovies, after extraction of the fish oil, become fishmeal that is used for fish and animal feed.

Freshness is Fundamental

Exceptional freshness levels are absolutely essential to fish oil, and ensure both product integrity and biological efficacy. Freshness begins at sea. A unique and vital benefit of Nordic Naturals' vertical integration process and management of every step from boat to bottle is the ability to minimize the time between catch and oil extraction. This step is absolutely critical to prevent degradation of the fish and guarantee optimal freshness.

Norway – Independent Fishermen and Same-Day Extraction: In Norway, Nordic Naturals partners with independent fishermen who operate small fishing vessels. They deliver the fish the same day it's caught to Nordic Naturals' extraction facility, which is Chain-of-Custody certified by the Marine Stewardship Council. This means that the cod liver oil is extracted within hours of catch and is extremely fresh when delivered as raw oil to the company's manufacturing facility. Both the extraction and manufacturing plants are located on the harbor, which also minimizes transportation time.

Peru – Sea-Water Cooling System: In Peru, the company partners with a Norwegian-owned and operated fishing fleet that utilizes a sea-water cooling system on all boats that catch fish for human consumption. Fish are kept cool and fresh on the boat and delivered to the extraction plant within one to three days of catch.

Nitrogen-Rich Environment: In addition to limiting exposure to oxygen, nitrogen is used at every step of production to further enhance freshness. Raw oils are shipped from Peru to the company's manufacturing plant in Norway in nitrogen-flushed, biodegradable bags. Nitrogen continues to be used throughout the manufacturing, shipping, bottling, and encapsulation processes.

KEY TAKEAWAYS

- Every step is guided by the goal to produce the highest quality fish oil
- Nordic Naturals respects the seas and those who depend on them for their livelihood
- All fish is wild-caught from healthy, well-managed fisheries
- The time from catch to processing is minimized in order to maximize freshness

Guiding Principle #2: PERFECT THE ART OF FISH OIL MANUFACTURING

Utilize the latest technology and research to create the highest quality and most stable product for the greatest health benefit with the least environmental impact.

State-of-the-Art Manufacturing

Nordic Naturals products are manufactured at the company's privately owned, state-of-the-art, green manufacturing plant, Nordic Pharma, on the harbor in Tromsø, Norway, situated above the Arctic Circle. Utilizing the latest technology and processes guarantees stable, effective products that are manufactured in an environmentally sound manner.

Manufacturing Plant Features: Nordic Pharma is cGMP-certified and built to pharmaceutical-grade standards. State-of-the-art technology allows for 20 to 30% less raw materials to achieve desired EPA/DHA levels.

Proprietary Processes: Oils are processed in an oxygen-free/nitrogen-rich environment utilizing proprietary technologies to ensure lowest oxidation, highest stability, and highest quality. An on-site laboratory facilitates 24-hour, continuous monitoring and testing at every step of the manufacturing process.

Green Factory: Nordic Pharma reuses waste energy and produces its own biodiesel and hydropower to meet approximately 95% of its energy needs. Surplus energy is provided to a nearby hospital and to the neighboring Norwegian Institute of Food, Fisheries, and Aquaculture Research. The plant's wastewater is cleaned before returning to the ocean. All of these factors contributed to the Norwegian Government's decision to award the plant with a \$1 million grant.

Manufacturing for Product Stability

In fish, the omega-3 fatty acids EPA and DHA naturally occur in triglyceride form. At Nordic Pharma, Nordic Naturals manufactures products in triglyceride form in order to maintain the natural form of the essential fatty acid molecule, and to enhance absorption and utilization.

Triglyceride Form: When producing concentrated products, many manufacturers leave the fatty acids in the ethyl ester form, a synthetic fatty acid with only about 30 years of history in the human diet. Nordic Naturals chooses to take the extra steps required to recreate the triglyceride structure, which research shows is superior in stability and absorption.

KEY TAKEAWAYS

- Nordic Naturals products are manufactured in its state-of-the-art, green plant, Nordic Pharma, in Norway

- Cutting-edge technology means less raw material is needed to achieve desired EPA+DHA levels
- Proprietary and advanced manufacturing processes ensure exceptional purity, freshness, and product stability
- Products are manufactured with the least possible environmental impact

Guiding Principle #3: DELIVER THE FRESHEST FISH OIL IN THE WORLD

Own the process to the very end, ensuring a robust inventory of exceptional finished products, carefully shipped directly to customers.

Quality Control All the Way to Finished Product

After the raw oils have been purified and processed, finished oils are sent to Nordic Naturals' state-of-the-art, green bottling and encapsulation plant in San Diego, California.

State-of-the-Art Facility: Much like Nordic Pharma, Nordic Naturals' bottling and encapsulation plant is a state-of-the-art, green facility. It is cGMP-certified, and has an on-site laboratory for 24-hour continuous monitoring and testing. The plant generates its own nitrogen, which is used at every step of the bottling and encapsulation process, and makes its own process water.

Dedicated to Omega-3 Production: Perhaps most important is the fact that the plant exclusively produces Nordic Naturals omega-3 fish oil supplements. The special procedures and protocols required to preserve freshness, prevent oxidation, and deliver products of the highest quality are rigorously followed.

Bottling and Encapsulation: At the plant, Nordic Naturals blends, bottles, and encapsulates its custom formulations. Liquid formulations are packaged in Nordic Naturals' signature Arctic blue bottles. Encapsulation includes a patented flavoring process, and both tumble- and air-drying the sealed soft gels. Soft gels are hand-inspected before bottling.

Ability to Ensure Full Inventory

Nordic Naturals' unique vertical integration also positively impacts inventory. Because the company manages every step of production, it can anticipate and respond to its own forecasted need for products. The company can also respond quickly to changing customer demand, ensuring ample inventory.

Hands-on Shipping: Finished products are shipped to Nordic Naturals' state-of-the-art eco-headquarters in Watsonville, California, a LEED Gold-certified facility. The 44,000-square-foot warehouse is cGMP-certified and built with room for expansion. From its headquarters, Nordic Naturals distributes its large product portfolio to more than 30 countries.

Exceptional Finished Products: Because of its commitment to manage the entire manufacturing process, Nordic Naturals offers products with full traceability from boat to bottle. Every batch of oils is tested more than 80 times throughout the manufacturing process, including third-party testing for purity, freshness, and quality. Products are backed by research and are proven effective. Since 1995, the company's products have earned more than 40 awards for taste, product quality, and brand excellence—one more reflection of the power of vertical integration.

KEY TAKEAWAYS

- For Nordic Naturals, vertical integration—and the quality control it guarantees—continues through bottling and encapsulation, and shipping
- Nordic Naturals' bottling and encapsulation plant only processes Nordic Naturals omega-3 supplements
- Nordic Naturals can forecast need and also respond to consumer demand, assuring a robust inventory of products
- Hands-on shipping is done at Nordic Naturals eco-headquarters in Watsonville

SUMMARY

Vertical Integration Reflects Passion, Leadership, & Responsibility

Passion is what built Nordic Naturals—a passion to make available the highest quality omega-3s in order to make a difference in the health of as many people as possible. Passion fueled the company's decision to vertically integrate their manufacturing process and manage every step from boat to bottle.

As Nordic Naturals pioneered a new definition of omega-3 fish oil quality, modeling a more holistic way of doing business, the company became an industry leader. Nordic Naturals views that leadership role as a serious responsibility and is committed to doing whatever it takes to deliver products that are exceptionally fresh, stable, and effective, in order to give each generation what it needs to grow healthy and strong.