



COMMITTED TO SUSTAINABILITY

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alme^go^a®^{PL}





WHAT IS SUSTAINABILITY?

Focusing on sustainability has multiple benefits for a business, even beyond environmental impacts—from revenue growth to improving company reputation and customer loyalty. It even helps to mitigate multiple business risks.

But what does the term “sustainability” really mean? It’s much more than a laundry list of check-the-box initiatives related to water use, waste, emissions, etc. Sustainability is about corporate responsibility. It’s about paying attention to people and to the planet, and as a result of those efforts, effecting substantial positive change.

To be able to claim real sustainability, a company must take into account—and responsibly address—the many social, environmental, and economic impacts of its business. This requires a business to dig deep to define sustainability—specifically, to do so in a way that uniquely applies to its operations, products, and services.



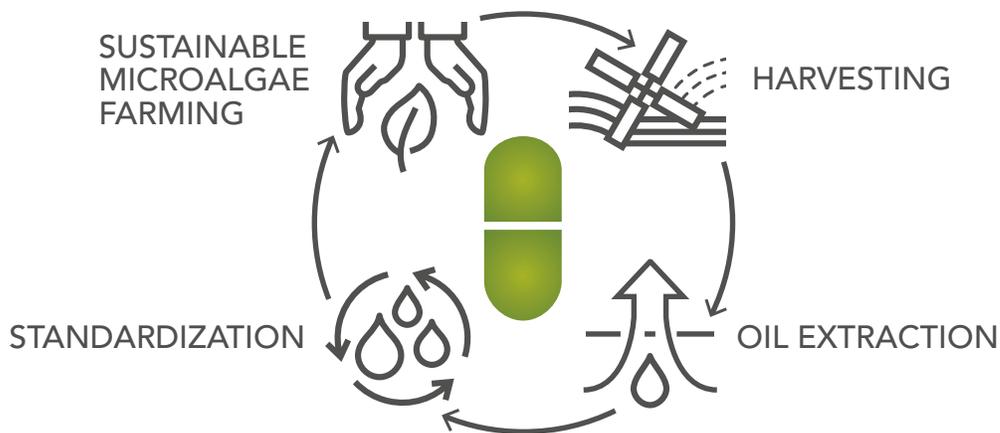
PRODUCED SUSTAINABLY

In today’s omega-3 market, only Almega PL[®], produced exclusively from farm-grown algae, is one that fully prioritizes sustainability. As a category leader in the algal omega-3 market, Almega PL delivers highly bioavailable omega-3s that have been clinically shown to support cardiovascular health, positive mood, and multiple other health benefits.



KEY SUSTAINABILITY ATTRIBUTES

Building on over ten years of experience in microalgae cultivation and extraction, the Qualitas Health team has developed unique and proprietary technologies that control the entire lifecycle of the Almega PL product.



There are four specific attributes Qualitas Health incorporates in the sustainable manufacturing of Almega PL:

- ❖ ALMEGA PL IS 100% OCEAN SAFE.
- ❖ ALMEGA PL IS MANUFACTURED USING REGENERABLE, UNDERUTILIZED RESOURCES.
- ❖ ALMEGA PL PRODUCTION CREATES POSITIVE ENVIRONMENTAL IMPACTS.
- ❖ ALMEGA PL UTILIZES A FULLY-CONTROLLED, TRANSPARENT SUPPLY CHAIN.

100% OCEAN SAFE

At the end of 2015, 281 wild capture fisheries in 33 countries were certified by the Marine Stewardship Council (MSC) Fisheries Standard for sustainable fishing.¹ Putting those numbers in perspective, the percentage of MSC-certified global wild catch went from 5% in 2010 to 9.4% in 2015.² While this is a fair amount of progress and other organizations (e.g. Monterey Bay Aquarium and Friends of the Sea) continue to work hard to develop, promote, and implement certification programs, the industry is still far from a complete solution for protecting the health of the world's oceans and marine ecosystems.

Sustainable fishing certification programs are important for the omega-3 industry, because most omega-3 products on the market come from fish oil or krill oil. Certification of these categories of omega-3 oils is crucial because it provides the only independent assurance available that these products are produced sustainably, lending credibility to company sustainability claims.

ALMEGA PL IS DIFFERENT

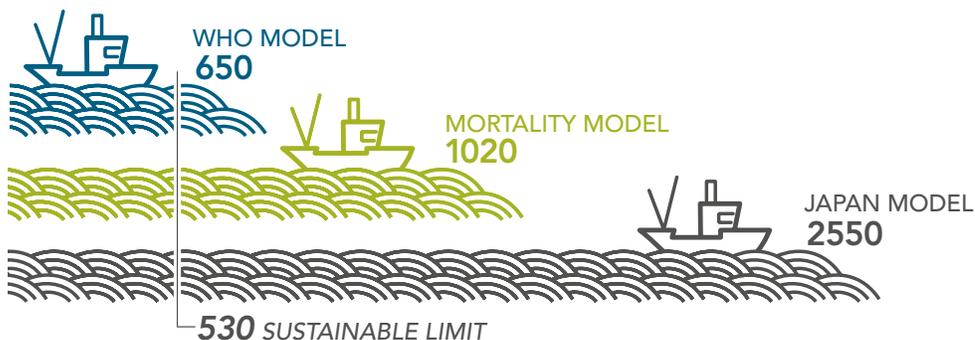
Qualitas Health approaches sustainability in a more effective, encompassing manner. Sourcing omega-3s only from farm-grown algae grown in the desert of West Texas, Qualitas Health does not need a third party to certify the marine sustainability of Almega PL. Unlike some other categories of omega-3s, Almega PL is 100% vegetarian and produced from algae. Almega PL creates zero marine impact, and therefore, zero risk of harm to healthy oceans and marine ecosystems.

Based on the recommended daily dose of omega-3s of the world population, oceans would only provide 530 thousand tons of EPA/DHA needed. According to the WHO model of EPA/DHA needs, 650 thousand tons are needed. Ocean capacity alone would leave much of the population deficient.³

THE OCEAN'S CAPACITY (thousands of tons)



GLOBALLY RECOMMENDED EPA/DHA NEEDS (thousands of tons)



REGENERABLE, UNDERUTILIZED RESOURCES

According to the *Global Organization for EPA and DHA Omega-3s (GOED)*, there is a looming supply issue in the omega-3 industry.

“Increasing supplies of marine omega-3s probably won’t be enough [to supply the world’s population with the recommended daily intake of omega-3s]. Every source needs to be developed to supply enough to the human population and that includes algae and plant sources....”⁴

Almega PL omega-3 from Qualitas Health addresses these supply concerns head-on by increasing renewable supply of omega-3s. The Qualitas Health farm in West Texas is one of the largest algae farming facilities of its kind in the world.

Qualitas Health relies almost exclusively on under-utilized, abundantly available and easily regenerable resources as key inputs for Almega PL and the production process. These resources are:

- ☞ NON-ARABLE LAND
- ☞ BRACKISH WATER
- ☞ RENEWABLE ENERGY
- ☞ RENEWABLE PLANT SOURCE—ALGAE



1 NON-ARABLE LAND

By 2050, we will need to have roughly doubled the amount of crops we grow world-wide. The population will have grown from 7 billion to 9 billion people. There will be an increased need to grow corn and soybeans to feed cattle, pigs, and chickens to supply the human diet with more meat, eggs and dairy than ever before.⁵ For this reason, “arable land” (defined by the FAO and World Bank as land that is used for cultivating crops or meadow for pasture)⁶ is in very high demand. Qualitas Health understands this issue and does not use any arable land to grow the algae used for Almega PL production. The land on the Almega PL algae farm in Texas is nutrient poor and completely non-arable.

NO ARABLE LAND REQUIRED TO PRODUCE ALMEGA PL

3.2 ACRES PRODUCES 1KG OF SEABREAM*

4.2 ACRES PRODUCES 1KG OF BEEF*

=.5 ACRES OF ARABLE LAND⁷

*Arable land needed to grow feed for fish and beef.



2 BRACKISH WATER

The World Economic Forum’s Global Risks Report 2016 lists water crises as the third highest global risk in terms of impact and the ninth highest global risk in terms of likelihood throughout the next ten years.⁸

Based on current trends, global water demand is projected to exceed sustainable supply by 40% in 2030. A full 40% of the world’s population currently suffers water shortages for at least one entire month each year, and the Organisation for Economic Co-operation and Development (OECD) estimates that 4 billion people could be living in water scarce areas by 2050. Water scarcity problems will also get worse, since agricultural production—the largest drain on available fresh water—will need to increase in the coming decades to feed a growing population and meet the rising demand for meat, eggs, and dairy—the very same pressures that apply to arable land.

Qualitas Health uses a specialized strain of marine microalgae, *Nannochloropsis oculata*, to produce Almega PL. This strain of microalgae grows in large ponds of brackish water, not fresh water, on Qualitas Health’s 55-acre farm.

Almega PL does not use any valuable fresh water in the process of farming algae. The water source used for Almega PL production is the Cenozoic Pecos Aquifer, an ancient ocean. Now underground, and with half the salinity of seawater, it is unsuitable for recreational human use, agricultural use, or industrial use. However, it is ideal for growing marine microalgae.

NO FRESH WATER REQUIRED TO PRODUCE ALMEGA PL

7,260 LITERS PRODUCES 1KG OF SEABREAM**

15,365 LITERS PRODUCES 1KG OF BEEF**

=1,000 LITERS OF FRESH WATER⁹

**Fresh water needed to grow feed for fish and beef.



3 RENEWABLE ENERGY

The major energy source for growing algae for Almega PL is naturally-available sunlight. This supports algal photosynthetic proliferation (plants, via photosynthesis and chloroplasts, are able to turn light energy into chemical energy). Almega PL's microalgae use CO₂, nutrients, and sunlight as inputs, and release pure O₂ into the atmosphere, as well as creating molecular compounds, including the omega-3 fatty acids in Almega PL.

Qualitas Health's farm uses CO₂, thereby mitigating emissions and maintaining a very low carbon footprint. In addition to using CO₂, Qualitas Health purchases 4 million kWh of renewable energy credits annually from a local Texas wind farm to power the electricity needed for farm operations.



4 RENEWABLE PLANT SOURCE—ALGAE

Unlike most terrestrial plants, the microalgae farmed by Qualitas Health has a very high growth rate and is a very efficient source of omega-3s. When microalgae is used as an omega-3 source material, the whole plant cell is used—not just the fruit, seeds, or leaves. The *Nannochloropsis* algae strain used to produce Almega PL is a rich source of omega-3s, protein, and other phytonutrients including omega-7 fatty acids, chlorophyll, carotenoids, phytosterols and tocopherols. This particular algae strain can double its biomass in three days.

Harvesting algae is comparable to milking a cow—algae is harvested daily, according to weather and algae health conditions. This continual harvest, combined with a rapid growth rate and limited plant waste, makes algae an incredibly efficient plant source of nutrition.

POSITIVE ENVIRONMENTAL IMPACTS

Without using marine sources, arable land, freshwater, or nonrenewable sources to produce Almega PL, Qualitas Health avoids causing substantial, cumulative, negative environmental impacts. In fact, the process deliberately minimizes negative environmental impacts while facilitating positive ones. **Almega PL helps positively impact people and the environment by:**

PRODUCING BREATHABLE O₂ AS BYPRODUCT

Microalgae are an incredible source of atmospheric O₂. In fact, microalgae produces approximately 50% of our atmosphere's total O₂. The O₂ results from photosynthesis, with the algae converting sunlight, water and CO₂ into molecular building blocks of the algae and O₂.

Unlike Almega PL, algal companies that use heterotrophic technology processes don't rely on photosynthesis, so there is no CO₂ sequestering or beneficial O₂ release into the atmosphere. The atmospheric benefits depend upon photosynthesis, which is leveraged by the production of Almega PL.



Amount of CO₂ sequestered and O₂ released to the atmosphere per 1,000mg capsule of Almega PL.⁹

FULLY-CONTROLLED AND TRANSPARENT SUPPLY CHAIN

Supply chain transparency has become imperative in today's world, particularly in the food and nutritional supplement industries. Qualitas Health addresses the need for transparency head-on with full control of the Almega PL supply chain.

In the production lifecycle of Almega PL, strain selection and farming/harvesting all occur onsite at Qualitas Health's farm in Texas. The farm team has progressed from pilot testing all the way to commercialization of algal oil by leveraging deep expertise and a decade of experience with microalgae cultivation and proprietary technologies. The production process is fully scalable—currently, 55 acres have been developed of a 300 acre site. **Qualitas Health fully controls the supply chain by:**

CARRYING OUT DAILY QUALITY TESTING

The onsite quality lab conducts tests of algae pond samples every day. The lab monitors pond growth and health to ensure strain purity and the absence of contaminants. Testing focuses on density, pigment composition, toxicology, fatty acid profile and more, thereby ensuring that the algae has the necessary inputs, that its growth rate is on target, and that its composition is correct and uncontaminated.

USING SAFE EXTRACTION METHODS

Extraction is performed on dedicated equipment, on which multiple quality protocols are performed. Qualitas Health partners with well-respected, third party, certified laboratories in order to ensure quality.

FARMING LOCALLY

The Qualitas Health farm, where all Almega PL algae is grown, is located in Imperial, Texas. Most inputs for Almega PL are sourced locally in this Texas town, and the expanding farm continues to help to create more local jobs.



CONCLUSION

Through dedicated research, innovation and commitment, Almega PL is a sustainable product that depends on four key attributes:

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Building on ten years of experience in microalgae cultivation and extraction, Almega PL, an industry leader, delivers highly bioavailable, sustainable omega-3s clinically shown to support cardiovascular health, positive mood, and other health benefits.

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