Mega 10[™] Frequently Asked Questions

General questions about essential fatty acids (omega-3s, omega-7s)

What are omega-7s?

The omega-7 palmitoleic acid is a monounsaturated "good" fatty acid that emerging science has recognized for its potential benefits to cardiovascular health. Although omega-7s can be produced in the body, production can slow with age and nutritional status. And dietary sources that provide significant levels of palmitoleic acid are limited—and some may also contain higher concentrations of unhealthy saturated fats. In animal studies, palmitoleic acid administration suggests promising evidence to support its role in cardiovascular health and insulin function. And a cross-sectional study showed a positive association between circulating palmitoleate (palmitoleic acid) and insulin and blood lipid metabolism. A recent, 30-day open label pilot study with 16 patients who were on a lifestyle program and supplemented with purified omega-7s for 30 days demonstrated support for healthy blood lipids, including triglycerides.

- 1. Yang ZH, Miyahara H, Hatanaka A. Lipids Health Dis. 2011;10:120.
- 2. Stefan N, Kantartzis K, Celebi N, et al. Diab Care. 2010;33:405-407.
- 3. Martinez L. Manuscript pending publication. 2013.

What is palmitoleic acid? How is it different than palmitic acid?

Palmitoleic acid is a monounsaturated ("healthier") fatty acid that is considered an omega-7. Palmitic acid—also known as hexadecanoic acid—is a saturated fat found in many animal-derived food products (e.g., meat, cheese, dairy) and some plant oils (e.g., palm kernel oil). Palmitic acid has been suggested to have negative effects on cardiovascular health. (Excess carbohydrates in the body are converted to palmitic acid, which then helps the body make other fats.)

The challenge is that "good" palmitoleic acid and "bad" palmitic acid may be found in the same sources. For instance, a plant that provides a rich source of palmitoleic acid (e.g., sea buckthorn) may also be a rich source of palmitic acid. Likewise, some palmitoleic acid preparations may also contain higher concentrations of potentially unhealthy palmitic acid. That's why it's important that the source of omega-7s be purified to help remove unwanted saturated fats.

What are omega-3s?

Omega-3 essential fatty acids are prevalent in the body, making up a large percentage of some of our most vital organs. They influence every cell—structure and repair, gene expression, and cell signaling and responses—so their presence (or absence) impacts multiple aspects of physical and emotional health. Unfortunately, the typical Western diet provides an overabundance of unhealthy fats due to processed and fried foods, exceeding the amount of health-promoting omega-3s. While the American Heart Association recommends consumption of omega-3s to maintain cardiovascular health, it's difficult to get enough through dietary measures alone.*

What are EPA and DHA?

EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) are long-chain omega-3 polyunsaturated fatty acids found in cold-water fish. These fatty acids are "essential" fatty acids that cannot be manufactured in the body and, therefore, must be taken in from the diet and converted...or provided in supplement form. Because of their powerful influence on overall health and limited amounts in a modern diet, EPA and DHA are considered to be some of the most essential nutrients for good health. They are



jointly recommended to complement a healthy diet and support general cardiovascular health, musculoskeletal health, a positive mood, and overall wellness.*

What is Mega 10? What makes it "the perfect 10" for heart health?

Mega 10 reflects the latest research on potential benefits of both omega-7 and omega-3 fatty acids (7 + 3 = 10, figuratively). This breakthrough formula provides targeted support for cardiovascular health by delivering unique levels and ratios of omega-7s and omega-3s in combination that is designed to support healthy blood lipids, including triglycerides. Mega 10 contains purified omega-7s to help remove undesirable saturated fats (palmitic acid) from its natural sources. And it provides omega-3s from oils of sustainably harvested cold-water fish—and both Metagenics and independent laboratories test these fish oils for purity. Furthermore, it provides greater value and easier dosing with concentrated levels of both omega-7s and omega-3s, specifically EPA and DHA. In fact, Mega 10 provides 500 mg of combined EPA and DHA per softgel—compared to the leading krill oil supplement that only provides 74 mg per softgel. (That means you would have to take nearly 7 krill oil softgels to achieve the same dosage of EPA and DHA as just 1 softgel of Mega 10.)

How is Mega 10 different than other OmegaGenics fish oil supplements?

Mega 10 is the first formula in the OmegaGenics line to provide concentrated omega-7s. Like all OmegaGenics formulas that contain fish oils, Mega 10 undergoes rigorous internal and third-party testing for purity and quality.

How is Mega 10 different than krill oil supplements?

Krill oil supplements provide only omega-3s, whereas Mega 10 provides both omega-7s and omega-3s. In addition, Mega 10 provides 6.6 times more EPA and DHA (both omega-3 fatty acids) than the leading krill oil supplement (500 mg vs. 74 mg per softgel). There remains a concern regarding the environmental impact and sustainability of krill, a foundation food for the marine ecosystem. Mega 10 fish oils are derived from sustainably harvested wild fish.

What is "purified" omega-7?

Mega 10 contains purified omega-7 fatty acids that undergo a unique, patent-pending process to help remove unhealthy saturated fatty acids (palmitic acid) and provide concentrated levels of monounsaturated palmitoleic acid. Palmitic acid has been associated with a negative impact on important aspects of heart health. Many unpurified palmitoleic acid preparations that are currently available, such as those from sea buckthorn and others, may contain high concentrations of the undesirable palmitic acid.

What are the benefits of an enteric softgel?

Though not critical to the performance of a fatty acid formula, enteric softgels can help delay premature dissolution in the stomach. In fish oil formulas, this may help reduce the likelihood of repeating (burp-up) in susceptible individuals. Better quality oils also help reduce the fishy taste associated with products of lesser quality.

Why add lemon flavor to Mega 10?

Even the cleanest fish oil carries a slightly detectable "fishy" taste that might prevent product use and clinical outcomes. No flavor, however, could mask the taste or smell of rancidity. Mega 10 features a natural lemon flavor to enhance palatability and promote compliance by helping fish oils taste even better.



Questions about OmegaGenics fish oil quality

How do I know that OmegaGenics fish oil is high quality?

Metagenics unconditionally guarantees the quality and purity of OmegaGenics concentrated EPA and DHA formulas made with fish oil. Each formula contains only the highest quality, purity-tested omega-3 fatty acids that meet or exceed label claim (milligram, not just area percent). These formulas are also enhanced with antioxidants to aid product stability. The exceptional manufacturing and purification technology for our fish oils exceeds the highest quality standards. Our dedication to every detail and exhaustive testing includes:

- In-house and third-party (independent) testing of raw materials (fish oil) to protect from heavy metals and other harmful contaminants
- In-house and third-party testing of EPA/DHA content of final product
- In-house testing for yeasts, molds, and harmful bacteria
- In-house testing for disintegration time and shelf stability

What are the advantages of choosing OmegaGenics fish oil formulas from Metagenics?

Not all fish oil formulas are the same. The advantages of OmegaGenics premium fish oil formulas include:

- Third-party testing for purity
- Natural lemon and citrus flavors
- Concentrated levels of specific omega-3s
- Low in cholesterol
- Low cost per concentrated dose

Does OmegaGenics fish oil contain mercury or other contaminants?

Metagenics uses fish oil from fresh, clean, deep-sea, wild-caught, cold-water fish with lower risk of contamination. In addition, our purity-tested fish oils undergo a proprietary refinement process to remove heavy metals and other environmental pollutants.

Is the OmegaGenics fish oil collected from Norwegian fish?

The fish oil in OmegaGenics formulas is processed in Norway, but the fish come from elsewhere. Fish oil resellers may imply that their product is made exclusively from fish from Norwegian waters. In truth, the majority of wild-caught fish for supplements comes from off the coast of South America (Peru and Chile), with smaller amounts coming from Europe, Africa, and the United States. What is the key takeaway point? Don't be misled by slick marketing tactics. The finest raw material sources start with fresh, clean, deep-sea, wild-caught, cold-water fish; the oils from these fish should then be further purified through advanced processes to remove any concern of harmful levels of potential contaminants.

* 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.

