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CONCIERGE PERSONALIZED CARE
GYNECOLOGY • HORMONE THERAPY
INTEGRATIVE MEDICINE

What are Omega-3 Fatty Acids?

Omega-3 Fatty-Acids are a type of *polyunsaturated fat* that are *essential for a healthy diet and normal cellular metabolism*. Since your body cannot produce these fats, they need to be ingested from your diet or supplements. They are found in fish, like salmon, as well as in nuts, seeds, and leafy greens. The three main types are:

- **ALA** (*alpha linolenic acid*). Seeds, such as flax, chia and walnuts.
- **EPA** (*eicosapentaenoic acid*) and **DHA** (*docosahexaenoic acid*) are found in fish.

There are two FDA approved omega-3 fatty acid products:

- **Vascepa** (*icosapent ethyl*), contains only EPA and is used to treat high triglycerides.
- **Lovaza** (*omega-3 acid ethyl esters*) containing both EPA and DHA.

What are Fatty Acids:

Fatty acids are types of fats that are found in different foods and have various effects on our health. Here is a brief explanation of the differences between the various types of fatty acids:

- **Saturated** fatty acids: These are usually solid at room temperature and are commonly found in animal products such as meat and dairy, as well as in some plant-based oils like coconut oil. Consuming high amounts of saturated fatty acids can increase your cholesterol levels and increase your risk for heart disease.
- **Monounsaturated** fatty acids: These are liquid at room temperature and are found in foods like olive oil, avocados, and nuts. These types of fatty acids are known to have a positive effect on heart health and can help lower bad cholesterol levels.
- **Polyunsaturated** fatty acids: These are also liquid at room temperature and can be found in foods like fatty fish, flaxseed, and some vegetable oils like soybean and corn oil. These types of fatty acids can also help lower bad cholesterol levels and have anti-inflammatory properties.
- **Trans** fatty acids: These are often found in processed foods like baked goods, fried foods, and snack foods. They are created by adding hydrogen to liquid vegetable oils to make them more solid. This occurs when oils are heated or aged. Trans fats have been linked to an increased risk of heart disease and should be avoided. [See Website Article: "What is Trans-Fats?"]

It's important for patients to understand the differences in fatty acids so they can make informed choices about their diets and their overall health. Encourage patients to choose foods that are rich in monounsaturated and polyunsaturated fatty acids, while limiting their intake of saturated and trans fats.

The Benefits of Omega-3 Fatty Acids:

- **Heart Health:** Omega-3s can help lower triglycerides (a type of fat in your blood) and may reduce the risk of heart disease. Vascepa is specifically formulated for this purpose.

- **Brain Function:** DHA, a type of Omega-3, is crucial for brain health due to its protective effect on tissues with a high-fat content like neural and retinal tissue. . It's been linked to better memory and cognitive function, especially as you age.
- **Mental Health:** Omega-3's may help reduce symptoms of depression and anxiety, making them a natural option for improving your mood.
- **Pregnancy:** For expecting mothers, Omega-3s are vital for both maternal and child health, supporting brain and visual development in the baby and reducing the risk of postpartum depression in the mother.
- **Vascular Function:** Omega-3's have a protective benefit on arrhythmias, blood pressure and risk of blood clots.
- **Anti-Inflammatory Benefits:** Omega-3's have a positive benefit on multiple inflammatory pathways to reduce the impact of many inflammatory diseases, such as Alzheimer's disease, type 2 diabetes, certain cancers, rheumatoid arthritis, asthma, irritable bowel disease and the cardiovascular system in addition to triglyceride regulation.

The Science of How Omega-3's Work:

You might wonder how these fatty acids can have such wide-ranging effects. Omega-3s work at the cellular level, influencing gene expression, increasing fat metabolism, and even reducing inflammation—a key factor in many chronic diseases. They help your body convert fat into energy more efficiently, and when it comes to the brain, they are crucial in maintaining the integrity of neural cells, which can enhance cognitive function and protect against neurodegenerative diseases.

The Dosage Debate: How Much is Enough?

When considering adding Omega-3 supplements to your routine, knowing the correct dosage is essential. For adults with high triglycerides, the FDA recommends a daily dose of 4 grams, taken as prescribed by your doctor. Over-the-counter supplements are available, but they're not regulated by the FDA, so their efficacy and safety is not guaranteed. *Bioavailability* of a substance taken orally is the amount that is absorbed from the intestinal track into the bloodstream. The amount stated on a label can vary greatly when measured in the blood. In other words: *just because the label says so doesn't mean it's true*. Your actual blood level of EPA, DHA and ALA should determine the amount you should consume daily.

Potential Side Effects: What You Need to Know

While Omega-3 supplements are generally safe, they're not without potential side effects. Common issues may include a fishy aftertaste, digestive discomfort, and in some cases, increased bleeding risk when taken with certain medications. It's also worth noting that Omega-3s derived from fish may not be suitable for those with seafood allergies, so plant-based sources like flaxseed or algae oil can be excellent alternatives.

The Final Takeaway:

Omega-3 fatty acids offer a myriad of health benefits. Whether through diet or supplementation, ensuring you get enough Omega-3s to give you a healthy level in your blood could be a vital step toward a healthier, happier life. Omega-3 fatty acids may not be a miracle cure, but their broad-spectrum benefits make them a valuable addition to any wellness routine.

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