Improve Cholesterol and Triglycerides Naturally

By Robert Ferguson

For decades, heart disease has been the leading cause of death worldwide, with high cholesterol, inflammation, and triglycerides being major risk factors. While many people focus on reducing "bad" cholesterol (LDL), the real key to cardiovascular health is **balancing cholesterol, lowering inflammation, and optimizing lipid metabolism**.

One of the most powerful ways to achieve this is through **omega-3 fatty acids combined with polyphenols**—a synergy that not only boosts HDL ("good" cholesterol) but also shifts LDL to a safer form, reduces triglycerides, and combats inflammation. Let's break it down.

How Omega-3s and Polyphenols Improve Heart Health

1. Omega-3s Help Increase HDL (The "Good" Cholesterol)

High-density lipoprotein (HDL) is often referred to as "good" cholesterol because it helps **remove excess cholesterol from the bloodstream** and transports it to the liver for disposal. Higher HDL levels are associated with a lower risk of heart disease.

- Omega-3s, particularly **EPA (Eicosapentaenoic Acid)** and **DHA (Docosahexaenoic Acid)**, help increase HDL levels, making it easier for the body to clear cholesterol from arteries.
- Polyphenols, plant-based antioxidants found in foods like olives and berries, further enhance HDL functionality by protecting it from oxidative damage, allowing it to work more efficiently.

By raising HDL, omega-3s and polyphenols **support cholesterol transport and reduce arterial plaque buildup**—key factors for heart health.

2. Omega-3s Shift LDL to a Less Harmful Form

LDL (low-density lipoprotein), often labeled as "bad" cholesterol, is not inherently dangerous—it's the **type of LDL that matters**.

- Small, dense LDL particles are the **most dangerous**, as they easily penetrate artery walls and contribute to plaque formation.
- Large, fluffy LDL particles are **less likely** to cause damage and are considered less harmful.

Omega-3s, particularly **EPA**, have been shown to **reduce small, dense LDL particles** and shift them toward the larger, less harmful form. This means that even if LDL levels remain stable or slightly increase with omega-3 intake, the **risk of heart disease decreases** because the LDL particles become less dangerous.

Additionally, **polyphenols prevent LDL from oxidizing**, which is a major driver of atherosclerosis (hardening of the arteries). When LDL oxidizes, it becomes much more likely to trigger inflammation and plaque buildup, increasing heart disease risk. By combining omega-3s with polyphenols, **LDL is not only altered in size but also protected from oxidation**.

3. Omega-3s and Polyphenols Reduce Triglycerides

Triglycerides are a type of fat found in the blood, and **high levels are a major risk factor for heart disease, metabolic syndrome, and insulin resistance**.

- Omega-3s have been clinically proven to **lower triglycerides by 15-30%**, especially when taken at therapeutic doses.
- They work by reducing liver fat production and increasing fat metabolism, making them an essential tool for those with high triglycerides or fatty liver disease.
- **Polyphenols enhance this effect** by improving liver function, reducing oxidative stress, and supporting metabolic processes that break down excess fat in the bloodstream.

For those struggling with **elevated triglycerides due to poor diet, insulin resistance, or metabolic syndrome**, supplementing with omega-3s and polyphenols can make a significant difference.

4. Omega-3s and Polyphenols Reduce Inflammation

Inflammation is a silent killer, playing a key role in heart disease, diabetes, and even neurodegenerative conditions. Chronic inflammation damages blood vessels, promotes plaque buildup, and increases the risk of heart attacks and strokes.

Omega-3s—particularly **EPA**—are **potent anti-inflammatory agents**, reducing levels of inflammatory markers like **C-reactive protein (CRP)** and **interleukin-6 (IL-6)**.

However, omega-3s alone are not enough. This is where **polyphenols** come in:

- Polyphenols work **synergistically with omega-3s** to further reduce inflammation at the cellular level.
- They enhance **mitochondrial function**, reducing oxidative stress that contributes to chronic disease.
- They support endothelial health, **improving blood vessel function and reducing stiffness**—a major factor in hypertension and cardiovascular disease.

By **reducing systemic inflammation, protecting blood vessels, and preventing oxidative stress**, omega-3s and polyphenols **work together to slow down the aging process and prevent cardiovascular disease**.

Why Testing Matters: Choosing the Right Omega-3 Supplement

Not all omega-3 supplements are created equal. The effectiveness of an omega-3 supplement depends on how well it balances the **omega-6 to omega-3 ratio** in the body, and the best way to determine this is through **Dried Blood Spot (DBS) testing**. This test measures **the Omega-3 Index and the Omega-6:3 ratio**, which are critical for assessing cardiovascular and metabolic health.

BalanceOil+ is the only omega-3 supplement fused with polyphenols and backed by DBS testing, making it the best option for ensuring optimal heart health. By measuring your levels before and after supplementation, you can verify that your body is achieving the right balance for maximum benefit.

References

1. Mozaffarian, D., & Wu, J. H. (2011). Omega-3 fatty acids and cardiovascular disease: Effects on risk factors, molecular pathways, and clinical events. *Journal of the American College of Cardiology*, *58*(20), 2047-2067.
2. Kris-Etherton, P. M., Harris, W. S., & Appel, L. J. (2002). Fish consumption, fish oil, omega-3 fatty acids, and cardiovascular disease. *Circulation*, *106*(21), 2747-2757.
3. Calder, P. C. (2017). Omega-3 polyunsaturated fatty acids and inflammatory processes: Nutrition or pharmacology? *British Journal of Clinical Pharmacology*, *83*(1), 152-166.
4. Hernáez, Á., Castañer, O., Elosua, R., et al. (2017). Mediterranean diet improves high-density lipoprotein function in high-cardiovascular-risk individuals: A randomized controlled trial. *Circulation*, *135*(7), 633-643.
5. Yubero-Serrano, E. M., Delgado-Lista, J., Tierney, A. C., et al. (2015). Omega-3 fatty acids and polyphenols in cardiovascular disease: Complementary effects and molecular mechanisms. *Current Pharmaceutical Design*, *21*(34), 3773-3793.

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