

# Omega-3 2020

## Journal

Nutrients

## Article

*Omega-3 Eicosapentaenoic Acid (EPA) Rich Extract from the Microalga Nannochloropsis Decreases Cholesterol in Healthy Individuals: A Double-Blind, Randomized, Placebo-Controlled, Three-Month Supplementation Study*

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## Key Words

- Long-chain omega-3 fatty acids
- Eicosapentaenoic acid
- Polar Lipids; Galactolipids
- Cardiovascular health
- Cholesterol
- Very-low-density lipoprotein
- Dietary supplements
- Microalga
- *Nannochloropsis*

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## Summary / Key Points

A recent RCT shows that natural eicosapentaenoic (EPA) supplementation can help manage cholesterol levels.

□ □ Please see before for further details □ □

Omega-3 fatty acids (particularly EPA) have shown to be effective for heart disease treatment though less is known about their general benefits. This trial looked at the effects of an EPA-only formula Almega<sup>®</sup> PL on otherwise healthy people. The product comes from a microscopic type of algae □ known as *Nannochloropsis* which contains EPA but no DHA.

In the RCT □ ‘active’ group participants took a 1g capsule □ of Almega<sup>®</sup> PL each day for three months. Those in the ‘placebo’ group were given a visually identical product □ over the same period. Neither participants nor study investigators knew who took what – through a process called double blinding.

Participants were matched for various characteristics like age, weight and blood pressure in order to more accurately gauge the product’s true effect. There were slightly more females in both groups □ □ with average ages of 53.9 (EPA) and 52 years (placebo). All participants were tested for their Omega 3 status □ as well as a range of health indicators at the beginning, middle and end of the trial. Their usual diet □ and exercise □ ♀ levels were also maintained and documented throughout.

After the 12 weeks, ‘active’ group participants showed significant increases in their Omega-3 and EPA levels when compared to controls. They also experienced a 25% reduction in very-low-density lipoprotein cholesterol (VLDL), as well as total cholesterol. VLDL is made by the liver and in high levels can increase risks of atherosclerosis, heart disease and stroke.

Interestingly, the VLDL reduction wasn’t associated with more LDL, a similar “bad” cholesterol with less triglycerides (type of fat) but more cholesterol (which can build up plaque in the arteries). This seems to be a key benefit of EPA-only supplementation □

□ Natural EPA supplementation shown to reduce VLDL □  
by 25% compared to placebo

~~ Decreases in VLDL were not associated with increases in LDL ~~

□ Almega<sup>®</sup> PL capsules can increase EPA concentrations and help manage □  
cholesterol in the generally healthy population

This study contributes to the evidence base  
for safe and successful cholesterol management.

[Check out this link \(website / paper\)](#) for more info  
about the Omega-3 study and RDC Clinical!

