

An analysis of 70 trials that looked at omega-3 fatty acid consumption reveals that omega-3 use may be as effective at reducing blood pressure as significant lifestyle changes.

Meta-analysis supports the consumption of omega-3 fatty acids to reduce blood pressure

Nearly 6 out of 10 American adults have elevated blood pressure, which is linked to an increased risk of strokes, coronary heart disease, and total mortality. A recent meta-analysis published in the *American Journal of Hypertension* analyzed 70 trials to determine the effect of eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) on blood pressure.

Weighted differences were used to separate individuals into an EPA+DHA group and a placebo group. All of the studies combined resulted in a 1.52 mm Hg reduction in systolic blood pressure and a 0.99 mm Hg reduction in diastolic blood pressure for the EPA+DHA group over the placebo group. Additional data was used to further separate these into subgroups for additional analysis. This revealed even stronger effects of EPA+DHA, where a 4.51 mm Hg reduction in systolic blood pressure and a 3.05 mm Hg reduction in diastolic blood pressure were observed among untreated hypertensive subjects.

These results continue to build on prior evidence showing that omega-3 fatty acids may play a role in helping individuals control their blood pressure. One of the authors, Dominik Alexander, PhD, noted that *"when measuring blood pressure, even small reductions can have a significant clinical impact."* He continues to note that these small differences could be the difference between having to take medication to control blood pressure. A 2 mm Hg reduction in blood pressure reduces stroke mortality by 6%, coronary heart disease mortality by 4%, and total mortality by 3%. In untreated hypertensive individuals, where the EPA and DHA were most effective, EPA+DHA treatment was as effective, or more effective, at lowering blood pressure than increasing physical activity and restricting alcohol and sodium.

Miller, P.E., Elswyk, M.V., Alexander, D.D. Long-Chain Omega-3 Fatty Acids Eicosapentaenoic Acid and Docosahexaenoic Acid and Blood Pressure: A Meta-Analysis of Randomized Controlled Trials. *American Journal of Hypertension* (2014).