Omega-3-rich diets linked to lower blood pressure in young, healthy adults

By Stephen Daniells, 15-Nov-2016

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Diets rich in omega-3 fatty acids may help healthy young people avoid the onset of high blood pressure, according to preliminary data presented at the American Heart Association's Scientific Sessions 2016.

Observational data from 2,036 young, healthy adults indicated that adults in the highest quarter had about 4 mm Hg lower systolic and 2 mm Hg lower diastolic blood pressure compared to those with the least omega-3 fatty acids in their blood.

In general, the higher the omega-3 fatty acids in the blood meant lower both systolic and diastolic blood pressure.

The results were presented by Mark Filipovic, MD, from the University of Zurich in Switzerland at the AHA's Scientific Sessions 2016.

Meta-analysis

The potential blood pressure benefits of omega-3s have been reported many times. A 2014 meta-analysis of 70 randomized controlled trials concluded that consumption of EPA and DHA omega-3s was associated with an average 1.52 mmHg and 0.99 mmHg reduction in systolic and diastolic blood pressure, respectively, compared to placebo. (*American Journal of Hypertension, Vol. 27, No. 7, pp. 885-896*).

The cardiovascular benefits were greater still for untreated hypertensive subjects, who experienced average reductions of systolic and diastolic blood pressure of 4.51 mmHg and 3.05 mmHg, respectively. About 60% of the US adult population is reported to have elevated blood pressure.

But the benefits were not limited to hypertensives, however, with normotensive subjects also experiencing beneficial reductions of 1.25 mmHg and 0.62 mmHg reduction in systolic and diastolic blood pressure, respectively.

"When measuring blood pressure, even small reductions can have a significant clinical impact," said Dominik Alexander, PhD, from Exponent, Inc, and senior author of the study. According to Stamler, et. al., each 2 mm Hg reduction reduces stroke mortality by 6%, coronary heart disease mortality by 4% and total mortality by 3%.

Source: American Heart Association's Scientific Sessions 2016
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