

Cardiovascular Abstracts

Results from clinical trials suggest DHA is the principle cardio-protective long-chain omega-3 fatty acid.

- **Schwellenbach et al. *J Am Col Nutr*:25(6):480-485**

Prospective, randomized, double blind study comparing DHA (1000mg) to DHA and EPA (1252mg total) for 8 weeks in patients with coronary artery disease and hypertriglyceridemia. Subjects were men and women with an average age of 69-78

Findings: Triglycerides decreased in the DHA group 21.8% versus 18.3% in the DHA+EPA. A greater proportion of the DHA group (24.6%) achieved the triglyceride goal (<150mg/dl) compared to the EPA+DHA group (10.2%). DHA group had greater benefit on HDL level (cardioprotective) raising it by 5.5% versus 0.1% in the DHA+EPA group.

- **Keske et al. *Abstract 2007***

16 studies were reviewed to assess outcomes related to Martek algal-derived DHA and triglyceride levels.

Findings: Algal-derived DHA alone is effective in lowering fasting triglyceride levels whether as a sole agent or co-administered with a statin. Triglyceride reductions were achieved at a lower dose than that currently recommended by the American Heart Assoc for the combination of DHA and EPA.

- **Kelley et al. *Am J Clin Nutr* 2007; 86:324-33**

Double blind randomized, placebo controlled trial. 34 hypertriglyceridemic men aged 39-66 received either 3g per day of Martek's DHA or placebo for 90 days. Goal was to determine if DHA supplementation may decrease the risk for cardiovascular disease by reducing the concentration of triglycerides, total and small dense LDL particles and increasing HDL cholesterol.

Findings: After 45 days the DHA supplemented population had significantly reduced concentrations of triglycerides (24% reduction) and increased HDL-cholesterol levels (7.5% increase) and mean LDL particle size (0.6nm increase). The LDL particle size and increased buoyancy is believed to be less atherogenic.

- **Theobald et al. *J Nutr* 2007;137(4):973-978**

Used Life's DHA, reported significant reduction in diastolic blood pressure in healthy middle aged men and women (aged 40-65). Supplemented with 0.7g DHA/day from Martek DHA or placebo. This is first study to assess effects on blood pressure of intakes of DHA alone at less than 1g per day.

- **Mori et al. *Curr Opin Clin Metab Care* 2006; 9:95-104**

A review of the literature detailing the independent effects of purified EPA and DHA on cardiovascular risk factors in humans. The biological effects of these acids and potential mechanisms through which they may affect cardiovascular disease risk factor are investigated.

Findings: EPA and DHA have differing hemodynamic and antiatherogenic properties. Both effective in reducing triglycerides. DHA better at increasing HDL. DHA alone increases LDL particle size (cardioprotective). DHA is more effective in reducing blood pressure than EPA. DHA, but not EPA, significantly decrease heart rate, suggesting DHA role may be more important than EPA in anti-arrhythmic effect.