

July 6th, 2011

A recent review shows that intakes of omega-3 fatty acids from fish at 250 mg/day or more, reduce risk of sudden cardiac death in a dose dependant manner. It is suggested that 250 mg per day should be a minimum intake, not a target intake.

HIGHER INTAKES OF OMEGA-3 FATTY ACIDS ARE BETTER TO PREVENT DEATH FROM HEART DISEASE

A review published online on May 31, 2011 in the *British Journal of Nutrition* concludes that consuming moderate amounts of omega-3 long-chain fatty acids (LCFA) is superior to a lower intake for the prevention of sudden cardiac death and fatal coronary events. Long-chain fatty acids include eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), which are found in oily fish and algae.

The objective of the present study was to determine whether an amount greater than 250 mg per day omega-3 fatty acids, the level recently determined as cardioprotective by the European Food Safety Authority, is associated with an increased reduction in the risk of fatal or nonfatal coronary events (such as heart attack) in men and women without a history of heart disease. A comprehensive and systematic review of the published scientific literature identified eight prospective studies (seven cohorts and one nested case-control study) that met predefined inclusion criteria.

Compared to the consumption of less than 250 mg/day, intake of more than 250 mg/day was associated with a 35.1% reduction in the risk of sudden cardiac death. A near significant 16.6% reduction in the risk of total fatal coronary events was also seen in the group consuming higher amounts.

In several meta-analyses, which were based on U.S. studies, risk of cardiac death was found to be dose-dependently reduced by omega-3 fatty acids, with further risk reductions observed with intakes in excess of 250 mg/day. Prospective observational and intervention data from Japan, where intake of fish is very high, suggest omega-3 intakes of 900-1000 mg/day and greater may give increased protection against non-fatal myocardial infarction.

The present evidence suggests that 250 milligrams per day of the omega-3 LCFA should be considered a minimum target intake and not an absolute target intake.

Kathy Musa-Veloso, Malcolm A. Binns, Alexandra Kocenas, Catherine Chung, Harry Rice, Hilde Oppedal-Olsen, Hilary Lloyd and Shawna Lemke Impact of low v. moderate intakes of long-chain n-3 fatty acids on risk of coronary heart disease. British Journal of Nutrition, Available on CJO 2011 doi:10.1017/S0007114511001644