

Eristland, Jan MD Arnesen, Harald MD Ph.D. Gronseth, Knut MD Fjeld, B Nils MD Abdelnoor, Michael MPH Ph.D. "Effect of Dietary Supplementation With Omega-3 Fatty Acids on Coronary Artery Bypass Graft Patency." Am J Cardiol 1996 77:31-36

Study Shows Omega-3 Fatty Acids Reduces the Instance of Occluded Blood Vessels

In a randomized controlled study from May of 1989 to February 1992, 610 patients underwent coronary artery bypass grafting. Using highly polyunsaturated omega-3 fatty acids in the experiment, an inverse relationship between the levels of Omega-3 fatty acids and clogged grafts at the end of the trial. The two groups, control and fish oil, both received antithrombotic treatment while the fish oil group was assigned four grams of fish oil concentrate a day. After a one year angiopasy, (x-ray which examines the interior of the heart and vessels through the injection of a dye), the fish oil group had 27% vein graft blockage rate per distal anastomoses. The control group who only received aspirin and warfarin, had a 33% vein graft blockage rate per distal anastomoses.

All patients in the study were randomized into two groups. The fish oil group received a gelatin which contained 1 g of fatty acids, approximately 51% eicosapentaenoic acid and 32% docosahexaenoic acid esters. Both groups were assigned low fat regiments within their diets such as less hard margarine, less milk products, and meat products.

After one year, results showed that 43% of the fish oil group had a greater or equal to one ratio of blocked vein grafts while 51% of the control group had a greater or equal to 1 ratio of blocked grafts. Since both groups took antithrombotic medicines, the use of Omega-3 fatty acids is prevalent in the reduction of occluded arteries. Omega-3 Fatty acids were found to be as effective as warfarin and aspirin in vein graft patency.

These results concur with numerous of other studies on Omega-3 fatty acids and serum phospholipid content. Each study has recorded that a regular intake of Omega-3 fatty acids have had numerous significant effects on the interior walls of blood vessels.