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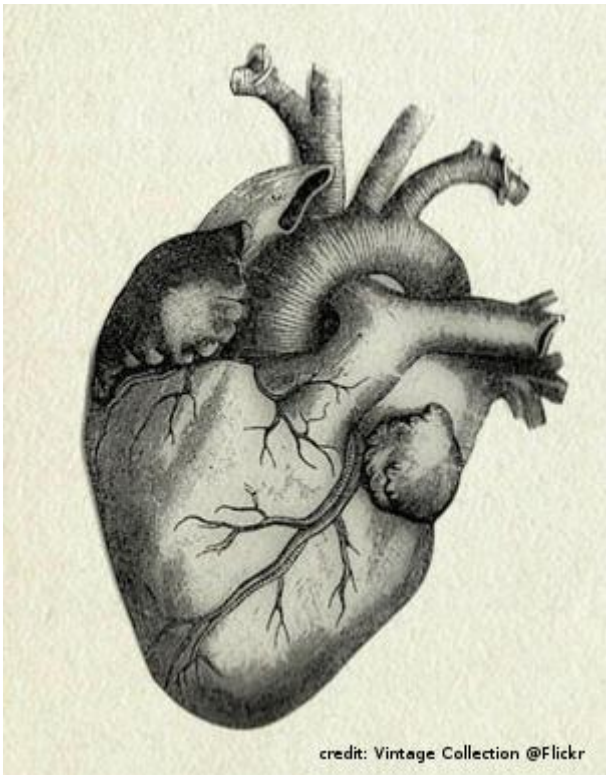
## Vitamin D and Omega-3 fatty acids work together to reduce coronary calcification

Posted on December 4, 2009 by Deana Ferreri, Ph.D.




Coronary artery calcification is essentially the beginning of bone formation – except it's happening in the arteries.[1-2] Sound scary? It is. Calcification is associated with a 3-4 fold increased risk of death from cardiovascular disease.[3] And strangely enough, those who have vascular calcification usually have low bone density or even osteoporosis[4] – hard arteries and weak bones??

Previous studies had tested the effects of cholesterol-lowering drugs (statins) on the progression of arterial calcification, and they were found to be ineffective. These scientists were looking for another solution. Vitamin D deficiency is known to produce a risk of cardiovascular disease, but had not been investigated for effects on arterial calcification. Because of the protective effect of Vitamin D on both bone and cardiovascular tissues, scientists thought that Vitamin D might be a player in this complex interplay between bone precursors and blood vessel walls.

Subjects with no previous heart disease symptoms but a high coronary calcium score (CCS) were included in the study. They supplemented with omega-3 fatty acids and sufficient Vitamin D3 to achieve greater than 50ng/ml serum levels of 25(OH) Vitamin D. The response of these subjects to these therapies varied 18 months later. About half saw a decrease in CCS, and about half

experienced no change or a small increase in CCS. Also about half of the subjects experienced slowed atherosclerotic plaque growth.[5]

What do these results tell us? It is difficult to interpret these results because of the lack of a control (no treatment) group, but it definitely opens the door to more studies on the role of Vitamin D in coronary artery calcification.

We also don't know anything about the diets of the subjects of the study. A phytochemical-rich diet plus Vitamin D and omega-3 supplementation could have achieved dramatic improvements in calcium score!

For now, we can now tentatively add coronary calcification to the long list of detrimental consequences of Vitamin D deficiency. Our best protection against these consequences, in addition of course to a high nutrient diet, is a good Vitamin D supplement.

References:

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Tags: Cardiovascular Disease, Heart, calcium, omega-3, vitamin D

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Jennifer - *December 9, 2009 5:19 PM*

I had primary hyperparathyroid disease caused by a parathyroid adenoma that was removed. After the tumor was removed, the effects of long term hypercalcemia were still present as demonstrated by digital pulse wave analysis, my veins/arteries literally were as stiff as an 80 year olds! I have succeeded in mostly reversing this through oral chelation product that has lots of Vit D (5000) and omega 3's in it along with EDTA. It is very exciting to me that the reversal of vessel calcification can by so easily documented and reversed. I of course also try to eat well, but find often that convience sometime infringes on quality of choices. Anyone else have experiences with reveral of vessel disease to share?