

A new study has shown that calcium supplementation in women does not increase heart disease risk, and may actually decrease carotid artery thickness and heart disease risk.

Calcium supplementation is not related to an increased risk of heart disease

Calcium is an essential nutrient for skeletal health. However, a couple of recent studies have suggested that supplemental calcium may be associated with an increased risk of cardiovascular disease, possibly by increasing carotid artery thickness.

A new study published in the *Journal of Bone and Mineral Research* reports that supplementing with calcium may decrease carotid artery thickness and heart disease risk. Australian researchers evaluated data from 1,103 older women that took part in the Calcium Intake Fracture Outcome Study, a 5 year (1998-2003) randomized controlled study. The participants were randomized to take either a 1,200 mg calcium carbonate supplement daily or a placebo. Common carotid artery intimal media thickness (an indicator of atherosclerosis) was measured at the beginning and after 3 years.

The women who took calcium supplements during the trial did not have an increase in carotid artery thickness compared to the placebo group. In fact, the presence of atherosclerosis was found in 46.7% of women taking the calcium compared to 54.7% of the women in the placebo group. The women whose total calcium intake from diet and supplements was in the top one-third of subjects had a 33% lower risk of carotid artery atherosclerosis than those whose total calcium intake was in the lowest third.

The conclusion of this study refutes the finding of recent studies showing a negative association between calcium supplementation and heart disease. Higher calcium intake through supplementation and diet may actually reduce carotid artery atherosclerosis.

Lewis JR, Zhu K, Thompson PL, Prince RL. The Effects of 3 Years of Calcium Supplementation on Common Carotid Artery Intimal Medial Thickness and Carotid Atherosclerosis in Older Women: An Ancillary Study of the CAIFOS Randomized Controlled Trial. *J Bone Miner Res*. 2013 Oct 23. doi: 10.1002/jbmr.2117.