

Mixed results on vitamin D's benefit for aging hearts

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Vitamin D supplements might lower the risk of heart attack and other

cardiac ills for people over 60—especially if they're already taking heart meds, a new study suggests.

"Our results suggest that further exploration of the possible benefit of vitamin D on [cardiovascular events](#), particularly in those at higher risk of having an event, might be warranted," said senior researcher [Rachel Neale](#).

Evidence of benefit was strongest for folks taking cholesterol-lowering statins or other [heart](#) medications, said Neale, deputy coordinator of the population health program at the QIMR Berghofer Medical Research Institute in Queensland, Australia.

The large trial found "some evidence of benefit for people who were taking drugs to treat [cardiovascular conditions](#) or high cholesterol at baseline, and vitamin D reduced the rate of [heart attack](#)," she said.

Other studies have not found a benefit of vitamin D for major cardiovascular events, "but the results of [our] D-Health Trial suggest that it might be beneficial," Neale said.

Still, the findings aren't conclusive. "Overall, we found no statistically significant effect of vitamin D on major cardiovascular events, such as stroke, [myocardial infarction](#) [[heart attack](#)], or treatment of blocked vessels in the heart," she added.

While not whole-heartedly endorsing D supplementation, Neale said older adults might give it some thought.

"Taking a modest dose of vitamin D is unlikely to be harmful," she said. "People at increased risk of cardiovascular events may like to take vitamin D even if they are not vitamin D-deficient, but they should be informed that the evidence for such a recommendation is relatively weak

so that they can make an informed choice about whether they choose to spend money on vitamin D supplements."

One expert said this study is like others in that no strong evidence exists showing a benefit from vitamin D in preventing heart attacks or other cardiovascular events.

"Randomized, placebo-controlled vitamin D supplementation trials have failed to demonstrate a reduction in cardiovascular events, despite being well-powered to detect clinically relevant risk reduction," said [Dr. Gregg Fonarow](#), co-chief of cardiology at the University of California, Los Angeles.

This new trial found no statistically significant difference between vitamin D and placebo, he said. "The totality of currently available evidence suggests that routine vitamin D supplementation does not provide cardiovascular benefits," Fonarow added.

For the study, Neale and her colleagues used data from their D-Health Trial in which they randomly assigned more than 21,000 men and women ages 60 to 84 to receive 60,000 IU of vitamin D or a placebo for five years.

During that time, more than 1,300 participants had a major cardiovascular event, including 7% getting the placebo and 6% receiving vitamin D.

The rate of major cardiovascular events was 9% lower among those taking vitamin D, compared with those taking the placebo—about 6 fewer events per 1,000 participants, the researchers found.

Among those taking vitamin D, the rate of heart attacks was 19% lower and the rate of coronary revascularization (treatments that restore blood

flow to parts of your heart when that flow is limited or blocked] was 11% lower. However, no difference in the rate of stroke was seen in the two groups, Neale's team reported.

The effect of vitamin D appeared stronger among people who were using statins or other cardiovascular drugs, but this finding was not statistically significant, the researchers note.

Neale calculated that 172 people would need to take vitamin D supplements to prevent one major cardiovascular event.

[Dr. Guy Mintz](#), director of cardiovascular health & lipidology at Sandra Atlas Bass Heart Hospital in Manhasset, N.Y., said the idea that vitamin D might prevent cardiology events is "interesting," but lacks definitive "proof."

Any reduction in the risk of cardiovascular events might be due to the anti-inflammatory effect of vitamin D, he said. But statins also have this effect, as do other drugs, said Mintz, who was not involved in the study.

"In terms of the role of [vitamin D](#) in the cardiovascular arena, prior studies were totally negative," he said. "This study says maybe. I would leave it as an interesting thought that requires a lot more research."

The report was published June 28 in the journal *BMJ*.

More information: The [American Heart Association](#) has more on heart disease and vitamin D.

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