

**- Vitamins / Heart attack****Vitamin D supplements may cut risk of heart attacks, trial suggests**

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Vitamin D supplements may cut the risk of serious cardiovascular events such as heart attacks in older people, according to the largest study of its kind.



Cardiovascular disease (CVD) is one of the main causes of death globally. The number of cardiovascular events is predicted to surge as populations continue to age and chronic diseases become more common.

Observational studies have consistently shown a link between vitamin D levels and the risk of CVD. However, randomised controlled trials previously found no evidence that supplements prevented cardiovascular events, possibly due to differences in trial design that can affect results.

Now a randomised controlled trial involving more than 21,000 people aged over 60 suggests vitamin D supplements could reduce the risk of major cardiovascular events. The findings have been published in the peer-reviewed journal *The BMJ*.

The researchers stressed that the absolute risk difference was small, but said this was the largest trial of its kind to date and that further evaluation was now warranted.

“These findings indicate that vitamin D supplementation might reduce the incidence of major cardiovascular events,” the Australian authors wrote. More trials were needed, but they said it suggested previous thinking that vitamin D supplements do not alter CVD risk was “premature”.

The study, which was led by the QIMR Berghofer medical research institute in Queensland as part of its population health programme, was carried out between 2014 and 2020 and involved 21,315 Australians aged 60 to 84 who randomly received a vitamin D supplement or placebo taken orally at the beginning of each month for up to five years.

During the trial, 1,336 people experienced a major cardiovascular event – 6.6% in the placebo group and 6% in the vitamin D group.

The rate of major cardiovascular events was 9% lower in the vitamin D group compared with the placebo group, equivalent to 5.8 fewer events per 1,000 participants. The rate of heart attack was 19% lower in the vitamin D group. There was no difference in stroke risk between the two groups.

Overall, the researchers calculated that 172 people would need to take monthly vitamin D supplements to prevent one major cardiovascular event.

The researchers acknowledged limitations of the trial and said the findings may not apply to other populations. However, this was a large trial with extremely high retention and adherence, and almost complete data on cardiovascular events and mortality outcomes.

Vitamin D helps regulate the amount of calcium and phosphate in the body. These nutrients are needed to keep bones, teeth and muscles healthy. In the UK, government advice is that everyone should consider taking a daily vitamin D supplement during the autumn and winter.