

## Does vitamin D prevent cardiovascular disease and diabetes?

Several recent reports [\[1,2\]](#) have shed light on whether vitamin D prevents cardiovascular disease and diabetes, or whether the jury is still out. These reports concluded that the evidence that vitamin D prevents cardiovascular disease and most other nonskeletal health outcomes continues to be inconclusive and inconsistent.

The randomized trials of vitamin D and cardiovascular disease and diabetes have been, in general, quite inconsistent and inconclusive. Whether the trials are of vitamin D alone or of vitamin D plus calcium, the results have been mixed and generally neutral and null, not showing a clear association. Most of these trials tested lower doses of vitamin D. However, we don't yet know that higher doses (2000 IU/day or higher) will have a favorable benefit/risk ratio.

We can't assume that more is better. More is not necessarily better when it comes to vitamin D, calcium, or many other nutrients. In fact, with vitamin D, there is a suggestion of a U-shaped relationship between 25-hydroxyvitamin D and risks for cardiovascular disease and all-cause mortality. There is a suggestion of increased risk at both low and very high levels of 25-hydroxyvitamin D.

### References

- 1- Shapses SA, Manson JE. Vitamin D and prevention of cardiovascular disease and diabetes: why the evidence falls short. *JAMA*. 2011;305:2565-2566.
- 2- Holick MF, Binkley NC, Bischoff-Ferrari HA, et al. Evaluation, treatment, and prevention of vitamin D deficiency: an endocrine society clinical practice guideline. *J Clin Endocrinol Metab*. 2011;96:1911-1930. Epub 2011 Jun 6.