

**Vitamin D alone ineffective for preventing fractures****Clinical Question**

How effective are vitamin D and its analogues for preventing fractures in post-menopausal women and older men?

**Bottom Line**

There is no evidence that Vitamin D alone, in the formats and doses tested, prevents fractures. Supplements of vitamin D and calcium slightly reduced the likelihood of hip or any type of fracture. There was a small but significant increase in gastrointestinal symptoms and renal disease associated with vitamin D and calcium. There was no increased risk of death from taking vitamin D and calcium.

**Caveat**

Other systematic reviews have found an increased association of myocardial infarction (MI) with supplemental calcium, and evidence of increased MI and stroke, but decreased cancer, with supplemental calcium plus vitamin D, without an overall effect on mortality.

**Context**

Hip fractures and several other types of fractures are very common in post-menopausal women and older men, due to age-related osteoporosis.

**Cochrane Systematic Review**

[Avenell A et al. Vitamin D and vitamin D analogues for preventing fractures in post-menopausal women and older men. Cochrane Reviews, 2014, Issue4. Art. No.: CD000227.DOI: 10.1002/14651858. CD000227.pub4.](#)  
This review contains 53 studies involving 91,791 participants.