

Does Vitamin D Status Affect Mortality?

No association between vitamin D status and mortality at 7 years was found.

These days, many clinicians are checking vitamin D levels routinely. Patients with the lowest levels clearly are at risk for metabolic bone disease, which can be prevented with vitamin D supplementation. Another premise is that screening and supplementation will prevent a variety of disorders involving other organ systems. However, randomized trials in which researchers are examining the effect of vitamin D supplementation on mortality have not yet been completed, and not every observational study has demonstrated an association between vitamin D status and mortality.

In this U.S. study, 1500 relatively healthy community-dwelling men (age, ≥ 65) were randomly selected from participants in the prospective Osteoporotic Fractures in Men study ([Contemp Clin Trials 2005; 26:569](#)). At baseline, 25-hydroxyvitamin D levels were <20 ng/mL in 25% of men, and between 20 and 30 ng/mL in 50% of men. During an average follow-up of 7 years, 22% of participants died. In both unadjusted analyses and in analyses adjusted for potentially confounding variables, no significant associations were observed between vitamin D levels (across quartiles) and all-cause, cancer-related, or cardiovascular mortality.

Comment: This study reminds us that our understanding of the relation between vitamin D status and various sources of morbidity or mortality is far from complete. Whether screening and supplementation will save lives, prevent cancer, or prevent cardiovascular disease is unknown.

— [Allan S. Brett, MD](#)

Published in [Journal Watch General Medicine](#) October 26, 2010