

Meta-analysis confirms serum 25(OH)D, mortality link

June 20 2014



(HealthDay)—Serum 25-hydroxyvitamin (25[OH]D) levels are associated with all-cause and cardiovascular mortality, according to a meta-analysis published online June 17 in *BMJ*.

Ben Schöttker, Ph.D., from the German Cancer Research Center in Heidelberg, and colleagues conducted a meta-analysis of individual participant data to examine the correlation between 25(OH)D and mortality. Participants included 26,018 men and women, aged 50 to 79 years, from the general population in Europe and the United States, enrolled in eight prospective cohort studies.

The researchers found that there was strong variation in 25(OH)D concentrations by season, country, and sex. A total of 6,695 participants died during follow-up, including 2,624 of cardiovascular diseases and



2,227 of cancer. For all-cause mortality, the pooled risk ratio was 1.57 comparing the bottom with the top quintile of 25(OH)D. Risk ratios of similar magnitude to that of all-cause mortality were seen for cardiovascular mortality for individuals with and without a history of cardiovascular disease at baseline. For cancer mortality, there was an association only for individuals with a history of cancer (risk ratio, 1.70). Curvilinear, inverse dose-response curves were seen for these correlations based on analyses using all quintiles. In most meta-analyses, heterogeneity was low.

"Results from a long-term <u>randomized controlled trial</u> addressing longevity are being awaited before vitamin D supplementation can be recommended in most individuals with low 25(OH)D levels," the authors write.

More information: Abstract

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Citation: Meta-analysis confirms serum 25(OH)D, mortality link (2014, June 20) retrieved 1 May 2024 from https://medicalxpress.com/news/2014-06-meta-analysis-serum-25ohd-mortality-link.html

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