Vitamin D and cardiovascular disease risk.

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PURPOSE OF REVIEW: Despite our understanding of how to prevent and treat traditional cardiovascular risk factors, cardiovascular disease remains the leading cause of death of both men and women in the US. Thus, there is widespread interest in a number of emerging nontraditional risk factors for the detection of early cardiovascular disease in order to implement aggressive preventive therapies. 25-Hydroxyvitamin D deficiency has been identified as a potential novel cardiovascular disease risk factor. This review outlines what is known about the association of 25-hydroxyvitamin D levels and cardiovascular disease risk.

RECENT FINDINGS: Low 25-hydroxyvitamin D levels have been associated with the cardiovascular disease risk factors of hypertension, obesity, diabetes mellitus and the metabolic syndrome, as well as cardiovascular disease events including stroke and congestive heart failure. Studies suggest vitamin D deficiency may be a contributor to the development of cardiovascular disease potentially through associations with diabetes or hypertension.

SUMMARY: Vitamin D deficiency is easy to screen for and easy to treat with supplementation. Further larger observational studies and randomized clinical trials are, however, needed to determine whether vitamin D supplementation could have any potential benefit in reducing future cardiovascular disease events and mortality risk.

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