



HEALTH NOTES



amen
Adventist Medical
Evangelism Network

AMEN's mission is to motivate, train, and equip Seventh-day Adventist health-care professionals to team with pastors and members, uniting the church to restore Christ's ministry of healing to the world, hastening His return.

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High Dose Vitamin D and Bone Health

LOW BLOOD LEVELS of vitamin D have been shown to increase the risk of developing heart attacks and strokes¹, but studies reported in these **Health Notes** have shown that correcting vitamin D levels by taking supplements does not reduce the risk of heart attacks and strokes.

Low blood levels of vitamin D have been shown to increase the risk of developing cancers of the breast, prostate and colorectal area¹, but studies reported in these Health Notes have shown that correcting vitamin D levels by taking supplements does not reduce the risk of developing cancer at any site.

Low blood levels of vitamin D are associated with an increased risk of developing type 2 diabetes¹, but as reported in these Health Notes, taking supplemental vitamin D does not reduce the risk of developing diabetes.

Low levels of vitamin D are associated with osteoporosis and an increased risk of fractures of the hip and spine¹. A new study looks for benefits in bone density and bone strength from taking high levels of vitamin D.²

This study was conducted in Calgary Canada. Exposure to sun is less the further north you live and vitamin D levels tend to be lower. The final study population was composed of 311 community dwelling adults with an average age of 62. This was a double-blind study meaning that the prescribers and participants didn't know the strength of vitamin D that was administered. Persons excluded from the study included those who already had osteoporosis, those with high vitamin D levels, those who were already taking vitamin D supplements, and those with high blood calcium levels.

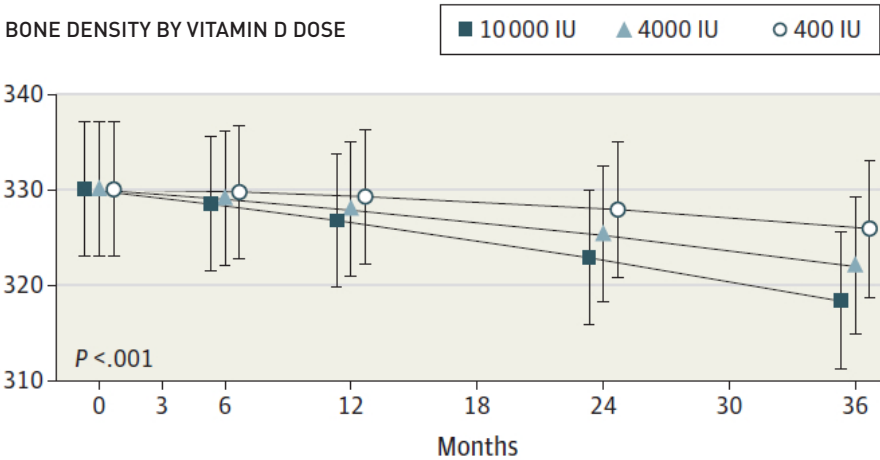
One third received 400 IU of vitamin D daily, one third received 4000 IU of vitamin D daily, and one third received 10,000 IU daily. Bone density was measure at the beginning and throughout the 3 years of the study.

Throughout the study blood levels of vitamin D did not change in those receiving 400 IU daily. (76 to 77 mmol/L) In the group receiving 4000 IU vitamin D levels rose from 81 to 115 (mmol/L). Levels in the group receiving 10,000 IU per day rose from 78 to 188 (mmol/L)

Bone mineral density was measured in the tibia and the radius at multiple points in time over the three years. Here is a graph showing the results. Everyone in their 60s tends to lose some bone density with time. The group with the least loss of bone was the group receiving only 400 IU of



vitamin D per day. The larger the dose of vitamin D the more bone loss occurred over time.²



Vitamin D supplementation appears to be harmful to bone density. In other words, vitamin D supplementation accelerates the development of osteoporosis—it does NOT prevent osteoporosis or preserve bone.

Strong bones throughout life are important. The best source of vitamin D comes from judicious exposure to sunlight not supplements in a bottle. Sunshine is the natural remedy not a pill.

ELLEN WHITE confirms, “Nothing short of nature’s invigorating air and sunshine will fully meet the demands of the system.”

—*Fundamentals of Education* 73

¹H. Wang, et al, “Vitamin D and Chronic Diseases” *Aging and Disease*, Vol 8, Number 3, June 2017, 346-353.

²L. A Burt, et al, “Effect of High-Dose Vitamin D supplementation of Volumetric Bone Density and Bone Strength. A Randomized Clinical Trial” *Journal of the American Medical Association*, August 27, 2019, Vol 322, Number 8, 736-745