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*New research shows that vitamin D supplementation can reverse normal age-associated bone loss in postmenopausal women, which can lead to a reduced risk of osteoporosis and other bone disorders.*

## VITAMIN D SUPPLEMENTATION INHIBITS AGE-RELATED BONE LOSS IN OLDER WOMEN

Until recently, it was unknown whether improving vitamin D status (without changing calcium intake) could have a positive effect on bone turnover. To that end, a group of researchers recently measured the effect of vitamin D supplementation on markers associated with bone turnover in women known to be vitamin D deficient (<20 ng/mL).

Participants were South Asian women at least 20 years of age. The women were categorized by age and menopausal status, then randomized to receive either 4,000 IU of vitamin D or a placebo every day for 6 months.

In the women who received vitamin D supplements, average vitamin D blood levels increased from 8.4 ng/mL to 30 ng/mL. Additionally, measured bone markers either stayed the same or decreased in postmenopausal women who received vitamin D supplements, indicating a potential reduction in bone turnover. In postmenopausal women who received placebo, markers associated with bone turnover increased. In younger, premenopausal women, no significant bone turnover change was reported for either placebo or supplementation.

This research confirms that correcting vitamin D deficiencies in older women can suppress age-related increases in bone turnover, which also helps reduce bone resorption (the process by which bone breaks down and releases its minerals, resulting in a transfer of calcium from bone into the blood).

*von Hurst PR, Stonehouse W, Kruger MC, Coad J.*

*Vitamin D supplementation suppresses age-induced bone turnover in older women who are vitamin D deficient. 2010. J Steroid Biochem Mol Biol. Epub ahead of print, retrieved online 6 April 2010.*