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*A new study shows that weight loss improves serum vitamin D concentrations in overweight women.*

## **WEIGHT LOSS IMPROVES VITAMIN D STATUS IN OVERWEIGHT POSTMENOPAUSAL WOMEN**

**I**t is common for obese or overweight individuals to have low circulating vitamin D levels. Some researchers believe this could be one explanation for elevated risks of certain cancers and cardiovascular disease in overweight individuals.

A new study published in the *American Journal of Clinical Nutrition* investigated the effects of 12 months of weight loss through caloric restriction, exercise intervention, or both on serum vitamin D concentrations.

Participants included 439 overweight and obese postmenopausal women who were randomly assigned to 1 of 4 groups: 1) diet modification, 2) exercise, 3) diet + exercise, or 4) control. The diet was a group-based reduced-calorie program with a 10% weight-loss goal. The exercise intervention consisted of 45 min/day of moderate intensity aerobic activity (5 days/wk). Serum vitamin D levels were measured at the beginning and after 12 months.

Women who lost <5%, 5–9.9%, 10–14.9%, or ≥15% of baseline weight had average increases in serum vitamin D of 2.1, 2.7, 3.3, and 7.7 ng/mL, respectively. Vitamin D levels at baseline did not alter the effect of the interventions on weight loss or body-composition changes at the 12-mo follow-up.

In this study, a greater degree of weight loss, achieved through either a reduced-calorie diet or increased exercise, is associated with increased circulating vitamin D concentrations.

*Caitlin Mason et al. Effects of weight loss on serum vitamin D in postmenopausal women. Am J Clin Nutr July 2011 vol. 94 no. 1 95-103.*