

# Obese women have greater adipose stores of vitamin D

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(HealthDay)—Obese women have significantly greater total vitamin D

stores than normal-weight women, although the pattern of distribution of the stores is similar, according to a study published online Aug. 20 in the *Journal of Bone and Mineral Research*.

Angela Carrelli, M.D., from the Columbia University College of Physicians and Surgeons in New York City, and colleagues examined whether the correlation between body composition, serum 25-hydroxyvitamin D (25[OH]D), vitamin D in subcutaneous (SQ) and omental (OM) adipose, and total adipose stores of vitamin D varied for obese women and normal-weight controls. The authors enrolled [obese women](#) undergoing bariatric surgery and normal-weight women undergoing abdominal surgery for benign gynecologic conditions (36 women in total).

The researchers found that serum 25(OH)D was similar between the groups, and there was no significant between-group difference in adipose vitamin D concentrations in either SQ or OM compartments. Vitamin D distribution between SQ and OM compartments was similar between the groups. There was a direct correlation between serum 25(OH)D and adipose vitamin D in both groups. Obese women had significantly greater total body vitamin D stores.

"Our data demonstrate that obese subjects have greater adipose stores of vitamin D," the authors write. "They support the hypotheses that the enlarged adipose mass in obese individuals serves as a reservoir for vitamin D, and that the increased amount of [vitamin D](#) required to saturate this depot may predispose [obese individuals](#) to inadequate serum 25(OH)D."

**More information:** [Abstract](#)  
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