

African-American, Caucasian women should take identical vitamin D doses

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African-American women battling vitamin D deficiencies need the same dose as Caucasian women to treat the condition, according to a recent study accepted for publication in *The Endocrine Society's Journal of Clinical Endocrinology & Metabolism* (JCEM).

Although [women](#) with darker skin tones tend to have lower levels of the biomarker used to measure [Vitamin D](#) levels, called 25-hydroxyvitamin D or 25OHD, the study found that older African-American and Caucasian women responded in the same way when they received vitamin D supplements.

Unlike many vitamins that are absorbed primarily from foods, the body's main source of vitamin D is sunlight. Vitamin D deficiency, which is primarily caused by inadequate exposure to sunlight and very poor diet, can result in abnormalities in calcium, phosphorus and bone metabolism. Vitamin D deficiency can cause rickets in children or a bone-softening condition called osteomalacia and muscle weakness in adults.

In a double-blind study that gave varying vitamin D doses to African-American and [Caucasian women](#) of similar body size, levels of the 25OHD biomarker were very similar. The findings suggest that vitamin D absorption and metabolism is the same in both groups. Researchers concluded that African-American women tend to have lower levels of the biomarker 25OHD because they naturally produce less vitamin D in the skin after sunlight exposure.

"African-American women don't have to worry about taking larger doses of vitamin D to compensate," said J. Chris Gallagher, MD, of Creighton University School of Medicine in Omaha, Neb., and lead author of the study. "They should follow the current medical guidelines for vitamin D supplementation suggested recently by the Institute of Medicine."

The Endocrine Society has issued a separate set of clinical practice guidelines governing vitamin D dosage.

Previously there was no research in minority populations to determine whether the same guidelines applied to them. Researchers designed this study to develop dosing guidelines for older African-American women. The study, which looked at vitamin D doses in 110 African-American women between the ages of 57 and 90, was the first randomized controlled dose response study conducted in this population.

"We saw a real need to study optimal vitamin D doses in African-American women and help their health care professionals make informed medical decisions," Gallagher said.

Although exposure to sunlight increases vitamin D levels, concerns about melanoma and other types of skin cancer necessitate avoidance of excessive exposure to the sun.

More information: The guidelines are available at www.endo-society.org/guideline...amin-D-Guideline.pdf.

Provided by The Endocrine Society

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