Study: Higher Vitamin D Levels in Blacks Linked to Hardening of Arteries

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Although recent research has put vitamin D in a positive light, a new study warns that supplements of the vitamin have different effects on different races—and in fact may be harmful to African Americans.

The study findings from the Wake Forest University Baptist Medical Center in Winston-Salem, North Carolina, are the first to show a positive relationship between calcified plaque buildup in the body's large arteries (a measurement of atherosclerosis or "hardening of the arteries" caused by calcium deposits) and circulating vitamin D levels in black patients.

Usually, blacks have naturally lower vitamin D levels because of the high melanin (a pigment) content in darker skin. This pigment in dark-skinned people restricts the quantity of vitamin D produced by the sunlight that penetrates their skin. In addition, blacks also generally get less calcium than whites because they eat less dairy products, a common source of the vitamin.

For the study, researchers evaluated the connection between circulating vitamin D levels and arterial calcium (calcium present in the arteries) of 340 black men and women with type 2 diabetes. To do this, scientists used a computed tomography (CT) scan to detect the amount of plaque.

"We found that higher circulating levels of vitamin D in blacks were associated with more calcium in the artery walls," said Barry I. Freedman, MD, the nephrology division chief at the Wake Forest School of Medicine and the study's lead author. "This is the opposite effect of what is felt to occur in white patients and shows that the accepted 'normal' range of vitamin D may be different between blacks and whites."

In Wake Forest press materials, Freedman explained that vitamin D deficiency means different things in black and white patients. And what's been considered "normal" vitamin D levels is set for all races at a standard that was calibrated for whites.

What doctors definitely don't want is to have vitamin D supplementation trigger more calcium buildup in their black patients' arteries, Freedman said.

Currently, blacks do not typically suffer as much from many diseases related to low vitamin D

levels, such as osteoporosis (weakening and thinning of the bone) and heart disease caused by artery-clogging plaque.

What this shows, Freedman said, is that despite blacks having lower than “normal” levels of vitamin D, there are racial differences that affect how at risk blacks and whites are for bone and heart disease.

Instead of applying the same brush stroke to these two diverse population groups, Freedman said, doctors should carefully consider other variables, such as the bone strength of their black patients and whether or not there are other reasons they may require more vitamin D.

“We should more clearly determine the effects of supplementing vitamin D in black patients with low levels based on existing criteria and should not assume that the effects of supplementation will be the same between the races,” Freedman concludes.

The study is in the March issue of the *Journal of Clinical Endocrinology and Metabolism*.

Read more about the health benefits of vitamin D here

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http://beta.docker.realhealthmag.com/article/vitaminD-blacks-supplements-18207-4338