

# Vitamin D levels lower in African-Americans

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African-American women had lower vitamin D levels than white women, and vitamin D deficiency was associated with a greater likelihood for aggressive breast cancer, according to data presented at the Third AACR Conference on the Science of Cancer Health Disparities.

"We know that darker skin pigmentation acts somewhat as a block to producing [vitamin D](#) when exposed to sunlight, which is the primary source of vitamin D in most people," said Susan Steck, Ph.D., M.P.H., associate professor of epidemiology at the University of South Carolina.

Steck and colleagues observed 107 women who were all diagnosed with breast cancer in the previous five years. Sixty of these women were African-American, while the remaining 47 were white.

All women donated a blood sample, and vitamin D status was determined using circulating 25 hydroxyvitamin D levels as a marker. The mean serum concentration of vitamin D was 29.8 ng/ml in white women and 19.3 ng/ml in African-American women.

Researchers defined [vitamin D deficiency](#) as a serum concentration less than 20 ng/ml, and found this to be the case in 60 percent of African-American women compared with 15 percent of white women. Serum levels were lowest among patients with triple-negative [breast cancer](#), and aggressive disease was eight times more likely among patients with vitamin D deficiency.

Steck said the findings of this study provide a foundation for a possible prevention strategy, but further research would be required.

Provided by American Association for Cancer Research

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