

Study: Low levels of vitamin D linked to higher rates of asthma in African-American kids

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Researchers at Children's National Medical Center have discovered that African American children with asthma in metropolitan Washington, DC, are significantly more likely to have low levels of vitamin D than healthy African American children.

This study supports recent research that suggests vitamin D plays a greater role in the body than just keeping bones healthy. [Vitamin D deficiency](#) has been recently linked to a variety of non-bone related diseases including depression, [autoimmune disorders](#), and now asthma.

"It's been well-documented that as a group, [African Americans](#) are more likely than other racial groups to have low levels of vitamin D," said Robert Freishtat, MD, MPH, an emergency medicine physician and lead author on the study. "But we were shocked to see that almost all of the African American [children](#) with asthma that we tested had low vitamin D levels. After adjusting for differences in age, weight, and the time of year of the testing, the odds of these kids with asthma being vitamin D deficient were nearly twenty times those of healthy kids."

The study took a one-time measurement of vitamin D in the blood of 85 African American children with asthma, who were between 6 and 20 years old. Additionally, the researchers measured the vitamin D levels of 21 healthy African American children between the ages of 6 and 9 years of age. The research team found that 86 percent of the children in the

study with asthma had insufficient levels of vitamin D, while only 19 percent of non-asthmatics had these low levels.

These findings may mean that low vitamin D levels have more serious effects on a child's lung health than previously believed. Though more research is needed to establish definitively how vitamin D deficiency can contribute to asthma, parents can ensure that their children receive healthier amounts of vitamin D by following the current USDA guidelines for milk consumption and seeking a doctor's advice about multivitamins.

"The District of Columbia has among the highest rates of pediatric asthma in the United States, and we're working to find out why," says Stephen Teach, MD, MPH, senior author of the study. "For African American kids with [asthma](#), vitamin D testing and ensuring adequate vitamin D intake may need to become necessary steps in their primary care."

More information: Read the study published online in the Journal of Pediatrics: [www.jpeds.com/article/S0022-34 ... \(09\)01290-6/abstract](http://www.jpeds.com/article/S0022-34... (09)01290-6/abstract)

Provided by Children's National Medical Center

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