

Meditation practice may decrease risk for cardiovascular disease in teens

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Regular meditation could decrease the risk of developing cardiovascular disease in teens who are most at risk, according to Georgia Health Sciences University researchers. Pictured here is Dr. Vernon Barnes, a physiologist in the Georgia Health Sciences University Institute of Public and Preventive Health and a co-author on the study published in Evidence-Based Complementary and Alternative Medicine. Credit: Phil Jones, GHSU Photographer

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In a study of 62 black teens with [high blood pressure](#), those who

meditated twice a day for 15 minutes had lower left ventricular mass, an indicator of future cardiovascular disease, than a control group, said Dr. Vernon Barnes, a physiologist in the Medical College of Georgia and the Georgia Health Sciences University Institute of Public and Preventive Health.

Barnes, Dr. Gaston Kapuku, a cardiovascular researcher in the institute, and Dr. Frank Treiber, a psychologist and former GHSU Vice President for Research, co-authored the study published in *Evidence-Based [Complementary and Alternative Medicine](#)*.

Half of the group was trained in transcendental meditation and asked to meditate for 15 minutes with a class and 15 minutes at home for a four-month period. The other half was exposed to health education on how to lower blood pressure and risk for cardiovascular disease, but no meditation. Left ventricular mass was measured with two-dimensional echocardiograms before and after the study and the group that meditated showed a significant decrease.

"Increased mass of the heart muscle's [left ventricle](#) is caused by the extra workload on the heart with higher blood pressure," Barnes explained. "Some of these teens already had higher measures of left ventricular mass because of their elevated blood pressure, which they are likely to maintain into adulthood."

During meditation, which Barnes likens to a period of deep rest, the activity of the [sympathetic nervous system](#) decreases and the body releases fewer-than-normal [stress hormones](#). "As a result, the vasculature relaxes, blood pressure drops and the heart works less," he said.

School records also showed behavioral improvements.

"[Transcendental meditation](#) results in a rest for the body that is often

deeper than sleep," Barnes said. "Statistics indicate that one in every 10 black youths have high blood pressure. If practiced over time, the meditation may reduce the risk of these teens developing cardiovascular disease, in addition to other added health benefits. "

Provided by Georgia Health Sciences University

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