



## Walk to school, less heart risk as an adult

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BUFFALO, N.Y., Aug. 12 (UPI) -- A morning walk or bike ride to school could reduce stress reactivity in children, which is linked to later heart risk, U.S. researchers say.

Senior investigator James Roemmich, a University at Buffalo associate professor, and graduate students Maya Lambiase and Heather Barry say cardiovascular reactivity -- changes in heart rate and blood pressure due to stress -- is associated with the beginnings of cardiovascular disease in children and atherosclerosis. Atherosclerosis, in adults, is the build-up of cholesterol, calcium, fat and other substances in artery walls.

The research team had 20 boys and 20 girls -- all Caucasian, ages 10-14 -- visit the Behavioral Medicine Research Laboratory.

Half of the children sat in a comfortable chair and watched a 10-minute slide show of images of a suburban neighborhood to simulate a ride to school. The other half walked on a treadmill -- while images of a suburban neighborhood were projected onto a screen -- at a self-selected pace for 1 mile, wearing a book bag containing 10 percent of their body weight.

The study, published in *Medicine & Science in Sports & Exercise*, finds, on average, during this activity, heart rate increased by about three beats per minute in children who walked, compared with about 11 beats per minute in children who "rode" to school.

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