

## Walking to School Helps Kids Cope With Stress

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Stressed-out kid? Have them get more exercise. Credit: Getty Images

**Walking to school in the morning can help children respond better to stress during the day, a new study shows.**

Forty children between the ages of 10 and 14 made a morning visit to the Behavioral Medicine Research Laboratory at the University at Buffalo. Half of them sat in a comfortable chair and watched a 10-minute slide show of pictures of a suburban neighborhood-simulation of a bus ride and the other half walked a mile on a treadmill wearing a book bag and looking at similar suburban images-simulation of a walk to school.

The children were then allowed to rest for 20 minutes before taking a test that required them to identify color names printed in the wrong color, such as the word "green" printed in blue ink.

Children who were put through the simulated walk to school in the morning had smaller elevations in their blood pressure, heart rates and perceived stress when given a short exam later in the day than children who had been given the simulated ride.

The group of walkers' heart rates increased an average of three beats per minute, compared to 11 beats per minutes for the riders, and the riders' blood pressure spike was about three times higher than the walkers'. The riders' rate of perceived stress was also twice as high as that of the walkers. Such stress-induced changes in heart rate and blood pressure are associated with the development of cardiovascular disease in adulthood.

"We found that 20 minutes of low-intensity physical activity, no more intense than a walk, reduced both children's perceptions



of an event as stressful as well as their bodies' responses to that stressful event," James Roemmich, associate professor of pediatrics and exercise and nutrition science and the study's senior investigator, tells ParentDish. "It was protective against the responses that are risk factors for the development of cardiovascular disease."

Stress in childhood can affect heart health later on, Roemmich says. "Cardiovascular disease takes decades to develop, and there's good evidence it begins in childhood," Roemmich tells ParentDish. "We know that leading a physically active lifestyle is protective against the development of cardiovascular disease."

Roemmich said scientists don't know how long the protective aspects of exercise last, so children should be encouraged to be active throughout the day. "It's just more evidence of why recess is important," he tells ParentDish.

It's not just walking that helps, so if hoofing it to school isn't feasible for your child, make sure she has several opportunities each day to get moving.

The results of the study were published in the journal *Medicine & Science in Sports & Exercise*.

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