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Walking to School Could Ease Classroom Stress

In study, kids 'commuting' by feet had better heart rate, blood pressure during test

SATURDAY, Aug. 14 (HealthDay News) -- Walking to school may help reduce children's stress throughout the day, the results of a new study suggest.

This reduction in stress reactivity could prevent increases in heart rate and blood pressure that can lead to cardiovascular disease later in life, explained the University at Buffalo researchers.

The study included 20 girls and 20 boys, aged 10 to 14, who underwent testing in a behavioral research laboratory. Half the children took a simulated ride to school -- they sat in comfortable chairs and watched a 10-minute slide show that included images of a suburban neighborhood and ended with an image of a suburban school.

The other children did a one-mile walk on a treadmill at a self-selected pace and wore a book bag that contained 10 percent of their body weight. As they walked on the treadmill, the children saw images of a suburban neighborhood on a screen.

After the simulations, both groups of children rested for 20 minutes and then took a test in which they were asked to identify the color of color names printed in the wrong color (the word green appeared in blue ink, for example). On average, 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.

Compared to those who walked, the children who "rode" had a three times greater increase in systolic blood pressure and their change in perceived stress was about twice as high, according to the report published in the August issue of the journal *Medicine & Science in Sports & Exercise*.

"The cardiovascular disease process begins in childhood, so if we can find some way of stopping or slowing that process, that would provide an important health benefit," senior investigator James Roemmich, an associate professor of pediatrics and exercise and nutrition science, said in a news release from the University at Buffalo.

More information

The American Heart Association has more about [children's health](#).

-- Robert Preidt

SOURCE: University at Buffalo, news release, Aug. 10, 2010

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