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Fitness May Boost Kids' Grades

Study finds link between physical health and academic test scores

By Kathleen Doheny

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TUESDAY, March 2 (HealthDay News) -- Fit bodies may bring kids better test scores in school, a new study finds.

"Children's physical fitness is associated with their academic performance," said study author Lesley Cottrell, an associate professor of pediatrics at West Virginia University, in Morgantown.

She is due to present the findings this week at the American Heart Association's 2010 Conference on Nutrition, Physical Activity and Metabolism in San Francisco.

In general, the fitter the student, the better the test scores, Cottrell's team found.

The researchers evaluated almost 1,200 students, assessing their fitness in the fifth grade and then again in the seventh grade. They tested them in four subjects in seventh grade -- reading, math, science and social studies -- using standardized tests.

The researchers hypothesized that those children who maintained fitness over the two-year span would have the best test scores, and they were right.

The fitness evaluation was done by the commonly used Fitness Gram, which tests fitness by such measures as the time it takes to run a mile, then rates the student as in the healthy fitness zone or not.

Across each of the four academic areas, a child who was fit in fifth grade and maintained it at seventh grade had the highest scores, on average, in the standardized tests.

For example, those who were unhealthy in fifth grade and remained so were the worst at reading, with an average reading score of 2.91 points (of a possible 5). Those who were fit as fifth-graders but weren't fit by the seventh grade did only a little better academically, getting a 3.03 reading score.

In contrast, those who weren't fit in the fifth grade but got fit by seventh grade got an average reading score of 3.14, the team found.

And those who were in the "healthy" fitness zone in both the fifth and seventh grades did the very best of all - an average reading score of 3.31. "Mastery" at reading begins at a score of 3 or greater.

The emphasis was on fitness, not body weight, Cottrell said, which is good news for those children carrying a few extra pounds. "It's really their level of fitness [that is associated with the better test scores], not their body mass index," she said, citing previous research that agreed with that finding.

The study results came as no surprise to Todd Galati, an exercise physiologist and spokesman for the American Council on Exercise in San Diego. "These findings are in line with other studies that show similar correlations with increased fitness and higher test scores," he said.

Why the link? "I believe it's showing the mind-body connection," Galati said. "We have a body that is meant to move." Regular physical activity, he said, can result in positive mood, healthy blood sugar levels and increased ability to focus and pay attention.

According to Galati and Cottrell, the data point to the need for schools and parents to pay more attention to the value of physical activity.

Yet another study due to be presented at the same meeting points to the value of physical activity, too. In that effort, researchers at the University of Maryland, College Park, followed nearly 2,400 girls for 10 years, assessing their body fat levels.

Those who engaged in moderate weekly activity had lower body fat at the study's end than did the sedentary girls, the study found.

More information

There's more on boosting physical activity in school at the [American Heart Association](#).

SOURCES: Lesley Cottrell, Ph.D., associate professor, pediatrics, University of West Virginia, Morgantown; American Heart Association's 2010 Conference on Nutrition, Physical Activity and Metabolism, Mar. 2, 2010; Todd Galati, exercise physiologist and spokesman, American Council on Exercise, San Diego

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