Physically fit students more likely to do well in school, less likely to be disciplinary problems

AUSTIN – A first-of-its-kind study of more than 2.4 million Texas students found that students who are physically fit are more likely to do well on the state’s standardized tests and have good school attendance. Fit students are also less likely to have disciplinary referrals.

The findings released today are based on the results of a battery of six FITNESSGRAM® tests taken by students in grades 3-12 during the 2007-2008 school year. The FITNESSGRAM® tool was created by The Cooper Institute of Dallas. The six types of assessment measure five areas - body composition, aerobic capacity, muscular strength, endurance and flexibility. The assessments determine whether students are in a “healthy fitness zone” for their age and gender.

The study analyzed data from 6,532 schools, which represents about 75 percent of the schools in Texas and about 84 percent of the school districts.

“Our state and nation are struggling with obesity, thanks to the combination of increasingly sedentary lifestyles and the declining quality of diets,” Gov. Rick Perry said. “We owe it to our children to take the appropriate steps to encourage fitness, steps that are made more clear by the information contained in this first round of testing. I am confident we are on our way to making a difference that will improve and even save lives.”

Commissioner of Education Robert Scott said, “Texas is the first state to require an annual physical fitness assessment of public school students. Today’s research results show that improving our children’s physical fitness can have positive results not only for the children, but for the schools as well.”

The study found that cardiovascular health, measured by a walking/running test, had a higher correlation to school success than did the Body Mass Index (BMI), which is a measure of body fat based on height and weight, adjusted for age and gender.

“The impact exercise has on the growing brain is unparalleled, said “father of aerobics” Kenneth H. Cooper, M.D., M.P.H., founder and chairman of The Cooper Institute. “Increased exercise improves cardiovascular health, and that helps the brain function more efficiently and enhances its ability to learn.”

About 78 percent of fourth-grade students were in the healthy fitness zone for cardiovascular fitness, whereas only 20 percent of high school seniors reached the healthy fitness zone. As with the overall FITNESSGRAM® data, cardiovascular fitness levels declined with each passing grade.

About 70 percent of students in each of the grades 3-12 reached the healthy fitness zone for Body Mass Index. About 30 percent of the students were not able to achieve the healthy fitness zone for their age and gender.
Significant correlations were found between physical fitness and various indicators of academic achievement. The study shows that:

- Higher levels of fitness are associated with better academic performance. At high performing schools that have earned the state’s top rating of Exemplary, about 80 percent of the students have healthy levels of cardiovascular fitness.
- At schools that have received the state’s lowest rating called Academically Unacceptable, slightly more than 40 percent of the students achieved cardiovascular fitness.
- Higher levels of fitness were associated with better school attendance.
- Higher levels of fitness at a school were also associated with fewer disciplinary incidents. The research looked at the number of incidents involving drugs, alcohol, violence and truancy.
- Counties with high levels of cardiovascular fitness tended to have high passing rates on the Texas Assessment of Knowledge and Skills (TAKS). Regional and county data can be found at www.texasyouthfitnessstudy.org.

“This data confirms what we have always thought to be true -- that there is a strong correlation between a student’s fitness and their scholastic success. These results provide yet another incentive to reverse the health trends we are seeing among our youth. We need to move forward on this issue as if lives depend on it -- because they do!” said Sen. Jane Nelson, R-Flower Mound, chairman of the Senate Health & Human Services Committee and author of the law establishing the assessments.

The physical fitness assessments are given annually to Texas students. The 2007-2008 school year was the first time students were assessed statewide using the FITNESSGRAM®. About 2.6 million students were tested. To ensure that results were representative of a school, test results were removed from the analysis if fewer than 25 percent of the students at a school were tested. Consequently, the research into the correlation between the cardiovascular health and BMI and academic success is based on the performance of 2.4 million students.

The original 2008 baseline data from 2.6 million youngsters, which was analyzed by researchers with The Cooper Institute, found that:

- Students were most likely to achieve a healthy fitness zone level on all six FITNESSGRAM® tests at third grade;
- Of the 331,379 third-grade students who participated in the study, 33.25 percent of the girls and 28.60 percent of the boys were in the healthy fitness zone on all six tests;
- Fitness levels declined with each subsequent grade level, reaching a low at 12th grade. Of the 152,144 seniors tested, only 8.18 percent of the girls and 8.96 percent of the boys meet healthy standards on all six tests.