

THE STATE OF OUR STUDENT BODY :: FACTSHEET

The Least-Fit Generation

It's a fact: America's elementary school students are the least physically fit generation in history. Some of the potential causes for the increase in youth inactivity include dramatic cuts in school funding, lack of physical education programs, shortage of fitness equipment and playground facilities, and the rising use of computers, television and video games in the place of physical play and recreation.

To address one of the most critical issues facing school-aged children – the lack of physical activity – Nike created NikeGO PE. NikeGO PE helps kids stay active during the school day and gives schools and teachers the means to make physical education fun and possible.

- Since 1980, overweight and obesity levels in children have tripled to almost 19 percent among children ages 6 to 11 years and more than 17 percent among adolescents ages 12 to 19.¹
- These statistics are even more disturbing when you consider that 31 percent of kids ages 6 to 19 are at risk for being overweight or are already overweight.²
- A national study of kids ages 12 to 19 found that approximately one-third of youth were out of shape.³

Students who are overweight and out of shape are more likely to experience a range of short- and long-term health problems. They also increase their risk of struggling with social, psychological and academic challenges.

- Today's students are developing health problems that were previously only seen in adults, such as Type II Diabetes, obstructive sleep apnea, high cholesterol and hypertension.^{4,5}
- Children who are overweight are more likely to become overweight as adults.
- An alarming 60 percent of obese children ages 5 to 10 have at least one risk factor for heart disease, and 25 percent have two or more risk factors.⁶
- According to a recent study conducted by the American Academy of Pediatrics, hospital costs for diseases related to childhood obesity increased from \$35 million in 1979 to \$127 million in 1999.
- Beyond the health implications of obesity, there are social and psychological consequences for obesity in youth. Poor self-esteem and lower quality of life are more prevalent among obese youth - similar to levels found among children diagnosed with cancer - when compared to children of healthy weight.⁷

Studies also show that children are becoming increasingly sedentary.

- U.S. Centers for Disease Control and Prevention (CDC) research finds that more than one third of adolescents in grades 9 to 12 do not regularly participate in vigorous physical activity.⁸
- More than 71 percent of elementary schools provide regularly scheduled recess for students in kindergarten through Grade 5, and in 2000 the U.S. Department of Education reported that 21 to 30 percent of children in Grades 1 to 6 get just 15 minutes or less of recess per day.⁹

Status of Physical Activity in Schools

Schools are well-suited to provide children with access to physical activity, but due to recent cuts in education funding, most don't make the grade when it comes to offering physical education.

- The American Heart Association (AHA) and American Academy of Pediatrics (AAP) agree that the schools provide an ideal environment and play a critical role in offering opportunities for physical activity to students.^{2,5}

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Status of Physical Activity in Schools cont.

- Likewise, the U.S. Department of Health & Human Services Healthy People 2010 report includes recommendations for increasing daily physical education, yet the exact opposite is occurring.
- Daily participation in school physical education programs is declining. Between 1991 and 2003, the percentage of students participating in daily PE dropped from 41.6 percent to 28.4 percent.¹⁰
- An assessment of PE in private and public schools found that just 8 percent of elementary schools, 6.4 percent of middle schools and 5.8 percent of high schools provided daily PE or allocated the recommended time per week to activity (150 minutes for elementary and 225 minutes for junior and senior high schools).¹¹
- Children are hardly making up for the lack of PE with activity outside of school hours.³
⁸ An estimated 26 percent of American children spend at least four hours per day watching television.¹² Experts increasingly recommend parents regulate children's "screen time" as access to computers, television and video games is becoming more prevalent.

Move the Body - Improve the Mind

School-based activity is a positive solution to help combat the problems of overweight and obese youth.

- Several studies presented at the North American Association for the Study of Obesity (NAASO) 2004 Annual Scientific meeting found that school-based PE programs can have positive effects on students' body fat, bone density, waist circumference and cardiovascular fitness.
- In all children, physical activity improves circulation, increases blood flow to the brain, increases self-esteem and decreases anxiety and depression.²
- Additionally, exercise raises levels of norepinephrine and endorphins (natural body chemicals) helping reduce stress, elevate mood and aid relaxation - all desirable "side effects" for the teaching environment. Behaviorally, physical activity has been shown to help students develop social skills, improve mental health and reduce risk-taking behaviors later in life.¹³
- Recent research on the association of physical education in school-aged children and academic outcomes shows the following:^{13, 14}

- Increased time in PE **does not result in** loss of academic performance
- Increased time in PE may slightly improve academic performance
- Trading time in PE for classroom time does not necessarily result in improved academic performance
- Individual studies are more encouraging.^{15, 16} For instance, a 1999 study on the SPARK program (Sports, Play, and Active Recreation for Kids Curriculum) showed that students who spent up to 200 percent more time in PE class (compared to students who spent that same time in the classroom) did as well or better on standardized test scores.¹⁵ Similarly, a 2002 study found primary school children who scored highest on physical fitness tests also scored highly on standardized tests for reading and math.¹⁶
- Experts, school administrators and teachers agree that schools are an essential provider of physical activity.^{3, 5} PE is invaluable for improving children's fitness levels, health status, social skills, behavior, and possibly even academic performance.

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www.cdc.gov/nchs/products/pubs/pubd/hestats/overweight/overwght_child_03.htm
- ² Pate RR, et al. Promoting Physical Activity in Children and Youth: A Leadership Role for Schools: A Scientific Statement From the American Heart Association Council on Nutrition, Physical Activity, and Metabolism (Physical Activity Committee) in Collaboration With the Councils on Cardiovascular Disease in the Young and Cardiovascular Nursing. *Circulation*. 2006;114:1214-24.
- ³ Pate RR, et al. Cardiorespiratory fitness levels among US youth 12 to 19 years of age. *Arch of Pediatr Adolesc Med*. 2006;160:1005-12.
- ⁴ Mitsnefes MM. Hypertension in children and adolescents. *Pediatr Clin N Amer*. 2006;53(3):493-512.
- ⁵ Policy Statement: Active Healthy Living: Prevention of childhood obesity through increased physical activity. *Pediatrics*. 2006;117(5):1834-42.
- ⁶ Freedman DS, et al. Relationship of childhood obesity to coronary heart disease risk factors in adulthood: The Bogalusa heart study. *Pediatrics*. 2001;108(3):712-18.
- ⁷ Schwimmer JB, et al. Health-related quality of life of severely obese children and adolescents. *JAMA*. 2003;289:1813-19.
- ⁸ Grunbaum JA, et al. Youth risk behavior surveillance—United States, 2003. *MMWR Surveill Summ*. 2004;53(2):1-96.
- ⁹ Centers for Disease Control and Prevention. (2000). School Health Policies and Programs Study (SHHPS). Fact sheet physical education and activity.
- ¹⁰ Centers for Disease Control and Prevention. Participation in high school physical education—United States, 1991-2003. *Morbidity and Mortality Weekly Report*. 2004;53(36):844-47.
- ¹¹ Burgeson CR, et al. Physical education and activity: results from the School Health Policies and Programs Study 2000. *J Sch Health*. 2001;71:279-93.
- ¹² Andersen RE et al. Relationship of physical activity and television watching with body weight and level of fatness among children: results from the Third National Health and Nutrition Examination Survey. *JAMA*. 1998;279:938-42.
- ¹³ Taras H. Physical Activity and student performance at school. *J Sch Health*. 2005;75(6):214-18.
- ¹⁴ van der Mars H. Physical education time and academic achievement. In: Kirk D, O'Sullivan M, McDonald D, eds. *Handbook of Physical Education*. Thousand Oaks, Calif: Sage Publications. In press.
- ¹⁵ Sallis JF, et al. Effects of health-related physical education on academic achievement: project SPARK. *Res Q Exerc Sport*. 1999;70(2):127-34.
- ¹⁶ Grissom JB. Physical fitness and academic achievement. *JEPonline*. 2005;8(1):11-25.