

FACTS

Teaching America's Kids A Healthy Lifestyle

Healthy Bodies, Healthy Minds

OVERVIEW

Childhood obesity in the United States is an epidemic. About 12 million children and adolescents ages two to 19 are considered obese.¹ As these obese children grow into adulthood, they have a much greater risk than their normal weight peers of developing and dying from chronic diseases². Indeed, some experts predict that by 2015, 75% of adults will be overweight with 41% obese.^{3,4} One important way to arrest this rise in childhood obesity is through strong physical education programs in our nation's schools.

Children must be physically active at school and learn about keeping healthy through exercise and eating a balanced diet. If lifetime physical activity and healthy food and beverage choices are taught at both school and home, children will have the optimal foundation for healthy living.⁵ Research also shows that healthy, physically active children learn more effectively and achieve more academically.⁶

Beyond the impact on chronic disease, the obesity epidemic places a significant burden on our society. The estimated annual cost of overweight and obesity is \$147 billion dollars.⁷ In addition, it also affects the number of young adults who are able to qualify to enroll at police academies or pass fitness tests given to potential emergency responders and military recruits.⁸

CHILDREN NEED DAILY PHYSICAL ACTIVITY

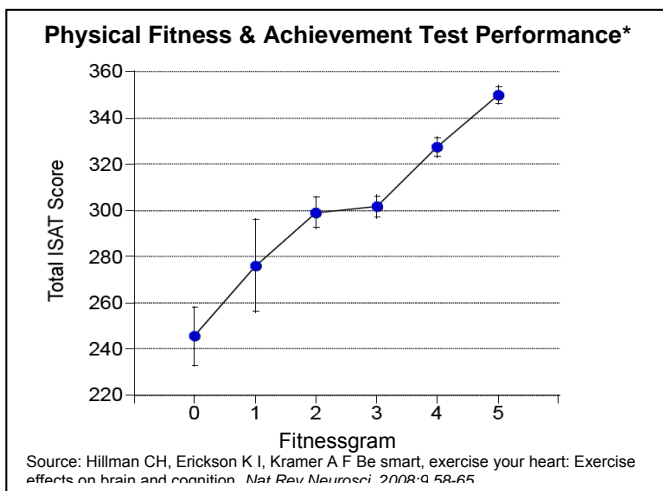
Obesity is a major risk factor for cardiovascular disease (CVD), cancer, diabetes, and early death. However, children are currently not getting enough physical activity to counter the obesity epidemic.

- A recent study showed that the plaque buildup in the neck arteries of obese children or those with high cholesterol is similar to those levels seen in middle-aged adults.⁹
- Of all U.S. deaths from major chronic diseases, 23% are linked to sedentary lifestyles.¹⁰
- In 2005, the Government Accountability Office released a report discussing key strategies to include in programs designed to target childhood obesity. Experts agreed that "increasing physical activity" was the most important component of any such program.¹¹
- National guidelines recommend that children engage in at least 60 minutes of physical activity on most, and preferably, all days of the week.¹² Because they spend half their day in school, children should get 30 minutes of exercise time during the school day.
- There is strong public support for more physical education in schools: 81% of adults believe daily physical education should be mandatory.^{13,14} However, a recent report revealed that physical education time has declined across many school districts since the No Child Left Behind Act took effect in 2002.¹⁵
- Only 3.8% of elementary, 7.9% of middle, and 2.1% of high schools provide daily physical education or its equivalent for the entire school year. Twenty-two percent of schools do not require students to take any physical education at all.¹⁶
- The US military reports that 27% of young Americans are too overweight to join, and around 15,000 potential recruits fail their physicals every year because they are too heavy.¹⁷
- A comprehensive community-based intervention that increased opportunities for physical activity before, during, and after school successfully reversed obesity in children.¹⁸ Regular participation in PE has also been shown to reduce obesity rates in low-income students.¹⁹

ACTIVE CHILDREN THRIVE ACADEMICALLY AND SOCIALLY

Physically active and educated children are more likely to thrive academically and socially. Through effective physical education, children learn how to incorporate safe and healthy activities into their lives. Physical education is an integral part of developing the “whole” child in social settings and the learning environment.

- Studies have shown that normal weight children have higher scholastic achievement, less absenteeism, and higher physical fitness than their obese counterparts.^{20, 21}
- Further research shows a strong correlation between aerobic fitness and academic performance as measured by grades in core subjects and standardized test scores.^{22, 23, 24}



CHILDREN NEED QUALITY PHYSICAL EDUCATION

The quality of a school's physical education classes is as important as their frequency, especially if children are to reap the full benefits of regular physical activity. Quality programs based on national and state standards that provide professional development, adequate resources, and sufficient space for physical education and activities are essential.

- Principals and physical education teachers need adequate resources to do their jobs at a high level. Just as reading, math, and science teachers receive the professional development they need, physical education teachers require the same kind of support.
- Schools need adequate space and facilities to conduct supervised, structured physical activity and physical education.

THE AHA ADVOCATES

AHA supports the Fitness Integrated with Teaching Kids Act (FIT Kids Act), which would:

- Require schools to report on the quality and quantity of physical education;
- Provide opportunities for physical activity and wellness in school programs;
- Involve parents in supporting schools in students' nutrition and physical activity; and
- Provide physical education teachers with professional development opportunities.

References

1. American Heart Association. *Heart Disease and Stroke Statistics – 2010 Update*. A Report from the American Heart Association. *Circulation*. December 17, 2009.
2. Cox ER, et al. Trends in the prevalence of chronic medication use in children: 2002-2005. *Pediatrics* 2008;122:e1053-e1061.
3. Baker JL, Olsen LW, Sorensen T. Childhood body mass index and the risk of coronary heart disease in adulthood. *New Engl J Med*; 2007. 357(23):2329-2337.
4. Kaplan JP, et al. *Progress in Preventing Childhood Obesity: How Do We Measure Up?* Institute of Med. Washington, DC: National Acad. Press, 2007.
5. Pate, RR, et al. Promoting physical activity in children and youth: a leadership role for schools. *Circulation* 2006; 114: 1214-1224.
6. Active Living Research. Active Education: Physical Education, Physical Activity and Academic Performance, *Research Brief* 2009; www.activelivingresearch.org: 1-8.
7. Finkelstein EA, Trogon JG, Cohen JW, Dietz W. Annual medical spending attributable to obesity: payer- and service-specific estimates. *Health Affairs*. September/October 2009; 28(5): w822-w831.
8. Institute of Medicine. Board on Behavioral, Cognitive, and Sensory Sciences and Education. Assessing fitness for military enlistment: physical, medical, and mental health standards. National Academies Press. Washington, DC. 2006.
9. Raghuveer G, et al., Obese kids' artery plaque similar to middle-aged adults. AHA Scientific Sessions 2008. Abstract 6077.
10. Bulwer B. Sedentary lifestyles, physical activity & cardiovascular disease: from research to practice. *Crit Pathways in Cardiol*. 2004;3(4):184.
11. Government Accountability Office. *Childhood Obesity: Most Experts Identified Physical Activity and the Use of Best Practices as Key to Successful Programs*. GAO-06-127R. Washington, DC, October 7, 2005.
12. DHHS. 2008 Physical Activity Guidelines for Americans. Available at <http://www.health.gov/PAGuidelines/guidelines/default.aspx#toc>
13. DHHS and Department of Education. *Promoting Better Health for Young People through Physical Activity and Sports: A Report to the President from the Secretary of Health and Human Services and the Secretary of Education* 2000. Available at www.ed.gov/offices/OSDFS/physedprpt.pdf. Accessed July 12, 2007.
14. CDC. Guide to Community Preventive Services: Systematic Reviews & Evidence-Based Recommendations. November 15, 2005.
15. McMurrer J. *Instructional Time in Elementary Schools: A Closer Look at Changes for Specific Subjects*. Washington, DC: Center on Education Policy, 2008.
16. CDC. School Health Policies and Programs Study (SHPPS) 2006. *Journal of School Health*. 2007; 27(8).
17. Survey by the Lewin Group, 2005, for the U.S. Army Center for Accessions Research. Accessed online November 18, 2009 at <http://www.missionreadiness.org/index.html>
18. Economos CD, et al. A community intervention reduces BMI z-score in children: Shape Up Somerville first year results. *Obesity* 2007; 15:1325-36.
19. Madsen KA, et al., Physical activity opportunities associated with fitness and weight status among adolescents in low-income communities. *Arch Pediatr Adolesc Med*. 2009; 163(11):1014-1021.
20. Shore SM, et al. Decreased scholastic achievement in overweight middle school students. *Obesity* (2008) 16, 1535-1538.
21. Geier AB, et al. The Relationship Between Relative Weight and School Attendance. *Obesity* 2007. 15:2157-2161.
22. Coe DP, et al. Effect of physical education and activity levels on academic achievement in children. *Medicine & Science in Sports & Exercise* 2006;38:1515-1519.22.
23. Castelli DM, et al. Physical fitness and academic achievement in third- and fifth-grade students. *Journ Sport & Exer Physiol* 2007; 29:239-252.
24. Carlson SA, et al. Physical education and academic achievement in elementary school: data from the early childhood longitudinal study. *Am J Public Health* 98:721-727.