

FACTS

Learning For Life

Physical Education in Public Schools

OVERVIEW

Childhood obesity has reached epidemic proportions in the United States. Nearly 35% of children ages 2 to 19 are overweight or obese.¹ As these children grow older, they have a much greater risk than their healthy weight peers of developing and dying from chronic diseases in adulthood.² By 2015, 75% of adults will be overweight with 41% obese.^{3,4} By 2030, over 50% will be obese if current trends continue.¹ One important way to stop this rise in obesity and chronic disease in our children is by establishing lifelong physical activity habits with strong physical education programs and regular physical activity opportunities throughout the day in our nation's schools.

Children must be physically active at school and learn about keeping healthy through exercise and a balanced diet. Regular physical activity is associated with a healthier, longer life and lower risk of CVD, high blood pressure, diabetes, obesity, and some cancers.⁵ If the lessons of lifetime physical activity and healthy food and beverage choices are modeled at both school and home, children will have the optimal foundation for healthy living.⁶ Children who receive 30 minutes a day of quality physical education learn more effectively and achieve more academically.⁷ Unfortunately, many schools are cutting back on traditional physical education programs because of budgetary concerns and competing academic demands.⁷

Beyond the impact on chronic disease, physical inactivity and obesity place a significant burden on our society. Nearly 17% of U.S. medical costs are attributed to the treatment of obesity.¹ And if current childhood obesity trends continue, the resulting total costs will be nearly \$250 billion by 2050.¹ Obesity and lack of physical fitness in America's youth also affect our national security. A recent study showed that 25% of young Americans are too overweight to serve in the military.⁸ Nearly 23 million young adults

do not meet the US Army's weight standards for enlistment.⁹

A GROWING SEDENTARY LIFESTYLE: SERIOUS HEALTH CONSEQUENCES

- A recent study showed that the plaque buildup in the neck arteries of obese children is similar to those levels seen in middle-aged adults.¹⁰
- Unfortunately, even obese pre-schoolers, are showing some of the biomarkers related to cardiovascular risk.¹¹
- Along with rising obesity rates, the rate of prescription drug use by children for diabetes, high blood pressure and high cholesterol is increasing.^{12,13}
- Other research suggests that regular participation in physical education classes helps reduce obesity in low-income teenagers who are disproportionately affected by the childhood obesity epidemic.¹⁴
- A survey of school principals showed that kids are more likely to get the recommended amount of recess and physical education if they live in states or districts with policies that call for more of those types of activity.⁷
- Sedentary lifestyles increase the likelihood of cardiovascular disease mortality by 37%.¹⁵
- Children's physical activity level drops dramatically between the ages of 9 and 15.¹⁶

ACTIVE CHILDREN THRIVE

Physically active children are more likely to thrive academically and socially.¹⁷ 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 for success in social settings and the learning environment.

- Physical activity has a positive impact on cognitive ability, avoiding tobacco use, insomnia, depression, and anxiety.^{18,19,20,21,22} Physically fit children have higher scholastic achievement,

better classroom behavior and less absenteeism than their unfit counterparts.^{23,24}

- Many schools are still offering junk foods and sodas and not providing adequate time for physical activity.²⁵
- Only 3.8% of elementary schools, 7.9% of middle schools and 2.1% of high schools provide daily physical education or its equivalent for the entire school year.²⁶ Recently, schools have made no progress on increasing physical education, recess, or other physical activity opportunities.²⁷
- 95% of parents believe physical education should be part of a school curriculum for all students in grades K-12.²⁸

QUANTITY AND QUALITY

- The Physical Activity Guidelines recommend that children engage in at least 60 minutes of moderate to vigorous physical activity each day. It is reasonable that children should get at least 30 minutes of that time in school.²⁹
- The national recommendation for physical education is 150 minutes per week in elementary and 225 minutes per week in middle and high schools.
- The quality of the physical education program is also paramount. A high-quality physical education program taught by a certified physical education teacher enhances the physical, mental, and social/emotional development of all children and helps them understand, improve, and maintain physical well-being.

THE ASSOCIATION ADVOCATES

The American Heart Association advocates for daily, quality physical education in our nation's schools, together with other healthy lifestyle choices. We support:

- Require all school districts to develop and implement a planned K-12 physical education curriculum that adheres to national and state standards for health and physical education, including providing 150 minutes per week of physical education in elementary school, 225 minutes per week in middle school and requiring physical education as a requirement for graduation from high school. The physical education grade should be counted toward students' overall grade point average.
- Hire a physical education coordinator at the state level to provide resources and offer support to school districts across the state.
- Offer regular professional development opportunities to physical education teachers that are specific to their field.
- Require physical education teachers to be highly-qualified and certified.
- Add valid fitness, cognitive, and affective assessments in physical education that are

based on student improvement and knowledge gain.

- Require that students be active in moderate-vigorous physical activity for at least 50% of physical education class time.
- Assure that physical education programs have appropriate equipment and adequate facilities.
- Not allow students to opt out of physical education to prepare for other classes or standardized tests.
- Not allow waivers or substitutions for physical education.

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³ Kaplan JP, et al. Progress in Preventing Childhood Obesity: How Do We Measure Up? Institute of Med. Washington, DC: National Acad. Press, 2007.

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¹³ Lenz, TL, et al. Prevalence of Medication Use in Children for Cardiometabolic Risk Reduction. *American Journal of Lifestyle Medicine*:2013.

¹⁴ Shih, M., et al. The association between community-level economic hardship

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¹⁸ Taylor, AH. The acute effects of exercise on cigarette cravings, withdrawal symptoms, affect and smoking behaviour: a systematic review. *Addiction*. 2007. 102(4): 534-543.

¹⁹ Drollette, ES et al. Acute exercise facilitates brain function and cognition in children who need it most: an ERP study of individual differences in inhibitory control capacity. *Developmental cognitive neuroscience*. 2014. 7: 53-64.

²⁰ Anand, S., et al. Physical activity and self-reported symptoms of insomnia, restless legs syndrome, and depression: The comprehensive dialysis study. *Hemodialysis International*. 2013 17(1): 50-58.

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²² Da Silva, MA et al. Bidirectional association between physical activity and symptoms of anxiety and depression: the Whitehall II study. *European journal of epidemiology*. 2012. 27(7): 537-546.

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