



Heart Disease and Stroke. You're the Cure.

Physical Education in Schools – Both Quality and Quantity are Important

♥ *The Policy Position of the American Heart Association:*

Quality, daily physical education in the nation's schools is an important part of a student's comprehensive, well-rounded education program and a means of positively impacting life-long health and well-being. The optimal physical education program will foster a lifetime commitment to physical activity as part of a healthy lifestyle. Ultimately, improved coordinated school health programs, of which physical education is a central component, will augment other prevention efforts and help to reverse the growing epidemic of childhood obesity which threatens to undo decades of progress in the fight against cardiovascular disease. Effective efforts made now will help children avoid a lifetime of chronic disease and disability.

♥ *Why Physical Education Is So Important – It's Not Just the Activity Itself:*

Regular physical activity is associated with a healthier, longer life and with a lower risk of heart disease, high blood pressure, diabetes, obesity, and some cancers.ⁱ Current recommendations are for children to engage in at least 60 minutes of physical activity each day. Children spend over half their day in school, so it is reasonable to require that they should get at least 30 minutes of that time in school. Physical education should be an important part of that requirement and does more than provide some minutes of moderate-vigorous activity. It also exposes students to lifetime activities and teaches students how to integrate exercise into their lives. Since childhood obesity rates continue to rise across the country, there is public support for more physical education in schools. A study conducted by Opinion Research Corporation International for the National Association for Sport and Physical Education (NASPE) in 2003 indicated that 81% of adults believe that daily physical education should be mandatory in schools.ⁱⁱ

In a systematic review of physical education programs that increased the amount of time that students were physically active, students' aerobic and physical fitness increased. Additionally, modifying the school physical education curricula was effective across diverse racial, ethnic, and socioeconomic groups, among boys and girls, elementary- and high-school students, and in urban and rural settings.ⁱⁱⁱ Recent research shows that regular exercise can restore blood vessel function and improve cardiovascular risk factors in obese children.^{iv} A six-month exercise program reduced body mass index, diabetes risk factors and low-degree inflammation.^v Evidence from the Early Childhood Longitudinal Study published in 2004 showed that physical education programs do have an impact in combating childhood obesity, especially in young adolescent girls. Just an extra hour of exercise a week lessened obesity in young overweight girls.^{vi}

Benefits extend beyond improvement in health status. Studies in California suggest that children who are more physically fit perform better on standardized math and reading test scores.^{vii} Sallis et al. showed that children who participated in school physical education programs did not experience a harmful effect on their standardized test scores, though less time was available for other academic subjects.^{viii} Coe and colleagues demonstrated in a prospective study with sixth graders that although academic achievement was not significantly related to physical education enrollment, higher grades were associated with vigorous activity, particularly activity meeting recommended Healthy People 2010 levels.^{ix}

The quality of the physical education program, not just the time spent being active during physical education, is the foremost concern. Our organizations do not want to increase time spent in weaker programs, just like we would not want to do that in other areas of the school curriculum. Physical education policy should prioritize quality while, simultaneously and/or subsequently, trying to increase the amount of time children spend in class.

♥ *Ways to Address Quality Physical Education*

According to NASPE, a high quality physical education program enhances the physical, mental, and social/emotional development of every child and incorporates fitness education and assessment to help children understand, improve and/or maintain their physical well-being.

Legislation and/or regulation to promote quality physical education should address all of the following:

- require all school districts to develop and implement a planned, sequential physical education curriculum k-12 that adheres to national and state standards for health and physical education;
- 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 which are specific to the field and require teachers to keep aware of emerging technologies, model programs, and improved teaching methods;
- add requirements for fitness, cognitive, and affective assessment in physical education that are based on student improvement and knowledge gain;
- assure that programs have appropriate equipment and adequate indoor and outdoor facilities;
- require that students are active in moderate-vigorous physical activity for at least 50% of class time;
- disallow substitutions for physical education with activities such as marching band or varsity sports.
- do not allow students to opt out of physical education to prepare for other classes or standardized tests; and
- require physical education for graduation and count the physical education grade as part of students' overall grade-point averages.

♥ **The Quantity of Physical Education**

National organizations including the American Heart Association, the American Cancer Society, the American Diabetes Association, NASPE, the National Association of State Boards of Education (NASBE), the Centers for Disease Control and Prevention and the Institute of Medicine recommend 150 minutes of physical education each week for children in elementary school and 225 minutes per week for middle school and high school. At least 50 percent of class time should be spent in moderate to vigorous physical activity.

By addressing the quality, quantity and intensity of physical education across the country—the educational as well as the activity component—policymakers will maximize children's potential for a lifetime of physical activity, health and wellness.

ⁱ *Guide to Community Preventive Services: Systematic Reviews and Evidence-Based Recommendations*. Centers for Disease Control and Prevention. November 15, 2005. www.thecommunityguide.org/pa/m. accessed November 27, 2006.

ⁱⁱ *Public Attitudes toward Physical Education: Are Schools Providing What the Public Wants?*

A Survey Conducted by Opinion Research Corporation International of Princeton, NJ,

for the National Association for Sport and Physical Education, February 2000,

http://www.aahperd.org/naspe/pdf_files/survey_public.pdf.

ⁱⁱⁱ *Guide to Community Preventive Services: Systematic Reviews and Evidence-Based Recommendations*. Centers for Disease Control and Prevention. November 15, 2005. www.thecommunityguide.org/pa/m. accessed November 27, 2006.

^{iv} Meyer, AA, Kundt, G, Lenschow, U, Schuff-Werner, P, Kienast W. Improvement of early vascular changes and cardiovascular risk factors in obese children after a six-month exercise program. *J Am Coll Cardiol*, 2006; 48:1865-1870, (Published online 16 October 2006).

^v Meyer, AA, Kundt, G, Lenschow, U, Schuff-Werner, P, Kienast W. Improvement of early vascular changes and cardiovascular risk factors in obese children after a six-month exercise program. *J Am Coll Cardiol*, 2006; 48:1865-1870, (Published online 16 October 2006).

^{vi} Datar A, Sturm R. Physical education in elementary school and body mass index: Evidence from the early childhood longitudinal study. *American Journal of Public Health*. Sept. 2004; 94,9.

^{vii} California School Boards Association Governance and Policy Services Policy Briefs. *Physical education and California schools*. http://www.cahperd.org/images/pdf_docs/CA%20PE%20fitness%20academic%20CSBA%2006. accessed October, 2006.

^{viii} Sallis, JF, McKenzie, TL, Kolody, B., Lewis, M., Marshall, S., Rosengard P. Effects of Health-Related Physical Education on Academic Achievement: SPARK. *Research Quarterly for Exercise and Sport*. 1999. Vol. 70, No.2, pp. 127-134.

^{ix} Coe DP, Pivarnik JM, Womack CJ, Reeves MJ, Malina RM. Effect of physical education and activity levels on academic achievement in children. *Medicine and Science in Sports and Exercise*. Vol. 38, No. 8, 1515-1519, 2006.