

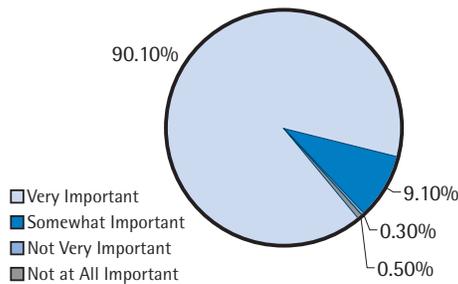


HealthVoices

Addressing Overweight: The Role of Physical Activity in Schools

Winter 2005

Georgians believe it is very important for schools to provide physical education to students



Source: Healthcare Georgia Foundation, 2004

In Georgia, the estimated economic burden associated with adult obesity and resulting diseases in 2003 exceeded \$2.1 billion.³⁵

Georgians and health experts agree -

childhood overweight is a serious problem that demands action. School-based physical activity is one key component in promoting healthy weight in young people. Requiring physical education in schools and providing after-school sports and physical activities are important first steps toward promoting healthier, more fit children and reducing overweight among Georgia's children and youth.

Being Overweight Damages the Health of Georgia's Children

Between 1980 and 2000, the national prevalence of overweight tripled among children (ages 6-11) from 5% to 16%, and doubled among adolescents (ages 12-19) from 7% to 16%.¹ (The term "overweight" is used for children to describe weight conditions similar to obesity in adults.) Overweight among Georgia's youth is considerably higher than the national figures. A recent school-based study found that 20% of Georgia's children and adolescents are overweight and 36% are either overweight or at risk for overweight.²

Overweight youth have a greater risk of becoming obese as adults,³ with serious health and economic implications. Type-2 diabetes, a disease rarely diagnosed in children and adolescents before the 1990s, is emerging in epidemic proportions among youth, with one study reporting a 10-fold increase in the past decade.⁴ Individuals with diabetes incur medical costs that are two to three times higher than someone without diabetes.⁵ In addition, overweight and obese individuals are at an increased risk for other diseases and conditions, including coronary heart disease, stroke,

high cholesterol and high blood pressure. The increased risks to children translate into greater disease prevalence with a heavy economic burden for individuals, families, businesses, and communities.

Physical Activity Makes a Difference—But Georgia's Children Aren't Active

A major factor contributing to the rapid increase in childhood overweight is physical inactivity.⁶ Despite well-known benefits, many children fail to engage in adequate daily physical activity. In a recent survey, over 36% of Georgia's adolescents reported not participating in a sufficient amount of physical activity during the previous seven days.⁷

Participation in regular physical activity has been shown to:

- decrease body fat
- increase muscle and bone strength
- decrease risk of death from heart disease
- lower risk of developing diabetes
- reduce blood pressure in persons with elevated levels



Addressing Overweight

School-based physical activity and physical education have been identified as key components in addressing childhood overweight.⁸ Increasing the amount and the intensity of physical activity among school-aged youth has shown health benefits and promise in preventing overweight.⁹⁻¹⁷ Yet, only 29% of Georgia middle and high school students report attending physical education classes daily.¹⁸ And, only 37% of Georgia's adolescents are enrolled in physical education classes compared with 56% nationally.¹⁹

In the face of increasing academic and budgetary pressures, schools struggle to balance a myriad of demands and expectations. However, the economic and health consequences of overweight and a sedentary lifestyle make it impossible to ignore the benefits of school-based physical activity. ***Because most children and adolescents spend a significant portion of their time at school, efforts to promote school-based physical activity have strong potential benefits for a large number of youth.*** Schools, in partnership with families and communities, can serve a vital role in assuring that children achieve the daily recommended quantity and quality of physical activity. Additionally, there is evidence to suggest that physically active students perform better academically and exhibit less disruptive behavior.^{20,21}

What Georgians Think

To learn more about Georgians' views on childhood overweight and physical activity, Healthcare Georgia Foundation sponsored a statewide poll of over 1200 randomly selected adult residents. Respondents overwhelmingly identified overweight and

Healthcare Georgia Foundation's survey found:

- 94.5% of Georgians support requiring school-based physical education
- 97.0% believe after-school sports are either very important (72.5%) or somewhat important (24.5%)
- 61.9% were willing to support physical education in schools using part of a special one cent sales tax
- 64.5% supported earmarking increases in alcohol and tobacco excise taxes for school-based physical education

obesity as a serious problem (96.7%), and indicated that, next to parents, schools have the most significant responsibility in preventing childhood overweight. The findings were the same for respondents, regardless of race, income, education, or whether they lived in urban or rural areas. Results from this poll, in combination with the increasing prevalence and the known health and financial burdens of obesity, underscore the merits of more and better structured school-based physical activity.

Recommendations for Physical Activity in Schools

Regular physical activity is strongly linked to better health and reduced mortality.²² For young people, properly structured school-based physical activity can positively impact health and well-being. And, while the evidence is still developing, ***there is sufficient information to provide direction as to how schools can better serve children through physical education during the school day and physical activity programs outside the structured curriculum.***

The daunting problem of childhood overweight requires action using the best available evidence coupled with ongoing evaluation and quality improvement. The following recommendations are based on the scientific literature and published evidence from successful programs.

Mandate Physical Education for All Grades

Currently, only schools with kindergarten through fifth grade in Georgia are required to provide physical education classes and the amount is often insufficient. Middle and high schools are not required to offer physical education classes, though many make courses available on an occasional basis. The problem of overweight among the school-aged population in Georgia, caused in part by physical inactivity, calls for additional physical education during the school day. To assure access and quality, physical education must be statutorily mandated and not placed as a discretionary burden on local boards of education.

Make it Daily. The American Heart Association, Centers for Disease Control and Prevention (CDC), and National Association for Sport and Physical Education recommend daily physical education from kindergarten through high school. The National School Boards Association asserts that physical education must be offered daily to adequately address instructional components and provide opportunities for the practice of health-enhancing physical activity. Less than one third of Georgia's adolescents attend daily physical education classes.²³ To address this inadequacy, schools must be required to provide daily physical education for students.



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Make it at least 30 minutes of moderate to vigorous physical education. Children of all ages should be accumulating at least 60 minutes of moderate to vigorous physical activity everyday.²⁴⁻²⁶ However, only 59% of Georgia's adolescents are engaging in 20 minutes or more of vigorous physical activity on three or more days of the week.²⁷ Children need physical activities that elevate energy expenditure to several times the resting metabolic rate, such as brisk walking, swimming, basketball and field games.²⁸

To meet the daily recommendation, at least 30 minutes of this kind of activity should be provided during the school day. While daily physical education is the ideal recommendation for all students, high school students may need a more flexible approach to achieving this goal.

Deliver it with trained educators in a quality environment with appropriate curriculum.

Physical education specialists and well-trained classroom teachers are more effective in delivering quality physical education curricula than non-trained or poorly trained classroom teachers. Specialists and well-trained teachers prepare higher quality lessons and achieve longer durations of moderate to vigorous physical activity among students within the allotted class time.²⁹ Physical education facilities should be safe and appropriate for the course activities. The curriculum should prepare students for lifelong health and fitness. An emphasis on health, weight,

physical activity knowledge, and life skills management will help promote lifelong physical activity.

Increase Physical Activity with After-School Programs

To reach the minimum 60 minutes of recommended physical activity, young people must engage in recreational activities outside the traditional school day. The after-school environment, and occasionally the before-school environment, may provide the greatest opportunity for safe, focused and supervised physical activity. When young people have access to recreation spaces, such as school playgrounds and gyms, they are more likely to engage in physical activity.³⁰ After-school programs, including organized activities and intramural sports, have the potential to significantly increase physical activity levels among school-aged children.³¹ These programs are even more viable when children are provided with transportation home.³²⁻³⁴ Accordingly, schools should offer children the opportunity to be active for at least 30 minutes outside the traditional school day.

A Call for Action

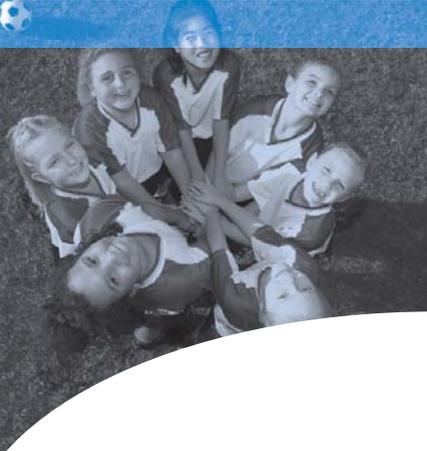
With the high prevalence of overweight among Georgia children, the time for Georgians to act is now. Promoting physical activity within the schools by implementing these policy recommendations will have positive benefits for children, families and the state as a whole.

Components of successful school-based physical activity

- Mandate physical education in all grades
- Provide at least 30 minutes of daily moderate to vigorous physical education during school hours
- Use trained educators in a quality environment with appropriate curriculum
- Provide at least 30 minutes of additional daily physical activity opportunities through after-school programs and intramural sports

Yet, school-based physical activity is only one, albeit important, component to promoting healthy weight. As school-based physical activity programs are implemented and enhanced, it will be important to continually evaluate their impact and costs. Complementary strategies, such as nutrition education programs and designing communities to promote greater physical activity, also must be evaluated as part of a comprehensive strategy for addressing overweight among children in Georgia. State action to enhance school-based physical activity is an important first step to promote better health and quality of life for all of Georgia's children and youth.

"School-based physical activity and physical education have been identified as key components in addressing childhood overweight."



This policy brief was prepared by Policy Leadership for Active Youth (PLAY) with support from Healthcare Georgia Foundation. The research paper which provides the scientific basis for this brief and the reference notes for this brief may be found at www.healthcaregeorgia.org and the website of the Georgia Prevention Institute of the Medical College of Georgia at www.mcg.edu/institutes/gpi. For information, contact PLAY project director Rodney Lyn at rlyn1@gsu.edu or (404) 651-2209.

Policy Leadership for Active Youth (PLAY)

is a three-year policy research initiative of the Georgia State University Institute of Public Health in partnership with the Georgia Center for Obesity and Related Disorders (GCORD) of the University of Georgia and the Medical College of Georgia. PLAY collaborates with other stakeholders to identify promising strategies to increase physical activity, decrease sedentary behaviors and prevent childhood overweight. Investigators are Dr. Michael Eriksen, Valerie Hepburn and Dr. Ike Okosun, Georgia State University; Dr. William Kanto, Dr. Paule Barbeau, Dr. Frank Treiber and Dr. Andrew Muir, Medical College of Georgia; and Dr. Rebecca Mullis, Dr. Richard Lewis and Dr. Emma Laing, University of Georgia.

Healthcare Georgia Foundation is a statewide, private independent foundation whose mission is to advance the health of all Georgians and to expand access to affordable, quality healthcare for underserved individuals and communities.

Healthcare Georgia Foundation is a catalyst for better health and health care in Georgia. Through strategic grantmaking, Healthcare Georgia Foundation supports organizations that drive positive change; promotes programs that improve health and health care among underserved individuals and communities; and connects people, partners and resources across Georgia.

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HealthVoices is available online at www.healthcaregeorgia.org. For further information, please contact Martha Katz, Director of Health Policy, 404.653.0990 or mkatz@healthcaregeorgia.org.

