

# PHILANTHROPIC COLLABORATIVE FOR A HEALTHY GEORGIA

## Preventing Overweight Children

### *A Brief for Foundations*

One of every five children in Georgia is overweight – or 20% of all residents under age 18.<sup>1</sup> Like many other health indicators, Georgia fares worse than the nation as a whole; approximately 15% of all children in the United States are currently overweight, up from 11% only a decade ago.<sup>2</sup>

This recently recognized epidemic becomes even more serious when the number of children at risk for overweight is included. Using Body Mass Index (or BMI), a common measure of weight status, three in ten (29.7%) middle school students aged 11 to 14 years are either overweight or at risk for overweight. And one in four (26.7%) high school students aged 14 to 18 years is overweight or at risk for overweight.<sup>3</sup>

African American middle and high school students are at greatest risk for being overweight, followed by Hispanics and then whites. And males of all racial and ethnic groups in both middle and high school are twice as likely to be overweight than their female counterparts.

*Almost 30% of Georgia middle school students and another 25% of high school students are either overweight or at risk of being overweight.*

### WHAT IS BMI?

*The Body Mass Index, or BMI, is a widely used index of weight status for children and adults that relates body weight to height. It is calculated with a simple formula:*

$$\frac{\text{weight in kilograms}}{\text{height in meters}^2}$$

*To compare a child's BMI status with the expected BMI for children of the same age and gender, the Centers for Disease Control and Prevention (CDC) produced BMI-for-Age percentile charts. Using these charts:*

A child is **overweight** if that child's BMI-for-Age is at or above the 95th percentile.

A child is **at risk of overweight** if his or her BMI-for-Age is greater than the 85th percentile but less than the 95th percentile.

Studies have shown that overweight children are more likely to have

- Type 2 diabetes mellitus
- Cardiovascular problems such as high blood pressure and high cholesterol
- Asthma, sleep apnea, chronic hypoxemia, early maturation and orthopedic problems
- Psychosocial problems including low self-esteem and depression.

Overweight and obesity have also been linked to endometrial, breast, prostate, and colon cancers. Of particular concern is the fact that youth who are overweight are 70% more likely to be overweight or obese as adults.<sup>4</sup> It is estimated that about one-third of overweight preschool children and one-half of overweight school age children remain overweight in their adult years.<sup>5</sup> This statistic has significant social and economic implications since overweight and obesity contribute to a number of serious life-threatening or debilitating health conditions in adults, including cardiovascular disease, cancer, and diabetes.

## CHILDHOOD OBESITY INITIATIVE ADVISORY GROUP

The Philanthropic Collaborative launched its Childhood Obesity Initiative in January 2003. The goal of this major initiative is to inform, engage, and energize Georgia's foundations and other grantmakers in order to reduce the incidence of childhood obesity in the state. To oversee the initiative, the Collaborative established a Childhood Obesity Task Force comprised of representatives from foundations, the state, the Centers for Disease Control

and Prevention, and the school nursing community.

The Task Force met monthly and was chaired by Gary Nelson, President of the Healthcare Georgia Foundation. Its exploration of the childhood obesity issue began by commissioning four papers from nationally recognized experts. These papers examined evidence-based interventions related to nutrition and physical activity from several perspectives: policymaking, health communications, and behavioral and

environmental changes. On the basis of these papers and further discussions with national, state, and local experts, the Task Force prepared this brief to share its understanding of the problem along with its collective wisdom on both proven effective and most promising strategies. More detailed findings will be presented to the foundation community on December 10, 2003, followed by facilitated dialogue on possible strategies and directions for addressing this critical health problem.

## A FRAMEWORK FOR PREVENTION

The two most important factors underlying this epidemic are changes in dietary and physical activity patterns. Nationally, more than one-third of high school students do not regularly engage in vigorous physical activity, and only 29% are enrolled in a daily physical education class. Similarly, students across the nation have poor nutritional habits; on a daily basis, less than one in five eat the recommended five or more servings of fruits and vegetables and over 60% eat too much fat.<sup>6</sup>

Treatment of overweight that is already established is more difficult, more costly, and less effective than overweight prevention. Thus, to create widespread changes in children's dietary and physical activity habits and patterns, multi-level interventions should be implemented through families, schools, communities, and governmental agencies and should focus on establishing healthy behaviors at the earliest age possible.

After reviewing numerous interventions related to nutrition and physical activity, the Task Force opted to focus on those that have been found effective or highly promising by leading public health institutions and advisory groups, such as the Centers for Disease Control and Prevention (CDC), the U.S. Surgeon General, the American Public Health Association, and the National Institutes of Health. These interventions are displayed on the *Framework of Strategies for Foundations to Address Childhood Obesity* and emphasize those that can be most appropriately supported by Georgia foundations.

The Framework offers potential strategies for both nutrition and physical activity policies and programs in two major settings.

**Schools.** Since children spend much of their time in school, preschool, elementary, middle and high schools are a logical focus for interventions to establish and reinforce healthy eating habits, increase physical activity, and identify children who are at particular risk and may need special attention.

**Communities.** Eighty percent of children's physical activity and eating takes place outside of school.<sup>7</sup> Therefore, many of the interventions can occur in the home and in organized community programs such as youth sports, dance or other activity classes, and public recreation centers. In addition, the design of communities can either help or hinder walking, cycling, and other forms of physical activity. Transportation and urban plans should emphasize the design of traditional neighborhoods, where there is mixed land use with shops close to homes, streets connected in a grid-like pattern, relatively high density, and good sidewalk networks.

The Task Force also recognized healthcare providers as a third setting in which interventions for addressing childhood obesity are valuable. Such interventions include support for the development and evaluation of training programs for providers and involvement of providers in schools. It was felt, however, that the foundation community could add greater value by focusing primarily on schools and communities.

## Framework of Strategies for Foundations to Address Childhood Obesity

		NUTRITION		PHYSICAL ACTIVITY	
		POLICIES	PROGRAMS	POLICIES	PROGRAMS
SETTINGS	SCHOOLS*	<ul style="list-style-type: none"> <li>Establish nutrition standards for competitive foods provided in schools</li> <li>Discourage exclusive marketing contracts between schools and soft drink companies</li> <li>Require comprehensive nutrition education in curriculum for grades PreK-12</li> </ul>	<ul style="list-style-type: none"> <li>Implement programs in schools and pre-schools that reinforce healthy eating habits through food service and education interventions</li> <li>Encourage schools to conduct the School Health Index (SHI) to assess the status of health oriented programs and activities in the school, identify gaps, and set priorities</li> <li>Lower the price and increase the quantity of more healthful foods in vending machines</li> </ul>	<ul style="list-style-type: none"> <li>Require daily physical education (PE) in core curriculum in grades K-12</li> <li>Require increased physical activity in PE</li> <li>Require all PE instructors to be trained and certified</li> <li>Establish school policies to involve parents in children's physical activities, for example, through instruction and extracurricular activities or advisory councils</li> </ul>	<ul style="list-style-type: none"> <li>Implement evidence-based physical education programs in the schools</li> <li>Implement evidence-based curricula as part of a multi-component school approach</li> <li>Establish a campus environment that encourages activity</li> <li>Encourage safe walking to school</li> <li>Incorporate parent education into curricula</li> </ul>
	COMMUNITIES*	<ul style="list-style-type: none"> <li>Provide financial and other incentives to increase super-market access in underserved areas</li> <li>Designate vacant city land for community gardens and provide free or low-cost water to gardens</li> <li>Require nutrition labeling on menus, especially in chain restaurants</li> </ul>	<ul style="list-style-type: none"> <li>Implement multi-disciplinary programs on weight management, diet, and exercise</li> <li>Incorporate healthful nutrition and physical activity information into regular activities offered by park and recreation departments and other community agencies</li> <li>Develop communication messages that are achievable and believable</li> </ul>	<ul style="list-style-type: none"> <li>Require public and private organizations to have targeted signs encouraging people to use safe stairways</li> <li>Fund community-wide campaigns to increase physical activity</li> <li>Require access to walking trails, workplace sites and other community venues for physical activity</li> </ul>	<ul style="list-style-type: none"> <li>Develop community-based programs that reduce sedentary behaviors and promote physical activity after school and on weekends</li> <li>Improve physical facilities at parks and recreation departments, for example, with soccer goals, skateboard areas, and sound systems for dance or aerobic classes</li> <li>Improve activities at parks and recreation departments by increasing participation of low-income youth, holding more frequent sessions, sponsoring year round activities, expanding choices, and promoting services</li> <li>Provide parents with information about the benefits of exercising and reducing TV-viewing time</li> <li>Integrate physical activity messages into existing PSAs and other free media programs</li> <li>Design communities and environments that encourage walking and cycling</li> </ul>

*\*Working closely with the family unit is an important element of all strategies in both school and community settings.*

## THE CHALLENGE

The Task Force underscored the need for a concerted effort to address this important public health issue in Georgia. One critical component is a statewide policy vehicle that will:

- *Create and maintain a database of effective policies, and disseminate this information.*
- *Analyze state and local policies, monitor trends, and evaluate interventions.*
- *Develop state goals and benchmarks.*
- *Inform policymakers of needed changes.*
- *Educate policymakers about the importance of adequately funding schools to prevent dependence on income from competitive food sales.*
- *Work with the media to develop and disseminate effective communication messages.*
- *Inform organizations of potential funding sources to support program implementation.*

Georgia's philanthropic community also has a unique role in facing the challenge of overweight children. During the December Symposium, foundations will gather together to:

- *Better understand the nature and extent of childhood obesity in Georgia and the associated long-term health problems.*
- *Examine best practices and successful strategies for preventing and correcting childhood obesity from a variety of perspectives (including public policy, research, healthcare access, community norms, environmental concerns, family behavior, and child-serving institutions such as schools, pre-schools, and youth organizations).*
- *Learn about existing success stories in Georgia and nationally.*
- *Explore options and opportunities for foundations and grantmakers to fund successful programs statewide and/or in their own communities.*

**It is hoped that this brief, the Framework, and the Symposium will serve to stimulate further exploration and action and will lead to new and effective partnerships among schools, communities, foundations, and state agencies in improving the lives of children.**

- 1 Georgia Senate Research Office. Report of the Joint Study Committee on Physical Activity in Georgia Schools. Atlanta 2001: p 4.
- 2 National Center for Health Statistics. Prevalence and Trends in Overweight Among US Children and Adolescents, 1999-2000. JAMA 2002; 288: 1728-32.
- 3 Kanny D, Bricker SK, Powell KE. Overweight among Middle and High School Students in Georgia, 2001. Georgia Department of Human Resources, Division of Public Health, December 2002.
- 4 Trowbridge FL, Kibbe, D. Childhood Obesity: Partnerships for Research and Prevention. Washington DC: ILSI Press, 2002.
- 5 Serdula MK, Ivery D, Coates RJ, et al. Do Obese Children Become Obese Adults? A Review of the Literature. Prev Med 1993; 22: 167-77.
- 6 Centers for Disease Control and Prevention. Physical Activity and Good Nutrition: Essential Elements to Prevent Chronic Diseases and Obesity: At A Glance 2003. Available at [http://www.cdc.gov/nccdphp/aag/aag\\_dnpa.htm](http://www.cdc.gov/nccdphp/aag/aag_dnpa.htm).
- 7 Ross JG, Dotson CO, Gilbert GG, Katz SJ. After Physical Education: Physical Activity Outside of School Physical Education Programs. J Physical Educ Recreat Dance 1985; 56(1): 35-9.

The Georgia Health Policy Center  
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