

Mississippi Initiatives to Address Childhood Obesity April 2008

■ Issue

Children in Mississippi suffer from an alarming rate of overweight that continues to rise. Overweight children miss significantly more school days and perform less well academically than normal weight children. Risk factors for heart disease (such as high cholesterol and high blood pressure) and type 2 diabetes occur more frequently in overweight children and adolescents. In the past ten years there has been a dramatic increase in the prevalence of type 2 diabetes in adolescents. In addition to the health consequences, there are risks of developing potentially life-threatening psychological problems as well, such as depression, eating disorders, discrimination and stigmatization, negative self image, and passivity and withdrawal from peers. Research indicates that overweight adolescents have a 70 percent chance of becoming overweight or obese adults.

■ Prevalence

Mississippi has one of the highest rates of childhood obesity in the United States. The Centers for Disease Control and Prevention tracks the rate of obesity among children through its Youth Risk Behavior Surveillance System, which collects data through surveys of youth. The following table shows Mississippi results compared to the nation:

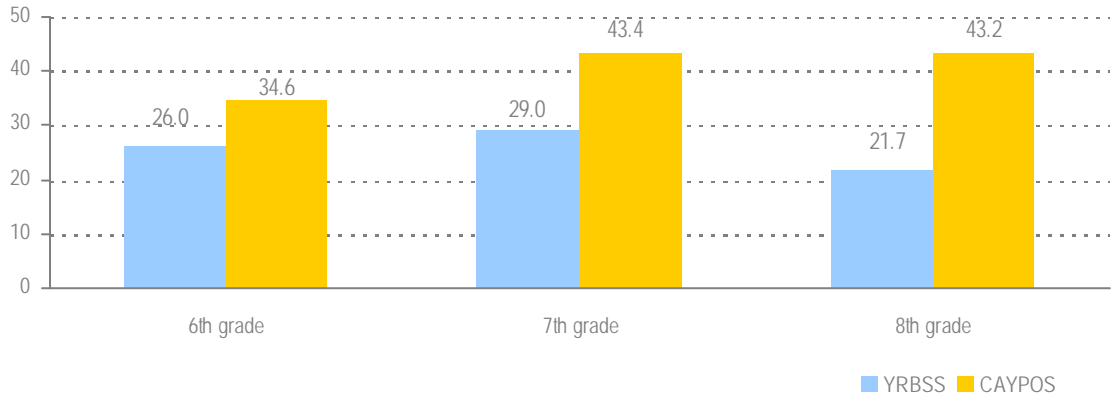
Figure 1: Percentage of High School Students Who Were Overweight or At Risk of Becoming Overweight, Mississippi and the United States, 2003.

	2003 Mississippi Rate	2003 U.S. Rate
Percentage of students who were at risk for becoming overweight (i.e., at or above the 85th percentile but below the 95th percentile for body mass index, by age and sex)	15.7%	14.8%
Percentage of students who were overweight (i.e., at or above the 95th percentile for body mass index, by age and sex)	15.7%	12.1%

Source: Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System, 2003.

When data are collected through measured heights and weights rather than through self-reports, researchers find that the rates of children who are overweight or at risk of overweight are even higher. Researchers from the College of Health at the University of Southern Mississippi developed the Child and Youth Prevalence of Overweight Survey (CAYPOS) to estimate the prevalence of obesity among children in Mississippi using height and weight measurements and compared the results for grades 6 through 8 with self-reported data from the Youth Risk Behavior Surveillance System (YRBSS) for middle school students. Figure 2 shows that the rates were much higher when the researchers used actual measurements than when self-reported data were used.

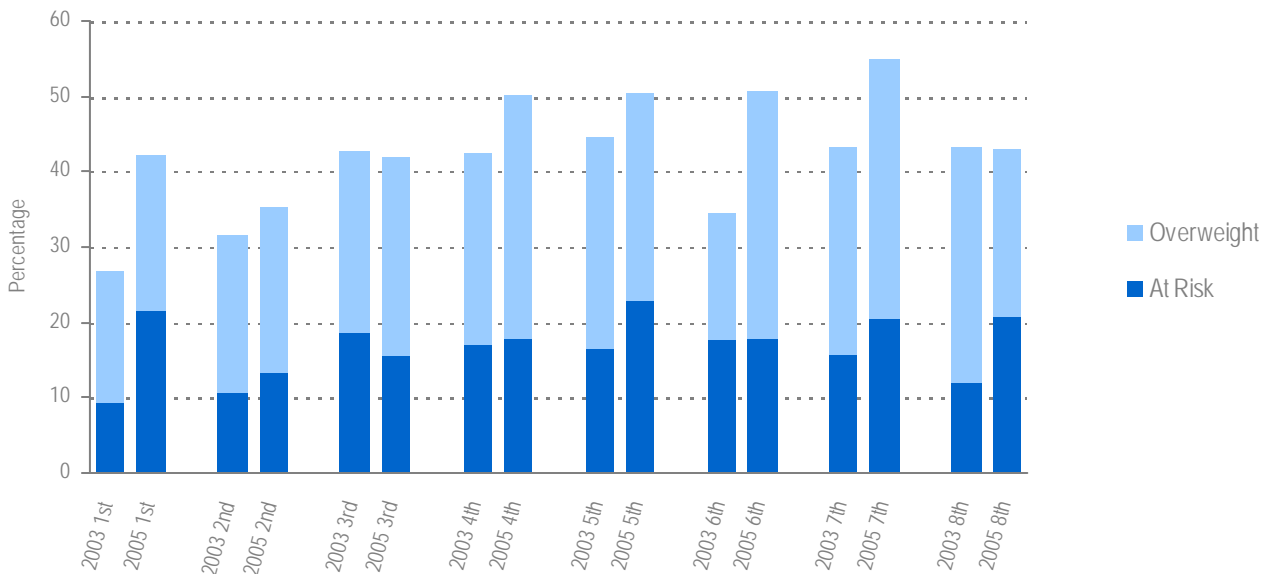
Figure 2: Percentage of Middle School Students in Mississippi Who Were Overweight or At Risk of Becoming Overweight, YRBSS vs. CAYPOS, 2003.



Source: Kolbo JR, Penman AD, Meyer MK, Speed NM, Molaison EF, Zhang L. Prevalence of overweight among elementary and middle school students in Mississippi compared with prevalence data from the Youth Risk Behavior Surveillance System. *Prevention of Chronic Disease, Vol. 3, no. 3, July 2006.*

Researchers repeated the CAYPOS measurements in 2005 and compared the results to those from 2003. In almost every grade, the percentage of children who were overweight or at risk of becoming overweight increased:

Figure 3: Percentage of children in Mississippi (Grades 1-8) Who Are Overweight or At Risk of Becoming Overweight, 2003 vs. 2005.



Source: Molaison EF, Kolbo JR, Speed N, Dickerson, E, & Zhang L. Prevalence of overweight among children and youth in Mississippi: A comparison between 2003 and 2005. December 2007.

Public Opinion

About 95 percent of adult Mississippians think that childhood obesity is a serious problem in Mississippi, according to a 2006 statewide survey conducted by researchers at the College of Health at the University of Southern Mississippi (USM). In addition, Mississippi adults show stronger support for public policies to address the problem than adults nationwide. For example, Mississippians were more favorable to the following:

- Requiring 30 minutes of daily activity in school (MS 94%, US 92%)
- Requiring nutrition, fitness, & health in school curriculum (MS 92%, US 91%)
- Offering only healthy school lunches (MS 87%, US 85%)
- Limiting elementary school vending machines (MS 79%, US 71%)
- Requiring BMI assessments for children in schools (MS 66%, US 51%)
- Banning school junk food ads (MS 62%, US 58%)

Officials Look for Solutions

Recognizing the seriousness of the problem in Mississippi, legislators, Governor's staff, members of the State Board of Education, and staff of the Department of Education studied the data on the prevalence of obesity in Mississippi, the consequences of childhood obesity, and public policy in other states. They examined initiatives implemented by other states, reviewing much of the legislation that had been introduced in 45 states during 2005 to address the increasing rate of childhood obesity, as well as similar action taken through regulation and policy.

Of particular note was legislation passed in Arkansas in 2003 that implemented a comprehensive initiative to reduce and prevent overweight among children. Data collected in subsequent school years indicates Arkansas may have halted the increase in the prevalence of overweight children.

Mississippi Takes Action

In 2006, the Legislature instructed the Department of Education to develop a wellness curriculum for use by each school district and establish rules and regulations to be followed by the districts in implementing the curriculum. The Legislature also mandated that the State Board of Education adopt regulations defining what products may be sold in vending machines on school campuses and when they can be sold (SB 2602, 2006 Regular Legislative Session).

The State Board of Education subsequently adopted rules and regulations that required schools to develop and implement wellness policies and restricted the products that could be sold in vending machines. Beverage regulations were designed to be phased in over two years beginning with the 2007-2008 school year. Snack regulations will be phased in over three years beginning with the 2006-2007 school year. Under the regulations, all full calorie, sugared carbonated soft drinks can no longer be sold to students in Mississippi schools during the school day. The only beverages that can be sold include bottled water, low-fat or non-fat milk, 100% fruit juices, no/low calorie beverages, and light juices/sports drinks. Standards for snack items vary by the type of snack product, and the Department of Education maintains a list of products meeting state standards.

In 2007, the Legislature passed the Mississippi Healthy Students Act (SB 2369, amending Mississippi Code of 1972 Annotated Section 37-13-134), which includes the following provisions:

- mandates minimum requirements for health education and physical education in public schools:
 - For grades K – 8, 150 minutes per week of physical education and 45 minutes per week of health education, and
 - For grades 9 – 12, ½ Carnegie unit in physical education or physical activity for graduation.

- designates an appropriation for a physical activity coordinator at the State Department of Education;
- makes the statutory duties of local school health councils mandatory rather than permissive;
- directs the State Board of Education to adopt regulations that address healthy food & beverage choices, healthy food preparation, marketing of healthy food choices to students & staff, food preparation ingredients & products, minimum & maximum time allotments for lunch & breakfast periods, the availability of food items during lunch & breakfast periods, and methods to increase participation in the Child Nutrition School Breakfast & Lunch Programs; and
- provides for the appointment of an advisory committee to advise the State Board of Education in developing these regulations.

The advisory committee submitted recommendations to the State Board of Education in October 2007. The State Board of Education subsequently adopted Nutrition Standards and Rules and Regulations for Physical Education and Health Education.

The Department of Education is using multiple strategies to support the implementation of the rules and regulations by Mississippi schools:

- Five Star Food Grant
- Nutrition Integrity Grant
- Committed to Move Grant
- Health in Action
- Health Is Academic – John D. Bower, M.D. School Health Network
- Excellence in Physical Education Certification Program
- Local School Wellness Policies
- 2007 Team Nutrition Grants
- TEAM Mississippi: A Partnership for Healthy Families

With funding from the National Governors' Association's *Healthy Kids, Healthy America Program*, through a project entitled *Preventing Obesity with Every Resource (POWER)*, the State Department of Health conducted an Environmental Scan of Obesity Efforts in Mississippi. The resulting report outlines the many ongoing activities in the state targeting childhood obesity, as well as identifies weaknesses in the state's overall approach and provides recommendations for improvements. The Department is planning to conduct a similar review of adult obesity prevention projects. Also under the POWER project, the State Department of Education is working with a wide range of stakeholders to develop a strategic plan for childhood obesity prevention policy development in Mississippi.

■ Summary

Childhood obesity is a critical health issue throughout the country and continues to have significant negative impacts in the State of Mississippi. Mississippians recognize the seriousness of the problem and support public policies to address the problem. At least one state, Arkansas, has demonstrated that comprehensive action can halt the rise in child obesity rates. Policymakers in Mississippi have studied the problem, examined policies implemented in other states, and taken action to address the issue.

More detailed information on the data, reports, briefs, laws, and regulations mentioned in this Issue Brief can be found on the Center's web site at www.mshealthpolicy.com.

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