Childhood Obesity and School Health Initiatives

Presentation at the Winter Conference of the MS Association of School Superintendents
January 23, 2007
Why Be Concerned about Overweight Children?

- 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.
The Problem is Getting Worse

Prevalence of Overweight among Children & Adolescents
1970-2004

It’s Worse Than We Thought

- The percentage of children found to be overweight is higher when data are collected through measured heights and weights than through self-reports.
- The prevalence of overweight in elementary and middle school children tends to increase by grade.
- Parents of overweight children often do not recognize that their child is overweight.
Now, The Good News

- In 2003, the Arkansas Legislature passed landmark legislation that implemented a comprehensive initiative to reduce and prevent overweight among children.
- Data collected during the 2004-05 and 2005-06 school years indicate that Arkansas may have halted the increase in the prevalence of overweight children.
# Arkansas’ Results

<table>
<thead>
<tr>
<th>Category</th>
<th>2003-04</th>
<th>2004-05</th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight</td>
<td>20.9%</td>
<td>20.8%</td>
<td>20.4%</td>
</tr>
<tr>
<td>At Risk</td>
<td>17.2%</td>
<td>17.2%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Healthy Weight</td>
<td>60.1%</td>
<td>60.1%</td>
<td>60.6%</td>
</tr>
<tr>
<td>Underweight</td>
<td>1.8%</td>
<td>1.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Total Students Assessed</td>
<td>348,710</td>
<td>372,369</td>
<td>371,082</td>
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</tbody>
</table>

Source: Arkansas Center for Health Improvement. Tracking Progress: The Third Annual Arkansas Assessment of Childhood and Adolescent Obesity. August 2006.
What Did Arkansas Do?

- Required annual BMI* reports on each child to be sent to the child’s parents
- Set limitations on vending machine products
- Created advisory committees at the state, district, and school levels
- Mandated an annual assessment of each school using CDC’s School Health Index and required the assessment results be included in the each school’s improvement plan.
- Restricted access to Foods of Minimal Nutritional Value

*BMI=Body Mass Index. BMI is calculated from the child’s height and weight and is considered a proxy measure for body fat.
Arkansas Initiative (Continued)

- Prohibited schools from providing extra servings of certain foods (e.g. desserts, french fries, or ice cream) in elementary schools
- Developed grade-appropriate academic content standards and learning expectations for nutrition education and integrated nutrition education into the curriculum
- Required at least 30 minutes of physical activity each day in grades K – 12
- Required a minimum level of physical education per week that varies by grade level
- Required that there be at least one certified FTE physical education teacher for every 500 students in grades K-6

Note: Many of these recommendations are designed to be phased in over several years.
Other States Began Following Suit

- In 2005, legislation was introduced in 45 states to address the increasing rate of obesity among children.
  - Nutrition Standards: 38 states considered and 18 enacted
  - BMI Assessment: 15 states considered and 3 enacted
  - Physical Education: 39 states considered and 22 enacted
  - Nutrition Education: 20 states considered and 9 enacted
- In 2006, at least 23 states considered legislation relating to school nutrition standards and 34 states reviewed bills to enhance physical education requirements.
- States have also taken similar action through regulation and policy.
Mississippians Support Many of These Actions to Address Childhood Obesity

- Researchers at the College of Health at the University of Southern Mississippi surveyed a representative sample of adults in Mississippi about their opinions and attitudes regarding childhood obesity and related policies.
- The survey mirrored a national survey conducted by Harvard School of Public Health for the Robert Wood Johnson Foundation.
- About 95 percent of Mississippi adults surveyed considered childhood obesity to be a serious problem.
Survey Results

- Support was expressed for the following:
  - Requiring 30 minutes of daily activity in school (94%)
  - Requiring nutrition/fitness/health in school curriculum (92%)
  - Offering only healthy school lunches (87%)
  - Limiting elementary school vending machines (79%)
  - Requiring BMI assessments (66%)
  - Banning school junk food ads (62%)

What Mississippians Think

- Policies not supported:
  - Limiting fast food outlets near schools (40.6%)
  - Banning TV junk food ads during kids’ shows (45.5%)

- Mississippi adults support most initiatives more strongly than adults nationwide.

Mississippi vs. National Opinion

Support for Initiatives: Mississippi Compared to the Nation

- Require 30 minutes of daily activity in school
- Require nutrition/fitness/health in curriculum
- Offer only healthy school lunches
- Limit elementary school vending machines
- Require BMI assessment of children
- Ban school junk food ads
- Limit fast food outlets near schools

Mississippi Legislation in 2006

- Section 18 of SB 2602
  - Required the State Board of Education to develop a wellness curriculum for use by each school district and to establish rules and regulations governing the curriculum.
  - Required the State Board of Education to adopt regulations concerning what products may be sold in vending machines on campus and when they can be sold.
Federal Law

- Public Law 108-265, the Child Nutrition and WIC Reauthorization Act of 2004, required each local educational agency participating in the School Lunch Program to establish a local school wellness policy.
School Wellness Principal Survey

- Researchers at USM surveyed school principals to assess the status of school health policies and programs.
- Of 882 principals, 369 participated in the survey.
  - Elementary Schools – 38.8%
  - Middle/Jr. High Schools – 15.2%
  - High Schools – 20.9%
  - K – 6 or K - 8 – 16.3%
  - Other – 7.2%
Health Education, Physical Education, and Nutrition Education

Distribution of Schools by Percentage of Students Receiving Sequential Health Education Curriculum, Sequential Physical Education Curriculum, or Nutrition Education as Part of Structured and Systematic Unit of Instruction

Health Education, Physical Education, and Nutrition Education

Distribution of Schools with More than Half of Students Receiving Sequential Health Education Curriculum, Sequential Physical Education Curriculum, or Nutrition Education as Part of Structured and Systematic Unit of Instruction

Percentage of Schools With No Qualified/Certified Health Education or Physical Education Teacher

Degree to Which Health Education or Physical Education Teachers Are Qualified/Certified

Distribution of Schools by Percentage of Those Teaching Health Education or Physical Education Who Are Qualified/Certified

0% 20% 40% 60% 80% 100%

0-33.3% 33.4-66.6% 66.7-100%

Health Education Physical Education

Average Number of Minutes Students Were in PE Each Week

Average Number of Minutes per Week

Foods Served During Average Week

- Dark Green/Orange Vegetables or Fruits: 37.4% Daily, 52.5% At Least Three Times
- 2 or More Sources of Iron: 39.1% Daily, 46.6% At Least Three Times
- Fresh Fruits: 40.0% Daily, 45.3% At Least Three Times
- Whole Grain Foods: 21.5% Daily, 48.8% At Least Three Times
- Raw Vegetables: 21.7% Daily, 43.3% At Least Three Times

Schools Offering Beverages Other than Low-fat Milk, 100% Juice, & Water

Schools Selling Competitive Foods and Beverages

Where are competitive foods and beverages sold?

Local Wellness Policy Implementation

- Developed Wellness Policy: 75.9%
- Exceed Minimum Requirements: 27.4%
- Conducted Needs Assessment: 43.9%
- Implemented All 5 Minimum Requirements: 44.4%
- Established School Health Council: 64.5%

Awareness of Local Wellness Policy

Status of Current Legislation

- HB 732
  - Passed the House; will be transmitted to the Senate for consideration
  - Addresses physical education, health education, and nutrition standards
HB 732 Highlights

Physical Education & Health Education

- Requires the following for students in Kindergarten through Grade 8:
  - 150 minutes per week (instruction must be a minimum of three (3) days per week) of activity-based instruction, and
  - Forty-five (45) minutes per week of health education instruction.

- Requires the following for students in grades 9-12:
  - ½ Carnegie unit requirement for graduation, and
  - All instruction in physical education and health education must be based on the most current state standards provided by the State Department of Education.
HB 732 Highlights

Nutrition standards

- Requires the State Board of Education to develop regulations for School Breakfast and Lunch Programs that will address food preparation methods with the following goals in mind:
  - Reduce or eliminate saturated fat,
  - Reduce amounts of sugar and sodium,
  - Eliminate any non-naturally occurring trans-fatty acids,
  - Use 100% whole grain product whenever possible, and
  - Eliminate the frying of food items.

- Regulations to be effective July 1, 2008.
HB 732 Highlights

- Body Mass Index
  - Requires each school district to calculate an annual body mass index (BMI) for every student and provide the information to the parents along with an explanation of BMI, the benefits of physical activity and proper nutrition, and resources that promote and encourage a healthy lifestyle.
SB 2369

- Contains similar provisions related to physical education and health education as HB 732
- Does not contain provisions related to BMI measurement or nutrition standards
- A Committee Substitute bill has passed the Senate Education Committee and is referred to the Senate Appropriations Committee
Summary

- Mississippi children suffer from an alarming rate of overweight that continues to rise.
- Mississippi policy makers are aware of the problem and are considering adopting best practices from other states.
- There is broad public support for these efforts.
- There is considerable variation in the current status of local school wellness policies and programs.
Questions?

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