September 2011

Parent Youth and Policymaker Perspectives on the Mississippi Healthy Students Act of 2007: Year 3 Findings

Submitted to:

The Center for Mississippi Health Policy

Prepared by:

Childhood Obesity Research Team*
Family & Children Research Unit
Social Science Research Center
Mississippi State University

Funded by The Robert Wood Johnson Foundation

*Team Members
Dorris Baggett, M.S.
Troy Blanchard, Ph.D.
Anne Buffington, B.S.
Jonelle Hussein, M.S.
Colleen McKee, M.S.
David Parrish, M.S.

Research Students/Assistants Meghan Dunaway, B.F.A. Benjamin Fay, B.S. Trey Thompson, B.A. Ben Walker, B.S.







TABLE OF CONTENTS

EXECUTIVE SUMMARY AND KEY FINDINGS	4
INTRODUCTION AND BACKGROUND	12
Continuing Importance of the Study: Childhood/Adult Obesity Rates	12
Overview of Evaluation: Year Three Findings, Comparison of Years 1 and 2 Findings	13
Social Climate Approach	14
PARENTS AND ADOLESCENTS	14
Goals of the Parent Surveys	14
Goals of the Adolescent Surveys	15
Methodology	15
Telephone Survey of Parents and Children	16
Findings	16
Family nutrition practices/knowledge	23
Family/child Activity Levels	27
Body Mass Index (BMI)	34
Parents' support of future policies	38
POLICYMAKERS: State Board of Education, State Board of Health & Mississippi State District	Public Health
Officers	46
Overall Methodology	46
Mississippi State Board of Education	47
Measuring Success	49
Strengthening School Policies	50
Obstacles Schools Face in Meeting Physical Education and Nutrition Requirements	52
Comparison of Themes	53
Year One Themes	53
Year Two Themes	54
Year Three Themes	54
Mississippi State Board of Health	56
Comparison of Themes	60
Year One Themes	60
Year Two Themes	61
Year Three Themes	61
District Health Officers	62
Comparison of Themes	68
Year One Themes	68
Year Two Themes	69
Year Three Themes	69
Public School District Superintendents and School Board Members	70
Methodology	71
Telephone Survey of Public School Superintendents	71

Survey of School Board Members	71
Findings	72
School Board Policies: School Nutrition and School Activity	
REFERENCES	90
APPENDIX A	91
APPENDIX B	155
APPENDIX C	160
APPENDIX D	182

EXECUTIVE SUMMARY AND KEY FINDINGS

The Mississippi Healthy Students Act of 2007 was enacted by the Mississippi Legislature to address the relationship between student inactivity and obesity. The goal of the Act is to improve the physical activity, nutrition and health education instruction for students in kindergarten through 12th grade. Specifically, the Act mandates 45 minutes per week of health education instruction and 150 minutes per week of activity-based instruction in Grades K-8. All students in Grades 9-12 must have a ½ Carnegie Unit in health education and ½ Carnegie Unit in physical education in order to graduate.

The overall purpose of the 2011 report is twofold: 1) provide the third year of data from parents, youth, as well as local, district and state level policymakers to assess the implementation status of the Mississippi Healthy Students Act of 2007 and 2) compare findings from Year Three (2011) to both Year One (2009)¹ and Year Two (2010) data.²

Key Findings: Parents of Public School Students

Beginning February through June 2011, telephone surveys were completed by 3,641 parents who had at least one child attending Mississippi public schools in the 2010-2011 academic year. Overwhelming parental support for various components of the Mississippi Healthy Students Act of 2007 was evident in the following areas:

- Parents continue to be extremely supportive of physical education requirements for all students at 96.3% (2011), compared to 96% (2010), and 96.6% (2009).
- Parents continue to be strongly supportive of schools which offer only healthy foods to children and increase physical education 92.7% (2011) compared to 95.9% (2010) and 95.6% (2009).
- While the percentage of parents has declined from 50.2% (2009) to 45.2% (2011) who stated that only healthy items should be offered to students via school vending machines; there was an

- increase from 21.2% (2009) to 24.6% (2011) of parents who stated that schools should not have vending machines available to students.
- As in 2010 (Year Two) an alarming finding came from reports of parents of young children (ages 5-6 years). Parents were more likely to report their younger children as being obese, compared to parents of older aged children. In fact, 35.2% of parents in 2011 (Year Three) reported their young child as being obese with an additional 15.0% noting that their child was overweight, based upon BMI calculations conducted by the research team using parent's report of the child's height and weight. This resulted in 50.2% of very young children being reported by their parents as overweight or obese. In 2010 parents of young children (age 5-6 years of age) were more likely to report their child as being obese, compared to parents of older aged children. In fact, 47.2% of parents reported their young child as being obese with an additional 13.6% noting that their child was overweight, based upon BMI calculations conducted by the research team, resulting in 60% of very young children being overweight or obese. The good news is that this percentage is down from 2010; however, it must be noted, as in 2010 that this is from a very small sample, from the random state-wide sample of parents of public school children in Mississippi.
- Children whose BMIs were within normal weight limits were 1.5 times more likely to make A's &
 B's compared to children who were overweight and obese.
- Children who live in households with higher income levels were 3-4 times more likely to have a normal weight compared to children who were obese.

There was less awareness reported on other key components that promote healthy school environments, such as:

 Of the 3,641 parents responding in 2011, approximately one fifth (21.5%) stated that their child's school had a health committee, council or task force, very similar to 21.7% in 2010 and lower than one fourth (25.6%) in 2009.

Within their home environments, parents reported the following:

- More than forty percent (44.3%) of parents in 2011 reported serving sodas to their families 4-7 days per week; this has improved over 46.3% (2010), but still higher than 35.8%(2009).
- Parents reported a decrease in the level of physical activity by 4.5 % in 2011, compared to 4.3% in 2010 and 5.8% in 2009. In addition, 48% of parents reported an increase in the amount of physical activity among family members in 2011 compared to 58.7% (2010) and 46.7% (2009).

When asked about their support of *potential* new school policies, parents reported the following:

- The majority of parents 79.6% (2011) continued to be supportive of schools collecting information on children's height and weight and giving the report to parents compared to 82.1% (2010) and 85.3% (2009).
- Of parents in 2011, 43% reported that public school facilities are available for individuals within the community to use for physical activity outside the school hours.

Key Findings: Youth

During the same time frame that parents were interviewed (February through June 2011), telephone surveys were completed on 210 youth (age 14 and over) who attend public schools and whose parents gave permission to interview the youth. The sample sizes for this year remain too small to make generalizations; however, the adolescents' answers do give voice to several areas that impact child and youth obesity since data is now available for three years.

Regarding health education in school, this finding remained very high, with almost ninety percent
(88.1%) of adolescents surveyed in 2011 reporting that they had learned the importance of healthy
eating and physical activity in maintaining a healthy weight compared to 84.6% (2010) and 88.7%
(2009).

• There has been an increase in the percentage of teens reporting that there are limits to television watching/playing video games to 45.7% (2011); 42.7% (2010) and 34.7% (2009).

Key Findings: State and District Policymakers

In addition to parents and youth, policymakers at the state level and district levels are clearly important to the success of the Mississippi Healthy Students Act of 2007. For these groups of individuals, the primary methodology was a qualitative approach, although there were some questions that resulted in respondents providing quantitative responses. As in previous years of the evaluation of the Healthy Students Act of 2007, researchers in 2011 also employed a mixed-method of interviews (i.e., telephone, face-to-face and electronic responses) with the following groups of policy and decision-makers: Mississippi State Department of Education Board Members, Mississippi State Board of Health Members and Mississippi State Department of Health District Health Officers. All of these groups continued to consistently rank the prevention of childhood obesity as a very important issue in Mississippi. While the interview guides were tailored to each group of policymakers to some degree, there was also considerable overlap among many items, in order to make valid comparisons among groups interviewed.

Key Findings: Mississippi State Department of Education Board Members

Of the nine State Board of Education members, six agreed to complete an interview, yielding a response rate of 66.7%. Some of the qualitative themes identified among this group of interviews included:

- Recognition that there must be a balance between academics and promoting health—one that
 recognizes that healthy students perform better academically. Positive opinions about the
 Mississippi Healthy Students Act of 2007 were held by Board of Education members, noting that
 this Act continues to be timely and necessary.
- Recognition that reducing obesity and improvement of Mississippi's students requires a collaborative effort among many different state agencies and stakeholder groups.

 Unanimous recognition that the prevention and reduction of childhood obesity continues to be an important goal, given both short-term and long-term consequences of obesity.

Among the quantitative findings from the interviews, the Mississippi State Board of Education members, as a group, had the following responses: (Note: For a full description of 2011 responses, as well as comparisons to 2009 and 2010 responses, see Appendix B).

- On a scale of 1 5, with 5 being the most important, Mississippi Board of Education members, on average, reported that the prevention of childhood obesity was very important (5).
- Mississippi Board of Education members responded that current policies could be more effective in addressing childhood obesity.

Board of Education members were asked to rank target areas by level of importance with 5 being the most important and 1 being the least important. The most important category was decreasing the consumption of high calorie, dense foods (4.8), followed by increasing consumption of fruits and vegetables (4.4), followed by increasing physical activity and decreasing consumption of sugary beverages (each 4.2), with the lowest ranking (3.2) for decreasing screen time.

Key Findings: Mississippi State Department of Health Board Members

Of the eleven State Board of Health members, five agreed to complete an interview, yielding a response rate of 45.4%. Of these respondents, the Board of Health members reported:

- Recognition that collaboration at both state and local level and interagency collaboration is needed for effective obesity prevention and reduction strategies.
- Recognition that addressing childhood obesity is as important as academic achievement.

- Recognition that by educating and influencing children on healthy habits will, in turn, influence family members.
- On a scale of 1 5, with 5 being the most important, Board of Health respondents, on average,
 reported that the prevention of childhood obesity was very important (5.0).
- Board of Health members were asked to rank target areas by level of importance with 5 being
 the most important and 1 being the least important. Respondents noted that increasing physical
 exercise and decreasing consumption of sugary beverages had the highest ranking (5.0),
 increasing children's consumption of fruits and vegetables had the next highest ranking at (4.8),
 followed by decreasing the consumption of high calorie, dense foods (4.6) and, encouraging
 breast feeding at 4.4.

Key Findings: Mississippi State Department of Health District Health Officers

Six out of six Mississippi State Department of Health District Health Officers completed an interview, yielding a response rate of 100%. Among qualitative findings, some of the themes that emerged are noted below:

- Recognition that district and county level health departments have important roles in obesity prevention.
- Recognition that collaboration among stakeholders is extremely important, including agencies, institutions and parents in prevention of childhood obesity.
- Recognition that assessment of the Healthy Students Acts of 2007 is critical and should be a multi-dimensional assessment.

Among the quantitative findings from the interviews, the Mississippi State Department of Health District Health Officers, as a group, had the following responses when asked to rate the importance of various areas that can be addressed by public health to combat childhood obesity: increasing physical

activity, increasing consumption of fruits and vegetables and decreasing consumption of sugary beverages all scored the highest (5) on a 5 point scale. These were followed closely by the following: decreasing consumption of high calorie, dense foods (4.8) decreasing children's screen time (4.7) and encourage breast feeding (4.7).

Key Findings: District Superintendents of Education

Telephone surveys were conducted from early July to early August, 2011 with 100 superintendents completing surveys. Key findings included the following:

- School superintendents reported in 2011 (92%) that their communities were either very supportive
 or somewhat supportive of promoting physical education, nutrition and health education in their
 schools, compared to 83.7% (2010) and 90% (2009), with the most change occurring positively in
 the very supportive category.
- In 2011, 85% of superintendents noted the presence of a health council within their school district,
 reflecting an increase of 20.6% from 2010, when 64.4% of school superintendents noted the
 presence of a school council in their district.
- In 2011, 57% of superintendents responded that it is "very important" with an additional 37% responding that it is "moderately important" to provide staff wellness programs. This has remained fairly constant with 2009 and 2010 findings.
- In 2011, school superintendents (23%) reported that their school districts have adopted a policy to prohibit the use of food or food coupons as a reward for good behavior or good academic performance. This reflects an 8.7% decrease from the 2010 finding of 31.7%. In 2009, 23.6% of school superintendents surveyed had adopted such a policy.
- More than 4 in 5 (82%) of school superintendents, in 2011 noted that they are in favor of collecting
 BMIs on children, and of these, 95.1 % of those superintendents are in favor of sending BMI results

home to parents. While not statistically significant from previous years, this is higher than in previous years [i.e., 76.4% (2009) and 62.5% (2010)].

Key Findings: Local School Board Members

Paper surveys were administered during 2011, with 278 usable surveys returned.

- School board members (43.9%) reported that their district does have a health council within each school of their district, compared to 33.3% in 2009, and reflects a statistically significant increase.
- School board members (15.4 %) reported that their school districts have adopted a policy to prohibit
 the use of food or food coupons as a reward for good behavior or good academic performance with
 an additional 16.2% of school board members noting that they recommend against this.
- Approximately two-thirds (67.1%) of school board members in 2011 reported the level of community support on promoting physical education, nutrition and health education within the schools as either very or somewhat supportive, compared to 72.9% in 2010 and 80% in 2009.
- School board members (63.8%) in 2011 noted that they are in favor of collecting BMIs on children, and 79.4 % of those school board members are in favor of sending BMI results home to parents. This is very similar to findings from 2010 (63.6%) and 2009 (61.3%), yet still much lower than school superintendents, of whom 82% are in favor of collecting BMIs and of these 95.1% are in favor of sending results to parents.

In sum, there continues to be a strong awareness of childhood obesity as an important problem in Mississippi among parents and policy makers. As in previous years, more than ninety five percent (96.3%) of parents are supportive of schools offering only healthy food to children and also increasing children's physical education. Almost one half (48%) of parents reported an increase in physical activity in their families. As in previous years, parents reported that they are trying to make healthy improvements within their households, yet this is not reflected in the high amount of

servings of soft drinks within their households in each of the three years of the study, to date. Increasingly, youth report limits to their screen time, specific to television watching and playing video games, with 45.7% reporting a limit, the highest percentage of the three years of the study. Almost ninety percent (88.1%) of youth report they have learned about the importance of healthy eating and physical activity in maintaining a healthy weight, through health education in their schools. Among parents, school board members and school superintendents there is a wide range of awareness of a school health council within their districts, from a low of 25% awareness by parents to a high of 85% awareness by superintendents. In addition, there is strong support for both fitness and BMI assessments to be conducted with reports being sent to parents, particularly by school superintendents and parents.

Among state level policy makers (Mississippi State Board of Health, District Health Officers and Mississippi State Department of Education Board Members), there is consensus that collaboration among agencies and education with parents and youth are critical components of curbing and preventing childhood obesity. Overall, there continues to be strong support for the on-going implementation of the Healthy Students Act of 2007.

INTRODUCTION AND BACKGROUND

Continuing Importance of the Study: Childhood/Adult Obesity Rates

Since the Year One report¹ of the evaluation of the Mississippi Healthy Students Act of 2007, evidence continues to mount that environmental influences, particularly those environments in which children and adolescents spent the majority of their time (i.e., schools and homes), influence the health and well-being of children and adolescents. This was reported in Year One¹ and Year Two² reports, but also by the Centers for Disease Control³ (CDC) and a multitude of additional research.⁴ In addition to the well-publicized reports of health consequences and diminished length and quality of life, there are also economic consequences to the rising rate of childhood and adult obesity.

These economic consequences include, but are not limited to, increases in health costs such as insurance, hospitalizations and prescription. There have been substantial increases in the costs of Medicare, Medicaid and private insurance among obese patients. In addition, the increased hospital costs among obese adults was approximately 3 ½ times higher between 2006-2008 and among obese children, the increase in costs of hospitalizations are almost 2 times higher than the costs of hospitalizations between 2001-2005. Given the aforementioned research, nationally, along with Mississippi-specific research findings (Report Year Two)², it is clearly important to note on-going research findings. In doing so, continuing to track associations, measuring statistical and practical significance and noting some potential trends among Mississippi's children, adolescents, families and communities will serve to increase knowledge and promote policies that hold strong promise in not only curbing, but eventually reversing the obesity epidemic in Mississippi.

More recently (June, 2011)⁶, the American Academy of Pediatrics (AAP) issued a new policy statement on obesity related to media. Dr. Victor Strasburger who led the revision of this policy statement noted, "We've created a perfect storm for childhood obesity—media, advertising, and inactivity." This builds upon earlier AAP policy statements promoting additional physical activity, expansion of school physical education and promotion of activity levels at the community level. ⁷

Overview of Evaluation: Year Three Findings, Comparison of Years 1 and 2 Findings

The third year of the evaluation began in January, 2011 and provided researchers with three distinct data points, since the implementation of the Healthy Students Act of 2007 legislation. While differences among the three years will be reported, there will be a focus upon differences that are statistically significant, as well as changes that whether statistically significant or not, are notable changes. Given that Year Two of the report focused comparisons between Year One¹ and Year Two², this report (Year Three)³ will focus primarily on differences between Year Two and Year Three, but also differences between Year One and Year Three, particularly if statistically significant.

Social Climate Approach

As in Years 1 and 2, the Social Science Research Center (SSRC) research team utilized a social climate approach in assessing parents, adolescents and policymakers' knowledge, beliefs and practices on a particular topic. A social climate approach considers one particular topic and measures how the knowledge, attitudes and beliefs of an array of individuals and institutions, separately and collectively over time, influence the norms of a society that are related to that topic. The evaluation of school-related policies of the Mississippi Healthy Students Act of 2007 and associated rules and regulations lend itself to using a social climate approach. In order to examine the social climate of childhood obesity and school-related policies, the SSRC utilized a variety of methods to gauge social norms among the following groups: 1) parents of public school children and adolescents attending public schools and 2) local and state-level decision-makers, including the following: State Board of Health and State Board of Education members, Superintendents, School Board members, and District Health Officers.

PARENTS AND ADOLESCENTS

Goals of the Parent Surveys

As in 2009 and 2010, the 2011 parent survey was conducted to evaluate parental attitudes in family environments and in children's health behaviors during the evaluation period. The overall purpose of the parent survey was to determine changes between 2010 and 2011, and to compare the 2011 results to the baseline findings of 2009. The comparisons determine changes and potential trends related to parental beliefs about school health policies, family knowledge, attitudes, practices and constraints on children's health and health behaviors, with special attention on variables influencing children and adolescents' weight. In Year Three, the research team sought to determine parental knowledge of and attitudes toward the Mississippi Healthy Students Act of 2007.

Similar to Years 1 and 2, it was important to understand the attitudes, practices and constraints within family environments around healthy eating and exercise. This understanding was critical in knowing a) how receptive the parents/families may be toward school health policies, and in turn, how these families may influence the enforcement of local school policies and b) to what extent any emerging change (or lack thereof) in children's practices may be attributed, in part, to family factors. By documenting nutrition and physical activity patterns in the home environment, correlations of changes in children's health can be more easily identified (e.g., it can be determined if changes, or a lack thereof, are likely due to nutrition and/or physical activity patterns, and to what degree any alterations occurred at school versus at home environment).

In order to make comparisons across the nine (9) Mississippi public health districts, a sample of 400 respondents per district was needed. The sample for Year Three consisted of 3,641 respondents, similar in size to Year One (3,710 respondents) and Year Two (3,755 respondents).

Goals of the Adolescent Surveys

The goals of the 2011 adolescent survey were consistent with those of 2009 and 2010. Understanding the attitudes, practices and constraints within the youths' familial environments *from the youths' perspective* around healthy eating and exercise was critical in understanding similarities and/or differences that exist between parental reporting and youth reporting of factors influencing youth overweight and obesity, while also making comparisons among all three (3) years.

Methodology

Please note: In each of the following sections, all methodologies were approved by Mississippi State University's Institutional Review Board for Human Subjects prior to the data collection, and each member of the Research Team was trained in Human Subjects protection.

Telephone Survey of Parents and Children

Surveys were conducted by the Wolfgang Frese Survey Research Laboratory of the Social Science Research Center at Mississippi State University. The Mississippi Department of Education provided the telephone numbers of all parents in the state of Mississippi who had at least one child enrolled in a public school during the 2010-2011 school year. From this database of approximately 491,540 telephone numbers, a random sample of 3,641 numbers was drawn. The data collection period spanned from early February, 2011 to early July of 2011.

As in Years 1 and 2, adolescents surveyed in Year Three were 14 years of age or older, and a parent had given permission for the survey to be conducted. In 2011, a total of 210 adolescents answered questions about nutrition standards and vending machines, physical education and physical activity, and health education and health knowledge, compared to 260 adolescents in 2010 and 150 adolescents in 2009. The sampling error for the total dataset (binomial response option with 50/50 split) is no larger than + or – 3.5% with a 95% confidence interval. Telephone numbers were dialed a maximum of eight times. There was a cooperation rate of 55.9%.

Findings

Of the 3,641 adults who answered the survey in 2011, there was a general awareness and support of school policies related to decreasing childhood obesity and overweight.

- Parents (96.3%) continued to be extremely supportive that schools require physical education to all students, compared to 96.6% and 96% in 2009 and 2010, respectively.
- Parents (92.7%) continued to be strongly supportive that schools offer only healthy food to children
 and to increase physical education compared to 95.6% and 95.9% in 2009 and 2010, respectively.

Figure 1

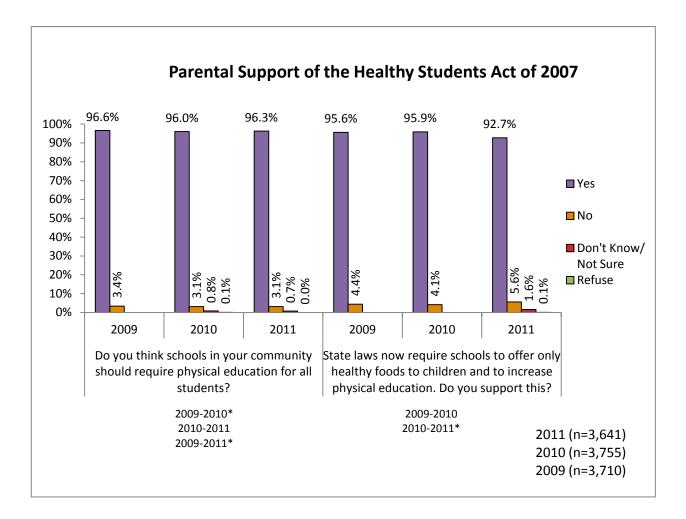


Figure 2

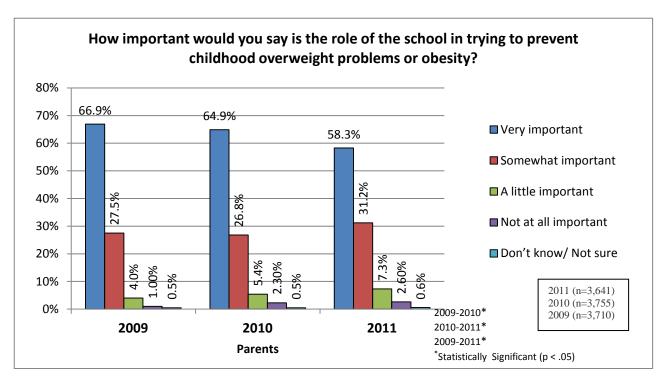
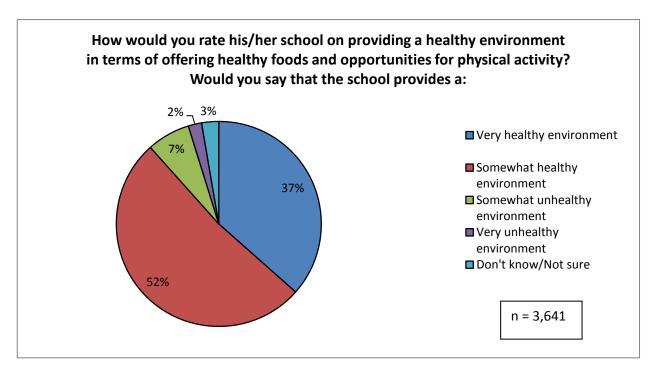


Figure 3



When asked about specific changes within the school environment in the following areas (all components of the Mississippi Healthy Students Act of 2007), parents reported the following:

Table 1

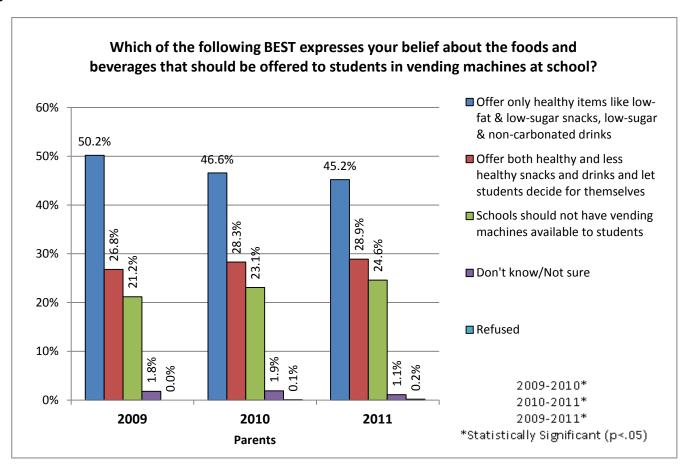
Are you aware of any changes in vending machines, school lunch choices, or physical exercise requirements at his/her school?						
					Percent	
RESPONSE	2010	%	2011	%	Change	
Yes	1385	36.9	1228	33.7	-3.2	
No	2329	62.0	2339	64.2	2.2	
Not sure	41	1.0	73	2.0	1.0	
Refused	0	0.0	1	0.0	0.0	
Total	3755	100	3641	100	YES <.05	

Does his/her school have a health committee, council or task force?						
					Percent	
RESPONSE	2010	%	2011	%	Change	
Yes	813	21.7	784	21.5	-0.2	
No	1637	43.6	1329	36.5	-7.1	
Not sure	1305	34.8	1525	41.9	-7.1	
Refused	0	0.0	3	0.1	0.1	
Total	3,755	100	3,641	100	YES <.05	

Are you aware of any changes in vending machines, school lunch choices, or physical exercise requirements at his/her school? Percent **RESPONSE** 2009 % 2011 % Change Yes 1,634 44.0 1228 33.7 -10.3 No 1,959 52.8 2339 64.2 11.4 Not sure 114 3.1 73 2.0 -1.1 Refused 3 0.1 1 0.0 -0.1 100 Total 3,710 3641 100 YES <.05

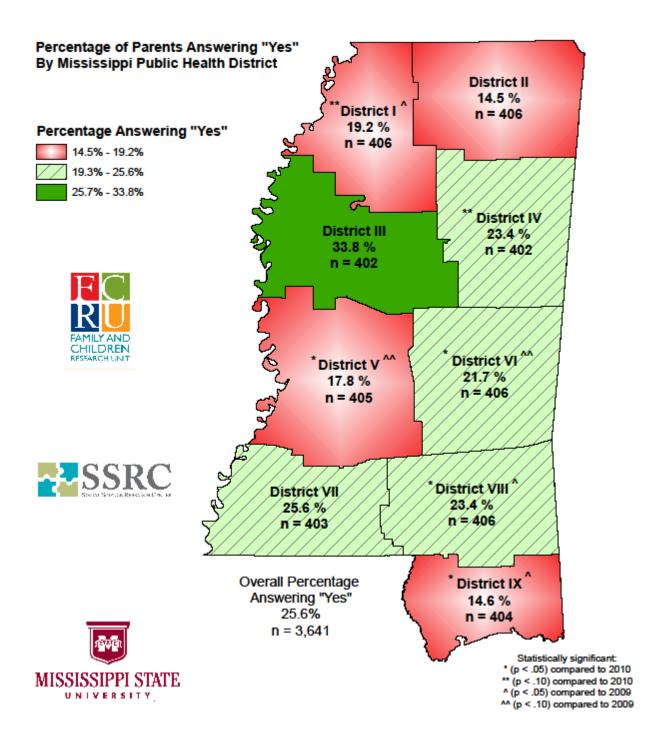
Does his/her school have a health committee, council or task force?						
RESPONSE	2009	%	2011	%	Percent Change	
Yes	951	25.6	784	21.5	-4.1	
No	1401	37.8	1329	36.5	-1.3	
Not sure	1357	36.6	1525	41.9	5.3	
Refused	1	0.0	3	0.1	0.1	
Total	3,710	100	3,641	100	YES <.05	

Figure 4



Please note for each of the maps in this report: Three group ranges were chosen to geographically illustrate the survey results for nine Mississippi health districts. These ranges represent a relative high, medium and low percentage range for respondents answering "yes" to each question. The classification method for determining the class intervals of these data is the Jenks' natural breaks method. This standard grouping method is part of ESRI's (Environmental Systems Research Institute) ArcMap® software. In general terms, the breaks in data are determined statistically by finding relatively large differences in adjacent values. Subsequently, each value is placed in one of the three categories.

Figure 5. Does His/Her School Have a Health Committee, Council or Task Force? 2011



Family nutrition practices/knowledge

- In 2011, 78% percent of parents and 70% of youth reported trying to eat healthier within the past year.
- 44.3% of parents and youth reported they drink sodas 4-7 days each week.
- When asked, "How many servings of fruits and vegetables should an individual eat," the vast
 majority of adults (75.5%) and youth (79.5%) reported 1-4 servings. The majority of parents (87.5%)
 reported that their child regularly eats breakfast.

Figure 6

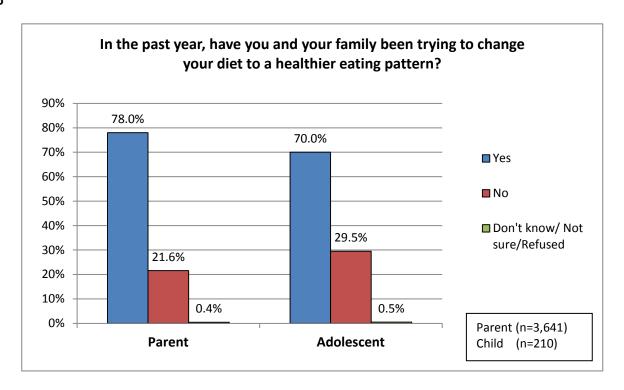
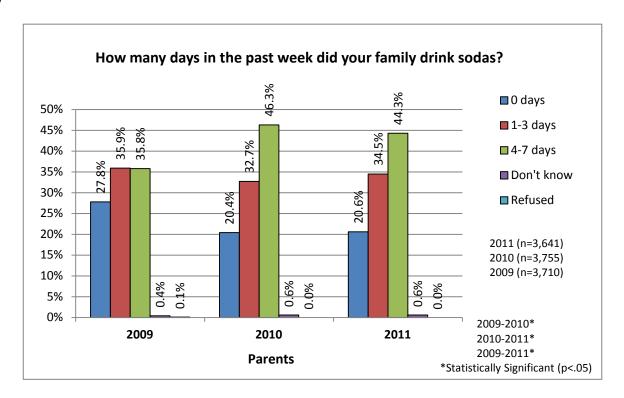


Figure 7



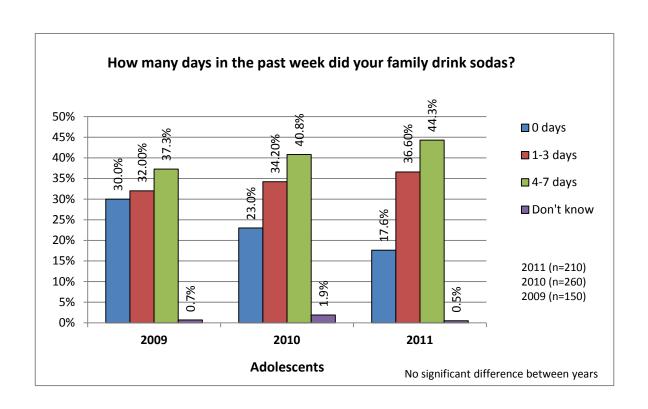
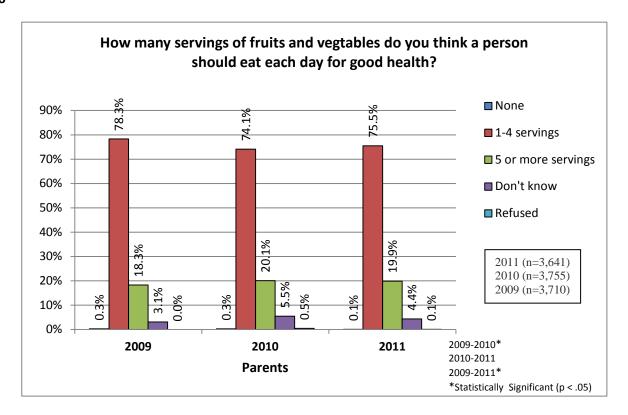


Figure 8



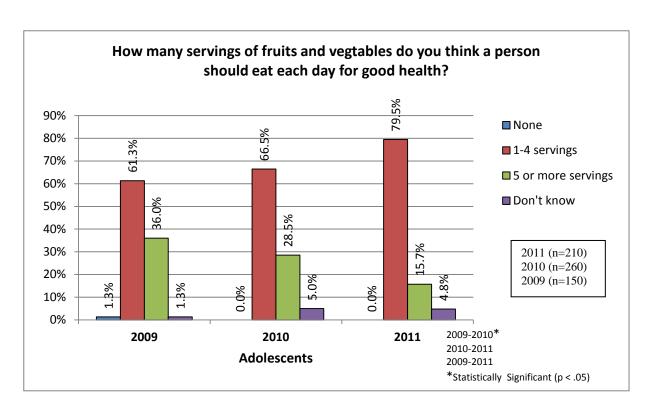


Figure 9

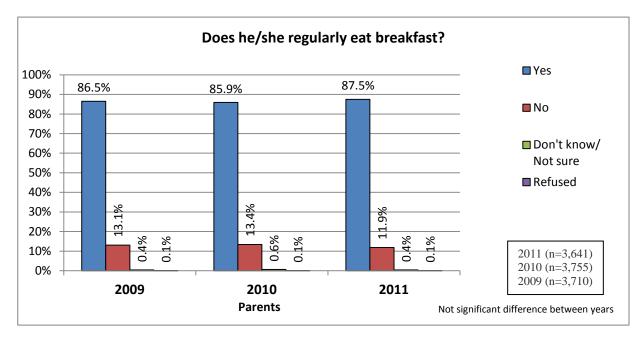
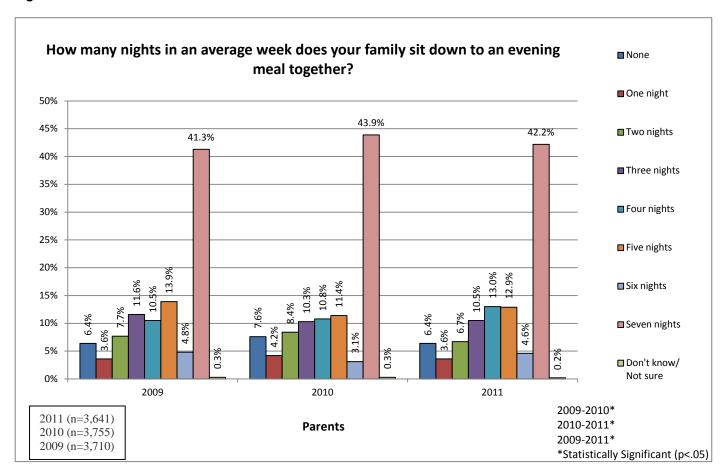


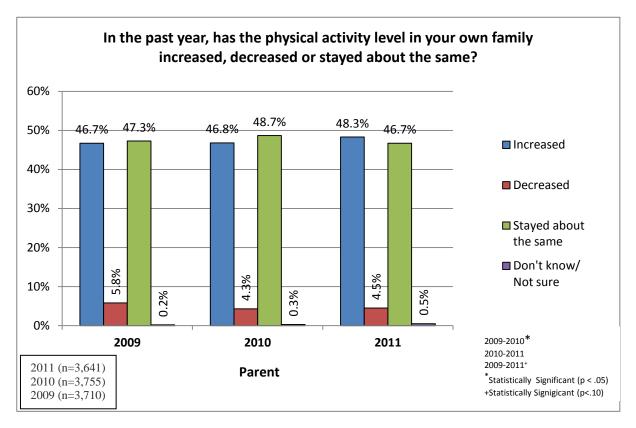
Figure 10



Family/child Activity Levels

In 2011, 48.3% of parents reported that the physical activity level in their family increased, reflecting a similar percentage from previous years: 46.7% (2009) and 46.8% (2010).

Figure 11



There has been a steady increase over the past three years in the percent of adolescents reporting that they have limits on the amount of time that they are allowed to watch television and play video games. These percentages are as follows: in 2009 (34.7%), in 2010 (42.7%) and in 2011 (45.7%). There has also been a decrease over the same time period of the percentage of adolescents reporting that they have a television in their bedroom (72.9%), while there has also been an increase in the percentage of adolescents reporting they have a computer in their bedroom (31%).

Figure 12

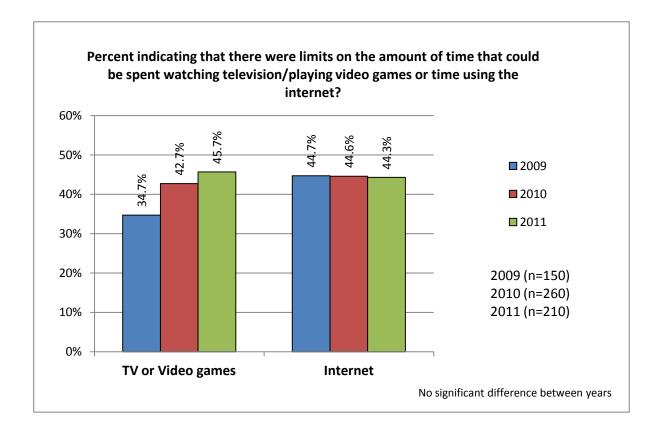
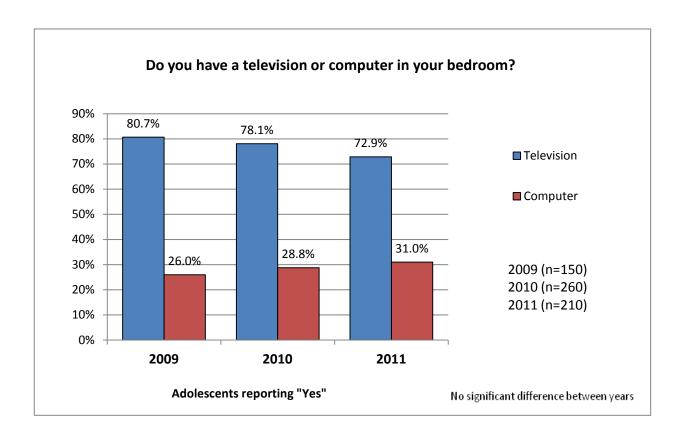
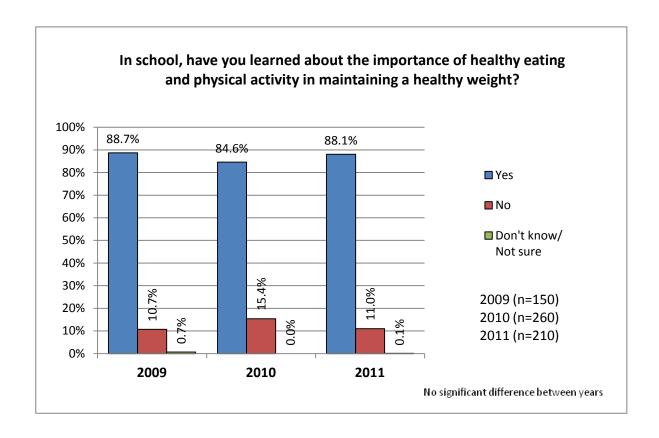


Figure 13



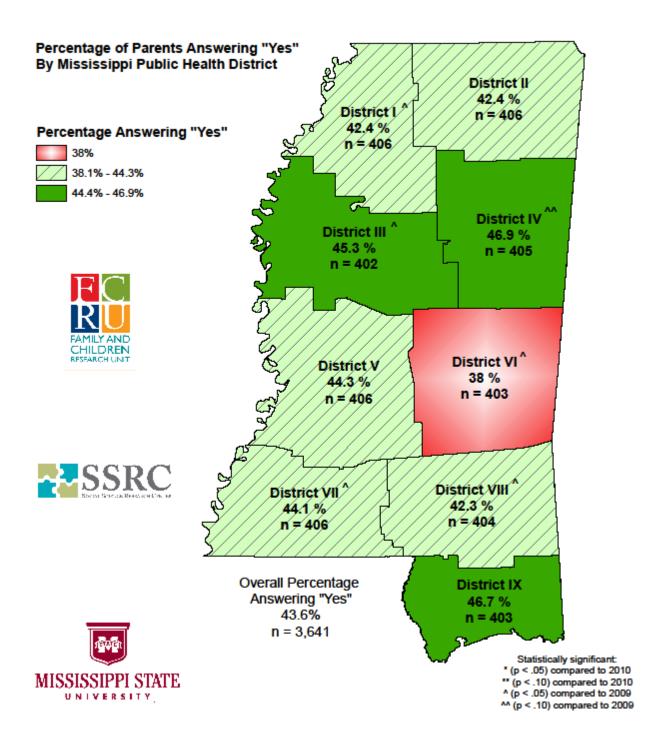
A high percentage of adolescents (88.1%) reported that they have learned in school the importance of healthy eating and physical activity in maintaining a healthy weight. While not statistically significant, it is encouraging to note that 2011 is higher than 2010 (84.6%) and is consistent with 2009 (88.7%).

Figure 14



Overall in 2011 43.6% of parents reported that they have increased their child's exercise within the past year, compared to 43.7% in 2010 and 52% in 2009.

Figure 15. In the Past Year, Have You Increased His/Her Exercise or Physical Activity? 2011



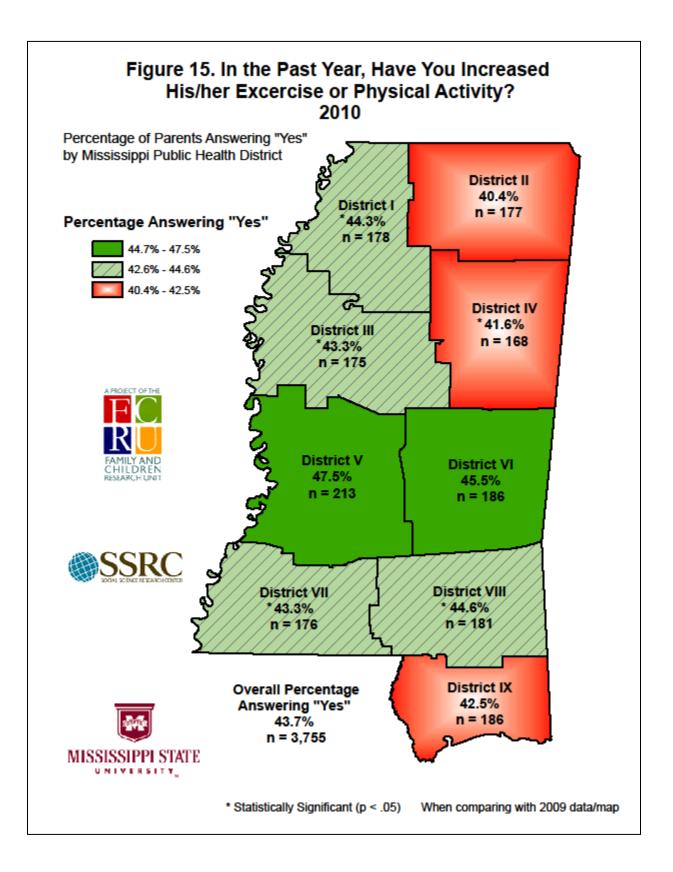
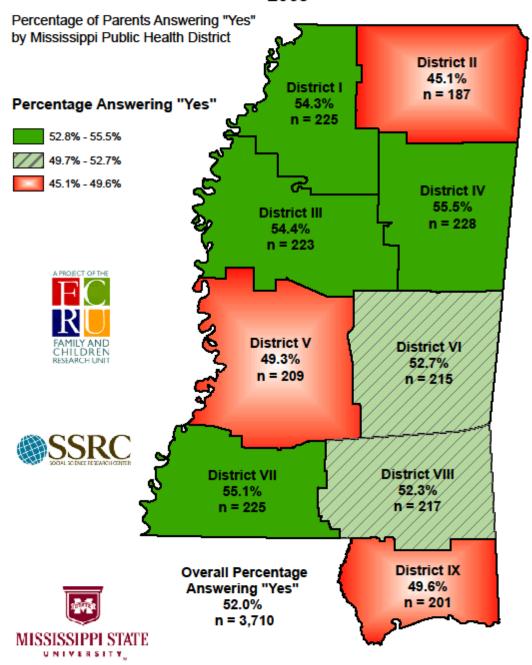


Figure 15. In the Past Year, Have You Increased His/her Exercise or Physical Activity? 2009



Body Mass Index (BMI)

Parents in the telephone survey were asked "How tall are you without your shoes on?" (in inches) and also "How much do you weigh without shoes?" With this self-reported information, we calculated Body Mass Index.⁸ Body Mass Index (BMI) is the indicator used by the Centers for Disease Control (CDC) for determining overweight and obesity among the general public. The calculation used by the CDC to determine BMI is the following: ⁸

weight (lb) / [height (in)]² x 703

After calculating the BMI, the interpretation of weight status is determined by using the following categories: 8

BMI Categories

BMI	Weight Status
Below 18.5	Underweight
18.5 – 24.9	Normal
25.0 – 29.9	Overweight
30.0 and Above	Obese

Overall, the data show that the state as a whole continues to be overweight. The 2011 survey revealed that in 8 of the 9 public health districts in Mississippi, the average BMI ranges from 28.1 to 29.7. One public health district's respondents (District III) average BMI reported was 30.6 (2011), which is in the obese category. On a relatively bright side, this reflects one less public health district that was classified as obese in 2010, and the district that remained obese did not increase their mean BMI level, but remained at 30.6. In 2010, District VII respondents also reported their mean BMI as 30.4, but noted a decrease in 2011, with mean BMI reported at 29.7.

Table 2

Body Mass Index of Adults by Public Health District 2009					
District	n	Mean	Median	Minimum	Maximum
District I	385	28.5	27	17	58
District II*	377	28.1	27	16	67
District III*	380	30.5	29	14	62
District IV*	384	29.7	29	16	65
District V	387	28.5	27	16	59
District VI	371	28.7	28	16	56
District VII	373	29.6	28	17	56
District VIII	379	29.2	28	18	68
District IX	372	27.6	27	17	50
Total	3,408	28.9	28	14	68
*Statistical Different (p < .05)					

Body Mass Index of Adults by Public Health District 2010						
District	n	Mean	Median	Minimum	Maximum	
District I	368	29.0	28	16	57	
District II	404	29.3	27	14	59	
District III*	373	30.6	30	17	54	
District IV	375	29.3	28	13	57	
District V	408	29.2	28	17	58	
District VI	372	29.4	28	15	67	
District VII*	366	30.4	29	12	71	
District VIII	375	29.5	28	16	62	
District IX*	402	28.3	27	16	51	
Total	3,443	29.4	28	12	71	
*Statistical Different from State Average (p < .05)						

Body Mass Index of Adults by Public Health District 2011						
District	n	Mean	Median	Minimum	Maximum	
District I	378	28.5	27	16	56	
District II	365	28.6	27	18	53	
District III*	378	30.6	29	17	60	
District IV	374	29.0	27	16	61	
District V	364	29.1	27	15	56	
District VI	370	29.2	28	17	62	
District VII	382	29.7	29	17	55	
District VIII	373	28.4	27	15	71	
District IX*	367	28.1	27	17	56	
Total	3,351	29.0	28	15	71	
*Statistical Different from State Average						
(p < .05)						

As in 2010, an alarming finding of obesity was reported by parents of young children (ages 5-6 years). Parents were more likely to report their younger children as being obese, compared to parents of older aged children. In fact, 35.2% of parents in 2011 reported their young child (ages 5-6) as being obese with an additional 15% noting that their child was overweight, based upon BMI calculations conducted by the research team using parent's report of the child's height and weight, resulting in 50.2% of very young children being overweight or obese (Table 3). In 2010 parents of young children (age 5-6 years of age) were more likely to report their child as being obese, compared to parents of older aged children (Table 3). In fact, 47.2% of parents reported their young child as being obese with an additional 13.6% noting that their child was overweight, based upon BMI calculations conducted by the research team, resulting in 60% of very young children being overweight or obese. The good news is that this percentage is down from 2010; however, it

must be noted in 2011, as in 2010 that this is from a smaller sub-sample, yet, are from a random state-wide survey, as noted in Table 3.

Table 3

Weight Category by Students' Age - 2011											
Weight Category	4	5	6	7	8	9	10	11	12		
Underweight	1	12	28	18	16	19	17	17	18		
	12.5%	19.7%	16.9%	10.3%	10.1%	9.8%	7.7%	7.6%	6.8%		
Healthy Weight	2	22	51	69	66	88	106	107	142		
	25.0%	36.1%	30.7%	39.7%	41.5%	45.4%	48.2%	47.8%	54.0%		
Overweight	2	7	27	27	20	35	32	45	51		
	25.0%	11.5%	16.3%	15.5%	12.6%	18.0%	14.5%	20.1%	19.4%		
Obese	3	20	60	60	57	52	65	55	52		
	37.5%	32.8%	36.1%	34.5%	35.8%	26.8%	29.5%	24.6%	19.8%		
Totals	8	61	166	174	159	194	220	224	263		
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
Weight Category	13	14	15	16	17	18	19	20	Totals		
Underweight	15	15	10	10	6	8	1	1	212		
	5.3%	6.0%	3.9%	3.8%	2.8%	6.0%	6.7%	50.0%	7.4%		
Healthy Weight	164	145	169	177	141	88	8	1	1546		
	58.0%	58.0%	65.3%	68.1%	66.8%	65.7%	53.3%	50.0%	53.6%		
Overweight	51	49	45	39	38	22	4	0	494		
	18.0%	19.6%	17.4%	15.0%	18.0%	16.4%	26.7%	0.0%	17.1%		
Obese	53	41	35	34	26	16	2	0	631		
	18.7%	16.4%	13.5%	13.1%	12.3%	11.9%	13.3%	0.0%	21.9%		
Totals	283	250	259	260	211	134	15	2	2883		
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Table Sig p<.05

In 2011, children who were classified as "healthy" weight, based upon the same BMI calculations as above were twice as likely to have mostly A's & B's in school (as reported by their parents), when compared to children who were "obese."

Table 4

Weight Category by Students' Grades - 2011											
Weight Category	Mostly A's	Mostly B's	Mostly C's	Mostly D's	Mostly F's	Don't Know/ Not Sure	Refused	Totals			
Underweight	129	52	24	4	0	3	0	212			
	8.7%	5.8%	6.5%	7.1%	0.0%	6.3%	0.0%	7.4%			
Healthy Weight	811	507	178	25	6	17	2	1546			
	54.5%	56.1%	48.2%	44.6%	46.2%	35.4%	33.3%	53.6%			
Overweight	254	145	71	11	3	9	1	494			
	17.1%	16.1%	19.2%	19.6%	23.1%	18.8%	16.7%	17.1%			
Obese	294	199	96	16	4	19	3	631			
	19.8%	22.0%	26.0%	28.6%	30.8%	39.6%	50.0%	21.9%			
Totals	1488	903	369	56	13	48	6	2883			
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			

Table Sig p<.05

Parents' support of future policies

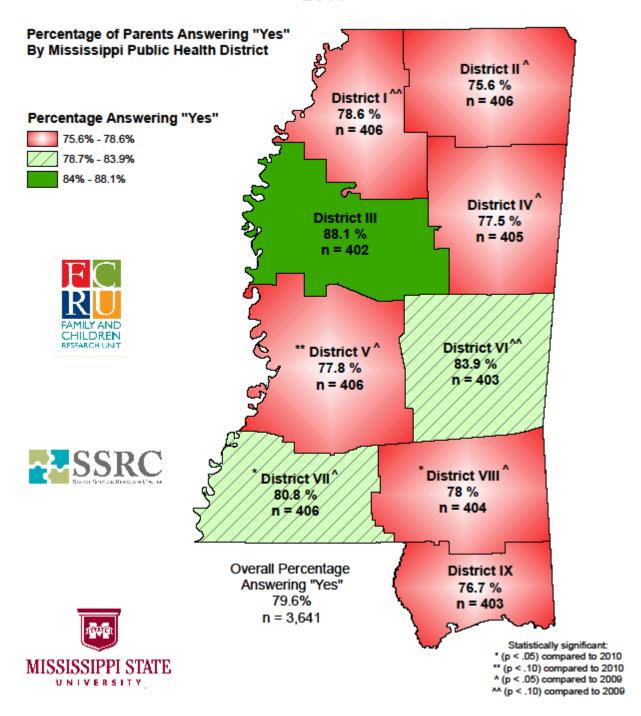
Among parents, the following findings are of interest:

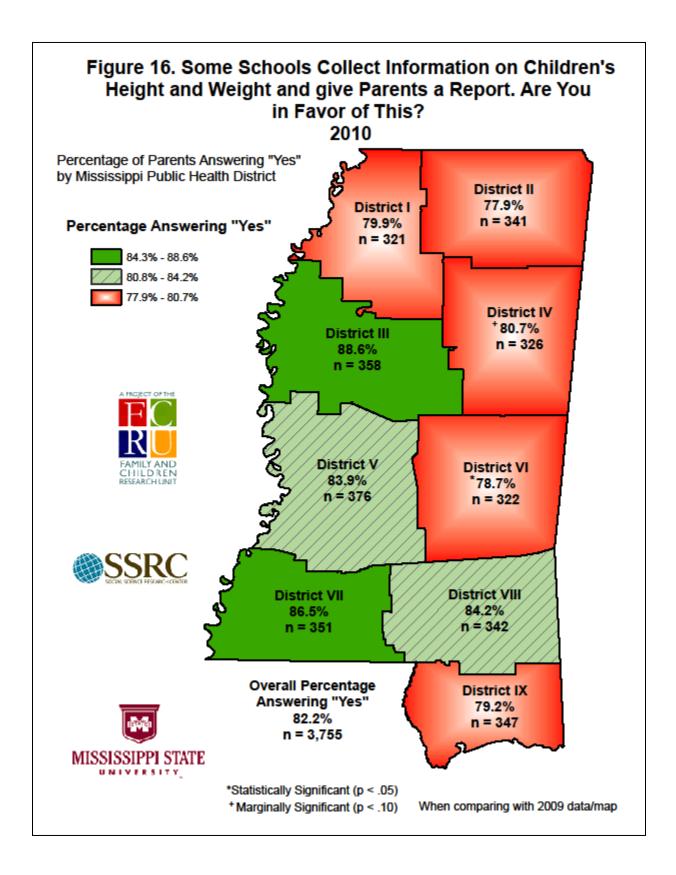
• Continued strong support of schools collecting heights and weights and giving a report of that information to parents (79.6% in 2011, compared to 82.2% in 2010 and 85.3% in 2009). In 2011, District III had the highest percentage of support (88.1%), with District II having the lowest (75.6%). In 2010, the support ranged from a high of 88.6% in District III to the lowest in District II (77.9%). Over the three-year evaluation period, District III respondents revealed the highest support (91.5% in 2009), while the lowest support over the same time period was from District II (75.6% in 2011).

- Among all respondents, in 2011, approximately 71.4% reported having a park nearby for their child to play. The range among the nine public health districts was from a low of 57.4% in District VII to a high of 78.1% in District I.
- In 2011, 43% of parents surveyed reported that public school facilities are available to use for physical activity outside the regular school hours.
- All in 2011, approximately 71.4% reported having a park nearby for their child to play. The range among the nine public health districts was from a low of 57.4% in District VII to a high of 78.1% in District I.

Figure 16. Some Schools Collect Information on Children's Height and Weight and Give Parents a Report. Are you in Favor of This?

2011





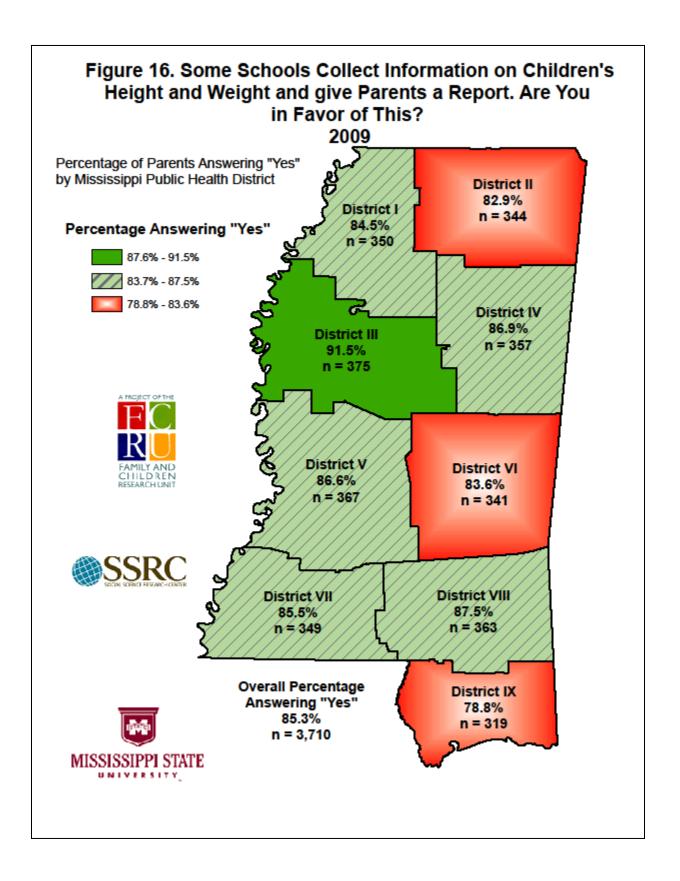
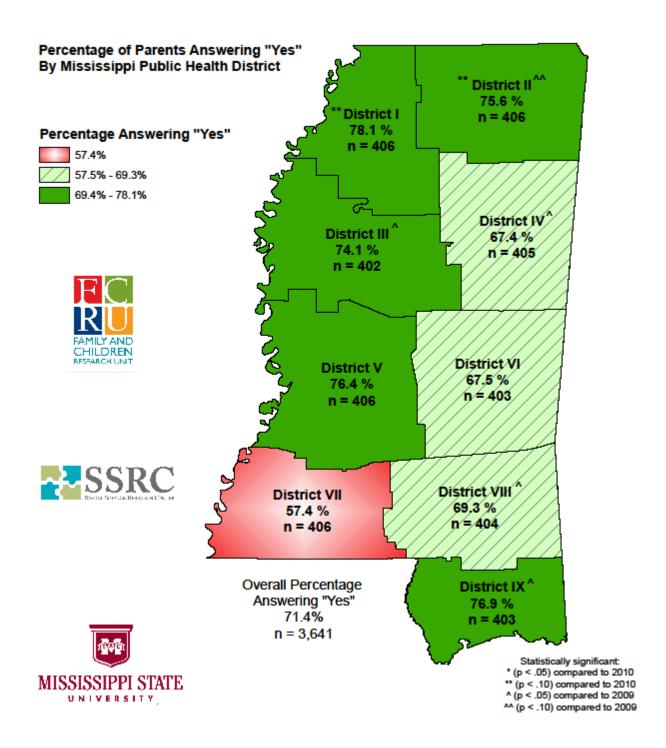
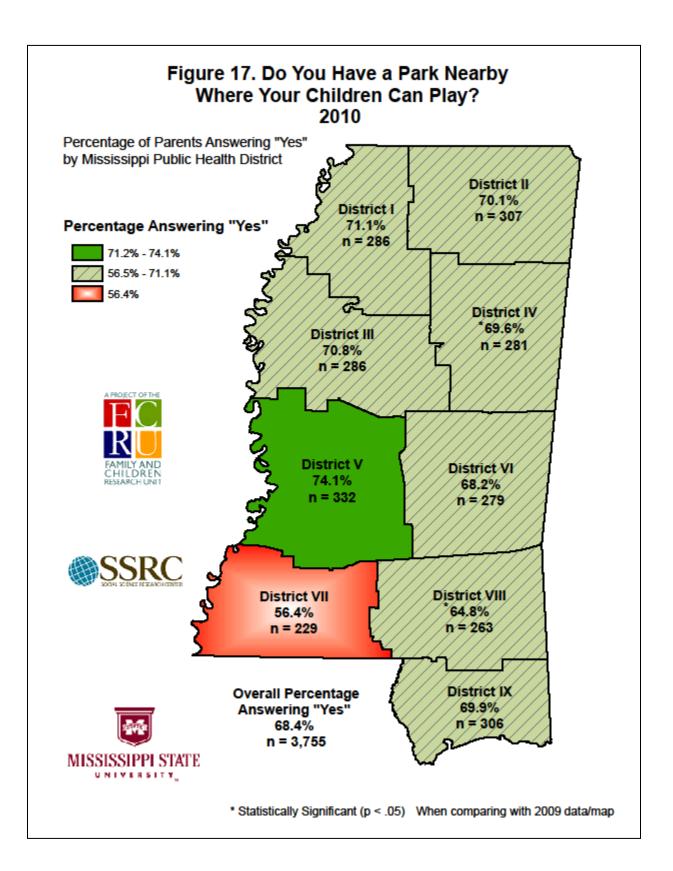
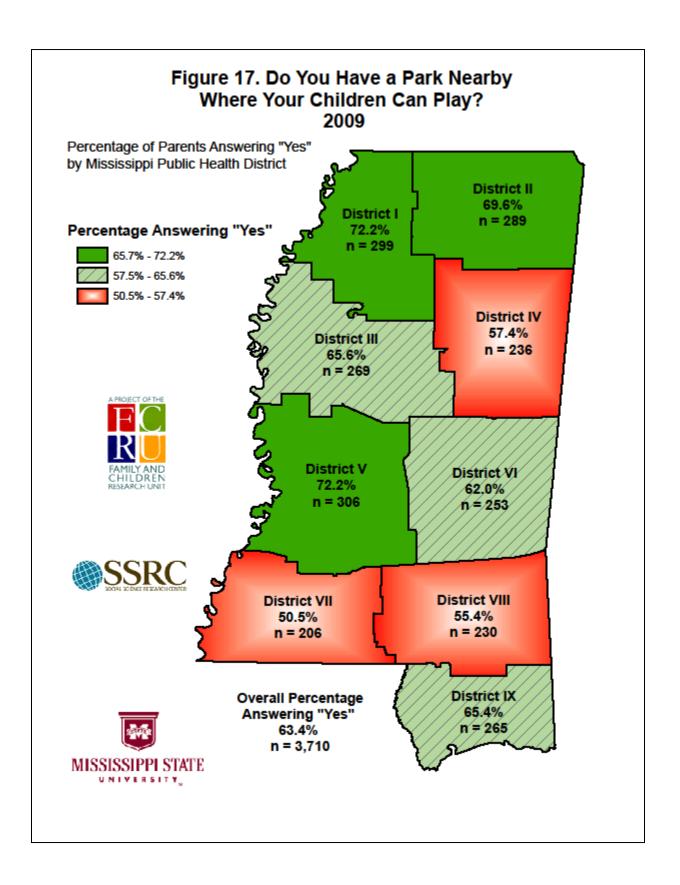


Figure 17: Do You Have a Park Nearby Where Your Children Can Play? 2011







POLICYMAKERS: STATE BOARD OF EDUCATION, STATE BOARD OF HEALTH & MISSISSIPPI STATE DISTRICT PUBLIC HEALTH OFFICERS

Overall Methodology

The 2011 interview guide was consistent with the interview guides used in 2010, and as in 2010 and 2009, these were developed in concert with staff from the Center for Mississippi Health Policy and the SSRC research team. The full interview guides are attached (see Appendix A). A mixed-method of telephone, written interviews via email, and face-to-face interviews were conducted from February 2011 through July 2011.

All telephone and face-to-face interviews were digitally recorded and were conducted by SSRC researchers. Key Mississippi policymakers, including members of the State Board of Education, State Board of Health and District Health Officers were asked about their perceptions and opinions regarding the Mississippi Healthy Students Act of 2007 (MHSA). Respondents were asked a series of open-ended questions concerning how the three major components (nutrition, health education, and physical education) should be prioritized, their views on the roles of various district offices as related to MHSA, perceptions of support by local constituents, opinions regarding how well the components of MHSA have been implemented, opinions regarding the need for additional policies to increase the health of Mississippi school children, and appropriate methods of measuring the success of MHSA. Interviews were transcribed and then analyzed by associates affiliated with the SSRC.

Researchers analyzed each transcript qualitatively to identify patterns and their underlying meanings within each group of key stakeholder interviews. Qualitative research methods are particularly useful for obtaining information about issues that cannot be directly observed. Specifically, this method of analysis is particularly appropriate for identifying and understanding perspectives, opinions, and experiences in exploratory research. For this evaluation, researchers were interested in the ideas, feedback, and perspectives from an array of policymakers regarding the implementation of the MHSA.

The researchers noted key themes which emerged from the data. Themes were identified as a response topic that was mentioned by more than one respondent in the group, and mentioned on one or more question. Researchers also identified key quotes that reflected the themes identified in the analyses. The qualitative portions of each interview were organized by group and topic. Each respondent's ideas and opinions were then categorized by themes. Careful review of the interviews revealed areas of consistency with past reports (Year One and Year Two), as well as some changes. The data was then systematically arranged accordingly which enabled the researcher to discuss the findings in this report. The research noted key themes that emerged from the data.

The qualitative analysis component of this report includes analysis of interviews comprised of six Board of Education members, five State Board of Health members, and six District Health Officers. Each interview guide also had quantitative questions, and these responses were tabulated and when appropriate were compared to Year One and Year Two findings (2009 and 2010), respectively.

Mississippi State Board of Education

The Mississippi State Board of Education is composed of nine members and the State Superintendent of Education. The Board of Education is governed by an express vision that focuses on "creating a world-class educational system that gives students the knowledge and skills to be successful in college, the workforce, and to flourish as parents and citizens." ⁹ To this end, the stated mission of the Board of Education is to "provide leadership through the development of policy and accountability systems so that all students are prepared to compete in the global community." ⁹

Board of Education members were invited to share their perspectives on the Act and to suggest additional policies that could assist in the prevention of obesity among Mississippi's children. A total of six Board of Education members participated in the Year Three evaluation of the Mississippi Healthy Students Act (MHSA). The following highlights the qualitative findings of interviews conducted with Mississippi Board of Education Members.

The six Board of Education members who participated in the Year Three evaluation stated they were "somewhat familiar" with the Act. We interpret this as a positive indicator that board members are familiar with the Healthy Students Act and its goals to improve the health of Mississippi public school students in the areas of physical activity, nutrition, and health education.

Board members did not express consensus in ranking the three components of the Mississippi Healthy Students Act. Three members stated they believed increasing health education to be the most important component of the Act. Two members stated improving school nutrition was most important while one member focused on improving the physical education requirements. Given that the components of the MHSA are so closely related, the absence of consensus most likely reflects the difficulty in prioritizing the components of the Act given the ways each goal intersects with the other goals. One respondent highlighted the close relationship between the three components in this way:

I would probably say they are just about all three equal but in health education. Educating the students to what is healthy probably would be the number one [place to start]. I would think that both are equally important but I would lead with the physical or nutritional side.

All respondents stated preventing childhood obesity is important or very important for the state of Mississippi. The unanimous recognition that childhood obesity is a significant problem in the state indicates that Board of Education members recognize both the short term and longer term consequences at the individual and societal levels. At the individual level, obesity impacts students' quality of life. At the structural or societal level, a state population that is obese negatively impacts the economy of the state since unhealthy people are not as productive, and an unhealthy population costs the state in terms of health care costs and shortened life expectancy.

Respondents stated current state policies designed to address childhood obesity are adequate to moderately effective. These responses suggest an acknowledgment that policies can be improved to better address issues of childhood obesity. Given that the MHSA passed only four years ago, these responses are

positive. Programs take time to implement and evaluate; as initial changes are made, policies can be evaluated and recommendations made to strengthen these initial policies. Respondents were asked how the Act was perceived by individuals with whom the Board member interacts. One respondent stated:

The responses I've heard have been positive.

Another stated:

I think it would be appropriate to say that the education personnel understand the seriousness of obesity and applauded the passing of that Act.

My impression is that people are supportive of the effort to encourage better health among our children.

These responses reflect that the MHSA is both <u>timely</u> and <u>necessary</u>. Improving school nutrition, health education, and increasing physical activity not only benefits school children but also strengthens this youngest generation to become healthier and productive citizens who will be in a position to make viable contributions to their communities and the state as a whole.

Measuring Success

The Mississippi Board of Education members were asked how the success of the MHSA should be measured. While responses varied, all respondents focused on determining the percentage of children who are obese and then following these children to determine if obesity rates decline over time. As one respondent stated:

We're going in the right direction. Are we getting fatter or getting a little bit leaner?

Responses indicated the need to collect baseline data on the prevalence of obesity among

Mississippi's school children and the collection of longitudinal data to determine if obesity rates decline over
time. Given that all respondents stated they see a role for the Mississippi State Department of Education in

obesity prevention, designing and implementing a data collection plan to track rates of obesity would provide the state with the empirical data needed to objectively evaluate the outcomes of the MHSA.

Strengthening School Policies

Respondents were asked if the state of Mississippi has done enough to strengthen school policies. Responses ranged from "Yes, for now" to "Yes, but schools need continued support," to "not sure" and "don't know." As one respondent stated:

The state can only require so much, but on the local level you need to ensure that every student gets some physical activity during the day.

The above response highlights the distinction between minimum requirements (at the state level) and how requirements are enacted at the local level. It may be important to determine *how* state requirements are being interpreted and enacted at the local level so that deficiencies or inconsistencies can be addressed.

All respondents stated they believed it is important for schools to promote healthy lifestyles for both students and staff. Because faculty and staff are role models for students, it is important for them to recognize that students pay attention to their behaviors and habits. One respondent noted:

Students could always use more education [physical] but we must balance this effort with teaching academics. We have just so many minutes in each day.

Respondents were asked to what extent they believe schools in the state are implementing the minimum requirements of Coordinated School Health programs. The Coordinated School Health program is based on an eight component model developed by the Centers for Disease Control and Prevention (CDC). The purpose of the model is to encourage lifelong healthy behaviors that contribute to productive citizens. Half (3) of the respondents (Board of Education members) stated they believe schools in the state are doing an average job, two stated schools were doing better than adequate, and one respondent did not have an opinion one way or another.

Four out of six respondents stated they believe local government funds should be used to build and maintain places in the community where people can exercise. This finding suggests that a majority of

respondents recognize the relationship between exercise and good health as a community issue.

Respondents were then asked if schools should make school facilities such as gym tracks, ball fields, and playgrounds available to community members after school hours. Five respondents indicated this would be a good idea with one respondent stating:

Where appropriate, yes. It cannot interfere with student activities but if there is available time, yes.

These responses indicate support for possible collaboration between schools and the communities in which they are located. Where possible, making school gym tracks, ball fields, and playgrounds available to community members could foster an important collaborative approach to healthy lifestyles and encourage partnerships between schools and local communities.

Respondents identified a broad array of other key groups as having a stake in decreasing childhood obesity in Mississippi. One respondent stated the primary responsibility lies with parents, followed by day care centers, youth recreation groups, restaurants and restaurant associations, as well as the health department. Another respondent identified the state medical association as a primary stakeholder in the fight against obesity. In general, respondents understood obesity as a structural issue affecting a significant proportion of the state's population. As such, they suggested it is a problem that presents many opportunities for local and state level involvement. Two respondents see the YMCA, churches, and other faith-based organizations as potentially playing a key role given their involvement in activities for young people. Board of Education members report they access several key institutions for information regarding childhood obesity. These institutions include the State Department of Education, State Board of Health, Office of Healthy Schools, and the Department of Health and Human Services.

Five out of six Board of Education members reported they favor collecting information on school children's height and weight to determine student's Body Mass Index (BMI). Board members also supported

conducting fitness testing of children in certain grades and sending both the fitness information and information concerning children's body mass index home to parents. This support suggests that board members see parents as key stakeholders in their children's health.

Obstacles Schools Face in Meeting Physical Education and Nutrition Requirements

Board of Education members identified several key obstacles schools face in meeting the physical education and nutrition requirements outlined in the MHSA. These obstacles include:

- Emphasis on academics
- Time and money
- Traditional attitudes
- Cafeteria equipment
- Getting buy-in on the importance of these requirements from administration, faculty, and parents

The obstacles identified by respondents indicated that board members see the problem of obesity as a broad range issue that requires investment not only by school districts but also community organizations as well as parents. Although not explicitly stated, respondents seem to recognize that reducing childhood obesity will require coordinated efforts by each of these groups if a successful campaign to end childhood obesity is to be realized.

Overall, respondents reported a "fair amount" of association between implementing Coordinated School Health Programs in school districts and academic performance of students. Additionally, respondents reported it is "moderately important" to "very important" to provide staff wellness programs. This suggests recognition that good health and establishing healthy behaviors among staff and students are important. To this end, respondents perceived the effectiveness of School Health Councils as ranging from average to above average in their roles to promote healthy behaviors. In conclusion, several respondents commented:

Education is required to change habits.

I think parents have to be educated...obesity is a real problem and it is connected to poverty and ignorance. Any way you can educate people anywhere, anytime on the dangers of obesity is good.

These responses indicate an awareness that obesity is symptomatic of the larger structural issues associated with poverty. As one respondent stated in conclusion:

Our mission is to produce happier, more productive citizens. Healthier students are an important part of that mission.

This quote highlights awareness by this respondent that obesity education is one part of improving the health of Mississippi school children. Obesity education also involves more than simply educating children—it also involves getting the community on board and working collaboratively to address the broader issues that impact the health of school children and adults alike. These broader issues include poverty, access to health care, access to nutritious, healthy foods, and access to community activities and resources that promote physical activity and exercise.

Comparison of Themes

Board of Education members have participated in an evaluation of the MHSA for the past three years.

The following section highlights shifts or changes in the perspectives of Board of Education members concerning the Act.

Year One Themes

In the first evaluation of the Mississippi Healthy Students Act of 2007 (MHSA), Board of Education members focused on obesity as a continuum of health concerns. Specific concerns expressed by Board of Education members included the economic costs of obesity, impact of health on academic achievement, the importance of providing healthy meals to Mississippi's school children, and the tensions between the role of government and personal responsibility for obesity. Additionally, board members expressed concerns about implementing the MHSA in a timely manner, integrating childhood obesity policies seamlessly, and the need for collaboration among various state agencies to prevent childhood obesity. Board members also identified

the need for parental education and involvement in strategies of action to prevent or reduce childhood obesity and the importance of establishing positive role models for students who could model healthy eating habits and behaviors.

Overall, Board of Education members focused their concerns on implementing the requirements of the MHSA and working with various agencies involved in addressing obesity issues in the state.

Year Two Themes

In the second year of evaluation interviews, Board of Education members identified health education as the most important component of the MHSA. Members report they perceived the State Department of Education as a key stakeholder in the prevention of obesity. Board members expressed support for collecting the necessary data to adequately measure the success of the MHSA. To this end, they reported reductions in the percentage of children who are obese and the improvement of the overall health status of Mississippi school children as the most important ways to measure the success of the MHSA.

Overall, Board of Education members recognized the important role of exercise in promoting good health. They supported making exercise facilities available as well as working collaboratively with local governments to ensure facilities are accessible both to students and community members. Board members specifically identified the need for cooperation and collaboration by community leaders, families, and schools in the effort to improve health and reduce obesity.

Year Three Themes

The Year Three evaluation of the MHSA represents subtle to moderate shifts in the perceptions of Board of Education members on the importance of the three components of the Act (improving school nutrition, improving physical education, or increasing health education). This year, when asked to rank the components of the Act, members were divided with three members who stated the priority should be to increase health education, followed by two members who recommended making improved school nutrition the priority. One

member reported that the most important component was increasing physical education in the schools. This absence of consensus may highlight recognition among Board of Education members that each of the components of the Act is closely inter-related with the other two components, making it difficult to specify which component is most important. Although there was a lack of consensus, members expressed unanimous recognition that reducing and preventing childhood obesity is an important goal given the short- and long-term economic and individual consequences that obesity represents.

Board members stated the current state policies to address childhood obesity are adequate to moderately effective, suggesting they perceived there is room to strengthen obesity policies. Board members reported positive responses from those personnel with whom they interact. Specifically, several board members reported that state education personnel fully understand the problems associated with obesity and endorsed the passage of the MHSA. Overall, Board of Education members perceived the Act as being timely and necessary.

Similar to other groups of stakeholders, Board of Education members supported the collection of longitudinal data in order to effectively evaluate the impact of the MHSA. Board members recognized that reducing obesity and improving the health of Mississippi school children represents a collaborative effort among many different state agencies and stakeholder groups.

Board members also recognized that one component of promoting healthy lifestyles is to incorporate role models for both students and staff in order to demonstrate the "real world" benefits of adopting healthier eating patterns and behaviors. Board members noted that setting a good example can go a long way in promoting healthy lifestyles.

Similar to previous years' findings, Board of Education members are cognizant that there is a tension between an emphasis on academics and the importance of educating students about the importance of healthy lifestyles. Members stressed the need to establish a balance between academics and promoting health—one that recognizes that healthy students perform better academically. Although there is no easy remedy to this

tension between academics and health, members did perceive that schools in the state are implementing the requirements of the Coordinated School Health program. This program seeks to encourage life-long health behaviors that contribute to the development of productive citizens.

Two thirds of the board members who participated in this year's evaluation believed local government funds should be used to build and maintain places in the community where people can exercise. Similar to the findings in Year Two, Board of Education members recognized exercise, good health, and health education as inextricably related and affecting both school children and the larger community.

Board of Education members identified several key obstacles schools face in effectively implementing the full requirements of the MHSA. These obstacles include an emphasis on academic achievement, time and money, traditional attitudes, and creating "buy-in" from administration, faculty, and parents. The identification of these obstacles represents an understanding on the part of board members that obesity is a multi-faceted issue that requires the investment of stakeholders at the state, local, and community levels.

Mississippi State Board of Health

The Mississippi State Department of Health is governed by an 11 member Board appointed by the Governor for the purpose of providing policy direction for the agency. Specifically, the Board of Health approves the State Health Plan and all agency rules and regulations. Five of the eleven members of the State Board of Health participated in the Year Three evaluation of the Mississippi Healthy Students Act of 2007 (MHSA).

Three of five respondents reported they are very familiar with the requirements of the MHSA and two reported being somewhat familiar. A majority of Board of Health members reported improving school nutrition as the most important component of the MHSA. Increasing health education was ranked as the next most important component and increasing physical education was ranked last among respondents.

Board of Health members unanimously reported the prevention of childhood obesity as an issue of paramount importance for the State of Mississippi. Four out of five members believed the state is doing an adequate job of effectively addressing the problems associated with childhood obesity. One respondent reported state policies are less than adequate. When queried about reactions to the MHSA by individuals and health department personnel with whom the board member interacts, one member stated:

Well, it's been positive and I think the people I've interacted with see it as a real need. I've been very uplifted by the positive tone that I heard regarding the Act.

Other board members reported they had received little feedback or were not in regular contact with teachers or other administrative personnel. One member reported:

I have heard from a parent who said that teachers could not direct her child to the healthiest food items. The teachers said they were not allowed to. That's counterproductive.

These comments indicate responses to the MHSA encompass a broad range of responses that are related to the degree of contact a specific board member has with individuals and health department district personnel familiar with the MHSA.

Board of Health members expressed varying opinions regarding how to measure the success of the MHSA. Several board members supported measuring body mass index and conducting fitness tests in order to determine decreases in obesity rates. Another board member stated:

We can also measure the success of it (Healthy Students Act of 2007) by what we are serving our children (nutrition).

All board members reported they see the State Department of Health playing a central role in obesity prevention. As one board member stated:

The State Department of Education and the Department of Health are working together and trying to establish collaboration because we see a definite link. I am just hoping there will be either some legislation or something in the way of the budget that can help facilitate...what we can do together.

The above quote highlights both the importance of collaborative work between agencies as well as the obstacles that agencies face in today's climate of budget restraints and cutbacks. Linking programs makes fiscal sense and eliminates duplication of programs; however, sharing budget funds poses challenges that will need to be addressed if a collaborative program is to be successful.

When respondents were asked if they see a role for the local and/or district health department in promoting the MHSA - all participants stated "yes." One participant noted:

Yes. All health care is ultimately local.

Yes. I definitely see a role and the Communication Department with the Department of Health have pledged their support of this initiative. I think local health departments can do some things on the local level that we probably can't do on the state level because they (local departments) are closer to the students. There should be a buy-in from all of the stakeholders to really make this a success.

This comment clearly demonstrates recognition by Board of Health members that obesity prevention and reduction strategies require collaboration at the local and state levels. One agency simply cannot meet all the needs of everyone in the state. Obesity prevention requires information and assistance concerning nutrition and the importance of physical exercise, access to parks, equipment, and recreation activities, and overall health education about the linkages between each of these components.

Three out of five respondents reported they do not believe the state has done enough to strengthen school policies on nutrition, health education, or physical exercise. One participant stated the state has done an adequate job in addressing school policies on nutrition and physical education and recommends, "staying on course." As far as health education, this respondent stated:

Health education should be on equal academic status with math, science, language and social studies. It should be comprehensive and sequential.

Another board member stated:

I'm not sure the local schools are addressing this issue (nutrition, health education, and physical exercise); maybe it's put on the back burner due to all the other concerns.

There's a correlation between all three (components). If we can get (school children) eating the right things early I believe as they move on and matriculate, they will work that into part of their daily habits, which, in turn, (will) decrease some of the healthcare disparities that we have in the state of Mississippi. I believe the key to help us save our healthcare will be getting children to eat properly at an early age, thus eradicating obesity.

These comments indicate that Board of Health members believe policies can be strengthened to be more effective. Comments also indicate recognition that addressing childhood obesity is as important as academic achievement and has long-term benefits to not only individuals but also the prosperity of the state. Board of Health members were divided on the issue of whether or not government funds should be spent to build and maintain places in local communities where people can exercise. Three out of five respondents did not support use of government funds, one indicated support, and one respondent was unsure.

I think it's very, very important and I think there should be legislation for walking trails but I'm not real sure whether I think government funds should be used to promote exercising. I think that's a personal choice and a personal decision. I think each and every person should do what they need to do in terms of exercise. I don't know whether the government should fund that.

Government funds should only be given as matching funds from the community or in-kind services from the community to build and maintain facilities.

Clearly, respondents were hesitant to support the use of government funds to build and maintain exercise facilities or activities. Although it is unclear where this hesitation originates, it may be due to a general public consensus that "too much government" is problematic. Given the importance of individualism and autonomy as founding principles of the U.S., it is not surprising that respondents see healthy lifestyles as a matter of individual choice and responsibility.

In closing, respondents were asked to share their insights regarding childhood obesity legislation. As indicated by the following quotes, respondents see educating children at an early age as key to reducing and preventing obesity:

It has to start with the children and they have to educate their parents. Within one generation, children are capable of changing the (landscape) of obesity.

[We need more programs like Health Works in Tupelo] because you're getting children to become aware of nutrition. You're getting them (children) to embrace it and encourage their parents to embrace it...if we could do that and do that systematically, by the time that a child reaches high school, we would have a healthy individual who will encourage [the next generation] to do the same. The answer lies with the children.

Comparison of Themes

Board of Health members have participated in an evaluation of the MHSA for the past three years. The following section highlights shifts or changes in the perspectives of Board of Education members concerning the Act.

Year One Themes

Board of Health members focused their concerns during Year One on securing adequate funding, personnel, and training to address obesity prevention in public schools. Specifically, board members identified the need to integrate health education into a comprehensive curriculum to promote health, increasing the availability of structured physical education programs, and improving the nutrition of foods prepared and available in schools. Additionally, board members identified the importance of getting the buy-in of parents as key stakeholders in the prevention of childhood obesity.

Year Two Themes

During Year Two, Board of Health members focused on the need to improve health education in public schools and to begin educating students' about the importance of nutrition, physical exercise, and health education at early ages. Members identified the importance of measuring the outcomes of the legislation. Specifically, board members supported the collection of longitudinal data to measure changes in the prevalence of obesity.

Year Three Themes

Primary themes expressed by Board of Health members during Year Three focused on the need for collaboration among agencies involved in preventing obesity. A majority of board members reported the state is doing an adequate job of addressing the problems associated with childhood obesity, but there is room for collaboration between local and state health departments to make obesity reduction programs more effective. Three out of five board members stated they did not believe the state had done enough to strengthen the policies on school nutrition, health education, and physical exercise, suggesting that policies could be strengthened to improve obesity outcomes.

Board members reported improving school nutrition should be a priority followed by increasing health education and, finally, increasing physical exercise in Mississippi public schools. Board members were hesitant to support the use of government funds to build, maintain, and support community exercise facilities, stating that adopting a healthy lifestyle should be an individual choice and responsibility.

Board of Health members identified educating school children as the key to addressing the problem of obesity in the state of Mississippi. From the perspectives of Board of Health members, children represent the future of Mississippi and are also in a strong position to influence the health habits of their family members. Thus, educating young cohorts of school children has the potential to affect the prevalence of obesity on both an individual and structural level.

District Health Officers

Mississippi's District Health Officers oversee the public health programs in each of the nine health districts in the state. In their capacity as medical directors, District Health Officers are responsible for programs addressing a broad range of health issues including communicable diseases, preventive health, environmental health, maternal and child health, emergency preparedness, and other various health-related programs.

District Health Officers were contacted by researchers at the Social Science Research Center at Mississippi State University and invited to participate in an interview to evaluate the Mississippi Healthy Students Act of 2007. All of the six District Health Officers participated in the survey process which was designed to ascertain their knowledge of the Act, their attitudes, knowledge, and support for ways to prevent obesity among Mississippi's school age children.

District Health Officers were asked how familiar they were with the requirements of the MHSA. Four of six officers stated they were "somewhat familiar" with the Act, one respondent stated "very familiar," and one respondent "abstained." Respondents were then asked which of the three components of the Act they consider to be most important: improving physical education, improving school nutrition, or increasing health education. Three District Health Officers reported improving school nutrition was the most important component of the MHSA, while one reported "improving physical education" and another respondent "increasing health education." One respondent declined to answer.

When asked about their perceptions on Mississippi's efforts to address childhood obesity, one respondent stated:

We haven't reached where we need to be. We're still taking out ovens (fryers) in some of the schools. [But] now we'll have an expanded health education as a result of this legislation.

Another respondent stated:

I think we're getting there in all three areas [nutrition, health and physical education].

Less optimistic, one District Health Officer sees the problem as one of competing interests:

There is one program I know about that is very good but the rest of them, they want to do something but they're so distracted by this No Child Left Behind (program) that they don't know what to do...

District Health Officers reported generally positive reactions to the MHSA from individuals and health department personnel with whom they interact:

[Everyone] is very supportive and very appreciative. This is the right thing at the right time. We're aware and we're involved.

It is one of the most important pieces of legislation that we could have made for Mississippi.

I've talked with the school nurse in a couple of schools and they seem very interested in promoting healthy lifestyles.

Other District Health Officers indicated those with whom they interact express support for the MHSA but may not be actively involved with the programs funded by the Act:

The school nurses are very positive. County nurses are positive but not directly involved.

They're generally supportive of the concept but not fully engaged in the implementation and getting the best outcomes.

One District Health Officer stated:

I don't think they know anything about the Act. They just go to the school and see there is some improvement in one or two schools.

These responses suggest there may be gaps in the knowledge of some public healthcare professionals concerning the MHSA as well as variation in who is involved in the implementation and administration of programs designed to improve the health of Mississippi's school children. Given that the nine health districts vary in size and availability of resources, this gap in knowledge among public healthcare professionals may indicate an opportunity to incorporate information about the Act into in-service training programs or annual state meetings of healthcare professionals.

District Health Officers provided comprehensive ideas on how best to measure the success of the Mississippi Healthy Students Act of 2007. Four out of six officers stated the need for "evidence-based" data that can be used to monitor and assess the effectiveness of programs designed to address childhood obesity:

I think we just have to bite the bullet and get parental consent... do a physical assessment each year of the student population. If it's too costly, you might want to do a sample so I could follow some kids longitudinally.

Do an assessment each year and make notations in the assessment about changes [such as the addition of playgrounds, hiring of additional physical education teachers, and replacement of fryers with ovens].

Periodically, make unannounced inspections at the schools to check the lunch room and vending machines. Check the amount of food that goes in the garbage and what kids are eating—monitor what's left over at the end of the day. You see it's one thing to put it (healthy foods) on the table but if they (students) don't eat it (healthy food), it doesn't have any impact. If the kids aren't changing their knowledge and their practices, and their consumption, we're not going to be any better off than before we made all these changes.

Watching (monitoring) weights is essential in furthering evidence-based data. Fitness testing would be a great adjunct.

Questioning parents to find out what their children are bringing home in the way of what they have learned and finding out if parents are being influenced by this would also give (us) important data.

I think the best way to measure it is in outcomes—either absolute obesity rates or declines in the worsening of the epidemic would be the best indicators. Other indicators might include the number of schools with improved lunches or improved nutritional products or number of schools with improved health behaviors such as exercise activities in the schools.

As these responses indicate District Health Officers recognize the need to collect longitudinal data to accurately evaluate the success of the MHSA over time. While collecting height, weight, or body mass index provides a snapshot of student health, this data could be enhanced by incorporating an assessment of physical fitness levels and by monitoring students periodically throughout their educational careers. These responses also indicate recognition by District Health Officers that there are multiple ways to assess the success of the MHSA. Specifically, collecting not only empirical data but also qualitative data such as information concerning what foods kids are eating (and not eating) in school cafeterias, which vending machine foods are being consumed, and whether a cafeteria has replaced fryers with ovens would provide a more complete picture of student health and would complement the statistical data currently being collected.

When asked if they envision district and county health offices playing a role in obesity prevention, health officers responded with a resounding "yes." Themes involving the importance of partnership and commitment emerged as articulated in the response below:

We need to get into the community and do some health education or promotion activities...not completely get rid of the clinics but I mean the thing is...what I can get you to do is easier than me doing it. I only have two hands and there's just so much I can do but if I can make you an apostle and [train] another apostle then it can affect your church, your family, where you work. We've got to get out of our buildings and into the community and get these partners that have the same motivations and goals we do. We need to go out...Arkansas has done that...they have changed their way of doing business. [The] Health department now is a community education entity first and clinic second.

The short answer is yes. The long answer is it depends on the individual health officer and how committed he is to this. It's going to take a special kind of person to get involved in this.

Given the unanimous agreement that district and county offices have an important role to play in obesity prevention, researchers were interested in how health officers perceive the role of district and county offices in promoting the MHSA. A majority of respondents (four out of five) stated local offices do have an important role to play:

We are trying to get a nurse or health educator or myself onto one the of school health councils. We try to get involved. We participate on a regular basis in their activities.

Health educators can be helpful from the district role but we do not have a health educator right now. It would be great to have another position to help link with the schools and chronic disease prevention.

District Health Officers reported variation in the level of involvement of their district staff in assisting schools with implementing coordinated school health programs. In large part, the variation in involvement is dependent on district staffing size:

It ranges depending on the size of the health department and staff we have at that (particular) health department.

Pretty active [involvement]. We have a nutritionist who works with the schools and does a really good job. They work with the school nurses in trying to promote healthy nutrition in the schools.

I know of no specific involvement in the school health programs since we do not have a health educator or anyone assigned to this role.

We have an extremely large staff, so some are not involved at all and not even aware of what's going on. It's not part of their intended job. Those that it is a part of their intended job are very active.

Really limited involvement, some consultation, but nothing well coordinated or integrated.

As these responses indicate, district staff involvement in implementing coordinated school health programs ranges from active to limited involvement or no involvement due to staffing limitations.

Interview participants were asked what additional policies, if any, should be enacted to bolster the effectiveness of the MS Healthy Students Act. Respondents voiced a broad range of ideas:

I think we need a policy that requires parents to become involved in the school. (We need) to call the parent in and review their child's (health) with them and talk to them about what we may be able to do (we at the school), you at home, and the child to improve whatever is wrong.

The other thing (that needs to be changed), is (rewarding) students at school recognition programs with a piece of candy, a sugared drink, a coupon for McDonalds or a pizza outing. They (staff) mean well but they disassociate what they're doing with where they need to go. (Substitute these rewards) with a whole load of pencils everybody needs. Don't give out lollipops—that's another one they like to give out.

I think we need stronger policies on getting the colas and junk food out of schools. (Kids) need at least an hour a day of physical activity and nutrition education so they can take that home with them and help their parents cook healthier at home.

Getting the deep fryers out of schools for sure and replacing them with high efficiency bake ovens. Getting better food preparation stuff in schools should be a priority. Also, make sure kids don't have access to sugary beverages and prioritizing exercise—increasing the requirements for exercise so it is more of a daily routine.

Although these responses highlight a broad range of ideas concerning additional policies that could improve the health of Mississippi school children, they highlight the recognition that improving the health of children in the state requires a collaborative effort across a broad constituency of stakeholders—health professionals, schools, and parents. While implementation of additional policies represents one component to solving the problem of childhood obesity, collaboration among institutions and between institutions and parents

represents another important component. The success of the MHSA requires investment by both individuals and institutions.

District Health Officers report they rely upon multiple resources to stay up to date on childhood obesity in Mississippi:

We do wellness checks on kids so I see the data of what our kids look like. I review some of the reports that I get from schools, I talk to doctors in the community, go to meeting where reports are presented. I get a variety of data that our agency collects.

State Board of Health publications, the internet, and seminars

MSU, Theresa Hanna's group, and Kids Count

The Office of Healthy Schools

Centers for Disease Control (CDC) and the Kaiser Foundation have pretty good information, and then our own Department of Health data

Google

District Health Officers utilize a wide variety of resources to keep abreast of research on childhood obesity in the state. The diversity represented in responses to this question indicates that a majority of District Health Officers are interested and committed to being well-informed about childhood obesity in Mississippi.

Finally, District Health Officers were asked if there was additional information they wanted to share regarding their experiences and knowledge about childhood obesity legislation:

[MHSA] needs to be summarized in a short version and put out there [in public] as often and in as many places as we can get it. I think we [members of the medical community] should be adopting schools—monitoring what the school(s) is doing, being present, and being on their councils.

It's going to take more than the schools to address this [obesity]). It's an important place but some of the decisions on eating behaviors and exercise happen outside the school setting. Pricing policies for healthy foods versus high calorie dense foods (provides) incentives for unhealthy behaviors. Although the healthy schools initiative is great, it's going to take more than that—[it's going to take] a cultural shift to have a huge impact.

Our population as a whole is dealing with obesity, and this is affecting our chronic disease numbers and outcomes. This affects the public health-wise, financially, and emotionally.

Our local legislator participated in a weight loss program at the capitol and lost about 40 pounds. I think by doing that and speaking publicly about obesity he has set an excellent example and that he is very active in promoting parks, walks, and exercise to his constituents.

I want to commend the state for having passed the law and the State Department of Education for implementing it as aggressively as they have. I especially want to thank the Bower foundation for picking up the tab on changing the fryers for convection ovens. The business community has funded 10 million dollars to bring physical fitness education into the daycares. So we're on the right track...we just need more.

These responses demonstrate the need to educate and inform the public about the MHSA, to integrate mentors into the program who can serve as role models on the benefits of a healthy lifestyle, and to develop extensive partnerships between school districts and foundations and businesses. The District Health Officers who participated in the interviews clearly recognize that obesity is not only a national problem but also one that stands to impact the future of our state. Reducing obesity among Mississippi's school children requires collaboration among schools, parents, the business community, and foundations and organizations.

Comparison of Themes

District Health Officers have participated in an evaluation of the MHSA for the past three years. The following section highlights shifts or changes in the perspectives of District Health Officers concerning the Act.

Year One Themes

In the first evaluation of the MHSA, District Health Officers focused on the relationship between physical activity and academic performance, noting that academic success requires good physical health. Obesity not only impacts the likelihood of academic success but also is associated with economic costs later in life. District Health Officers overwhelmingly recognized the need to incorporate more physical activity into school curriculums although respondents expressed concerns about the feasibility of schools being able to address childhood obesity given the limitations imposed by time constraints of the structured academic day.

Year Two Themes

In the second year of interviews, District Health Officers expressed concern that many of the health departments and districts were unaware of the MHSA. Moreover, officers reported their staff had limited or no involvement in implementing coordinated school health programs. Interview respondents identified several key actions that were needed for the successful implementation of the MHSA. These key actions included making physical education a required component of the educational curriculum at every grade level, increasing the number of required health education classes for students, and providing healthier food choices in school cafeterias. District Health Officers also noted the importance of adopting an integrated approach to addressing childhood obesity. Respondents noted the importance of educating parents to become active partners in improving the health of Mississippi's school children.

District Health Officers expressed the need for collecting outcome measurements to evaluate the success of the legislation. Specifically, the primary emphasis focused on collecting height, weight, and body mass index measurements.

Year Three Themes

Year Three appears to represent a significant shift in the perspectives of District Health Officers concerning the MHSA. A majority of District Health Officers report very positive responses from health department and district staff to the MHSA, indicating that staff familiarity with the Act has improved since Year Two. Although district staff participation in the implementation of programs may vary and there remain some gaps in knowledge about the Act, most district officers report positive support and interest from staff concerning coordinating health education programs in schools.

One of the most significant shifts evident in the Year Three data focuses on strategies to assess the success of the MHSA. Respondents identified the importance of collecting longitudinal data to capture changes in student health over time as well as collecting qualitative data to provide a more detailed, in-depth assessment of the changes resulting from implementation of the Act. Specifically, suggestions included

conducting random visits to school cafeterias to not only assess what types of foods were being served but also which foods were being consumed by students to assess whether students were implementing health education information. Another suggestion focused on spot-checking vending machines in schools to determine whether healthier snacks were available and which snacks school children were choosing. Still other suggestions included collecting data about playground improvements, hiring of additional physical education teachers, and replacement of deep fat fryers with convection ovens. District Health Officers expressed a wide range of ideas concerning assessment of the MHSA. This suggests the officers are becoming more invested in the implementation of programs designed to address childhood obesity and are thinking creatively about how best to assess the programs being implemented. Working with schools to implement coordinated health programs varies according to district size and staffing. Those districts with adequate staff are active in implementation and coordination of health programs; those with few staff face constraints that limit their capacity to work on setting up health programs in schools.

PUBLIC SCHOOL DISTRICT SUPERINTENDENTS AND SCHOOL BOARD MEMBERS

Increasingly, the data in each year of the reports (2009, 2010 and 2011) underscores the importance of the implementation of systemic policies at the local school level in order to have the maximum success of the Healthy Student Act of 2007 for children throughout Mississippi. This section provides findings of Year Three (2011) and compares previous years' (2009 and 2010) findings by which local policymakers are implementing the Mississippi Healthy Students Act of 2007. It should be noted in both the superintendents and school board members that as some items on the survey were refined between 2009 and 2010; some comparisons are not made across all three years.

Methodology

Telephone Survey of Public School Superintendents

The survey was conducted by the Wolfgang Frese Survey Research Laboratory of the Social Science Research Center at Mississippi State University. The population included 149 school superintendents. The data collection period spanned from early-July to early August, 2011. There were 100 superintendents who completed the survey for a response rate of 67%. Given that this was not a random sample, margin of error must not be calculated. The data from this survey represent a census with a minimal non-response rate.

Survey of School Board Members

In April, researchers met with Marian Barksdale, the President of the Mississippi School Boards Association (MSBA) to explore ways to increase the survey response rate from local school board members. It was suggested that sending the survey from the MSBA office would call more attention to the process and would possibly generate a higher response. Researchers were given permission by Dr. Michael Waldrop, Executive Director of MSBA to use their return mailing address and to mail the surveys from their office to school board members. Researchers prepared a cover letter to each school board member, explaining the purpose of the research; included the survey and a stamped self-addressed envelope for them to return to the surveys to us. In addition, the SSRC staff attended the Mississippi School Boards Association conference in May 2011 and had surveys available at the Office of Healthy Schools table, so that anyone who did not complete a survey earlier would have the opportunity to do so, and return to our staff before leaving the conference. Again, as in past years, our response rate from these two methods was less than expected. Therefore, we attempted one last effort to increase our response rate with this group. We obtained Institutional Review Board approval to ask school Superintendents for their help in increasing our response rate for school board members. Packets were sent to all school Superintendents in Mississippi, asking them to give surveys to School Board members. These packets included a letter to Superintendents, a survey for each school board member, consent forms, and self-addressed stamped envelopes for return of the surveys to SSRC. Our

staff also made phone calls to Superintendent's offices to inform them that the packets had been mailed to them. While the response rate (37.1%) was less than we had hoped, given the additional strategies employed in Year Three, it was the highest of all three years of the evaluation, to date. For Year One (2009) the response rate was 20.8% and for Year Two (2010), the response rate was 33.94%.

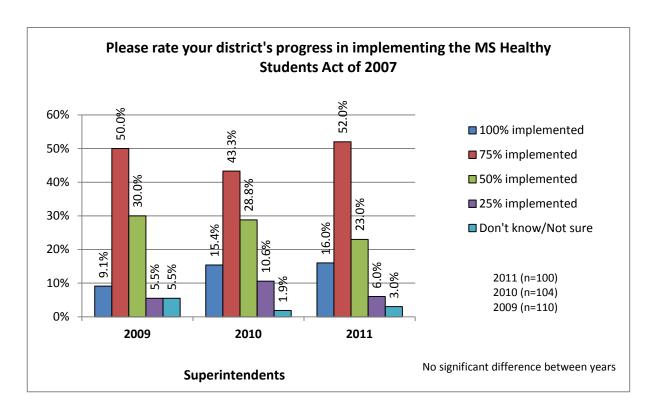
Findings

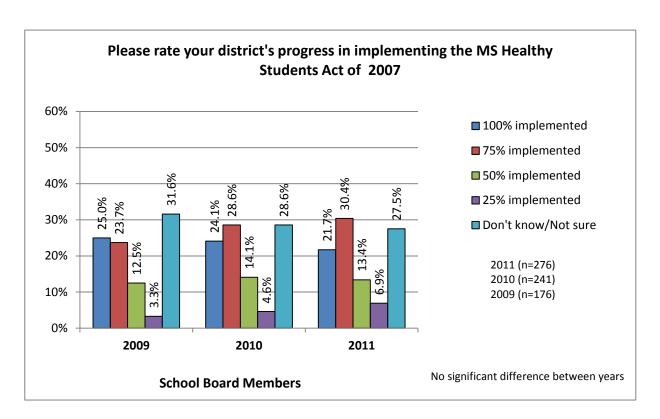
When asked about their district's progress towards full implementation of the Mississippi Healthy

Students Act of 2007 (MHSA) school superintendent responses were less than optimal. In 2011, only 16% of superintendents reported their districts at 100% implementation. Similarly, in 2010, only 15.4% said their districts had fully implemented the Act. The percentages for districts that had implemented at least 75% of the Act were more encouraging, with superintendents reporting 52% in 2011 compared to 43.3% in 2010. Among school board members, there was not a significant difference reported from 2010 to 2011 with regard to those districts which had fully implemented the Act. In 2011, 21.7% of school board members reported their districts had full implementation with 24.1% reporting in 2010. This is higher than the percentages recorded by the superintendents in the same years. However, school board members indicated lower percentages of districts reporting 75% implementation with 30.4% in 2011 and 28.6% in 2010.

It is interesting to note the difference between the responses of superintendents who "did not know or were not sure" of their district's progress in implementation compared to the responses of local school board members to the same question. In 2011, only 3% of superintendents did not know or were not sure compared to 1.9% in 2010. However, the percentages were much higher among school board members (27.5% in 2011 and 28.6% in 2010).

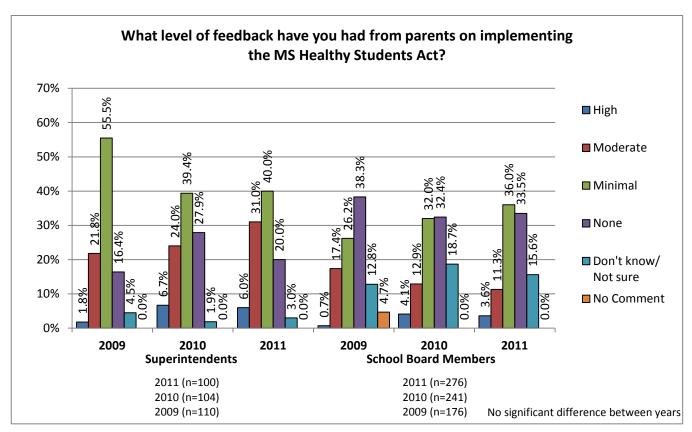
Figure 18





When asked about the level of feedback received from parents in Year Three of the on-going implementation the MHSA, the majority of each group had received "none" or "minimal." In 2011, superintendents reported the combined categories of "none" or "minimal" as 60% and school board members reported 69.5%.

Figure 19

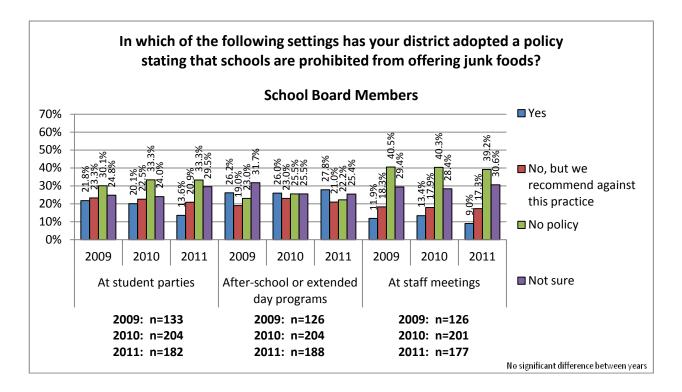


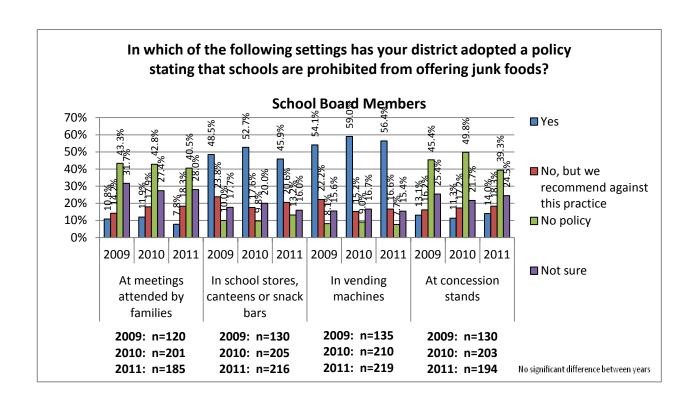
School Board Policies: School Nutrition and School Activity

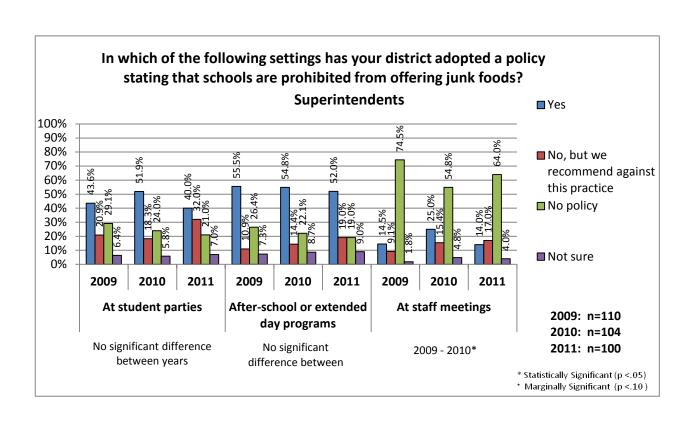
While there is a decrease in the percentage of superintendents in 2011 who reported adopting a policy to prohibit schools offering junk foods at student parties, after-school or extended day program and at staff meetings, there is an increase in superintendents who report "No, but we recommend this practice" in each of

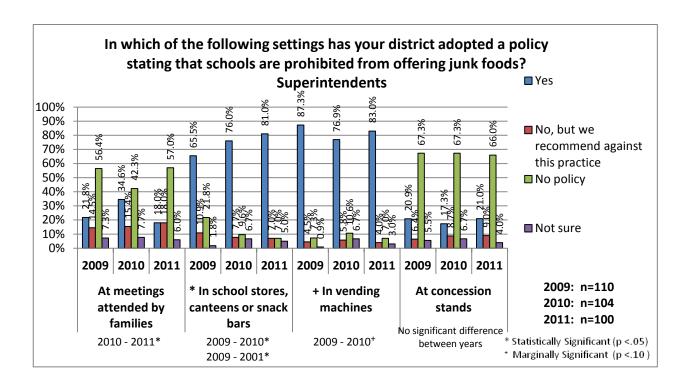
the same areas noted above. There were additional school settings in 2011, which superintendents reported an increase in policy prohibited from offering junk food included in school stores, canteens or snack bars and at concession stands.

Figure 20









There is also a difference in the response between school board members and superintendents on whether their school district has a policy that prohibits the use of food or food coupons for good behavior or good academic performance, with 23% of school superintendents noting that there is a policy to this end, while only 15.4% of school board members acknowledge said policy. In 2009, 21.7% of school boards members indicated their school board had adopted a policy, while in that same year, 23.6% of school superintendents answered affirmatively.

Table 5

Superintendents

Does your school district have a policy that prohibits the use of food or food coupons as a reward for good behavior or good academic performance?

RESPONSE	2010	%	2011	%	Percent Change
Yes, we prohibit	33	31.7	23	23.0	-8.7
We recommend against	23	22.1	18	18.0	-4.1
We do not have a policy	42	40.4	48	48.0	7.6
Don't know/ Not sure	6	5.8	11	11.0	5.2
Total	104	100	100	100	No

School Board Members

Has your school board adopted a policy stating that schools are prohibited from using food or food coupons as a reward for good behavior or good academic performance?

RESPONSE	2010	%	2011	%	Percent Change
Yes, we prohibit	53	21.8	42	15.4	-6.4
We recommend against	43	17.7	44	16.2	-1.5
We do not have a policy	75	30.9	111	40.8	9.9
Don't know/ Not sure	70	28.8	75	27.6	-1.2
No comment	2	0.8	0	0.0	-0.8
Total	243	100	272	100	No

Superintendents

Does your school district have a policy that prohibits the use of food or food coupons as a reward for good behavior or good academic performance?

RESPONSE	2009	%	2011	%	Percent Change
Yes, we prohibit	26	23.6	23	23.0	-0.6
We recommend against	30	27.3	18	18.0	-9.3
We do not have a policy	48	43.6	48	48.0	4.4
Don't know/ Not sure	6	5.5	11	11.0	5.5
Total	110	100	100	100	No

School Board Members

Has your school board adopted a policy stating that schools are prohibited from using food or food coupons as a reward for good behavior or good academic performance?

·					
RESPONSE	2009	%	2011	%	Percent Change
Yes, we prohibit	34	21.7	42	15.4	-6.3
We recommend against	27	17.2	44	16.2	-1.0
We do not have a policy	56	35.7	111	40.8	5.1
Don't know/ Not sure	34	21.7	75	27.6	5.9
No comment	6	3.8	0	0.0	-3.8
Total	157	100	272	100	Yes < .05

In 2011, more than two thirds (69%) of superintendents reported they think that the State of Mississippi has done enough to strengthen school policies on nutrition compared to 27.1% of school board members. In

2009 only 32.6% of school board members agreed with this statement, compared to 70.9% of school superintendents.

Table 6

Superintendents					
Do you think the STATE OF MISSISSIPPI has done enough to strengthen school policies on nutrition?					
RESPONSE	2010	%	2011	%	Percent Change
Yes	69	66.3	69	69.0	-2.7
No	24	23.1	22	22.0	1.1
Undecided	10	9.6	3	3.0	6.6
Don't know / Not sure	1	1.0	6	6.0	-5.0
Total	104	100	100	100	Yes <.10

School Board Members					
Do you think the STATE OF MISSISSIPPI has done enough to strengthen school policies on nutrition?					
RESPONSE	2010	%	2011	%	Percent Change
Yes	79	32.1	75	27.1	-0.5
No	107	43.5	114	41.2	0.9
No comment	0	0.0	0	0.0	-1.4
Undecided	44	17.9	70	25.3	0.9
Don't know / Not sure	16	6.5	18	6.5	0.1
Total	246	100	277	100	No

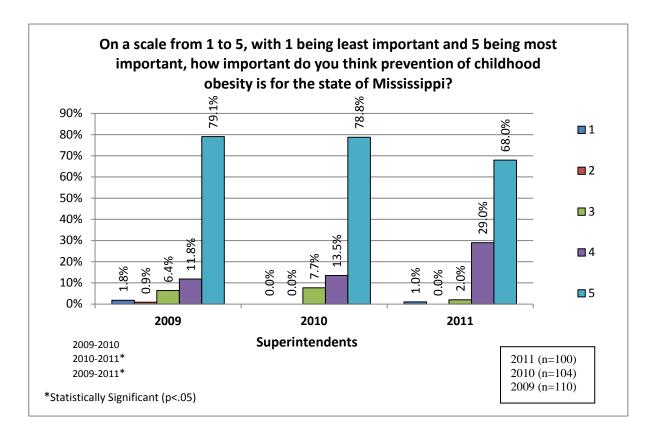
Superintendents Do you think the STATE OF MISSISSIPPI has done enough to strengthen school policies on nutrition? Percent RESPONSE 2009 % 2011 % Change 78 70.9 69 69.0 1.9 Yes 25 22.7 22 22.0 0.7 No 4 3 3.6 3.0 0.6 Undecided 3 2.7 6 6.0 -3.3 Don't know / Not sure 100 100 100 Total 110 No

School Board Members						
Do you think the STATE OF MISSISSIPPI has done enough to strengthen school policies on nutrition?						
RESPONSE	2009	%	2011	%	Percent Change	
Yes	46	32.6	75	27.1	-0.5	
No	60	42.6	114	41.2	0.9	
No comment	2	1.4	0	0.0	-1.4	
Undecided	24	17.0	70	25.3	0.9	
Don't know / Not sure	9	6.4	18	6.5	0.1	
Total	141	100	277	100	Yes <.10	

Among school superintendents in 2011, 68% ranked the prevention of childhood obesity as being "most important", when asked to rank on a scale of 1-5, compared to 61.9% of school board members ranking it most important. School board members ranked this at 62.1% in 2009 and 60.8% in 2010. This is in contrast to 79.1% of school superintendents in 2009 and 78.8% in 2010.

In 2011, there is also a sharp contrast between superintendents and school board members ranking of the effectiveness of school health councils within their district, with 16% of superintendents ranking school councils as being "very effective", compared to school board members ranking of 61%.

Figure 21



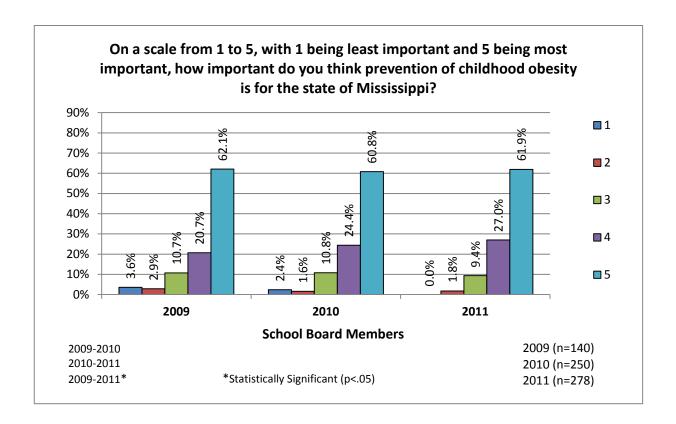
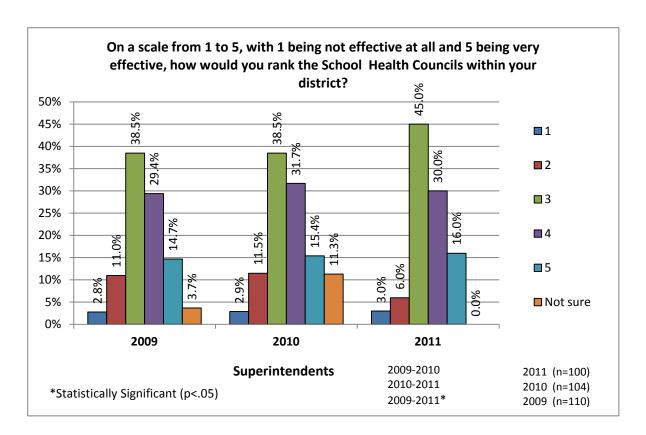
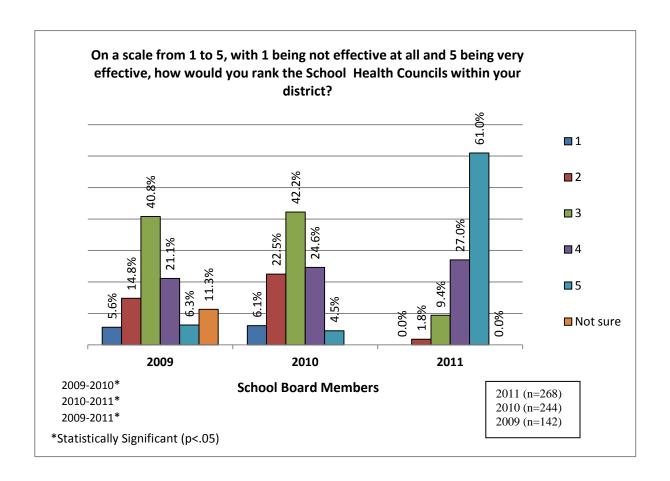


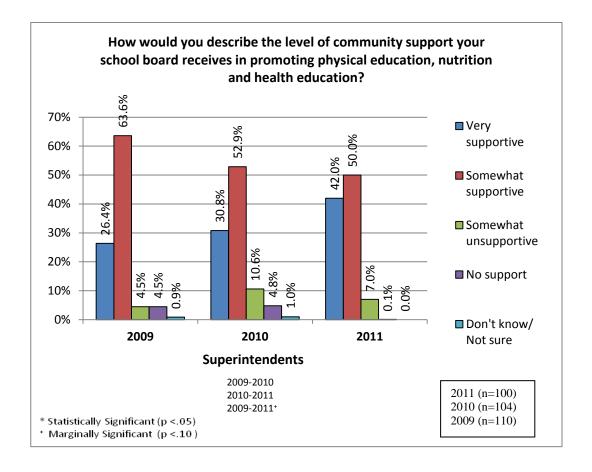
Figure 22

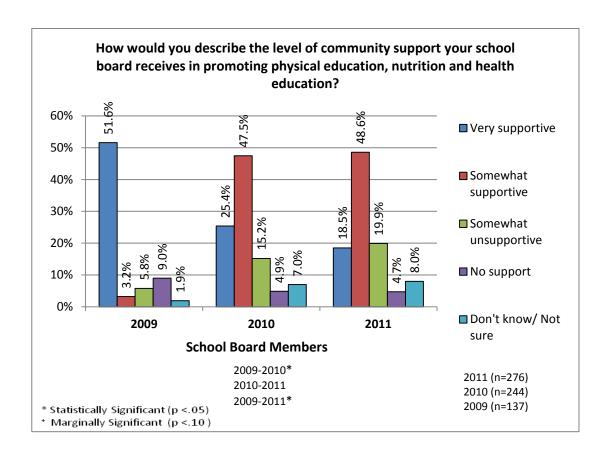




When asked about the level of community support in 2011 that the school board receives in promoting physical education, nutrition and health education there were differences between school board members and school superintendents. School superintendents (42%) note that the community is very supportive, contrasted to 18.5% of school board members.

Figure 23





When asked whether their school districts conduct fitness testing, 68% of superintendents reported yes, compared to 18.2% of school board members in 2011. In each year of the surveys (2009, 2010 & 2011), more than 40% of school board members reported they didn't know/not sure of whether fitness testing is conducted or not, compared to less than 10% for school superintendents for this same period.

Table 7

Do schools in your district conduct fitness testing?						
Superintendents	20	10	2011			
RESPONSE	n	%	n	%	Percent Change	
Yes	64	61.5	68	68.0	6.5	
No	30	28.8	27	27.0	-1.8	
Don't know/ Not sure	10	9.6	5	5.0	-4.6	
Total	104	100	100	100	No	

Do schools in your district conduct fitness testing?						
School Board Members	2010		2011			
RESPONSE	n	%	n	%	Percent Change	
Yes	82	33.6	50	18.2	-15.4	
No	63	25.8	101	36.7	10.9	
Don't know/ Not sure	99	40.6	124	45.1	4.5	
No comment	0	0.0	0	0.0	0.0	
Total	244	100	275	100	YES < .05	

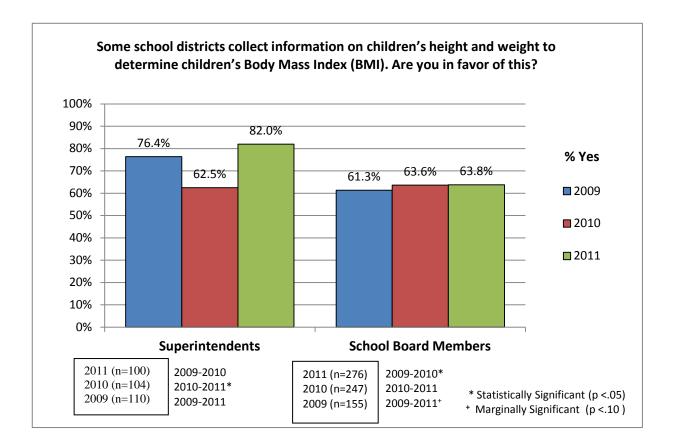
Do schools in your district conduct fitness testing?						
Superintendents	20	09	20			
RESPONSE	n	%	n	%	Percent Change	
Yes	80	72.7	68	68.0	-4.7	
No	21	19.1	27	27.0	7.9	
Don't know/ Not sure	9	8.2	5	5.0	-3.2	
Total	110	100	100	100	No	

Do schools in your district conduct fitness testing?						
School Board Members	2009		2011			
RESPONSE	n	%	n	%	Percent Change	
Yes	55	35.0	50	18.2	-16.8	
No	32	20.4	101	36.7	16.3	
Don't know/ Not sure	68	43.3	124	45.1	1.8	
No comment	2	1.3	0	0.0	-1.3	
Total	157	100	275	100	YES < .05	

When asked "Would you be in favor of sending the children's fitness testing information to their parents?", again there were differences. Among superintendents, 97.1% answered yes, while 65.9% of school

board members answered yes. This reflected an increase among superintendents between 2009 and 2011, but a decrease among school board members in 2011.

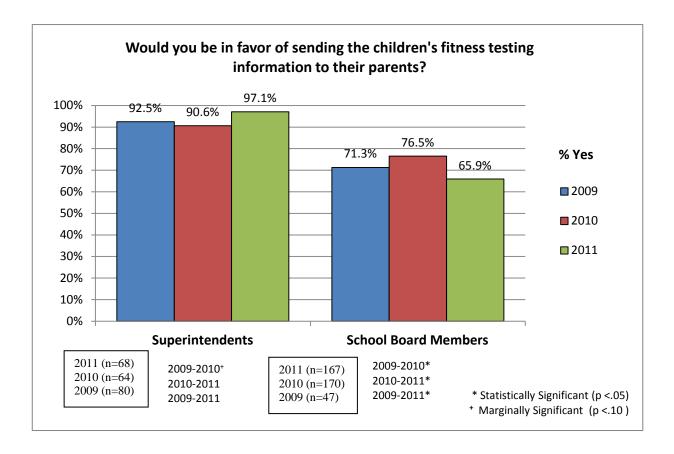
Figure 24



When asked if they were in favor of collecting children's height and weight to determine children's BMI and if they were in favor of sending this information to children's parents, there were again differences between the two groups. In 2011, 82% of superintendents supported collecting BMIs and 95% were in favor of sending this information to children's parents.

Among school board members, 63.6% were in favor of collecting BMIs, with 79.4% favored sending this information to children's parents. For more detailed information see Appendix C.

Figure 25



REFERENCES

- Southward, L., Cross, G., Baggett, D., Hanna, H., Edwards, J., Carmack, R., Parrish, D., Buffington, A., Mathews, R., & Thompson, C. (2009, October). Parents', youth and policymakers' perspectives on the Mississippi Healthy Students act of 2007: Baseline findings. The Center for Mississippi Health Policy, funded by the Robert Wood Johnson Foundation.
- 2. Southward, L., Baggett, D., Buffington, A., Cross, G.W., Edwards, J., Gallman, S., Husain, J., McKee, C., & Parrish, D., Dunaway, M., Fay, B., Gullett, H., Meeks, C., & Thompson, T. (2010, October). Parent, youth, and policy maker perspectives on the Mississippi Healthy Students Act of 2007: Year two findings. The Center for Mississippi Health Policy, funded by the Robert Wood Johnson Foundation.
- Centers for Disease Control and Prevention (CDC). (2011). Children's food environment state indicator report, 2011. Retrieved September 12, 2011 from http://www.cdc.gov/obesity/ downloads/ ChildrensFoodEnvironment.pdf
- Ogden, C. & Carroll, M. (2010). Prevalence of Obesity among children and adolescents: United States, trends 1963-1965 through 2007-2008. Centers for Disease Control and Prevention, Division of Health and Nutrition Examination Surveys. Retrieved September 12, 2011 from http://www.cdc.gov/nchs/ data/hestat/obesity_child_07_08/ obesity_child_07_08.pdf
- 5. Robert Wood Johnson Foundation (RWJ). (n.d.). *Childhood Obesity, Economic Consequences*. Retrieved September 12, 2011 from http://www.reversechildhoodobesity.org
- 6. American Academy of Pediatrics. (2011). Children, adolescents, obesity, and the media. *Pediatrics*, 128, 201-208. doi: 10.1542/peds.2011-1066
- 7. American Academy of Pediatrics (2006). Active healthy living: Prevention of childhood obesity through increased physical activity. *Pediatrics*, *117*, 1834-1842. doi: 10.1542/peds.2006-0472
- 8. Centers for Disease Control and Prevention: *Healthy Weight: It's Not a Diet, It's a Lifestyle!* Retrieved September 14, 2011 from http://www.cdc.gov/ healthyweight/ assessing/bmi/adult_bmi/english_bmi_calculator/bmi_calculator.html
- Mississippi Department of Education (MDE). (2010, September). Fiscal Year 2012 budget request, legislative budget committee hearing. Retrieved September 1, 2011 from https://docs.google.com/a/ssrc.msstate.edu/viewer?url=http://www.mde.k12.ms.us/PDF/2012_Budget_Presentation.pdf

APPENDIX A

2011 Mississippi Parent - Child Eating Habits Survey

Question Q1

How many school age children do you have living with you? child(ren)

Question Q2

Starting with the youngest one, please tell me what grade each child is in.

- 0. Kindergarten
- 1. 1st Grade
- 2. 2nd Grade
- 3. 3rd Grade
- 4. 4th Grade
- 5. 5th Grade
- 6. 6th Grade
- 7. 7th Grade
- 8. 8th Grade
- 9. 9th Grade
- 10. 10th Grade
- 11. 11th Grade
- 12. 12th Grade
- 13. Don't Know/Not Sure
- 14. Refused

Question Q3

Enter the grade of the student listed below.

- 0. Kindergartener
- 1. 1st Grader
- 2. 2nd Grader
- 3. 3rd Grader
- 4. 4th Grader
- 5. 5th Grader
- 6. 6th Grader
- 7. 7th Grader
- 8. 8th Grader
- 9. 9th Grader
- 10. 10th Grader

- 11. 11th Grader
- 12. 12th Grader
- 13. Respondent Didn't Know Grade of selected child
- 14. Respondent Refused to give grade of selected child

Question Q4		
How old is your	grader?	years old

First I am going to ask you some questions about foods your family ate within your own household during the past week.

Question Q5

How many days in the past week did your family eat fresh, frozen or canned fruit? days

Question Q6

How many days in the past week did your family eat raw or cooked, fresh, canned, or frozen vegetables, including salads? days

Question Q7

Do you have any problems finding or purchasing fresh fruits and vegetables?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question Q8

What are the problems that you have?

- 1. Location of grocery store that sells them (too far to drive to find them)
- 2. Cost (too expensive)
- 3. Children don't eat them
- 4. Transportation (doesn't have a vehicle or means to get to grocery store)
- 5. Other(s)
- 6. Has no problems
- 7. Don't Know/Not Sure
- 8. Refused

Question Q9

How many days in the past week did your family eat high-fat foods like French fries, chips or desserts? days

Not including drinks like Hi-C and Sunny Delight, how many days in the past week did your family drink 100% natural juices? days

Question Q11

How many days in the past week did your family drink milk? days

Question Q12

How many days in the past week did your family drink sodas? days

Question Q13

How many nights in an average week does your family sit down to an evening meal together?

- 1. One night
- 2. Two nights
- 3. Three nights
- 4. Four nights
- 5. Five nights
- 6. Six nights
- 7. Seven nights
- 8. None
- 9. Don't Know/Not Sure
- 10. Refused

Question Q14

How many TIMES in an average week does your family eat or pick up food from a "fast food" restaurant like, McDonald's, Wendy's, KFC, or Popeyes? times

Question Q15

How many servings or helpings of fruits and vegetables do you think a person should eat each day for good health? servings

Question Q16

In the past year, have you and your family been trying to change your diet to a healthier eating pattern?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

In the past year, has the physical activity level in your own family increased, decreased or stayed about the same?

- 1. Increased
- 2. Decreased
- 3. Stayed about the same
- 4. Don't Know/Not Sure
- 5. Refused

Question Q18

What is the PRIMARY reason for this change in physical activity level?

- 1. Information from child's school
- 2. Recent health event in family
- 3. Doctor visit
- 4. Something I read
- 5. Become healthier
- 6. Manage weight
- 7. Something I saw on TV
- 8. Other (Specify):
- 9. Don't Know/Not Sure
- 10. Refused

These next questions are specifically about YOUR participation in physical activity during the past 7 days.

Question Q19

During the past 7 days how many days have you exercised by walking, swimming, running, jogging, weight lifting, or bicycling?

- 1. One Day
- 2. Two Days
- 3. Three days
- 4. Four days
- 5. Five days
- 6. Six days
- 7. Seven days
- 8. None
- 9. Don't Know/Not Sure
- 10. Refused

Last week, on days when you exercised, on average, how long did you exercise each day?

hours minutes

Question Q21

What is the PRIMARY reason why you do not exercise or are not physically active at least 5 days a week?

- 1. others discourage me
- 2. self-conscious about my looks
- 3. afraid of injury
- 4. a lack of time
- 5. too tired
- 6. lack a safe place to exercise or walk
- 7. have care-giving duties
- 8. the weather is bad
- 9. not in good health
- 10. lack the energy to exercise
- 11. don't like or want to exercise
- 12. job-related activities provide enough exercise
- 13. Other (specify):
- 14. Don't know/Not sure
- 15. Refused

Question Q22

During the past 7 days, how many days have you exercised or been active with your family by doing things like going to the park, playing sports, or riding bikes?

- 1. One Day
- 2. Two Days
- 3. Three days
- 4. Four days
- 5. Five days
- 6. Six days
- 7. Seven days
- 8. None
- 9. Don't Know/Not Sure
- 10. Refused

Question Q23

Last week, on days when you exercised or were active with your family, on average, how long were you active each day?

hours minutes

Question Q24

On an average day, how long do you usually watch television or videos?

hours minutes

Question Q25

On an average day, how long do you typically use a computer for non-work activities?

hours minutes

Question Q26

Do you know or have you heard about any health problems that can happen when children are overweight?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question Q27

What health problems have you heard about happening to overweight children?

High blood pressure
Diabetes
Asthma or Other respiratory problems
Heart disease/ heart problems
High cholesterol
Other (Specify):
THAT IS ALL - GO TO NEXT QUESTION
Nothing
Don't Know/Not Sure
Refused

Question Q28

How likely do you think it is that overweight children will develop one or more health problems because they are overweight? Would you say:

1. Very likely,
2. Somewhat likely,
3. Somewhat unlikely, or
4. Very unlikely?
5. Don't Know/Not Sure
6. Refused
Question Q29 How likely do you think it is that overweight children will become overweight adults? Would you say:
1. Very likely,
2. Somewhat likely,
3. Somewhat unlikely, or
4. Very unlikely?
5. Don't Know/Not Sure
6. Refused
Question Q30 Do your children have a regular doctor or health care provider?
1. Yes
2. No
3. Don't Know/Not Sure
4. Refused
Question Q31

In the past year, has your doctor or health care provider said that

any of your children weigh too much?

Do you think schools in your community should require physical education for all students?
1. Yes
2. No
3. Don't Know/Not Sure
4. Refused
Question Q33 Are public school facilities, that is, buildings and grounds available for individuals in the community to use for physical activity outside of school hours?
1. Yes
2. No
3. Don't Know/Not Sure
4. Refused
Question Q34 Does your family use these facilities outside of school hours?

1. Yes

2. No

4. Refused

the community.

Question Q32

3. Don't Know/Not Sure

The next few questions are about the relationship between health and

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

What are the reasons your family does not use these facilities?

Lack of time
Transportation issues
Lack of structured activities
Safety concerns
Lack of information on facilities (what's available)
Lack of companions (nobody to go with)
Other (Specify):
No reason
Don't Know/Not Sure
Refused

Question Q36

Do you have a park nearby where your children can play?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question Q37

Do any of your children play there?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

What are the reasons why your children do not play there?

- 1. Lack of time
- 2. Financial Issues (park or activity fees)
- 3. Safety Issues
- 4. Park facilities are not maintained
- 5. Transportation issues
- 6. Lack of information or structured activities
- 7. Lack of information on facilities (what's available)
- 8. Lack of companions (nobody to go with)
- 9. Other (specify):
- 10. THAT IS ALL the reasons GO TO NEXT QUESTION
- 11. No reason
- 12. Don't Know/Not Sure
- 13. Refused

Question Q39

Do you think local government funds should be spent to build and maintain places in your community where people can exercise?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question Q40

Do any of your children walk or bike to school?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question Q41

State laws and rules now require schools to offer only healthy foods to children and to increase physical education. Do you support these changes?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

How important would you say is the role of the school in trying to prevent childhood overweight problems or obesity? Would you say the school's role is:

- 1. Very important,
- 2. Somewhat important,
- 3. A little important, or
- 4. Not at all important?
- 5. Don't Know/Not Sure
- 6. Refused

Question Q43

Which of the following BEST expresses your belief about the foods and beverages that should be offered to students in vending machines at school?

- 1. Offer only healthy items like low-fat & low-sugar snacks, low-sugar & non-carbonated drinks,
- 2. Offer both healthy and less healthy snacks and drinks and let students decide for themselves, or
- 3. Schools should not have vending machines available to students?
- 4. Don't Know/Not Sure
- 5. Refused

Question Q44

Some schools collect information on children's heights and weights and give a

report to parents. Are you in favor of this?
1. Yes
2. No
3. Don't Know/Not Sure
4. Refused
Question Q45 Now I am going to ask you about your grader. Please answer all of the remaining questions as they pertain to your grader.
Question Q46 Is your grader a boy or girl?
1. Boy
2. Girl
3. Refused
Question Q47 What is your relationship to your grader?
 Parent (either biological, adoptive or step) Grandparent Aunt or Uncle Brother or Sister Other Relative Legal Guardian Foster Parent Other Non-Relative Don't Know/Not Sure Refused
Question Q48 On an average day, how long is she/he physically active outside of school hours?

hours minutes

Which of the following are reasons why your _____ grader is not physically active more than 30 minutes each day, outside of school hours?

Not enough time after school
Unsafe neighborhood
Child's health
Involved in other after school activities
Nowhere to play
Lack of companions to play with
Weather
Job responsibilities
Other reason(s):
Don't Know/Not Sure
Refused

Question Q50

On an average day, how long does she/he usually participate in electronic entertainment such as watching TV or videos, playing video games, hand-held games, and using the internet?

hours minutes

Question Q51

Do you have a home computer?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question Q52

On an average day, how long does she/he usually use a computer for fun, not school work?

hours minutes

Question Q53

During the past 12 months, how would you describe her/his grades in school?

3. Mostly C's
4. Mostly D's
5. Mostly F's
6. Don't Know/Not Sure
7. Refused
Question Q54 During an average week, does your grader mostly eat food prepared in the school cafeteria or take her lunch to school?
1. Eats school lunch
2. Takes lunch to school
3. About 50-50
4. Don't Know/Not Sure
5. Refused
6. Child does NOT eat lunch
Question 55 Are you aware of any changes in vending machines, school lunch choices, or physical exercise requirements at her/his school?
1. Yes
2. No
3. Don't Know/Not Sure
4. Refused

1. Mostly A's

2. Mostly B's

How would you rate her school on providing a healthy environment in terms of offering healthy foods and opportunities for physical activity? Would you say that the school provides a:

- 1. Very healthy environment,
- 2. Somewhat healthy environment,
- 3. Somewhat unhealthy environment, or
- 4. Very unhealthy environment?
- 5. Don't Know/Not Sure
- 6. Refused

Question New1

Does her/his school conduct physical fitness testing?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question NEW2

Are you in favor of schools sending children's physical fitness testing information to their parents?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

How satisfied are you with her/his school in terms of promoting healthy foods? Are you:

- 1. Very satisfied,
- 2. Somewhat satisfied,
- 3. Somewhat dissatisfied, or
- 4. Very dissatisfied?
- 5. Don't Know/Not Sure
- 6. Refused

Question Q58

How satisfied are you with her/his school in terms of promoting physical activity? Are you:

- 1. Very satisfied,
- 2. Somewhat satisfied,
- 3. Somewhat dissatisfied, or
- 4. Very dissatisfied?
- 5. Don't Know/Not Sure
- 6. Refused

Question Q59

How often do you receive information from her/his school about ways your family can eat healthier foods? Would you say:

- 1. Very often,
- 2. Occasionally, or
- 3. Never?
- 4. Don't Know/Not Sure
- 5. Refused

\cap	uestion	\cap	61	٦
u	uestion	u	U	J

Does h	er school	have a	health	committee,	council	or task	force?
DOC3 III	ei school	nave a	Health	committee,	Council	OI Lask	TOTCE:

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Have you ever attended a meeting or event?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question Q62

How much does your ____ grader weigh without shoes? pounds

Question Q63

How tall is she/he without shoes? feet inches

Question Q64

What would you say best describes her/his weight?

- 1. Underweight,
- 2. A healthy weight,
- 3. Overweight, or
- 4. Obese?
- 5. Don't Know/Not Sure
- 6. Refused

How worried	d are vou	about her	/his weight?	Would v	vou sav	/ :
TIONS WOLLICE	a are yea	about ner	/ IIIO WWCISIIC.	VVCaia	y o a sa y	, ,

1. Very,
2. Somewhat,
3. Slightly, or
4. Not at all worried?
5. Don't Know/Not Sure
6. Refused
Question Q66 Does she/he regularly eat breakfast?
1. Yes
2. No
3. Don't Know/Not Sure
4. Refused
Question Q67 Where does she/he usually eat breakfast?
1. At home
2. On the way to school
3. At School
4. Doesn't eat breakfast
5. Don't Know/Not Sure
6. Refused
Question Q68 Do you limit the amount of chips, soda or sweets your grader eats

2.	No
3.	Don't Know/Not Sure
4.	Refused
In th	stion Q69 e past year, have you or your grader taken any action to address his weight gain or loss?
1.	Yes
2.	No
3.	Don't Know/Not Sure
4.	Refused
	stion Q70 e past year, have you increased her/his exercise or physical activity?
1.	Yes
2.	No
3.	Don't Know/Not Sure
4.	Refused
Inclu invo	stion Q71 Iding school-related and non school-related activities, is your child lived in any organized activities where she/he is physically active outside shool hours?
1.	Yes
2.	No
3.	Don't Know/Not Sure
4.	Refused

1. Yes

Question Q72

What kind of organized activities does your child participate in outside of school hours where she is physically active?

School sports team(s)
Community/city-sponsored sports (rec. sports)
Girl/Boy Scouts
Boys and Girls Club
Karate/Taekwondo
Band
Cheerleading
Other (specify):
THAT IS ALL - GO TO NEXT QUESTION
Don't Know/Not Sure
Refused

Question Q73

Do you have health insurance?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question Q74

Does your ___ grader have health insurance?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question Q75

Do you have a regular doctor or health care provider?

1. Yes

No
 Don't Know/Not Sure
 Refused
 re following background on

The following background questions are just for statistical purposes. Remember, all your answers will be confidential.

Question Q76 What year were you born? 19

Question Q77 Are you Hispanic or Latino?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question Q78

Which of the following groups would you say best represents your race or ethnic background?

- 1. White;
- 2. Black or African American;
- 3. Asian;
- 4. Native Hawaiian or Pacific Islander; or
- 5. American Indian or Alaska Native?
- 6. Other (Specify):
- 7. Don't Know/Not Sure

8. Refused

Question Q79 Are you currently:

- 1. Married,
- 2. Divorced,
- 3. Widowed,
- 4. Separated,
- 5. Never been married, or
- 6. A member of an unmarried couple?
- 7. Refused

Question Q80

What is the highest grade or year of school you completed?

- 1. Never attended school or only attended kindergarten
- 2. Grades 1 through 8 (Elementary)
- 3. Grades 9 through 11 (Some high school)
- 4. Grade 12 or GED (High school graduate)
- 5. College 1 year to 3 years (some college or technical school)
- 6. College 4 years or more (College graduate)
- 7. Refused

Question Q81

Are you currently:

- 1. Employed full-time,
- 2. Employed part-time,
- 3. Self-employed,

6. A Homemaker,
7. A Student,
8. Retired, or
9. Unable to work?
10. Refused
Question Q82 About how much do you weigh without shoes? pounds
Question Q83 How tall are you without your shoes on? feet inches
Question Q84 What would you say best describes your own weight? Would you say:
1. Underweight,
 Underweight, Normal weight,
2. Normal weight,
2. Normal weight,3. Overweight, or
 Normal weight, Overweight, or Obese
 Normal weight, Overweight, or Obese Don't Know/Not Sure
 Normal weight, Overweight, or Obese Don't Know/Not Sure Refused Question Q85

4. Out of work for more than 1 year,

5. Out of work for less than 1 year,

1. One 2. Two 3. Three 4. None 5. Don't Know/Not Sure 6. Refused Question Q87 What is the gender of the respondent? (Ask if necessary) 1. Male 2. Female 3. Refused and could not tell for sure **Question Q88** I am going to read some income categories, please stop me when I get to the one that best describes your total 2010 household income before taxes. 1. BELOW \$20,000 2. \$20,000 TO \$40,000

3. Slightly, or

4. Not at all?

6. Refused

Question Q86

or obese?

5. Don't Know/Not Sure

Considering your three closest friends, how many would you say are overweight

3. \$40,000 TO \$60,000						
4. \$60,000 TO \$80,000						
5. \$80,000 TO \$100,000						
6. \$100,000 AND ABOVE						
7. DON'T KNOW/NOT SURE						
8. REFUSED						
Question Q89 What is your zip code?						
Child/Adolescent Questionnaire						
Now that we have completed our interview, if she/he is available I would like to have your permission to ask your grader a few questions as well. The interview with your child will last about 10 minutes and the questions will be similar to the questions I have been asking you. Your child's participation is completely voluntary and her answers will remain confidential and will be used for research purposes only. Your child may discontinue the interview at any time and skip any questions she would prefer not to answer						
completely voluntary and her answers will remain confidential and will be used for research purposes only. Your child may discontinue the interview at any						
completely voluntary and her answers will remain confidential and will be used for research purposes only. Your child may discontinue the interview at any						
completely voluntary and her answers will remain confidential and will be used for research purposes only. Your child may discontinue the interview at any time and skip any questions she would prefer not to answer						
completely voluntary and her answers will remain confidential and will be used for research purposes only. Your child may discontinue the interview at any time and skip any questions she would prefer not to answer May I have your consent to do an interview with your grader?						
completely voluntary and her answers will remain confidential and will be used for research purposes only. Your child may discontinue the interview at any time and skip any questions she would prefer not to answer May I have your consent to do an interview with your grader? 1. Yes						

May I interview her/him now?

- 1. Yes
- 2. No, my child is not available now.

3. Refused

Hello, my name is I am calling from the Social Science Research
Center at Mississippi State University. Your mother/father has given
us permission to ask you some simple questions about your health and
the foods you eat at home and in school. All of your answers are
confidential. You don't have to take this survey if you don't want to.
You may stop at any time. If you think a question is too personal you
don't have to answer it. This survey will only take about 10 minutes.
May I begin?

- 1. Yes
- 2. No
- 3. Refused

Question QA1

In school, have you learned about the importance of healthy eating and physical activity in maintaining a healthy weight?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Next I have some questions about the foods and drinks sold in your school.

Question QA2

Does your school have a vending machine from which students can buy food, drinks or candy?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question QA3

How many times in the past week did you purchase drinks such as bottled water, milk, 100% fruit juice, or 100% vegetable juice from a vending machine at school? times

Question QA4

How many times in the past week did you purchase drinks such as sodas, lemonade, sweet tea or fruit-flavored drinks from a vending machine at school? times

Question QA5

How many times in the past week did you purchase snacks from a vending machine at school? times

Question QA6

Which of the following BEST expresses your belief about the foods and beverages that should be offered to students in vending machines at school?

- 1. Offer only healthy items like low-fat & low-sugar snacks, low-sugar & non-carbonated drinks,
- 2. Offer both healthy and less healthy snacks and drinks and let students decide for themselves, or
- 3. Schools should not have vending machines available to students?
- 4. Don't Know/Not Sure
- 5. Refused

Question QA7

Does your school cafeteria have a salad bar?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question QA8

Thinking about school days only, that is, Monday through Friday; on how many of those days do you typically eat breakfast?

- 1. One day
- 2. Two days
- 3. Three days
- 4. Four days
- 5. Five days
- 6. Never/None
- 7. Don't Know/Not Sure
- 8. Refused

The next questions are about foods you ate yesterday (last schoolday). When I ask how often the food was eaten, please tell me how many times, or how many servings you ate or drank.

Question QA9

How many servings or helpings of fruit, like apples, bananas, or canned peaches did you eat yesterday (last schoolday)? servings

Question QA10

How many servings or helpings of vegetables, like corn or green beans, including salads, did you eat yesterday (last schoolday)? servings

Question QA11

How many servings of French Fries did you eat yesterday (last schoolday)? servings

Question QA12

Not including Kool-Aid, lemonade, Hi-C, Sunny D, or Twister, how many glasses of 100% juices did you drink yesterday (last schoolday)? glasses

Question QA13

How many glasses or cans of sodas like Coke or 7-Up did you drink yesterday

(last schoolday)? glasses

Question QA14

How many glasses of milk did you drink yesterday (last schoolday)? glasses

Next I am going to ask some questions about meals that you ate at home during the past week.

Question QA15

How many days in the past week did your family eat fresh, frozen, or canned fruit? days

Question QA16

How many days in the past week did your family eat raw or cooked, fresh, canned, or frozen vegetables, including salads? days

Question QA17

How many days in the past week did your family eat high-fat foods like French fries, chips or desserts? days

Question QA18

Not including drinks like Hi-C and Sunny Delight, how many days in the past week did your family drink 100% natural juices? days

Question QA19

How many days in the past week did your family drink milk? days

Question QA20

How many days in the past week did your family drink sodas? days

Question QA21

How many servings of fruits and vegetables do you think a person should eat each day for good health? servings

Question QA22

Do your parents limit the amount of chips, soda or sweets you eat?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure

4. Refused

Question QA23

During an average week, do you mostly eat food prepared in the school cafeteria or take your lunch to school?

- 1. Eats school lunch usually
- 2. Takes lunch to school usually
- 3. About 50-50
- 4. Don't Know/Not Sure
- 5. Refused

Question QA24

How healthy is the food that is served in your school's cafeteria? Would you say it is:

- 1. Very healthy,
- 2. Somewhat healthy,
- 3. Somewhat unhealthy, or
- 4. Very unhealthy?
- 5. Don't Know/Not Sure
- 6. Refused

Question QA25

In the past year have you been trying to change what you eat to be healthier?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question QA26

Have you been trying to eat healthier because of something you learned at school?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question QA27

What was the MAIN reason you decided to eat healthier?

- 1. Recent health event in family
- 2. Information from my school
- 3. Doctor visit
- 4. Something I read
- 5. Become healthier
- 6. Manage weight
- 7. Something I saw on TV
- 8. Other (specify):
- 9. Don't know
- 10. Refused

Question QA28

What changes have you made? (DO NOT READ CHOICES)

Increase in chicken or fish consumption (decrease in red meat) Switch to low-fat products

Reduce fat intake
Decrease sodas or switch to diet sodas
Decrease fried snacks such as potato chips and fries
Change cooking methods to reduce frying
Decrease portion sizes
Increase fruits and vegetables
Decrease sweets and desserts
Count calories
Eat less fast food
Eat out less often
Use nutrition labels to make choices
Other (Specify):
Don't Know/Not Sure
Refused

Question QA29

Which of the following have you done during this past school year:

Dieted
Skipped meals
Skipped snacks
THAT IS ALL - GO TO NEXT QUESTION
No (None of the above)
Don't Know/Not Sure
Refused

Physical activity is any activity that increases your heart rate and makes you get out of breath some of the time. Physical activity can be done in sports, playing with friends, or walking to school. Some examples of physical activity are running, brisk walking, rollerblading, biking, dancing, skateboarding, swimming, soccer, basketball, football and surfing.

Question QA30

Not counting PE OR GYM CLASS, over the past 7 days, how many days were you physically active?

- 1. One day
- 2. Two days
- 3. Three days

Question QA31						
On days when you were physically active last week, on average, how long were you physically active each day? hours minutes						
Question QA32 How many total PE courses do you plan to take in high school?						
1. One PE course						
2. More than one PE course						
3. None (plan to substitute band or sports for my PE requirement)						
4. Don't know/Not Sure						
5. Refused						
Question QA33 Including school-related and non school-related activities, are you involved in any organized activities where you are physically active outside of school hours?						
1. Yes						
2. No						
 None (plan to substitute band or sports for my PE requirement) Don't know/Not Sure Refused Question QA33 Including school-related and non school-related activities, are you involved in any organized activities where you are physically active outside of school hours? Yes 						

4. Four days

5. Five days

6. Six days

8. None

7. Seven days

9. Don't know

10. Refused

- 3. Don't Know/Not Sure
- 4. Refused

Question QA34

What kind of organized activities do you participate in outside of school hours where you are physically active?

School sports team(s)
Community/city-sponsored sports (rec. sports)
Girl/Boy Scouts
Boys and Girls Club
Karate/Taekwondo
Band
Cheerleading
Other (Please specify)
THAT IS ALL of the sports - GO TO NEXT QUESTION
Don't Know/Not Sure
Refused

Question QA35

Do your parents limit the amount of time you spend watching TV or playing video games?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question QA36

Do your parents limit the amount of time you spend using the Internet?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question QA37

On an average day, how long do you usually participate in electronic entertainment such as watching TV or videos, playing video games, hand-held games, and using the internet?

hours minutes

Question QA38

Do you have a computer in your bedroom?

- 1. Yes
- 2. No
- 3. Don't Know/Not Sure
- 4. Refused

Question QA39

On an average day, how long do you usually use a computer for fun, not school work?

hours minutes

Question QA40

Do you have a television in your bedroom?

1. Yes	
2. No	
3. Don't Know/Not Sure	
4. Refused	
Question QA42 Have you been trying to increase your amount of exercise or physical activity because of something you learned at school?	
1. Yes	
2. No	
3. Don't Know/Not Sure	
4. Refused	
Question QA43 What would you say best describes your weight? Would you say you are:	
1. Underweight,	
2. At a healthy weight,	
3. Overweight, or	
	27

1. Yes

2. No

4. Refused

Question QA41

activity that you do?

3. Don't Know/Not Sure

In the past year, have you increased the amount of exercise or physical

5. Don't Know/Not Sure
6. Refused
Question QA44 Are you very, somewhat, slightly, or not at all worried about your weight?
1. Very
2. Somewhat
3. Slightly
4. Not at all
5. Don't Know/Not Sure
6. Refused
Question QA45 Considering your three closest friends, how many would you say are overweight or obese?
1. One
2. Two
3. Three
4. None
5. Don't Know/Not Sure
6. Refused
Question QA46 During the past month, on how many days did you smoke cigarettes? days Finally, I would like to ask some background questions for statistical purposes.

4. Obese?

Question QA47

Are you Hispanic or Latino?

1. Yes
2. No
3. Don't Know/Not Sure
4. Refused
Question QA48 Which of the following groups would you say best represents your race or ethnic background?
1. White;
2. Black or African American;
3. Asian;
4. Native Hawaiian or Pacific Islander; or
5. American Indian or Alaska Native?
6. Other (Specify):
7. Don't Know/Not Sure
8. Refused
Question QA49 During the past 12 months, how would you describe your grades in school?
1. Mostly A's
2. Mostly B's
3. Mostly C's
4. Mostly D's
5. Mostly F's

7. Refused							
Question QA50 About how much do you weigh without shoes? pounds							
Question QA51 How tall are you without your shoes on? feet inches							
This completes our interview. Thank you for taking the time to participate in this important study.							
State Board of Education Interview Guide							
Introduction—1 st Telephone Contact:							
Hello. My name is I am from Mississippi State University, and am calling regarding a project that is designed to evaluate the Mississippi Healthy Students Act of 2007. As you may recall, this research is sponsored by the Center for Mississippi Health Policy and funded by the Robert Wood Johnson Foundation.							
As a part of this research, we would like to interview, regarding his/her opinions about childhood obesity policies.							
Any information we gather will only be released as group information and will not be attributed to any individual board member. Is there a time when I may speak with for about 20 minutes in the next two (2) weeks?							
Objectives (if asked to describe the study/project in more detail):							
 To learn State Board of Education members perspectives on the passage and implementation of the Mississippi Healthy Students Act of 2007. 							
 To understand State Board of Education members knowledge, attitudes and support for ways to prevent obesity among Mississippi's children. 							

6. Don't Know/Not Sure

Interview Script/Guide:
Name:
Hello, Dr/Mr/Ms Thank you for agreeing to participate in this interview. We appreciate your time last year and are interested in following up to learn your opinions on the childhood obesity legislation of the Mississippi Healthy Students Act of 2007. [If the Board Member is new, the sentence above will read as follows: "We are interested in learning your opinions on the childhood obesity legislation of the Mississippi Healthy Students Act of 2007:] As you know, this legislation affected physical education, nutrition and health education in the schools. We are also interested in your perspectives on additional policies that could assist in the prevention of obesity among Mississippi's children. We believe that the results of our research will be helpful to improve programs throughout the state of Mississippi.
We would like to have your permission to tape this interview. Any information we gather from this research will be kept confidential and will not be attributed to any individual board member. That is, the responses from all Board of Education members will be grouped together. Quotes may be used, but they will not be attributed to any individual board member. The tape will be used only to help with the transcription of the interview, and there will be no identifying information on the tape. Your name will not be used. Your participation in this interview is completely voluntary, and you do not have to answer any question that you choose not to. Should you have further questions or need more information, please feel free to contact Ms. Dorris Baggett at (662) 325-8079 or Ms. Anne Buffington at (662) 325-1590 [We will also give them a business card w/ our contact information]
Do I have your permission to record this interview? (Note to interviewer: If yes, proceed. If no, use longer form with spaces for notes.)
May I begin?
How familiar are you with the requirements of the MS Healthy Students Act of 2007? Very familiar Somewhat familiar Somewhat unfamiliar Very unfamiliar Don't know / Not sure
As you may recall, there are three (3) major components of the Mississippi Healthy Students Act of 2007, Improving physical education Improving school nutrition and Increasing health education
Of these components, which do you see as most important? As next important?

- Improving physical education
- Improving school nutrition and
- Increasing health education

Are you aware that the Center for Mississippi Health Policy is conducting a 5-year evaluation of the Mississippi Healthy Students Act of 2007?

If yes, go to question 4

If no, go to question 5

Have you seen a copy of the evaluation report for year 2? (show them a copy of the report)

On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?

Least important Most important
1 2 3 4 5

How would you rate where the state of Mississippi is on addressing childhood obesity policies, with 1 being Mississippi's policies are not at all effective in addressing childhood obesity and 5 being Mississippi's policies are very effective in addressing childhood obesity?

Not at all effective Very effective

1 2 3 4 5

Among individuals and school districts with whom you interact, what has been your impression of their reaction to the MS Healthy Students Act of 2007?

(Probe/follow-up, if needed: For example, have you heard anything from school personnel? Parents?)

How do you think we should measure success of this legislation? (Probe/follow-up, if needed)
For example, fitness testing, decrease in % of children who are obese more 'fit' workforce (economic development issue)

Do you see a role for the State Department of Education in obesity prevention? Yes No

If yes, go to question #10. If no, go to question #11.

Please rate the following target areas that can be addressed by the Department of Education, by level of importance, with 1 being not at all important and 5 being very important..

		Not at all important			Very important	
Increasing physical activity		1	2	3	4	5
Increasing consumption of fruits & vegetables		1	2	3	4	5
Decreasing consumption of high calorie, dense foods		1	2	3	4	5
Decreasing children's screen time (TV viewing, computer time)	1	2	3	4	5	
Decreasing consumption of sugary beverages		1	2	3	4	5

Do you think that the state of Mississippi has done enough to strengthen the school policies on nutrition? on health education? on physical education?

If No to any of these in Q#11, then go to 12A 12A. What other policies need to be enacted? If yes to all questions, then go to Q # 13.

Do you think that students are receiving enough education in each of the following areas? Nutrition? Health? Physical education?

Do you think it is important for schools to promote healthy lifestyles for the following groups? Students? Staff?

To what extent do you think the schools in the state are implementing the minimum requirements of Coordinated School Health Programs?, with 1 being they are not doing a very good job and 5 being they are doing a good job.

Not	doing a v	ery goo	d job		Doing a good job
1	2	3	4	5	

Many things can have an impact on the prevention of childhood obesity. Please rate the following things that exist outside of the school setting, with a rating of 1 meaning that it has no impact and a rating of 5 meaning that it has a very large impact.

No impact Very large impact

Child care centers		1	2	3	4	5
Nutrition labeling		1	2	3	4	5
Media policy (restrictions on advertising promoting positive messages)	g, 1	2	3	4	5	
Farmers' markets		1	2	3	4	5
Body Mass Index (BMI) (measuring children's height and weight) reporting	1	2	3	4	5	
Built environment (sidewalks, parks, green space, bike lanes)	1	2	3	4	5	
Fat and trans fat restrictions	1	2	3	4	5	
Location of Supermarkets (proximity to where residents live)		1	2	3	4	5

Do you think local government funds should be spent to build and maintain places in your community where people can exercise?

Yes

No

Don't know/Not sure

Do you think schools should make school facilities, such as gym tracks, ball fields, or playgrounds, available to the community after school hours to promote physical activity/education programs?

Yes

No

Don't know/Not sure

Besides schools, what other places or groups/organizations if any, do you think have an important role in decreasing childhood overweight and/or obesity in Mississippi?

Who do you rely upon to get information on childhood obesity in Mississippi?

Some school districts collect information on children's *height and weight* to determine children's Body Mass Index (BMI). Are you in favor of this?

Yes

No

Don't know/Not sure

If yes, are you in favor of sending this information to children's parents? Yes

No

Don't know/Not sure

School districts are required to conduct fitness testing in certain grades. Are you in favor of sending the results of this testing to students' parents?

Yes

No

Don't know/Not sure

Some school districts have adopted policies stating that schools are prohibited from offering "junk" foods (foods which provide calories primarily through fats or added sugars and have minimal amounts of vitamins and minerals) in the following settings:

What are your thoughts on each of the following?

	Prohibit	Recommend Against	No Policy	Not Sure/No Comment
At student parties				
In after-school or extended day programs				
At staff meetings				
At meetings attended by families				
In school stores, canteens or snack				
bars				
In vending machines				
At concession stands				

Generally speaking, what if anything, makes it most difficult for the schools in Mississippi to meet Physical Education and Nutrition requirements?

To what extent do you believe there is a positive association between implementation of Coordinated School Health Programs in the school district and the academic performance of the students?

Not at all Somewhat A fair amount A great deal Don't know/not sure

In your opinion, how important is it to provide staff wellness program(s)? Very important Moderately important Not important at all

Don't know/	not	sure
-------------	-----	------

Generally speaking, how would you rate the effectiveness of School Health Councils with 1 being not effective a	t all and
5 being very effective, h?	

Not effective at all Very effective 1 2 3 4 5

Is there anything else you would like to share about your experience and knowledge regarding childhood obesity legislation and state policies? (Probe/Follow-up if needed: How is this an education concern)?

Thank you so much for your time. We know how busy you are, and we are pleased that you made time to share this important information.

Would you like a copy of the report or to be put on a mailing list for the report? (if so, obtain email or mailing address)

Mississippi State Board of Health Members' Interview Guide

Introduction: 1st Telephone Contact:

Hello. My name is	I am from Mississippi Sta	ate University and am calling regarding a project that
is designed to evaluate the Mis	sissippi Healthy Students A	Act of 2007. This research is sponsored by the Center
for Mississippi Health Policy ar	nd funded by the Robert Wo	ood Johnson Foundation.
As a part of this research, we vobesity policies.	vould like to interview	, regarding his/her opinions about childhood

Any information we gather will only be released as group information and will not be attributed to any individual board member. Is there a time when I may speak with ______ for about 20 minutes in the next two (2) weeks?

Objectives (if asked to describe the study/project in more detail):

- 1. To learn (<u>State Board of Health Member's</u>) perspectives on the passage and implementation of the Mississippi Healthy Students Act of 2007.
- 2. To understand (State Board of Health Member's) knowledge, attitudes and support for ways to prevent obesity among Mississippi's children.

Interview Script/Guide:
Name:
Dr/Mr/Ms, thank you for agreeing to participate in this interview. We appreciate your time last year and are interested in following up to learn your opinions on the childhood obesity legislation of the Mississippi Healthy Students Act of 2007. [If Board member is new, the sentence above will read as follows: "We are interested in learning your opinions on the childhood obesity legislation of the Mississippi Healthy Students Act of 2007."] As you know, this legislation affected physical education, nutrition and health education in the schools. We are also interested in your perspectives on additional policies to assist in the prevention of obesity among Mississippi's children. We believe that results of our research will be helpful to improve programs throughout the state of Mississippi.
We would like to have your permission to tape this interview. Any information we gather from this research will be kept confidential and will not be attributed to any individual board member. That is, the responses from all Board of Health members will be grouped together. Quotes may be used, but they will not be attributed to any individual board member. The tape will be used only to help with the transcription of the interview and no identifying information will be on the tape. Your name will not be used. Your participation in this interview is completely voluntary, and you do not have to answer any question that you choose not to. Should you have further questions or need more information, please feel free to contact Ms. Dorris Baggett at (662) 325-8079 or Ms. Anne Buffington at (662) 325-1590 [We will also provide them with a business card with our contact information]
Do I have your permission to record this interview?
Note to interviewer
If yes, proceed.
If nouse longer form with spaces (for notes)
May I begin?
How familiar are you with the requirements of the MS Healthy Students Act of 2007? Very familiar Somewhat familiar Somewhat unfamiliar Very unfamiliar Don't know / Not sure
As you may recall, there are three (3) major components of the Mississippi Healthy Students Act of 2007, Improving physical education

Improving school nutrition and Increasing health education

Of these components, which do you see as most important? As next important?

- Improving physical education
- Improving school nutrition and
- Increasing health education

Are you aware that the Center for Mississippi Health Policy is conducting a 5-year evaluation of the Mississippi Healthy Students Act of 2007?

If yes, go to question 4

If no, go to question 5

Have you seen a copy of the evaluation report for year 2? (show a copy of the report)

On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?

Least important 1 2 3 Most important 4 5

How would you rate where the state of Mississippi is on addressing childhood obesity policies, with 1 being Mississippi's policies are not at all effective in addressing childhood obesity and 5 being Mississippi's policies are very effective in addressing childhood obesity?

Not at all effective

1 2 3 4 5

Among individuals and health department districts with whom you interact, what has been your impression of their reaction to the MS Healthy Students Act of 2007?

(Probe/follow-up, if needed)

For example, have you heard anything from school personnel? physicians, school nurses?

How do you think we should measure success of this legislation? (Probe/follow-up, if needed)
For example, fitness testing, decrease in % of children who are obese, more 'fit' workforce (economic dev issue)

Do you see a role for the State Department of Health in obesity prevention?

Yes

No

If yes, go to question #10. If no, go to question #11.

Please rate the following target areas that can be addressed by public health, by level of importance, with 1 being not at all important and 5 being very important:

	4	2	2	Not at all important			Very important Increasing physical activity		
	1	2	3	4	5				
Increasing con & vegetables	sumptio	n of frui	ts		1	2	3	4	5
Decreasing concalorie, dense	-	on of hig	ţh		1	2	3	4	5
Decreasing chi			me	4	2	2	4	_	
(TV viewing, co	omputer	time)		1	2	3	4	5	
Encouraging b	reastfee	ding			1	2	3	4	5
Decreasing con sugary beverag	•	on of			1	2	3	4	5

Do you see a role for the local and/or district Health Departments in promoting the MS Healthy Students Act of 2007?

Do you think that the state of Mississippi has done enough to strengthen the school policies

on nutrition?

on health education?

on physical education?

If NO to any of these on Q#12, then what other policies need to be enacted?

Many things can have an impact on the prevention of childhood obesity. Please rate the following things that exist outside of the school setting, with a rating of 1 meaning that it has no impact and a rating of 5 meaning that it has a very large impact.

	No impac	t	Very large			rge impact
Child care centers	1		2	3	4	5
Nutrition labeling	1		2	3	4	5
Media policy (restrictions on advertising promoting positive messages)	g, 1 2		3	4	5	

Farmers' markets		1	2	3	4	5
Body Mass Index (measuring children's height and weight) reporting	1	2	3	4	5	
Built environment (sidewalks, parks, green space, bike lanes)	1	2	3	4	5	
Fat and trans fat restrictions	1	2	3	4	5	
Location of Supermarkets (proximity to where residents live)		1	2	3	4	5

Do you think local government funds should be spent to build and maintain places in your community where people can exercise?

Yes No

Don't know/Not sure

Is there anything else you would like to share about your experience and knowledge regarding childhood obesity legislation?

Thank you so much for your time. We know how busy you are, and we are pleased that you made time to share this important information.

Would you like a copy of the report or to be put on a mailing list for the report? (if so, obtain email or mailing address)

District Health Officers Interview Guide

Introduction: 1 st Telepho	ne Contact:
is designed to evaluate the	I am from Mississippi State University, and am calling regarding a project that e Mississippi Healthy Students Act of 2007. This research is sponsored by the alth Policy and funded by the Robert Wood Johnson Foundation.
As a part of this research, obesity legislation.	we would like to interview, regarding his/her opinions about childhood
	will only be released as group information and will not be attributed to any individual en I may speak with for about 15 minutes in the next two (2)
Objectives (if asked to des	scribe the study/project in more detail):
 To learn District Healthy Studer 	t Health Officers' perspectives on the passage and implementation of the Mississippi ats Act of 2007.
To understand among Mississ	District Health Officers knowledge, attitudes and support for ways to prevent obesity ippi's children.
Interview Script/Guide:	
Name:	<u> </u>
	k you for agreeing to participate in this interview. We appreciate your time last year wing up to learn your opinions on the childhood obesity legislation of the Mississippi
Healthy Students Act of 20	007. [If Officer is new, the sentence above will read as follows: "We are
U 2	ur opinions on the childhood obesity legislation of the Mississippi Healthy As you know, this legislation affected physical education, nutrition and health
-	We are also interested in your perspectives on additional policies to assist in the

We would like to have your permission to tape this interview. Any information we gather from this research will be kept confidential and will not be attributed to any individual person. That is, the responses from all District Health Officers will be grouped together. Quotes may be used, but they will not be attributed to any individual health officer. The tape will be used only to help with the transcription of the interview, and there will be no identifying information on the tape. Your name will not be used. Your participation in this interview is completely voluntary, and you do not have to answer any question that you choose not to. Should you have

prevention of obesity among Mississippi's children. We believe that results of our research will be helpful to

improve programs throughout the state of Mississippi.

further questions or need more information, please feel free to contact Ms. Dorris Baggett at (662) 325-8079 or Ms. Anne Buffington at (662) 325-1590. [We will also provide them with a business card with our contact information]
Do I have your permission to record this interview? Note to interviewer If yes, proceed. If nouse longer form with spaces (for notes)
May I begin?
How familiar are you with the requirements of the MS Healthy Students Act of 2007? Very familiar Somewhat familiar Somewhat unfamiliar Very unfamiliar Don't know / Not sure
As you may recall, there are three (3) major components of the Mississippi Healthy Students Act of 2007, Improving physical education Improving school nutrition and Increasing health education
Of these components, which do you see as most important? As next important?
 Improving physical education Improving school nutrition and Increasing health education
Are you aware that the Center for Mississippi Health Policy is conducting a 5-year evaluation of the Mississippi Healthy Students Act of 2007? If yes, go to question 4 If no, go to question 5
Have you seen a copy of the evaluation report for year 2?
On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?

How would you rate where the state of Mississippi is on addressing childhood obesity policies, with 1 being Mississippi's policies are not at all effective in addressing childhood obesity and 5 being Mississippi's policies are very effective in addressing childhood obesity?

Most important

Least important

Not at all effecti	ve		\	Very effective	
	1	2	3	4	5

Among individuals and health department districts with whom you interact, what has been your impression of their reaction to the MS Healthy Students Act of 2007

(Probe/follow-up, if needed: For example, have you heard anything from the district administrators? County nurses? Physicians, school nurses, parents?)

How do you think we should measure success of this legislation? (Probe/follow-up, if needed)
For example, fitness testing, decrease in % of children who are obese more 'fit' workforce (economic dev issue)

Do you see a role for District and County Health Offices in obesity prevention?

- Yes
- No

If yes, go to question #10. If no, go to question #11.

Please rate the following target areas that can be addressed by public health, by level of importance, with 1 being not at all important and 5 being very important.

	Not at all important				Very important	
Increasing physical activity		1	2	3	4	5
Increasing consumption of fruits & vegetables		1	2	3	4	5
Decreasing consumption of high calorie, dense foods		1	2	3	4	5
Decreasing children's screen time (TV viewing, computer time)	1	2	3	4	5	
Encouraging breastfeeding		1	2	3	4	5
Decreasing consumption of sugary beverages		1	2	3	4	5

Do you see a role for the district or county health offices in promoting the MS Healthy Students Act of 2007?

How involved is the staff in your district in assisting the schools in implementing coordinated school health programs? Please list any initiatives that you are aware of.

Do you think Mississippi has done enough to strengthen the school policies on nutrition?

on health education? on physical education?

If no to any of these on Q#13, then what other policies need to be enacted?

Many things can have an impact on the prevention of childhood obesity. Please rate the following things that exist outside of the school setting, with a rating of 1 meaning that it has no impact and a rating of 5 meaning that it has a very large impact.

	No imp	act	Very large impact						
Child care centers		1	2	3	4	5			
Nutrition labeling		1	2	3	4	5			
Media policy (restrictions on advertising,									
promoting positive messages)	1	2	3	4	5				
Farmers' markets		1	2	3	4	5			
Body Mass Index (measuring									
children's height and weight) reporting	1	2	3	4	5				
Built environment (sidewalks, parks,									
green space, bike lanes)	1	2	3	4	5				
Fat and trans fat restrictions	1	2	3	4	5				
Location of Supermarkets									
(proximity to where residents live)		1	2	3	4	5			

Do you think local government funds should be spent to build and maintain places in your community where people can exercise?

Yes

No

Don't know/Not sure

Who do you rely upon to get information on childhood obesity in Mississippi?

Is there anything else you would like to share about your experience and knowledge regarding childhood obesity legislation? (Probe/follow up if needed: How is this a public health concern?)

Thank you so much for your time. We know how busy you are, and we are pleased that you made time to share this important information.

Would you like a copy of the report or to be put on a mailing list for the report? (if so, obtain email or mailing address)

Survey of Superintendents of Education (2011)

1. On a scale of 1 to 5, with 1 being least important and 5 being most important:, how important do you think prevention of childhood obesity is for the State of Mississippi?

1 2 3 4

Don't know Refused

2. On a scale of 1 to 5, with 1 being "very ineffective" and 5 being "very effective," how would you rate the policies of the State of Mississippi in addressing childhood obesity?

1 2 3 4 5

Don't know Refused

- 3. How satisfied are you with your school district's progress in creating a healthy school environment? Would you say . . .
- Very satisfied
- Somewhat satisfied
- Somewhat dissatisfied
- Very dissatisfied

Don't know Refused

4. To what extent are the schools in your district implementing the requirements of the Coordinated School Health
Program, with 1 being that your district has "not at all" implemented the requirements and 5 being that your district is
"doing all it can."

1 2 3 4 5

Don't know Refused

5. Within your school district, upon whom do you MOST rely upon to ensure that the Mississippi Healthy Students Act of 2007 is implemented? Would you say . . .

District Superintendents
School Coordinators
Nutrition/cafeteria managers
Physical Education teachers
School Principals
Teachers
Your school board
Health teachers
Other
Don't know/Not Sure
Refused

6. How would you describe the level of community support your school board receives in promoting physical education, nutrition and health education? Would you say . . .

Very supportive Somewhat supportive Somewhat unsupportive Very unsupportive (No Support) Don't know Refused

- 7. Some school districts collect information on children's *height and weight* to determine children's Body Mass Index (BMI). Are you in favor of this?
- Yes
- No

Don't know/Not Sure

Refused

- 8. Would you be in favor of sending the children's Body Mass Index (BMI) information to their parents?
- Yes
- No

Don't know/Not Sure

Refused

Refused

- 9. Do schools in your district conduct fitness testing?
 Yes
 No
 Don't know/Not Sure
- 10. Would you be in favor of sending the children's fitness testing information to their parents?
- Yes
- No

Don't know/Not Sure

Refused

11. On a scale from 1 to 5, with 1 being "not at all effective" and 5 being "very effective", how would you rate the level of effectiveness of the School Councils in your school district?

1 2 3 4 5

Don't know Refused

- 12. As you will recall, there are three (3) major components of the Mississippi Healthy Students Act of 2007 . . .
- 1) Improving physical education
- 2) Improving school nutrition, and
- 3) Increasing health education

Which component do you see as most important?

- Improving physical education
- Improving school nutrition
- Increasing health education
- Don't know/Not sure
- Refused

Which component do you see as the second most important?

- Improving physical education
- Improving school nutrition
- Increasing health education
- Don't know/Not sure
- Refused
- 13. Do you think that the state of *Mississippi* has done enough to strengthen the school policies on nutrition?

Yes
No
Undecided
Don't know/Not Sure
Refused
14on Health Education?
Yes
No
Undecided Control of the Control of
Don't know/Not Sure
Refused
15on Physical Education?
Was .
Yes
No Undecided
Don't know/Not Sure
Refused
Refuseu
16. Do you think that YOUR School District has done enough to strengthen the school policies on nutrition?
Yes
No
Undecided
Don't know/Not Sure
Refused
17on Health Education?
Yes
No
Undecided
Don't know/Not Sure
Refused
18on Physical Education?
Yes
No No
Undecided
Don't know/Not Sure
Refused
19. Has your school board adopted any policies within the last year to improve student nutrition?

•	Yes

No

Don't know/Not Sure Refused

20. Do you routinely meet with an official or group responsible for implementing the Coordinated School Health Program?

- Yes
- No

Don't know/Not Sure

Refused

21. With whom do you meet?

How often do you meet?

22. Does your school district have a policy that prohibits the use of food or food coupons as a reward for good behavior or good academic performance?

Yes, we prohibit No, but we recommend against this practiice We do not have a policy Don't know/Not Sure Refused

23. Does your school district have a policy that prohibits the use of physical activity (e.g. laps, push-ups) to punish students for bad behavior?

- Yes
- No

Don't know/Not Sure Refused 24. We define JUNK FOOD as food that provides calories primarily through fats or added sugars and have minimal amounts of vitamins and minerals.

In which of the following settings has your district adopted a policy stating that schools are prohibited from offering "junk" foods

	Prohibit	Recommend Against	No Policy	Not Sure	No Comment
At student parties					
In after-school or extended day programs					
At staff meetings					
At meetings attended by families					
In school stores, canteens or snack bars					
In vending machines					
For fundraisers					
At concession stands					

25. Which of the statements best describes your school district's policy concerning commercial advertising on school premises by food or beverage companies?

We do not allow any advertising by food or beverage companies. We allow advertising of only healthy products. We do not restrict advertising at all for these companies Don't know/Not Sure Refused

26. In the past year, has your school district adopted any new policies to increase the student's physical activity?

- Yes
- No

Don't know/Not Sure

Refused

27. How important do you think it is that Physical Education classes be taught by a certified Physical Education teacher? Would you say . . .

Very important Moderately important Not important at all Don't know Refused

28. Does your school district allow school facilities, such as gym tracks, ball fields, or playgrounds, to be available to the community after school hours in order to promote physical activity or physical education programs?

Yes

•	No Don't Know/Not Sure Refused
28a. Does yo	our school district have any formal, written agreements for such use?
•	Yes No (just informal agreements) Don't Know/Not Sure Refused
29. What, if a requirement	anything, makes it most difficult for the schools in your district to meet Physical Education and Nutrition so?
30. Does each	school within your district have a health council?
YesNoDon't know/Refused	Not Sure
31. Have you	ever attended a meeting or event held by a school health council?
YesNoDon't know/Refused	Not Sure
32. In the pa	ast 12 months, has your school board seen a presentation from at least one school health council? Yes No Don't Know/Not Sure Refused
33. In the pa	ast 12 months, approximately what percentage of school health councils have made a presentation to the

Programs and the students' academic performance? Would you say there is . . .

34. To what degree do you believe there is a positive association between implementation of Coordinated School Health

No association between the two

school board?

A moderate association A strong association A very strong association Don't know Refused

35. What level of feedback have you had from parents on implementing the Mississippi Healthy Students Act?

None Minimal Moderate High Don't know Refused

36. On a scale of one to five, with 1 being VERY NEGATIVE and 5 being VERY POSITIVE: Please rate the type of feedback you have had from parents regarding the following four topics

	Very	Negative	Neutral	Positive	Very	No
	Negative				Positive	Comment
Banning JUNK FOOD sales at						
student or school fund-						
raising activities						
Decreasing JUNK FOOD						
choices in vending machines						
Increasing amount of						
physical exercise for						
students						
Increasing amount of health						
education for students						

- 37. Which of the following would best describe your school district's staff wellness policy and staff wellness programs? Would you say your school district . . .
- has a policy and provides staff wellness programs
- has a policy, but does not provide staff wellness programs
- has a policy and plans to implement staff wellness programs within the next 12 months
- has a policy but no plans to implement any staff wellness programs
- does not have a policy, but provides staff wellness programs
- does not have a policy, but plans to implement a policy within the next 12 months
- does not have a policy, nor plans to implement a policy within the next 12 months
- Don't Know/Not Sure
- Refused

38. In your opinion, how important is it to provide a staff wellness program? Would you say . . .

Very important Moderately important Not important at all Don't know Refused

39. In your school district, what is the PRIMARY area of health education that needs the MOST improvement? Would you say . . .

Community/Environmental Health Nutrition Personal Health **Consumer Health Human Growth and Development** Mental Health Disease Prevention and Control Safety and First Aid

Drug Abuse Prevention

Family Life

Other (please specify)

Don't know/Not Sure

Refused

40. Which of the following would best describe your school district's progress in implementing the Mississippi Healthy Students Act of 2007?

25% implemented or less 50% implemented 75% implemented 100% or fully implemented Don't know Refused

Finally, we'd like to ask you a few background questions for statistical purposes only.

41. How many years of experience do you have as Superintendent?

42. How many years of experience have you had as a Superintendent in your CURRENT school district?

43. Which racial or ethnic group do you most closely identify yourself with?

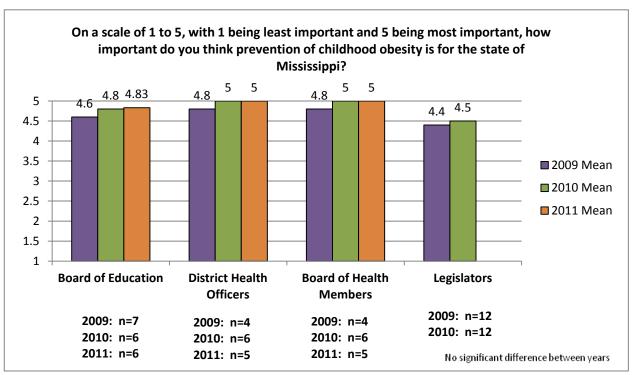
Black (African American) White (Caucasian) American Indian / Native American Hispanic/Latino Asian or Pacific Islander

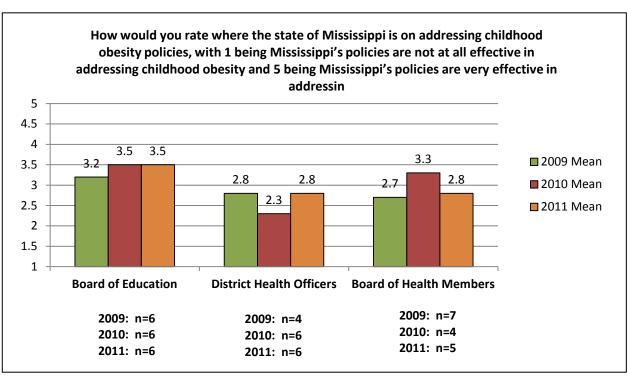
44. In what year were you born?	Other, please specify Don't know/Not sure Refused	
	44. In what year were you born?	

- 45. What is the respondent's gender?
 - Male
 - Female
 - Refused

That completes our interview. Thank you for taking the time to participate in this important study. Goodbye.

APPENDIX B





State Board of Health Members	2009		2010		20	11
	Valid		Valid		Valid	
Question	n	Mean	n	Mean	n	Mean
On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?	8	4.8	5	5.0	5	5.0
Please rate the following target areas that can be addressed by public health, by level of importance, with 1 being not at all important and 5 being very important:						
- Increasing physical activity	8	4.4	5	4.7	5	5.0
 Increasing consumption of fruits & vegetables 	8	4.4	5	4.8	5	4.8
- Decreasing consumption of high calorie, dense foods			5	4.4	5	4.6
- Encouraging breast feeding	7	4.1	5	4.6	5	4.4
- Decreasing consumption of sugary beverages	7	4.4	5	5.0	5	5.0
Many things can have an impact on the prevention of childhood obesity. Please rate the following things that exist outside of the school setting, with a rating of 1 meaning that it has no impact and a rating of 5 meaning that it has a very large impact.						
- Child care centers	7	3.7	5	*4.8	5	4.8
- Nutrition labeling	8	3.2	5	4.0	5	3.4
 Media policy (restrictions on advertising, promoting positive messages) 	8	4.2	5	4.4	5	4.0
- Farmers' markets	8	3.6	5	4.4	5	3.4
- Body Mass Index (BMI) (measuring children's height and weight) reporting	8	3.9	5	4.4	5	4.2
- Built environment (sidewalks, parks, green space, bike lanes)	8	4.0	5	4.8	5	3.8
- Fat and trans fat restrictions	8	3.6	5	4.4	5	4.2
- Location of Supermarkets (proximity to where residents live)	7	3.1	5	4	5	3.2
* Statistically Significant (p < .05)				* YES		

State Board of Education Members	2009		20	10	2011		
State Board of Eddeadon Weinbers	Valid		Valid		Valid		
Question	n	Mean	n	Mean	n	Mean	
On a scale of 1 to 5, with 1 being least important and 5 being most important, how important do you think prevention of childhood obesity is for the state of Mississippi?	7	4.6	6	4.8	6	4.8	
On a scale of 1 to 5, with 5 being very EFFECTIVE and 1 being very INEFFECTIVE, how would you rank Mississippi's current policies on childhood obesity?	6	3.2	6	3.5	6	3.5	
Please rate the following target areas that can be addressed by public health, by level of importance, with 1 being not at all important and 5 being very important:							
- Increasing physical activity	7	4.7	6	4.3	6	4.0	
 Increasing consumption of fruits & vegetables 	7	4.6	6	4.5	6	4.2	
 Decreasing consumption of high calorie, dense foods 	7	4.4	6	4.5	6	4.5	
- Decreasing children's screen time	7	3.6	5	3.4	6	3.0	
 Decreasing consumption of sugary beverages 	7	4.6	6	4.5	6	4.0	
To what extent do you think the schools in the state are implementing the minimum requirements of Coordinated school Health Programs?	5	3.8	5	3.8	5	^3.6	
Many things can have an impact on the prevention of childhood obesity. Please rate the following things that exist outside of the school setting, with a rating of 1 meaning that it has no impact and a rating of 5 meaning that it has a very large impact.							
- Child care centers	7	3.9	6	4.2	6	4.0	
- Nutrition labeling	7	3.7	6	3.2	6	3.3	
 Media policy (restrictions on advertising, promoting positive messages) 	7	3.4	5	3.8	6	3.8	
- Farmers' markets	7	3.1	6	2.8	6	2.7	
 Body Mass Index (BMI) (measuring children's height and weight) reporting 	7	3.0	5	3.2	6	3.3	

- Built environment (sidewalks, parks, green space, bike lanes)	7	3.7	6	3.5	6	3.2
green space, bike lailes)	,	5.7	0	3.3	- 0	
- Fat and trans fat restrictions	7	3.6	6	4.3	6	3.3
- Location of Supermarkets (proximity						
to where residents live)	7	2.6	5	2.8	6	2.3
Generally speaking, how would you rank the						
effectiveness of School Councils, with 5						
being very EFFECTIVE and 1 being very					5	^3.0
INEFFECTIVE?	5	3.6	5	⁺3.1		0.0
* Marginally Significant (p < .10)				⁺ YES		

[^] Response of 99 counted as "0" and therefore reduced mean value

State Board of Health Members	2009			2010			2011		
Question	Valid n	n Yes	% Yes	Valid n	n Yes	% Yes	Valid n	n Yes	% Yes
Do you think local government funds should be spent to build and maintain places in your community where people can exercise?	8	7	87.5	4	4	100	5	1	20
Do you see a role for the State Department of Health in obesity prevention?	8	8	100	5	5	100	5	5	100
Do you see a role for the local and/or district Health Departments to promote the MS Healthy Students Act of 2007?	8	8	100	5	5	100	5	4	80
Do you think that the state of Mississippi has done enough to strengthen the school policies:									
- on nutrition?	8	1	12.5	5	0	0.0	5.0	1.0	20.0
- on health education?	8	1	12.5	5	0	0.0	5.0	0	0.0
- on physical education?	7	0	0.0	5	1	20.0	5.0	1.0	20.0

District Health Officers	201	1
Question	Valid n	Mean
Please rate the following target areas that can be addressed by public health, by level of importance, with 1 being not at all important and 5 being very important:		
- Increasing physical activity	6	5.0
- Increasing consumption of fruits & vegetables	6	5.0
- Decreasing consumption of high calorie, dense foods	6	4.8
- Decreasing children's screen time	6	4.7
- Encouraging breast feeding	6	4.7
- Decreasing consumption of sugary beverages	6	5.0

APPENDIX C

School Board Members

Notes:

- 1. Percent change columns may reflect mathematical rounding
- 2. The lower right hand cell in each table indicates whether the response pattern between compared years is significantly different (Chi-Squared Test)

SBM Q6

Please rate your district's progress in implementing the MS Healthy Students Act of 2007.								
RESPONSE	2010	%	2011	%	Percent Change			
25% or less progress	11	4.6	19	6.9	2.3			
50% progress	34	14.1	37	13.4	-0.7			
75% progress	69	28.6	84	30.4	1.8			
100% progress	58	24.1	60	21.7	-2.4			
Don't know/Not sure	69	28.6	76	27.5	-1.1			
Total	241	100	276	100.0	No			

SBM Q6

Please rate your district's progress in implementing the MS Healthy Students Act of 2007.								
RESPONSE	2009	%	2011	%	Percent Change			
25% or less progress	5	3.4	19	6.9	3.5			
50% progress	19	13.0	37	13.4	0.4			
75% progress	36	24.7	84	30.4	5.7			
100% progress	38	26.0	60	21.7	-4.3			
Don't know/Not sure	48	32.9	76	27.5	-5.4			
Total	146	100	276	100.0	No			

SBM Q8

How would you describe the level of community support your school board receives on promoting physical education, nutrition and health education?							
RESPONSE	2010	%	2011	%	Percent Change		
Don't know/Not sure	17	7.0	22	8.0	1.0		
No comment	0	0.0	1	0.4	0.4		
No support	12	4.9	13	4.7	-0.2		
Somewhat supportive	116	47.5	134	48.6	1.1		
Somewhat unsupportive	37	15.2	55	19.9	4.7		
Very supportive	62	25.4	51	18.5	-6.9		
Total	244	100	276	100	No		

SBM Q8

How would you describe the level of community support your school board receives on promoting physical education, nutrition and health education?						
RESPONSE	2009	%	2011	%	Percent Change	
Don't know/Not sure	14	9.0	22	8.0	-1.0	
No comment	3	1.9	1	0.4	-1.5	
No support	9	5.8	13	4.7	-1.1	
Somewhat supportive	80	51.6	134	48.6	-3.0	
Somewhat unsupportive	5	3.2	55	19.9	16.7	
Very supportive	44	28.4	51	18.5	-9.9	
Total	155	100	276	100	YES	

SBM Q9

Some school districts collect information on children's height and weight to determine children's Body Mass Index (BMI). Are you in favor of this?						
RESPONSE	2010	%	2011	%	Percent Change	
Yes	157	63.6	176	63.8	0.2	
No	40	16.2	47	17.0	0.8	
No comment	0	0.0	1	0.4	0.4	
Don't know/Not sure	50	20.2	52	18.8	-1.4	
Total	247	100	276	100.0	No	

SBM Q9

Some school districts collect information on children's height and weight to determine children's Body Mass Index (BMI). Are you in favor of this?

RESPONSE	2009	%	2011	%	Percent Change
Yes	95	61.3	176	63.8	2.5
No	25	16.1	47	17.0	0.9
No comment	6	3.9	1	0.4	-3.5
Don't know/Not sure	29	18.7	52	18.8	0.1
Total	155	100	276	100.0	YES

SBM Q10

If you are in favor of collecting children's Body Mass Index (BMI) information, are you in favor of sending this information to children's parents?

RESPONSE	2010	%	2011	%	Percent Change
Yes	175	78.8	189	79.4	0.6
No	17	7.7	19	8.0	0.3
No comment	0	0.0	1	0.4	0.4
Don't know/ Not sure	14	10.5	29	12.2	1.7
Total	222	100	238	100.0	No

SBM Q10

If you are in favor of collecting children's Body Mass Index (BMI) information, are you in favor of sending this information to children's parents? Percent 2009 **RESPONSE** 2011 % % Change 79.7 189 79.4 -0.3 106 Yes 13 9.8 19 8.0 -1.8 No 0 0.0 1 0.4 0.4 No comment Don't know/ Not sure 14 10.5 29 12.2 1.7 Total 133 100 238 100.0 No

SBM Q11

Do schools in your district conduct fitness testing?							
RESPONSE	2010	%	2011	%	Percent Change		
Yes	82	33.6	50	18.2	-15.4		
No	63	25.8	101	36.7	10.9		
Don't know/ Not sure	99	40.6	124	45.1	4.5		
No comment	0	0.0	0	0.0	0.0		
Total	244	100	275	100	YES		

SBM Q11

Do schools in your district conduct fitness testing?						
RESPONSE	2009	%	2011	%	Percent Change	
Yes	55	35.0	50	18.2	-16.8	
No	32	20.4	101	36.7	16.3	
Don't know/ Not sure	68	43.3	124	45.1	1.8	
No comment	2	1.3	0	0.0	-1.3	
Total	157	100	275	100	YES	

SBM Q12

If yes, are you in favor of sending this information to children's parents?							
RESPONSE	2010	%	2011	%	Percent Change		
Yes	130	76.5	110	65.9	-10.6		
No	1	0.6	16	9.6	9.0		
No comment	0	0.0	0	0.0	0.0		
Don't know/ Not sure	39	22.9	41	24.6	1.7		
Total	170	100	167	100	YES		

SBM Q12

If yes, are you in favor of sending this information to children's parents?							
RESPONSE	2009	%	2011	%	Percent		
RESPONSE	2009	70	2011	70	Change		
Yes	92	71.3	110	65.9	-5.4		
No	6	4.7	16	9.6	4.9		
No comment	18	14.0	0	0.0	-14.0		
Don't know/ Not sure	13	10.1	41	24.6	14.5		
Total	129	100	167	100	YES		

SBM Q20

Has your school board adopted a policy stating that schools are prohibited from using food or food coupons as a reward for good behavior or good academic performance?									
RESPONSE 2010 % 2011 % Change									
Yes, we prohibit	53	21.8	42	15.4	-6.4				
We recommend against	43	17.7	44	16.2	-1.5				
We do not have a policy	75	30.9	111	40.8	9.9				
Don't know/ Not sure 70 28.8 75 27.6 -1.2									
No comment	2	0.8	0	0.0	-0.8				
Total	243	100	272	100	No				

SBM Q20

Has your school board adopted a policy stating that schools are prohibited from using food or food coupons as a reward for good behavior or good academic performance? Percent 2009 RESPONSE % 2011 % Change 34 21.7 42 15.4 -6.3 Yes, we prohibit We recommend 17.2 44 27 16.2 -1.0 against We do not have a 35.7 111 40.8 policy 56 5.1

34

6

157

21.7

3.8

100

75

0

272

27.6

0.0

100

5.9

-3.8

YES

SBM Q27

Total

No comment

Don't know/ Not sure

Does each school within your district have a school health council?								
RESPONSE	2010	%	2011	%	Percent Change			
Yes	107	43.9	102	37.2	-6.7			
No	54	22.1	72	26.3	4.2			
No comment	0	0.0	1	0.4	0.4			
Don't know/ Not sure	83	34.0	99	36.1	2.1			
Total	244	100.0	274	100.0	No			

SBM Q27

Does each school within your district have a school health council?								
DECDONICE	2000	0/	2011	0/	Percent			
RESPONSE	2009	%	2011	%	Change			
Yes	53	35.3	102	37.2	1.9			
No	36	24.0	72	26.3	2.3			
No comment	4	2.7	1	0.4	-2.3			
Don't know/ Not sure	57	38.0	99	36.1	-1.9			
Total	150	100	274	100.0	No			

SBM Q33

What level of feedback have you had from parents on implementing the MS Healthy Students Act?								
RESPONSE	2010	%	2011	%	Percent Change			
None	78	32.4	92	33.5	1.1			
Minimal	77	32.0	99	36.0	4.0			
Moderate	31	12.9	31	11.3	-1.6			
High	10	4.1	10	3.6	-0.5			
No comment	0	0.0	0	0.0	0.0			
Don't know/Not sure	45	18.7	43	15.6	-3.1			
Total	241	100	275	100	No			

SBM Q33

What level of feedback have you had from parents on implementing the MS Healthy Students Act?								
RESPONSE	2009	%	2011	%	Percent Change			
None	57	38.3	92	33.5	-4.8			
Minimal	39	26.2	99	36.0	9.8			
Moderate	26	17.4	31	11.3	-6.1			
High	1	0.7	10	3.6	2.9			
No comment	7	4.7	0	0.0	-4.7			
Don't know/Not sure	19	12.8	43	15.6	2.8			
Total	149	100	275	100	YES			

SBM Q36

In your opinion, how important is it to provide staff wellness program(s)?								
RESPONSE	2010	%	2011	%	Percent Change			
Very important	150	62.8	178	65.2	2.4			
Moderately important	62	25.9	77	28.2	2.3			
Not important at all	7	2.9	6	2.2	-0.7			
No comment	0	0.0	0	0.0	0.0			
Don't know/Not sure	20	8.4	12	4.4	-4.0			
Total	239	100	273	100	No			

SBM Q36

In your opinion, how important is it to provide staff wellness program(s)?								
RESPONSE	2009	%	2011	%	Percent Change			
Very important	88	58.7	178	65.2	6.5			
Moderately important	46	30.7	77	28.2	-2.5			
Not important at all	2	1.3	6	2.2	0.9			
No comment	6	4.0	0	0.0	-4.0			
Don't know/Not sure	8	5.3	12	4.4	-0.9			
Total	150	100	273	100	YES			

Superintendents

Notes:

- 1. Percent change columns may reflect mathematical rounding
- 2. The lower right hand cell in each table indicates whether the response pattern between compared years is significantly different (Chi-Squared Test)

Supers Q6

How would you describe the level of community support your school board receives in promoting physical education, nutrition and health education?

					Percent
RESPONSE	2010	%	2011	%	Change
Very	22	20.0	42	42.0	11.2
supportive	32	30.8	42	42.0	11.2
Somewhat					
supportive	55	52.9	50	50.0	-2.9
Somewhat	4.4	10.6	_	7.0	2.6
unsupportive	11	10.6	7	7.0	-3.6
No support	5	4.8	1	1.0	-3.8
Don't					
know/Not					
sure	1	1.0	0	0.0	-1.0
Total	104	100	100	100	No

How would you describe the level of community support your school board receives in promoting physical education, nutrition and health education? Percent **RESPONSE** 2009 % 2011 % Change Very 29 26.4 42 42.0 15.6 supportive Somewhat 70 63.6 50 50.0 -13.6 supportive Somewhat 5 4.5 7 7.0 unsupportive 2.5 5 4.5 1 1.0 -3.5 No support Don't know/Not 1 0.9 0 0.0 -0.9 sure Total 110 100 100 100 YES

Supers Q7

Some school districts collect information on children's height and weight to determine children's Body Mass Index (BMI). Are you in favor of this? Percent **RESPONSE** 2010 % 2011 % Change Yes 65 62.5 82 82.0 19.5 31 29.8 14 14.0 -15.8 No Don't know/ 7 6.7 4 4.0 -2.7 Not sure 1 1.0 0 0.0 -1.0 Refused Total 104 100 100 100 YES

Supers Q7

Some school districts collect information on children's height and weight to determine children's Body Mass Index (BMI). Are you in favor of this?

RESPONSE	2009	%	2011	%	Percent Change
Yes	84	76.4	82	82.0	5.6
No	23	20.9	14	14.0	-6.9
Don't know/ Not sure	3	2.7	4	4.0	1.3
Refused	0	0.0	0	0.0	0.0
Total	110	100	100	100	No

Supers Q8

Would you be in favor of sending the children's Body Mass Index (BMI) information to their parents? If yes, are you in favor of sending this information to children's parents?

RESPONSE	2010	%	2011	%	Percent Change
Yes	58	89.2	78	95.1	5.9
No	5	7.7	2	2.4	-5.3
Don't Know/ Not Sure	2	3.1	2	2.4	-0.7
Total	65	100	82	100	No

Supers Q8

Would you be in favor of sending the children's Body Mass Index (BMI) information to their parents? If yes, are you in favor of sending this information to children's parents? Percent RESPONSE 2009 % 2011 % Change 80 95.2 78 95.1 -0.1 Yes 2 1 1.2 2.4 1.2 No Don't Know/ Not 3 3.6 2 2.4 -1.2 Total 84 100 82 100 No

Supers Q9

Do schools in your district conduct fitness testing?								
RESPONSE	2010	%	2011	%	Percent Change			
Yes	64	61.5	68	68.0	6.5			
No	30	28.8	27	27.0	-1.8			
Don't know/ Not sure	10	9.6	5	5.0	-4.6			
Total	104	100	100	100	No			

Supers Q9

Do schools in your district conduct fitness testing?								
RESPONSE	2009	%	2011	%	Percent Change			
Yes	80	72.7	68	68.0	-4.7			
No	21	19.1	27	27.0	7.9			
Don't know/ Not sure	9	8.2	5	5.0	-3.2			
Total	110	100	100	100	No			

Supers Q10

Would you be in favor of sending the children's fitness testing information to their parents?					
RESPONSE	2010	%	2011	%	Percent Change
Yes	58	90.6	66	97.1	6.5
No	5	7.8	1	1.5	-6.3
Don't know/ Not sure	1	1.6	1	1.5	-0.1
Total	64	100	68	100	YES

Supers Q10

Would you be in favor of sending the children's fitness testing information to their parents?					
RESPONSE	2009	%	2011	%	Percent Change
Yes	74	92.5	66	97.1	4.6
No	1	1.3	1	1.5	0.3
Don't know/ Not sure	5	6.3	1	1.5	-4.8
Total	80	100	68	100	YES

Supers Q22

Does your school district have a policy that prohibits the use of food or						
food coupons as a reward for good behavior or good academic						
performance?						
					Percent	
RESPONSE	2010	%	2011	%	Change	
Yes, we prohibit	33	31.7	23	23.0	-8.7	
We recommend against	23	22.1	18	18.0	-4.1	
We do not have a policy	42	40.4	48	48.0	7.6	
Don't know/ Not sure	6	5.8	11	11.0	5.2	
Total	104	100	100	100	No	

Supers Q22

Does your school district have a policy that prohibits the use of food or food coupons as a reward for good behavior or good academic performance? Percent 2009 **RESPONSE** % 2011 % Change 23.6 23 26 23.0 -0.6 Yes, we prohibit We recommend 30 18.0 -9.3 27.3 18 against We do not have 48 43.6 48 48.0 4.4 a policy Don't know/

5.5

100

11

100

11.0

100

5.5

No

6

110

Supers Q30

Not sure

Total

Does each school in your district have a health council?					
RESPONSE	2010	%	2011	%	Percent Change
Yes	67	64.4	85	85.0	20.6
No	32	30.8	9	9.0	-21.8
Don't know/	32	30.0		J.0	21.0
Not sure	5	4.8	6	6.0	1.2
Total	104	100	100	100	YES

Supers Q30

Does each school in your district have a health council?					
RESPONSE	2009	%	2011	%	Percent Change
Yes	87	79.1	85	85.0	5.9
No	18	16.4	9	9.0	-7.4
Don't know/ Not sure	5	4.5	6	6.0	1.5
Total	110	100	100	100	No

Supers Q35

What level of feedback have you had from parents on implementing the Mississippi Healthy Students Act?					
RESPONSE	2010	%	2011	%	Percent Change
None	29	27.9	20	20.0	-7.9
Minimal	41	39.4	40	40.0	0.6
Moderate	25	24.0	31	31.0	7.0
High	7	6.7	6	6.0	-0.7
Don't know	2	1.9	3	3.0	1.1
Total	104	100	100	100	No

Supers Q35

What level of feedback have you had from parents on implementing the						
Mississippi Healthy Students Act?						
					Percent	
RESPONSE	2009	%	2011	%	Change	
None	18	16.4	20	20.0	3.6	
Minimal	61	55.5	40	40.0	-15.5	
Moderate	24	21.8	31	31.0	9.2	
High	2	1.8	6	6.0	4.2	
Don't know	5	4.5	3	3.0	-1.5	
Total	110	100	100	100	No	

Supers Q 38

In your opinion, how important is it to provide staff wellness program(s)?						
RESPONSE	2010	%	2011	%	Percent Change	
Very important	55	52.9	57	57.0	4.1	
Moderately important	41	39.4	37	37.0	-2.4	
Not important at all	6	5.8	5	5.0	-0.8	
Don't know	2	1.9	1	1.0	-0.9	
Total	104	100	100	100	No	

Supers Q38

In your opinion, how important is it to provide staff wellness program(s)?						
RESPONSE	2009	%	2011	%	Percent Change	
Very important	71	64.5	57	57.0	-7.5	
Moderately important	35	31.8	37	37.0	5.2	
Not important at all	4	3.6	5	5.0	1.4	
Don't know	0	0.0	1	1.0	1.0	
Total	110	100	100	100	No	

Supers Q40

Which of the following would best describe your school district's progress in implementing the Mississippi Healthy Students Act?							
RESPONSE 2010 % 2011 % Change							
25% or less							
progress	11	10.6	6	6.0	-4.6		
50% progress	30	28.8	23	23.0	-5.8		
75% progress	45	43.3	52	52.0	8.7		
100% progress	16	15.4	16	16.0	0.6		
Don't know/Not							
sure	2	1.9	3	3.0	1.1		
Total	104	100	100	100	No		

Supers Q40

Which of the following would best describe your school district's progress in implementing the Mississippi Healthy Students Act?								
					Percent			
RESPONSE	2009	%	2011	%	Change			
25% or less								
progress	6	5.5	6	6.0	0.5			
50% progress	33	30.0	23	23.0	-7.0			
75% progress	55	50.0	52	52.0	2.0			
100% progress	10	9.1	16	16.0	6.9			
Don't know/Not								
sure	6	5.5	3	3.0	-2.5			
Total	110	100	100	100	No			

APPENDIX D

What would you say best describes your own weight?									
Parent responses	2010		20:	11					
	Pare	ents	Pare	nts	Percent				
	n	%	n	%	Change				
Underweight	83	2.2	74	2	-0.2				
Healthy weight	1,302	34.7	1,344	36.9	2.2				
Overweight	2,107	56.1	1,896	52.1	-4.0				
Obese	226	6	271	7.4	1.4				
Don't know/Not sure	15	0.4	14	0.4	0.0				
Refused	22	0.6	42	1.2	0.6				
Total	3,755	100	3,641	100	* YES				

p<.10 yesp<.05 yes

What would you say best describes your	r own weight?
--	---------------

Parent responses	20	09	20:	11	
	Pare	ents	Pare	nts	Percent
	n	%	n	%	Change
Underweight	108	2.9	74	2	-0.9
Healthy weight	1307	35.2	1,344	36.9	1.7
Overweight	2,092	56.4	1,896	52.1	-4.3
Obese	157	4.2	271	7.4	3.2
Don't know/Not sure	29	0.8	14	0.4	-0.4
Refused	17	0.5	42	1.2	0.7
Total	3,710	100.0	3,641	100	* YES

p<.10 yesp<.05 yes

What would you say best describes his/her weight?							
Parent responses	2010	2011					

	Chile	dren	Child	Percent	
	n	%	n	%	Change
Underweight	252	6.7	255	7	0.3
Healthy weight	2,902	77.3	2,815	77.3	0.0
Overweight	540	14.4	495	13.6	-0.8
Obese	47	1.3	52	1.4	0.1
Don't know/Not sure	11	0.3	18	0.5	0.2
Refused	3	0.1	6	0.2	0.1
Total	3,755	100	3,641	100	
* Statistically Significant (p < .05)					

p<.10 no p<.05 no

What would you say best describes his/her weight?									
Parent responses	20	2009 2011							
	Chile	dren	Pare	nts	Percent				
	n	%	n	%	Change				
Underweight	260	7	74	2	-5.0				
Healthy weight	2,783	75	1,344	36.9	-38.1				
Overweight	304	8.2	1,896	52.1	43.9				
Obese	344	9.3	271	7.4	-1.9				
Don't know/Not sure	19	0.5	14	0.4	-0.1				
Refused	0	0	42	1.2	1.2				
Total	3,710	100	3,641	100					
* Statistically Significant (p < .05)					* YES				

p<.10 yes
p<.05 yes</pre>

Are you Hispanic or Latino?

Weight Category	Yes	No	Don't Know	Refuse	Totals
Underweight	6	204	2	0	212
	10.3%	7.3%	50.0%	0.0%	7.4%
Normal					
Weight	26	1514	1	5	1546
	44.8%	53.8%	25.0%	62.5%	53.6%
Overweight	13	480	0	1	494
	22.4%	17.1%	0.0%	12.5%	17.1%
Obese	13	615	1	2	631
	22.4%	21.9%	25.0%	25.0%	21.9%
Totals	58	2813	4	8	2883
	100.0%	100.0%	100.0%	100.0%	100.0%

Table Sig p<.05

Which of the	Which of the following groups would you say best represents your race or ethnic background?									
Weight Category	White	Black/ African American	Asian	Native Hawaiian/ Pacific Islander	American Indian/ Alaska Native	Other	Don't Know/Not Sure	Refused	Totals	
Underweight	120	84	1	1	1	5	0	0	212	
	7.3%	7.5%	11.1%	50.0%	3.6%	9.4%	0.0%	0.0%	7.4%	
Normal Weight	953	533	4	1	17	25	2	11	1546	
	57.8%	47.5%	44.4%	50.0%	60.7%	47.2%	66.7%	68.8%	53.6%	
Overweight	264	204	2	0	6	14	1	3	494	
	16.0%	18.2%	22.2%	0.0%	21.4%	26.4%	33.3%	18.8%	17.1%	
Obese	313	301	2	0	4	9	0	2	631	
	19.0%	26.8%	22.2%	0.0%	14.3%	17.0%	0.0%	12.5%	21.9%	
Totals	1650	1122	9	2	28	53	3	16	2883	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table Sig p<.05

Is your _ grader a boy or girl?

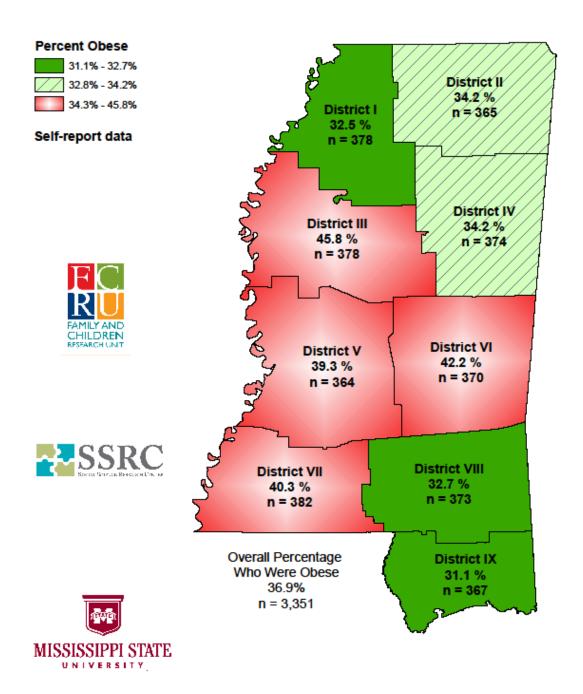
Weight Category	Воу	Girl	Totals
Underweight	126	86	212
	8.4%	6.3%	7.4%
Normal Weight	767	779	1546
	50.9%	56.6%	53.6%
Overweight	274	220	494
	18.2%	16.0%	17.1%
Obese	340	291	631
	22.6%	21.1%	21.9%
Totals	1507	1376	2883
	100.0%	100.0%	100.0%

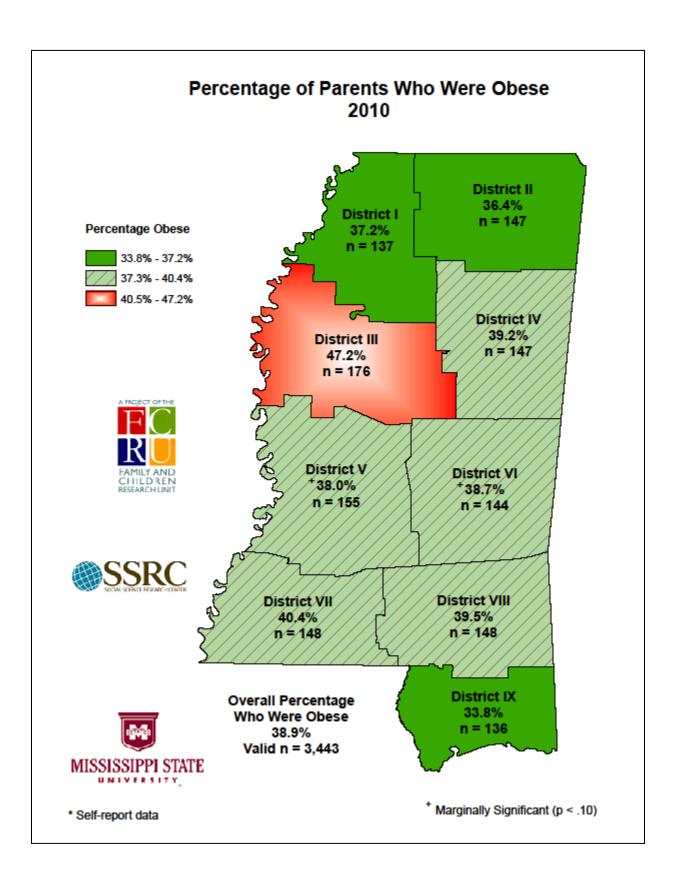
Table Sig p<.05

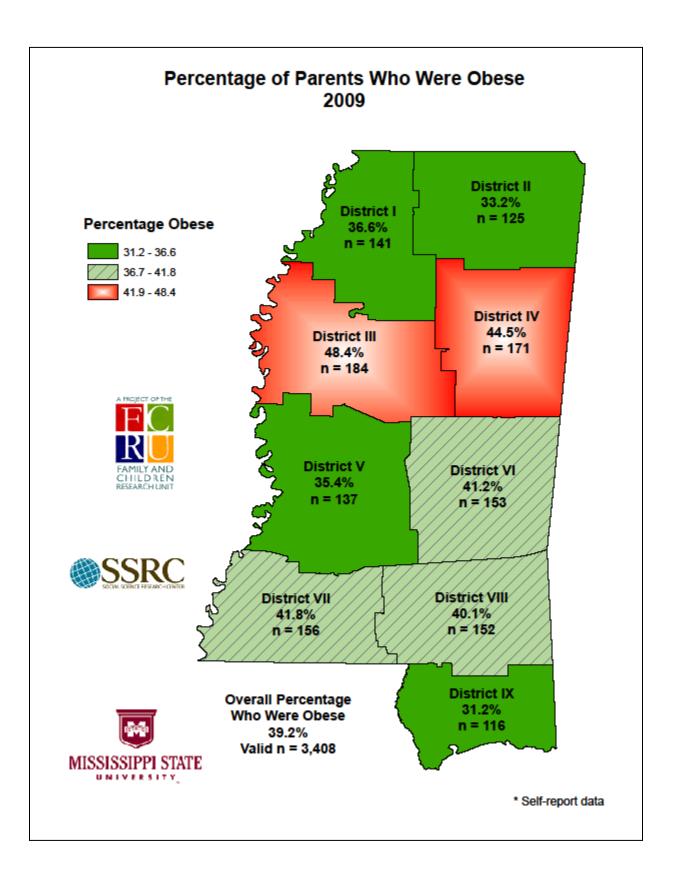
What was your total 2009 household income before taxes?									
Weight Category	BELOW \$20,000	\$20,000 TO \$40,000	\$40,000 TO \$60,000	\$60,000 TO \$80,000	\$80,000 TO \$100,000	\$100,000 AND ABOVE	DON'T KNOW/NOT SURE	REFUSED	Totals
Underweight	38	46	37	26	21	26	0	18	212
	6.6%	6.3%	7.7%	8.5%	9.4%	9.0%	0.0%	8.1%	7.4%
Normal									
Weight	263	345	278	170	142	184	32	132	1546
	45.7%	47.5%	57.6%	55.6%	63.4%	63.7%	57.1%	59.2%	53.6%
Overweight	106	131	73	63	30	41	10	40	494
	18.4%	18.0%	15.1%	20.6%	13.4%	14.2%	17.9%	17.9%	17.1%
Obese	169	204	95	47	31	38	14	33	631
	29.3%	28.1%	19.7%	15.4%	13.8%	13.1%	25.0%	14.8%	21.9%
Totals	576	726	483	306	224	289	56	223	2883
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table Sig p<.05

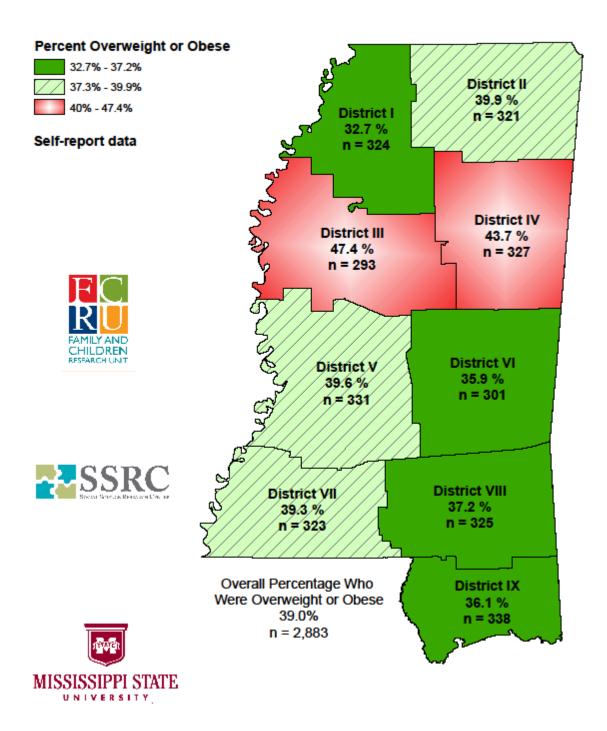
Percentage of Parents Who Were Obese 2011

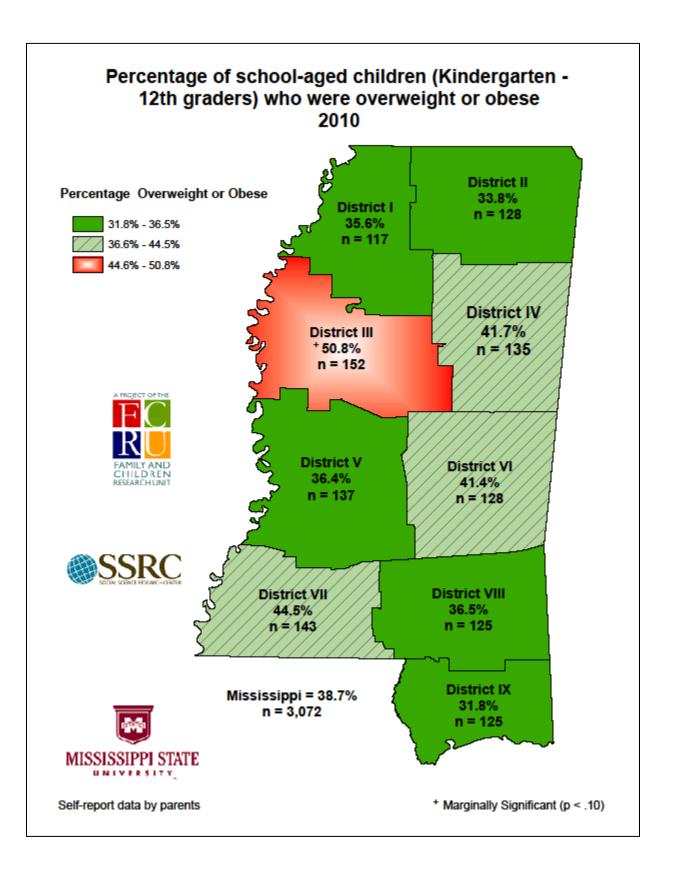


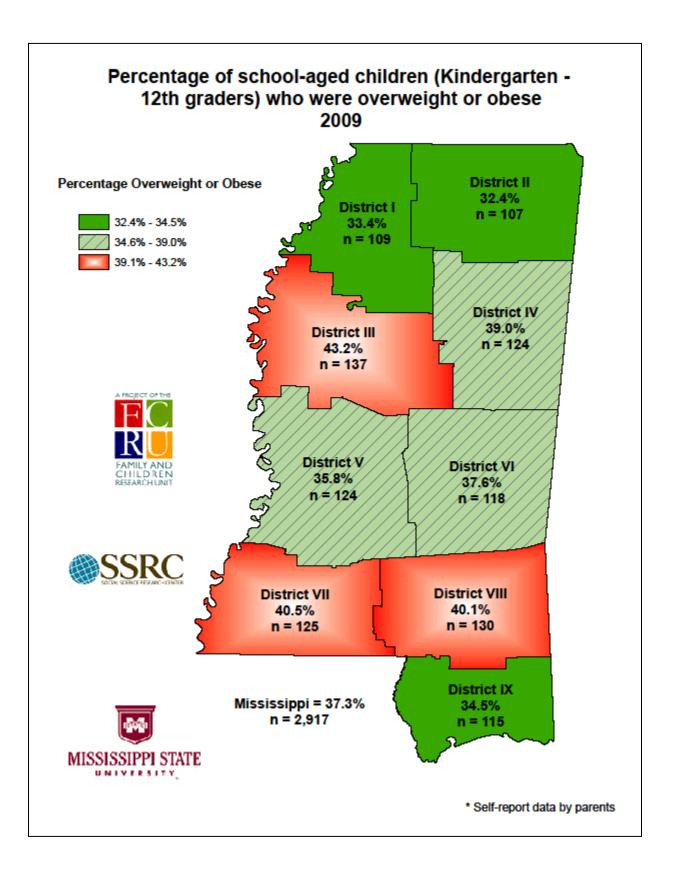




Percentage of School-Aged Children (K-12) Who Were Overweight or Obese 2011

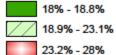






Percentage of Obese Children 2011

Percent Obese



Self-report data







