

What Do Mississippians Think About Childhood Obesity?

Findings from the 2006

Mississippi Public Perception of Childhood Obesity Survey

Prepared for:

The Center for Mississippi Health Policy

Conducted by:

Jerome R. Kolbo, PhD, ACSW

Bonnie Harbaugh, PhD, RN

Charkarra Anderson-Lewis, PhD, MPH, CHES

Lei Zhang, PhD, MSc, MBA

Jacquelyn Lee, LMSW

Terri Sasser, MPH

December 22, 2006

What Do Mississippians Think About Childhood Obesity?

Findings from the 2006 Mississippi Public Perception of Childhood Obesity Survey

Introduction

The Center for Mississippi Health Policy (CMHP) is committed to providing information to policymakers and the general public and communicating research findings that will stimulate dialogue and inform decision-making on health policy issues. One of the most significant health problems requiring the attention of policy makers in Mississippi is the continuing rise in childhood obesity rates. Understanding the public perception of childhood obesity in Mississippi is important for formulating new health policies related to obesity and selecting the best interventions for curbing the alarming rise in childhood obesity in the state. The Center for Mississippi Health Policy therefore contracted with the University of Southern Mississippi to assess public opinion and support regarding strategies to combat childhood obesity.

Significance

Children's weights are of vital importance to the State of Mississippi, which has the highest rates of child overweight in the United States (NHANES, 2004). Child overweight is the term used by the Centers for Disease Control (CDC) but is also used interchangeably with child obesity, particularly among the public. Children are classified as Overweight if they are greater than or equal to the 95th percentile on the CDC Body Mass Index (BMI) for age chart, or at Risk for Overweight if they are between the 85th-94th percentiles on the CDC BMI for age chart. The prevalence of child overweight in

Mississippi is well documented not only by NHANES (2004), but also by CAYPOS (Kolbo, et al, 2006), and by YRBSS data (2003), which show Mississippi children to be more overweight than ever rising national child overweight rates.

The health consequences of child overweight include higher risks of developing Type 2 Diabetes, Hypertension, High Cholesterol, Cancer, Asthma, and Orthopedic problems (National Institutes of Health). These physical health problems are occurring more often and earlier than ever before. If obese children do not develop one or more of these chronic diseases during childhood, the chances are high that they will appear when they reach adulthood. There are risks of developing potentially life-threatening psychological problems as well, such as depression, eating disorders, discrimination and stigmatization, negative self-image, and passivity and withdrawal from peers.

The causes of child overweight can be from genetic predisposition and/or metabolic problems, such as hypothyroidism, but these are rare. Most cases of childhood overweight are the result of societal and environmental changes, including more sedentary play activities, the structure and safety of neighborhoods, the reduction of physical activity in schools, the amount and type of television viewing, food advertising, the availability of fast foods, sugary drinks, and high-fat snacks at home and school, increased portion sizes, and changes in family feeding patterns and practices.

Because so many of the causes of child overweight are environmental and societal, rather than genetic and metabolic, the rising tide of child overweight rates can be slowed through actions by individuals, families, communities, schools and governments. This year there has been well publicized debate about child overweight in Mississippi, with governmental agencies willing to examine the school environment, such as physical

activity requirements, and the content of vending machines in schools. These are important steps towards addressing the present and looming health problems Mississippi faces as a result of child overweight.

Purpose

The purpose of this study was to survey a representative sample of Mississippi adults in order to determine current attitudes about childhood overweight. Self-reports of adult respondent weights and heights were also obtained to calculate BMI's. Findings from the study are compared to national data, and households with and without children under 18 are also compared. These findings can be used to stimulate dialogue and action to address the issue of child overweight in Mississippi.

Methodology

The Mississippi Public Perception of Childhood Obesity Survey was conducted in October and November 2006 by a multidisciplinary research team at the University of Southern Mississippi (USM) College Of Health. The survey questions were modeled after questions in a representative national survey done in October 2005 by the Robert Wood Johnson Foundation (RWJF) and the Harvard School of Public Health so that comparisons can be made between Mississippi and national data (see Appendix A for questions). The survey was conducted by the Center for Research, Evaluation, Assessment and Training Services (CREATeS) using Computer-assisted Telephone Interviewing (CATI) methods. The sampling frame was purchased from Survey

Sampling International, and included 16,000 telephone numbers. The sample was randomly selected using Random-Digit Dialing (RDD) technique.

Student workers from USM were interviewed, hired, and specifically trained for this project. Each student signed a confidentiality statement regarding the collected data, and received a one-hour training on the questions before beginning the survey. The students were supervised at all times by either the CREATEs manager or a graduate assistant who was also specifically trained for this project. The calls were placed Monday through Thursday from 3:00pm to 9:00pm beginning October 16 and ending November 9.

A total of 1,427 Mississippians were surveyed. Among those, 44 respondents used non-residential lines for the interview and 12 respondents refused to tell which type of phone lines they were using for the survey. Further, there were 5 respondents who were less than 18 years of age. There were 4 respondents who did not report their gender and age; hence the appropriate weights could not be assigned based on the post-stratification of data to approximate Mississippi's population distribution. As a result, a total of 75 respondents did not meet the selection criteria and were excluded from the analysis.

Analyses were performed using frequencies, percentages and cross tabulations. The analysis was based on a total of 1,362 respondents. Among those there were 28% men and 72% women. This gender distribution is significantly different from the distribution of men and women in Mississippi's population. Also, respondents with ages 65 or above accounted for 26.5% of the sample while only 12.0% of that age group in the population. To compensate for these biases, sample data were weighted based on the 2005 Census Bureau Population Estimates by Age Group, Race and Sex, Mississippi.

The survey weights were calculated (Table 1) and assigned to the respondents in data analyses.

To further analyze the data, respondents' weight status using Body Mass Index (BMI) was calculated. BMI is a measure of body weight for a specified height and was computed for each respondent based on height (in meters) and weight (in kilograms). The height in feet and inches is first converted to height in meters using the formula: Height (in m) = [(feet × 12) + inches] × 0.0254 m/in. The weight in pounds was then converted to weight in kilograms using the following formula: Weight (in kg) = Weight (in lbs) × 0.4536 kg/lb. In this study, BMI was divided into the following categories: (1) underweight (BMI < 18.5), (2) normal weight (18.5 ≤ BMI ≤ 25), (3) overweight (25 < BMI < 30), and (4) obese (BMI ≥ 30).

The data management, post-stratification weights, and analysis used SPSS 14.0 (SPSS, Inc, Chicago, IL) to calculate summary statistics and to adjust these estimates to reflect the differences in the population using weights. SPSS "Frequency Procedure" was used to calculate percentages of overall perceptions on childhood overweight and its related questions. SPSS "Crosstabs Procedure" was used to calculate the perceptions among different subgroups, such as race, gender, age, educational level, and BMI status. Though respondents' household incomes were asked in the survey, we did not do further analysis based on household income since over 53.3% of respondents refused to answer this questions. For the question, "How concerned are you about your oldest child being or becoming obese, or seriously overweight?" we subset the data and analyzed respondents who have children in their household under the age of 18 using SPSS "Select Cases Procedure".

Table 1. Survey Weights

Category	Population N	Population %	Sample N	Sample %	Weight
Age 18-34, Male	357,949	0.12	90	0.066	1.816
Age 18-34, Female	354,578	0.12	179	0.131	0.913
Age 35-44, Male	194,932	0.07	58	0.043	1.644
Age 35-44, Female	206,772	0.07	148	0.109	0.644
Age 45-54, Male	195,172	0.07	85	0.062	1.122
Age 45-54, Female	209,535	0.07	217	0.159	0.439
Age 55-64, Male	141,525	0.05	61	0.045	1.116
Age 55-64, Female	153,726	0.05	163	0.120	0.418
Age 65+, Male	146,592	0.05	87	0.064	0.783
Age 65+, Female	211,801	0.07	274	0.201	0.348

Findings

The full survey results are presented in Appendices A and B. The following are highlights and summaries of that data.

Seriousness of the Childhood Overweight Problem

How did Mississippians respond to questions related to their perception of child overweight, and the best way to address it?

- About 94.8% of Mississippi adults surveyed consider childhood overweight to be a serious national problem (includes very serious and somewhat serious categories).
- Mississippians were almost evenly divided on whether reducing childhood overweight was a personal issue (46.7%) that children and their families should deal with on their own, or a community issue (45%) that needs to be addressed by the entire community, including schools and community groups. This one

question had the highest number of “no opinion” responses in the entire survey (7.3%). The almost evenly split responses and the number of “no opinions” suggests that there is not a consensus on this issue of personal responsibility, or the need for community action.

- About 56% of Mississippians thought that government should play a significant role in reducing overweight, while about 36.6% were against this proposal. These findings indicate more agreement for a governmental response to childhood overweight, as opposed to a community or a personal issue orientation.

Vending Machines in Schools

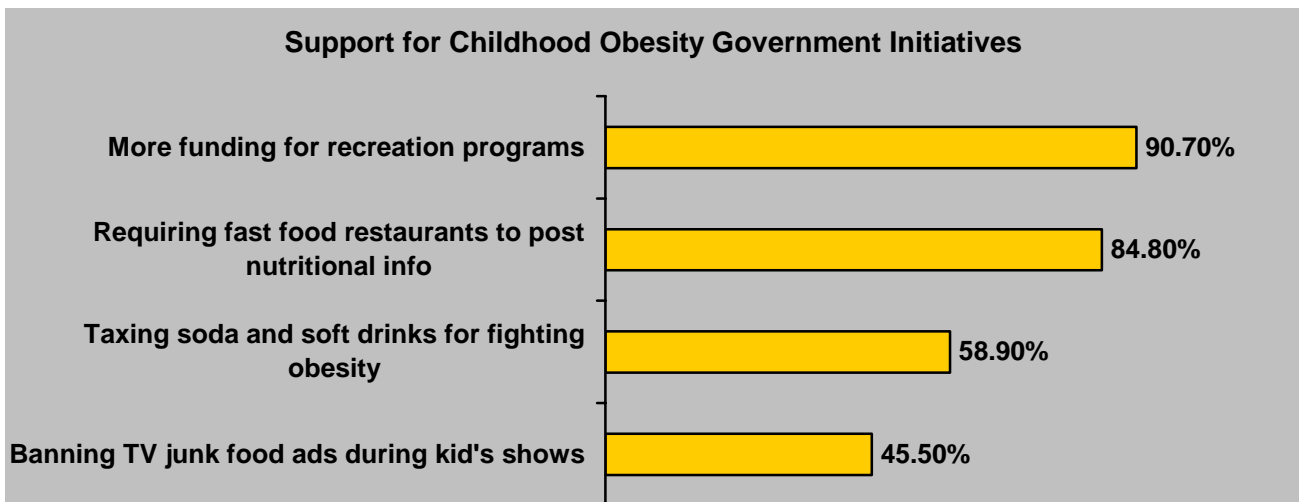
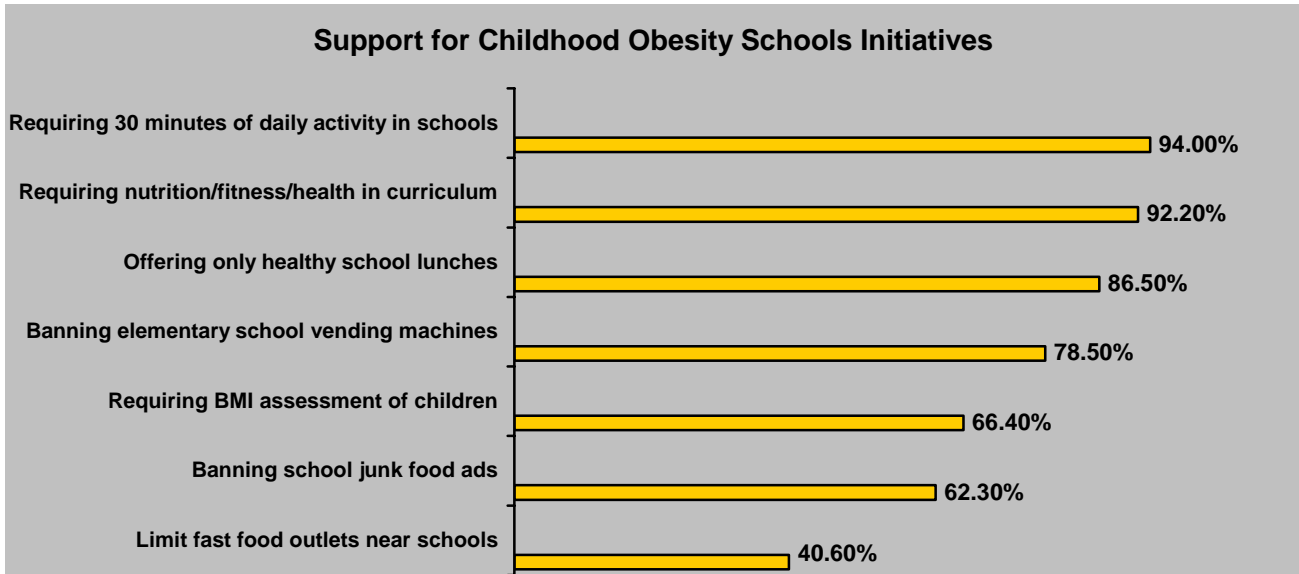
Recently, Mississippi has had widespread public debate regarding the presence of vending machines in schools as well as the types of products sold in schools.

- About 78.5%, 77.5%, and 73.4% of Mississippi adults favored passing a law to convert vending machines from carrying high-sugar, high-fat food to carrying healthy snacks and beverages in Elementary-, Middle- and High Schools, respectively.

School and Government Initiatives on Fighting Childhood Overweight

Mississippians were asked whether they would favor or oppose a variety of laws to fight overweight in children. These laws were divided into school or government initiatives (see figures below). More than half ($\geq 60\%$) of the respondents would favor 9 of the 11 initiatives (includes favor strongly and favor somewhat categories). The majority of Mississippians indicated that they would oppose 2 initiatives: “prohibiting

television from running advertisements for food and drinks like candy, chips, and soda during children’s programming” and “setting a limit on the number of fast food restaurants located near schools”.



In summary, of the six school initiatives in the survey, the most popular were:

- Requiring 30 minutes of daily physical activity for grades K-12 (94.0%)
- Including nutrition/fitness/health in school curricula (92.2%).
- Offering only healthy lunches in school (86.5%).

The most popular of the five government initiatives in the survey included:

- Funding recreation programs for children and teens (90.7%).
- Including nutritional information on fast food menus (84.8%).

Perceptions of Child Overweight in Mississippians of Different Backgrounds

The following relationships were found when examining the survey data by race, gender, age, educational status, and BMI status:

- More African Americans (76.4%) view childhood overweight as a very serious problem than Caucasians (70%) by a difference of almost 6%. About 17.8% of African Americans view this as somewhat serious compared to 25.5% of Caucasians.
- More women (76%) view childhood overweight as a very serious problem than men (68.2%) by a difference of almost 8%. This difference was statistically significant ($p = 0.005$). However, when those who consider childhood overweight as somewhat of a problem are combined with those who believe it to be a very serious problem, the percentages of women (98%) and men (97%) indicate overwhelming and equal agreement that it is a problem. About 20.7% of females view this as somewhat serious compared to 24.7% of males.
- About 79.6% of respondents who were 55 years old or above view childhood overweight as a very serious problem compared to 69.1% of those younger than 55 years. This difference was statistically significant ($p = 0.018$). About 14.4% of older respondents (55+) view this as somewhat serious compared to 26.0% of younger respondents (< 55).
- Those of different educational levels have similar opinions about the seriousness of childhood overweight as a problem. About 72.2% of respondent with 4 years of college or higher education view childhood overweight as a very serious problem, and 71.9% of those with lower levels of education (some college, high school graduates, and those with less than a

high school diploma). About 25.3% of respondents with 4 years of college or higher education view this as somewhat serious compared to 21.9% of respondents with lower education.

- More obese (74.6%) and overweight (72.7%) Mississippians view childhood overweight as a very serious problem than respondents who have a normal weight (68.2%). Interestingly, those who were categorized as underweight had the highest belief that childhood overweight was a very serious problem (81.3%). About 20.8% of obese respondents view this as somewhat serious compared to 27.4% of respondents with normal weight.
- Only 32.5% of parents with children under age 18 were very concerned about their children being or becoming obese or seriously overweight. This finding suggests that parents are less concerned about overweight in their own children.

Mississippians With and Without Children Under 18 in the Home

Comparisons between Mississippians with children under age 18 years in the home and those without were performed. Appendix B contains a question-by-question comparison between Mississippians with children and those without.

Both groups agreed almost equally in high proportions on the following survey questions:

- Child overweight is a serious problem (with children 95.5%, without 94.2%)
- Requiring 30 minutes of exercise in schools (with children 94.2%, without 93.9%)
- Requiring nutrition, fitness and health education in schools (with children 92.7%, without 92.2%)

Comparisons also showed that more adults with children than without children in the home agreed with the following questions:

- Reducing overweight is a community issue versus a personal issue (with children 46.7%, without 43.8%)
- Government should play a significant role in reducing overweight (with children 58.6%, without 53.8%)
- A tax on soft drinks to fund overweight reduction (with children 66.0%, without 52.5%)
- More funding for children's recreation programs (with children 93.7%, without 88.1%)
- Requiring fast food establishments to post nutrition information (with children 87.1%, without 82.7%)

More Mississippians without children than with children in the home agreed with the following questions:

- Requiring BMI assessments in schools (without children 67.2%, with 64.5%)
- Schools should be required to offer only healthy lunches (without children 88.5%, with 84.32%)

In the groups compared above, there were more African Americans with children less than 18 years in the household (38.9%) than in those without children (26.5%).

Another difference between the groups is that 67.5% of respondents were Overweight or Obese in homes with children less than 18 years old compared to 64.4% of respondents

without children. These factors may account for a portion of the differences between the two groups.

Mississippi Contrasted with the Nation

Mississippians' responses on the survey questions agreed in direction with many of the responses from the national survey, however some opinions differed in strength of belief from those in the national survey. Mississippians tended to respond more favorably towards many of the initiatives presented. For example, Mississippians were more favorable to:

- The government playing a significant role in reducing child overweight (56%) than the nation (38%).
- Limiting vending machines in elementary, middle and high schools (78.5%, 77.5%, 73.4%) than the nation (71%, 67%, 59%).
- Requiring BMI assessments for children in schools (66.4%) than the nation (51%).
- Taxing soft drinks and using the money to fight child overweight (58.9%) than the nation (50%).
- Requiring fast food restaurants to post nutritional information (84.8%) than the nation (79%).

More Mississippi adults responding to the survey had children living in their household (47.5%) than did the national survey respondents (34%). Also, there were fewer Caucasian respondents in the Mississippi survey (61.6%) than the national survey

(80%), as well as more African Americans (32.4%) than the national survey (11%).

These factors reflect the diversity within Mississippi and may account for a portion of the differences between the two surveys. Appendix A contains a question-by-question comparison between the Mississippi CMHP/USM Survey and the RWJF/Harvard national survey.

Limitations

As with most surveys, potential sources of error were present in this study. These include sampling error (with only a sample of 1427 Mississippians used to represent the whole state). Also, sources of measurement error may be due to problems in the wording of questions, or question order, interviewer effects, or the reliability of the respondents to answer truthfully. This study was presented to the respondents as voluntary and anonymous. The protocol for this study was reviewed and approved by the Human Subjects Review Board at The University of Southern Mississippi.

Summary

This study surveyed a representative sample of Mississippi adults and determined current attitudes about childhood overweight. Additionally, the data was examined in relation to Gender, Age, Ethnicity, Educational level, BMI, and whether there were children in the home. Findings were then compared to national data, and between households with and without children less than 18 years old.

There are several major overall findings from this study. First, results indicate that there is widespread recognition that there is a problem with childhood overweight in

Mississippi. Second, Mississippians have varying levels of concern and interest in how to address the problem. Third, the data show variation in Mississippians' opinions by ethnicity, gender, age and family composition, therefore sensitivity to these disparities is warranted.

Findings also indicate that Mississippians are in agreement with national opinions, just more so. Mississippians tended to be more favorable than the nation to many of the suggested initiatives related to reducing child overweight. In particular, more than 66% of Mississippians versus 51% of the nation favored BMI assessments. The next greatest difference between Mississippi and the nation was in support of taxing soda and soft drinks to fund obesity reduction programs (58.9% vs. 50%).

When comparing Mississippians' attitudes by homes with or without children, there was generally agreement between opinions. However, differences were noted in that those homes with children less than 18 years old were more favorable to external initiatives such as taxes, and community and government involvement.

Reducing child overweight will require steadfast commitments to data driven, fully funded, comprehensive and broad based initiatives. To inform initiatives, Mississippians need more research data on the problem itself, as well as on the associated problems of overweight. While more research is desperately needed; initiatives and practices to address overweight do exist and can be used in Mississippi. Accomplishing these initiatives will require the development of long-term strategies and interventions based on solid evidence and best practices. Intervention based on data and best practices must then be evaluated, using indicators such as changes in prevalence data, and those results should be used to further improve the interventions and initiatives in Mississippi.

Appendix A

Comparative Analysis between 2006 Mississippi Public Perception of Childhood Obesity Survey and 2005 RWJF National Survey

Questions	Mississippi N=1,362	RWJ /Harvard N= 1,108
1. How serious is obesity in children?	Very serious 72.2% <u>Somewhat serious 22.7%</u> 94.9% Not too serious 2.8% Not at all serious .3% No opinion 2.0%	Very 59% <u>Somewhat serious= 33%</u> 92% Not too serious 5% Not at all serious 1% Don't know 2%
2. Is reducing obesity a personal or community issue?	Personal issue 46.7% Community issue 45.0% No opinion 8.3%	Personal issue 51% Community 47% Don't know 5%
3. Should government play a significant role in reducing obesity?	Significant role 56.0% Not a significant Role 36.6% No opinion 7.3%	Significant role 38 % Not a significant Role 57%
4. Should there be a law limiting vending machines in elementary schools?	Favor 78.5% Oppose 16.5% No opinion 4.9%	Favor 71% Oppose 27 % Don't know 2%
5. Should there be a law limiting vending machines in middle schools?	Favor 77.5% Oppose 17.4% No opinion 5.1%	Favor 67% Oppose 31 % Don't know 2 %
6. Should there be a law limiting vending machines in high schools?	Favor 73.4% Oppose 21.0% No opinion 5.6%	Favor 59% Oppose 38% Don't know 3%
7. Should there be a law requiring 30 minutes of physical activity in schools?	Favor strongly 90.3% <u>Favor somewhat 3.7%</u> 94.0% Neither favor or Oppose .6% Oppose somewhat 2.7% <u>Oppose strongly 1.9%</u> 4.6 % No opinion .9%	Favor strongly 77% <u>Favor somewhat 15 %</u> 92.0% Neither favor or Oppose N/A Oppose somewhat 5% <u>Oppose strongly 3%</u> 8% Don't know 0%

8. Law prohibiting advertising soda, chips and candy in schools?	Favor strongly 58.2% <u>Favor somewhat 4.1%</u> 62.3% Neither favor or oppose 4.5% Oppose somewhat 16.8% <u>Oppose strongly 12.9%</u> 29.7% No opinion 3.6%	Favor strongly 41% <u>Favor somewhat 17%</u> 58% Neither favor or oppose N/A Oppose somewhat 17% <u>Oppose strongly 21%</u> 38% Don't know 4%
9. Law requiring BMI assessments for children in schools?	Favor strongly 57.5% <u>Favor somewhat 8.9%</u> 66.4% Neither favor or Oppose 3.5% Oppose somewhat 13.8% <u>Oppose strongly 14.5%</u> 28.3% No opinion 2.3%	Favor strongly 27% <u>Favor somewhat 24%</u> 51.0% Neither favor or Oppose N/A Oppose somewhat 18% <u>Oppose strongly 28%</u> 46% Don't know 4%
10. Law requiring nutrition, fitness and health education in schools?	Favor strongly 88.9% <u>Favor somewhat 3.3%</u> 92.2% Neither favor or Oppose .6% Oppose somewhat 3.0% <u>Oppose strongly 2.9%</u> 5.9% No opinion 1.3%	Favor strongly 70% <u>Favor somewhat 21%</u> 91.0% Neither favor or Oppose N/A Oppose somewhat 4% <u>Oppose strongly 3%</u> 7% Don't know 2%
11. Law requiring elementary schools to remove vending machines?	Favor strongly 54.2% <u>Favor somewhat 6.1%</u> 60.3% Neither favor or Oppose 4.1% Oppose somewhat 18.1% <u>Oppose strongly 14.7%</u> 32.8% No opinion 2.9%	Favor strongly 45% <u>Favor somewhat 16%</u> 61.0% Neither favor or Oppose N/A Oppose somewhat 17% <u>Oppose strongly 18%</u> 35% Don't know 4%

<p>12. Law requiring schools to offer only healthy lunches?</p>	<p>Favor strongly 82.1% <u>Favor somewhat 4.4%</u> 86.5%</p> <p>Neither favor or Oppose 1.6%</p> <p>Oppose somewhat 5.4% <u>Oppose strongly 5.5%</u> 10.9%</p> <p>No opinion 1.1%</p>	<p>Favor strongly 64% <u>Favor somewhat 21%</u> 85.0%</p> <p>Neither favor or Oppose N/A</p> <p>Oppose somewhat 9% <u>Oppose strongly 5%</u> 14%</p> <p>Don't know 1%</p>
<p>13. Law prohibiting TV from running certain ads during children's programming?</p>	<p>Favor 45.5%</p> <p>Oppose 45.5%</p> <p>No opinion 9.0%</p>	<p>Favor strongly 29% <u>Favor somewhat 18%</u> 47%</p> <p>Neither favor or Oppose N/A</p> <p>Oppose somewhat 24% <u>Oppose strongly 27%</u> 51%</p> <p>Don't know 2%</p>
<p>14. Law to tax soft drinks and use the money to fight obesity in children?</p>	<p>Favor 58.9%</p> <p>Oppose 35.4%</p> <p>No opinion 5.7%</p>	<p>Favor strongly 30% <u>Favor somewhat 20%</u> 50%</p> <p>Neither favor or Oppose N/A</p> <p>Oppose somewhat 12% <u>Oppose strongly 35%</u> 47%</p> <p>Don't know 3%</p>
<p>15. Law for more funding for recreation programs for children and teens?</p>	<p>Favor 90.7%</p> <p>Oppose 8.2%</p> <p>No opinion 1.1%</p>	<p>Favor strongly 67% <u>Favor somewhat 20%</u> 87%</p> <p>Neither favor or Oppose N/A</p> <p>Oppose somewhat 5% <u>Oppose strongly 7%</u> 12%</p> <p>Don't know 1%</p>

16. Law Requiring fast food restaurants to post nutritional information?	Favor 84.8%	Favor strongly 55% Favor somewhat 24% 79%
	Oppose 12.5%	Neither favor or Oppose N/A Oppose somewhat 8% Oppose strongly 11% 19%
	No opinion 2.7%	Don't know 2%
17. Laws setting limits on the number of fast food restaurants near school?	Favor 40.6%	Favor strongly 24% Favor somewhat 17% 41%
	Oppose 51.3%	Neither favor or Oppose N/A Oppose somewhat 22% Oppose strongly 33% 55%
	No opinion 8.2%	Don't know 4%
18. Do you have one or more children under 18 living in your household?	N= 479 yes Yes 47.5% No 52.5%	N= 379 yes Yes 34% No 66%
19. Race	Caucasian 61.6% AA 32.4% Asian .6% NatAm 1.3% Other 2.5% Notsure .5% Refused 1.1%	Caucasian 80% AA 11% Hispanic 9%
20. Gender (weighted)	Male 48.7% Female 51.3%	N/A

21. Household income	< \$20,000	7.7%	N/A
	20,001-30,000	5.1%	
	30,001-40,000	5.5%	
	40,001-50,000	7.0%	
	50,001-60,000	6.6%	
	60,001-70,000	3.7%	
	> 70,000	12.9%	
	don't know	12.8%	
	refused	38.7%	
22. Highest grade completed	Never attended	.6%	N/A
	Grades 1-8	2.5%	
	Grades 9-11	9.1%	
	Grade 12/GED	32.0%	
	College 1-3	24.7%	
	College 4 years	17.7%	
	Graduate degree	10.8%	
	Refused	2.5%	
23. BMI category	Underweight	1.7%	N/A
	Normal	32.4%	
	Overweight	37.8%	
	<u>Obese</u>	<u>28.0 %</u>	
		65.8%	

Appendix B

Comparison Between Mississippians With and Without Children less than 18 years at Home.

Questions	Without child <18 years n=529	With child <18 years n=479
1. How serious is obesity in children?	Very serious 73.6% Somewhat serious 20.6% 94.2% Not too serious 2.7% Not at all serious .4% No opinion 2.6%	Very serious 70.6% Somewhat serious 24.9% 95.5% Not too serious 2.9% Not at all serious .2% No opinion 1.4%
2. Is reducing obesity a personal or community issue?	Personal issue 48.8% Community issue 43.4% No opinion 7.7%	Personal issue 44.4% Community 46.7% No opinion 8.9%
3. Should government play a significant role in reducing obesity?	Significant role 53.8% Not a significant Role 38.6% No opinion 7.7%	Significant role 58.6 % Not a significant Role 34.5% No opinion 7.0%
4. Should there be a law limiting vending machines in elementary schools?	Favor 77.7% Oppose 17.5% No opinion 4.8%	Favor 79.6% Oppose 15.4% No opinion 5%
5. Should there be a law limiting vending machines in middle schools?	Favor 77.0% Oppose 18.3% No opinion 4.7%	Favor 78.0% Oppose 16.5% No opinion 5.5%
6. Should there be a law limiting vending machines in high schools?	Favor 73.7% Oppose 20.6% No opinion 5.7%	Favor 73.0% Oppose 21.5% No opinion 5.5%
7. Should there be a law requiring 30 minutes of physical activity in schools?	Favor strongly 90.0% Favor somewhat 3.9% 93.9% Neither favor or Oppose .7% Oppose somewhat 2.5% Oppose strongly 2.0% 4.5 % No opinion .9%	Favor strongly 90.7% Favor somewhat 3.5 % 94.2% Neither favor or Oppose .4% Oppose somewhat 2.9% Oppose strongly 1.7% 4.6% No opinion .8%
8. Law prohibiting advertising soda, chips and candy in schools?	Favor strongly 58.7% Favor somewhat 3.8% 62.5% Neither favor or oppose 5.0% Oppose somewhat 15.7% Oppose strongly 12.9% 28.6% No opinion 3.9%	Favor strongly 57.6% Favor somewhat 4.4% 62.0% Neither favor or oppose 4.1% Oppose somewhat 18.1% Oppose strongly 12.7% 30.8% No opinion 3.1%

9. Law requiring BMI assessments for children in schools?	Favor strongly 57.4% Favor somewhat 9.8% 67.2% Neither favor or Oppose 3.2% Oppose somewhat 12.4% Oppose strongly 14.6% 27.0% No opinion 2.6%	Favor strongly 57.7% Favor somewhat 6.8% 64.5% Neither favor or Oppose 3.8% Oppose somewhat 15.3% Oppose strongly 14.5% 29.8% No opinion 1.9%
10. Law requiring nutrition, fitness and health education in schools?	Favor strongly 87.8% Favor somewhat 3.9% 92.2% Neither favor or Oppose .8% Oppose somewhat 2.0% Oppose strongly 3.9% 5.9% No opinion 1.6%	Favor strongly 90.1% Favor somewhat 2.6% 92.7% Neither favor or Oppose .3% Oppose somewhat 4.2% Oppose strongly 1.8% 5.0% No opinion .9
11. Law requiring elementary schools to remove vending machines?	Favor strongly 55.0% Favor somewhat 6.5% 61.5% Neither favor or Oppose 4.6% Oppose somewhat 15.2% Oppose strongly 15.0% 30.2% No opinion 3.7%	Favor strongly 53.3% Favor somewhat 5.5% 58.8% Neither favor or Oppose 3.5% Oppose somewhat 21.4% Oppose strongly 14.3% 35.7% No opinion 2.0%
12. Law requiring schools to offer only healthy lunches?	Favor strongly 84.6% Favor somewhat 3.9% 88.5% Neither favor or Oppose 1.3% Oppose somewhat 3.9% Oppose strongly 5.3% 9.2% No opinion 1.0%	Favor strongly 79.3% Favor somewhat 5.0% 84.3% Neither favor or Oppose 1.9% Oppose somewhat 7.0% Oppose strongly 5.6% 12.6% No opinion 1.3%
13. Law prohibiting TV from running certain ads during children's programming?	Favor 45.4% Oppose 45.5% No opinion 9.2%	Favor 45.7% Oppose 45.6% No opinion 8.8%
14. Law to tax soft drinks and use the money to fight obesity in children?	Favor 52.5% Oppose 41.2% No opinion 6.3%	Favor 66.0% Oppose 28.9% No opinion 5.0%

15. Law for more funding for recreation programs for children and teens?	Favor	88.1%	Favor	93.7%
	Oppose	10.6%	Oppose	5.4%
	No opinion	1.3%	No opinion	.9%
16. Law Requiring fast food restaurants to post nutritional information?	Favor	82.7%	Favor	87.1%
	Oppose	14.2%	Oppose	10.7%
	No opinion	3.27%	No opinion	2.2%
17. Laws setting limits on the number of fast food restaurants near school?	Favor	38.6%	Favor	42.7%
	Oppose	52.5%	Oppose	49.9%
	No opinion	8.9%	No opinion	7.4%
18. Do you have one or more children under 18 living in your household?	No	100%	No	0%
	Yes	0%	Yes	100%
19. Race	Caucasian	67.1%	Caucasian	55.4 %
	AA	26.5%	AA	38.9%
	Asian	.5 %	Asian	.9%
	NatAm	1.6 %	NatAm	.1%
	Other	1.9%	Other	3.2%
	Not sure	.9 %	Not sure	.1 %
	Refused	1.6%	Refused	.4 %
20. Gender (weighted)	Male	50.9%	Male	46.2%
	Female	49.1%	Female	53.8%
21. Highest grade completed	Never attended	.4 %	Never attended	.8 %
	Grades 1-8	3.4%	Grades 1-8	1.5%
	Grades 9-11	9.4%	Grades 9-11	8.7%
	Grade 12/GED	31.2%	Grade 12/GED	32.9%
	College 1-3	23.7%	College 1-3	25.9%
	College 4 years	15.9%	College 4 years	19.7%
	Graduate degree	13.8%	Graduate degree	7.6%
	Refused	2.3%	Refused	2.8%
22. BMI category	Underweight	1.9 %	Underweight	1.5 %
	Normal	33.7%	Normal	31.0%
	Overweight	38.5%	Overweight	37.1%
	Obese	25.9 %	Obese	30.4%
		64.4 %		67.5%