

Spartanburg County, South Carolina

1st, 3rd, and 5th Grade Students
Body Mass Index (BMI) Report



2012-2013



"A Quality School System..."

Accredited by the Southern Association of Colleges and Schools Council on Accreditation and School Improvement



Preface

The Spartanburg County School District Body Mass Index (BMI) project was implemented under the auspices of the Spartanburg County Childhood Obesity Taskforce. All seven Spartanburg School Districts participated in the project, and measurements were obtained from children attending public schools in 1st, 3rd and 5th grades. This vital assessment would not be possible without the cooperation, collaboration and dedication of the Spartanburg County School System. The Childhood Obesity Task Force sincerely appreciates their commitment to this important project, and they are to be commended for taking a major step in a community-wide effort to address the problem of childhood obesity.

Over the past three decades, childhood obesity rates in America have tripled, and today, nearly one in three children in America are overweight or obese. The numbers are even higher in African American and Hispanic communities, where nearly 40% of the children are overweight or obese. If this problem is not addressed, one third of all children born in 2000 or later will suffer from diabetes at some point in their lives. Many others will face chronic obesity-related health problems like heart disease, high blood pressure, cancer, and asthma.

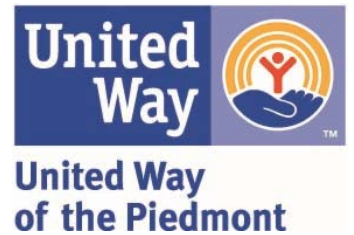
Spartanburg County has not escaped the childhood obesity epidemic. In 2008 the Spartanburg County Childhood Obesity Task Force was created to address this issue. The collaboration is comprised of a diverse group of partners representing non-profits, local hospitals, public health, schools, recreational organizations, foundations, institutes of higher learning, and community volunteers. The mission of the Task Force is to reverse the childhood obesity epidemic in Spartanburg. The BMI project is a tool to monitor our efforts.

While the local statistics are striking, there is much reason to be hopeful. There is considerable knowledge about the risk factors associated with childhood obesity. Research and scientific information on the causes and consequences of childhood obesity form the platform on which to build our local policies and partner in a collaborative manner to reduce the childhood obesity epidemic in Spartanburg. Effective policies and tools to guide healthy eating and active living, such as those listed below, are within our grasp.

1. Create a healthy start on life for our children, from pregnancy through early childhood;
2. Empower parents and caregivers to make healthy choices for their families;
3. Serve healthier food in schools;
4. Ensure access to healthy, affordable food; and
5. Increase opportunities for physical activity

A new initiative has been created by the Childhood Obesity Task Force to capture the broad-based grassroots, nonprofit, institutional, and governmental support for the development of a healthy Spartanburg County. This campaign, entitled Good For You Spartanburg is working to improve health behaviors and prevent chronic diseases such as childhood obesity. Businesses, schools, nonprofits, neighborhood associations, and other organizations are encouraged to become a partners in this effort as we work together to address childhood obesity and ensure a healthy future for our children. For more information please visit the website at www.goodforyouspartanburg.org.

Spartanburg County Childhood Obesity Task Force
Participating Organizations



Body Mass Index (BMI) - 1st, 3rd, and 5th Grade Students Spartanburg County, South Carolina

Introduction

The rising rate of childhood obesity is a major public health threat for our children. According to the CDC, currently one-third (33.6%) of American children and adolescents are either obese or at risk of becoming obese. In order to assess the healthy weight status of students in Spartanburg County, body mass index (BMI) data were collected during the 2012-2013 school year. The purpose of this report is to highlight the percent of obese or overweight 1st, 3rd, and 5th grade students in Spartanburg County, South Carolina.

Methodology

Body Mass Index (BMI) is a number calculated from a person's weight and height. BMI provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems.

BMI is calculated by multiplying a common conversion factor of 703 by weight in pounds (lb) divided by height in inches (in) squared. In other words,

$$BMI = 703 \times (Weight \text{ (lbs)} \div Height^2 \text{ (in}^2))$$

The weight status of children was determined by using growth charts developed by the Centers for Disease Control and Prevention. The growth charts show the distribution of BMI across a range of ages for a reference population. Children were classified as obese if their BMI-for-age was in the 95th percentile or above. Children were classified as overweight if their BMI-for-age was between the 85th and 94th percentile.

Demographic and health data were provided by selected individuals within each school district. Information Technology staff played a key role in consolidating data. As in the previous year, SPARK Stars were identified in each school district, and served as primary points of contact. In an effort to promote consistency, digital scales were provided by the Mary Black Foundation for each elementary/intermediate school, along with specific protocol on how to measure height and weight for each child.

Note:

92.7% of 1st graders were measured (3,367 of 3,632)

92.7% of 3rd graders were measured (3,139 of 3,388)

92.7% of 5th graders were measured (3,159 of 3,406)

Key Findings

- 27.6% of 1st Graders were obese or overweight.
- 33.8% of 3rd Graders were obese or overweight.
- 41.3% of 5th Graders were obese or overweight.
- Differences/Disparities exist between White, African-American, and Hispanic children.
- Differences/Disparities exist between socioeconomic status (SES) groups.

Conclusions

- Childhood obesity is a severe problem in Spartanburg County.
- Efforts should continue to monitor BMI in children.
- The community should be made aware of the situation in order to seek resources, implement evidence-based programs, and improve outcomes.

Actions for Prevention of Childhood Obesity

Immediate actions involving stakeholders from multiple settings are needed to address the epidemic.

Local Governments

- Expand and promote opportunities for active living and healthy eating in the community through changes to ordinances, policies, capital improvement programs, and other planning practices.

Communities

- Provide opportunities for healthy eating and physical activity in existing and new community programs.
- Support legislation and other local and state-level action promoting healthy eating and physical activity.
- Seek resources in order to help implement and/or maintain programs to promote and support healthy eating and physical activity in the community.

Schools

- Implement school wellness policies that promote healthy eating and active living for both students and teachers.
- Improve the nutritional quality of foods and beverages served and sold in schools and as part of school-related activities.
- Routinely track BMI and offer appropriate counseling and guidance to children and their families.

Families

- Implement interventions to reduce the amount of time children spend doing sedentary activities such as viewing television, playing video games, and using a computer.
- Monitor and discuss BMI information with family health care providers.
- Engage in and promote healthy eating and active lifestyles together as families.

1st Grade Report

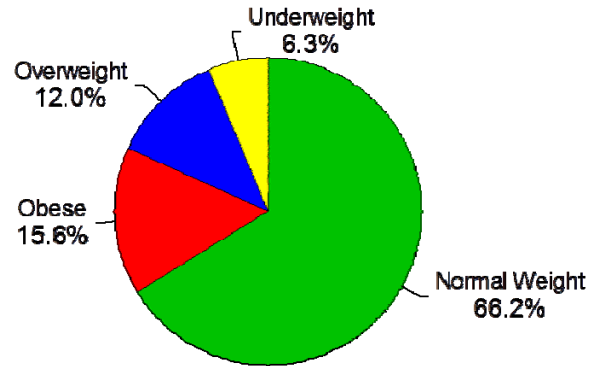


Spartanburg County 1st Graders

Weight status:

- 6.3% of 1st graders were underweight.
- 66.2% of 1st graders were in the normal weight range.
- 12% of 1st graders were overweight.
- 15.6% of 1st graders were obese.

Percent of children by weight status
Spartanburg County First Grade - 3367 Students

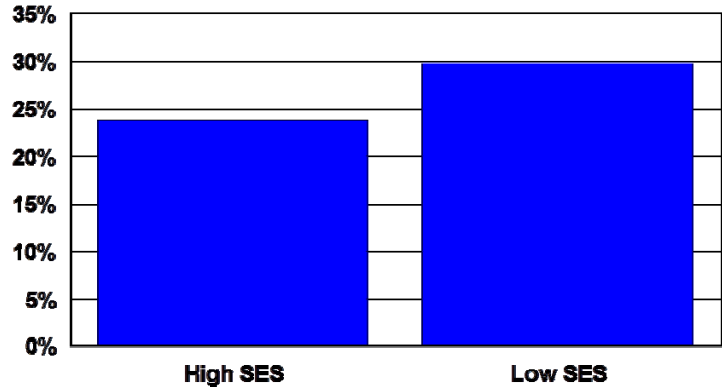


Underweight: less than the 5th percentile
Normal: between the 5th but less than the 85th percentile
Overweight: at or above the 85th but less than the 95th percentile
Obese: at or above the 95th percentile

Disparities in Obesity/Overweight by Socioeconomic Status *

- Children from low SES households were more likely to be obese or overweight.
- Children from high SES households were less likely to be obese or overweight.

Percent of children who were obese or overweight by SES
Spartanburg County - First Grade



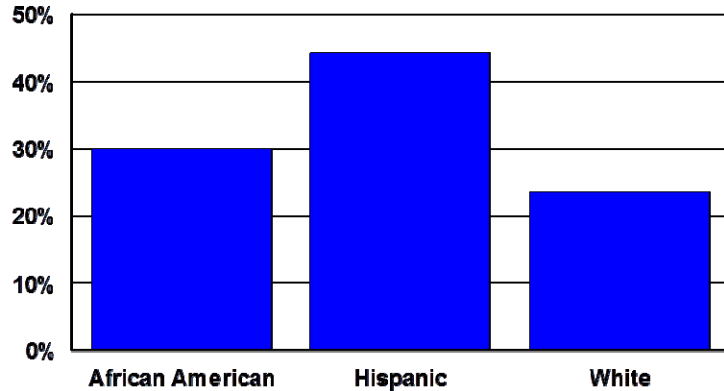
Overweight: at or above the 85th but less than the 95th percentile
Obese: at or above the 95th percentile

* Based on Free and reduced School Lunch Program eligibility

**Disparities in Obesity/
Overweight by Race/Ethnicity
by Race/Ethnicity ***

- White children were least likely to be obese or overweight.
- African-American children were more likely than White children to be obese or over-weight.
- Hispanic children were more likely than White children and African American children to be obese or over-weight.
- American children to be obese or over-weight.

**Percent of children who were obese or overweight by Race/Ethnicity
Spartanburg County - First Grade**



Overweight: at or above the 85th but less than the 95th percentile

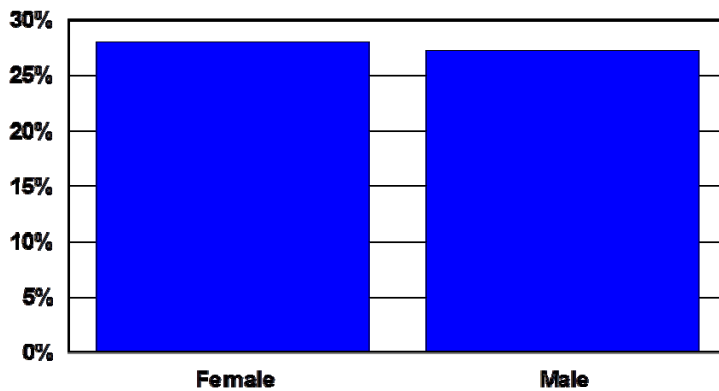
Obese: at or above the 95th percentile

* For statistical reasons, Race/Ethnic groups comprising <4% of the data were not included. These groups/individuals are included in all other parts of the reports.

**Disparities in Obesity/
Overweight by Gender**

- Females were more likely to be obese or overweight.
- Males were less likely to be obese or overweight.

**Percent of children who were obese or overweight by gender
Spartanburg County - First Grade**



Overweight: at or above the 85th but less than the 95th percentile

Obese: at or above the 95th percentile

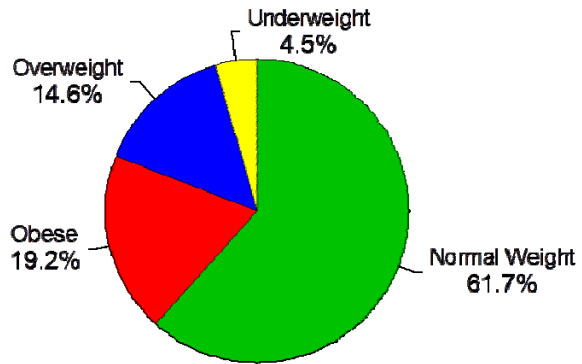
3rd Grade Report



Weight status:

- 4.5% of 3rd graders were underweight.
- 61.7% of 3rd graders were in the normal weight range.
- 14.6% of 3rd graders were overweight.
- 19.2% of 3rd graders were obese.

Percent of children by weight status
Spartanburg County Third Grade - 3139 Students

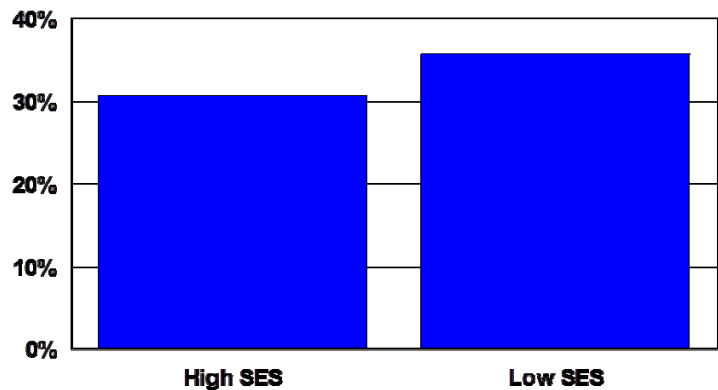


Underweight: less than the 5th percentile
 Normal: between the 5th but less than the 85th percentile
 Overweight: at or above the 85th but less than the 95th percentile
 Obese: at or above the 95th percentile

Disparities in Obesity/Overweight by Socioeconomic Status *

- Children from low SES households were more likely to be obese or overweight.
- Children from high SES households were less likely to be obese or overweight

Percent of children who were obese or overweight by SES
Spartanburg County - Third Grade



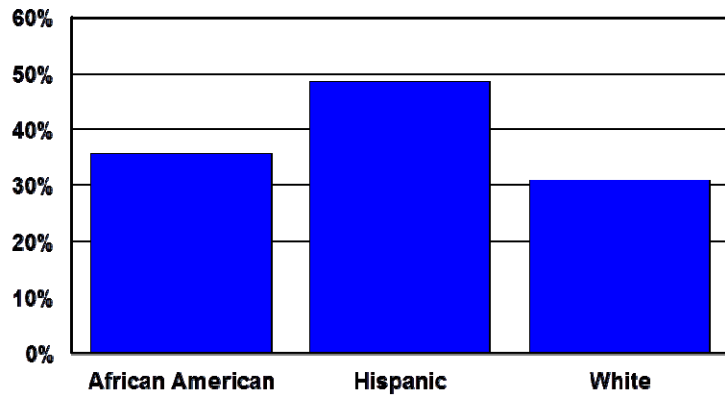
Overweight: at or above the 85th but less than the 95th percentile
 Obese: at or above the 95th percentile

* Based on Free and reduced School Lunch Program eligibility

Disparities in Obesity/ Overweight by Race/ Ethnicity *

- White children were least likely to be obese or overweight.
- African-American children were more likely than White children to be obese or over-weight.
- Hispanic children were more likely than White children and African American children to be obese or over-weight.

Percent of children who were obese or overweight by Race/Ethnicity
Spartanburg County - Third Grade



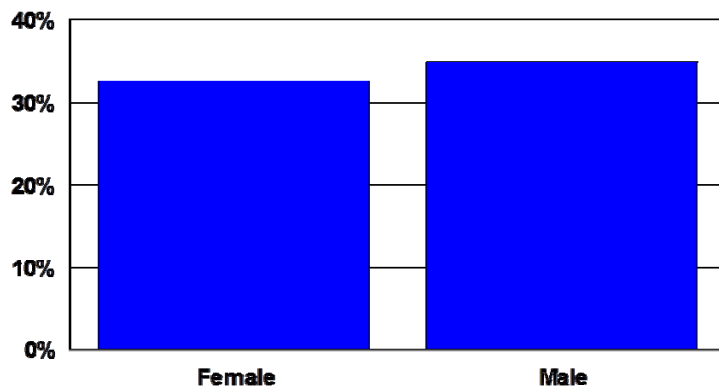
Overweight: BMI-for-age 85th-<95th percentile Obese: BMI-for-age \geq 95th percentile

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Disparities in Obesity/ Overweight by Gender

- Males and Females were almost equally likely to be obese or overweight, with percentages being slightly higher for males than for females.
- Females were only slightly less likely to be obese or overweight than males.

Percent of children who were obese or overweight by gender
Spartanburg County - Third Grade



Overweight: at or above the 85th but less than the 95th percentile

Obese: at or above the 95th percentile

5th Grade Report

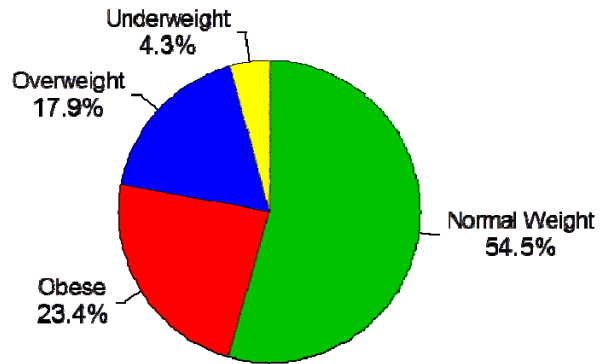


Spartanburg County 5th Graders

Weight status:

- 4.3% of 5th graders were underweight.
- 54.5% of 5th graders were in the normal weight range.
- 17.9% of 5th graders were overweight.
- 23.4% of 5th graders were obese.

Percent of children by weight status
Spartanburg County Fifth Grade - 3159 Students

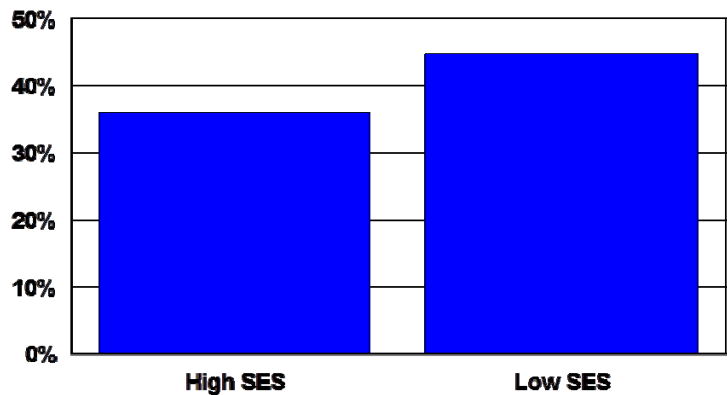


Underweight: less than the 5th percentile
 Normal: between the 5th but less than the 85th percentile
 Overweight: at or above the 85th but less than the 95th percentile
 Obese: at or above the 95th percentile

Disparities in Obesity/Overweight by Socioeconomic Status *

- Children from low SES households were more likely to be obese or overweight.
- Children from high SES households were less likely to be obese or overweight

Percent of children who were obese or overweight by SES
Spartanburg County - Fifth Grade



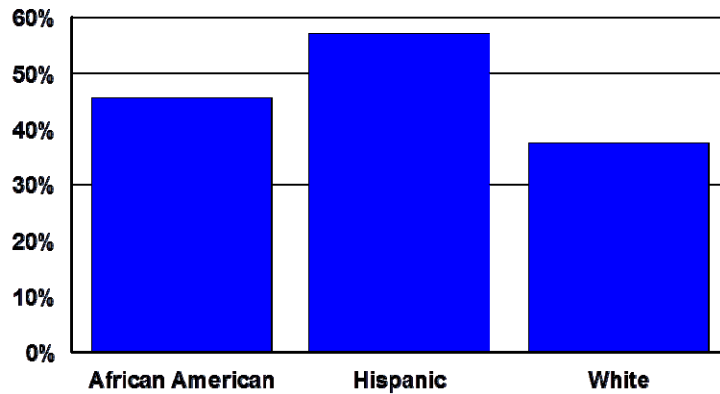
Overweight: at or above the 85th but less than the 95th percentile
 Obese: at or above the 95th percentile

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Disparities in Obesity/ Overweight by Race/ Ethnicity *

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- African-American children were more likely than White children to be obese or over-weight.
- Hispanic children were more likely than White children and African American children to be obese or over-weight.

Percent of children who were obese or overweight by Race/Ethnicity
Spartanburg County - Fifth Grade



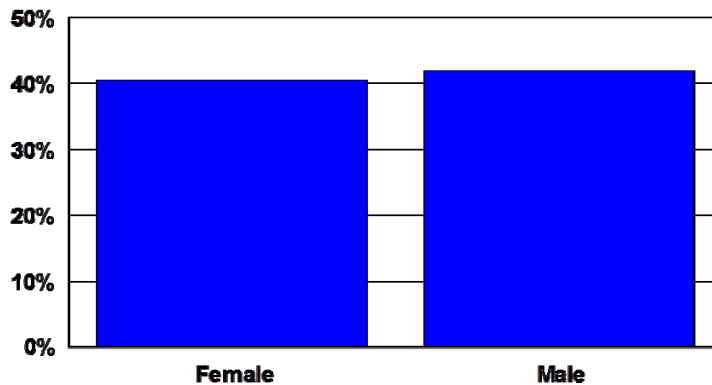
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Disparities in Obesity/ Overweight by gender

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- Females were only slightly less likely to be obese or overweight than males.

Percent of children who were obese or overweight by gender
Spartanburg County - Fifth Grade



Overweight: at or above the 85th but less than the 95th percentile

Obese: at or above the 95th percentile