

The New Jersey Childhood Obesity Study

Camden

School BMI Data

Punam Ohri-Vachaspati, PhD
Kristen Lloyd, MPH
Jolene Chou, MPH
Nirvana Petlick, BA
Susan Brownlee, PhD
Michael Yedidia, PhD

For more information contact
Email: pohri@ifh.rutgers.edu



Funding provided by the Robert Wood Johnson Foundation

Table of Contents

About the Study.....	3
In this Chartbook... ..	4
Overweight & Obesity in Five New Jersey Cities	5
Overweight & Obesity by Age Group	6
Overweight & Obesity by Gender.....	8
Overweight & Obesity by Race/Ethnicity	10
Overweight & Obesity by Age & Gender	12
Overweight & Obesity by School.....	16

RUTGERS

Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

About the Study

The New Jersey Childhood Obesity Study, funded by the Robert Wood Johnson Foundation, aims to provide vital information for planning, implementing and evaluating interventions aimed at preventing childhood obesity in five New Jersey municipalities: Camden, Newark, New Brunswick, Trenton, and Vineland. These five communities are being supported by RWJF's New Jersey Partnership for Healthy Kids program to plan and implement policy and environmental change strategies to prevent childhood obesity.

Effective interventions for addressing childhood obesity require community-specific information on who is most at risk and on contributing factors that can be addressed through tailored interventions that meet the needs of the community.

Using a comprehensive research study, the Center for State Health Policy at Rutgers University is working collaboratively with the State Program Office for New Jersey Partnership for Healthy Kids and the five communities to address these information needs. The main components of the study include:

- A household survey of 1700 families with 3 -18 year old children
- De-identified heights and weights data from public school districts
- Assessment of the food and physical activity environments using objective data

Data books and maps based on the results of the study are being shared with the community coalitions in the five communities to help them plan their interventions.

RUTGERS

Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

In This Chartbook...

The tables and graphs in this chartbook were created using data collected by Camden Public Schools for the school year 2008-2009. Rutgers Center for State Health Policy obtained de-identified data from the schools and computed a BMI score and a BMI percentile (BMIPCT) for each child. Weight status is defined using the following BMIPCT categories.

<u>BMIPCT</u>	<u>Weight Status</u>
BMIPCT < 85	Not Overweight or Obese
BMIPCT ≥ 85	Overweight and Obese
BMIPCT ≥ 95	Obese
BMIPCT ≥ 97	Very Obese

BMIPCT categories are presented at the city level and in sub-group analysis by age, gender, and race. Aggregate data are also presented at the school level, with notation, where representativeness of the data was a concern.

Tables and graphs on pages 5, 7, 9, and 11 show comparisons with national estimates (National Health and Nutrition Examination Survey, 2007-2008). The national data are representative of all 2-19 year old children in the US.

Each graph and table is accompanied by brief summary statements. Readers are encouraged to review the actual data presented in tables and graphs as there is much more detail.

Source: CSHP 2010, Camden public schools 2008-2009 BMI data

RUTGERS
Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

Prevalence of Childhood Overweight and Obesity In Five New Jersey Cities

		Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
City (Ages 3-19)	Camden	39.8%	23.3%	17.3%
	Newark	44.2%	25.2%	18.3%
	New Brunswick	46.4%	26.7%	19.9%
	Trenton	47.3%	28.0%	21.0%
	Vineland	43.6%	25.3%	18.5%
NHANES (Ages 2-19)	All	31.7%	16.9%	11.9%
	Non-Hisp Black	35.9%	20.0%	14.9%
	Mexican Am	38.9%	20.8%	14.9%
	Hispanic	38.2%	20.9%	15.2%
	Non-Hisp White	29.3%	15.3%	10.5%

Sources:
CSHP 2010, BMI data from public schools in 5 NJ cities, 2008-2009
NHANES 2007-2008 data

RUTGERS
Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

- Overall, rates of childhood overweight and obesity are higher in the five NJ cities compared to the national data.
- Compared to the other NJ cities in this study, children in Camden have slightly lower rates of overweight and obesity, though they are still higher than the national averages.

Camden

Prevalence of Childhood Overweight & Obesity

By Age Group

		Not Overweight (BMIPCT < 85)	Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
3-5 yrs	(n=1,150)	65.0%	35.0%	19.3%	14.7%
6-11 yrs	(n=5,492)	60.9%	39.1%	23.5%	17.3%
12-19 yrs	(n=3,407)	57.4%	42.6%	24.3%	18.2%
Total	(n=10,049)	60.2%	39.8%	23.3%	17.3%

Source: CSHP 2010, Camden public schools 2008-2009 BMI data

RUTGERS
Center for State Health Policy

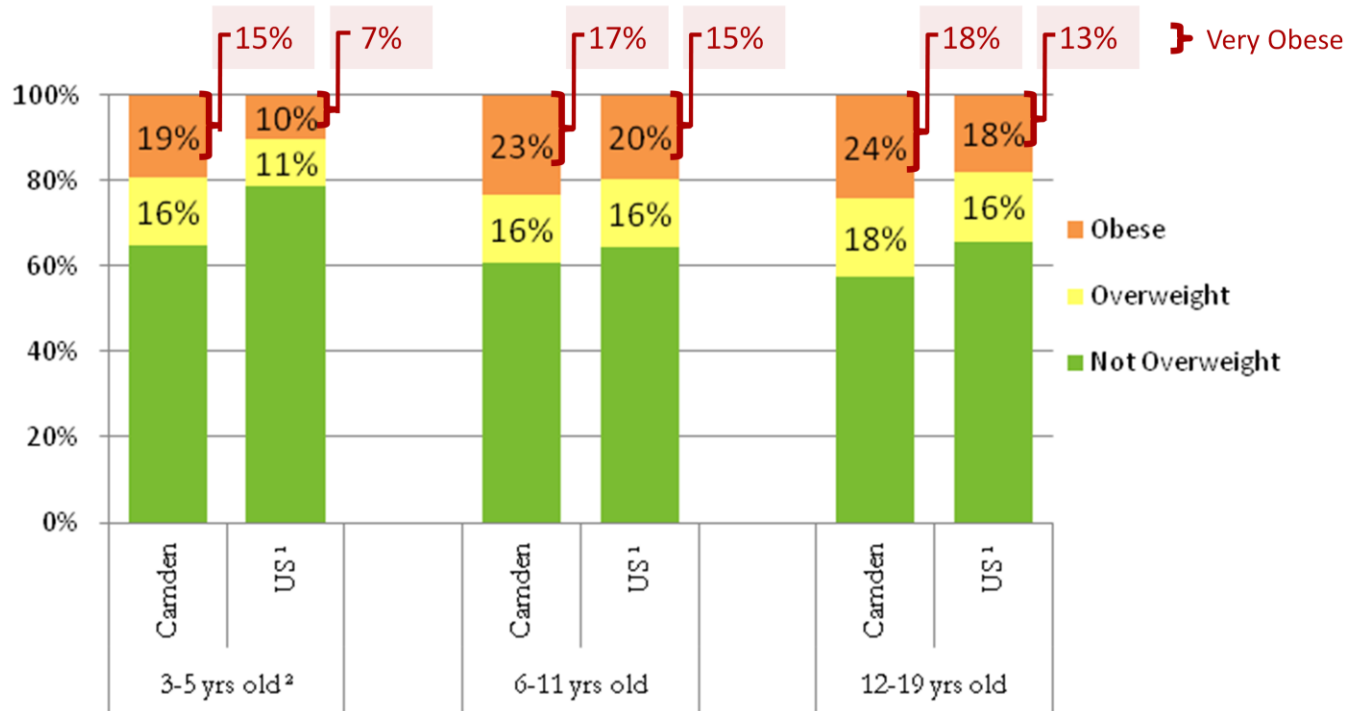
Funding provided by the Robert Wood Johnson Foundation

- Nearly 1 in 4 children in Camden ages 6-19 years are obese.
- Overall, the rates of overweight and obesity are higher among older (6-19 year-old) children compared to the youngest (3-5 year-old) age group.

Camden

Prevalence of Childhood Overweight & Obesity

By Age Group



¹ US estimates are based on NHANES 2007-2008 data

² US estimates are for ages 2-5

Source: CSHP 2010, Camden public schools 2008-2009 BMI data

RUTGERS

Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

- Compared to the national NHANES data, a higher percentage of Camden children in all age categories are overweight, obese, or very obese.
- The largest differences between Camden and national estimates are seen among the youngest children. It is important to remember that the national data for this age group are based on 2-5 year-olds, and Camden data are based on 3-5 year-olds.

Camden

Prevalence of Childhood Overweight & Obesity

By Gender

		Not Overweight (BMIPCT \geq 85)	Overweight & Obese (BMIPCT \geq 85)	Obese (BMIPCT \geq 95)	Very Obese (BMIPCT \geq 97)
Male	(n=5,178)	60.9%	39.1%	23.4%	17.4%
Female	(n=4,871)	59.5%	40.5%	23.1%	17.2%
Total	(n=10,049)	60.2%	39.8%	23.3%	17.3%

Source: CSHP 2010, Camden public schools 2008-2009 BMI data

RUTGERS

Center for State Health Policy

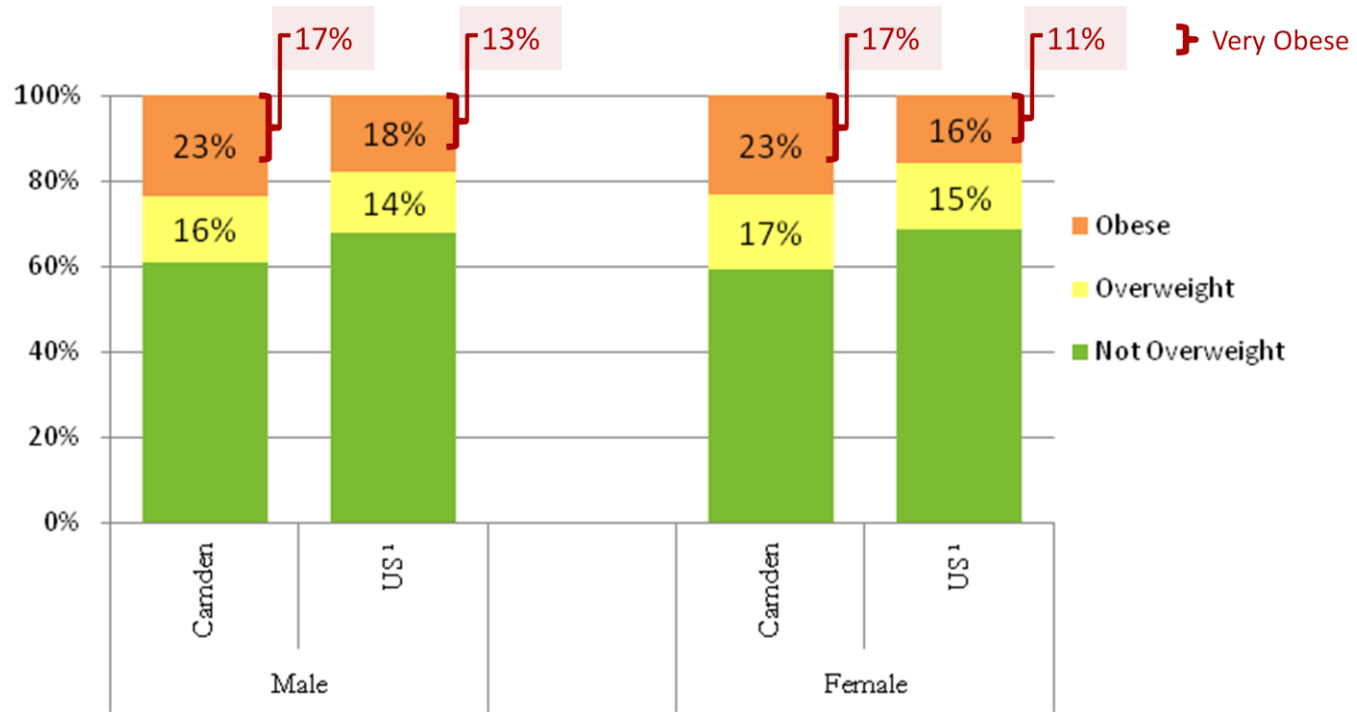
Funding provided by the Robert Wood Johnson Foundation

- Boys and girls have very similar rates of overweight and obesity in Camden, and nearly 1 in 4 are obese.

Camden

Prevalence of Childhood Overweight & Obesity

By Gender



¹ US estimates are based on NHANES 2007-2008 data

Source: CSHP 2010, Camden public schools 2008-2009 BMI data

RUTGERS
Center for State Health Policy
Funding provided by the Robert Wood Johnson Foundation

- Both boys and girls in Camden have higher rates of overweight and obesity compared to US averages.
- In Camden, 17% of the boys and girls are very obese compared to 13% of the boys and 11% of the girls nationally.

Camden

Prevalence of Childhood Overweight & Obesity

by Race/Ethnicity

		Not Overweight (BMIPCT < 85)	Overweight & Obese (BMIPCT ≥ 85)	Obese (BMIPCT ≥ 95)	Very Obese (BMIPCT ≥ 97)
Non-Hispanic Black	(n=5,119)	63.2%	36.8%	20.4%	14.8%
Hispanic	(n=4,649)	56.8%	43.2%	26.7%	20.1%
Non-Hispanic White	(n=45)	60.0%	40.0%	24.4%	22.2%
Other	(n=207)	65.2%	34.8%	18.8%	14.0%
Total *	(n=10,049)	60.2%	39.8%	23.3%	17.3%

* Note: Total includes individuals whose race/ethnicity information is unknown

Source: CSHP 2010, Camden public schools 2008-2009 BMI data

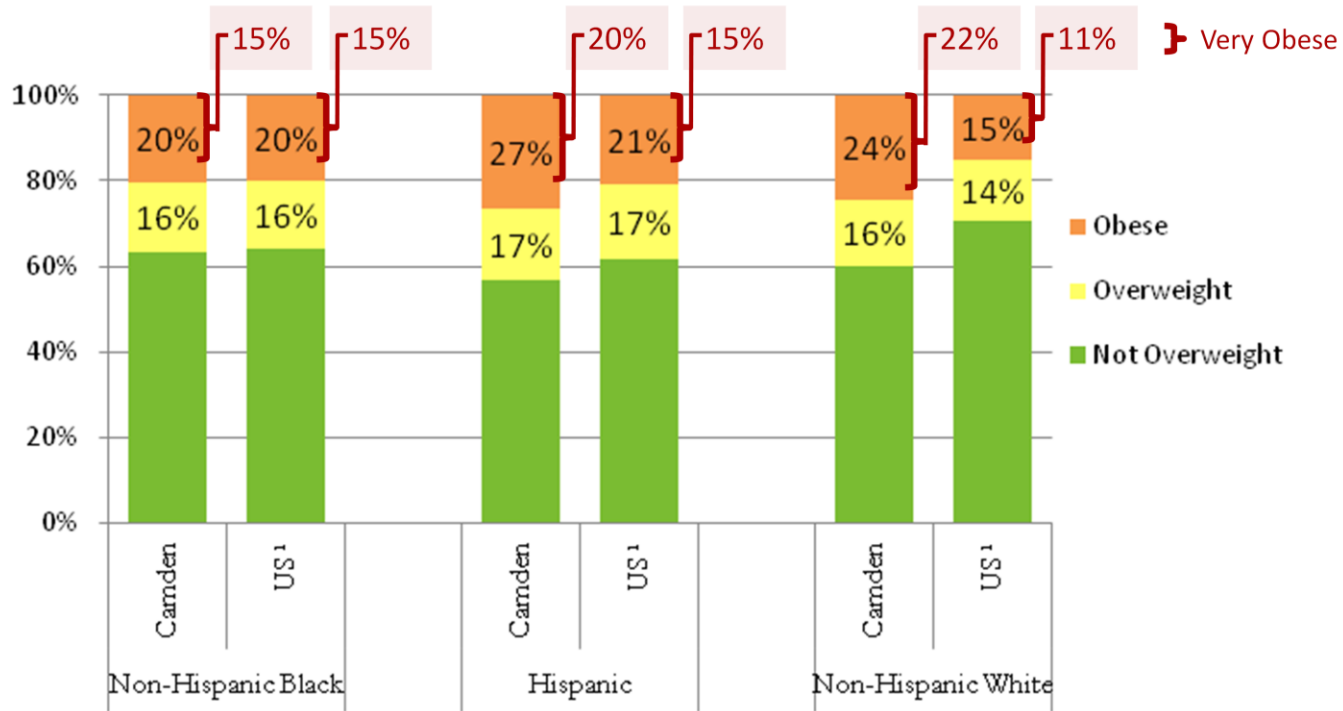
RUTGERS
Center for State Health Policy
Funding provided by the Robert Wood Johnson Foundation

- Hispanic children in Camden have the highest rates of overweight and obesity, with over 1 in 4 being obese and 1 in 5 being very obese.
- Though the rates of overweight and obesity are also high among non-Hispanic whites, it is important to note that there are only a small number of children in this group.

Camden

Prevalence of Childhood Overweight & Obesity

by Race/Ethnicity



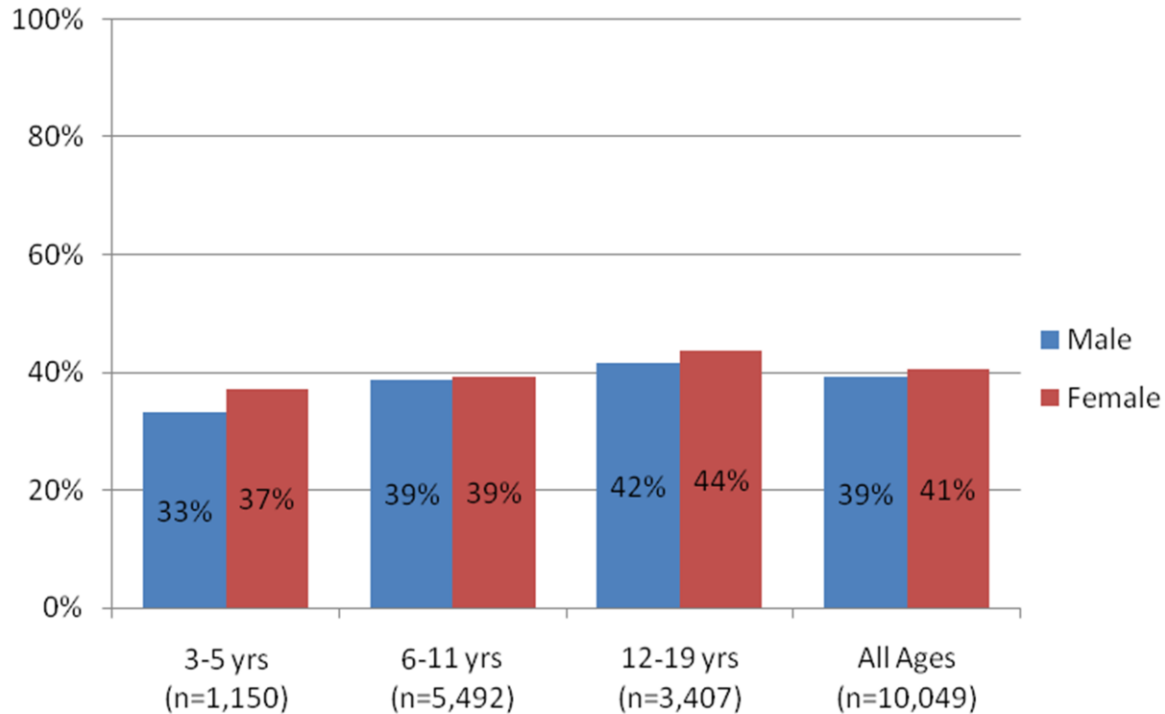
¹ US estimates are based on NHANES 2007-2008 data

Source: CSHP 2010, Camden public schools 2008-2009 BMI data

RUTGERS
Center for State Health Policy
Funding provided by the Robert Wood Johnson Foundation

- The likelihood of non-Hispanic black children in Camden being overweight and obese is comparable to the national averages for that group.
- 44% of the Hispanic children in Camden are overweight or obese compared to 38% nationally.
- It is important to note that there is only a small number of children (n=45) in the non-Hispanic white category.

Camden, All Racial/Ethnic Groups Prevalence of Childhood Overweight & Obesity By Age & Gender



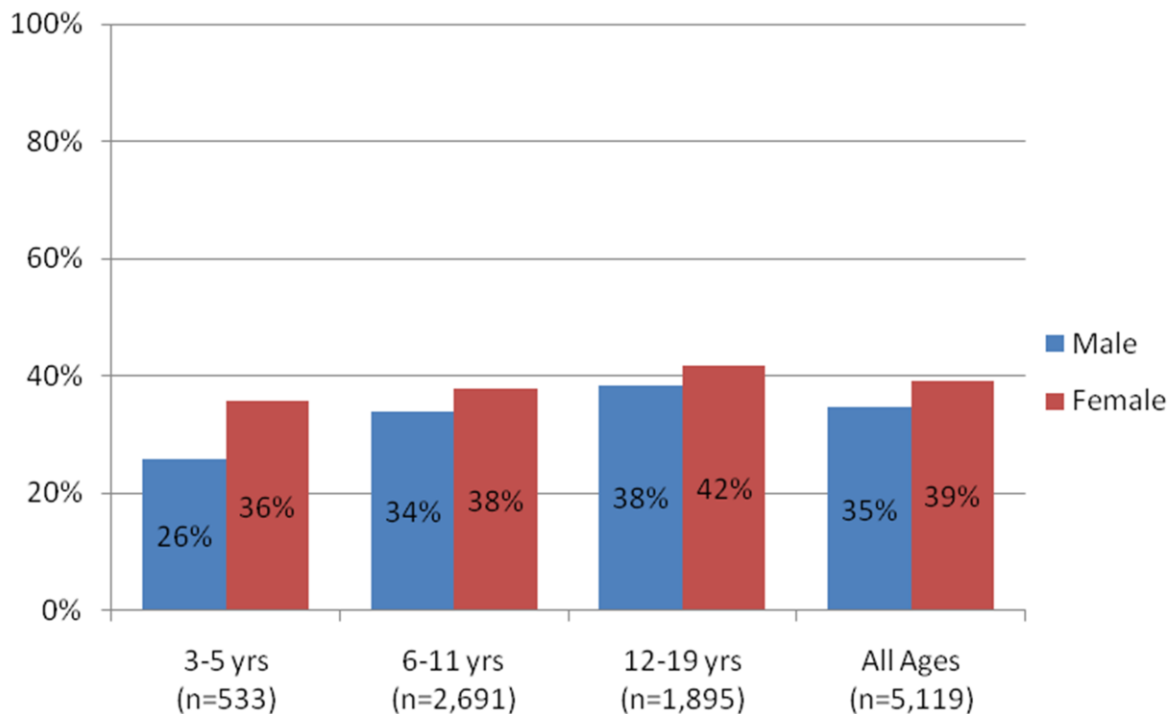
Source: CSHP 2010, Camden public schools 2008-2009 BMI data

RUTGERS
Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

- Compared to boys of the same age group, a slightly higher percentage of girls are overweight or obese.

Camden, Non-Hispanic Black Prevalence of Childhood Overweight & Obesity By Age & Gender



Source: CSHP 2010, Camden public schools 2008-2009 BMI data

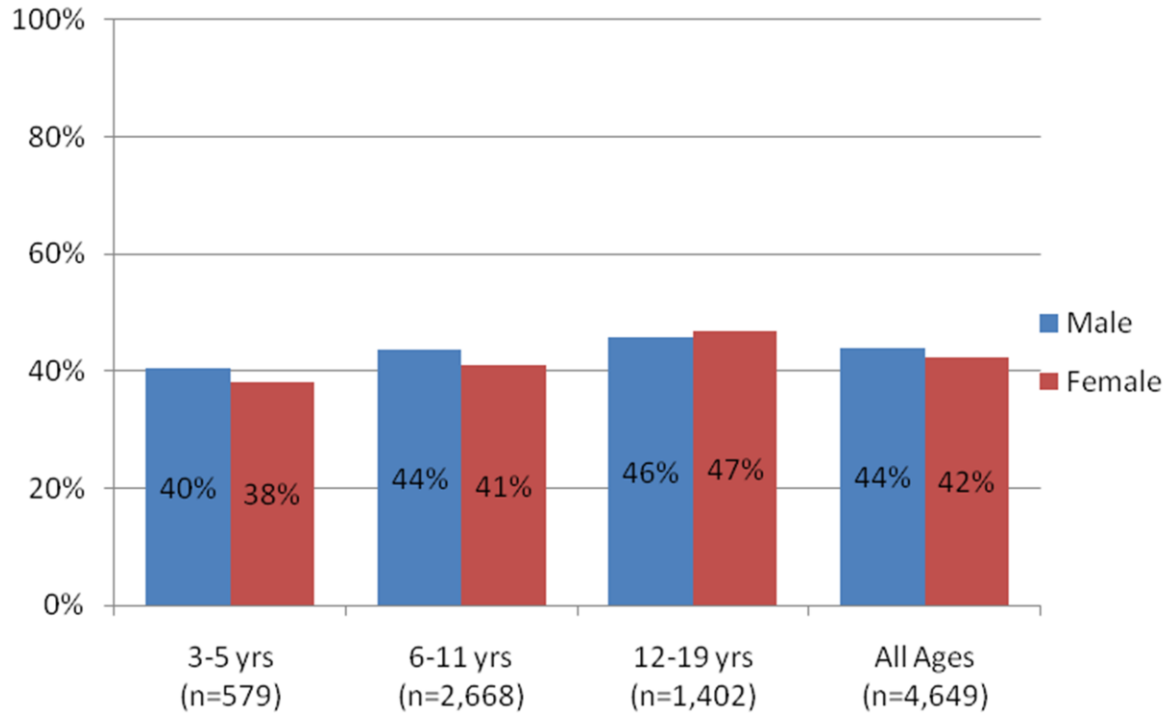
RUTGERS
Center for State Health Policy
Funding provided by the Robert Wood Johnson Foundation

- Among non-Hispanic black children in Camden, the largest difference in rates of overweight and obesity is observed among 3-5 year old children. Approximately 1 in 4 boys and 1 in 3 girls are overweight or obese in this age group.
- Non-Hispanic black girls have higher rates of overweight and obesity than boys across all age groups.

Camden, Hispanic

Prevalence of Childhood Overweight & Obesity

By Age & Gender

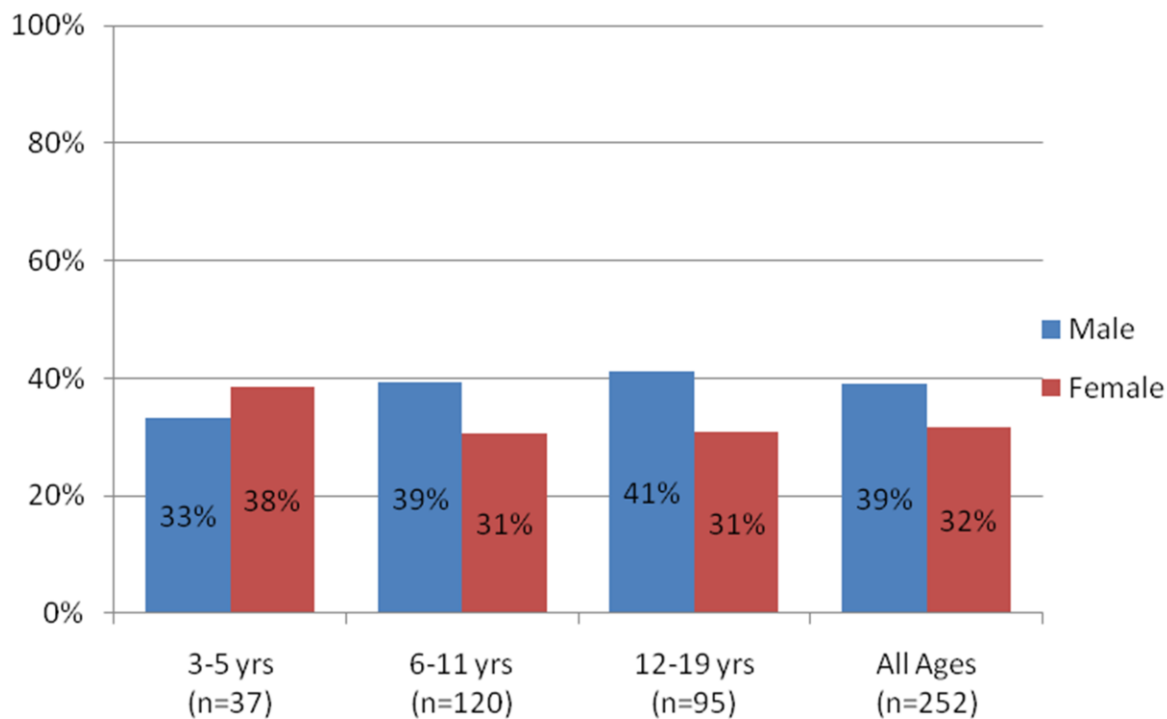


Source: CSHP 2010, Camden public schools 2008-2009 BMI data

RUTGERS
Center for State Health Policy
Funding provided by the Robert Wood Johnson Foundation

- Among Hispanic children in Camden, there are only slight differences in the rates of overweight and obesity between girls and boys in all age groups.
- Nearly half (46%) of Hispanic adolescents in Camden are overweight or obese.

Camden, “Other” and Non-Hispanic White Prevalence of Childhood Overweight & Obesity By Age & Gender



Source: CSHP 2010, Camden public schools 2008-2009 BMI data

RUTGERS
Center for State Health Policy
Funding provided by the Robert Wood Johnson Foundation

- Given the small numbers, non-Hispanic white and “other” racial/ethnic groups were combined for analysis, with a larger number of children coming from the “other” category.
- In this combined racial/ethnic category, boys aged 6 years or older are more likely than girls to be overweight or obese, while girls in the youngest (3-5 years) group are more likely than boys to be overweight or obese.

Camden City Public Schools

School	% Students Overweight / Obese
Powell	27.9 %
Whittier	28.1 %
Wilson	29.8 %
Forest Hill	30.7 %
Bonsall	34.3 %
Catto Demonstration School	34.9 %
Sharp	35.1 %
Riletta Cream Elem School ^{a, d}	35.4 %
Woodrow Wilson High ^{a, e}	37.1 %
Cramer	37.6 %
Creative & Performing Arts High	38.1 %
Sumner	38.1 %
McGraw	38.2 %
R. C. Molina Elem School	38.7 %
East Camden Middle	39.2 %
Morgan Village Middle	39.2 %
Brimm Medical Arts High	39.3 %
So. Camden Alternative School	40.0 %

School	% Students Overweight / Obese
Parkside	40.9 %
Washington	40.9 %
Early Childhood Dev Cent	41.5 %
Davis Elementary ^{a, d}	43.8 %
Camden High ^{b, c}	44.5 %
Yorkship ^a	45.5 %
Coopers Poynt	45.9 %
Hatch Middle	46.6 %
Veterans Memorial Middle	46.8 %
Lanning Square	47.3 %
U. S. Wiggins ^a	48.2 %
Met East High School	50.0 %
Pyne Poynt Family School	51.5 %

^a Only 50-80% of the students were measured

^b Less than 50% of the students were measured

^c Male students over-represented

^d Data not representative by grade

^e Data not representative of school racial/ethnic composition

RUTGERS

Center for State Health Policy

Funding provided by the Robert Wood Johnson Foundation

Source: CSHP 2010, Camden public schools 2008-2009 BMI data

- Estimates are provided at the school level for Camden schools.
- It is important to note that for some schools insufficient numbers of students were measured so that the percentages above may not be representative (see superscript flags). Of particular concern are schools where less than 50% of the students were measured (flag *b*).