

2013 Ohio Youth Risk Behavior Survey



# **Nutrition, Weight Control and Dietary Behavior**

## Nutrition, Weight Control, and Dietary Behaviors

In the United States, over one third of children and adolescents were considered overweight or obese in 2010. Obese youth have a higher risk for pre-diabetes, cardiovascular disease, bone and joint problems, sleep problems and social emotional problems and are more likely to be obese adults.<sup>1</sup> Healthy eating in adolescence promotes optimal growth and development and reduces the risk for many harmful illnesses and diseases as well as being associated with increased cognitive functioning, attendance and mood.<sup>2</sup> Research shows that eating fast food can lead to high body mass index (BMI) for students and suggests that school's proximity to fast food restaurants is associated with students being overweight or obese.<sup>3</sup>

Healthy People 2020's 10-year health objectives include topics relevant to the YRBS topics, aimed at improving the health of adolescents in the United States.<sup>4</sup> One objective that addresses Nutrition and Weight Status (NWS) in adolescents specifically is presented below:

**NWS-10.3:** Reduce the proportion of adolescents aged 12 through 19 who are considered obese to 16.1 percent.

- In 2013, 13 percent of Ohio high school students fit the criteria for obesity, based on self-reported height and weight.

Recent trends (2003-2013) in Ohio:

- The prevalence rates for high school students who fit the criteria for being overweight or being obese remained steady.
- Prevalence rates for students who took diet pills, powders or liquids without a doctor's advice to try and lose weight decreased.
- Prevalence rates for students who ate fruits or vegetables five or more times per day during the past seven days increased significantly from 2007.
- Prevalence rates for students who drank soda one or more times per day during the past seven days decreased significantly from 2007.

The charts on the following pages represent the past ten years of YRBS data.<sup>abc</sup>

<sup>a</sup>2009 data are not included in tables because the limited response rate did not produce a weighted sample.

<sup>b</sup>Trend data based on trend analysis using logistic regression model controlling for sex, race/ethnicity, and grade,  $p < 0.05$ .

<sup>c</sup>Comparisons among groups in 2013 data were not tested for significance, but determined by comparing confidence intervals.

**Percentage of students who were overweight (i.e., at or above the 85th percentile but below the 95th percentile for body mass index, by age and sex), Ohio 2003-2013**



*"How tall are you without your shoes on?"*

*"How much do you weigh without your shoes on?"*

- From 2003 to 2013, there was **no significant** change in the percentage of students who fit the criteria for being overweight.
- There were no differences by gender, grade level or race for students who were overweight.

**Percentage of students who were obese (i.e., at or above the 95th percentile for body mass index, by age and sex), Ohio 2003-2013**

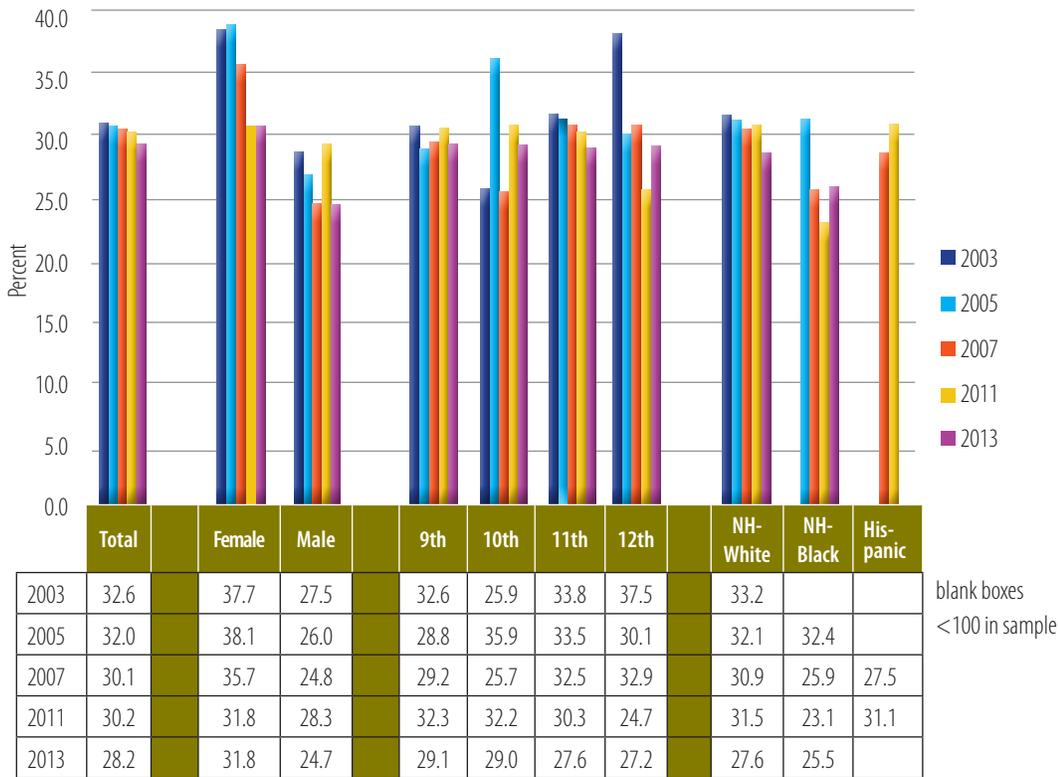


*"How tall are you without your shoes on?"*

*"How much do you weigh without your shoes on?"*

- From 2003 to 2013, there was **no significant change** in the percentage of students who were considered obese.
- When compared to female students, male students were 2.1 times more likely to be obese.
- There were no differences by grade level or race for students who were considered obese.

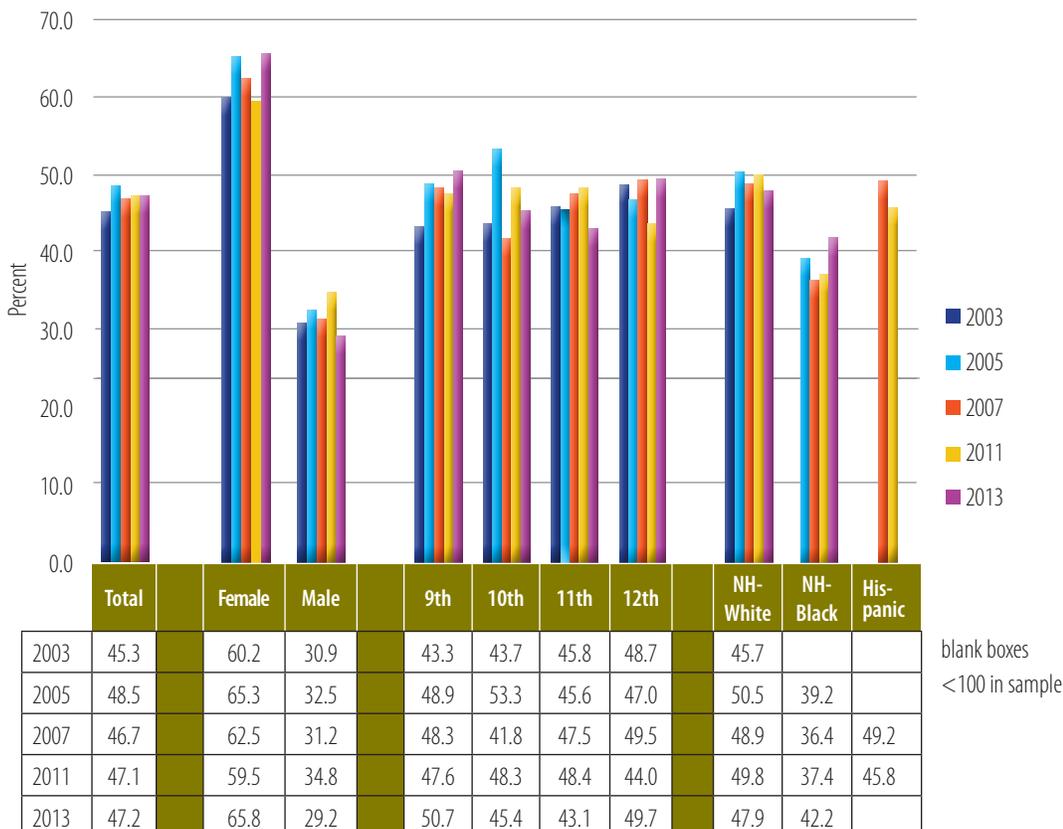
### Percentage of students who described themselves as slightly or very overweight, Ohio 2003-2013



*“How do you describe your weight?”*

- From 2003 to 2013, there was a **significant decrease** in the percentage of students who described themselves as slightly or very overweight.
- There were no differences by gender or grade level for students who describe themselves as slightly or very overweight.

### Percentage of students trying to lose weight, Ohio 2003-2013



*“Which of the following are you trying to do about your weight?”*

- From 2003 to 2013, there was **no significant change** in the percent of students trying to lose weight.
- There were no differences by race or grade level for students who are trying to lose weight.
- When compared to male students, female students were 2.3 times more likely to try to lose weight.

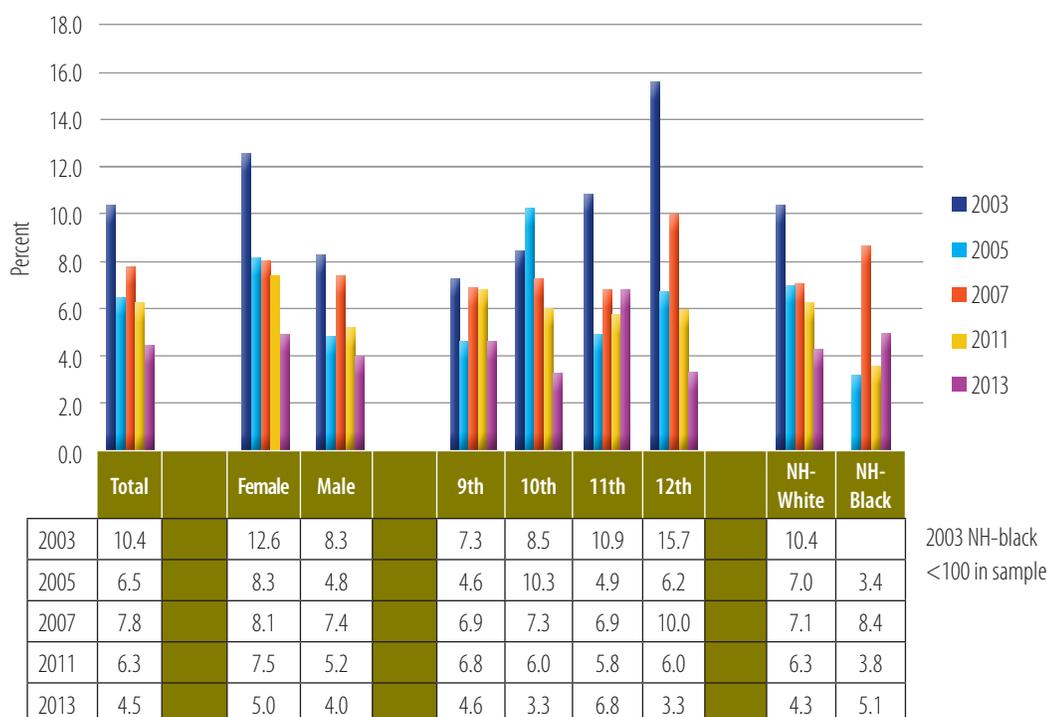
### Percentage of students who went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days, Ohio 2003-2013



*“During the past 30 days, did you go without eating for 24 hours or more to lose weight or keeping from gaining weighting?”*

- From 2003 to 2013, there was **no significant change** in the percent of students who went without eating for 24 hours to keep from gaining weight.
- When compared to male students, female students were 2.3 times more likely to go without eating for 24 hours to keep from gaining weight.
- There were no differences by race or grade level for students who went without eating for 24 hours to keep from gaining weight.

### Percentage of students who took any diet pills, powders, or liquids without a doctor’s advice to lose weight or keep from gaining weight during the past 30 days, Ohio 2003-2013



*“During the past 30 days, did you take any diet pills, powders, or liquids without a doctor’s advice to lose weight or to keep from gaining weight?”*

- From 2003 to 2013, there was a **significant decrease** in the percentage of students who took diet pills, powders or liquids.
- There were no differences by gender, grade or race for students who took diet pills, powders or liquids.

### The percentage of students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days, Ohio 2003-2013

*“During the past 30 days, did you vomit or take laxatives to lose weight or to keep from gaining weight?”*

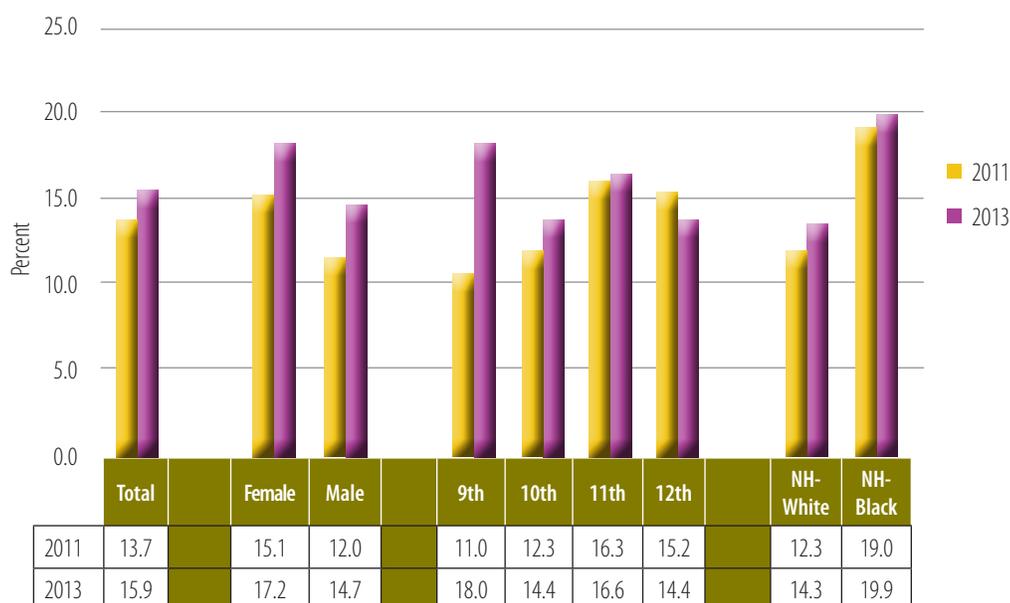
- From 2003 to 2013, there was **no significant change** in the percentage of students who vomited or took laxatives to lose weight or keep from gaining weight.
- There were no differences by gender, race or grade level for students who vomited or took laxatives to lose weight or to keep from gaining weight.



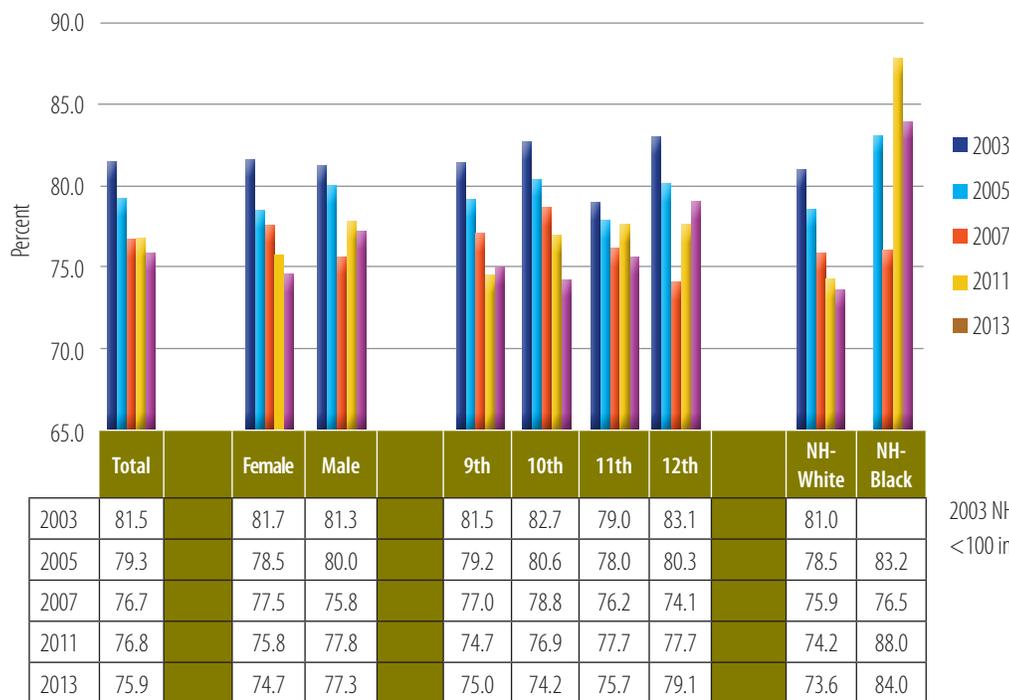
### Percentage of students who were ever told by a doctor or nurse that they were overweight, obese, too heavy or needed to lose weight, Ohio 2011-2013

*“Has a doctor or nurse ever told you that you were overweight, obese, too heavy, or needed to lose weight?”*

- From 2011 to 2013, there was **no significant change** in the percentage of students who were told that they were overweight, obese, too heavy or needed to lose weight.
- There were no differences by gender, race or grade level for students who were told they were overweight, obese, too heavy or needed to lose weight.



### Percentage of students who drank 100% fruit juices one or more times during the past seven days, Ohio 2003-2013



*“During the past seven days, how many times did you drink 100% fruit juices such as orange juice, apple juice or grape juice?”*

- From 2003 to 2013, there was a **significant decrease** in the percentage of students who drank 100% fruit juice during the past seven days.
- Compared to non-Hispanic white students, non-Hispanic black students were 1.1 times more likely to drink 100% fruit juice.

2003 NH-black <100 in sample

### Percentage of students who ate fruit one or more times during the past seven days, Ohio 2003-2013

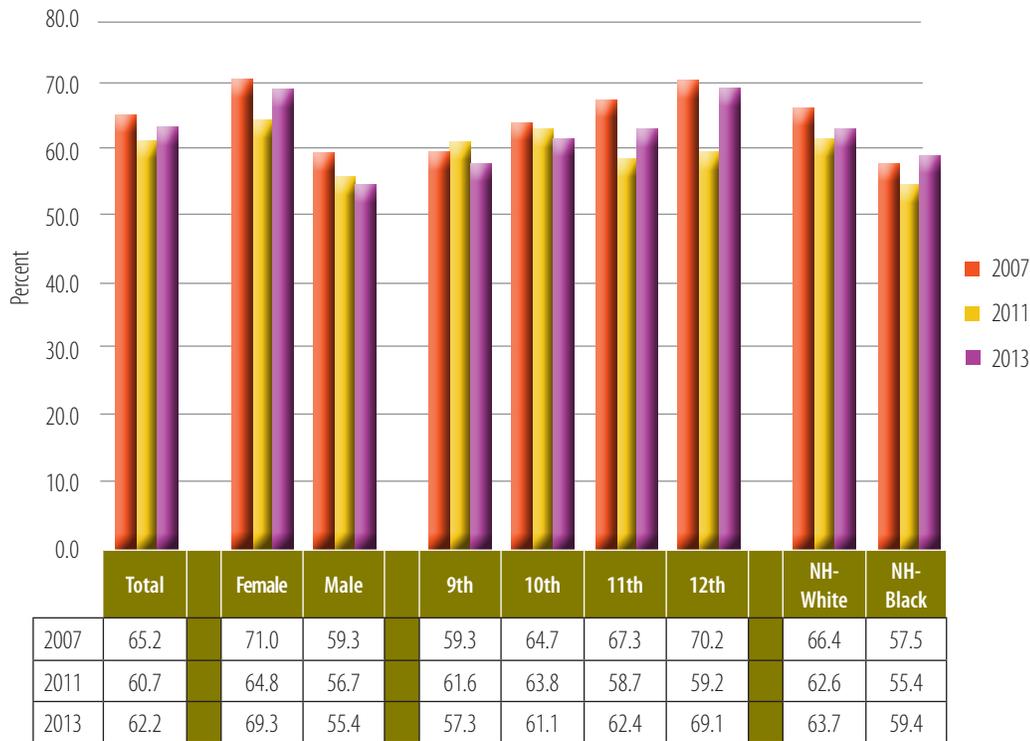


*“During the past seven days, how many times did you eat fruit?”*

- From 2003 to 2013, there was a **significant increase** in the percentage of students who ate fruit during the past seven days.
- There were no differences by grade level, race or gender for students who ate fruit during the past seven days.

2003 NH-black <100 in sample

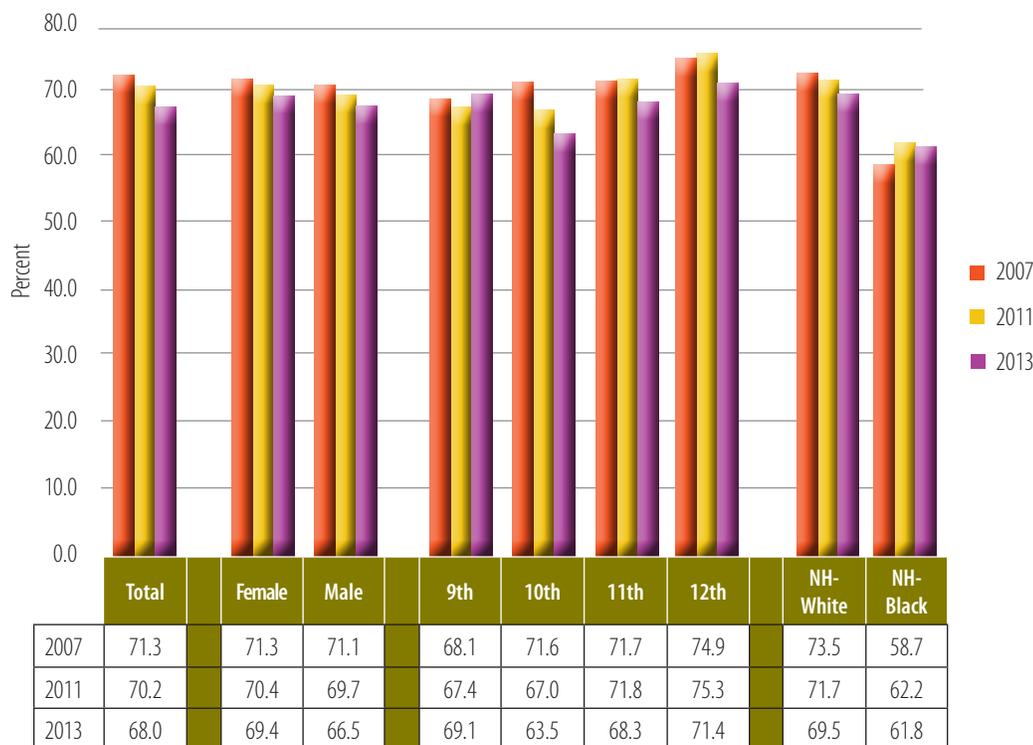
**Percentage of students who ate green salad one of more times during the past seven days, Ohio 2007-2013**



*“During the past seven days, how many times did you eat green salad?”*

- From 2007 to 2013, there was **no significant change** in the percentage of students who ate green salad during the past week.
- When compared to male students, female students were 1.3 times more likely to eat green salad during the past week.
- 12<sup>th</sup> graders were 1.2 times more likely than 9<sup>th</sup> graders to eat green salad.
- There were no differences by race.

**Percentage of students who ate potatoes one or more times during the past seven days, Ohio 2007-2013**



*“During the past seven days, how many times did you eat potatoes?”*

- From 2007 to 2013, there was **no significant change** in the percentage of students who ate potatoes in the past week.
- There were no differences by race, grade level or gender for students who ate potatoes one or more times in the past week.

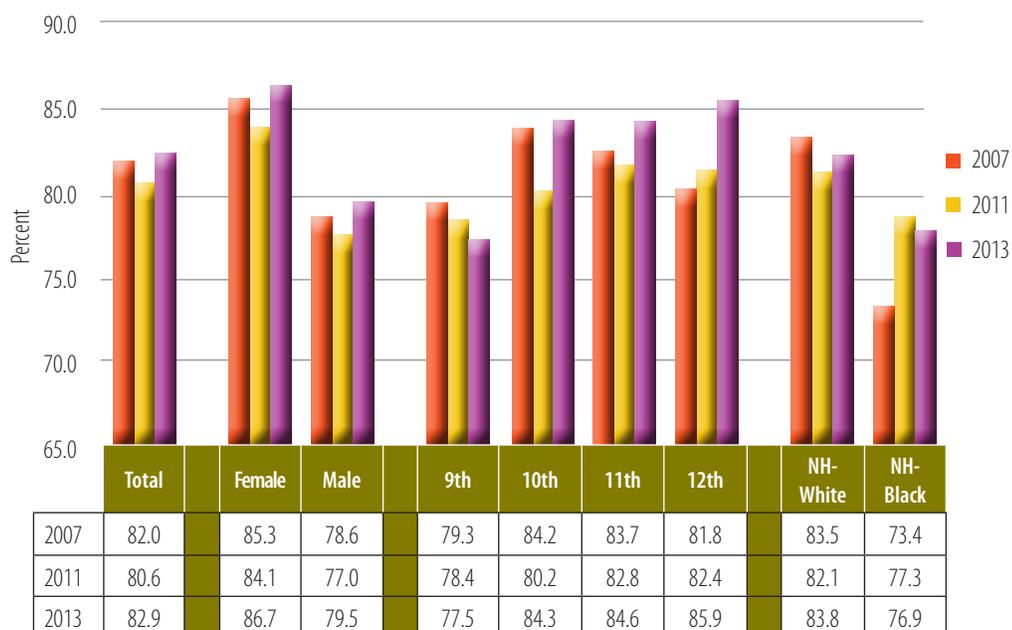
### Percentage of students who ate carrots one or more times during the past seven days, 2007-2013



*“During the past seven days, how many times did you eat carrots?”*

- From 2007 to 2013, there was **no significant change** in the percentage of students who ate carrots in the past seven days.
- When compared to non-Hispanic black students, non-Hispanic white students were 1.7 times more likely to report eating carrots in the past week.
- There were no differences by grade level or gender for students who reported eating carrots in the past week.

### Percentage of students who ate other vegetables one or more times during the past seven days, Ohio 2007-2013



*“During the past seven days, how many times did you eat other vegetables?”*

- From 2007 to 2013, there was **no significant change** in the percentage of students who reported eating other vegetables in the past seven days.
- There were no differences by grade level, gender or race for students who reported eating other vegetables during the past seven days.

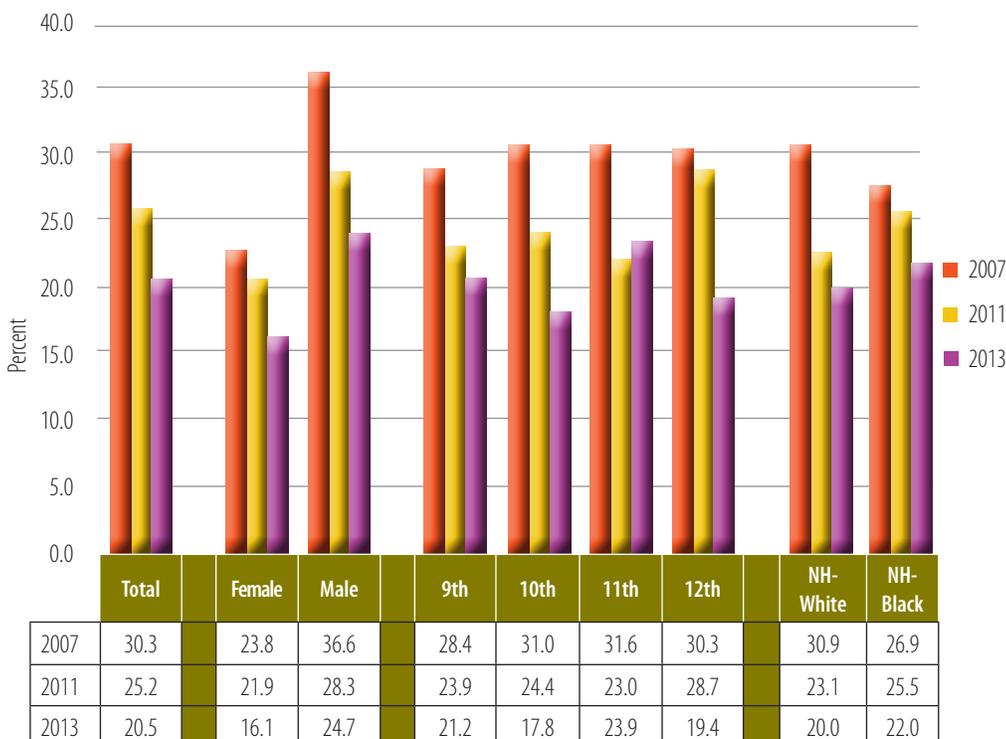
**Percentage of students who ate fruits and vegetables five or more times per day during the past seven days, Ohio 2007-2013**



*“During the past seven days, how many times did you eat fruits or vegetables?”*

- From 2007 to 2013, there was a **significant increase** in the percentage of students who ate fruits and vegetables five or more times per day during the past seven days.
- There were no differences by gender, grade level or race for students who reported eating fruits and vegetables five or more times per day during the past seven days.

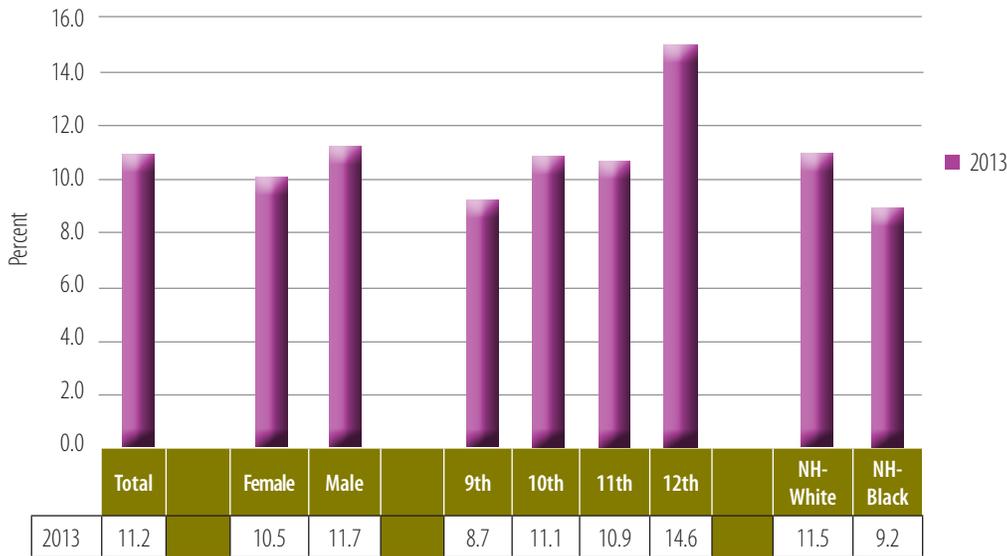
**Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day during the past seven days, Ohio 2007-2013**



*“During the past seven days, how many times did you drink a can, bottle or glass of soda or pop, such as Coke, Pepsi, or Sprite?”*

- From 2007 to 2013, there was a **significant decrease** in the percentage of students who drank soda one or more times per day in the past week.
- When compared to female students, male students were 1.5 times more likely to drink soda.
- There were no differences by grade level or race for students who drank soda one or more times per day during the past week.

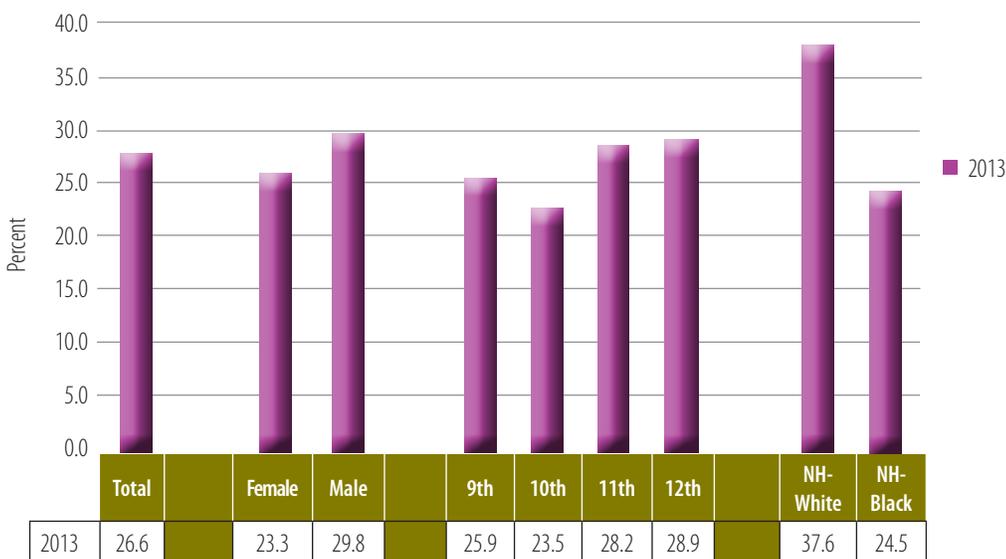
**Percentage of students who drank a drink that was high in caffeine, such as coffee or espresso, or energy drinks, such as Red Bull, Monster, or Rockstar one or more times per day during the past seven days, Ohio 2013**



*“During the past seven days, how many times did you have a drink that was high in caffeine, such as coffee or espresso, or energy drinks, such as Red Bull, Monster or Rockstar?”*

- There were no differences by race, gender or grade level for students who reported drinking drinks that were high in caffeine one or more times per day during the past week.

**Percentage of students who ate at least one meal or snack from a fast food restaurant such as McDonald’s, Taco Bell, or KFC on three or more of the past seven days, Ohio 2013**

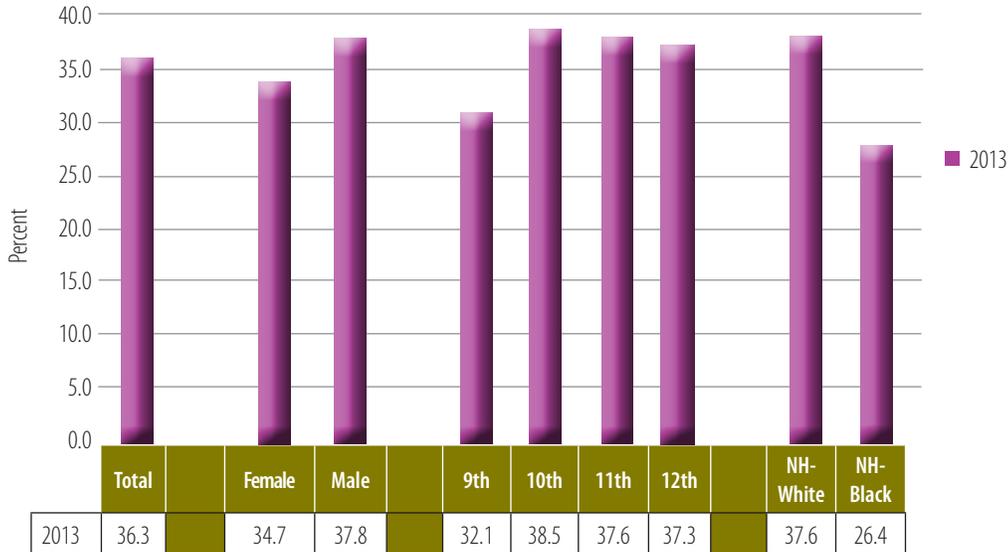


*“During the past seven days, on how many days did you eat at least one meal or snack from a fast food restaurant such as McDonald’s, Taco Bell or KFC?”*

- When compared to non-Hispanic white students, non-Hispanic black students were 1.5 times more likely to eat fast food three or more of the past seven days.
- There were no differences by gender or grade level for students who ate fast food three or more of the past seven days.

**Percentage of students who ate breakfast on all of the past seven days, Ohio 2013**

*"During the past seven days, how many days did you eat breakfast?"*



■ There were no differences by gender, race or grade level for students who ate breakfast daily.

## Conclusions

Obesity in adolescents can lead to major health problems in adulthood. In Ohio, adolescent rates of obesity have appeared to remain steady over the past ten years. Lack of proper nutrition in adolescence can lead to numerous problems, such as stunting, being obese or overweight, iron, folate or iodine deficiencies.<sup>5</sup> Though indicators of better nutrition appear to be increasing, a higher percentage of students (27 percent) report eating fast food three times during the past week than students who report getting the recommended amount of daily fruits and vegetables (20 percentage). Eating breakfast daily has been shown to associated with lower BMI in students, increased physical activity and overall healthier eating habits,<sup>6</sup> yet in Ohio only 36 percent of students reported eating breakfast every day during the past week.

The primary findings for the 2013 Ohio YRBS showed that approximately:

- Two out of 10 Ohio high school students are considered overweight and one out of 10 is considered obese.
- Five out of 10 Ohio high school students reported they are trying to lose weight.
- Two out of 10 Ohio high school students reported they ate five or more servings of fruits and vegetables per day during the past seven days.
- Three out of 10 Ohio high school students reported they ate fast food on three or more of the past seven days.

## References:

1. Centers for Disease Control and Prevention. (2013, July 10). *Child Obesity Facts*. Retrieved from Adolescent and School Health: <http://www.cdc.gov/healthyyouth/obesity/facts.htm>.
2. Centers for Disease Control and Prevention. (2013, February 19). *Nutrition Facts*. Retrieved from Nutrition, Physical Activity and Obesity: Healthy People. (2013, March 8). 2020 Topics and Objectives. Retrieved from Nutrition, Physical Activity and Obesity: <http://www.cdc.gov/healthyyouth/nutrition/facts.htm>.
3. Davis, B. & Carpenter, C. (2009). Proximity of fast-food restaurants to schools and adolescent obesity. *American Journal of Public Health, 99*(3), 505-510. doi: [10.2105/AJPH.2008.137638](https://doi.org/10.2105/AJPH.2008.137638).
4. Healthy People. (2013, March 8). *2020 Topics and Objectives*. Retrieved from: <http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx>.
5. Acharya, B. (2011). Adolescent Nutrition. *Health Prospect, 10*, 55-56.
6. Timlin, M.T., Pereria, M.A., Story, M. & Neumark-Sztainer, D. (2008). Breakfast eating and weight change in a 5-year prospective analysis of adolescents: Project EAT (Eating among Teens). *Pediatrics, 121*, 638-645. Doi: [10.1542/peds.2007-1035](https://doi.org/10.1542/peds.2007-1035).

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