

Child Obesity Risk: Nutrition & Physical Activity

Obesity, epidemic both nationwide and in New York City, often begins early in life. In New York City, 40% of elementary school children are overweight or obese.

Data show that overweight children are more likely to become overweight adults. Many serious health problems are related to being overweight or obese in childhood, such as diabetes, heart disease, asthma and depression.

Poor eating habits, lack of exercise and limited

access to nutritious foods create conditions that contribute to being overweight or obese. The abundance of fast food and sugary beverages also makes it harder for children across the U.S. to meet national nutrition guidelines.

This report examines two major risk factors for childhood obesity, poor nutrition and lack of physical activity, using data from telephone surveys of New York City parents. Page four provides tips for parents, providers, schools and policymakers to help children maintain a healthy weight.

Less than half of NYC children meet nutrition guidelines

Percent of NYC children ages six to 12 who meet nutrition recommendations, according to parent reports			
Food Category	2010 U.S. Dietary Guidelines	%	Notes
Fruit	1–2 cups per day	35%	Meeting nutrition guidelines is based on calorie needs, which vary by age, gender and physical activity level, and is defined as consuming at least the minimum serving.
Vegetables	1½–3 cups per day	6%	
Milk/Milk Products ¹	2½–3 cups per day	33%	
Seafood	5–10 ounces per week	21%	
Sugar-Sweetened Beverages	None	16%	Does not include diet soda, seltzer, sugar-free drinks or 100% fruit juice.
Fast Food	No more than once a week	82%	Examples include McDonald's, KFC, Taco Bell, Golden Crust or similar food chains

¹ U.S. 2005 dietary guidelines were used for milk recommendations (2–3 cups), due to the inability to convert serving sizes to half cups. Estimates are based only on milk or soy beverage consumption. Since recommendations can be met with yogurt and cheese as well, the percent of NYC children meeting this guideline is likely to be an underestimate.

Source: Child Health Survey 2009. For more information on USDA nutrition guidelines, visit www.cnpp.usda.gov.

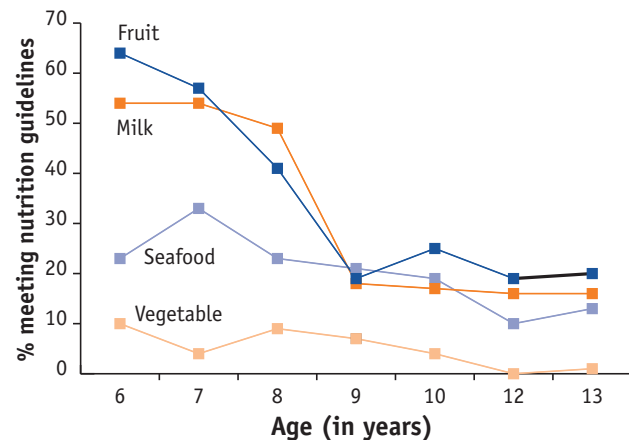
- Similar to children nationwide, few children in New York City eat the recommended daily amounts of fruit (35%) and vegetables (6%), according to parent reports.
- More than two thirds (67%) of children don't drink the recommended servings of milk per day. Among those who meet the dairy guidelines (33%), only 10% drink low-fat milk. The nutrition guidelines recommend that children aged two and older drink 1%, skim or soy milk.
- In New York City, more than four in five children drink one or more sugar-sweetened beverage daily. According to the CDC's National Health and Nutrition Examination Surveys, sugar-sweetened beverages are the third largest source of calories for children two to 18 years of age.

Data are from the Child Health Survey 2009, a population-based telephone survey conducted by the Health Department with support from Children's Health Fund. A parent, guardian or other knowledgeable adult (referred to as "parents") was interviewed about the health of a child in their household for a total sample of 3,002 children ages 12 and under. Data were weighted to the New York City child population using the 2006–2008 American Community Survey. All estimates in this report are for children ages six to 12. Recommendations and national estimates are from the US Department of Agriculture's Dietary Guidelines for Americans, 2010.

Children are less likely to meet nutrition guidelines as they get older

- According to parent reports, the percent of children six to 12 years of age meeting nutrition guidelines for milk, seafood, fruits and vegetables declines as they get older.
- On average, NYC children eat 1.4 cups of combined fruits and vegetables versus the minimum recommended 2.5 cups, which is associated with reduced risk of cardiovascular disease.
- Children are drinking the same amount of milk as they get older, but the daily recommendation for milk increases to three servings per day for children aged nine and older. As a result, fewer older children meet recommendations.

Percent of children six to 12 years of age meeting nutrition guidelines



Source: Child Health Survey 2009

Less than half of NYC children meet physical activity guidelines

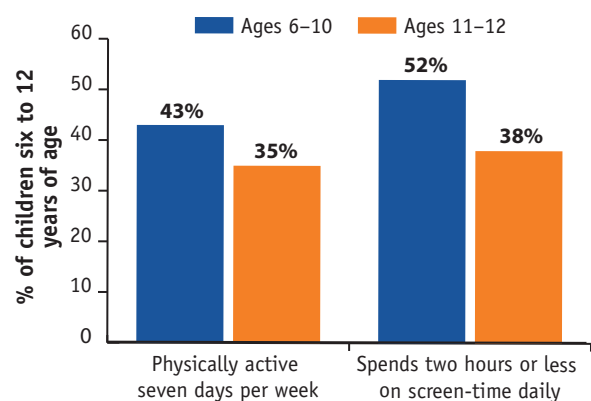
Percent of NYC children ages six to 12 who meet activity recommendations, according to parent reports			
Type of Activity	2010 U.S. Activity Guidelines	%	Notes
Physical Activity	At least 60 minutes per day	40%	Does not include physical activity during PE or recess at school.
Screen-time	Two hours or less per day	47%	Screen-time includes TV and computer time not spent on schoolwork.

Source: Child Health Survey 2009. For more information on USDA nutrition guidelines, visit www.cnpp.usda.gov.

As children get older, they are less active and log more screen-time

- Physical activity decreases as children get older. Children six to 10 years of age are more likely to meet physical activity recommendations in the past week than are 11- and 12-year-olds (43% vs. 35%), according to parent reports.
- Among six- to 10-year-olds, 52% meet the recommendation of logging two or fewer hours of screen-time a day, compared with 38% of 11- to 12-year-olds.
- Children six to 12 years of age spend more time watching TV than using the computer. However, older children are 19% more likely than younger children to log more than an hour a day on the computer.
- Among 11- and 12-year-olds who get less than an hour of physical activity a day, 67% log more than two hours of screen-time a day, compared with 54% among those meeting daily physical activity recommendations.

Percent of children six to 12 years of age meeting physical activity and screen-time recommendations

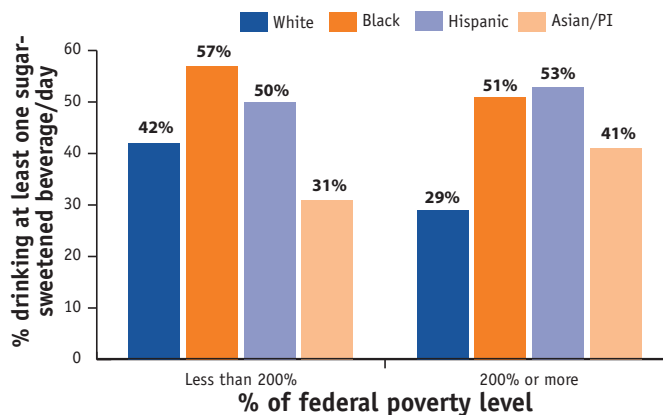


Source: Child Health Survey 2009

Black and Hispanic children and those in low-income households are more likely to drink sugar-sweetened beverages

- Overall, black and Hispanic children are more likely to drink one or more sugar-sweetened beverages a day (54% and 49%) than are white or Asian children (both 33%), based on parent reports
- Low-income white children are more likely to drink one or more sugar-sweetened beverages a day than are those in higher-income households (42% vs. 29%), whereas sugar-sweetened beverage consumption in other racial groups is not affected by income level.
- Consumption of sugar-sweetened beverages does not vary by age among six- to 12-year-olds.

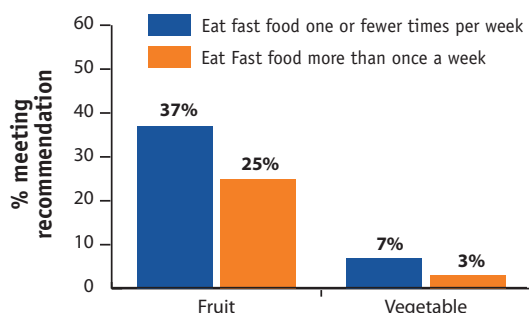
Children drinking one or more sugar-sweetened beverages per day by poverty level and race/ethnicity (%)



Source: Child Health Survey 2009

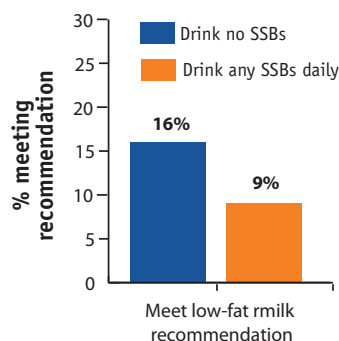
Children who consume fast food and sugary drinks are less likely to meet other nutrition recommendations

Children meeting fruit and vegetable nutrition recommendations who eat fast food less than once a week versus more than once a week



- Close to one in five (18%) children citywide eat fast food more than once a week. According to the U.S. Department of Agriculture (USDA), eating fast food more than once a week is associated with high rates of obesity.
- Children who eat fast food no more than once a week are more likely to meet fruit and vegetable nutrition guidelines than are those who eat fast food more than once a week, according to parent reports.

Children meeting healthy beverage recommendations who do not drink sugar-sweetened beverages versus drinking any per day



Source: Child Health Survey 2009

- Everyone is encouraged to choose healthier drink alternatives, such as water, seltzer or low-fat milk.
- Overall, the percent of children who meet their daily dairy recommendations by drinking low-fat milk is low. However, children who don't drink sugar-sweetened beverages are more likely to meet their daily dairy recommendations with low-fat milk than those who drink sugary beverages (16% vs. 9%).

Recommendations

Parents and caregivers can help children maintain a healthy weight by encouraging them to eat healthy food and increase their physical activity.

- Children learn from watching their parents. Eat fruits and vegetables and children will too.
- Give children fruits and vegetables at every meal and snack. Sometimes children don't take to new foods right away, so offer new fruits and vegetables many times.
- Instead of sugary drinks, serve water, seltzer, low-fat milk or soy milk. If juice is consumed, limit to no more than six ounces of 100% juice per day.
- Be active with children. Make sure they get at least an hour of physical activity every day (even if in multiple short intervals), by walking with them to school, playing in the playground and riding bikes. Find other recreational activities in the neighborhood at www.nyc.gov/parks/befitnyc.
- Limit TV, computer games and the Internet to no more than two hours a day for everyone.

Health care providers should discuss healthy eating habits and physical activity routines with children and parents.

- As children grow, continue to encourage physical activity and healthy alternatives to unhealthy foods, snacks and drinks. For more information, visit <http://www.nyc.gov/html/doh/downloads/pdf/chi/chi28-5.pdf>.

Schools can support healthy habits among children.

- Provide health education, including information about the importance of eating fresh fruits and vegetables and seafood and doing daily physical activity.
- Integrate fitness breaks into the school day.
- Ensure that meals and vending machines in schools meet NYC nutrition standards, and make water, low-fat milk, and fresh fruits and vegetables available to all children.
- Work with city partners to ensure safe walking and biking routes to school for students.

Policymakers should support healthy food and physical activity environments for children.

- Work with schools to improve access to healthy foods, such as low-fat milk, fruits and vegetables.
- Ensure all NYC neighborhoods have access to healthy, affordable foods.
- Partner with urban planners to develop parks and playgrounds and to improve pedestrian and bicyclist access to existing open spaces.
- Collaborate with architects and urban designers to follow the Active Design Guidelines at www.nyc.gov/ddc for schools and neighborhoods.



A data report from the New York City Health Department



New York City Department of Health and Mental Hygiene

December 2011

Volume 10, No. 4

Gotham Center, 42-09 28th Street, CN-6, Queens, NY 11101-4132

Michael R. Bloomberg, Mayor

Thomas A. Farley, MD, MPH, Commissioner of Health and Mental Hygiene

Division of Epidemiology

Carolyn Greene, MD
Deputy Commissioner

Bureau of Epidemiology Services

Bonnie Kerker, PhD, MPH
Assistant Commissioner

Sophia Day, BA
Kevin Konty, MS
Sungwoo Lim, MS
Jennifer M. Norton, PhD
Carolyn Olson, MPH

Division of Health Promotion and Disease Prevention

Andrew Goodman, MD
Deputy Commissioner

Bureau of Chronic Disease Prevention

Susan Kansagra, MD
Acting Assistant Commissioner
Lillian Dunn, MPH
Cathy Nonas, MS, RD
Gretchen Van Wye, PhD, MA

Bureau of Communications

June Schwartz
Senior Writer

Office of School Health

Roger Platt, MD
Chief Executive Officer