

Childhood Obesity in Connecticut

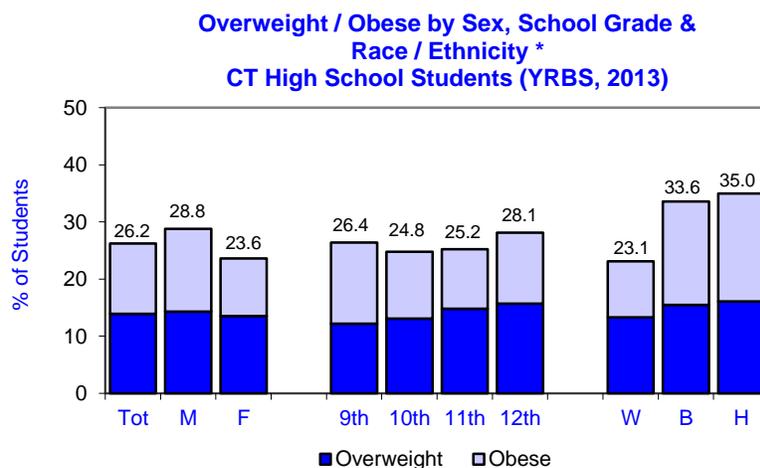


The Problem

- Obesity is the second-leading cause of preventable death in the United States after smoking.^{1, 2}
- The prevalence of childhood obesity is a common concern across this country and around the world.
- In just over one generation, U.S. rates of obesity have approximately tripled among preschoolers and adolescents, and quadrupled among children aged 6 to 11 years.³
- Obesity is a major risk factor for many chronic diseases, including 4 of the 10 leading causes of death in the United States: heart disease, stroke, diabetes, and several forms of cancer.
- Direct medical costs of overweight and obesity account for more than 9% of all U.S. health expenditures.⁴

Connecticut High School Students (YRBS, 2013 data⁵):

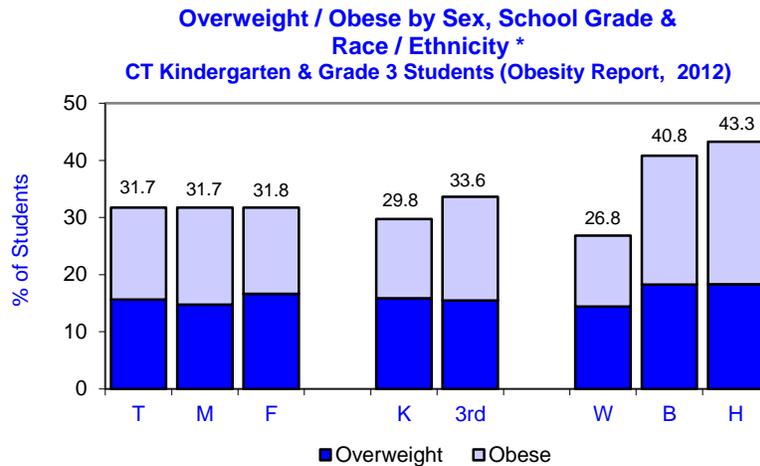
- One-quarter (26.2%) of Connecticut high school students are overweight (13.9%) or obese (12.3%). These numbers are lower but not significantly than the national average, where three out of every ten (30.3%) high school students are overweight (16.6%) or obese (13.7%).
- The prevalence of overweight and/or obesity does not vary significantly by sex; 28.8% of male students are overweight or obese (14.3% overweight, 14.5% obese), as compared to 23.6% of female students (13.5% overweight, 10.1% obese).
- Hispanic (35.0%; 16.1% overweight, 18.9% obese) and non-Hispanic black (33.6%; 15.5% overweight, 18.1% obese) teens are significantly more likely to be overweight or obese, compared to non-Hispanic white teens (23.1%; 13.3% overweight, 9.8% obese).



* **T**otal Students, **M**ales & **F**emales; Non-Hispanic (NH) **W**hite, NH **B**lack & **H**ispanic.

Connecticut Kindergarten and Grade 3 Students (Every Smile Counts, 2010-2011 data⁶)

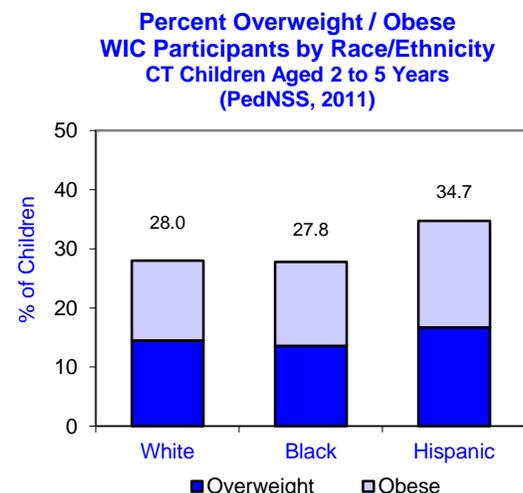
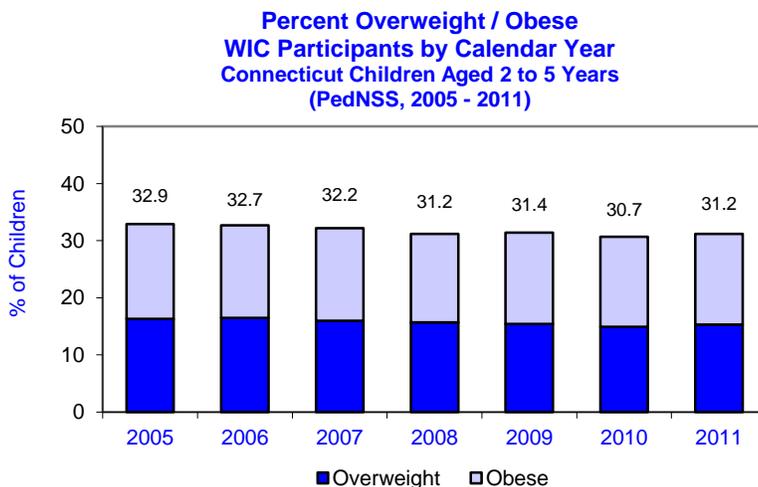
- The direct measurement of height and weight in an *Every Smile Counts* Obesity Survey revealed that almost one-third (31.7%) of Connecticut students in kindergarten and 3rd grade are overweight (15.6%) or obese (16.1%).
- Similar to high school-aged students, non-Hispanic black (40.8%; 18.3% overweight, 22.5% obese) and Hispanic (43.3%; 18.3% overweight, 25.0% obese) children are significantly more likely to be overweight or obese than non-Hispanic white children (26.8%; 14.4% overweight, 12.4% obese).



* **T** Total Students, **M** Males & **F** Females; Non-Hispanic (NH) **W**hite, NH **B**lack & **H**ispanic.

WIC Participants, Aged 2 to 5 Years (CDC, Pediatric Nutrition Surveillance System [PedNSS], 2005 – 2011 data⁷)

- In 2011, almost one-third (31.2%) of Connecticut's low-income children 2 to 5 years of age in the Women, Infants and Children (WIC) Program were overweight (15.3%) or obese (15.9%). Nationally, 30.4% of the low-income WIC population were overweight (16.0%) or obese (14.4%) in that year.
- Hispanic children (34.7%; 16.7% overweight, 18.0% obese) in the Connecticut WIC Program were more likely to be overweight or obese than non-Hispanic black (27.8%; 13.6% overweight, 14.2% obese) or non-Hispanic white children (28.0%; 14.5% overweight, 13.5% obese).



The Impact

Overweight children and adolescents are at risk for many serious physical, social and mental health problems – both during their youth and as adults – including:

Physical Health:

Asthma
Cardiovascular disease
Gall bladder disease
High blood pressure
High cholesterol
Orthopedic complications
Sleep and skin disorders
Type 2 diabetes
Shortened life expectancy

Social & Emotional Health:

Behavioral problems
Depression and withdrawal
Discrimination and stigma
Learning problems
Negative body image
Poor self-esteem
Social marginalization
Teasing and bullying
Decreased quality of life

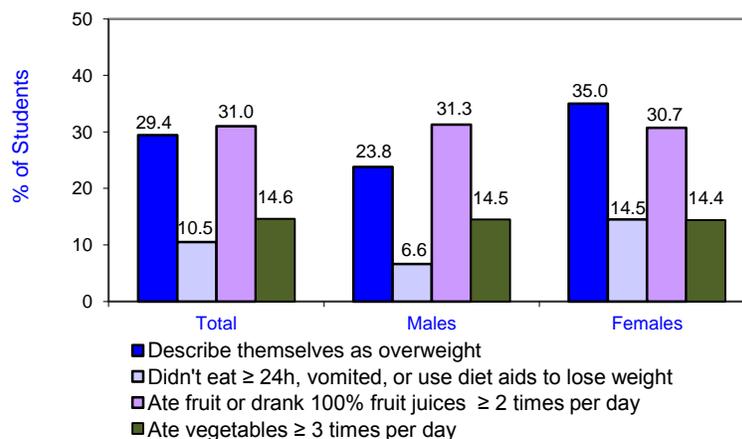
- Obesity now causes health problems in children that were inconceivable 25 years ago:
 - 60% of overweight children exhibit at least one risk factor for heart disease, the #1 cause of death.⁸
 - Type 2 diabetes – once referred to as *adult-onset* diabetes – represents up to 45% of new pediatric cases, compared with only 4% a decade ago.⁹
- According to the American Academy of Pediatrics:
 - Adolescents who are overweight have an estimated 80% chance of being obese as adults; and,
 - If overweight begins before age 8, obesity in adulthood is likely to be more severe.
- An estimated \$856 million in adult medical expenditures are attributable to obesity each year in Connecticut.¹⁰
- Obesity kills more Americans each year than AIDS, cancer and injuries combined.
- At this rate, the current generation of children will not live as long as their parents.

Contributing Factors

Genetic, biological, psychological, socio-cultural, economic, behavioral and environmental factors all contribute to the obesity epidemic.

Dietary Habits (YRBS, 2013 data):

**Weight Perception & Dietary Behaviors by Sex
CT High School Students (YRBS, 2013)**



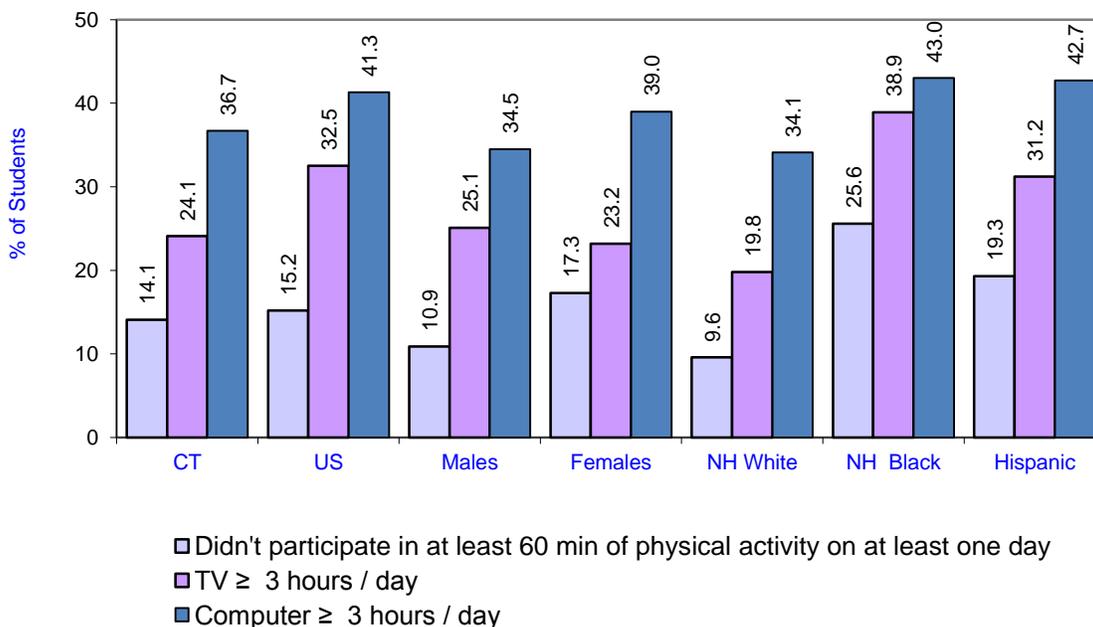
- Unhealthy food choices and eating behaviors are major factors contributing to overweight and obesity.
- In Connecticut, 29.4% of high school students described themselves as slightly or very overweight; 10.5% had not eaten for 24 hours or more, vomited, or had taken laxatives, diet pills, powders or liquids (without the advice of a doctor) to lose weight or to keep from gaining weight during the 30 days preceding the survey.
- About one-third (31.0%) of Connecticut high school students ate fruit or drank 100% fruit juices two or more times per day, and one-seventh (14.6%) ate vegetables three or more times per day.
- About one-seventh (13.9%) of Connecticut high school students drank soda (not including diet soda) one or more times per day.

Physical Inactivity (YRBS, 2013 data):

Today's youth are considered the most inactive generation in history, according to the American Obesity Association.

- In Connecticut, 26.0% of high school students had been physically active doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes per day on each of the seven days preceding the survey (i.e., physically active at least 60 minutes per day on all seven days).
- In other words, three-fourth (74.0%) of all high school students did not get at least 60 minutes of physical activity every day (66.6% of male, 81.3% of female, 70.7% of non-Hispanic white, 77.8% of non-Hispanic black, and 81.8% of Hispanic students).

**Physical Inactivity by Sex and Race / Ethnicity
CT High School Students (YRBS, 2013)**



- In the 7 days preceding the survey, one out of every 7 students (14.1%) had 0 day where they had at least 60 minutes of physical activity; this rate is higher among female (17.3%), non-Hispanic black (25.6%) and Hispanic (19.3%) students.
- About 1 in 4 (24.1%) Connecticut high school students watches TV for 3 hours or more on an average school day; this rate is higher among non-Hispanic black (38.9%) and Hispanic (31.2%) students.
- More than 1 in 3 (36.7%) Connecticut high school students played video or computer games or used a computer for something that was not school work for three or more hours per day on an average school day; this rate is significantly higher among Hispanics (42.7%) than among non-Hispanic whites (34.1%).

Key Recommendations

The American Academy of Pediatrics (AAP), the American Medical Association (AMA), and the Centers for Disease Control & Prevention (CDC), among others, endorse the following key recommendations to reduce the prevalence, and eliminate racial and ethnic disparities, in childhood obesity:

- Dietary Intake:
 - Encourage, support and maintain breastfeeding.
 - Eat at least 5 servings of fruits and vegetables daily.
 - Limit the consumption of sugar-sweetened beverages.
 - Limit the consumption of high-fat and high-calorie foods.
 - Eat a diet rich in calcium, and high in fiber and other nutrients.
- Physical Activity:
 - Participate in 60 minutes of moderate to vigorous physical activity each day.
 - Limit television and other screen time to no more than 1 or 2 hours of quality programming a day.
 - Remove television and computer screens from children's bedrooms.
 - Increase physical activity in school and childcare settings.
- Eating Behaviors:
 - Eat breakfast daily, and share regular family meals.
 - Limit portion size, and learn to read nutrition labels.
 - Limit eating out, especially at fast food restaurants.
 - Avoid using food as a reward, especially foods high in sugar, fat and calories.
 - Emphasize healthful food choices rather than restrictive eating patterns.

Obesity prevention programs [should] encourage a health-centered, rather than weight-centered, approach that focuses on the whole child, physically, mentally, and socially. The emphasis is on living actively, eating in normal and healthful ways, and creating a nurturing environment that helps children recognize their own worth, and respects cultural foodways and family traditions. It is recognized that obesity, eating disorders, hazardous weight loss, nutrient deficiencies, size discrimination, and body hatred are all interrelated and need to be addressed in comprehensive ways that do no harm. (Society for Nutrition Education) ¹¹

¹ The June 2007 Expert Committee Recommendations on the Assessment, Prevention and Treatment of Child and Adolescent Overweight and Obesity (AMA, HRSA & CDC), define *overweight* as a body mass index (BMI) \geq 85th percentile but $<$ 95th percentile for age and sex, replacing the term "at risk of overweight" for individuals aged 2-18 years; BMI \geq 95th percentile is considered *obese* for this population. In most children, such BMI values are known to correlate with elevated body fat, the presence or risk of obesity-related disease, and long-term mortality.
http://www.ama-assn.org/ama1/pub/upload/mm/433/ped_obesity_rec.pdf

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- ² Wee, CC, et al. 2005. *Health care expenditures associated with overweight and obesity among US adults: Importance of age & race.* American Journal of Public Health 95:159-165.
- ³ Institute of Medicine. *Progress in preventing childhood obesity: How do we measure up?* Washington, DC: National Academies Press; 2006.
- ⁴ Finkelstein EA, Fiebelkorn IC, Wang G. 2003. *National medical spending attributable to overweight and obesity: How much and who's paying?* Health Aff (Millwood).
- ⁵ Connecticut Department of Public Health, *2013 Connecticut School Health Survey Youth Behavior Component.* Hartford, CT, February 2015. http://www.ct.gov/dph/lib/dph/hisr/pdf/cshs_ycb2013_report.pdf
- ⁶ Kloter A, Peng, J, Phipps, K and Ferraro, L (2012). *Overweight and obesity among kindergarten and third grade children in Connecticut: 2010-2011.* Connecticut Department of Public Health, Community Health and Prevention Section, Hartford, CT.
- ⁷ Centers for Disease Control & Prevention (CDC), Pediatric Nutrition Surveillance System (PedNSS). <http://www.cdc.gov/pednss/>
- ⁸ National Governors Association. *NGA report on healthy living: Investing in Connecticut's health.* Washington, DC. www.nga.org
- ⁹ *Childhood obesity: What it means for physicians. Commentary.* JAMA, August 22/29, 2007. Vol. 298, No. 8. 3pp.
- ¹⁰ Finkelstein, EA, et al. 2004. *State-level estimates of annual medical expenditures attributable to obesity.* Obesity Research 12:18-24.
- ¹¹ Society for Nutrition Education. *Guidelines for childhood obesity prevention programs: Promoting healthy weight in children.* Journal of Nutrition Education & Behavior. Vol. 35, No. 1, January-February 2003.

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