

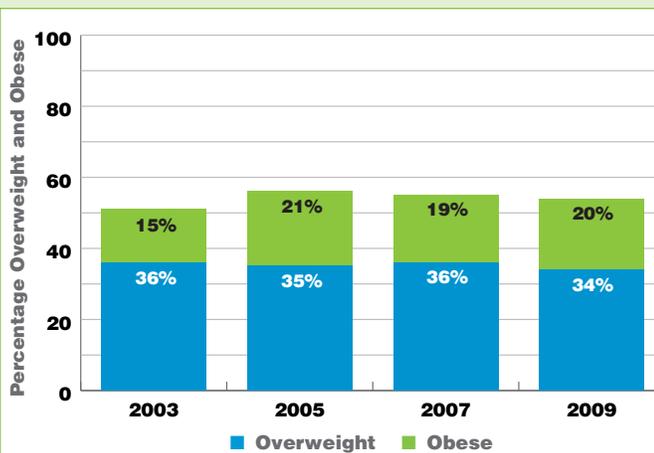
WEIGHT

Overview

Since 2003, the number of obese and overweight children and adults has increased in Denver. More than half the adults in Denver are now overweight or obese. Body mass index (BMI) combines height and weight to determine if someone is at a healthy or unhealthy weight for his or her height. A measure above 30 indicates obesity. From 1990 to 2009, the percentage of Denver adults who are obese more than doubled, from less than 10% to 20%. In 2009, an additional 35% of adults were overweight with a BMI of 25-29.9 (FIGURE 1). Obesity among children also increased rapidly over this same time period (FIGURE 2). Among Denver school children 5 to 18 years old, 33% of boys and 29% of girls were overweight or obese in 2009 (FIGURE 3).

FIGURE 1

Percentage of Overweight and Obese Adults DENVER, 2003 - 2009



While the trend seems to be stable or possibly decreasing for adults, more than one in two adults are overweight or obese. Denver exceeds the HP 2020 goal of having 30% or less people obese.

SOURCE: Behavioral Risk Factor Surveillance System

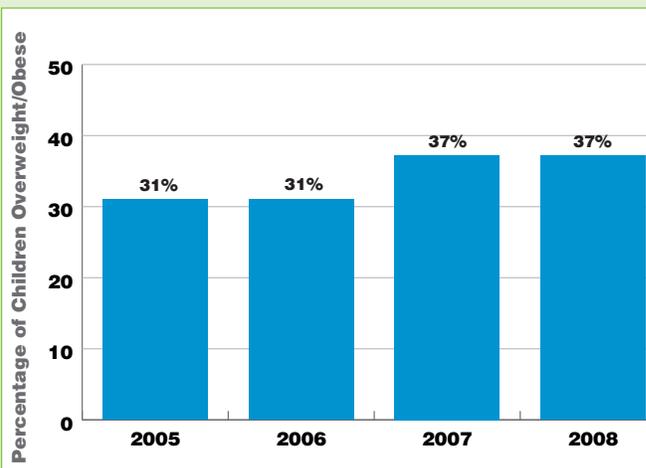
Overweight children, adolescents, and adults are at greater medical risk for diabetes, heart disease and certain cancers. Obese people often report poorer quality of life and have decreased lifelong earning potential.²⁶ Obese children are frequently bullied. The risk of obesity increases if a woman starts a pregnancy overweight or obese or gains excessive weight in pregnancy. Both mother and child are at a greater risk for diabetes and heart disease. Additionally, overweight and obese pregnant women have an increased risk of gestational diabetes, high blood pressure, and Caesarean sections.

Healthy eating and active living affect body mass index. Eating more fruits and vegetables and limiting calories from added sugars (e.g. sugar sweetened drinks) is recommended. Regular exercise can also help maintain a healthy weight. It is recommended that children should have at least 60 minutes of physical activity per day. Adults should exercise at least 150 minutes per week.²⁶ However, approximately 20% of Denver residents engage in no leisure-time physical activity and 74% consume fewer than five servings of fruits and vegetables per day.¹³

continued

FIGURE 2

Percentage of Overweight and Obese Children Ages 2 to 14 DENVER, 2005 - 2008



Childhood overweight and obesity is increasing with more than one in three fitting those body mass index measures.

SOURCE: Child Health Survey



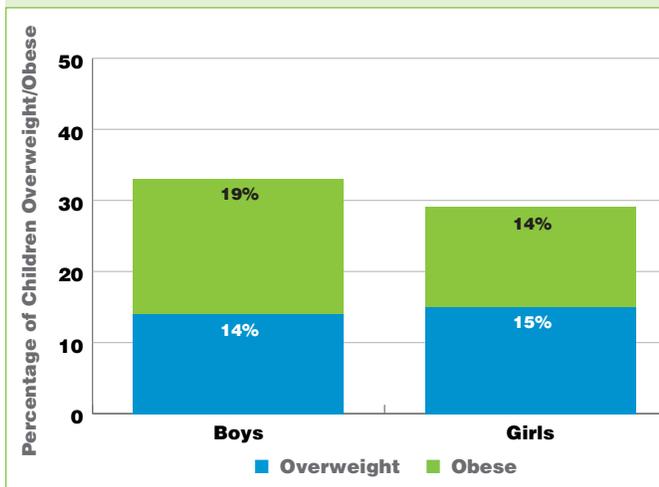
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Socioeconomic status affects access to a healthy diet and opportunities for exercise. Lower income adults eat fewer fruits and vegetables daily and engage in less physical activity (FIGURES 4 AND 5). Lower income adults are also more likely to be obese and overweight (FIGURE 4). While healthy behaviors are improving in high school students, fewer than one in four students eat the recommended number of fruits and vegetables and fewer than one in two exercise adequately every day (FIGURE 6).

Persons with lower incomes often suffer from food insecurity. They have limited or uncertain availability of nutritionally adequate and safe foods. In 2007, only 43% of eligible Denver residents received their Supplemental Nutrition Assistance Program (SNAP) funds. Denver has several large food deserts, defined as neighborhoods that lack access to grocery stores that sell healthy foods (FIGURE 7).

FIGURE 3

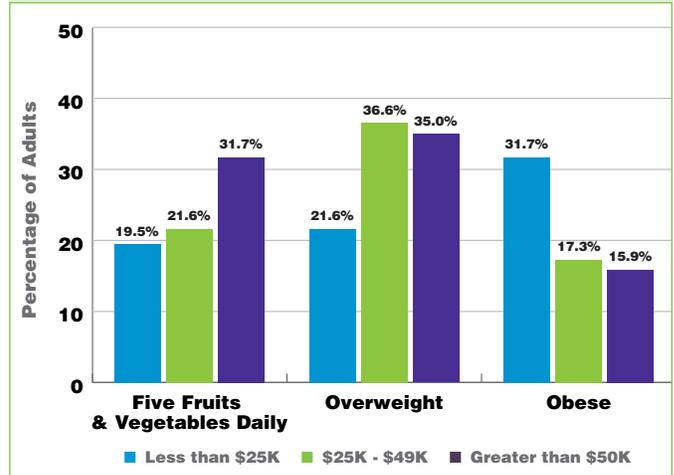
Percentage of Public School-Aged Children (5-18 years) Overweight and Obese DENVER, 2009



Body Mass Index (BMI) uses height and weight to help determine health. In 2009, 40,929 Denver Public School (DPS) students were assessed for BMI. Overweight and obesity were highly prevalent (33% of boys and 29% of girls). The Healthy People 2020 goal for obesity in children aged 2-19 years is 14.6%.
 SOURCE: Denver Public Schools

FIGURE 4

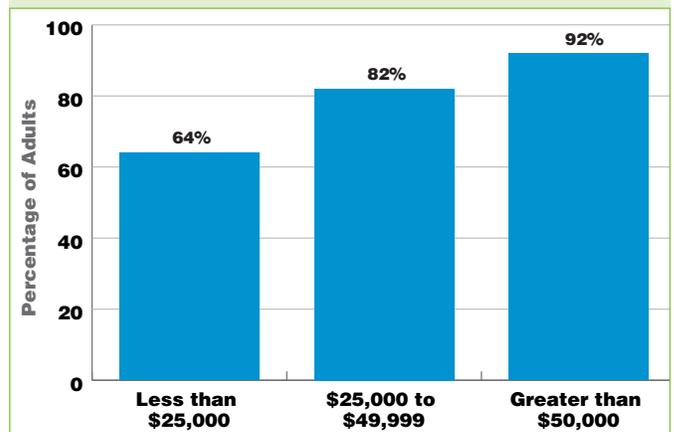
Percentage of Adults Consuming Five Fruits and Vegetables Daily, Overweight and Obesity by Income DENVER, 2009 AND 2010



Lower income Denver adults (>18 years old) were more likely to be obese and consumed less than five fruits and vegetables daily.
 SOURCE: Behavioral Risk Factor Surveillance System

FIGURE 5

Adult Participation in Physical Activities Outside of Regular Job DENVER, 2000 - 2010



In 2009-2010, physical activity was fairly common in Denver. People earning more income were more likely to exercise. Those earning less than \$25,000 were less likely to participate in physical activities. The Healthy People 2020 goal is a 10% improvement in exercise among adults.
 SOURCE: Behavioral Risk Factor Surveillance System

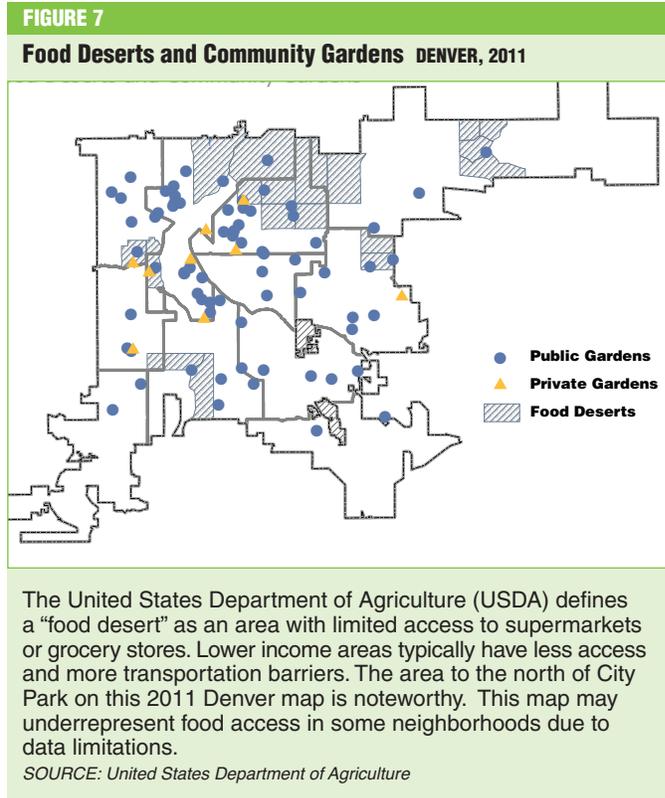
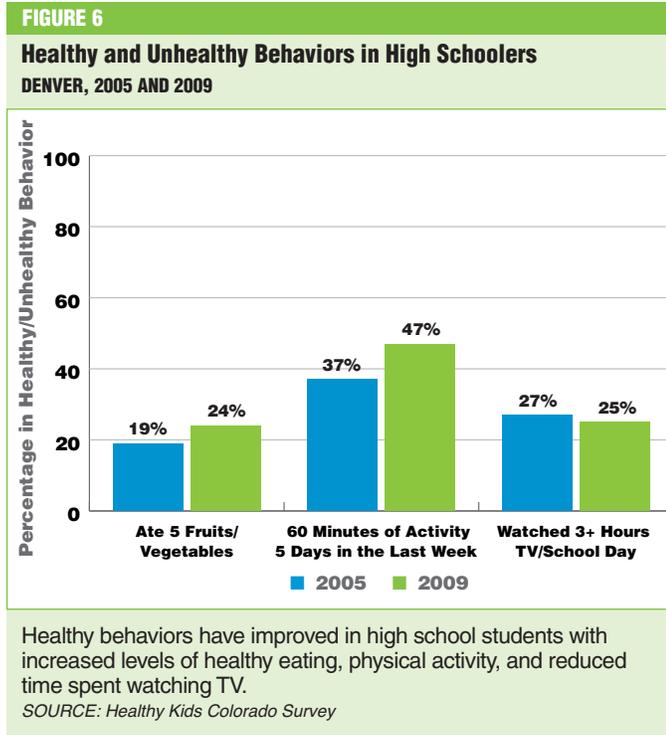


Cost Facts

In 2008, the Colorado cost of obesity across all resident adults averaged \$235 per adult. By 2018, it is expected to be \$864 per Colorado adult due to increased obesity prevalence.²⁷

Obesity impacts the economy by decreasing productivity. Obese workers have more missed days of work and are less efficient. In many businesses, obesity costs more than medical and drug expenses. Among full-time U.S. workers, 86% suffer from obesity or one or more chronic conditions. This costs the U.S. about \$153 billion annually due to missed work. Annually, U.S. companies spend about \$225 per employee on obesity.^{28, 29}

WEIGHT



Local Story

Tanya’s Story at Weigh and Win
 After having pictures taken with friends, I noticed how big I let myself get. My friend told me about this new program, *Weigh and Win* (www.weighandwin.com). I attended an introductory session, saw people just like me, and decided to join. I started with small goals as directed by the health coach. My very first goal was to get an alarm clock to get up for the gym! Daily text messages three times a day helped keep me on track. Another thing that really worked for me was the weekly grocery list. I am intimidated by big grocery stores and making healthy selections. So I now shop at smaller healthy grocery/farmers’ market-style stores. I am less tempted. For people who may be afraid of the higher costs in these grocery stores, my advice is that they try it out. [You would be] amazed how much money you save when you are not buying costly junk food! The scale does not lie, and it helps to get that motivation back. I love showing off the before and after pictures!

Permission to share granted from Tanya, 10/19/11

Denver has many areas where residents have to travel long distances to find a grocery store. These food deserts can be a significant barrier for people of lower incomes seeking healthy food. In a study of local stores in northeast Denver neighborhoods, there was a variation in access, price, and quality of fruits and vegetables. Using a standard list of 22 fruits and vegetables, nearly one in three stores no listed items yet all sold sweetened beverages. In 60 local food stores, the cost of purchasing five fruits and vegetables from the list ranged from \$4.11 to \$16.82. In addition to grocery stores, strategies to overcome food deserts include farmers’ markets, mobile fruit and vegetable vans, and corner market reforms.³³



Comparison Story

BMI Screening in Arkansas

Body Mass Index (BMI) is a number calculated from a person's weight and height. BMI is a relatively accurate indicator of body fat. It is used to screen for weight categories that may lead to health problems. Through a legislative mandate, Arkansas conducts annual BMI screenings for public school students.³⁰ The program engages school, clinical, public health, and community leaders. When the program was started, people were concerned that there would be negative impacts due to the testing requirement. However, once the program was in place, there was no teasing, use of diet pills, or excessive concerns about weight. While the risks of using BMI assessments in clinical or school-based settings must be recognized, they can be managed. BMI reporting has increased parents' information about their child's health. It has increased awareness of obesity among parents and their children. Linking reports with family strategies and community resources for healthy eating and active living and weight reduction can benefit all members of the family. The long-term data help to understand childhood and adolescent obesity in the state. Data are used to track progress made in combating this epidemic.



Did You Know

- Obesity is projected to be as high as one in three Americans by 2018.²⁸
- Many Colorado health care providers have adopted the “5-2-1-0” daily goals. This recommendation, part of the Colorado Clinical Obesity Prevention Guidelines, encourages 5 fruits and vegetables, no more than 2 hours of screen time, 1 hour of exercise, and 0 sweetened drinks for children and adolescents.³¹
- There are an increasing number of community gardens in Denver (FIGURE 6). Community gardens can promote healthier eating by increased access to fruit and vegetables. In Denver, people who worked in community gardens consumed five fruits and vegetables per day (56%) more than home gardeners (37%) and non-gardeners (25%).³²