

Introduction

Defining Overweight and Obesity

Causes Consequences Data and Statistics

□ **Introduction** Obesity is one of the most challenging health crisis's the country has ever faced. Two thirds of adults and a third of children are currently overweight or obese, putting them at an increased risk for more than 20 major diseases. And it's not just our health that is suffering. Obesity-related medical costs and a less productive workforce are hampering America's ability to compete in the global economy. (F as in Fat Report, p. 3) Within the Central District Health Department's region, which spans over Hall, Hamilton, and Merrick counties, a chilling 67.5% of our adult population is overweight or obese. Our children are above the national averages as well; just over a third of our children are considered overweight or obese. Our population is comparable to the national averages which wouldn't be so bad if the nation wasn't in such bad shape.

Defining Overweight and Obesity

According to the CDC Division of Nutrition, Physical Activity, and Obesity, the terms "overweight" and "obese" are both labels for ranges of weight that are greater than what is generally considered healthy for a given height. The terms also identify ranges of weight that have been shown to increase the likelihood of certain diseases and other health problems.

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Definitions for Adults

For adults, overweight and obesity ranges are determined by using weight and height to calculate a number called the "body mass index" (BMI). BMI is used because, for most people, it correlates with their amount of body fat.

- An adult who has a BMI between 25 and 29.9 is considered overweight.
- An adult who has a BMI of 30 or higher is considered obese.

See the following table for an example

Height

Weight Range

BMI

Considered

5' 9"

124 lbs or less

Below 18.5

Underweight

125 lbs to 168 lbs

18.5 to 24.9

Healthy weight

169 lbs to 202 lbs

25.0 to 29.9

Overweight

203 lbs or more

30 or higher

Obese

It is important to remember that although BMI correlates with the amount of body fat, BMI does not directly measure body fat. As a result, some people, such as athletes, may have a BMI that identifies them as overweight even though they do not have excess body fat. For more information about BMI, visit the CDC website for

[Body Mass Index](#)

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[Calculate an Adult's BMI Level](#)

[Assess Your Risk](#)

[Body Mass Index Table](#)

Definitions for Children

For children and teens, BMI ranges differ from the adult BMI ranges. The BMI ranges for children and teens are defined so that they take into account normal differences in body fat between boys and girls and differences in body fat at various ages.

[Calculate a Child's BMI Level](#) □ For more information on Childhood Overweight and Obesity, visit <http://www.cdc.gov/obesity/childhood/basics.html> . View the [2010-2011 Youth BMI Surveillance Project Report](#)

Other Ways to Measure

BMI is just one indicator of potential health risks associated with being overweight or obese. For assessing someone's likelihood of developing overweight- or obesity-related diseases, the National Heart, Lung, and Blood Institute guidelines recommend looking at two other predictors:

• The individual's waist circumference (because abdominal fat is a predictor of risk for obesity-related diseases).

• Other risk factors the individual has for diseases and conditions associated with obesity (for example, high blood pressure or physical inactivity).

Other methods of estimating body fat and body fat distribution include measurements of skin fold thickness and waist circumference, calculation of waist-to-hip circumference ratios, and techniques such as ultrasound, computed tomography, and magnetic resonance imaging (MRI).



Causes Why is the overweight and obesity epidemic so prevalent? There are a variety of factors that play a role in obesity which makes it a complex health issue to address. Behavior, environment, and genetic factors may have an effect in causing people to be overweight and obese.

□ **Environment** People may make decisions based on their environment or community. Recent research suggests that environmental factors, such as the lack of sidewalks or lack of healthful food options, strongly influences if and when we can make healthy lifestyle choices. The environment in which we live supports the intake of high calorie food and beverages, and at times even discouraging the choice of healthier options. □ Because of this influence, it is important to create environments in these locations that make it easier to engage in physical activity and to eat a healthy diet.

The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity 2001 identified

[action steps for several locations](#)

that may help prevent and decrease obesity and overweight.

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Overweight and obesity result from an energy imbalance. This involves eating too many calories and not getting enough physical activity. When it comes to maintaining a healthy weight for a lifetime, the bottom line is – calories count! Weight management is all about balance – balancing the number of calories you consume with the number of calories your body uses or "burns off."

Caloric

Balance Equation

- A *calorie* is defined as a unit of energy supplied by food. A calorie is a calorie regardless of its source. Whether you're eating carbohydrates, fats, sugars, or proteins, all of them contain calories.

- *Caloric balance* is like a scale. To remain in balance and maintain your body weight, the calories consumed (from foods) must be balanced by the calories used (in normal body functions, daily activities, and exercise).

If you are...

Your caloric balance status is

Maintaining your weight

"in balance." You are eating roughly the same number of calories that your body is using.

Your weight will remain **stable** .

Gaining weight

"in caloric excess." You are eating more calories than your body is using. You will

store these extra calories **gain** fat and you'll **gain** weight.

Losing weight

"in caloric deficit." You are eating fewer calories than you are using. Your body is

pulling from its fat storage **decreasing** energy, so your weight is **decreasing**

□ This information has been adapted from the CDC website. For more information, visit: <http://www.cdc.gov/obesity/causes/index.html> .

□ **Genetics** Science shows that genetics plays a role in obesity. However genes do not always predict future health. Genes and behavior may both be needed for a person to be overweight. In some cases multiple genes may increase one's susceptibility for obesity and require outside factors; such as abundant food supply or little physical activity. " Despite obesity having strong genetic determinants, the genetic composition of the population does not change rapidly. Therefore, the large increase in . . . [obesity] must reflect major changes in non-genetic factors."

For more information on the genetics and obesity visit [Obesity and Genetics: A Public Health Perspective](#)

Hill, James O., and Trowbridge, Frederick L. Childhood obesity: future directions and research priorities. Pediatrics. 1998; Supplement: 571. □

Consequences

Health Research has shown that as weight increases to reach the levels referred to as overweight and obesity, the risks for the following conditions also increases:

- Coronary heart disease
- Type 2 diabetes
- Cancers(endometrial, breast, and colon)
- Hypertension (high blood pressure)

· Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)

Stroke

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Liver and Gallbladder disease

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Sleep apnea and respiratory problems

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Osteoarthritis (a degeneration of cartilage and its underlying bone within a joint)

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Gynecological problems (abnormal menses, infertility)

NIH, NHLBI Obesity Education Initiative. Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. Available online:

http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf

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For more information about these and other health problems associated with overweight and obesity, visit [Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults](#)

Economic

Overweight and obesity and their associated health problems have a significant economic impact on the U.S. health care system (USDHHS, 2001). Medical costs associated with overweight and obesity may involve direct and indirect costs (Wolf and Colditz, 1998; Wolf, 1998). Direct medical costs may include preventive, diagnostic, and treatment services related

to obesity. Indirect costs relate to morbidity and mortality costs. Morbidity costs are defined as the value of income lost from decreased productivity, restricted activity, absenteeism, and bed days. Mortality costs are the value of future income lost by premature death.

National Estimated Cost of Obesity The medical care costs of obesity in the United States are staggering. In 2008, medical costs associated with obesity were estimated at \$147 billion; the medical costs paid by third-party payors for people who are obese were \$1,429 higher than those of normal weight.

Finkelstein, EA, Trogon, JG, Cohen, JW, and Dietz, W. Annual medical spending attributable to obesity: Payer- and service-specific estimates. Health Affairs 2009; 28(5): w822-w831. U.S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity. [Rockville, MD]: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; [2001]. Available from: US GPO, Washington.

Wolf AM, Colditz GA. Current estimates of the economic cost of obesity in the United States. Obesity Research. 1998;6(2):97–106.

Wolf, A. What is the economic case for treating obesity? Obesity Research. 1998;6(suppl)2S–7S.

Data and Statistics

National As stated on the CDC website, during the past 20 years, there has been a dramatic increase in obesity in the United States and rates remain high. As of 2010, there has not been a state that had a prevalence of obesity less than 20%. Thirty-six states had a prevalence of 25% or more; 12 of these states (Alabama, Arkansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Oklahoma, South Carolina, Tennessee, Texas, and West Virginia) had a prevalence of 30% or more.

Obesity Trends* Among U.S. Adults, BRFSS 2005
(BRFSS, n = 32 for overweight for 2 of persons)



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