Obesity

Lecture Objectives

- Examine the multi-faceted factors that contribute to obesity and suggest ways to overcome these challenges.
Obesity

Overweight & Obesity: The most important health issue in the U.S.?

- U.S. has highest rates of adult obesity in the world
- **Nutrition** and **physical activity** key in combating epidemic (behavioral factors)
- What other forces are at work?
  - Genetic
  - Metabolic
  - Environmental
  - Cultural
  - Socioeconomic
Measures of Obesity & Overweight

- For adults - Body mass index (BMI)
  - Formula:
    
    $$\text{BMI} = \left( \frac{\text{Weight in Pounds}}{(\text{Height in inches}) \times (\text{Height in inches})} \right) \times 703$$
    
    or
    
    $$\text{BMI} = \frac{\text{Weight in Kilograms}}{(\text{Height in Meters}) \times (\text{Height in Meters})}$$

- For children - Body mass index percentile
  - Similar, but based on gender and age
  - Web-based calculators are also available

Obesity Trends Among U.S. Adults
(1990-2008)

http://www.cdc.gov/obesity/data/trends.html
Obesity, adults, 1988–94 to 2009–10

Figure 1. Age-adjusted prevalence of obesity, by sex and age group, among adults aged 20 and over: United States, 2011–2012

1Crude estimate 35.1%.
2Significant difference from ages 20–39.
3Significant difference from ages 40–59.

NOTE: Estimates are age-adjusted for all adults aged 20 and over by the direct method to the 2000 U.S. census population using the age groups 20–39, 40–59, and 60 and over.

1 out of 3 children are overweight or obese.

2 out of 3 adults are overweight or obese.

$190.2 billion estimated annual cost of obesity-related illness.

21% of annual medical spending is on obesity-related illness.

$4.3 billion in annual losses to businesses because of obesity-related job absenteeism.

Obesity can cause other health problems:
- Cardiovascular Disease
- Type 2 Diabetes
- High Blood Pressure
- Sleep Apnea
- Depression
Class Wrap Up

- **Key Terms:**
  - Body Mass Index, Obesity, Overweight

- **Individual Health Importance:**
  - Understand the key components of living a healthy lifestyle, which includes nutrition and physical activity.

- **Public Health Importance:**
  - A balanced diet and physical activity can impact many morbidities in the US, especially obesity.

- **Social/Political Importance:**
  - Sociocultural, political, and environmental factors influence obesity prevention.