• Turn in Fitness Goals

• Reminder: Exam #1 Tuesday

• Chapter 6 – Weight Management
Global Obesity Epidemic

Age-standardized estimates for Obesity (BMI $\geq 30$ kg/m$^2$) by country for ages 15+ years, estimates for 2005

Source:
World Health Organization
Global Information Base
Measures of Body Composition

- What is BMI? (Chapter 4) What BMI values are considered healthy?
- Use Fig 4.10 to determine your BMI
- Why isn’t BMI always a good assessment tool?
Other Measurements…

- Waist circumference
  >35” in women, >40” in men = health risk
  - Abdominal fat = greater risk than other fat
• Waist-to-Hip Ratio (WHR)
  0.8 or less = safe for women
  0.9 or less = safe for men
• Be a pear, not an apple!
Obesity in the U.S.

- Obesity rates vary by ethnic group, age, gender, and region

Fig 6.1, pg 151
How Did It Happen?

• List the top 5 reasons your group thinks that obesity has become an epidemic

**TABLE 7.1 Supersized Portions**

<table>
<thead>
<tr>
<th>Food/Beverage</th>
<th>Original Size (year introduced)</th>
<th>Today (largest available)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soda (Coca-Cola)</td>
<td>6.5 oz (1916)</td>
<td>34 oz</td>
</tr>
<tr>
<td>French fries (Burger King)</td>
<td>2.6 oz (1954)</td>
<td>6.9 oz</td>
</tr>
<tr>
<td>Hamburger (McDonald’s); (beef only)</td>
<td>1.6 oz (1955)</td>
<td>8 oz</td>
</tr>
<tr>
<td>Nestle’s Crunch</td>
<td>1.6 oz (1938)</td>
<td>5 oz</td>
</tr>
<tr>
<td>Budweiser (bottle)</td>
<td>7 oz (1976)</td>
<td>40 oz</td>
</tr>
</tbody>
</table>
Risks of Obesity

- Officially recognized as a potentially fatal disease
  - BMI > 35 = 20x as likely to develop diabetes
  - Every 7lbs of extra weight risk of heart failure by 11%
Risks of Obesity continued…

- Excess weight → 14% of cancer deaths in men and 20% in women
- Increased gallstones, knee injuries, high BP, stroke, kidney stones, dementia
How do Weight Problems Develop?

• If you take in more calories than needed, excess is stored as fat

• Need depends on BMR and activity
Weight Management:
What if you are underweight?
Consume more calories than you burn, but in a healthful way!

• Eat a large variety of foods
• Eat frequent, small meals
• Choose calorie-rich, healthy foods
• Drink juice
• Exercise regularly
What if you are overweight?

- BRAINSTORM: List as many specific ways you can think of to modify your diet or lifestyle in order to lose weight
Do Diets Work? Extreme Dieting

- < 800 calories per day
- Muscle loss = weakened heart
- Metabolism slows even after diet = yo-yo dieting

Figure 6.5, pg 161
What about diet pills?

If it sounds too easy, it is!

- Can work temporarily
- Nasty side effects: addiction, heart problems, gas, insomnia, death
- Save your money (and your health!)
What about “light” foods?

- Low cal doesn’t mean you can eat more
- Low fat often = still high in sugar and calories
- Artificial sweeteners may make you gain weight
Extra Strategies to Keep Weight Off

• Personal responsibility
• Monitor food intake
• Be vigilant
• Eat breakfast
• 90% rule
• Exercise (just move!)
Treating Severe Obesity

- Prescription drugs
- Bariatric surgery
  - Gastric bypass
  - Gastric banding
- MAJOR risks and side effects!!
- Weight can be gained back
Eating Disorders

- Increasing in women AND men
- Social pressures, genetics, body image, athletic pressures all play a role
Anorexia Nervosa

• Refusal to maintain normal body weight
• Intense fear of gaining weight
• Distorted body image
• Absence of menstrual cycle in women
Loss of fat and muscle mass, including heart muscle

Increased sensitivity to cold

Irregular heartbeat

Bloating, constipation, abdominal pain

Amenorrhea (absence of menstruation)

Growth of fine babylike hair over body

Abnormal taste sensations

Osteoporosis

Depression

Sudden death
Bulimia Nervosa

- Repeated binge eating
- Lack of control over eating
- Reliance on self-induced vomiting or laxatives
- Preoccupation with body shape / weight