Weight gain during the holidays

- The average American gains 5-10 lbs between Thanksgiving and New Years.
- FACT OR FICTION?
Clinical trial data: average holiday weight gain is <1 lb (0.37 kg)

Over one year, average weight gain is 1.4 lbs. 52% of this weight gain occurs during the 6 week holiday period
This weight adds up...

- Take an average cardiologist in his 30s; starting weight, 155 lbs
  - In 10 years: **169 lbs**
  - In 20 years: **183 lbs**
  - In 30 years: **197 lbs**
How do we prevent this?

- Good diet
- Exercise, exercise, exercise...
Current Recommendations

- Moderate intensity aerobic physical activity 30 minutes/day, 5 days a week, or vigorous intensity activity 20 minutes/day, 3 days a week
- Combinations of moderate and vigorous intensity activity can be performed
Current Recommendations

- At least twice a week, use the major muscles of the body to maintain or increase muscular strength and endurance
Physical Activity in the US

- Prevalence of men and women meeting recommendations in 2005:
  - Age 18-24, ~60%
  - Age 25-34, ~50%
  - Age 35-44, <50%
  - Age 45-54, <50%
  - Age 55-64, ~45%
  - Age >65, <40%
Physical Activity and the Heart

- Cardiovascular disease (CVD) is the #1 killer in the U.S.:
  - In 2004, 871,000 people died of CVD, accounting for 36% of all deaths
- Lack of physical activity is a risk factor for CVD; Relative risk of CVD is 1.5-2.4, which is comparable to that observed for:
  - High cholesterol
  - High blood pressure
  - Cigarette smoking
Physical Activity and Health

- Physical activity reduces the risk of:
  - Heart disease
  - Stroke
  - Hypertension
  - Diabetes
  - Osteoporosis
  - Obesity
  - Colon cancer
  - Breast cancer
  - Anxiety
  - Depression
Additional benefits of physical activity

- Keeps weight under control
- Boosts energy level
- Helps manage stress
- Releases tension
- Improves ability to fall asleep quickly and sleep well
- Improves self-image
- Counters anxiety and depression
- Increases enthusiasm and optimism
What is physical activity?

- Current recommendations define it as:
  - Aerobic activity
  - Muscle-strengthening activity
What is aerobic activity?

- Refers to the use of oxygen by our muscles to generate energy
- Usually means any activity of moderate intensity carried out for extended periods of time.
- Examples are: Walking, running, bicycling, swimming
Muscle strengthening activity

- Activities that maintain or increase muscular strength and endurance
- These include:
  - Progressive weight training program
  - Weight bearing calisthenics
Intensities of Physical Activity

- Light
  - Walking slowly around the house
  - Billiards
  - Darts
  - Fishing
  - Playing a musical instrument
Intensities of Physical Activity

- **Moderate**
  - Walking 3-4 mph
  - Biking (flat surface, 10-12 mph)
  - Leisure swimming
  - Table Tennis
  - Tennis doubles
Intensities of Physical Activity

- **Vigorous**
  - Walking at brisk pace (4.5 mph)
  - Hiking
  - Jogging/Running
  - Basketball
  - Biking (at least 12 mph)
  - Cross country skiing
  - Soccer
  - Swimming
  - Tennis, singles
  - Volleyball
Some common questions and answers
“Do I need to exercise 30 minutes a day to get any benefit?”

- A direct activity dose response exists between exercise and risk of cardiovascular disease
- Women’s Health Initiative
  - 45-75 minutes/wk of brisk walking, lower risk of cardiovascular disease
- Nurses’ Health Study
  - 60-150 minutes/wk associated with lower risk
- Lower risk of heart disease when walking only **9-12** minutes a day, 5 days a week
“Do I have to exercise all at one time?”

- Intermittent bouts of physical activity, as little as 8-10 minutes, totaling 30 minutes or more may be as effective as 30 minutes of continuous activity.

- Clinical trials show that intermittent bouts of physical activity can positively affect:
  - Cardiorespiratory fitness
  - Lipid profiles
  - Blood pressure
  - Fasting insulin
  - Weight control
“Is moderate intensity exercise as good as vigorous intensity exercise?”

- Few studies have examined effects of intensity, duration, or frequency of physical activity independent of their contribution to the total amount of physical activity.

- Vigorous-intensity activities may have greater benefit for reducing cardiovascular events than moderate-intensity activities.
“Are there risks of exercise?”

- Risk of cardiovascular complications increases transiently during vigorous physical exertion, including cardiac arrest.

- However, physically active or aerobically fit individuals have 25-50% lower cardiovascular risk compared with sedentary or those with low aerobic fitness.
“Should I be screened before starting an exercise program?”

- Controversial
- Generally, asymptomatic persons performing moderate intensity activity do not need a physician consultation
- Symptomatic persons with cardiovascular disease, diabetes, or any medical concern should consult a physician prior to any increase in physical activity
“Do women get the same benefits from exercise as men?”

- Most physical activity studies conducted in men
- Studies that included women show even greater benefits than men
- Physically fit women may have even greater reduced rates of death from heart disease than men
“What are some tips to exercise success?”

- Choose activities that are fun, not exhausting
- Add variety
- Find a convenient time and place to do activities- try to make it a habit
- Use music to keep you entertained
- Don’t overdo it
- Keep a record of your activities and reward yourself at special milestones
“How do I avoid injuries?”

- Listen to your body - monitor your level of fatigue, heart rate, and physical discomfort
- Beware of signs of overexertion - breathlessness and muscle soreness
- Be aware of warning signs and signals of a heart attack - sweating, chest or arm pain, dizziness, lightheadedness
“How do I avoid injuries?”

- Use appropriate equipment and clothing
- Take 3-5 minutes at the beginning of any physical activity to warm up
- Start at an easy pace
- Drink plenty of water throughout the day to replace lost fluids
Summary

- Physical activity is essential to your health
- 30 minutes of moderate intensity activity should be performed at least 5 days a week
- Muscle strengthening activities should be performed at least twice a week
Summary

- ANY activity is better than none
- Intermittent activity may be as beneficial as continuous activity
- Choose fun and various activities to help you maintain interest
- Most people do not need to consult a doctor before starting moderate intensity activities