# **Exercise and your Cardiovascular Health**

Heart Disease is the leading cause of death in the United States and is a major cause of disability. In the U.S., someone has a heart attack every 34 seconds. Heart attacks can be prevented with exercise. It also helps prevent future cardiovascular events if you have already experienced one. Exercise improves your life expectancy and quality of life.

How does exercise help you? Exercise not only helps your cardiovascular system, it improves your overall body function.
This is how:

- Maintain a healthy weight
- Lowers overall cholesterol
- Decreases LDL—the bad cholesterol
- Increases HDL—the good cholesterol
- Lowers Blood Pressure
- Improves exercise capacity by improving the body's ability to use oxygen
- Improves muscle strength
- Improves balance and prevents falls
- Helps prevent other chronic conditions



### **Exercise Guidelines:**

- Visit your Doctor for a full physical exam before starting an exercise program
  - Start out slow and then increase exercise time and intensity
  - Always warm up and cool down for 10 min. before and after exercise
    - Make it a routine!

## **Exercise Recommendations**

#### **Aerobic Exercise**

- 30 minutes moderate intensity at least
   5 days per week, increasing to 60 min.
- Interval training has shown great results for cardiovascular patients. 30 minute cycles of the following at least 3 days per week:
  - High intensity exercise for 2 minutes (running, jogging, fast walking), you should not be able to talk during this intensity
  - Low intensity exercise for 2 minutes (walking)
- Pick your favorite activity, interval training can be done with most types of aerobic exercise just by changing your intensity!
- Examples of aerobic exercise: walking, jogging, biking, swimming/water aerobics and stair stepping

#### Safety:

Always talk to your physician before starting any exercise program.

Do <u>NOT</u> start an exercise program if you have:

- Unstable angina (chest pain with exertion)
- High blood pressure that is not controlled with medication
- Recent heart attack or recent congestive heart failure that is untreated



#### **Resistance Exercise**

- Add to routine after 2-4 weeks from initiation of aerobic exercise for prevention or if you are at a low cardiac risk. Consult your doctor first if you are at a moderate to high cardiac risk.
- Start with low weight or resistance bands performing 1 set of 10-15 repetitions. Increase to 3 sets
- Increase weight or resistance with 3 sets of 8-12 repetitions
- Perform 2 times per week, and then increase to 3 times per week
- Examples: Chest press, shoulder press, triceps extension, biceps curls, quadriceps extension, wall squats, abdominal crunch or curl up, back extensions, calf raises and rowing

#### References

- Heart Disease. Centers for Disease Control and Prevention Website. http://www.cdc.gov. Updated September 22, 2011. Accessed October 17, 2011.
- Exercise and Physical Activity in the Prevention and Treatment of Atherosclerotic Cardiovascular Disease. Article from American Heart Association Website. http://circ.ahajournals.org. 2003. Accessed October 13, 2011.
- Resistance Exercise in individuals with and without cardiovascular disease. Article from American Heart Association Website. http://circ.ahajournals.org. 2000.
   Accessed October 13, 2011.
- Exercise physiology. Article from American Heart Association Website. http://circ.ahajournals.org. 2007. Accessed October 17, 2011.
- Hansen D, Dendale P, et al. The impact of training modalities on the clinical benefits of exercise intervention in patients with cardiovascular disease risk or type 2 diabetes mellitus. *Sports Medicine*. Nov. 2010; 40(11):921-940.