**The Importance of Aerobic Exercise - Handout**

* **Remember to always check with your physician before beginning an intensive exercise program if you are on blood pressure medication or have a history of cardiac disease**

**Objectives**

1. Define aerobic exercise
2. Know what the recommended dose for aerobic exercise is in order to attain benefits
3. Understand the benefits of aerobic activity
4. Learn the difference between fat and calorie burning exercise
5. Learn how to incorporate aerobic exercise into a busy lifestyle
6. Understand heart rate recovery (HRR)

**Aerobic Exercise**

* It is any moderate or vigorous activity that increases your heart rate and respiratory rate for at least 10 minutes at a time
* To easily differentiate between moderate and vigorous intensity exercise, think of it this way – during a moderate-intensity activity you may feel slightly out of breath but still be able to hold a conversation whereas during a vigorous-intensity activity your heart rate should be significantly elevated, breathing is rapid, and talking would be limited

*Moderate intensity examples:*

* Walking fast
* Water aerobics
* Building a snowman
* Riding a bike on level ground

*Vigorous intensity examples:*

* Jogging or running
* Swimming laps
* Biking on hills
* Skiing/snowboarding

**Aerobic Exercise Recommendations**

*Minimum for Adults*

* 2 hours and 30 minutes of moderate-intensity exercise a week OR
* 1 hour and 15 minutes of vigorous-intensity exercise a week OR
* Combination of the two

*For Added Benefits*

* 5 hours of moderate-intensity exercise a week OR
* 2 hours and 30 minutes of vigorous-intensity exercise a week OR
* Combination of the two

**Benefits of Aerobic Exercise**

* Lose weight (and maintain)
* Increases stamina and reduces fatigue
* Strengthens the immune system
* Reduces health risks
* Manage chronic conditions
* Having a stronger heart
* Mood booster
* Maintain independence
* Live longer

**Fat vs. Calorie Burning**

*Fat*

* Low/moderate intensity exercise
* 60-65% of max heart rate
* More like endurance training

*Calorie*

* Higher intensity exercise
* 70-85% of max heart rate
* Sprint/interval training
* **Although 85% of your max heart rate is difficult to attain, it can be a good indicator of how hard you are pushing yourself**

**Too Busy to Exercise?**

* Exercise in shorter increments
* Take the stairs
* Play with your kids
* Enjoy more walks with your pet and/or significant other
* March in place during TV commercials
* Find a spot in the back of the parking lot and walk further

**The Karvonen Forumla**

* Gold standard for calculating your target heart rate

**Target Heart Rate =**

((max HR − resting HR) × % intensity) + resting HR

* The first step is to find out what your resting heart rate is.
  + The best time to do this is right when you wake up and still in bed.
* The next step is to determine what your max heart rate is.
  + This is done by taking 220 and subtracting your age (example: 40 years old = 220 – 40 = 180)

**Heart Rate Recovery (HRR)**

* **What is it?**
  + Heart rate recovery is the heart rate measured at a fixed time after cessation (stopping) of an activity (usually 1 and/or 2 minutes post)
* **Why is it important?**
  + A greater reduction in heart rate after exercise is indicative of a healthier, better conditioned heart
* **What is normal? Abnormal?** 
  + An abnormal value for the recovery of heart rate was defined as a reduction of 12 beats per minute or less from the heart rate at peak exercise
* **What should your goal be for HRR?**
  + A lower resting heart rate and a quicker recovery in heart rate after reaching your peak is indicative of a healthier cardiovascular system
  + An abnormal HRR has been correlated with an increased risk of mortality
* **How can I improve my HRR?**
  + Aerobic exercise will help you achieve a quicker HRR!
* **The most reliable way to determine your heart rate recovery is to reach your target HR (discussed on the previous slide), sustain for 1 minute, and then begin to recover.**
* **Measure your heart rate the first and second minute of that recovery period.**
* **Subtract the number you got 1 minute after recovery from your target HR – this will be your HRR (you can do the same with your heart rate after 2 minutes of recovery)**

**Personal Challenge of the Week**

* Take the stairs instead of the elevator 3 times this week OR park at the far end of the parking lot and walk the extra distance 3 times this week
* Calculate 65% of your max heart rate and see how you can maintain that level during your workout(s) this week

**Check Your Knowledge**

1. What is the minimum amount of time needed to exercise at a moderate-intensity for you to attain cardiovascular benefits?

2. What is an example of vigorous-intensity exercise?

3. Heart rate recovery is a good measurement tool in regards to health status. True or False

**Answers**

1. 2 hours and 30 minutes

2. Jog/run, swimming laps, biking on a hill

3. True