

## Lab 2. Determining Your Training Heart Rate Using the Percentage of Maximum Method

Name \_\_\_\_\_ ID \_\_\_\_\_ Sect \_\_\_\_\_ Time \_\_\_\_\_ Date \_\_\_\_\_

### Purposes

1. To understand the concept of training heart rate.
2. To learn how to determine your training heart rate using the percentage of maximum method.
3. To understand the effect of age and fitness level on training heart rate.

### Directions

Compute your estimated maximal heart rate ( $HR_{\max} = 220 - \text{age}$ ):  bpm

Compute the low end of the training heart rate zone using 60% intensity. This is the minimal training heart rate and is the lowest heart rate at which significant improvements in the cardiorespiratory system occur.

**Minimal Training Heart Rate** =  $(HR_{\max})$   x 0.60 =  bpm

Compute the high end of the training heart rate zone using 90% intensity. This is the maximal training heart rate and is the highest heart rate at which significant improvements in the cardiorespiratory system occur.

**Maximal Training Heart Rate** =  $(HR_{\max})$   x 0.90 =  bpm

**Your Training Heart Rate Zone** =  (minimal) to  (maximal)

## Activities

After calculating your training heart rate zone, determine the pace of walking or jogging necessary to achieve your minimal and maximal training heart rates. You will need either a measured distance on a flat surface or a treadmill that indicates the speed of walking or jogging. Start by walking or jogging at a pace that you estimate will be near the **minimal** training heart rate. After 2-3 minutes, take your heart rate and increase or decrease the pace to adjust your heart rate to the level necessary. Once you achieve the intensity of exercise that raises the heart rate to the desired level (target level  $\pm$  10 bpm), continue exercising at that level for a total of 10 minutes. **Determine** the speed in mph of walking or jogging that raised your heart rate to the desired level. **Explain** how you subjectively felt exercising at this level in the space below. Do you think you could have continued this exercise for 30 minutes? **Explain why or why not.**

Exercise heart rate: \_\_\_\_\_ bpm

Speed that raised your heart rate to the minimal training level: \_\_\_\_\_ mph

After 10 minutes at the minimal training heart rate, use the same procedure to determine the level of walking or jogging necessary to raise your heart rate to the **maximal** training heart rate. Exercise at this level for a total of 10 minutes. **Determine** the speed in mph of walking or jogging that raised your heart rate to the desired level (target level  $\pm$  10 bpm). **Explain** how you subjectively felt exercising at this level in the space below. Do you think you could have continued this exercise for 30 minutes? **Explain why or why not.**

Exercise heart rate: \_\_\_\_\_ bpm

Speed that raised your heart rate to the maximal training level: \_\_\_\_\_ mph