# Cardiovascular lab/fitness lab

## Resting Heart Rate

Resting heart rate averages 60 to 80 beats per minute. In middle-aged, unconditioned, sedentary individuals the resting rate can exceed 100 beats per minute. In highly conditioned endurance-trained athletes, such as Olympic cross-country skiers, resting rates in the range of 28 to 40 beats per minute have been reported. Your resting heart rate typically de-creases with age. It is also affected by environmental factors; for example, it increases with extremes in temperature and altitude.

**Part 1. Pulse rate under varied activities:**

A. You should have been sitting down for at least five minutes before starting:

Measure your
resting heart rate:

Average your
groups resting heart rate: Are you above or below the average?

What is the groups size _____

How does your resting heart rate compare to recommended resting heart rates?

B. Concentrate and listen to the music. Take your pulse rate when requested during the play of this music.

Your Pulse Rate while listening to music selection _____

Groups Average Pulse rate while listening to music selection _____

How did your pulse rate compare to the class average?

C. While still seated Conduct a meditative state for 5 minutes

Measure your heart rate: _____

Groups Average heart rate _____

How did your heart rate compare to the groups average heart rate?

D. Exercise Activity and Pulse Rate: **Run** up and down the stairs two times.

Measure your heart rate **immediately** upon returning.

Yours _____ Group Ave _____

Measure your heart rate again after 2 minutes and 5 minutes.

2 minutes: Yours _____ Group Ave _____

5 minutes: Yours _____ Group Ave _____

How did this compare to the original resting heart rate?

How did your five minute recovery heart rate compare to the groups five minute recovery rate?

Do you exercise aerobically at least three times per week? If yes, indicate the number of times you do so (on average)

List and compare the groups average initial resting heart rate to the average heart rates under each condition:

| Specific Condition | Groups Average Heart Rate | Higher or Lower than the Groups Initial Average Resting Heart Rate |
|---|---|---|
| Initial Resting Heart Rate | | |
| Heart Rate while concentrating on Music | | |
| Heart Rate while meditating | | |
| Heart rate immediately after exercise | | |
| Heart rate 5 minutes after exercise | | |

Which conditions indicated a change in the groups initial resting heart rate? What factors do you think were affecting each of these?

Respiration Volumes:

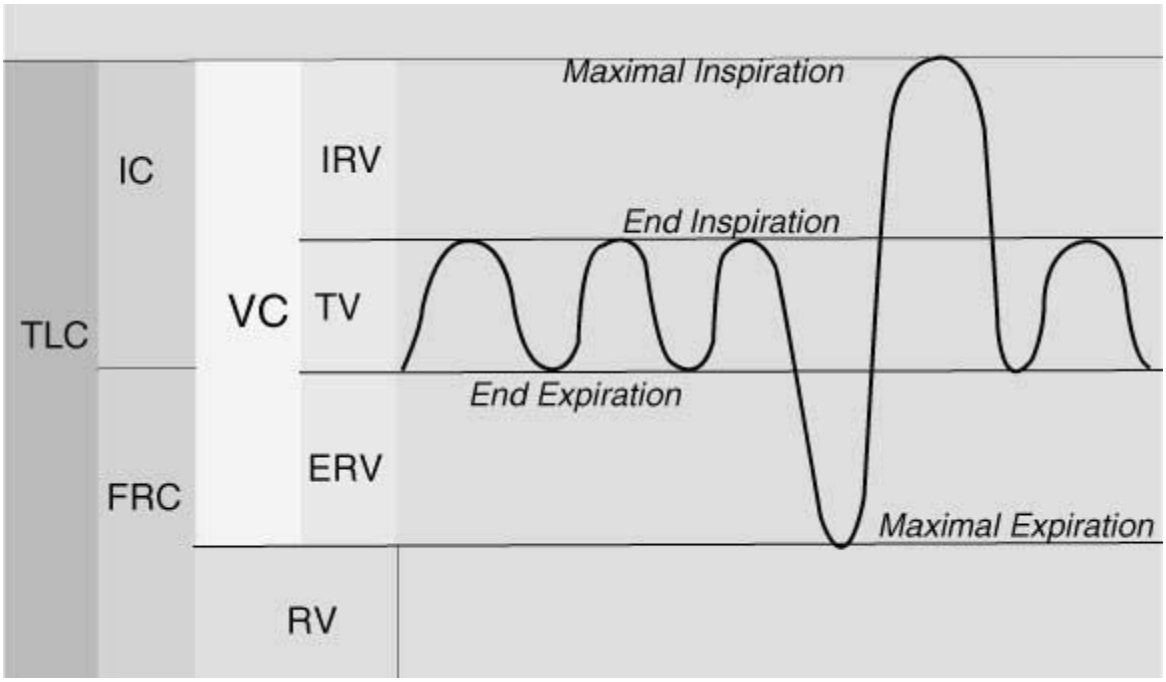


Figure from: http://www.rcjournal.com/cpgs/slvcpg-update.html

List your respiration measurements

How does this compare to the groups average?