Laboratory 11: Cardiovascular Measurements

Purpose:

The purpose of Laboratory 11 Cardiovascular Measurements was to measure the effects of postural change and exercise on the cardiovascular parameters using different types of equipment. The lab also determined the physical fitness of an individual. All this helps us to understand the effects of movements we make and checking our blood pressure and what it means.

Procedure:

11-A: Determination of blood pressure

- Wrap the pressure cuff of the sphygmomanometer snugly around the upper left arm of lab partner while they sit in a relaxed position.
- Place stethoscope over brachial artery and close pressure valve and begin pumping up rubber hall.
- Pump until pulse is not heard approximately 10 mmHg above partner's normal systolic pressure.
- Slowly open the pressure valve and listen for the pulse sounds to reappear as the pressure drops.
- The first sound heard signals the systolic BP. Record this value from scale.
- The sound will become louder as pressure drops until it starts to become muffles. Record the pressure when the sound vanished. This is the diastolic BP. Record blood pressure as systole/diastole.

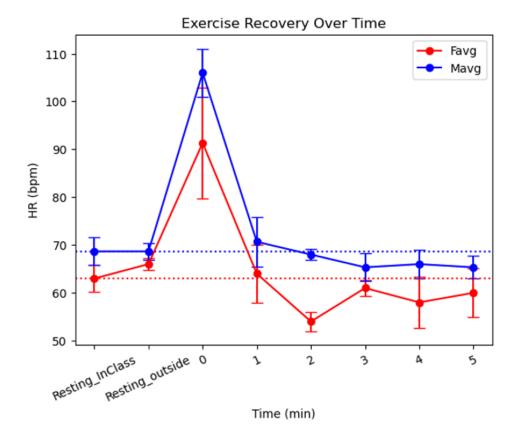
11-B: Demonstration of a measure of physical fitness

- Select students and take their resting pulse rate.
- Each student will step up and down a bench for 4 minutes and their pulse will be measured after every minute.
- The values will be compared.

Results:

11-A

| Blood pressure: | |
|-----------------|--------|
| Ximena: | 110/68 |
| Marlene: | 115/83 |



Discussion:

In this lab experiment, the first exercise that we did was taking our blood pressure and it did take a while for my partner and I to figure out the proper technique but then we were able to do it, I had a higher blood pressure than my partner and after researching I learned it wasn't a bad pressure. For the other exercise I was one of the volunteers that participated and I thought it was interesting how such a simple workout was able to increase my heart rate so rapidly and also how quickly my heart rate went back to normal.

Conclusion:

In conclusion, I did enjoy this lab. I got to learn how to properly take blood pressure after many attempts and what it represents and when it is considered normal. The second experiment made me pay more attention to my heart rate and the effect exercise has on it, I used to work out a lot before but I never really paid attention to my heart rate but this opened up my eyes more to looking more into it.