Madelyne Soto-Gomez

Tuesday Lab

11/7/23

Laboratory 14- Respiratory Physiology

Purpose- You will have the opportunity to try one or more of these devices and measure your inspiratory capability. Incentive inspiratory devices, also known as spirometers, are used to help improve lung function and respiratory muscle strength. They provide a visual incentive and feedback to encourage deep breathing and effective inhalation. These devices are often used in respiratory therapy to assist with conditions such as chronic obstructive pulmonary disease (COPD), asthma, and post-operative recovery. By using an incentive inspiratory device, you can strengthen your respiratory muscles, improve lung capacity, and promote better breathing techniques.

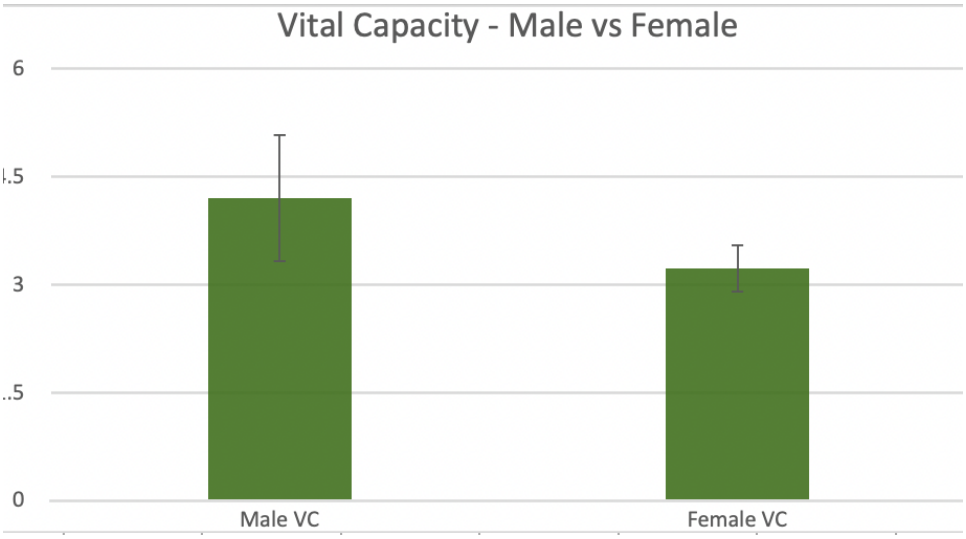
Procedures- 14-D: Incentive inspiratory devices:

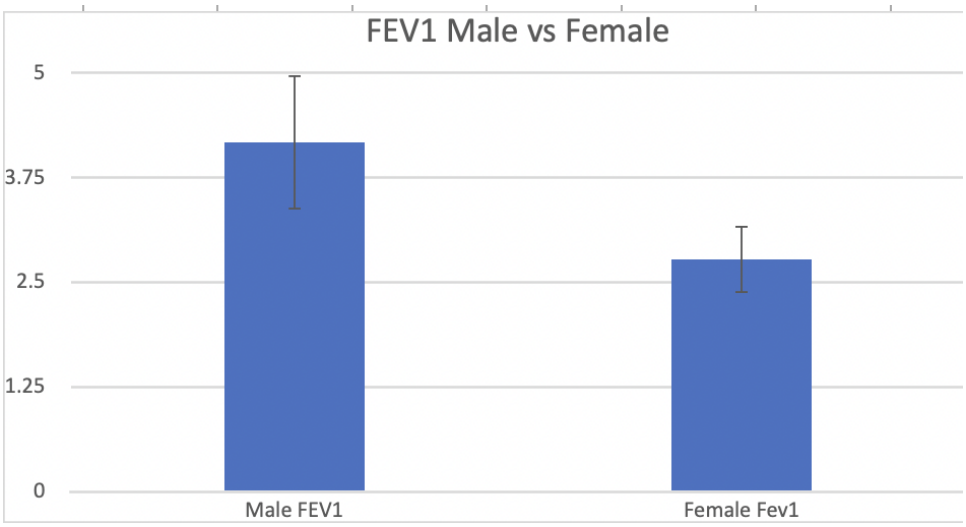
1. Obtain an incentive device and attach your disposable cardboard mouthpiece and white (or blue) filter to the breathing tube. The filter is quite a bit bigger than the breathing tube, so use your hand to try to get the best seal possible, it is not crucial to have a complete seal.

2. Breathe in as deeply as possible and record the measurement given on the device. Depending upon the model, you may have to move colored balls up plastic columns or move a bellows within a column.

3. Record your values. Discard the disposable cardboard mouthpiece and place the filter in the correct tub after use (the tub is labeled).

Results-





Discussion- This lab was honestly fun to do with my partner and seeing her try to blow out as hard as she can to reach the number on the spirometer. I think if I would've down it, I would've had a hard time blowing into it as well because I don't know how great my stamina is. However, I could tell my classmate had some pretty healthy lungs due to reaching the capacity for her age group.

Conclusion- In conclusion, we can see that males usually tend to have greater vital capacity versus women. But overall, by comparing these measurements to normal values, we can assess lung function and diagnose respiratory conditions.