

Abstract

For this experiment the question trying to be solved is if a person's lung capacity can increase with regular aerobic exercise and whether it differs for different age groups. In this project one measure of lung capacity will be used which is vital capacity or the amount of air that can be exhaled from a deep breath. The hypothesis is that the exercise group will increase consistently and the non exercise group will have the same range for lung capacity every week. The action taken from the experiment is to make the four different groups: child exercise, child non exercise, adult exercise, and adult non exercise. The non exercise group will simply blow balloons every week and measure the diameter of the balloon. The exercise group will do the same thing except for exercising for twenty minutes every day, then at the end of the week the balloon will be made and measured. The conclusion came out to be that the hypothesis wasn't fully supported. The exercise group definitely improved but not in a consistent pattern. It rather took a while until the progress started. Also, the non exercise group had a range that stayed the same throughout the experiment but the range was much wider than expected. If the experiment had a longer time span, used a peak air flow meter, and had a bigger age group, then the experiment would come out to be much more accurate.