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Physiology  
Conclusion

### **Manipulated Blood Pressure Lab Conclusion**

Ms. Emma Cormia's and I's experiment was to test if her blood pressure would increase when she was yelled at by me, and if yelling would cause my blood pressure would increase. Blood pressure is the pressure on the veins and arteries' walls caused by the blood traveling at varying speeds and power behind it. You can read blood pressure by two numbers placed one over the other, the one on top is called the systolic and the bottom number is the diastolic. Systolic is the higher number, both in placement and in numerical value itself, and it measures arteries pressure. Diastolic is the bottom number, both in placement and in numerical value, and it measures the pressure on the arteries between heartbeats. The hypothesis for my part of the experiment is if I yell at Emma, then I will raise my blood pressure because I am exerting myself, for three separate times after which we will take my blood pressure.

Blood Pressure can be manipulated by exercise or adrenaline because blood pressure is how hard the blood is pumping, and exerting yourself would cause your blood to pump harder. I manipulated my blood pressure by yelling, angrily, so that I was spending energy on volume, breathing, thinking fast of what to yell, and sounding angry. Stress, fear, and the cold can all cause the blood pressure to change because causes individual changes on where the blood goes. The cold would causes the blood to stay in the more main parts of the body so that the blood pressure in the limbs would be lower than usual, whereas the blood pressure in the main part of the body, ie. the torso, would be higher than usual. Fear would cause the blood pressure to increase because the body would respond to whatever caused the fear response with fight or flight which would make the body to want more oxygen in the powerhouse muscles that would allow the body to get away from the danger or fight off the danger with the body's bear hands. Stress would cause very similar responses as fright, but it would probably last for a longer time, which would eventually mean that the high blood pressure would start to cause damage to the blood carrying vessels as well as the heart.

My starting blood pressure was 154 over 80. After the first time that I exerted myself yelling at Emma, my blood pressure was 130 over 81. The second time we took my blood pressure after I exerted myself was 120 over 72. The third time it was 123 over 82. Unfortunately, my data does not coincide with my hypothesis, so the test proves it wrong. Although, there might have been errors in reading the blood pressure cuffs, and there was a difference in the time between the exertion and the reading of the blood pressure cuffs.

In conclusion, my hypothesis is proven wrong, I have high blood pressure, and when I yell, I lower my blood pressure.