

#### Introduction

We tested this to see how homeostasis affects our blood pressure. The brain, heart, kidneys, and blood vessels are the organs that regulate our bodies blood pressure. High blood pressure is linked to overactive nerves in the sympathetic nervous system. A poor diet, lack of exercise, and certain medication can cause blood pressure to raise. Our hypothesis was that after running the two laps the runners blood pressure will just increase.

# Blood Pressure Homeostasis Poster By: Alexis Bishop, Matt Cassidy, Brittany Fung and Joell Vaca STEM Marin, San Marin High School

Acknowledgement: We would like to thank Ms. Mathews for teaching us about homeostasis and providing us with the tool we needed for our tests.

#### **Hypothesis**

We thought the runner's blood pressure would rise when they stopped running the two laps around the San Marin Football Field.

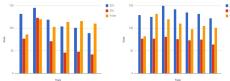
#### Abstract

2 test subjects ran 2 labs around A track. We measured the variable of their blood pressure. We tested to see how long it took after the run for the runners blood pressure to reach normal. We discovered that the subjects blood pressure rose quickly then slowly drops below the resting blood pressure .

## **Materials**

For our materials we used a blood pressure cuff, the San Marin track, a timer, and a camera.

Results



As you can see, the results for the first graph is inaccurate while the other is more accurate than the other.



### Conclusion

Our hypothesis was incorrect because we thought the blood pressure would rise but what we discovered that after exercise blood pressure goes up quickly then slowly decreases. Overall, the only things that really was successful was them running at a constant speed throughout the two laps that they ran. Our materials were provided by the school which were not very functional. For our timing we could've have gotten an more accurate time while measuring blood pressure after the run.