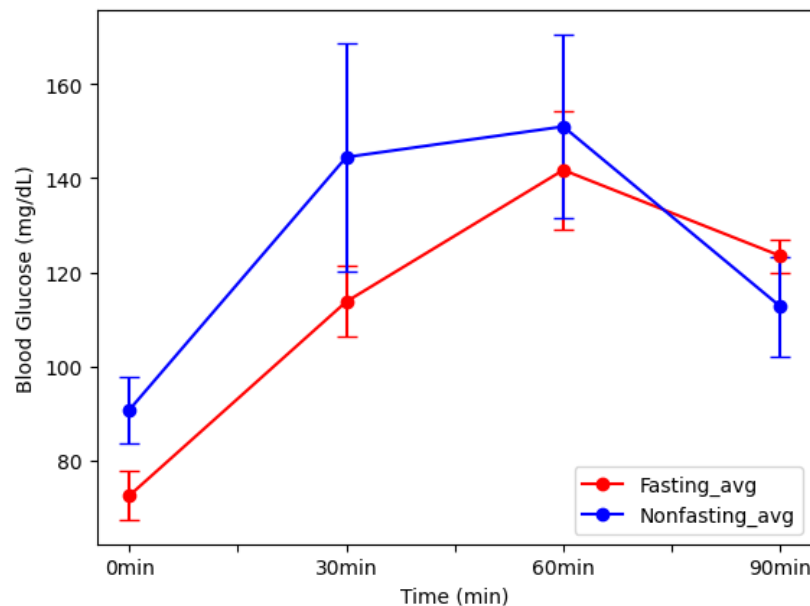


Laboratory 8- Hormonal Activity: The Glucose Tolerance Test**Purpose:**

The purpose of this lab experiment was to test the body's response to an excess ingestion of glucose. Also to compare the difference in blood glucose levels to understand how blood levels can rise depending on the person and their intake to see and understand how it affects people especially diabetics and an average person.

Procedure:

- Volunteers are selected to fast for 10-12 hours
- Volunteers will clean their fingers with alcohol wipes then use a sterile lancet to obtain a drop of blood for the test
- The blood is tested using a glucometer
- Subjects will drink a lemon-flavored solution of 25% glucose. The amount needed to be consumed is determined by body weight, 1 g glucose per kilogram of body weight
- After glucose is consumed, the blood testing will be repeated every 30 minutes for 1 ½ hours
- Results will be recorded and graphed for an average

Results:

Discussion:

As a volunteer that fasted for this lab, I found that seeing my glucose blood levels increase by a very high amount in my opinion was very interesting. Out of the 4 volunteers that fasted my levels reached the highest being 176 at 60 minutes. It did concern me at first however it still fit under the normal threshold so my concern went away. When understanding the effects of glucose levels in the blood, there is the absorptive stage of glucose which is found in the liver and where the glucose is converted to glycogen or fat storing energy for later use. Glucose levels in the blood begin to drop at this state as it is being absorbed and used by the cells. The post absorptive state, also known as the fasting state, is when the food has been absorbed and stored and while in this state the body needs to rely on stored glycogen initially. After comparing the average results from those who fasted to those who did not fast the non-fasters had a higher level at each segment until the last. Their levels decreased more than the average of those who fasted at the end.

Conclusion:

In conclusion, this lab explained the effects of glucose through looking at the glucose blood levels in those who fasted compared to those who did not fast. It explained how the levels can increase rapidly as well as decrease fast too. Understanding the effects of glucose in ones body is really important especially when it comes to those with diabetes and in general because it can help prevent more serious health problems and can help those with diabetes understand how to properly manage.