Lab 8: Hormonal Activity:
The Glucose Tolerance Test

Jasmin Villagomez and Cassandra Ortega

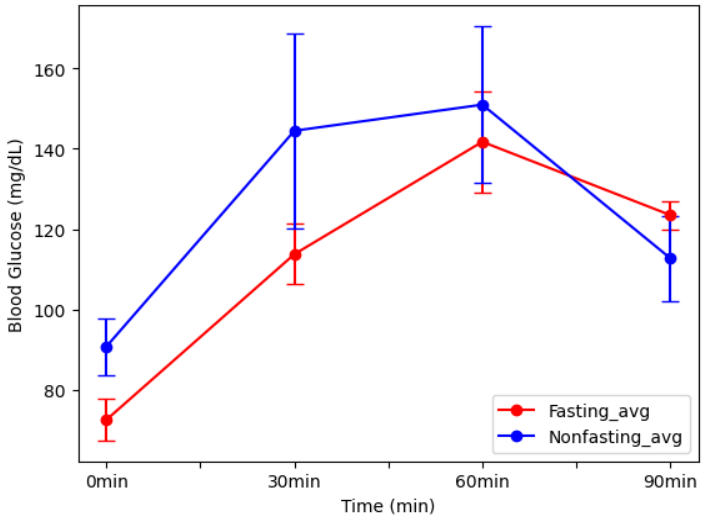
Purpose:

We are testing to see our glucose tolerance. This will see the ability of our bodies responding to an excessive ingestion of glucose. The changes in our glucose would show it is different from a diabetic person. But in this lab, we tested how an excessive intake of glucose differentiated between a person who has fasted all day to a person who ate that day.

Procedure:

Procedure 1.Six student volunteers will be selected for this experiment. These subjects should report to the lab in the fasted state –not having eaten for 10-12 hours.
2.Each student's normal fasting blood glucose level will be determined using the test strips for the glucometer assigned to each student. Each volunteer will clean a finger with 70% alcohol, then use a sterile lancet to obtain a drop of blood for the test. **If a student is helping another obtain a blood sample, gloves and universal precautions will be followed.
3.Each subject will then drink a lemon-flavored solution (Tru-Glu) of 25% glucose. The quantity of solution will be based on 1 g of glucose per kilogram of body weight. To determine body weight in kilograms, the weight in pounds will be divided by 2.2.
4.After ingesting the glucose, the subject will repeat the blood testing procedures every 30 minutes. Testing will continue in this manner for 1 1/2 hours or until the end of the lab period.
5.Record and graph the average of the class results of the blood glucose tests.
6.Compare the results with the normal glucose tolerance test curve. Describe the graphs in terms of absorptive and post-absorptive states.

Results:



Discussion:

We saw that from the start, the people who fasted had a higher blood glucose. Up until a little over an hour it stayed higher. After 90 mins, it dropped to a lower blood glucose than a person who ate that day.

Conclusion:

The purpose was to see if fasting affected an excessive intake of glucose and it was clear there was an effect. For the first hour, people who fasted had a higher blood glucose. Especially after the glucose intake, there was a huge difference meaning that fasting does affect how your body reacts to glucose intake. While both reacted. There was a clear difference in fasting reacting more to a higher blood glucose.