

Laboratory 8 – Hormonal activity: The Glucose Tolerance Test

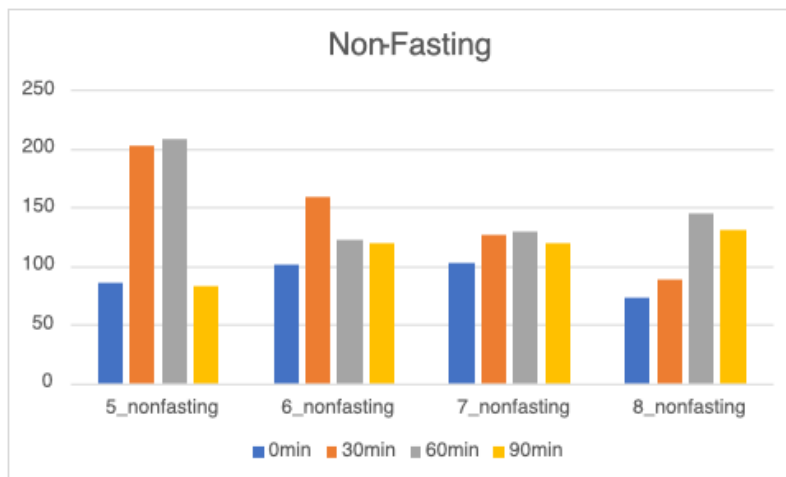
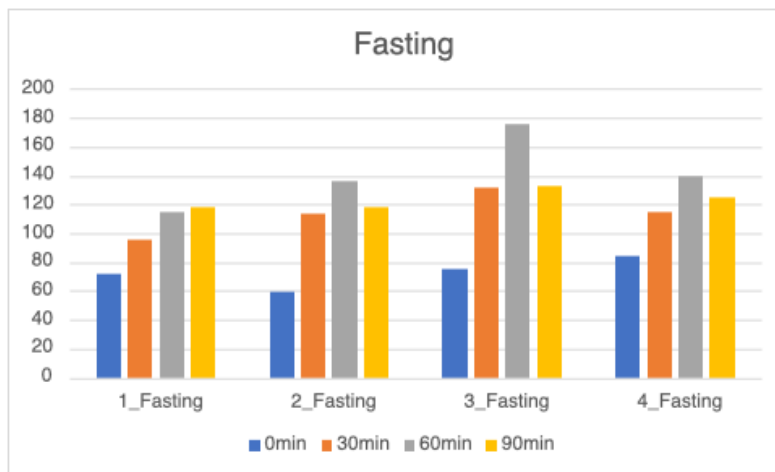
Purpose:

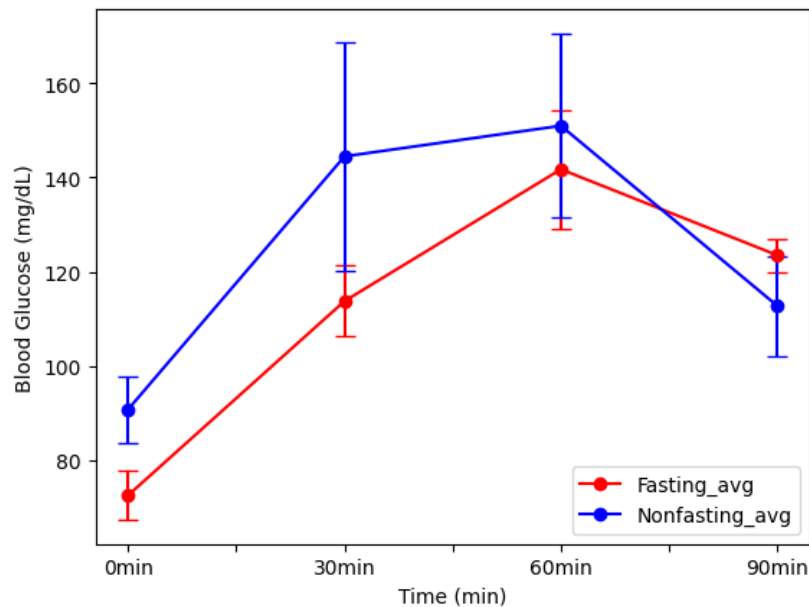
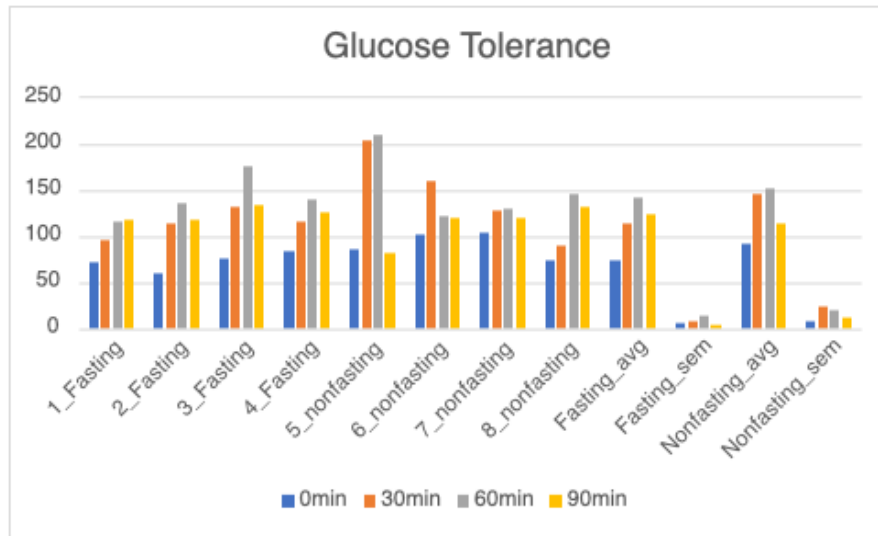
The purpose of this lab is to get a better understanding of how insulin and blood glucose work, and how glucose transports across the cellular membrane. Also, to learn about hormones and their chemical messengers that are secreted into blood by endocrine glands. Normal concentrate for blood glucose is 90 mg% (90mg/100 ml of blood), and during fasting, blood glucose falls around 60-70 mg%.

Procedures:

1. Fast before doing the glucose tolerance test for about 10-12 hrs.
2. Drink a lemon-flavored solution (tru-glu) of 25% glucose.
3. Drink about 2/3 depending on weight.
4. After ingesting the glucose, you will repeat the bloods test procedure every 30 minutes for 1 hour and ½.

Results:





Discussion:

In this lab we were able to test the different reactions for glucose between people who fasted for about 10-12 hours compared to people who did not fast for 10-12 hours. We could see that some people reacted differently compared to other people, the people who fasted had more controlled levels compared to the students who did not fast. In this study, I was student #4 who fasted, my results did not have a drastic change compared to other people who fasted and had a higher spike. The lemon-flavored solution (tru-glu) was super sweet, and not the best thing to have as a first meal.

Conclusion:

To conclude, I would now say that I have a better understanding of insulin and blood glucose, and the absorptive and post-absorptive states. In the results we could also observe the difference between the insulin and glucose people got from eating food and the lemon-flavored solution (tru-glu) they had to drink.