

Lab 8: Glucose Tolerance Test

Purpose: To determine the changes in the level of glucose in blood following the ingestion of glucose.

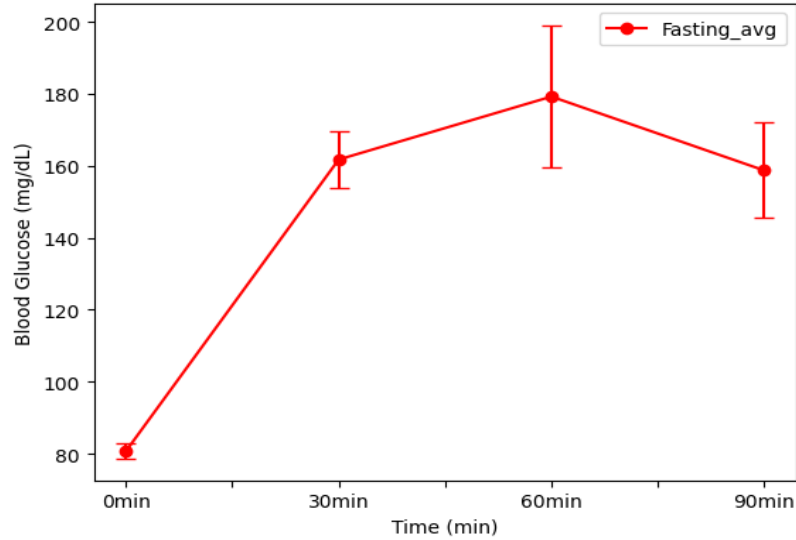
Procedure:

Six students will volunteer for this experiment. These subjects should report to the lab, not having eaten for 10-12 hours.

1. 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 one finger with an alcohol wipe, then use a sterile lancet to obtain a drop of blood for the test.
2. Each subject will then drink a solution of 25% glucose. The quantity of solution will be based on one gram of glucose per kilogram of body weight.
3. After ingesting the glucose, the subject will repeat the blood testing procedures every 30 minutes. Testing will continue in this manner for about an hour and a half.
4. Record and graph the average of the class results of the blood glucose tests.
5. Compare the results with the normal glucose tolerance test curve. Describe the graphs in terms of absorptive and post absorptive states.

Results:

Time	Group 1	2	3	4	5	6	7	Average
0 min	75	77	85	86	103	81	83	80.75
30 min	140	159	158	190	141	131	161	161.75
60 min	154	135	174	254	171	152	180	179.25
90 min	151	141	133	210	170	185	191	158.75



Discussion: The glucose tolerance test helped me understand how the body reacts to an excess ingestion of glucose.

Conclusion: After viewing the results of the Glucose Tolerance Test, I was able to understand fasting and post glucose ingestion readings can have a significant increase within one hour of the reading and it also tends to go down after an hour and a half.