

Body's response to Glucose

Purpose:

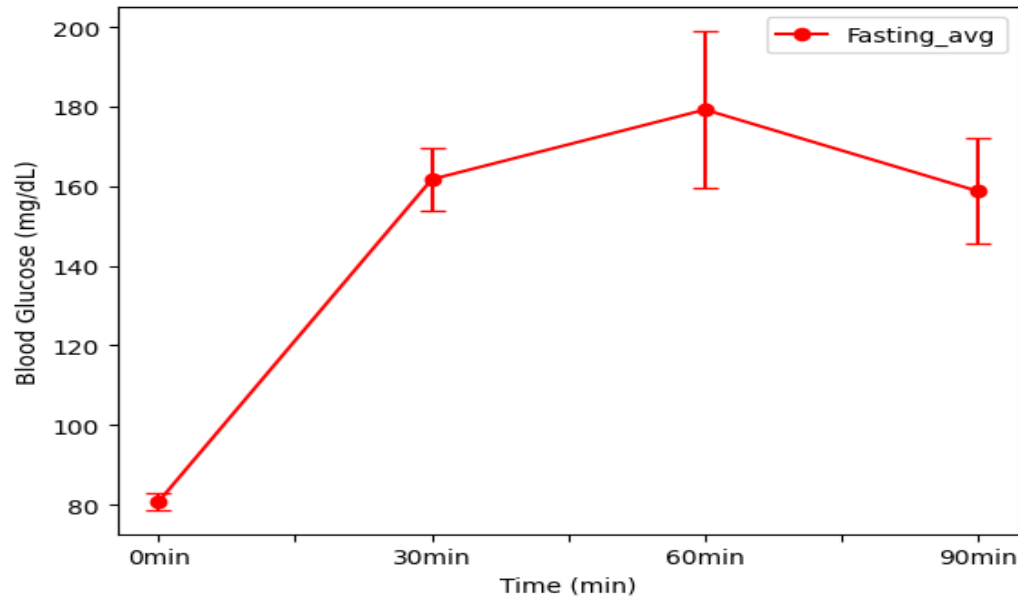
The purpose of this experiment is to understand and analyze the ability of the pancreas to respond to the overabundance of glucose ingestion.

Procedures:

1. 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:

Group	1_Fastin g	2_Fastin g	3_Fastin g	4_Fastin g	5_Fastin g	6_Fastin g	7_Fastin g	Fasting_ avg	Fasting_ sem
0min	75	77	85	86	103	81	83	80.75	2.10158 6702
30min	140	159	158	190	141	131	161	161.75	7.84598 7752
60min	154	135	174	254	171	152	180	179.25	19.7734 1891
90min	151	141	133	210	170	185	191	158.75	13.2102 9541



Discussion:

The results of the experiment show that after the glucose intake, their glucose levels did rise, for example: subject 7 went a little over the normal percentage, 191mg/dl, after the 90 min mark, this could mean this subject might be a pre diabetic response, impaired fasting glycaemia, not using glucose as efficiently as it should.

Conclusion:

During the experiment I saw how the subjects were reacting to fasting and then after the glucose intake, which caused some to be sick. I do recall doing the glucose when I was pregnant, it reminded me how sick it made me feel, come to find out I did get gestational diabetes. In this case it was very important to find out if you are diabetic or not, since it can harm the baby.