Lab 8 Glucose Testing

Purpose: The purpose of this lab is to understand the ability of an individual's pancreas to respond with an excess ingestion of glucose. In a non diabetic person, blood glucose levels rises from 90 mg to 140m in one hour then goes back down to normal after three hours. A person with diabetes would have their blood glucose rise from 120-1609 mg to 300 mg. This can help us indicate the state of whether we are prone or have diabetes or not.

Procedure: There would be volunteer students in this experiment where they will choose to fast for 12 hours, only able to drink water. Each student will then clean their finger with alcohol and obtain a drop of blood for the test. After that the student will drink a solution containing 25% glucose. The amount you drink is based on your body weight. The student will repeat blood testing every 30 minutes for an hour and a half.

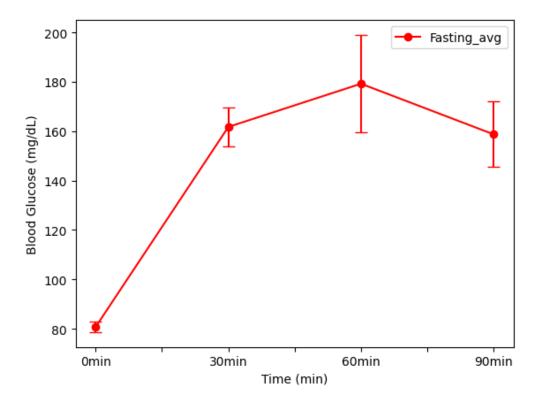
Results:

	1_Fasting	2_Fasting	3_Fasting	4_Fasting	5_Fasting	6_Fasting	7_Fasting	Fasting_avg	Fasting_sem
Group									
0min	75	77	85	86	103	81	83	80.75	2.101587
30min	140	159	158	190	141	131	161	161.75	7.845988
60min	154	135	174	254	171	152	180	179.25	19.773419
90min	151	141	133	210	170	185	191	158.75	13.210295

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Discussion: I wasn't one of the volunteers for this experiment so I do not have any personal insight. I was surrounded by people who did though and had overhead that many felt queasy from drinking the solution with glucose. One of the students also left the room to throw up so it made me glad that I didn't volunteer because my stomach is very sensitive and I feel like having something sweet and foreign after a fast I would probably be just like her in this situation.

Conclusions: For this lab, students had fasted for 12 hours to later drink a glucose based solution to test how their blood glucose levels responded to a sudden rush of glucose intake. This experiment can help with an overview of the possibilities of diabetes in an individual as there is a large difference between the levels of the glucose percentage can go to depending if the individual has diabetes or not.