

NAME _____

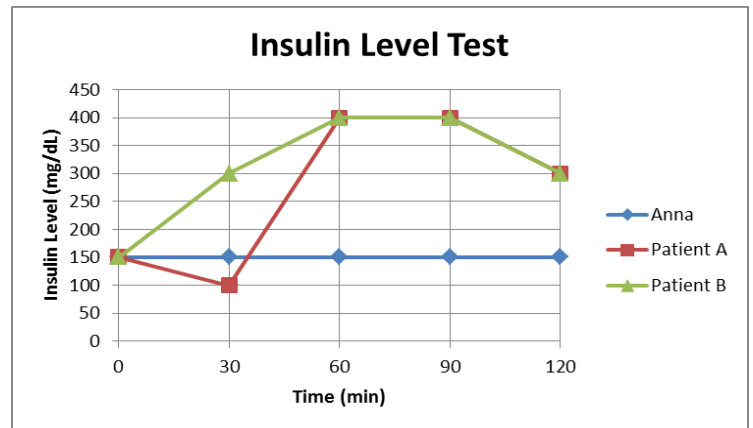
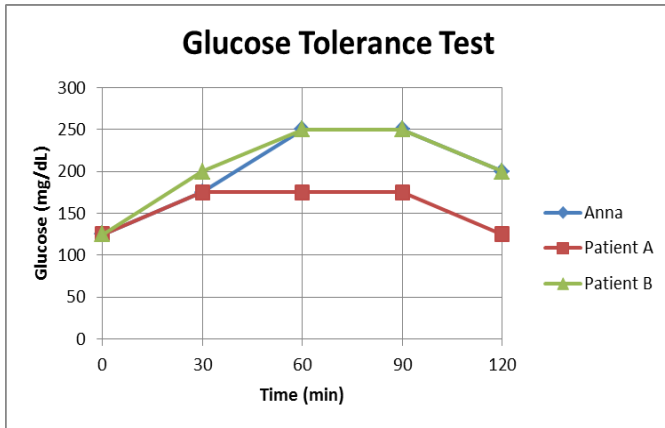
2.1 Review

2.1 a. What is diabetes? 2.1 c. How does the development of Type 1 and Type 2 Diabetes relate to how the body produces and uses insulin?

Type 1 Diabetes	Both	Type 2 Diabetes

2.1 b. How is glucose tolerance testing used to diagnose diabetes?

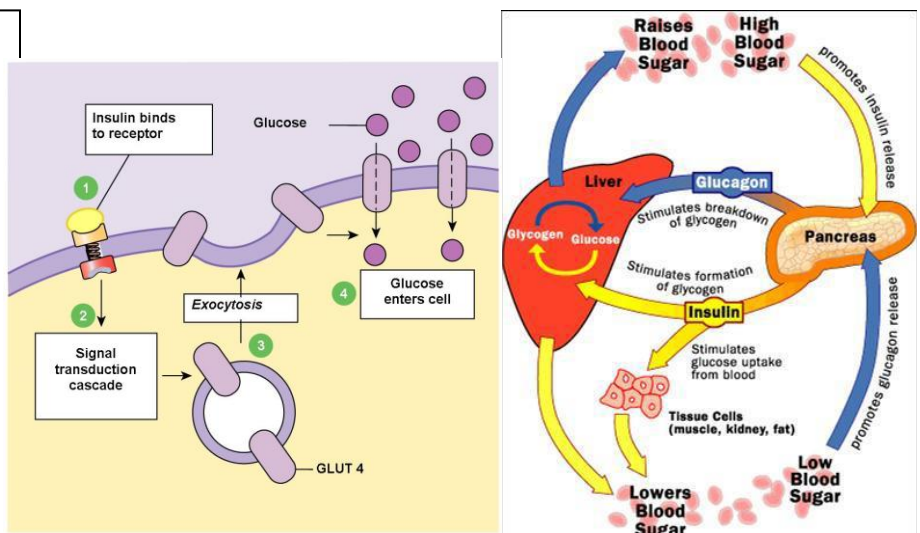
A GTT is completed by testing blood samples every 30 minutes following the consumption of a high glucose drink. Type 1 and Type 2 diabetes can both be diagnosed by observing the levels of blood glucose and/or insulin. Observe the graphs below to determine which patient has type 1 or Type 2 Diabetes.



2.1 d. What is the relationship between insulin and glucose?

2.1 e. How does insulin assist with the movement of glucose into body cells?

Insulin is a hormone produced by the pancreas. Its job is to allow glucose to enter the cells. Without insulin, cells become hypertonic due to the excess glucose outside of the cell. Insulin attaches to receptors on the cell membrane which signals the glucose transporter (GLUT) to open glucose channels.



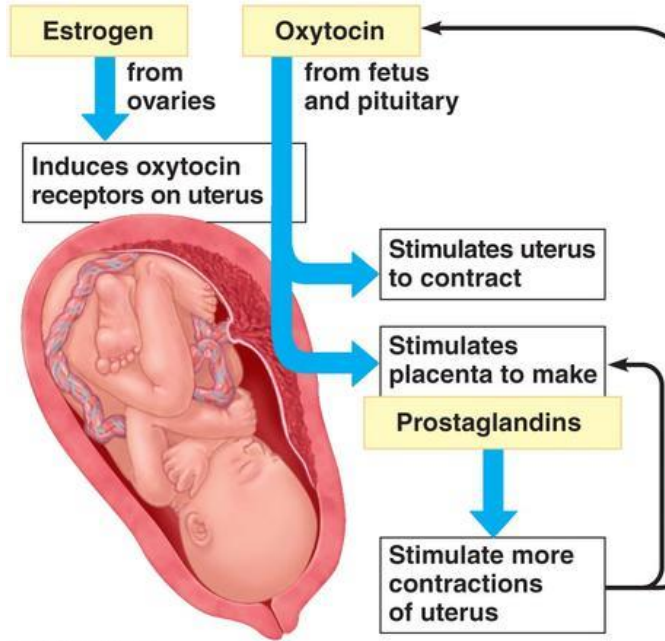
2.1 f. What is homeostasis? 2.1 g . What does feedback refer to in the human body?
 2.1 h. How does the body regulate the level of blood glucose?

Define homeostasis: _____

Positive feedback: increases / decreases the body's response. (circle one)

Negative feedback: increases / decreases the body's response. (circle one)

Identify the pictures below as positive or negative feedback. Then, determine which represents the way the body regulates the level of blood glucose.



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