

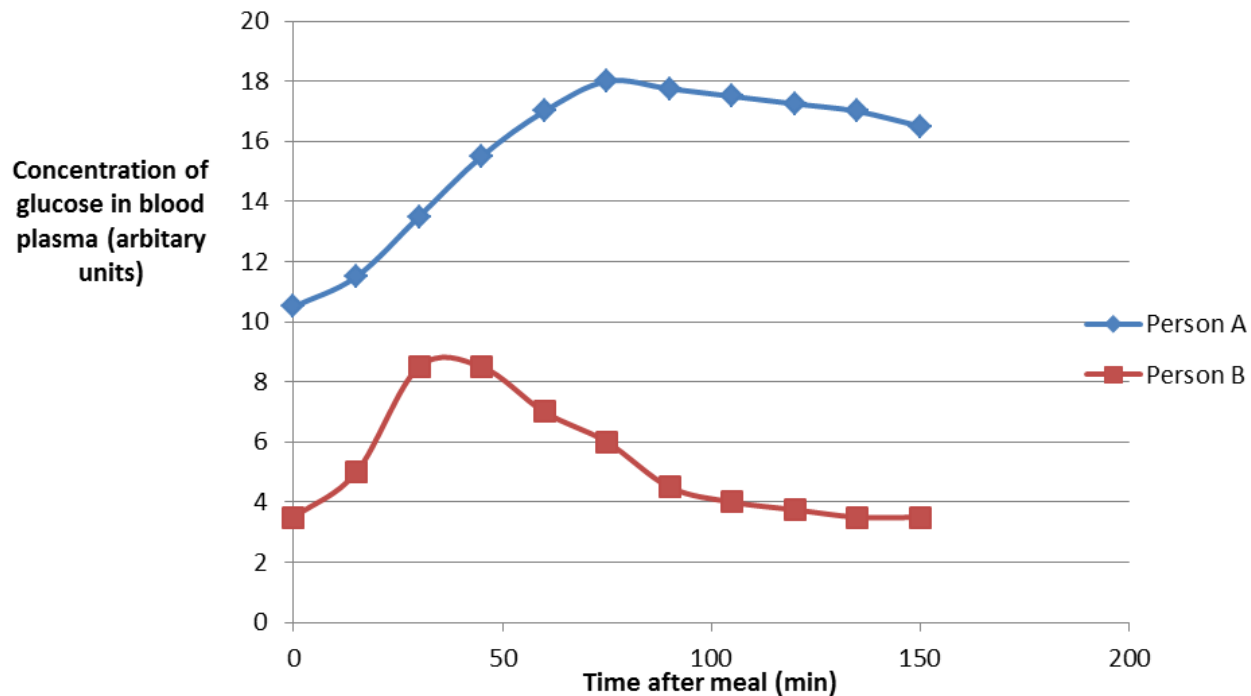
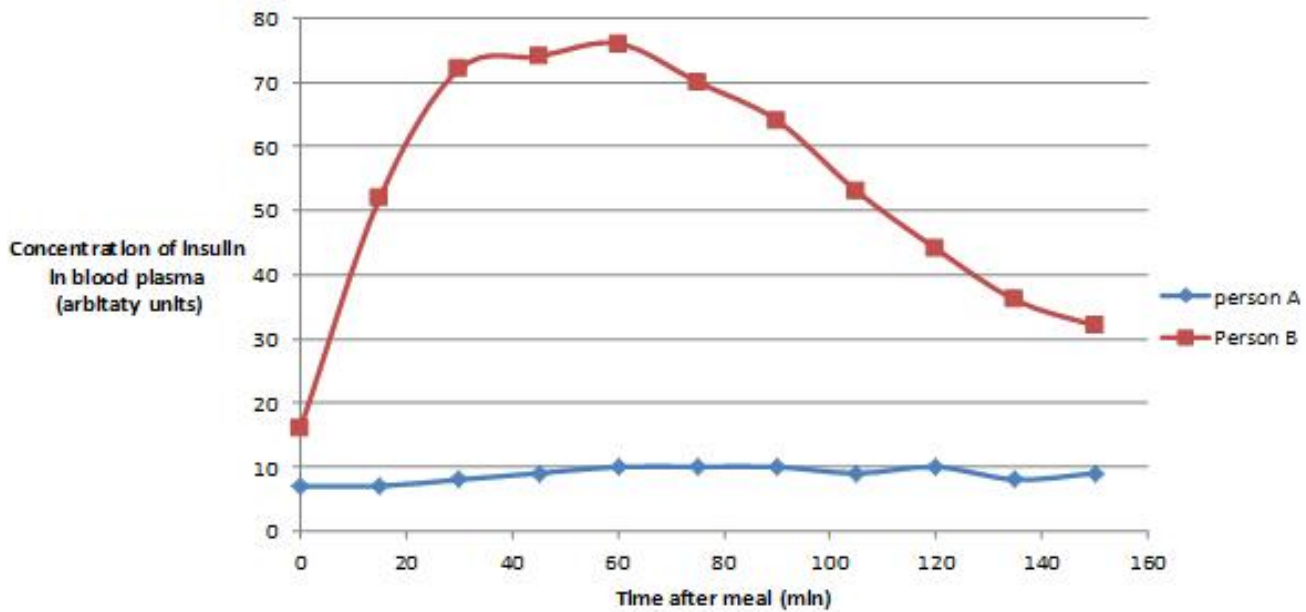
Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

Ms. Randall A & P

### Negative Feedback and Blood sugar Homeostasis

Diabetes is becoming more common. It is caused when the pancreas makes too little insulin. Insulin increases the uptake of glucose from the blood into the cells of the muscles and liver where it is converted into glycogen for storage.

The graph shows the blood glucose concentration for two people both given a high glucose meal.



**One person suffers from diabetes.**

1. Which person is it?
2. Explain why you have selected that person.
3. Use the graph to explain why blood glucose concentration is an example of negative feedback.
4. Using information from both graphs explain why the blood glucose level fell in person B.
5. Another hormone called **glucagon** has the opposite effect to **insulin** in that it changes **glycogen** into **glucose**. Produce a diagram to show how insulin and glucagon work to maintain a constant blood glucose level by negative feedback.