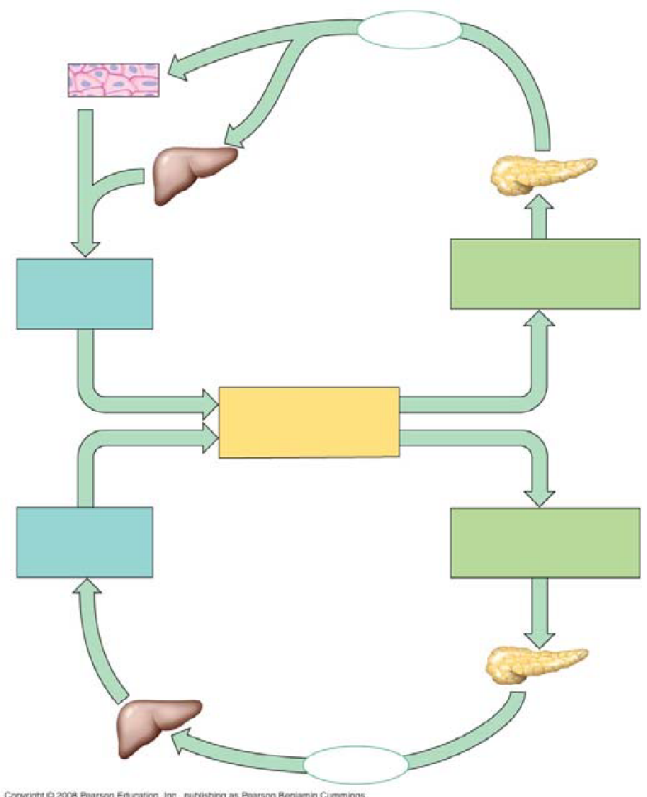


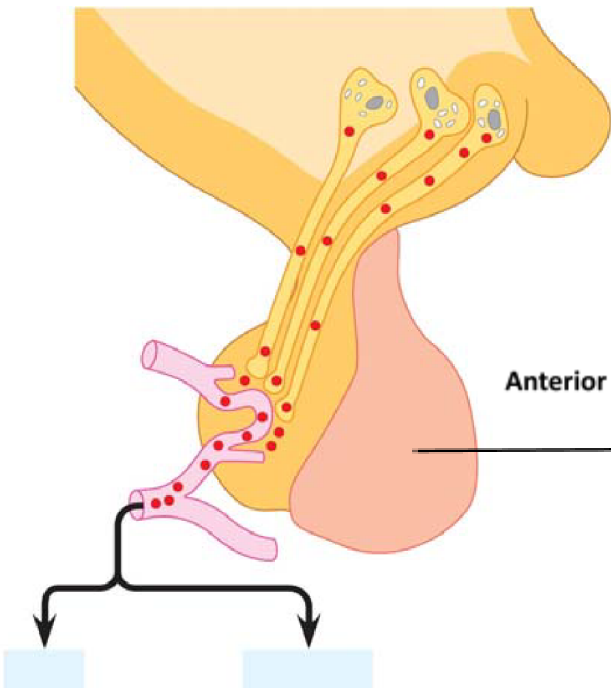
Chapter 45: Hormones and the Endocrine System

1. What is a *hormone*?
2. Why does a hormone elicit a response only with *target cells*?
8. Recall that target cells have receptors for specific hormones. Where are the receptors for lipid-soluble hormones found?
9. Where are the receptors for the water-soluble proteins found? Explain this difference for the two types of hormones.
18. Throughout this course, we have emphasized *feedback loops*. What occurs in a *negative feedback loop*?
19. Complete the following chart for this pair of *antagonistic hormones*.

Hormone	Secreted by	Action
Insulin		
glucagon		

20. On the AP Biology exam, you will be expected to explain a feedback loop. Use this figure to explain the control of blood glucose by *insulin* and *glucagon*. This is a commonly used example, and one you should know.





24. The *hypothalamus* directly secretes hormones that travel to the *posterior pituitary* and regulating hormones that affect secretions of hormones by the *anterior pituitary*. On this sketch, label *hypothalamus*, *anterior pituitary*, and *posterior pituitary* and the two hormones secreted from the posterior pituitary and list the hormones secreted by the anterior pituitary.

27. Let's pull out a few more details from this section. How is *oxytocin* an example of a hormone that is under *positive regulation*?

28. What are *tropic hormones*? Give three examples, and tell what each hormone regulates.

29. What two hormones are antagonistic controllers of blood calcium levels?

30. How does *parathyroid hormone (PTH)* raise blood calcium? (three ways)

31. Fill in the following chart to explain the regulation of blood calcium levels.

