

ANIMAL HORMONES

1. What is a hormone? Endocrine gland? Target cell?
2. What are the three main chemical groups of hormones?
3. What is endocrinology?
4. How do pheromones differ from hormones? How might pheromones be used in insect control?
5. What are the two basic mechanisms of hormone action?
6. List two general principles that govern hormone action.
7. Explain how cyclic AMP acts as a "second messenger" in a cell.
8. Describe how ecdysone and juvenile hormone act together to regulate insect molting(=ecdysis).
9. What does a "tropic" hormone do in vertebrates?
10. What part of the brain is the link between the nervous system and the endocrine system?
11. Why is the pituitary gland called the "master gland"?
12. What is a neurosecretory cell? Where would you go to find one?
13. Construct a chart showing the hormones produced by the anterior and posterior pituitary glands, include the functions and targets of each hormone.
14. What is GH? Is he a good teacher?
15. Where are the following hormones produced and what do they do.

Hormone Where Produced Function

thyroxine

calcitonin

PTH

insulin

glucagon

epinephrine (=adrenalin)

norepinephrine

(=noradrenalin)

testosterone

estrogen

progesterone

prolactin

oxytocin

melatonin

16. How will adrenalin help you during the AP Biology exam in May?
17. What are endorphins? What is "runners high"?
18. What is a goiter? What item at the grocery store is responsible for the decline in goiters in the U.S.?
19. Where are the islets of Langerhans(islet cells)? What do they produce?
20. Using insulin and glucagon, explain negative feed back and the regulation of blood sugar levels.
21. What does the pineal gland do? Why do zoologists like the tautara?