

The Endocrine System  
C17 Study Guide - HL

1. > What is the difference between an endocrine and exocrine glands?
2. What are the two communication systems in the body? Compare them?
3. What is the advantage of enzyme amplification? Why is it discussed in endocrinology?
4. > What two word phrase describes the function of a hormone?
5. > What is the difference between a hormone and a paracrine?
6. >What is the “working model” of a hormone? Draw picture.
7. What is the importance of the hypophyseal-pituitary- axis?
8. >What hormones are hyperglycemic?
9. > Which hormone is hypoglycemic?
10. Be able to list the anterior and posterior hormones and describe their functions:  
(see list at bottom of page)
11. >What is the hypothalamo-hypophyseal tract? Function and structure.
12. >What is the hypothalamo-hypophyseal portal system? Function and structure.
13. >Where are the hormone’s receptors located (hint: hydrophobic vs hydrophilic hormones)?
14. What events happen following hyposecretion of insulin?
15. How did the Greeks describe diabetes 2,500 years ago?
16. > What is the difference between diabetes insipidus, type I diabetes mellitus, type II diabetes mellitus, and gestational diabetes?
17. >What type of molecules are secreted by the adrenal cortex? Location within adrenal gland?
18. >How are hydrophilic and hydrophobic hormones transported?
19. What endocrine gland is most affected by stress?

20. > Explain the anatomy of the pituitary gland and related structures. (see figure in book)
21. > Explain positive and negative feedback mechanisms using oxytocin and thyroid stimulating hormone:
22. What type of molecules are hormones?
23. > What type of hormones are hydrophobic and hydrophilic? How does this affect their function? Location of receptors?
24. > What is a second messenger? What type of hormones use second messengers?
25. What hormones are secreted by the ovaries and how are they regulated?
26. What hormones are secreted by the testes and how are they regulated?
27. The new paradigm shift in endocrinology is referred to as the democratization of the human body. What does this mean?