

Study Guide for Endocrine

1. Create a notecard for every hormone discussed. Include the organ that produces it, effector organs, and action
2. What is a gland?
3. How do paracrine, endocrine, and exocrine glands differ from one another?
4. List some of the functions that are regulated by hormones
5. What type of feedback loop do hormones participate in?
6. What are the requirements of a feedback loop?
7. Why don't all cells respond to a given hormone?
8. What are the three classifications of hormones?
9. What are potential benefits of protein based hormones?
10. How do steroid based hormones circulate through the blood?
11. Which gland is known as the master gland?
12. From what part of the brain does the master gland receive input?
13. Which two regions of the master gland secrete hormones?
14. List all of the hormones secreted by each region of the master gland?
15. Which hormone causes the cells to divide rapidly?
16. Which hormone causes the cells to grow?
17. Which hormone causes melanocytes to secrete more pigment?
18. What is the name of the pigment secreted by melanocytes?
19. Which hormone stimulates a gland to secrete T3 and T4?
20. Which gland secretes T3 and T4?
21. Which hormone stimulates breasts to grow and secrete milk?
22. Which hormone instructs the adrenal gland cortex to grow and regulates secretion of adrenal cortex hormones?
23. Which hormones are secreted by the adrenal cortex?
24. Which hormone stimulates ovulation in females?
25. Which hormone in women stimulates estrogen production in men?
26. Which hormone in men stimulates sperm production in men?
27. Which hormone assists the kidneys to retain water in the presence of hypoperfusion?
28. Which hormone is released in a positive feedback manner by stretch receptors in the uterus?
29. Which gland is located in the anterior neck?
30. Which glands are located on the back of the above gland?
31. What mineral precursor is necessary for the formation of T3?
32. Which cells in the thyroid gland are responsible for the formation of T3?
33. Which hormones regulate the rate of oxygen usage in the body?
34. What is the basal metabolic rate?
35. Which hormones increase glycogenolysis?
36. Which thyroid condition is known to lead to obesity?

37. If the thyroid gland is hypoactive, would the level of thyroid stimulating hormone be higher or lower than average?
38. Which hormone is released when the body's blood calcium level is lower than normal?
39. Which hormone is released when the body's blood calcium level is higher than normal?
40. What are the effects on osteoblasts and osteoclasts?
41. What hormone is secreted by the glands on the back of the thyroid gland?
42. Which gland is located in the anterior, superior thoracic region?
43. What hormone is released by the above gland?
44. What is the stimulus to release the hormone?
45. Where is the adrenal gland located?
46. What are the two regions of the adrenal gland?
47. What hormone signals the hormones of the adrenal cortex?
48. Where is that hormone released from?
49. What are the three classifications of corticoid hormones?
50. What precursor is required for the manufacture of all corticoid hormones?
51. What is the principle mineralocorticoid?
52. What are its effects?
53. When would it be released? High or low blood pressure
54. What is the most important glucocorticoid hormone in the body?
55. What is the definition of glycogenolysis and gluconeogenesis?
56. What is the principle glucocorticoid?
57. What are the effects of cortisol on blood glucose level?
58. What are the effects of cortisol on adipose tissue?
59. What are androgens?
60. Are they secreted in men and women? Or just men?
61. What branch of the nervous system stimulates the adrenal medulla?
62. What two hormones are secreted by the adrenal medulla?
63. Which hormone causes the blood vessels to constrict?
64. Which hormone causes the bronchial passages to dilate?
65. Which hormone causes the pupils to dilate?
66. Which hormone causes the heart to beat faster and harder?
67. How does the level of glucose vary when adrenal medulla hormones are released?
68. What are the effects on cardiac output?
69. Which glands secrete progesterone?
70. What does progesterone regulate?
71. What does estrogen do?
72. When does estrogen production begin?
73. What hormone is secreted by the gonads in males?
74. Describe endocrine, exocrine and paracrine functions of the pancreas?
75. Where is the pancreas located?
76. What type of cells in the pancreas have endocrine functions?
77. Which type of cell is present in the greatest amount?

78. What hormone is released by each of the cell types?
79. Which hormone causes glycogenolysis and gluconeogenesis to occur?
80. Which hormone regulates cellular uptake of glucose?
81. Which hormone brings glucose into cells?
82. What are the effects of insulin on blood glucose level?
83. What are the effects on gluconeogenesis and glycogenolysis by the hormone insulin?
84. Which hormone would cause a person to gain weight?
85. What are the effects of glucagon on blood glucose levels?
86. Where is the pineal gland located?
87. What hormone is released by the pineal gland?
88. How is melatonin linked to temperature regulation?
89. What are prostaglandins derived from?
90. How do prostaglandins affect levels of pain?
91. What temporary structure acts as an endocrine gland?
92. What hormone is secreted by that gland?
93. List three causes of endocrine disorders
94. Name one disease that has environmental/ infectious affects?
95. What happens when the pituitary gland is hyperactive?
96. What happens when the pituitary gland is hypoactive?
97. What happens to blood pressure in states of pituitary hypoactivity?
98. What are symptoms of thyroid gland hyperfunction?
99. What are symptoms of thyroid gland hypofunction?
100. What would happen to blood calcium levels in states of thyroid hyperactivity?
101. Hypoactivity?
102. List some symptoms of low blood calcium?
103. List some symptoms of high blood calcium?
104. What is the cause of Cushings syndrome?
105. What is the cause of Addisons disease?
106. Which cells are damaged in the pancreas that causes diabetes?
107. What happens to the blood pressure during times that blood glucose levels are high?
108. What causes this effect?
109. What compound is formed by the incomplete metabolism of fats?
110. How do you know if a patient has that compound present?
111. Are patients with high blood glucose levels always going to be acidotic?
112. What are the three Ps of diabetes?
113. How is diabetes treated?