

CSM ANATOMY ENDOCRINE SYSTEM REVIEW SHEET

OVERVIEW

1. Describe the characteristics of the endocrine system. How does this system work with the Nervous system? How does it differ from the nervous system?

TYPES OF HORMONES

2. Describe the two molecular types of hormones. What is meant by "target cell"? What features do target cells have in common?

HORMONE ACTION

3. List the ways a hormone may alter cellular function.

HYPOTHALAMIC-HYPOPHYSEAL SYSTEM

4. Describe the role of the hypothalamus in the endocrine system. Show how the releasing factors or inhibiting factors control the anterior pituitary.
5. Describe the neurons that release ADH and oxytocin.
6. Describe the functions of the anterior pituitary hormones, what is meant by the term trophic hormone? Describe the functions of the posterior pituitary hormones.
7. What role does synthetic oxytocin have in the delivery room? What are the medical uses of growth hormone? What are some nonmedical uses of GH

THYROID GLAND

8. Identify thyroid follicles. Describe the role of triiodothyronine and thyroxine (T_3 and T_4) in the body. What are the diseases associated with abnormal quantities of these hormones?
9. Describe the target and role of calcitonin.

PARATHYROID GLAND

10. Describe the role of parathyroid hormone.

ADRENAL GLAND

11. Describe the major parts of the adrenal gland. Which part is neural, and which is epithelial in origin? What hormone groups come from each part?
12. What is the role of epinephrine in the body?
13. Describe the targets and effects of aldosterone, adrenal cortical androgens and estrogens, and cortisol. These are the "other" steroid hormones (beside the ones produced by the gonads).
14. How is cortisol used medically? The underlying sex hormones androgens and estrogens are responsible for masculinizing of women who have undergone menopause, and feminizing of those men who have lost their testes.

PANCREAS

15. Describe the location of the pancreatic islets. What is the role of insulin and glucagon? Describe the condition of diabetes mellitus.

KIDNEYS

16. Describe the role of erythropoietin. How is this drug used medically? How is it used as an ergogenic aid?