

Name _____

BIOL/HPS 3752
Quiz 2
WINTER 1998

Short Answer

1. Explain AND diagram the feedback loop that controls the regulation of thyroid hormone (T3/T4) concentration in the blood (5 points).

2. Compare and contrast the mechanisms of action of lipid-soluble vs. water soluble hormones (4 points).

Completion:

1. List the 3 target tissues for ADH? _____.
2. The role of cyclic AMP in the function of water-soluble hormones is to act as a _____.
3. Lower than normal water concentration in the blood is sensed by osmoreceptors in the _____ which activate the cells that synthesize and release the hormone _____.
4. The glucocorticoid that is most abundant and that is responsible for most of glucocorticoid activity is _____.
5. The parafollicular cells (C cells) of the thyroid gland secrete _____.
6. Acromegaly results from a hypersecretion of which hormone? _____
7. The anatomical term for the Adams apple is the _____.
8. Exophthalmos is a characteristic sign of _____.
9. Emphysema is a disease that affects the respiratory system in what specific way? _____.
10. Identify the structure labeled A _____.

MULTIPLE CHOICE

11. Destruction of the beta cells of the pancreas results in:
 - A. Type I diabetes mellitus
 - B. Type II diabetes mellitus
 - C. diabetes insipidus
 - D. hyperglycemia
 - E. pheochromocytoma
12. The pleura is:
 - A. the serous membrane surrounding the lungs
 - B. the membrane gases must cross during external respiration
 - C. the lining of the alveoli and respiratory passages
 - D. the lung tissue itself
 - E. both A and B are correct

13. The vocal folds are part of the:

- A. nasal cavity
- B. laryngopharynx
- C. trachea
- D. larynx
- E. lungs

14. The trachea extends from the:

- A. larynx to vertebra T5
- B. soft palate to the hyoid bone
- C. atlas to vertebra C7
- D. epiglottis to the thyroid cartilage
- E. foramen magnum to vertebra C5.

15. The function of the epiglottis is:

- A. to hold the pharynx open during speech
- B. produce surfactant
- C. close off the nasal cavity during swallowing
- D. close off the larynx during swallowing
- E. vibrate to produce sound as it passes over it

16. Which pairs of hormones are NOT antagonists?

- A. GHRH- somatostatin
- B. PTH- calcitonin
- C. insulin-glucagon
- D. aldosterone-atrial natriuretic peptide
- E. aldosterone-ADH

BONUS:

Define up-regulation and down regulation as they relate to hormone action. Under what circumstances would you expect to see these phenomena? (3 points added to total quiz score).