

Objectives on Anatomy & Physiology of Endocrine System

1. Which of the following is the master endocrine gland?

- A. Thyroid
- B. Pituitary
- C. Adrenal
- D. Pineal

2. The pituitary gland is located in the:

- A. Hypothalamus
- B. Sella turcica
- C. Optic chiasm
- D. Third ventricle

3. The posterior pituitary stores and releases which hormones?

- A. ACTH and GH
- B. Oxytocin and ADH
- C. FSH and LH
- D. Prolactin and TSH

4. Which hormone increases basal metabolic rate?

- A. Cortisol
- B. Thyroxine (T₄)
- C. Insulin
- D. Parathyroid hormone

5. Aldosterone is secreted from the:

- A. Adrenal medulla
- B. Zona fasciculata
- C. Zona glomerulosa
- D. Zona reticularis

6. Which hormone regulates blood calcium by increasing osteoclast activity?

- A. Calcitonin
- B. Parathyroid hormone
- C. Aldosterone
- D. Insulin

7. Which hormone is secreted by pancreatic beta cells?

- A. Insulin

- B. Glucagon
- C. Somatostatin
- D. Amylin

8. Melatonin is secreted by the:

- A. Thymus
- B. Pineal gland
- C. Pituitary gland
- D. Pancreas

9. Which of the following is an example of a steroid hormone?

- A. Insulin
- B. Cortisol
- C. ADH
- D. Epinephrine

10. The hypothalamus controls the anterior pituitary via:

- A. Nerve impulses
- B. Hypophyseal portal system
- C. Spinal cord
- D. Lymphatic vessels

11. Which hormone stimulates milk ejection during lactation?

- A. Prolactin
- B. Oxytocin
- C. Progesterone
- D. LH

12. Which gland atrophies after puberty?

- A. Pituitary
- B. Thymus
- C. Adrenal
- D. Pineal

13. The islets of Langerhans are found in the:

- A. Thyroid
- B. Pancreas
- C. Kidney
- D. Adrenal

14. Which hormone is involved in circadian rhythm regulation?

- A. Cortisol

- B. Melatonin
- C. TSH
- D. Glucagon

15. The zona fasciculata of the adrenal cortex secretes:

- A. Mineralocorticoids
- B. Glucocorticoids
- C. Catecholamines
- D. Androgens

16. Which hormone promotes glycogenolysis in the liver?

- A. Insulin
- B. Glucagon
- C. Prolactin
- D. ACTH

17. Which pituitary hormone stimulates the thyroid gland?

- A. LH
- B. TSH
- C. ACTH
- D. GH

18. Which hormone has both endocrine and exocrine functions?

- A. Pancreatic hormones
- B. Thyroid hormones
- C. Adrenal hormones
- D. Pituitary hormones

19. Which endocrine gland also functions as an immune organ?

- A. Thymus
- B. Pancreas
- C. Pituitary
- D. Adrenal

20. The hormone responsible for uterine contractions during labor is:

- A. Estrogen
- B. Progesterone
- C. Oxytocin
- D. Relaxin

21. The hormone that lowers blood glucose is:

- A. Insulin

- B. Glucagon
- C. Cortisol
- D. Epinephrine

22. Which of the following is an amine hormone?

- A. Thyroxine
- B. Aldosterone
- C. Cortisol
- D. Testosterone

23. Negative feedback in endocrine regulation helps to:

- A. Increase hormone secretion
- B. Maintain homeostasis
- C. Stop hormone synthesis permanently
- D. Stimulate new gland growth

24. The adrenal medulla secretes:

- A. Cortisol
- B. Epinephrine and norepinephrine
- C. Aldosterone
- D. Testosterone

25. Which hormone stimulates red blood cell production?

- A. Renin
- B. Erythropoietin
- C. Aldosterone
- D. Cortisol

26. Which hormone increases reabsorption of water in kidneys?

- A. Aldosterone
- B. ADH
- C. PTH
- D. Oxytocin

27. The endocrine portion of the pancreas is located in the:

- A. Acini
- B. Islets of Langerhans
- C. Ducts
- D. Nephrons

28. Which hormone regulates female secondary sexual characteristics?

- A. Testosterone

- B. Estrogen
- C. Progesterone
- D. Prolactin

29. Hypersecretion of GH in childhood leads to:

- A. Acromegaly
- B. Gigantism
- C. Dwarfism
- D. Cretinism

30. The hormone inhibiting prolactin secretion is:

- A. Dopamine
- B. Oxytocin
- C. Serotonin
- D. Cortisol

31. Which structure connects the hypothalamus to the pituitary gland?

- A. Infundibulum
- B. Corpus callosum
- C. Thalamus
- D. Pineal stalk

32. Which hormone is secreted in response to low blood sodium?

- A. Cortisol
- B. Aldosterone
- C. Insulin
- D. ADH

33. Which hormone is important in stress response?

- A. Cortisol
- B. Insulin
- C. Estrogen
- D. TSH

34. The 'fight-or-flight' response is mediated by:

- A. Insulin
- B. Cortisol
- C. Catecholamines
- D. Melatonin

35. In females, LH surge triggers:

- A. Menstruation

- B. Ovulation
- C. Fertilization
- D. Implantation

36. Which hormone increases intestinal calcium absorption by stimulating vitamin D activation?

- A. PTH
- B. Calcitonin
- C. Aldosterone
- D. Cortisol

37. Goiter is usually associated with dysfunction of the:

- A. Pancreas
- B. Thyroid
- C. Adrenal
- D. Pituitary

38. Which gland lies just superior to the kidneys?

- A. Pancreas
- B. Adrenal
- C. Thymus
- D. Thyroid

39. Which endocrine gland is bilobed and located in the neck?

- A. Thymus
- B. Thyroid
- C. Pituitary
- D. Pineal

40. The hormone responsible for regulating sleep–wake cycles is:

- A. Cortisol
- B. Melatonin
- C. Insulin
- D. ACTH