

# Chapter 20 Endocrine System

*Anatomy and Physiology Text and Laboratory Workbook; Davenport, Stephen*

## **Introduction**

- 1 What is direct communication between cells? How do the cells physically contact one another? What are three examples?
- 2 What is paracrine communication? What are paracrine factors? Why don't they affect distant cells?
- 3 What is the definition of a hormone? What is endocrine communication?
- 4 Generally speaking is hormonal action long or short term responses?
- 5 Generally speaking is neural action for long or short term responses? What is synaptic communication?
- 6 What are four similarities between the nervous system and the endocrine system?
7. What is an endocrine reflex? Are they mostly under control of negative or positive feedback mechanisms?
- 8 What organ serves as the highest level of endocrine control and integrates the nervous and endocrine system?
- 9 What are the three mechanisms involved in hypothalamic regulation?
10. What does the hypothalamus secrete to control the pituitary gland? The activity of what other endocrine glands is under the control of the pituitary?
11. What type of control does the hypothalamus exert on the adrenal medullae (what hormones are released)?
- 12 How is the hypothalamus involved with the posterior pituitary? What hormones are released?

## **Pituitary Gland**

- 13 Describe the anatomy of the pituitary gland. List the hormones produced, give their targets and effects.

## **Thyroid Gland**

- 14 Describe the anatomy of the thyroid gland. List the hormones produced, give their targets and effects.

## **Parathyroid Gland**

- 15 Describe the anatomy of the parathyroid gland. List the hormone produced, give its targets and effects.

## **Adrenal Gland**

- 16 Describe the anatomy of the adrenal gland. List the hormones produced, give their targets and effects.

## **Pancreas**

- 17 Describe the anatomy of the pancreas. List the hormones produced, give their targets and effects.

## **Testis**

- 18 Describe the anatomy of the testis. List the hormones produced, give their targets and effects.

## **Ovary**

- 19 Describe the anatomy of the ovary. List the hormones produced, give their targets and effects.

## **Thymus**

- 18 Describe the anatomy of the thymus. List the hormone produced, give its targets and effects.