

Endocrine System Worksheet  
Biology 100C

1. What is an **Endocrine Gland**?

**This is a gland that secretes hormones**

2. Endocrine glands are also called ductless glands because they secrete their chemical messengers into body fluids (usually the blood).

3. The chemical messenger secreted by an endocrine gland is called a

**Hormone**

4. How does an Endocrine Gland differ from an Exocrine Gland?

**Exocrine glands secrete fluid into a duct which conveys the products to the location**

5. What are **Neurosecretory Cells** and why do they show that the endocrine system and the nervous system are related structurally, chemically, and functionally?

**They are specialized nerve cells that secrete hormones. Several chemicals serve as both hormones and neurotransmitters.**

6. Name three different local regulators, tell what the chemical composition is for each one, and give one function for each local regulator.

**Nitric Oxide (NO) – secreted by neurons as a neurotransmitter, by WBC kills bacteria and cancer cells, by endothelia cells in blood vessels causes smooth muscle to relax.**

**Growth Factors – these are peptides and proteins, stimulate growth of various tissues**

**Prostaglandins – modified fatty acids, often derived from lipids of cell membrane,**

7. Where could a hormone receptor be located?  
**On cell membrane, in cytoplasm or in nucleus**

8. A protein hormone and many peptide hormones would bind with a receptor located in this place. **On cell membrane**
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