# The Endocrine System

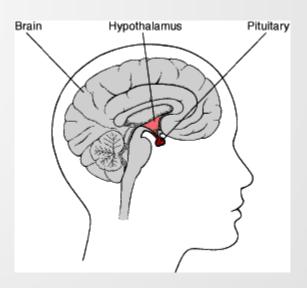
The endocrine system controls and excites growth and affects emotions and behavior in people.

### **Endocrine System**

- In addition to the nervous system, is a communication system for sending information to and from the brain.
- It sends chemical messages, called Hormones.
- Hormones, distributed by blood and other fluids.
- Hormones effect: growth, metabolic processes (effects how much energy you have to perform tasks)

## Pituitary Gland

- Master gland.
- Located near midbrain and hypothalamus.
- Secretes large numbers of hormones.
- Sends out messages to correct any imbalances.



### Thyroid, Adrenal, Sex Glands

- Thyroid Gland: produces hormone Thyroxine.
  - Too little makes people lazy, too much causes people to lose weight, sleep and be overactive.
  - Adrenal Gland: become active when person is angry or frightened.
  - Sex glands: testes-male, ovaries-female

#### Heredity and Environment

- Heredity is the transmission of characteristics from parents to children.
  - Genes are the basic units of heredity; they are reproduced and passed along from parents to child.
  - All the effects that genes have a on behavior occur through their role in building and modifying the physical structures of the body.
- Environment is the world around you.
- Heredity and environment affect your body and behavior.

#### Nature V. Nurture

- Nature: characteristics that a person inherits, his biological makeup.
- Nurture: environmental factors, such as family, culture, education, and individual experiences.
- Galton study of 1,000 families...heredity.
- Watson, environment can play a role.

