

Endocrine System

Endocrine System - regulates body activities by producing messengers in glands

Glands - specialized organs that make substances that control and regulate body processes

Hormones - chemical messengers.
- released directly into the bloodstream to be carried to other parts of the body

Pituitary - in the brain

- releases hormones that control other glands
- releases growth hormone
- controls ovaries in females and testes in males.

Thyroid - regulates metabolism

- Causes bones to store calcium

↳ Parathyroids - maintain calcium balance in blood

Thymus - allows body to make white blood cells

Adrenals - prepare body for emergencies

- regulate blood pressure
- regulate metabolism
- control salt and water balance

Pancreas - largest

- regulates blood sugar levels

Ovaries - Female

- affect female traits

Testes - male

- affect male traits

Epinephrine - released by the adrenal gland

- ↳ when frightened or angry
- makes heart beat faster

Steroids - affect metabolism and stimulate protein production in tissue

Insulin - produced by the pancreas
lowers blood sugar

Glucagon - produced by the pancreas
causes blood sugar to rise

Puberty - early teen years

pituitary gland send signal to ovaries / testes to start producing hormones.