

Endocrine and Reproductive Systems Fact Sheet

What does the Endocrine System do? Endocrine glands secrete (give off) chemical messengers (hormones) into the blood which cause the body to react. Regulates body systems so that they work together.

The Organs of the Endocrine System: Glands are the major organs of the endocrine system. Glands are clusters of endocrine cells found in different locations throughout the body. Glands produce hormones which go into the blood and take chemical messages to targeted cells throughout the body.

How do hormones help us respond to internal and external stimuli?

Pineal Gland

Located in the brain; Produces melatonin - melatonin is a hormone which regulates the wake/sleep cycle; It makes us sleepy when it gets dark.

Pituitary Gland

Located inside the brain; Produces hormones which affect human growth and reproduction; Tells our bodies when to grow and when to stop growing.

Thyroid Gland

Located below the larynx (voicebox) in the front of the throat ; Produces hormones which regulate the metabolism; Can change how slow/fast our cells work and our heart beats, etc.

Parathyroid

Located behind the thyroid on each side; Regulate calcium levels in the body to control bone growth and nerve impulses.

Thymus

Located in the upper chest behind the sternum or breastbone; Produces hormones that stimulate the body's immune system.

Adrenal Glands

One located on top of each kidney; Produces adrenaline which helps your body prepare for the "fight or flight" reflex

Produces corticosteroids which helps regulate the body's salt/water balance, stress response, and metabolism

Pancreas

Made of clusters of tissue called islets; Produces the hormone insulin; Insulin is released in the blood when you eat foods with sugar; When you don't produce enough insulin to pick up all the sugar you eat, you can get diabetes

What does the Reproductive System do?

Produces hormones which stimulate growth of sex cells (eggs and sperm); Allows the human species to reproduce ourselves through sexual reproduction where offspring are not identical to the parents

Organs of the Reproductive System

Ovaries

Found in females; Produce female hormones estrogen and progesterone which control the menstrual cycle; Produces human egg cells

Testes

Found in males; Produce male hormone testosterone; Produces human sperm cells

