



# Hormones: Your Body's Chemical Messengers

KS3 Ages 11-14 ⌚ 3 min read

## What Are Hormones?

**Hormones** are special chemicals made by your body that carry messages between different parts. They travel through your **bloodstream** to tell your organs and tissues what to do. Think of them like tiny instruction packets that keep your body running smoothly.

Hormones are made by parts of your body called **glands**. The biggest and most important gland is the **pituitary gland**, which is about the size of a pea and sits inside your brain. Other glands include the **thyroid** in your neck, the **pancreas** near your stomach, and your **adrenal glands** on top of your kidneys.

Think of it like a text message system: your glands send chemical messages through your bloodstream to tell different body parts what to do, just like texting tells your friends what you're planning.

## What Do Hormones Do?

Hormones control lots of important things. They help you grow taller and stronger as you get older. The hormone **insulin** helps your body use sugar from food for energy. **Adrenaline** is the hormone that makes your heart race when you're scared or excited—it prepares your body for action.

Hormones also affect your mood and how you feel. The hormone **serotonin** helps make you happy, while **melatonin** makes you feel sleepy at night. During **puberty**, hormones called **testosterone** and **estrogen** cause big changes in your body.

Think of it like a control centre: if your brain is the boss, hormones are like the managers passing orders to different departments to keep everything working together.

## Why Do We Need Them?

Without hormones, your body couldn't work properly. They keep your temperature right, control how thirsty you are, and manage your energy levels. They even help you handle stress and stay healthy. When hormone levels aren't right, it can make you feel tired, moody, or sick.

Scientists study hormones to help people who have health problems caused by hormones not working correctly. Understanding hormones helps doctors treat conditions like **diabetes** and thyroid problems.