

Parts of the Nervous System

The nervous system is divided into the **central nervous system** and the **peripheral nervous system**.

Central nervous system (CNS)

The brain and the spinal cord make up the central nervous system. The brain is protected inside the skull and from there controls all the body functions by sending and receiving messages through nerves.

Peripheral nervous system (PNS)

This refers to the nerves outside of the brain and spinal cord. The **PNS** connects the **CNS** to the organs and other body parts so messages can travel from the body to the brain.

The peripheral nervous system is then divided into the **somatic nervous system** and the **autonomic nervous system**.

Autonomic nervous system

This group of nerves works automatically. We don't have to think about them, the brain does it all for us. It would take a lot of concentration if we had to constantly tell our heart to beat or our digestive system to release certain enzymes. I'm sure I'd forget and would be dead in no time! Fortunately, the autonomic nervous system takes care of this for us.

Somatic nervous system

These are the nerves that we actively control, responsible for muscle movements (like when we are jumping with our legs or moving our arms) and reflexes.

Reflexes

Our bodies are super smart. Sometimes we need to move so fast that our brains don't have time to think. So our body just bypasses (s the brain. This happens when we touch something hot. Our hand actually moves before the brain tells it to. The brain eventually finds out what is going on, but our body has done the smart thing and moved first. Your doctor will test out your reflex by hitting your knee in a certain place to see if your leg will move without you thinking about it.

Fun Facts About the Nervous System

- There are more nerve cells in the brain than stars in the Milky Way.
- Nerves are covered by a substance called myelin that helps messages move quickly through the body.
- The spinal cord is just 48 cm long, but it holds over 10 million neurons.
- You can help your nervous system stay fast and healthy by exercising and eating a balanced diet!