

Organisation of the Nervous System Key Information

The nervous system in humans is divided into two main parts: the central nervous system (CNS), which consists of the brain and spinal cord, and the peripheral nervous system (PNS), which includes all the nerves outside the CNS. The PNS is further divided into the somatic nervous system, which controls voluntary actions like moving muscles, and the autonomic nervous system, which controls involuntary functions such as heart rate and digestion. The autonomic system is split into the sympathetic nervous system, which prepares the body for "fight or flight" responses, and the parasympathetic nervous system, which promotes "rest and digest" activities. This organisation allows for rapid, coordinated control of body functions.

Key words & definitions

Key word	Key information
Central Nervous System (CNS)	The part of the nervous system consisting of the brain and spinal cord; it processes information and coordinates responses.
Peripheral Nervous System (PNS)	All the nerves outside the CNS that connect it to the rest of the body.
Somatic Nervous System	The part of the PNS responsible for voluntary movements by controlling skeletal muscles.
Autonomic Nervous System	The part of the PNS that controls involuntary functions such as heart rate, digestion, and breathing.
Sympathetic Nervous System	A division of the autonomic nervous system that prepares the body for "fight or flight" responses by increasing heart rate and redirecting blood flow.
Parasympathetic Nervous System	A division of the autonomic nervous system that promotes "rest and digest" functions by slowing the heart rate and increasing digestion.
Voluntary Actions	Movements or activities controlled consciously, typically involving skeletal muscles