

# Autonomic nervous system

[Health & Medicine](#)



**ASSIGN  
BUSTER**

Autonomic nervous system - 'the part of the nervous system of vertebrates that controls involuntary actions of the smooth muscles and heart and glands' -Definition adapted from the Medical Dictionary.

The nervous system of the human body consists of a central processing unit known as the brain and from there the nerves extend out to every inch of the body. The nervous system exists in our body to regulate the involuntary actions like heart beat and breathing by transmitting motor impulses to the organs responsible for carrying out those functions. The digestive system is one for the systems that is controlled by the autonomic nervous system. Parasympathetic and the sympathetic nervous systems are the two parts that the autonomic nervous system is divided into.

The parasympathetic nervous system as the name suggest is directly connected to the peripheral nervous system where the nerve fibers arise from the central nervous system and has a craniosacral outflow. It controls those stimuli when the body is at rest, for example when the bright headlights of a car are shone into the driver's eyes while driving at night, a message is immediately relayed through the sensory fibers to the brain which will send back a signal that passes along the third cranial nerves to the pupil resulting in the automatic contraction of the pupil to reduce the amount of blinding light reaching the sensory cells in the eye. The sympathetic nervous system deals with the fight or flight reaction, since that is not an everyday situation it deals with the hemostasis in the body at a constant rate. The fight of flight reaction is when you are walking down a lonely road and you see a man with a gun moving steady towards you, here the sympathetic nervous system kicks in, using the shorter in length, preganglionic neurons which originate from T1- L2 and make their way

<https://assignbuster.com/autonomic-nervous-system/>

across to a ganglion where they will synapse with a longer postganglionic neuron transmitted the message to the brain telling you to run for your life.

#### Works Cited

THE MEDICAL NEWS | from News-Medical. Net - Latest Medical News and Research from Around the World." THE MEDICAL NEWS | from News-Medical. Net - Latest Medical News and Research from Around the World. N. p., n. d. Web. 23 May 2012. .