

The mouth and face are the location for 30–40 per cent of the body's sensory and motor nerves. This is sensation from the various viscera (internal organs) or organs of the body, as well as from the mucous membrane from the tonsils on down through the digestive and respiratory tract. The brain coordinates and sends out messages that cause muscles to contract, stimulates glands to secrete, regulates numerous functions, and performs many of these tasks without true consciousness on our part. The somatic nervous system consists of peripheral nerve fibers that pick up sensory information or sensations from the peripheral or distant organs (those away from the brain like limbs) and carry them to the central nervous system. When you feel stressed, the sympathetic nervous system, or 'fight or flight' response kicks in. At this point, the sympathetic nervous system becomes dominant and diverts blood from the digestive system to your leg muscles, enabling you to run from danger. The second category of the nervous system is the voluntary or peripheral nervous system, which comprises all nerves that extend outward from the brain, spinal cord. The system has motor and sensory fibers; the motor fibers supply smooth and cardiac muscle and glands, and the sensory fibers carry what is called visceral sensation. A motor message then left the brain and travelled down the spinal cord, and a second motor neuron carried the message out of the spinal cord and along a peripheral nerve to muscles that pulled the finger out of the drawer. The peripheral nervous system is made up of sensory neurons, ganglia which are groups of neurons, and nerves connecting to other nerves and the central nervous system. These also consist of motor nerve fibers that come out of the brain and take the messages for movement and necessary action to the skeletal muscles. These axons cause chemicals or neurotransmitters to be released at a synapse or junction. For example, on touching a hot object, the sensory nerves carry information about the heat to the brain, which in turn, via the motor nerves, tells the muscles of the hand to withdraw it immediately. The neuron's cell body that carries the information often lies within the brain or spinal cord and projects directly to a skeletal muscle. The autonomic nervous system is further divided into parasympathetic and sympathetic functions. When you feel relaxed, the parasympathetic nervous system is dominant and allows your body to function optimally. Neurons are bundles of fibers. The fibres are called axons. It has both