



MG31333 | HUMAN NERVOUS SYSTEM, 1/2 OF NATURAL SIZE

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Half life-size anatomical model offering a comprehensive overview of the human central and peripheral nervous system. The head is open, revealing the brain and cerebellum, while the path of the main nerves is clearly highlighted in relation to the skeleton. Important anatomical structures are numbered and colored for easy understanding.

Applications:

Ideal for the study and demonstration of the central and peripheral nervous system in educational and clinical settings. Support tool for learning in anatomy, physiology and pathophysiology.

Technical Differentiators:

- * Detailed representation of the central and peripheral nervous system.
- * Numbered and color-coded anatomical structures.
- * Manufactured with durable synthetic material.
- * Mounted on a durable polymer base.

3D Technology and Augmented Reality:

Our anatomical models offer an innovative visual complement through information cards that activate 3D models viewable in augmented reality (AR). This exclusive interactive platform stimulates learning, allowing for comparative analysis of anatomical structures and offering opportunities for continuing education in anatomy, physiology and pathophysiology.

Technical Specifications:

- * Scale: Half life-size
- * Material: Durable synthetic material
- * Base: Durable polymer

Main Structures:

Brain: The brain is the body's control center, responsible for thinking, memory, emotion, language, and various other cognitive functions. It is divided into two hemispheres, each controlling the opposite side of the body, and is composed of different lobes that play distinct roles in information processing.



Parietal lobe: The parietal lobe, located in the upper part of the brain, plays a fundamental role in processing sensory information, including touch, temperature, pain, and pressure. It is also involved in spatial perception, orientation, and body awareness.

Frontal lobe: The frontal lobe, located at the front of the brain, is responsible for executive functions such as planning, decision-making, problem-solving, and behavior control. It also plays an important role in language, working memory, and voluntary movement.

Occipital lobe: The occipital lobe, located at the back of the brain, is the main visual processing center. It receives information from the eyes and interprets it to create our perception of the visual world.

Temporal lobe: The temporal lobe, located on the sides of the brain, plays a crucial role in auditory processing, memory, and object recognition. It is also involved in language and emotions.

Cerebellum: The cerebellum, located in the posterior part of the brain, coordinates movement, balance, and posture. It receives information from muscles, joints, and other sensory systems to refine movement and ensure it is smooth and precise.

Cervical plexus: The cervical plexus is a network of nerves located in the neck, formed by the nerve roots of the first four cervical nerves (C1-C4). It innervates the muscles of the neck, shoulder, and diaphragm, in addition to providing sensitivity to the skin of the head, neck, and upper chest.

Bulb: The bulb, or medulla oblongata, is the lower part of the brainstem, connecting the brain to the spinal cord. It controls vital functions such as breathing, heart rate, blood pressure, and reflexes such as coughing, sneezing, and vomiting.

Phrenic nerve: The phrenic nerve is an important nerve that originates in the cervical plexus and innervates the diaphragm, the main muscle responsible for breathing. Stimulation of the phrenic nerve causes the diaphragm to contract, allowing inhalation.

Brachial plexus: The brachial plexus is a complex network of nerves that originates in the spinal cord, in the neck region, and extends to the arm. It is responsible for providing motor and sensory innervation to the upper limb, including the shoulder, arm, forearm, and hand.

Other structures can be verified directly on the physical piece or in the interactive 3D model.

Customizable Skin Tones:

This anatomical model offers the option of choosing between three skin tones to better represent human diversity and meet different educational and clinical needs. It is possible to choose between light skin, intermediate tone and dark skin, providing greater realism and



inclusion during training and demonstrations.

About Anatomical Models:

They are developed with resin replication technology, supplying the shortage of natural anatomical pieces for teaching and research. They present all the essential morphological characteristics with excellent cost-benefit, resistance, manual painting and numbering for precise identification of structures.

List of all visible structures:

- Brain
- Parietal lobe
- Frontal lobe
- Occipital lobe
- Temporal lobe
- Cerebellum
- Cervical plexus
- Medulla oblongata
- Phrenic nerve
- Brachial plexus
- Supraclavicular nerve
- Muscular branch
- Intercostal nerves
- Spinal cord
- Dorsal ramus
- Ulnar nerve
- Median nerve
- Radial nerve
- Palmar branch
- Lumbar plexus
- Iliohypogastric nerve
- Sacral plexus
- Obturator nerve
- Femoral nerve
- Sciatic nerve
- Common fibular nerve
- Tibial nerve
- Medial plantar nerve
- Lateral plantar nerve
- Sural nerve
- Saphenous nerve
- Deep fibular nerve
- Superficial fibular nerve