



MG21717 | HUMAN BRAIN WITH ARTERIES, 9 PARTS







This highly detailed and accurate anatomical brain model is divided into 9 parts to facilitate the study of brain structures and the arterial system. It includes the frontal, parietal, temporal, and occipital lobes, the cerebellum, the brainstem, and the basilar artery, with blood vessels represented in rich detail, including the circle of Willis. The model is mounted on a polymer base for better visualization and handling.

Applications:

- * Study of neuroanatomy in schools and universities.
- * Surgical dissection training.
- * Patient explanations.
- * Medical and scientific education.
- * Demonstration of procedures in classrooms.

Technical Advantages:

- * Detailed representation of cerebral and vascular structures, including the circle of Willis.
- * High-quality natural molding.
- * Manufactured from stable and resistant synthetic material.
- * Numbered and hand-painted for easy identification of structures.



- * Includes an information card identifying the structures.
- * Resin approved in toxicological tests.
- * High-fidelity replicas.
- * High durability and possibility of repair in case of damage.

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 interactive platform aids learning, allowing for comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

- * Material: Synthetic resin.
- * Scale: Life size.
- * Includes polymer base.
- * Manual numbering and painting.
- * Information card included.

Main Structures:

Frontal Lobe: The frontal lobe is the largest lobe of the brain, located in the anterior part of the head. It is responsible for higher-order cognitive functions such as planning, decision-making, working memory, and voluntary behavior. It contains the prefrontal cortex, crucial for executive functions.

Parietal Lobe: The parietal lobe is located posterior to the frontal lobe and is responsible for processing sensory information such as touch, temperature, pain, and pressure. It also plays a role in spatial perception and navigation.

Temporal Lobe: Located below the parietal lobe, the temporal lobe is involved in hearing, memory, language processing, and object recognition. It contains the hippocampus and amygdala, key structures for memory and emotions.

Occipital Lobe: Located in the posterior part of the brain, the occipital lobe is the primary visual processing center. It receives information from the optic nerve and interprets it, enabling vision.

Internal Carotid Artery: The internal carotid artery is one of the main arteries that supply blood to the brain. It branches into several smaller arteries that supply oxygenated blood to



different brain regions.

Trigeminal Nerve: The trigeminal nerve is a mixed cranial nerve (sensory and motor) that innervates the face, transmitting sensations of touch, temperature, pain, and proprioception, as well as controlling the muscles of mastication.

Oculomotor Nerve: The oculomotor nerve is a motor cranial nerve that controls the extrinsic muscles of the eye, responsible for eye movements. It also innervates the levator palpebrae superioris muscle.

Abducens Nerve: The abducens nerve is a motor cranial nerve that innervates the lateral rectus muscle of the eye, responsible for abduction (lateral movement) of the eyeball.

Facial Nerve and Intermediate Nerve: The facial nerve is a mixed cranial nerve that controls the muscles of facial expression, in addition to conducting parasympathetic fibers to the salivary and lacrimal glands. The intermediate nerve carries gustatory sensory fibers.

Vestibulocochlear Nerve: The vestibulocochlear nerve is a sensory cranial nerve responsible for hearing and balance. It has two divisions: the cochlear (hearing) and the vestibular (balance).

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

About the Anatomical Models:

They are developed with resin replication technology, meeting the demand for anatomical pieces for teaching and research. They present the main morphological characteristics with excellent cost-benefit, resistance, manual painting and numbering for precise identification of structures.

List of all visible structures:

- frontal lobe
- parietal lobe
- temporal lobe
- occipital lobe
- internal carotid artery
- trigeminal nerve
- oculomotor nerve
- abducens nerve
- facial nerve and intermediate nerve
- vestibulocochlear nerve



- pyramid
- olive
- hypoglossal nerve
- glossopharyngeal nerve
- vagus nerve
- accessory nerve
- accessory nerve
- posterior inferior cerebellar artery
- anterior inferior cerebellar artery
- frontal lobe