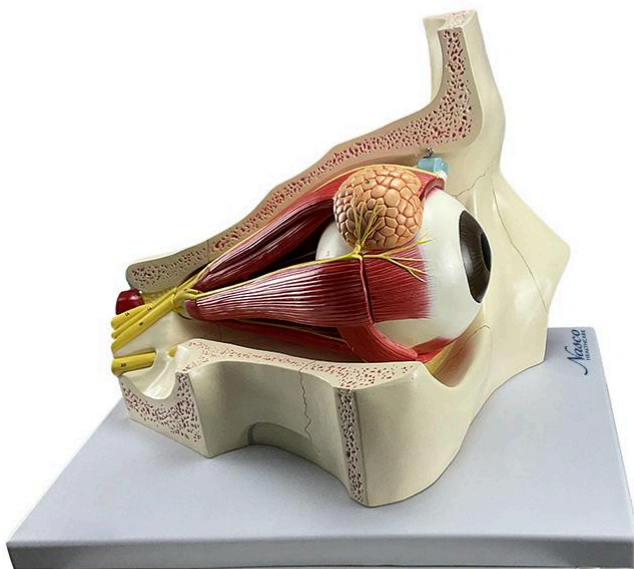
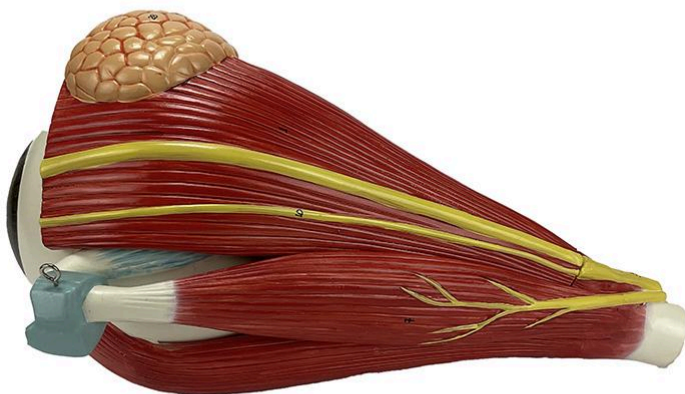




MG29940 | HUMAN EYE 5 TIMES ENLARGED, 4 PARTS







This anatomical model, magnified 5 times its actual size, offers a detailed representation of the eyeball and its associated structures, such as optic nerves and muscles, naturally positioned in the bony orbit. It is a dissectible model, with removable parts that facilitate in-depth study of the complex ocular and orbital anatomy.

Applications:

Ideal for in-depth study of the anatomy of the eyeball and orbital structures. Perfect for students, teachers, and healthcare professionals in medical, ophthalmology, and related courses, encouraging learning and comparative analysis of complex structures.

Technical Differentiators:

- * 5x magnification of actual size for detailed visualization.
- * Faithful representation of the eyeball, optic nerves, and muscles in their natural position in the bony orbit.
- * Removable components: lateral rectus muscle, levator palpebrae superioris muscle with lacrimal gland, eyeball with extraocular muscles, and the base of the bony orbit, allowing for an interactive study.
- * Manufactured with high-durability synthetic material.
- * Mounted on a durable polymer base with support for stability and display.



3D Technology and Augmented Reality:

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

Technical Specifications:

- * Scale: 5 times actual size
- * Material: Durable synthetic (model), Durable polymer (base)
- * Components: Eyeball, optic nerves, extraocular muscles, lacrimal gland, bony orbit
- * Features: Removable parts, mounted on base with support

Main Structures:

internal carotid artery: Main artery that supplies the brain, orbit, and facial structures. It enters the skull through the carotid canal and branches to supply various regions, including the eye and its adnexa.

abducens nerve: The sixth cranial nerve (CN VI), responsible for innervating the lateral rectus muscle of the eye, allowing for abduction (lateral rotation) of the eyeball.

maxillary nerve: The second branch of the trigeminal nerve (CN V2), a sensory nerve that innervates the skin of the maxilla, upper teeth, palate, and part of the nasal mucosa, as well as structures adjacent to the orbit.

ophthalmic nerve: The first branch of the trigeminal nerve (CN V1), a sensory nerve that innervates the region of the orbit, eyeball, upper eyelid, forehead, part of the scalp, and the dorsum of the nose.

oculomotor nerve: The third cranial nerve (CN III), responsible for innervating most of the extrinsic muscles of the eye (superior, inferior, medial rectus, inferior oblique) and the levator palpebrae superioris muscle, as well as parasympathetic fibers for pupil constriction and lens accommodation.

trochlear nerve: The fourth cranial nerve (CN IV), the smallest of the cranial nerves, which exclusively innervates the superior oblique muscle of the eye, responsible for internal rotation and depression of the eyeball.

frontal nerve: One of the terminal branches of the ophthalmic nerve, which divides into the supraorbital nerve and the supratrochlear nerve, sensory innervating the upper eyelid, forehead, and part of the scalp.

nasociliary nerve: One of the branches of the ophthalmic nerve, which sensory innervates



the eyeball (cornea, iris, ciliary body), the nasal mucosa, and the skin of the nose, and is responsible for the corneal reflex.

lateral rectus muscle: One of the six extrinsic muscles of the eye, innervated by the abducens nerve, responsible for the abduction movement of the eyeball, that is, lateral rotation.

eyeball: The main structure of the visual system, a hollow sphere responsible for capturing light and forming images, which are then transmitted to the brain via the optic nerve.

lacrimal gland: An exocrine gland located in the upper and lateral part of the orbit, responsible for the production of tears, which lubricate and protect the surface of the eye.

optic nerve: The second cranial nerve (CN II), responsible for transmitting visual information captured by the retina of the eyeball to the brain, where it is processed and interpreted as vision.

supraorbital nerve: A terminal branch of the frontal nerve, which emerges from the orbit and sensory innervates the skin of the forehead, upper eyelid, and part of the scalp.

lacrimal nerve: One of the branches of the ophthalmic nerve, which sensory innervates the lacrimal gland, the lateral conjunctiva, and the skin of the upper eyelid.

Smart Tags:

Designed to provide comprehensive training in the healthcare field, with interactive simulations covering Retina exams. This solution assists in developing diagnostic skills in different clinical scenarios, allowing professionals and students to explore and enhance their competencies with greater safety and accuracy.

Retinal exams: Simulate 39 retinal conditions, from normal and diabetic retinopathy (various stages) to rare diseases like retinitis pigmentosa and macular degeneration.

- Normal
- Tessellated Fundus
- Large Optic Disc Cupping
- DR1 (Diabetic Retinopathy - Stage 1)
- DR2 (Diabetic Retinopathy - Stage 2)
- DR3 (Diabetic Retinopathy - Stage 3)
- Branch Retinal Vein Occlusion (BRVO)
- Central Retinal Vein Occlusion (CRVO)
- Retinal Artery Occlusion (RAO)
- Rhegmatogenous Retinal Detachment
- Central Serous Chorioretinopathy (CSCR)
- Vogt-Koyanagi-Harada Disease (VKH)



- Maculopathy
- Epiretinal Membrane (ERM)
- Macular Hole (MH)
- Pathological Myopia
- Possible Glaucoma
- Optic Atrophy
- Severe Hypertensive Retinopathy
- Optic Disc Swelling and Elevation
- Displaced Optic Disc
- Congenital Optic Disc Anomaly
- Retinitis Pigmentosa
- Bietti's Crystalline Dystrophy
- Peripheral Retinal Degeneration and Tear
- Myelinated Nerve Fibers
- Particles in Vitreous
- Fundus Neoplasia
- Massive Hard Exudates
- Yellowish-White Spots (Flecks)
- Cotton Wool Spots
- Vessel Tortuosity
- Chorioretinal Atrophy - Coloboma
- Preretinal Hemorrhage
- Fibrosis
- Laser Marks
- Silicone Oil in Eye
- Blurred Fundus Without PDR (Proliferative Diabetic Retinopathy)
- Blurred Fundus With Suspected PDR (Proliferative Diabetic Retinopathy)

Virtual Patient Monitor: Provides an immersive and realistic training environment for healthcare students. It allows instructors to customize parameters for various vital signs, empowering students to interpret signals, develop critical thinking, and enhance their clinical reasoning skills through realistic scenarios.

Customizable Vital Signs

- Blood Pressure
- SpO2
- Heart Rate

ECG Interpretation: Train on 18 diverse ECG scenarios, including: Atrial Fibrillation, Ventricular Tachycardia and Heart Blocks. The monitor also simulates synchronized pulses with ECG for truly realistic cardiology training.

ECG Patterns

- Sinus Rhythm



- Atrial Extrasystole
- Atrial Flutter
- Atrial Fibrillation
- Paroxysmal Supraventricular Tachycardia (PSVT)
- Ventricular Extrasystole
- Ventricular Tachycardia (VT)
- Ventricular Fibrillation (VF)
- First-Degree Atrioventricular Block (AVB)
- Second-Degree Atrioventricular Block
- Third-Degree Atrioventricular Block (Complete Block)
- Long QT Syndrome
- ST Segment Elevation
- ST Segment Depression
- T Wave Inversion
- Left Ventricular Hypertrophy (LVH)
- Right Ventricular Hypertrophy (RVH)
- Wolff-Parkinson-White Syndrome (WPW)

Breathing Patterns

- Normal
- Dyspnea
- Apnea
- Cheyne-Stokes
- Biot
- Kussmaul

About Anatomical Models:

Developed with resin replication technology, addressing the scarcity 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:

- internal carotid artery
- internal carotid artery
- abducens nerve
- maxillary nerve
- ophthalmic nerve
- oculomotor nerve
- trochlear nerve



- frontal nerve
- nasociliary nerve
- lateral rectus muscle
- eyeball
- lacrimal gland
- optic nerve
- supraorbital nerve
- lacrimal nerve