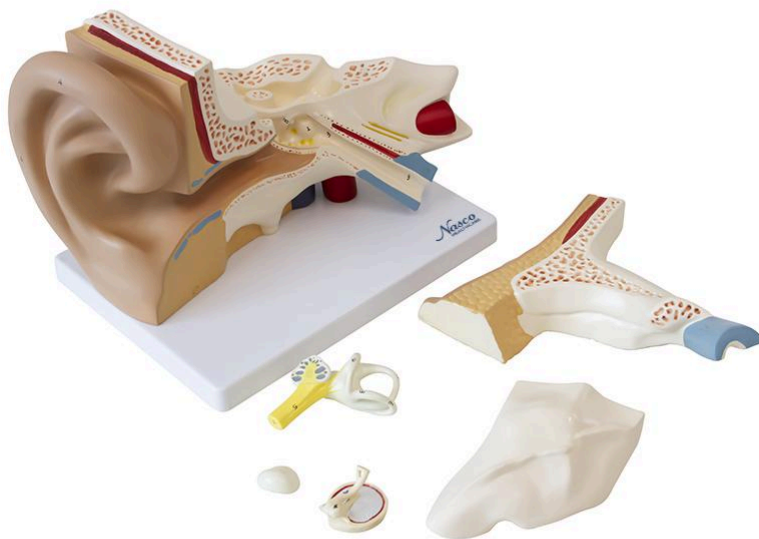
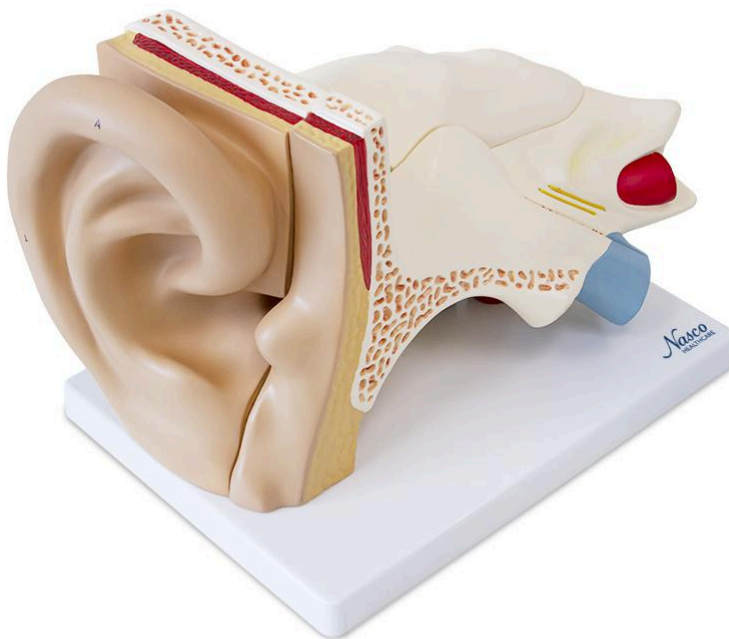
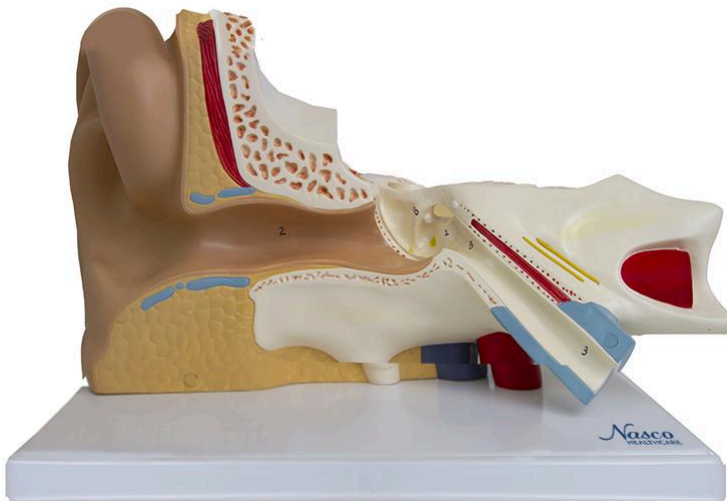


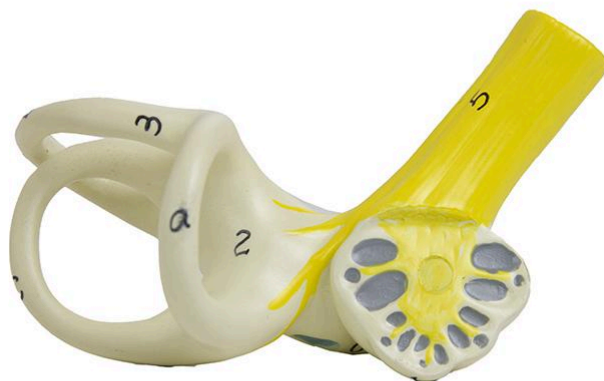
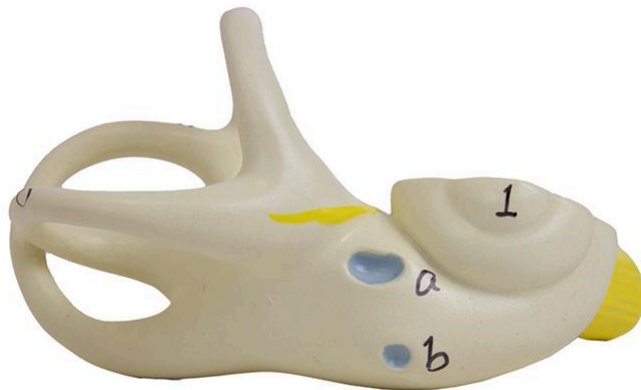


## **MG29983 | HUMAN EAR 3 TIMES ENLARGED, 6 PARTS**













3x Enlarged anatomical model representing the external, middle, and inner ear. It stands out for the possibility of removing the eardrum with malleus, incus, and stapes, as well as the cochlea and labyrinth with vestibular and cochlear nerves. It features two bone sections that define the middle and inner ear, mounted on a durable polymer base with support.

**Applications:**

Ideal for detailed study of ear anatomy, training in otolaryngology, demonstrations in anatomy and physiology classes, and for teaching ear pathologies.

**Technical Differentiators:**

- \* Enlarged model for better visualization of structures.
- \* Removable parts for individualized study.
- \* Durable polymer base for stability.
- \* Produced with durable synthetic material.
- \* Comes with an interactive 3D anatomical model with augmented reality.

**3D Technology and Augmented Reality:**

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

**Technical Specifications:**

- \* Scale: 3 times the actual size
- \* Material: Durable synthetic material
- \* Removable Structures: Eardrum with malleus, incus, and stapes, cochlea, labyrinth with vestibular and cochlear nerves, two bone sections.
- \* Base: Durable polymer with support

**Main Structures:**

**Auricle:** The auricle, or pinna, is the visible part of the external ear, responsible for collecting and directing sound waves to the external acoustic meatus. Its complex shape helps in locating the sound source.

**External ear:** The external ear is the outermost portion of the auditory system, comprising the auricle (pinna) and the external acoustic meatus. Its main function is to capture and conduct sound waves to the tympanic membrane.

**Mastoid antrum:** The mastoid antrum is a bony cavity located in the petrous part of the temporal bone, behind the middle ear. It is one of the air cells of the mastoid and communicates with the tympanic cavity through the aditus ad antrum.

**External acoustic meatus:** The external acoustic meatus, also known as the external auditory canal, is a tube that extends from the auricle to the tympanic membrane. It conducts sound waves and protects the more internal structures of the ear.

**Middle ear:** The middle ear is an air-filled chamber located between the external ear and the inner ear. It contains the tympanic membrane and the three ossicles (malleus, incus, and stapes), which transmit sound vibrations to the inner ear.

**Tympanic cavity:** The tympanic cavity is the central space of the middle ear, containing the ossicles (malleus, incus, and stapes) and connected to the auditory tube. It is responsible for amplifying and transmitting sound vibrations to the inner ear.

**Auditory tube:** The auditory tube, also known as the Eustachian tube, is a canal that connects the middle ear to the nasopharynx. Its main function is to equalize pressure between the middle ear and the external environment, allowing proper functioning of the tympanic membrane.

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.

### **Smart Tags:**

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

**Ear exams:** Conduct 9 realistic diagnostic exams.

- AOM
- Chronic
- Ear Ventilation
- Earwax
- Foreign Object
- Normal
- Otitis Externa
- Pseudomembrane
- Tympanosclerosis

**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:**

They are 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:**

- Auricle
- Outer ear
- Mastoid antrum
- External acoustic meatus
- Middle ear
- Tympanic cavity
- Auditory tube