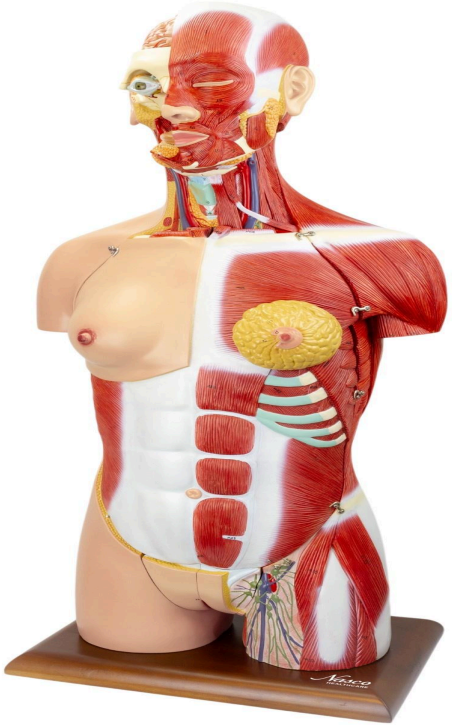
MG32004 | MUSCULAR DUAL-SEX HUMAN TORSO WITH OPENED NECK AND BACK, 28 PARTS



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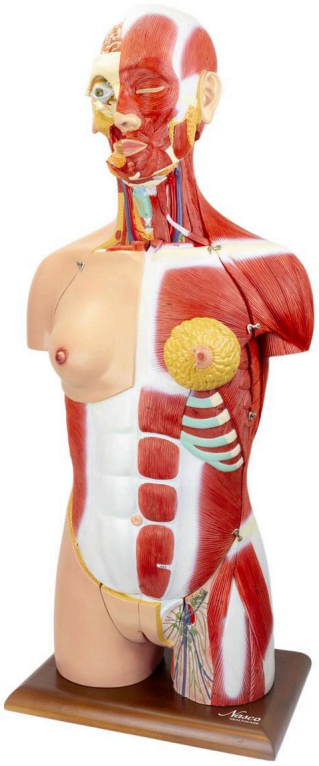

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This life-size anatomical model offers a comprehensive and accessible representation of the human body's systems. With its left side meticulously exposing superficial and deep muscles, vessels, and bones, and the open back revealing muscle layers, vertebral column, and nerve branches, the model provides a multifaceted view of anatomy. The head is designed to expose the brain, and the neck is dissected to reveal muscular, neural, vascular, and glandular structures. Furthermore, it features detachable and interchangeable male and female urogenital systems, and various removable internal structures for in-depth study.

Applications:
Ideal for in-depth study of human anatomy, physiology, and pathophysiology. It is an excellent tool for students and healthcare professionals in educational institutions, clinics, and laboratories, allowing for comparative analysis of anatomical structures and continuous improvement of knowledge.

Technical Differentiators:
* Life-size representation for maximum anatomical fidelity.
* Detailed dissection of the left side for exposure of superficial and deep muscles, vessels, and bones.

* Open back with visibility of muscle layers, vertebral column, and nerve ramifications.
* Thoracic vertebra (T12) with removable spinal cord section for detailed study.
* Open head with fully exposed brain and dissected neck for observation of muscular, neural, vascular, and glandular structures.
* Detachable and interchangeable male (4 parts) and female (3 parts, including embryo) urogenital systems.
* Numerous removable structures, including: Eye with optic nerve and extraocular muscles; Half of the brain; Trachea; Descending thoracic aorta and esophagus; Lungs (2 pieces each); Thorax and abdomen covering; Mammary gland; Liver with gallbladder; Half of a kidney; Heart (2 parts); Stomach (2 parts); Pancreas, stomach, duodenum, and spleen; Small and large intestines.
* Significant features numbered and referenced in multilingual information card.

3D Technology and Augmented Reality:
Our anatomical models offer an innovative visual complement through informative 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 continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:
* Scale: Life-size

Main Structures:

Brain: The brain is the control center of the nervous system, responsible for functions such as thought, emotions, memory, and movement. Divided into hemispheres and lobes, it houses specialized areas for sensory, motor, and cognitive processing, being vital for the interpretation and response to the environment.

Eye: The eye is the organ of vision, responsible for detecting light and converting it into electrical impulses that are sent to the brain. It is composed of structures such as the cornea, pupil, iris, lens, and retina, and is aided by optic nerves and extraocular muscles that control its movement.

Heart: The heart is a hollow muscular organ that acts as a pump, propelling blood throughout the body through the circulatory system. It is divided into four chambers – two atria and two ventricles – and has valves that ensure unidirectional blood flow, being essential for the supply of oxygen and nutrients.

Lungs: The lungs are the main organs of respiration, located in the rib cage. Their primary function is to perform gas exchange (hematosis), absorbing oxygen from the air and releasing carbon dioxide from the blood. They have a vast network of bronchi and alveoli to maximize the surface area for these exchanges.

Liver: The liver is the largest gland in the human body and performs hundreds of vital functions, including the detoxification of substances, the production of bile (aiding in the digestion of fats), the metabolism of carbohydrates and fats, and the storage of vitamins and minerals.

Kidney: The kidneys are bean-shaped organs that act as blood filters, removing metabolic waste, excess salts, and water to form urine. They also play a crucial role in regulating blood pressure, producing red blood cells, and balancing electrolytes.

Stomach: The stomach is a J-shaped organ of the digestive system, responsible for receiving chewed food from the esophagus and initiating chemical and mechanical digestion. It produces hydrochloric acid and enzymes to break down food before sending it to the small intestine.

Intestines: The intestines are essential parts of the gastrointestinal tract. The small intestine is where most digestion and absorption of nutrients occurs, while the large intestine is responsible for the absorption of water and electrolytes, and for the formation and elimination of feces.

Male Urogenital System: The male urogenital system encompasses the urinary and reproductive systems. The urinary system removes waste from the blood, while the reproductive system is responsible for the production and transport of sperm and male sex hormones, including organs such as the kidneys, bladder, testicles, and penis.

Female Urogenital System: The female urogenital system includes the urinary and reproductive systems. The urinary system removes waste, and the reproductive system is responsible for the production of eggs, gestation, childbirth, and production of female sex hormones, encompassing organs such as the kidneys, bladder, ovaries, uterus, and vagina.

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 fair 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 Retina, Ear, Throat, Pulse, Heart, Lung, and Abdominal 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

precision.

Heart sound recognition: Recognize 23 unique heart sounds with different patient postures and tools.
- Apex, Normal S1 S2, Supine, Bell
- Apex, Split S1, Supine, Bell
- Apex, S4, LLD, Bell
- Apex, Mid Systolic Click, Supine, Bell
- Apex, S3, LLD, Bell
- Apex, Early Systolic Murmur, Supine, Bell
- Apex, Mid Systolic Murmur, Supine, Bell
- Apex, Late Systolic Murmur, Supine, Bell
- Apex, Holosystolic Murmur, Supine, Bell
- Apex, Systolic Click & Late Systolic Murmur, LLD, Bell
- Apex, S4 & Mid Systolic Murmur, LLD, Bell
- Apex, S3 & Holosystolic Murmur, LLD, Bell
- Apex, OS & Diastolic Murmur, LLD, Bell
- Aortic, Normal S1 S2, Sitting, Bell
- Aortic, Systolic Murmur & Absent S2, Sitting, Bell
- Aortic, Early Diastolic Murmur, Sitting, Bell
- Aortic, Systolic & Diastolic Murmur, Sitting, Bell
- Pulmonary, Single S2, Supine, Diaphragm
- Pulmonary, Split S2 Persistent, Supine, Diaphragm
- Pulmonary, Split S2 Transient, Supine, Diaphragm
- Pulmonary, Ejection Systolic Murmur & Transient Split S2, Supine, Diaphragm
- Pulmonary, Split S2 & Ejection Systolic Murmur, Supine, Diaphragm
- Pulmonary, Ejection Systolic Murmur & Single S2 & Ejection Click, Supine, Diaphragm

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)

Ear exams: Conduct 9 realistic diagnostic exams.
- AOM
- Chronic
- Ear Ventilation
- Earwax
- Foreign Object
- Normal
- Otitis Externa
- Pseudomembrane
- Tympanosclerosis

Throat exams: Conduct 6 realistic diagnostic exams.
- Normal
- Oral Cancer (Benign)
- Oral Cancer (Malignant)
- Oral Dysplasia

- Pharyngitis
- Tonsillitis

Lung sound recognition: Recognize 15 lung sounds and breathing pattern analysis.
- Agonal Breathing
- Asthma Wheezing
- Bronchial
- Bronchovesicular
- Crackles - Coarse
- Crackles - Fine
- Crackles - Pulmonary Edema
- Crackles - Bronchiectasis
- Death Rattle
- Inspiratory Stridor
- Pleural Rubs
- Rhonchi - Low-Pitched Wheezes
- Vesicular - Normal
- Wheeze
- Wheeze-COPD

Abdominal sound diagnostics:
- Normal
- Normal Borborygmi
- Normal Gurgling
- Diarrhea
- Hyperactive
- Hypoactive
- Obstruction
- Absent

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:

- Trapezius
- Pectoralis major
- Transversus abdominis
- Internal intercostals
- Mammary gland

- Areola
- Lactiferous duct
- Tendinous intersections
- Pyramidalis
- Rectus femoris
- Sartorius
- Tensor fasciae latae
- Vastus lateralis
- Mons pubis
- Eyeball
- Lacrimal gland
- Superior nasal concha
- Middle nasal concha
- Inferior nasal concha
- Vestibule of nose
- Nasal cavity
- Tongue
- Sublingual gland
- Submandibular gland
- Pharynx
- Oral cavity
- Styloglossus
- Stylohyoid
- Posterior belly of digastric
- Anterior scalene
- Anterior belly of digastric
- Thyrohyoid
- Internal jugular vein
- Hyoid bone
- Thyrohyoid membrane
- Thyroid cartilage
- Cricoid cartilage
- Thyroid gland
- Trachea
- Superior belly of omohyoid
- Posterior auricular
- Occipital belly of occipitofrontalis
- Temporalis
- Procerus
- Orbicularis oculi
- Orbicularis oris
- Depressor labii inferioris
- Depressor anguli oris

- Platysma
- Risorius
- Zygomaticus major
- Zygomaticus minor
- Depressor anguli oris
- Masseter
- Parotid gland
- Mentalis
- Nasalis
- Cranial cavity
- Sternothyroid
- Inferior belly of omohyoid
- Middle scalene
- Clavicular head of sternocleidomastoid
- Sternal head of sternocleidomastoid
- Sternocleidomastoid
- Semispinalis capitis
- Obliquus capitis superior
- Rectus capitis posterior major
- Rectus capitis posterior minor
- Teres minor
- Deltoid
- Spinal cord
- Posterior root
- Suboccipital nerve
- Greater occipital nerve
- Transverse process
- Spinal ganglion
- Anterior root
- Spinal pia mater
- Spinal arachnoid mater
- Spinal dura mater
- 7th thoracic vertebra
- 12th thoracic vertebra
- Palate
- Inferior oblique muscle
- Inferior rectus muscle
- Short head of biceps brachii
- Long head of triceps brachii
- Musculus capitis
- Galea aponeurotica
- Internal vertebral plexus
- Filum terminale

- Cauda equina
- Gluteus maximus
- Semitendinosus
- Biceps femoris
- Internal oblique muscle of the abdomen
- Teres major
- Infraspinatus
- Long head of triceps brachii
- Lateral head of triceps brachii
- Vertebral artery
- Transverse process
- External oblique muscle of the abdomen
- Serratus anterior
- External intercostals