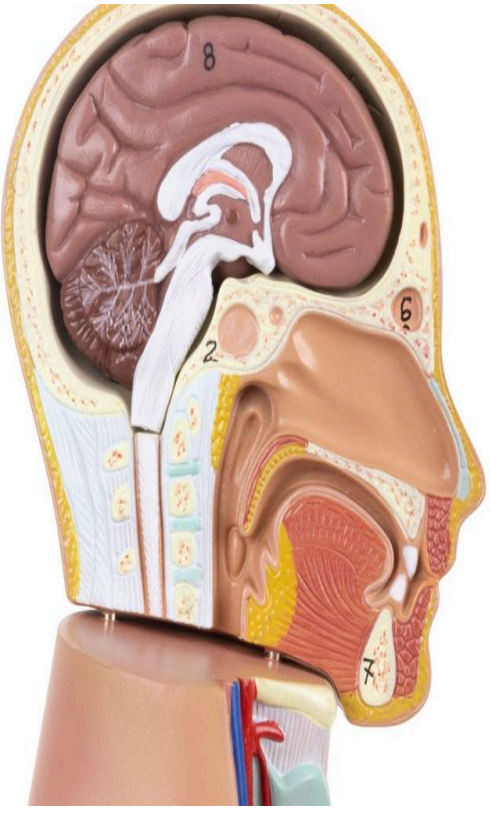
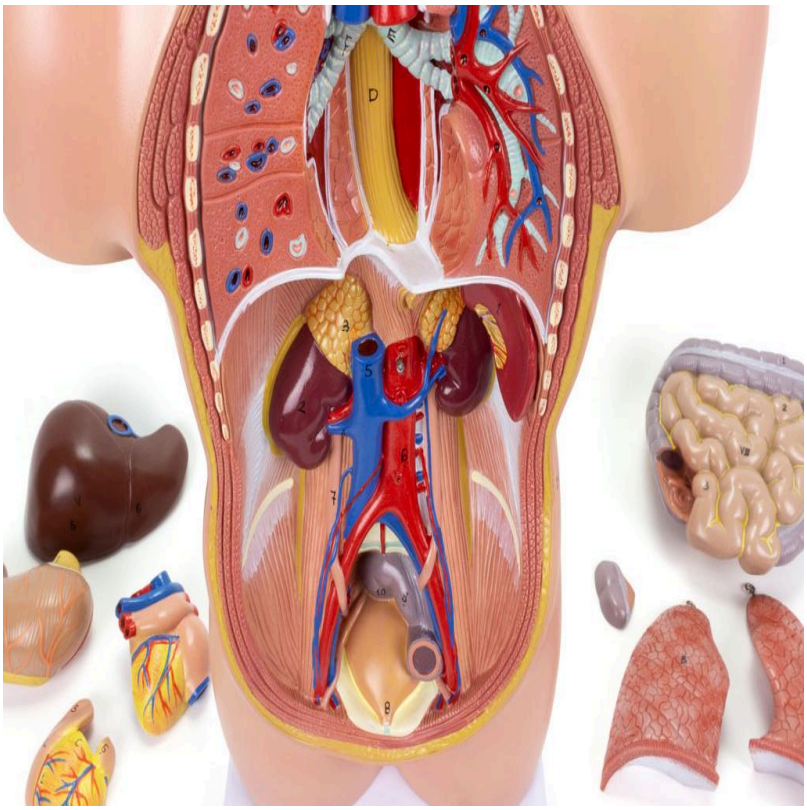
MG29696 | MINI UNISEX HUMAN TORSO, 12 PARTS

Nasco
HEALTHCARE





This half-scale anatomical torso model offers a detailed representation of the human body, focusing on the thoracic and abdominal cavities, as well as a removable head. The model consists of 12 detachable parts that reveal complex internal structures, including one half of the brain and removable portions of the lungs, exposing the pulmonary vasculature, airways, and internal tissue.

Applications:
Ideal for basic anatomy education, this model is a valuable tool for:
* In-depth study of the cranial, thoracic, and abdominal cavities.
* Understanding the organization and interrelationship of the respiratory, digestive, circulatory, and central nervous systems.
* Practical demonstrations in classrooms and anatomy laboratories.

Technical Differentiators:
The technical differentiators of this model include:
* Removable head with opening for viewing internal brain structures.
* Removable and detailed half of the brain for in-depth study.
* Lungs with detachable frontal portions, allowing exposure of the pulmonary vasculature, airways (right lung), and the texture of internal tissue (left lung).
* Heart divided into two parts, revealing atria, ventricles, and valves.

* Multiple removable organ pieces such as liver with gallbladder, stomach, and an integrated set of small intestine, large intestine, and pancreas, with a removable cover to explore the interior of the cecum and ileum.

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 comparative analysis of anatomical structures and offering opportunities for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:
Scale: Half-scale
Number of Parts: 12

Main Structures:

head: The head is the upper part of the human body, housing the brain, sensory organs (eyes, ears, nose, mouth), and the initial structures of the digestive and respiratory systems. It is composed of bones of the skull and face, which protect the brain and provide attachment points for muscles and soft tissues.

8. Brain: The brain is the main organ of the central nervous system, responsible for controlling vital functions, processing sensory information, reasoning, memory, emotions, and voluntary movements. Divided into cerebral hemispheres, cerebellum, and brainstem, it is the center of consciousness and human intelligence.

A. Left lung: The left lung is one of the two main organs of respiration, located in the thoracic cavity. It is responsible for gas exchange, where oxygen is absorbed into the blood and carbon dioxide is released. Usually smaller than the right due to the presence of the heart, it has two lobes: superior and inferior.

C. Heart: The heart is a hollow and vital muscular organ of the circulatory system, responsible for pumping oxygen-rich blood and nutrients throughout the body and carbon dioxide-rich blood to the lungs. It has four chambers (two atria and two ventricles) and valves that ensure unidirectional blood flow.

Liver: The liver is the largest gland in the human body and a vital organ with multiple metabolic functions, including detoxification of harmful substances, production of bile for fat digestion, storage of glycogen, and synthesis of plasma proteins. It is located in the upper right quadrant of the abdomen.

4. Gallbladder: The gallbladder is a small pear-shaped organ located below the liver. Its main function is to store and concentrate bile produced by the liver, releasing it into the small

intestine (duodenum) when fatty foods are ingested, aiding in the digestion and absorption of fats.

Stomach: The stomach is a "J"-shaped muscular organ of the digestive system, located between the esophagus and the small intestine. Its main function is to store food, initiate protein digestion, and mix food with gastric juices, forming chyme before passing it to the duodenum.

2. Jejunum: The jejunum is the second portion of the small intestine, following the duodenum and preceding the ileum. It is the main site of absorption of most digested nutrients, including carbohydrates, proteins, vitamins, and minerals. Its mucosa is rich in villi and microvilli that increase the surface area for absorption.

7. Duodenum: The duodenum is the first and shortest portion of the small intestine, connecting the stomach to the jejunum. Most chemical digestion occurs in it, with the mixing of stomach chyme with bile (from the liver and gallbladder) and digestive enzymes (from the pancreas), neutralizing the acidity of the chyme.

6. Pancreas: The pancreas is a mixed gland, with endocrine and exocrine functions, located behind the stomach. As an exocrine gland, it produces digestive enzymes that are released into the duodenum. As an endocrine gland, it secretes hormones such as insulin and glucagon, which regulate blood sugar levels.

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 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 accuracy.

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:

- Ⅰ.head
- 1. Frontal bone
- 2. Sphenoid bone
- 3. Temporal bone
- 4. Parietal bone
- 5. Occipital bone
- 6. Frontal sinus
- 7. Mandible
- 8. Cerebrum
- 9. Cerebellum
- Ⅱ.larinx
- 1. Hyoid bone

- 2. Median cricothyroid ligament
- 3. Thyrohyoid membrane
- 4. Thyroid cartilage
- 5. Cricothyroid muscle
- 6. Thyroid gland
- 7. Trachea (Windpipe)
- Ⅲ. Thoracic cave
- A. Left lung
- B. Right lung
- C. Heart
- D. Esophagus
- E. Left bronchus
- F. Right bronchus
- Ⅳ.Abdominal cavity
- 1. Spleen
- 2. Kidney
- 3. Suprarenal gland
- 4. Right renal vein
- 5. Inferior vena cava
- 6. Abdominal aorta
- 7. Ureter
- 8. Urinary bladder
- 9. Sigmoid colon
- 10. Rectum
- Ⅴ.Liver
- 1. Hepatic portal vein
- 2. Hepatic artery proper
- 3. Hepatic duct
- 4. Gallbladder
- 5. Right Lobe of liver
- 6. Left Lobe of liver
- 7. Caudate lobe
- 8. Quadrate lobe
- 9. Inferior vena cava
- Ⅵ.Heart
- 1. Right ventricle
- 2. Left ventricle
- 3. Left atrium
- 4. Right atrium
- 5. Right auricle
- 6. Left auricle
- 7. Pulmonary trunk
- 8. Ascending aorta

- 9. Superior vena cava
- 10. Inferior vena cava
- 11. Aortic valve
- 12. Pulmonary valve
- Ⅶ.Stomach
- 1. Cardia
- 2. Greater curvature
- 3. Lesser curvature
- 4. Body of stomach
- 5. Pylorus
- Ⅷ. Intestine
- 1. Transverse colon
- 2. Jejunum
- 3. Ileum
- 4. Caecum
- 5. Appendix (Vermiform appendix)
- 6. Pancreas
- 7. Duodenum