



MG31317 | HUMAN DIGESTIVE SYSTEM, 3 PARTS

This life-size anatomical model offers a comprehensive representation of the human digestive tract, from the oral cavity to the rectum. Details such as the oral cavity, pharynx, and esophagus are sagittally dissected, while the stomach, duodenum, cecum, small intestine, and rectum are frontally opened to reveal their internal structures. The model also includes the liver with gallbladder, a dissected pancreas, and a facial section with muscles and salivary glands, with the transverse colon being removable for greater interactivity.

Applications:

Ideal for in-depth study of the anatomy, physiology, and pathophysiology of the digestive system. It is a valuable educational tool for universities, medical schools, technical health courses, and professionals seeking continuous improvement, allowing for comparative and detailed analysis of organs and their interactions.

Technical Differentiators:

- * Detailed life-size representation of the entire digestive tract.
- * Sagittal dissections of the oral cavity, pharynx, and esophagus for internal visualization.
- * Frontal opening of the stomach, duodenum, cecum, small intestine, and rectum for exposure of internal features.
- * Dissected pancreas to reveal internal structures.
- * Removable transverse colon for isolated study.
- * Inclusion of facial section with muscles and salivary glands, expanding the scope of study.

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 (1:1)
- * Material: High-quality resin

Main Structures:



Oral cavity: Initial opening of the digestive tract, where chewing and salivation of food occur, with the participation of teeth, tongue, palate, and salivary glands.

Esophagus: Muscular tube that connects the pharynx to the stomach, responsible for transporting the food bolus through peristaltic movements.

Body of the stomach: Main portion of the stomach, located between the fundus and the pyloric antrum, where chemical and mechanical digestion of food occurs by the action of gastric juice.

Duodenum: First and shortest portion of the small intestine, in a "C" shape, which receives chyme from the stomach, bile from the liver, and pancreatic juice to initiate digestion and absorption.

Small intestine: Long tubular organ, divided into the duodenum, jejunum, and ileum, where most of the digestion and absorption of nutrients occurs due to its extensive surface area of villi and microvilli.

Large intestine: Final portion of the digestive tract, composed of the cecum, colon (ascending, transverse, descending, sigmoid), and rectum, mainly responsible for the absorption of water and electrolytes, formation, and storage of feces.

Rectum: Final part of the large intestine that extends from the sigmoid colon to the anal canal, functioning as a temporary reservoir for feces before defecation.

Right lobe: The largest of the four lobes of the liver, located to the right of the falciform ligament, playing vital roles in nutrient metabolism, detoxification, and bile production.

Gallbladder: Small pear-shaped organ located under the liver, responsible for storing and concentrating bile produced by the liver before releasing it into the duodenum to aid in fat digestion.

Body of the pancreas: Central part of the pancreas, located posteriorly to the stomach, which contains both exocrine tissue, producing digestive enzymes, and endocrine tissue, responsible for the production of hormones such as insulin and glucagon.

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 to choose 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 Throat and Abdominal exams. This solution assists in the development of diagnostic skills in different clinical scenarios, allowing professionals and students to explore and improve their skills with greater safety and accuracy.

Throat exams: Conduct 6 realistic diagnostic exams.

- Normal
- Oral Cancer (Benign)
- Oral Cancer (Malignant)
- Oral Dysplasia
- Pharyngitis
- Tonsillitis

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 parts 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:

- Teeth
- Lips
- Hard palate
- Oral cavity
- Pharyngeal tonsil
- Pharyngeal opening of the auditory tube
- Nasopharynx
- Pylorus
- Body of the stomach
- Cardiac orifice



- Duodenum
- Transverse colon
- Jejunum
- Small intestine
- Ileum
- Large intestine
- Anal canal
- Rectum
- Anus
- External anal sphincter
- Internal anal sphincter
- Vermiform appendix
- Sigmoid colon
- Pancreatic duct
- Accessory pancreatic duct
- Body of the pancreas
- Head of the pancreas
- Tail of the pancreas
- Pancreatic incisura
- Gallbladder
- Common bile duct
- Common hepatic duct
- Hepatic artery
- Hepatic portal vein
- Cystic duct
- Quadrate lobe
- Caudate lobe
- Right lobe
- Left lobe
- Esophagus
- Palatine tonsil
- Uvula
- Soft palate