



MG22746 | EFFECTS OF DIABETES, 5 PARTS



Anatomical model demonstrating the effects of diabetes on the eye, heart, kidneys, veins, and feet. Allows for detailed analysis of pathologies through individual rotation of each organ. Manufactured with long-lasting synthetic material to ensure product durability.

Applications:

Ideal for studying the effects of diabetes on multiple organs, providing a visual and tactile understanding of associated pathologies. Suitable for medical education, healthcare professional training, and patient awareness.

Technical Differentiators:

- * Detailed representation of diabetic pathologies in different organs.
- * Rotating organs for complete visualization.
- * High-durability synthetic material.
- * Includes 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:

* Material: Long-lasting synthetic material.

Main Structures:

retinal edema: Retinal edema is the accumulation of fluid in the retina, the light-sensitive layer at the back of the eye. This accumulation can be caused by various conditions, including diabetes, and leads to swelling and thickening of the retina, resulting in blurred or distorted vision.

optic nerve: The optic nerve is a bundle of nerve fibers that transmits visual information from the retina to the brain. It is essential for vision, and damage to this nerve can lead to various conditions, including glaucoma and optic neuropathy.

hard exudates: Hard exudates are deposits of lipids and proteins that accumulate in the retina, often as a result of blood vessel damage. They appear as yellow or white spots and are common in diabetic retinopathy.

cotton wool spots: Cotton wool spots are areas of ischemia in the retina, caused by obstruction of blood flow. They appear as white, fluffy patches and are a sign of microvascular damage, often associated with diabetes and hypertension.

narrowed and tortuous arterioles: Narrowed and tortuous arterioles refer to blood vessels in the retina that become thinner and more coiled than normal. This condition is often observed in patients with hypertension and diabetes, indicating vascular damage.

right atrium: The right atrium is one of the four chambers of the heart. It receives deoxygenated blood from the body through the superior and inferior vena cavae and pumps it into the right ventricle.

inferior vena cava: The inferior vena cava is the largest vein in the human body, responsible for transporting deoxygenated blood from the lower body back to the right atrium of the heart.

aorta: The aorta is the largest artery in the body, originating from the left ventricle of the heart and distributing oxygenated blood to all organs and tissues through its branches.

superior vena cava: The superior vena cava is a large vein that transports deoxygenated



blood from the upper body (head, neck, upper limbs) to the right atrium of the heart.

capsule: The capsule, in a general anatomical context, refers to a fibrous or membranous structure that surrounds an organ or joint, providing protection and support. Its composition may vary depending on the organ but is generally made of dense connective tissue.

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.

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:

- retinal edema
- optic nerve
- hard exudates
- cotton wool spots
- narrowed and tortuous arterioles
- right atrium
- right atrium
- inferior vena cava
- aorta
- superior vena cava
- capsule
- adrenal medulla
- adrenal cortex
- cortex
- pyramid
- capsule
- renal pelvis
- ureter
- tunica intima
- tunica media
- blood clot



- plaque (lipid and calcium deposits)
- tunica design
- gangrene
- ulcer