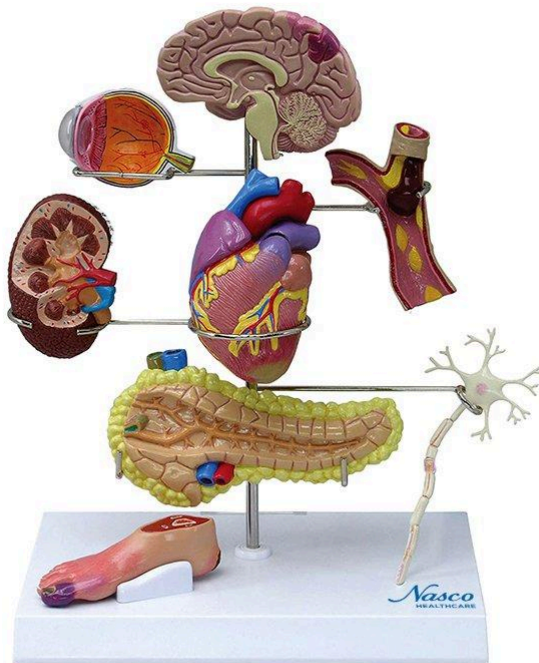
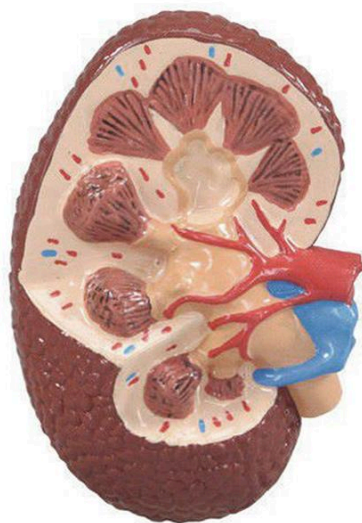


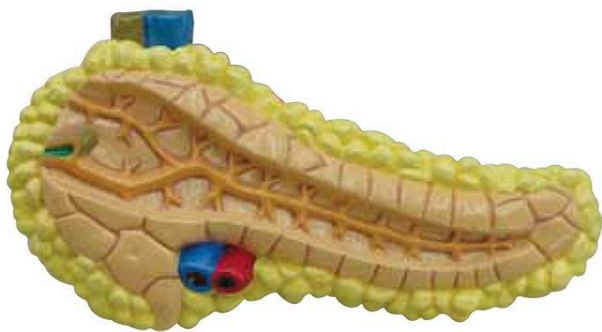


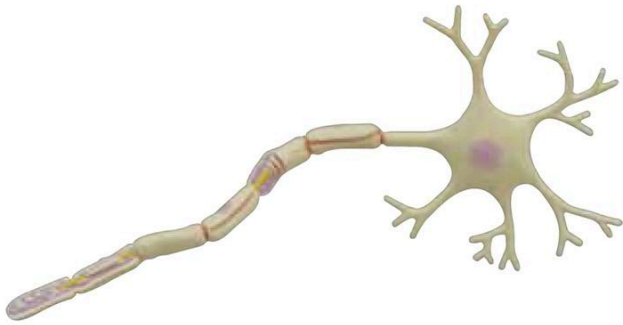
MG35532 | EFFECTS OF DIABETES TYPE II, 8 PARTS



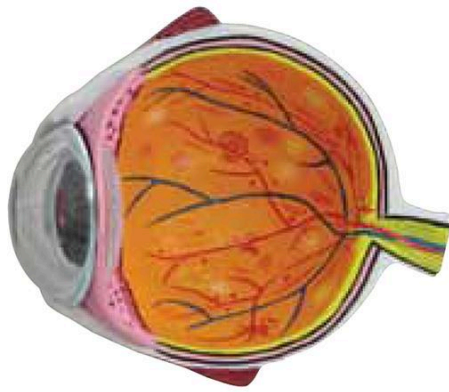


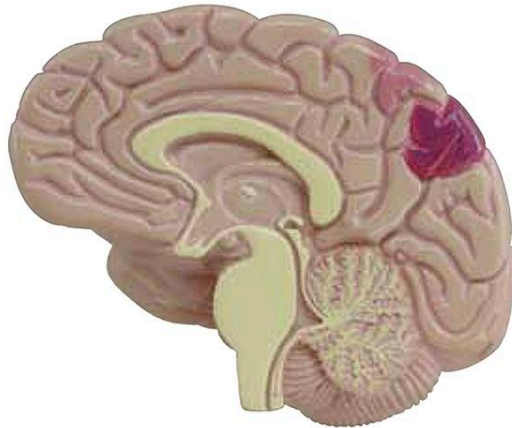
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The Type II Diabetes Set features miniature models of the brain, eye, heart, kidney, arteries, pancreas, neurons, and foot, illustrating the effects associated with Type II Diabetes, such as stroke, eye pathology, hypertensive heart disease, kidney and artery hardening, insulin resistance, neuropathy, and foot ulcerations.

Applications:

Ideal for studying and understanding the effects of Type II Diabetes on various organs and systems of the human body, encouraging learning, and providing educational support in anatomy, physiology, and pathophysiology.

Technical Differentiators:

- * Detailed representation of organs affected by Type II Diabetes.
- * Informative card illustrating the effects of the disease.
- * Tool for comparative analysis of anatomical models.

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



Technical Specifications:

- * Miniature models of the brain, eye, heart, kidney, arteries, pancreas, neurons, and foot.
- * Informative card included.

Main Structures:

ischemia: Is the restriction of blood flow to a tissue or organ, resulting in a decreased supply of oxygen and nutrients. If prolonged, ischemia can lead to cell damage and tissue death.

infarct: Refers to tissue necrosis that occurs due to the interruption of blood supply, depriving the tissue of oxygen. It is often associated with arterial obstructions, such as in a myocardial infarction (heart attack) or cerebral infarction (stroke).

gangrene: Is the death of body tissue due to a lack of blood supply or severe bacterial infection. Gangrene can affect any part of the body but is most common in the extremities, such as fingers, feet, and limbs.

ulcer: An ulcer is an open sore on the skin or mucous membrane, characterized by tissue loss. Ulcers can be caused by a variety of factors, including infections, prolonged pressure, poor blood circulation, and underlying medical conditions.

retina: The retina is the innermost layer of the eye, responsible for converting light into electrical signals that are sent to the brain via the optic nerve, enabling vision.

retinal edema: Retinal edema is the accumulation of fluid in the retina, the light-sensitive layer at the back of the eye. This swelling can distort vision, and if left untreated, it can lead to permanent damage.

narrowed and more tortuous arterioles: Arterioles are small blood vessels that regulate blood flow to the capillaries. In conditions such as hypertension, arterioles can become narrow and tortuous, hindering blood flow and increasing blood pressure.

hard exudates: Hard exudates are yellowish deposits of lipids and proteins that accumulate in the retina due to leakage from damaged blood vessels. They are often associated with conditions such as diabetic and hypertensive retinopathy.

visceral fat: Visceral fat is the type of fat that accumulates in the abdominal cavity, surrounding internal organs such as the liver, pancreas, and intestines. It is metabolically active and is associated with a higher risk of cardiovascular disease, type 2 diabetes, and other health conditions.

demyelinated axon: The axon is the main extension of a nerve cell (neuron) that conducts electrical impulses. Myelin is a protective layer that insulates the axon and accelerates the



transmission of these impulses. Demyelination occurs when the myelin is damaged, compromising the normal function of the axon and leading to neurological problems.

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 the 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:

- ischemia
- infarction
- gangrene
- ulcer
- retina
- retinal edema
- narrowed and more tortuous arterioles
- hard exudates
- visceral fat
- demyelinated axon
- normal axon
- cortex
- pyramid
- smooth granular surface
- narrowed lumen
- blood clot
- Plaques (lipid deposits and calcification)
- ischemia
- myocardial infarction
- left ventricle
- coronary artery
- coronary vein