

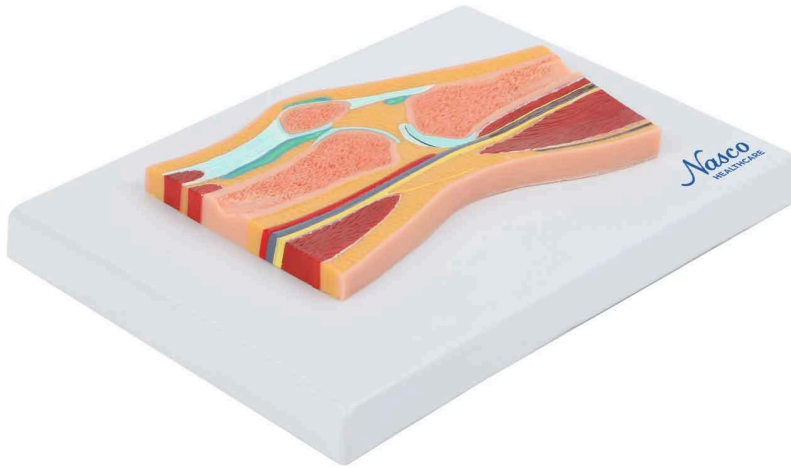


MG17222 | SECTION THROUGH THE KNEE



Nasco
HEALTHCARE







Anatomical Model of the Mid-Sagittal Section of the Knee: A life-size model detailing the complex, injury-prone knee joint. Features bone textures (spongy and compact), directional muscle striations, and realistically detailed fat areas, including muscles, bones (femur, tibia, and patella), vasculature, ligaments, tendons, and dermis. The model is mounted on a polymer base for better visualization and includes an information card referencing the structures.

Applications:

Ideal for anatomy studies in schools and universities; useful for training, medical, and scientific information.

Technical Advantages:

- * Detailed representation of anatomical structures;
- * High-precision natural molding;
- * Manufactured from a stable synthetic material and resin approved in toxicological tests;
- * Life-size replicas;
- * Hand-painted with references and markings;
- * Includes an information card with related structures.



3D Technology and Augmented Reality:

Our anatomical models offer a visual complement through information cards that activate 3D models viewable in augmented reality (AR). This interactive platform aids learning, allowing comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

- * Material: Synthetic resin.
- * Scale: Life-size.

Main Structures:

Quadriceps femoris muscle: Muscle group located in the anterior region of the thigh, composed of the rectus femoris, vastus medialis, vastus lateralis, and vastus intermedius muscles. Its main function is knee extension.

Quadriceps femoris tendon: Strong tendon that connects the quadriceps femoris muscle to the patella, transmitting the force of muscle contraction to leg extension.

Suprapatellar bursa: Synovial sac located between the femur and the quadriceps tendon, which reduces friction during knee movement.

Patella: Sesamoid bone located in front of the knee joint, which increases the leverage of the quadriceps muscle and protects the joint.

Prepatellar bursa: Synovial sac located between the skin and the patella, which minimizes friction between these two elements during knee flexion and extension.

Patellar ligament: Continuation of the quadriceps tendon, which extends from the patella to the tibial tuberosity, providing stability to the joint.

Infrapatellar bursa: Synovial sac located between the tibial tuberosity and the patellar ligament, reducing friction during knee movement.

Infrapatellar fat pad: Adipose tissue that protects the knee joint and assists in impact absorption.

Articular cartilage: Avascular tissue that covers the articular surfaces of the bones, providing a smooth, low-friction surface for joint movement.



Tibia: Long bone of the leg, located medially, which receives the body's weight and participates in the formation of the knee and ankle joints.

Other structures can be verified directly on the physical piece or on the interactive 3D model.

About the Anatomical Models:

They are developed with resin replication technology, offering an alternative to natural anatomical models for teaching and research. They present the main morphological characteristics with a good cost-benefit ratio, resistance, hand painting, and numbering for precise identification of structures.

List of all visible structures:

- quadriceps femoris muscle
- quadriceps femoris tendon
- suprapatellar bursa
- patella
- prepatellar bursa
- patellar ligament
- infrapatellar bursa
- infrapatellar fat pad
- articular cartilage
- tibia
- popliteus muscle
- gastrocnemius muscle
- small saphenous vein
- sural nerve
- popliteal vein
- tibial nerve
- biceps femoris muscle
- femur
- popliteal artery