



MG24031 | CANINE KNEE



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Canine Knee Anatomical Model: A mid-size model representing the canine knee joint, including femur, tibia, fibula, patella, menisci, ligaments, and tendons. It features important anatomical details, is mounted on a synthetic base, and includes an informational card.

Applications:

Ideal for veterinarians, veterinary students, and medical professionals. Used for the study of canine knee anatomy, demonstration of structures and pathologies, and as a teaching tool in veterinary clinics. Contributes to the improvement of the work environment and assists in customer service.

Technical Advantages:

- * Detailed representation of the canine knee joint, including lateral and medial menisci, cranial and caudal cruciate ligaments, and other ligaments and tendons.
- * Numbered and hand-painted in educational colors to facilitate the identification of structures.
- * High anatomical precision molding.
- * Stable and durable synthetic material, providing a long lifespan.
- * Includes an informational card with details about the related structures.



- * Articulated joints for better visualization of structures.
- * Replicas with bone references.
- * Manufactured with resin approved in toxicological tests.

3D Technology and Augmented Reality:

Our anatomical models offer a visual complement through informational 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:

- * Scale: Average adult natural size.
- * Material: Resin.
- * Model mounted on a polymer base with support and metal rod.

Main Structures:

Patellar Ligament: The patellar ligament is a robust tendon that connects the patella (kneecap) to the tibial tuberosity. It plays a crucial role in knee extension, transmitting the force of the quadriceps to the tibia.

Quadriceps Tendon: The quadriceps tendon is the continuation of the quadriceps femoris muscles, the main knee extensors. It inserts into the patella and, through the patellar ligament, into the tibia.

Lateral Collateral Ligament: Located on the lateral side of the knee, this ligament stabilizes the joint, preventing excessive varus movement (leg abduction).

Tibia: Long bone of the leg, located medially, which forms the knee joint with the femur and the foot with the fibula.

Fibula: Long and thin bone of the leg, located laterally to the tibia. Although it does not directly participate in the knee joint, it contributes to the stability of the ankle joint.

Extensor Digitorum Longus Tendon: This tendon originates on the lateral side of the tibia and fibula, passing posteriorly over the dorsal surface of the foot, to insert into the distal phalanges of the toes. Its function is the extension of the toes.

Lateral Meniscus: A crescent-shaped fibrocartilaginous structure located on the lateral side



of the knee. It helps stabilize the joint, distribute weight, and absorb impacts.

Femur: Long bone of the thigh, articulating proximally with the hip bone and distally with the tibia and patella at the knee joint.

Fabellae: Small sesamoid bones located in the tendon of the gastrocnemius muscle, in the posterior region of the knee. They assist in joint movement.

Cranial Cruciate Ligament: Intra-articular ligament that crosses obliquely within the knee joint, connecting the femur to the tibia. Essential for joint stability, preventing anterior displacement of the tibia relative to the femur.

Caudal Cruciate Ligament: Similar to the cranial cruciate ligament, but located in the posterior region of the knee joint. Its main function is to prevent posterior displacement of the tibia relative to the femur.

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 for teaching and research. They present the essential morphological characteristics with good cost-benefit, resistance, hand painting, and numbering for precise identification of structures.

List of all visible structures:

- Patellar ligament
- Quadriceps tendon
- Lateral collateral ligament
- Patellar ligament
- Tibia
- Fibula
- Extensor digitorum longus tendon
- Lateral meniscus
- Femur
- Fabellae
- Cranial cruciate ligament
- Caudal cruciate ligament
- Lateral meniscus
- Medial collateral ligament
- Patella