

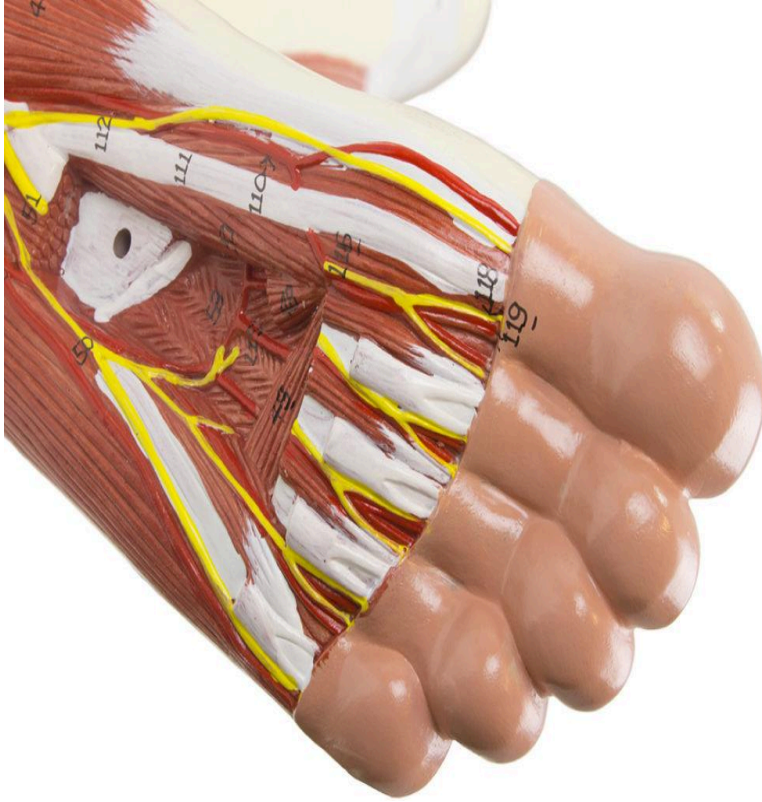


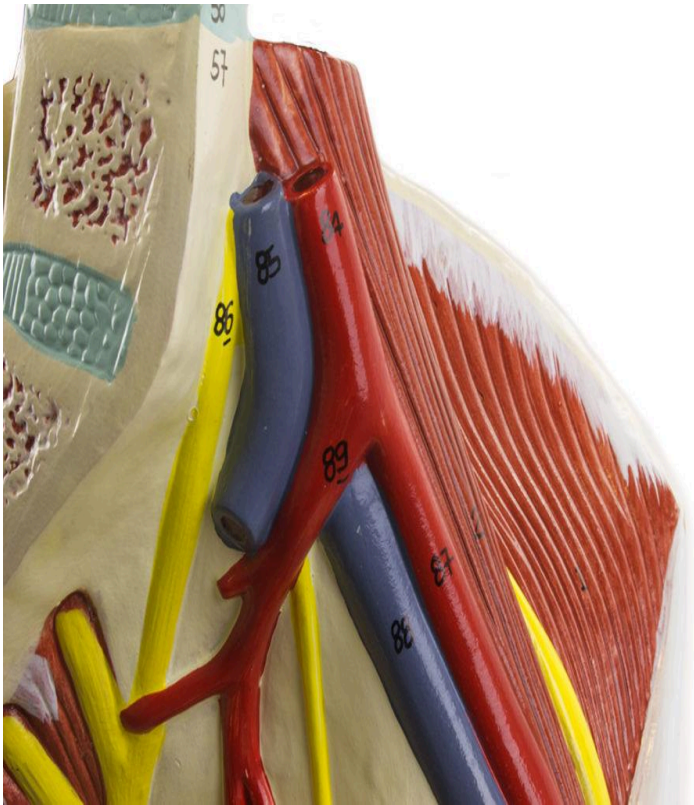
MG30417 | LEG MUSCLES LIFE-SIZE, 13 PARTS



Nasco
HEALTHCARE









This 13-part anatomical model offers a detailed and comprehensive representation of the human leg, encompassing superficial and deep muscles, vascular structures, nerves, and ligaments. It is an exceptional tool for the in-depth study of lower limb anatomy.

Applications:

Ideal for the in-depth study of leg anatomy, this model is a valuable tool for educational institutions, healthcare professionals, and students, promoting interactive learning and continuing education in anatomy, physiology, and pathophysiology.

Technical Differentiators:

This model stands out for its division into 13 parts, allowing for an in-depth analysis of the complex layers of the leg. It offers an extremely detailed representation of superficial and deep muscles, as well as vascular structures, nerves, and ligaments.

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:

* Number of parts: 13

Main Structures:

1 - Iliacus muscle: It is a broad, triangular muscle that originates in the internal iliac fossa. Together with the psoas major muscle, it forms the iliopsoas, the main hip flexor, essential for movements such as walking and running.

5 - Gluteus maximus muscle: The largest and most superficial of the gluteal muscles, it forms most of the mass of the buttock. It is the main hip extensor, crucial for movements such as climbing stairs, running, and standing up from a sitting position.

14 - Rectus femoris muscle: One of the four muscles that make up the quadriceps femoris, located on the anterior part of the thigh. It is the only quadriceps muscle that crosses two joints (hip and knee), being a powerful knee extensor and hip flexor.

25 - Long head of the biceps femoris muscle: Part of the hamstring group, located on the posterior part of the thigh. It acts in knee flexion and hip extension, in addition to performing lateral rotation of the tibia when the knee is flexed.

67 - Patella: Known as the kneecap, it is the largest sesamoid bone in the human body,



located in front of the knee joint. It acts as a pulley for the quadriceps tendon, increasing the leverage for knee extension and protecting the joint.

74 - Tibia: It is the larger of the two bones of the leg, located medially. It is the main weight-bearing bone of the leg, articulating with the femur superiorly to form the knee joint and with the talus inferiorly to form the ankle joint.

29 - Tibialis anterior muscle: Located on the anterior part of the leg, it is the main muscle responsible for ankle dorsiflexion (lifting the foot towards the shin) and foot inversion. It is essential for gait and for preventing toe drag.

34 - Medial head of the gastrocnemius muscle: One of the two heads of the gastrocnemius muscle, which forms most of the mass of the calf. Together with the lateral head and the soleus, it forms the triceps surae, being a powerful plantar flexor of the ankle and a secondary flexor of the knee.

38 - Calcaneal tendon (Achilles tendon): The largest and strongest tendon in the body, formed by the union of the gastrocnemius and soleus muscles. It inserts into the calcaneus bone (heel) and is essential for locomotion, allowing plantar flexion of the ankle, such as when walking, running, and jumping.

96 - Sciatic nerve: The largest and longest nerve in the human body, originating from the sacral plexus. It descends through the posterior part of the thigh, branching to innervate much of the muscles of the thigh, leg, and foot, in addition to providing cutaneous sensitivity to these regions.

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 of choosing 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 Pulse exams. This solution helps in the development of diagnostic skills in different clinical scenarios, allowing professionals and students to explore and improve their skills with greater safety and precision.

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 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:

- 1 - Iliacus muscle
- 2 - psoas major muscle
- 3 - Tensor fasciae latae muscle
- 4 - Iliotibial tract
- 5 - Gluteus maximus muscle
- 6 - Gluteus medius muscle
- 7 - Gluteus minimus muscle
- 8 - Obturator internus muscle
- 9 - Piriformis muscle
- 10 - Gemellus superior muscle
- 11 - Gemellus inferior muscle
- 12 - Quadratus femoris muscle
- 13 - Sartorius muscle
- 14 - Rectus femoris muscle
- 15 - Vastus medialis muscle
- 16 - Vastus intermedius muscle
- 17 - Vastus lateralis muscle
- 18 - Pectineus muscle
- 19 - Adductor longus muscle
- 20 - Gracilis muscle
- 21 - Adductor brevis muscle
- 22 - Adductor magnus muscle
- 23 - Anteromedial intermuscular septum
- 67 - Patella
- 68 - Patellar ligament
- 69 - Fibular head
- 70 - Popliteal fossa
- 71 - Medial condyle of femur
- 72 - Lateral condyle of femur
- 73 - Oblique popliteal ligament
- 74 - Tibia
- 75 - Crural interosseous membrane
- 76 - Medial malleolus
- 77 - Lateral malleolus
- 78 - Inferior extensor retinaculum
- 79 - Flexor retinaculum
- 80 - Superior peroneal retinaculum superior fibular retinaculum
- 81 - Calcaneus



- 82 - Tuberosity of fifth metatarsal bone(V)
- 83 - Dorsal digitorum aponeurosis
- 24 - Adductor hiatus
- 25 - Long head of biceps femoris muscle
- 26 - Short head of biceps femoris muscle
- 27 - Semitendinosus muscle
- 28 - Semimembranosus muscle
- 29 - Tibialis anterior muscle
- 30 - Extensor digitorum longus muscle
- 31 - Extensor hallucis longus muscle
- 32 - Peroneus longus muscle
- 33 - Peroneus brevis muscle
- 34 - Medial head of gastrocnemius muscle
- 35 - Lateral head of gastrocnemius
- 36 - Plantaris muscle
- 37 - Soleus muscle
- 38 - Calcaneal(Achilles)tendon
- 39 - Popliteus muscle
- 40 - Flexor digitorum longus muscle
- 41 - Flexor hallucis longus muscle
- 42 - Tibialis posterior muscle
- 43 - Plantar aponeurosis
- 44 - Abductor hallucis muscle
- 45 - Flexor digitorum brevis muscle
- 46 - Abductor digiti minimi muscle
- 84 - Common iliac artery
- 85 - Common iliac vein
- 86 - Lumbosacral trunk
- 87 - External iliac artery
- 88 - External iliac vein
- 89 - Internal iliac artery
- 90 - Sacral plexus
- 91 - Obturator artery
- 92 - Obturator nerve
- 93 - Femoral nerve
- 94 - Femoral artery
- 95 - Femoral vein
- 96 - Sciatic nerve
- 97 - Posterior femoral cutaneous nerve
- 98 - Inferior gluteal nerve
- 99 - Inferior gluteal artery
- 100 - Internal pudendal artery
- 101 - Pudendal nerve



- 102 - Popliteal artery
- 103 - Popliteal vein
- 47 - Flexor hallucis brevis muscle
- 48 - Oblique head of adductor hallucis muscle
- 49 - Transverse head of adductor hallucis
- 50 - Flexor digiti minimi brevis muscle
- 51 - Quadratus plantae muscle
- 52 - Lumbrical muscles
- 53 - Plantar interosseous muscle
- 54 - Extensor digitorum brevis muscle
- 55 - Extensor hallucis brevis muscle
- 56 - Dorsal interosseous muscle
- 57 - Fifth lumbar vertebra(LV)
- 58 - Intervertebral disc
- 59 - Hip bone
- 60 - Inguinal ligament
- 61 - Intervertebral disc interpubic fibrocartilage
- 62 - Sacrum
- 63 - Coccyx
- 64 - Sacrospinous ligament
- 65 - Sacrotuberous ligament
- 66 - Greater trochanter of femur
- 104 - Tibial nerve
- 105 - Posterior tibial artery
- 106 - Deep fibular nerve deep peroneal nerve
- 107 - Anterior tibial artery
- 108 - Dorsalis pedis artery
- 109 - Medial branch of deep fibular (peroneal) nerve
- 110 - Superficial branch of medial plantar artery
- 111 - Deep branch of medial plantar artery
- 112 - Medial plantar nerve
- 113 - Lateral plantar artery
- 114 - Lateral plantar nerve
- 115 - Deep plantar arch
- 116 - Common plantar digital nerves
- 117 - Common plantar digital arteries
- 118 - Proper plantar digital nerves
- 119 - Proper plantar digital arteries