Superficial Gluteal Muscles

Muscle	Origin	Insertion	Innerv-ation	Action
Gluteus Maximus	Gluteal (posterior) surface of the ilium, sacrum and coccyx	iliotibial tract and gluteal tuberosity of the femur	Inferior gluteal nerve	main extensor of the thigh, and assists with lateral rotation
Gluteus Medius	gluteal surface of the ilium	lateral surface of the greater trochanter	Superior gluteal nerve	Abduction and medial rotation of the lower limb. It stabilises the pelvis during locomotion, preventing 'dropping' of the pelvis on the contralateral side
Gluteus Minimus	ilium and converges to form a tendon	anterior side of the greater trochanter	Superior gluteal nerve	Abduction and medial rotation of the lower limb
Tensor fasciae latae	anterior iliac crest, attaching to the anterior superior iliac spine (ASIS).	iliotibial tract, which itself attaches to the lateral condyle of the tibia	Superior gluteal nerve	Assists the gluteus medius and minimus in abduction and medial rotation of the lower limb

Deep Gluteal Muscles

Muscle	Origin	Insertion	Innervation	Action
Piriformis	Anterior surface of the sacrum	Fibres travel inferiorly and laterally through the greater sciatic foramen to insert onto the greater trochanter of the femur	Nerve to piriformis	Lateral rotation and abduction
Obturator Internus	Pubis and ischium at the obturator foramen	Travels through the lesser sciatic foramen, and attaches to the greater trochanter of the femur.	Nerve to obturator internus	Lateral rotation and abduction
Superior and Inferior Gemellus (gemelli)	Superior gemellus muscle originates from the ischial spine, the inferior from the ischial tuberosity	Both attach to the greater trochanter of the femur	Superior gemellus muscle is innervated by the nerve to obturator internus, the inferior gemellus is innervated by the nerve to quadratus femoris	Lateral rotation and abduction
Quadratus Femoris	Lateral aspect of the ischial tuberosity	Quadrate tuberosity on the intertroc-hanteric crest	Nerve to quadratus femoris	Lateral rotation

Anterior Compartment of Thigh

Muscle	Origin	Insertion	Innervation	Action

Anterior Compartment of Thigh (cont)				
iliopsoas	psoas major originates from the lumbar vertebrae, and the iliacus originates from the iliac fossa of the pelvis	together onto the lesser trochanter of the femur	psoas major is innervated by anterior rami of L1-3, while the iliacus is innervated by the femoral nerve	Flexion of the the thigh at the hip joint
Vastus Lateralis	greater trochanter and the lateral lip of linea aspera of the femur.	insert onto the patella via the quadriceps tendon. The patella, in turn, is attached to the tibial tuberosity by the patella ligament.	Femoral nerve	Extension of the knee joint. It has a secondary function of stabilising the patella.
Vastus Interm-edius	anterior and lateral surfaces of the femoral shaft.	insert onto the patella via the quadriceps tendon. The patella, in turn, is attached to the tibial tuberosity by the patella ligament	Femoral Nerve	Extension of the knee joint. It has a secondary function of stabilising the patella.
Vastus Medialis	Originates from the intert-rochanteric line and medial lip of the linea aspera of the femur.	attaches to the patella via the quadriceps femoris tendon	Femoral Nerve	Extension of the knee joint. It has a secondary function of stabilising the patella.
Rectus Femoris	Originates from the anterior inferior iliac spine and the ilium of the pelvis.	attaches to the patella via the quadriceps femoris tendon	Femoral Nerve	Extension of the knee joint and flexion of the hip joint (it is the only muscle of the quadriceps group to cross both the hip and knee joints).
sartorius	Originates from the anterior superior iliac spine	superior, medial surface of the tibia	Femoral Nerve	At the hip joint, it is a flexor, abductor and lateral rotator. At the knee joint, it is also a flexor.

Anterior Compartment of Thigh (cont)

pectineus	Originates from the pectineal line of the pubis bone	inserts onto the pectineal line on the posterior aspect of the femur, immediately inferior to the lesser trochanter.	Femoral nerve. May also receive a branch from the obturator nerve.	Adduction and flexion at the hip joint

Medial Compartment of the Thigh

Muscle	Origin	Insertion	Innervation	Action
Adductor Magnus	Adductor – Originates from the inferior rami of the pubis and the rami of ischium. Hamstring part – Originates from the ischial tuberosity	Adductor – attaches to the linea aspera of the femur. Hamstring part – attaches to the adductor tubercle and medial supracondylar line of the femur.	Adductor – Obturator nerve (L2-L4) Hamstring part – Tibial component of the sciatic nerve (L4-S3).	Adductor – Adduction and flexion of the thigh Hamstring – Adduction and extension of the thigh.
Adductor Longus	Originates from the pubis bone of the pelvis and expands into a fan shape.	Broad distal attachment along the linea aspera of the femur.	Obturator nerve (L2-L4).	Adduction of the thigh
Adductor Brevis	Originates from the body of pubis and inferior pubic rami	Attaches to the linea aspera on the posterior surface of the femur (proximal to the adductor longus attachment).	Obturator nerve (L2-L4).	Adduction of the thigh.
Obturator Externus	Originates from the membrane of the obturator foramen and adjacent bone	It passes under the neck of femur and attaches onto the posterior aspect of the greater trochanter.	Obturator nerve (L2-L4).	Adduction and lateral rotation of the thigh
Gracilis	Originates from the inferior rami of the pubis and the body of the pubis	It descends down the medial aspect of the thigh and attaches to the medial surface of the tibial shaft.	Obturator nerve (L2-L4).	Adduction of the thigh at the hip and flexion of the leg at the knee

Posterior Compartment of the Thigh

Muscle	Origin	Insertion	Innervation	Action

Posterior Compartment of the Thigh (cont)				
Biceps Femoris	The long head originates from the ischial tuberosity of the pelvis. The short head originates from the linea aspera on posterior surface of the femur.	The heads form a tendon, which inserts into the head of the fibula.	Long head innervated by the tibial part of the sciatic nerve, whereas the short head is innervated by the common fibular part of the sciatic nerve.	Main action is flexion at the knee. It also extends the thigh at the hip, and laterally rotates at the hip and knee.
Semite-ndi-nosus	Originates from the ischial tuberosity of the pelvis	Attaches to the medial surface of the tibia.	Tibial part of the sciatic nerve.	Flexion of the leg at the knee joint. Extension of thigh at the hip. Medially rotates the thigh at the hip joint and the leg at the knee joint.
Semime mbr-anosus	Originates from the ischial tuberosity (more superiorly than the origin of the semitendinosus and biceps femoris)	Attaches to the medial tibial condyle.	Tibial part of the sciatic nerve	Flexion of the leg at the knee joint. Extension of thigh at the hip. Medially rotates the thigh at the hip joint and the leg at the knee joint.

Anterior Compartment of the Leg				
Muscle	**Origin**	**Insertion**	**Innerv ation**	**Action**
Tibialis Anterior	Originates from the lateral surface of the tibia	attaches to the medial cuneiform and the base of metatarsal I.	Deep fibular nerve.	Dorsiflexion and inversion of the foot
Extensor Digitorum Longus	Originates from the lateral condyle of the tibia and the medial surface of the fibula.	The fibres converge into a tendon, which travels onto the dorsal surface of the foot. The tendon splits into four and each tendon inserts onto a toe.	Deep fibular nerve.	Extension of the lateral four toes, and dorsif-lexion of the foot
Extensor Hallucis Longus	Originates from the medial surface of the fibular shaft	The tendon crosses anterior to the ankle joint and attaches to the base of the distal phalanx of the great toe.	Deep fibular nerve	Extension of the great toe and dorsiflexion of the foot.

Anterior Compartment of the Leg (cont)

Fibularis Tertius	Originates with the extensor digitorum longus from the medial surface of the fibula.	Its tendon descends onto the dorsal surface of the foot and attaches to the fifth metatarsal.	Deep fibular nerve	Eversion and dorsiflexion of the foot.

Lateral Compartment of the Leg

Muscle	Origin	Insertion	Innerv-ation	Action
Fibularis Longus	The fibularis longus originates from the superior and lateral surface of the fibula and the lateral tibial condyle.	The fibres converge into a tendon, which descends into the foot, posterior to the lateral malleolus. The tendon crosses under the foot, and attaches to the bones on the medial side, namely the medial cuneiform and base of metatarsal I.	Superf-icial fibular (peroneal) nerve.	Eversion and plantarflexion of the foot. Also supports the lateral and transverse arches of the foot.
Fibularis Brevis	Originates from the inferolateral surface of the fibular shaft. The muscle belly forms a tendon, which descends with the fibularis longus into the foot.	It travels posteriorly to the lateral malleolus, passing over the calcaneus and the cuboidal bones. The tendon then attaches to a tubercle on the 5th metatarsal.	Superf-icial fibular (peroneal) nerve.	Eversion of the foot.

Posterior Compartment of the Leg

Muscle	Origin	Insertion	Innerv ation	Action
Gastro-cnemius	The lateral head originates from the lateral femoral condyle. The medial head originates from the medial femoral condyle. The two heads combine to form a single muscle belly.	Distally, the muscle belly converges with the soleus muscle to form the calcaneal tendon. This inserts onto the calcaneus.	Tibial nerve.	Plantarflexion at the ankle joint and flexion at the knee joint.

Posterior Compartment of the Leg (cont)				
Soleus	Originates from the soleal line of the tibia and proximal fibula	The muscle converges with the fibres of the gastrocnemius to form the calcaneal tendon, which inserts onto the calcaneus.	Tibial nerve	Plantarflexion of the foot at the ankle joint.
Plantaris	Originates from the lateral supracondylar line of the femur. The fibres condense into a tendon which travels down the leg, between the gastrocnemius and soleus muscles.	It blends with the calcaneal tendon and inserts onto the calcaneus.	Tibial nerve	Contributes to plantarflexion at the ankle joint and flexion at the knee joint

Dorsal Aspect of Foot				
Muscle	**Origin**	**Insertion**	**Innervation**	**Action**

Plantar Aspect of Foot				
Muscle	**Origin**	**Insertion**	**Innervation**	**Action**