

(Anterior Fascial Compartment of the Thigh)

Muscle	Origin	Insertion	Action
SARTORIUS	A.S.I.S	Upper medial surface of shaft of tibia	Flexes, abducts, laterally rotates thigh at hip joint Flexes and medially rotates leg at knee joint
PECTINEUS	Superior ramus of pubis	Upper end of linea aspera of shaft of femur	Flexes and adducts thigh at hip joint
PSOAS MAJOR	Transverse processes, bodies, and intervertebral discs of the 12th thoracic and five lumbar vertebrae	Lesser trochanter of femur	It Flexes thigh on trunk; if thigh is fixed (The insertion is fixed while the origin is moving) It flexes the trunk on thigh as in sitting up from lying down. Sit-up' exercise
ILIACUS	Iliac fossa of hip bone		
RECTUS FEMORIS	Straight head from A.I.I.S Reflected head from ilium above acetabulum	the four heads are attached to the patella and, via the ligamentum patellae, to the tibial tuberosity (the real insertion)	Extends the leg at knee joint; flexes thigh at hip joint
VASTUS LATERALIS	Upper end and shaft of femur (linear origin)		
ASTUS MEDIALIS			Extends the leg at knee joint
VASTUS INTERMEDIUS	Anterior and lateral surfaces of shaft of femur		

Nerve supply : **Femoral nerve** *except* psoas major which is innervated by **lumbar plexus**
 Blood supply : **Femoral Artery**

(Medial Fascial Compartment of the Thigh)

Muscle	Origin	Insertio	Action
GRACILIS	Inferior ramus of pubis, ramus of ischium	Upper part of shaft of tibia on medial surface (SGS) area	Adducts thigh at hip joint; flexes leg at knee joint
ADDUCTOR LONGUS	Body of pubis, medial to pubic tubercle	Posterior surface of shaft of femur (linea aspera)	Adducts thigh at hip joint
ADDUCTOR BREVIS	Inferior ramus of pubis		
ADDUCTOR MAGNUS	Ischio-pubic ramus	mainly linea aspera, gluteal tuberosity and medial supracondylar line	Laterally rotates thigh at hip joint
OBTURATOR EXTERNUS	Outer surface of obturator membrane and pubic and ischial rami	Medial surface of greater trochanter	

Nerve supply : **Obturator Nerve**

Blood supply : **Profunda Femoris Artery and Obturator Artery**

(Gluteal Region)

Muscle	Origin	Insertion	N.S	Action
GLUTEUS MAXIMUS	1-Ilium (area behind the posterior gluteal line) 2-Back of sacrum and coccyx 3-Back of sacrotuberous ligament	The superficial three-fourths are inserted into the iliotibial tract The lower deep part is inserted into the gluteal tuberosity of femur	Interior gluteal nerve	Extends thigh, some lateral rotation (<u>main extensor of the hip joint</u>) Supports the Extended knee joint through iliotibial tract Plays an important role in climbing cycling and upstairs
TENSOR FASCIAE LATA	Iliac crest	Iliotibial tract		Assist gluteus maximus in extending the knee joint
GLUTEUS MEDIUS			Superior gluteal nerve	Abduction (main abductor of the hip joint) Medial rotation(anterior fibers) Both muscle contract reflex on each side alternatively during walking to prevent tilting of the pelvis to the unsupported side
GLUTEUS MINIMUS	Ilium	Greater trochanter of femur		

Short **LATERAL ROTATOR** muscles of the hip joint :

1. PIRIFORMIS
2. SUPERIOR GEMELLUS
3. OBTURATOR INTERNUS
4. INFERIOR GEMELLUS
5. QUADRATUS FEMORIS
6. OBTURATOR EXTERNUS

(Posterior Fascial Compartment of the Thigh)

Muscle	Origin	Insertion	N.S	Action
BICEPS FEMORIS	Long head: ischial tuberosity Short head: linea aspera, lateral supracondylar ridge of shaft of femur	Head of fibula	Long head: tibial portion of sciatic nerve Short head: common peroneal portion of sciatic nerve	Flexes and <u>laterally</u> rotates leg at knee joint; long head also extends thigh at hip joint
SEMITENDINOSUS	Ischial tuberosity	Upper part of medial surface of shaft of tibia (SGS area)	Tibial portion of sciatic nerve	Flexes and <u>medially</u> rotates leg at knee joint; extends thigh at hip joint
SEMI-MEMBRANOSUS		Medial condyle of tibia		
ADDUCTOR MAGNUS HAMSTRING PORTION ISCHIAL PART		Adductor tubercle of femur		

Nerve supply : **Sciatic nerve**

Blood supply : **Branches of the profunda femoris artery**

(Anterior Fascial Compartment of the Leg)

Muscle	Origin	Action
TIBIALIS ANTERIOR	Lateral surface of the shaft of tibia	<p>The main actions of these muscles are</p> <p>Extension of the foot at the ankle joint (dorsiflexion) to raise the toes up</p> <p>(in other words to stand up on the heels)</p> <p>In addition any muscle that got (tibialis) in its name will invert the foot at subtalar and transverse tarsal joints while any muscle got (peroneus) in its name will Everts foot at subtalar and transverse tarsal joints</p>
EXTENSOR DIGITORUM LONGUS	The anterior surface of shaft of fibula	
EXTENSOR HALLUCIS LONGUS		
PERONEUS TERTIUS		

Nerve supply : **Deep Peroneal Nerve**

Blood supply : **Anterior Tibial Artery**

(Lateral Fascial Compartment of the Leg)

Muscle	Origin	Insertion	Action
PERONEUS LONGUS	The lateral surface of shaft of fibula	Base of first metatarsal and the medial cuneiform bone (passes through a groove in the Cuboid bone.	both flex the foot at the ankle joint Evert the foot at the subtalar and transverse tarsal joints
PERONEUS BREVIS	Body of pubis, medial to pubic tubercle		

Nerve supply : **Superficial Peroneal Nerve**

Blood supply : **Branches from the Peroneal Artery**

(Posterior Fascial Compartment of the Leg)
Superficial :

Muscle	Origin	Insertion	Action
GASTROCNEMIUS	Lateral head from lateral condyle of femur Medial head from above medial condyle	Via tendo calcaneus into posterior surface of calcaneum	Plantar flexes foot at ankle joint Flexes knee joint
SOLEUS	Shafts of tibia and fibula		Together with gastrocnemius and plantaris is powerful plantar flexor of ankle joint; provides main propulsive force in walking and running
PLANTARIS		This muscle some times is absent	

Deep :

1. POPLITEUS
2. FLEXOR DIGITORUM LONGUS
3. FLEXOR HALLUCIS LONGUS
4. TIBIALIS POSTERIOR

Nerve supply : **Tibial Nerve**

Blood supply : **Posterior Tibial Artery**

(Muscles of the Sole of the Foot)

FIRST LAYER :

- 1- ABDUCTOR HALLUCIS
- 2- FLEXOR DIGITORUM BREVIS
- 3- ABDUCTOR DIGITI MINIMI

SECOND LAYER :

- 1- QUADRATUS PLANTAE
- 2- LUMBRIKALS
- 3- FLEXOR DIGITORUM LONGUS TENDON
- 4- FLEXOR HALLUCIS LONGUS TENDON

THIRD LAYER :

- 1- FLEXOR HALLUCIS BREVIS
- 2- ADDUCTOR HALLUCIS
- 3- FLEXOR DIGITI MINIMI BREVIS

FOURTH LAYER :

- 1- INTEROSSEI
- 2- PERONEUS LONGUS TENDON
- 3- TIBIALIS POSTERIOR TENDON