

LOWER LIMB MUSCLE FUNCTIONS

1. PIRIFORMIS

- Lateral rotator of thigh at hip joint

2. OBTURATOR INTERNUS

- Lateral rotator of thigh at hip joint

3. GAMELLUS SUPERIOR

- Lateral rotator of thigh at hip joint

4. GAMELLUS INFERIOR

- Lateral rotator of thigh at hip joint

5. QUADRATUS FEMORIS

- Lateral rotator of thigh at hip joint

6. GLUTEUS MINIMUS

- Abducts thigh at hip joint
- Tilts pelvis when walking to permit opposite leg to clear ground

7. GLUTEUS MEDIUS

- Abducts thigh at hip joint
- Tilts pelvis when walking to permit opposite leg to clear ground

8. GLUTEUS MAXIMUS

- Extends and laterally rotates hip joint
- Through iliotibial tract, it extends knee joint

9. TENSOR FASCIAE LATAE

- Assists gluteus maximus in extending the knee joint

10. SARTORIUS

- Flexes, abducts, laterally rotates thigh at hip joint
- Flexes and medially rotate leg at knee joint

11. RECTUS FEMORIS

- Extension of leg at knee joint
- Flexes thigh at hip joint

12. VASTUS LATERALIS

- Extension of leg at knee joint

13. VASTUS MEDIALIS

- Extension of leg at knee joint
- Stabilizes patella

14. VASTUS INTERMEDIUS

- Extension of leg at knee joint
- Articularis genus retracts synovial membrane

15. PSOAS MAJOR

- Flexes thigh on trunk
- If trunk is fixed, it flexes the trunk on the thigh as in sitting up from lying down

16. ILIACUS

- Flexes thigh on trunk
- If trunk is fixed, it flexes the trunk on the thigh as in sitting up from lying down

17. BICEPS FEMORIS

- Flexes and laterally rotates leg at knee joint
- Extends thigh at hip joint

18. SEMITENDINOSUS

- Flexes and medially rotates leg at knee joint
- Extends thigh at hip joint

19. SEMIMEMBRANOSUS

- Flexes thigh on trunk
- If trunk is fixed, it flexes the trunk on the thigh as in sitting up from lying down

20. GRACILIS

- Adducts thigh at hip joint
- Flexes leg at knee joint

21. PECTINEUS

- Flexes and abducts thigh at hip joint

22. ADDUCTOR LONGUS

- Adducts thigh at hip joint and assists in medial rotation

23. ADDUCTOR BREVIS

- Adducts thigh at hip joint

24. ADDUCTOR MAGNUS

- Adducts thigh at hip joint and assists in medial rotation
- Hamstring portion extends thigh at hip joint

25. OBTURATOR EXTERNUS

- Laterally rotates thigh at hip joint

26. GASTROCNEMIUS

- Plantar flexes foot at ankle joint
- Flexes knee joint

27. PLANTARIS

- Plantar flexes foot at ankle joint
- Flexes knee joint

28. SOLEUS

- Together with gastrocnemius and plantaris is powerful plantar flexor of ankle joint
- Provides main propulsive forces in walking and running

29. POPLITEUS

- Flexes leg at knee joint
- Unlocks knee joint by lateral rotation of femur on tibia and slackens ligaments of joints

30. FLEXOR HALLUCIS LONGUS

- Flexes distal phalanx of big toe
- Plantar flexes foot at ankle joint
- Supports medial longitudinal arch of foot

31. FLEXOR DIGITORUM LONGUS

- Flexes distal phalanges of lateral four toes
- Plantar flexes foot at ankle joint
- Supports medial and lateral longitudinal arches of foot

32. TIBIALIS POSTERIOR

- Plantar flexes foot at ankle joint
- Inverts foot at subtalar and transverse tarsal joints
- Supports medial longitudinal arch of foot

33. FIBULARIS LONGUS

- Plantarflexes foot at ankle joint
- Everts foot at subtalar and transverse tarsal joints
- Supports lateral longitudinal and transverse arches of foot

34. FIBULARIS BREVIS

- Plantarflexes foot at ankle joint
- Everts foot at subtalar and transverse tarsal joints
- Supports lateral longitudinal arch of foot

35. TIBIALIS ANTERIOR

- Extends foot at ankle joint
- Inverts foot at subtalar and transverse tarsal joints
- Holds up medial longitudinal arch of foot

36. EXTENSOR HALLUCIS LONGUS

- Extends big toe
- Extends foot at ankle joint
- Inverts foot at subtalar and transverse tarsal joints

37. EXTENSOR DIGITORUM LONGUS

- Extends toes
- Extends foot at ankle joint

38. FIBULARIS TERTIUS

- Extends foot at ankle joint
- Everts foot at subtalar and transverse tarsal joints

39. EXTENSOR DIGITORUM BREVIS

- Extends toes

40. EXTENSOR HALLUCIS BREVIS

- Extends the big toe

41. ABDUCTOR HALLUCIS

- Flexes and abducts big toe
- Braces medial longitudinal arch

42. FLEXOR DIGITORUM BREVIS

- Flexes lateral four toes
- Braces medial and lateral longitudinal arches

43. ABDUCTOR DIGITI MINIMI

- Flexes and abducts fifth toe
- Braces lateral longitudinal arch

44. QUADRATUS PLANTAE

- Assists flexor digitorum longus in flexing lateral four toes

45. LUMBRICALS

- Extends toes at interphalangeal joints

46. FLEXOR HALLUCIS BREVIS

- Flexes metacarpophalangeal joint of big toe
- Supports medial longitudinal arch

47. ADDUCTOR HALLUCIS

- Flexes metatarsophalangeal joint of big toe
- Holds together metatarsal bones

48. FLEXOR DIGITI MINIMI BREVIS

- Flexes metatarsophalangeal joint of little toe

49. PLANTAR INTEROSSEI

- Adduction of toes
- Flexes metatarsophalangeal joints
- Extends interphalangeal joints

50. DORSAL INTEROSSEI

- Abduction of toes
- Flexes metatarsophalangeal joints
- Extends interphalangeal joints