MUSCLES ACTING ON THE ANKLE AND FOOT
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THREE COMPARTMENTS OF THE LEG: (p 375) (Table: 11-17)

ANTERIOR COMPARTMENT: dorsiflex foot, extends toes.
tendons of insertion are held down by two retinacula at ankle
- tibialis anterior
  insertn: medial cuneiform, 1st metatarsal
dorsiflex, invert (small tears = shin splints)
- extensor digitorum longus
  insertn: superior surf of phalanges 2-5 extends toes
- extensor hallucis longus
  insertn: superior surf dist 1st phalanx 2-5, everts foot

LATERAL COMPARTMENT: everts foot. (Very small compartment)
- fibularis (peroneus) longus
  insertn: 1st metatarsal, med cuneiform (tendon under foot)
  evert foot, plantar flex
- fibularis (peroneus) brevis
  insertn: lateral side of 5th metatarsal
  evert foot, plantar flex

POSTERIOR COMPARTMENT, SUPERFICIAL: all but last plantar flex foot
- gastrocnemius
  origin: lateral and medial condyles of femur
  insertn: Achilles tendon plantar flex
- soleus
  origin: fibula and tibia
  insertn: Achilles tendon plantar flex
- plantaris
  origin: post. surf femur, above lateral condyle
  insertn: posterior calcaneus plantar flex
- popliteus
  origin: lat. condyle femur
  insertn: post tibia pl.flex, med rotates leg

POSTERIOR, DEEP: These internal muscles have tendons which pass behind medial malleolus, act on foot and toes
- flexor hallucis longus
  origin: fibula
  insertn: distal 1st phalanx flexes big toe, plantar flex foot, inverts foot
- flexor digitorum longus
  origin: tibia
  insertn: distal phalanges 2-5 plantar flexes toes 2-5
- tibialis posterior
  origin: tibia, fibula
  insertn: medial tarsals, 2nd-4th metatarsals inversion, dorsiflexion

INTRINSIC MUSCLES OF FOOT: (p 377) similar to hand, but heavier. (Table: 11-18)
The foot possesses supporting arch. Covered with plantar aponeurosis

DORSAL (extensors):
- extensor hallucis brevis
  origin: calcaneus
  insertn: 1st prox phalanx
- extensor digitorum brevis
  origin: calcaneus
  insertn: 2, 3, 4th prox phalanx, tendons of ext. dig. longus

PLANTAR four layers:
- flexor digitorum brevis
  origin: calcaneus
  insertn: middle phalanges, 2-5 split tendons for “longus”
- abductor digiti minimi
  superficial
- lumbricales
  second layer
- adductor hallucis
  third layer
- plantar interossei
  deepest layer

Front View of Foot Muscles

![Diagram of Foot Muscles](image-url)