



Understanding the Foot & Ankle

The foot and ankle

The foot and ankle form a complex structure for weight-bearing and locomotion. The foot is divided into three columns: the medial column (with the arch), the central column (with the ball of the foot), and the lateral column (with the heel). The ankle is formed by the distal ends of the tibia and fibula of the leg and the distal end of the talus of the foot. The ankle is a hinge joint, allowing for flexion and extension. The foot is a complex structure of bones, ligaments, and muscles that work together to support the body and provide a stable base for walking and running.



Inversion - right foot
(Turning the sole inward)



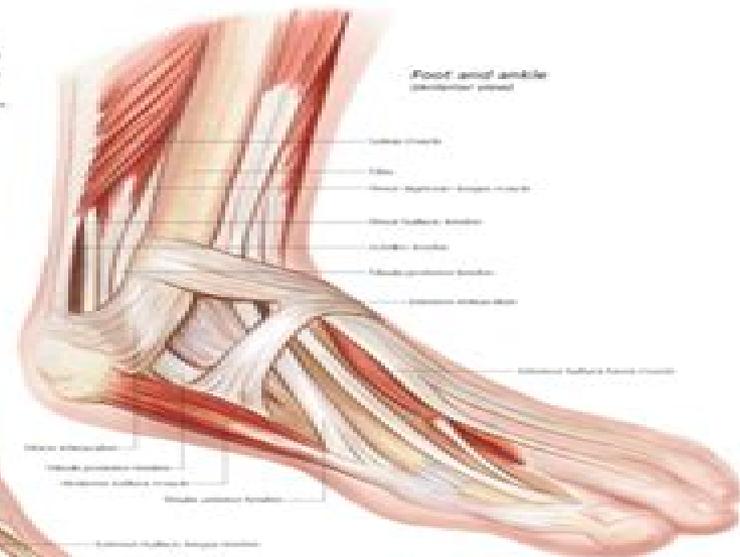
Eversion - left foot
(Turning the sole outward)



Key to abbreviations:
 ■ Bone ■ Ligament
 ■ Muscle ■ Tendon



Foot and ankle (medial view)



Bones of the ankle and foot
(Posterior view)



Dorsiflexion
(Movement upward)

Plantar flexion
(Movement downward)

Normal foot - The three arches in the foot (medial longitudinal, lateral longitudinal and transverse) help support the body as we stand or move.

Plantar fasciitis - Inflammation of the plantar fascia (running along the sole of the foot), often resulting in heel pain or morning stiffness.

Flat foot - Loss of the medial longitudinal arch, which can lead to foot pain and fatigue.

Clubfoot - A congenital deformity, present at birth, from incorrectly formed bones and joints.

Bones and ligaments of the left foot (plantar view)



- 1 Metatarsal I
- 2 Metatarsal II
- 3 Metatarsal III
- 4 Metatarsal IV
- 5 Metatarsal V
- 6 Proximal phalanx
- 7 Middle phalanx
- 8 Distal phalanx
- 9 Sesamoid
- 10 Calcaneus
- 11 Talus
- 12 Navicular
- 13 Cuboid
- 14 Cuneiform
- 15 Cuneiform I
- 16 Cuneiform II
- 17 Cuneiform III
- 18 Cuneiform IV
- 19 Cuneiform V
- 20 Metatarsal I
- 21 Metatarsal II
- 22 Metatarsal III
- 23 Metatarsal IV
- 24 Metatarsal V
- 25 Proximal phalanx
- 26 Middle phalanx
- 27 Distal phalanx

11 numbered bones form the foot. There are 28 bones in a normal adult foot. There are 27 bones in a normal adult foot. There are 27 bones in a normal adult foot. There are 27 bones in a normal adult foot.

Understanding Foot Ankle

K Morrison



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