

Lower Limb Bones - Tibia and Fibula

The tibia and fibula are the two bones of the lower leg which articulate with one another. Features of the tibia include: tibial plateau, tibial tuberosity, Gerdy's tubercle, fibular notch, medial and lateral condyles, and medial malleolus. Features of the fibula include the fibular head and lateral malleolus. Together they provide weight-bearing function, as well as points of attachment for many muscles, ligaments, and tendons of the lower limb.



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Characteristics

Tibia

Tibetan

Located medially, the tibia is the main weight-bearing bone of the lower leg; it forms what is known as the "shin" and can be easily palpated along the anterior portion of the leg.

Tibial Plateau

Tibetan Plateau

This is one of the most important weight-bearing points of the body, located at the proximal end of the tibia. The intercondylar eminence, part of the plateau, serves as an attachment point for the anterior and posterior cruciate ligaments, as well as the medial and lateral menisci.

Medial and Lateral Condyles

Metal Cone and Ladder Cone

The condyles are located proximally and articulate with the medial and lateral condyles of the femur to form the knee joint.

Tibial Tuberosity

Tibetan Tube

A protrusion of the proximal anterior tibia, the tuberosity provides insertion for the patellar ligament. 1-2 cm medial to the tibial tuberosity also serves as the preferred site to establish intraosseous (IO) access during emergency situations in which IV access is not possible.

Gerdy's Tubercle

Guard's Tube

A lateral tubercle on the proximal tibia, it provides insertion for the iliotibial tract, also known as the IT band.

Fibular Notch

Fibber in Notch

The fibular notch is a depression on the distal tibia joining with the fibula to form the inferior tibiofibular articulation.

Medial Malleolus

Metal Mail

The medial malleolus is a protrusion of the distal tibia, which contains the malleolar groove to which the tibialis posterior and flexor digitorum longus tendons attach. A separate groove, posterolateral to the malleolar groove, serves as an attachment point for the flexor hallucis longus tendon and deltoid ligament.

Fibula

Fibber

This bone's main purpose is to serve as a site for muscle attachments, as it has little to no weight-bearing role. In fact, the fibula is commonly used as a harvest site for bone grafts, because segmental removal does not affect function in the realm of normal activity.

Fibular Head[Fibber's Head](#)

Located at the proximal fibula, the head provides an attachment site for the fibular (lateral) collateral ligament of the knee.

Lateral Malleolus[Ladder Mail](#)

Joins with the trochlea of the talus and is inferior and posterior to the medial malleolus. The anterior talofibular, posterior talofibular and calcaneofibular ligaments all attach here. The peroneus longus and brevis tendons can be found in its sulcus.