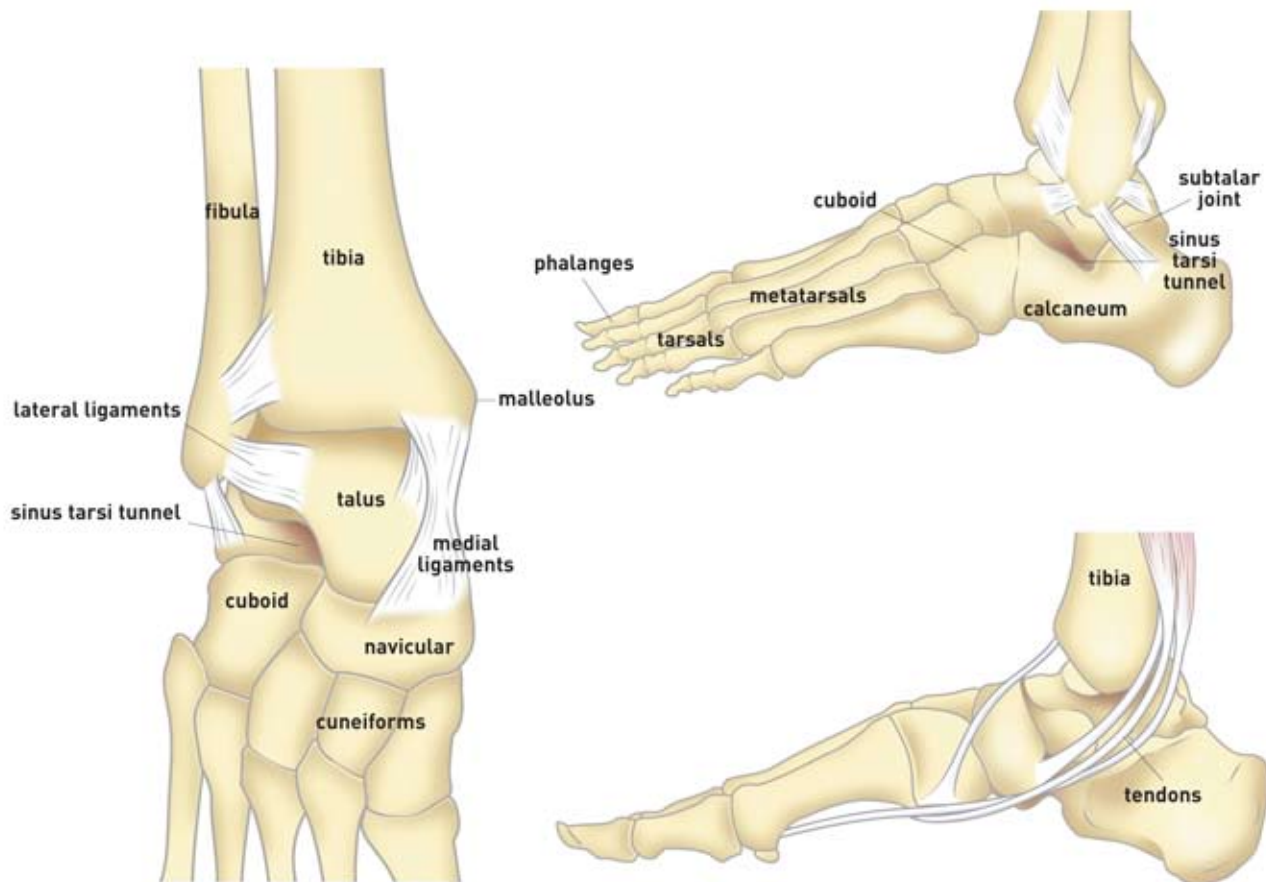


The foot and ankle

The foot is a hugely important area for the runner, because it is the initial point of contact with the ground and directs all the forces through the body. If the foot is out of alignment or not functioning properly, a lot can go wrong further up the kinetic chain.



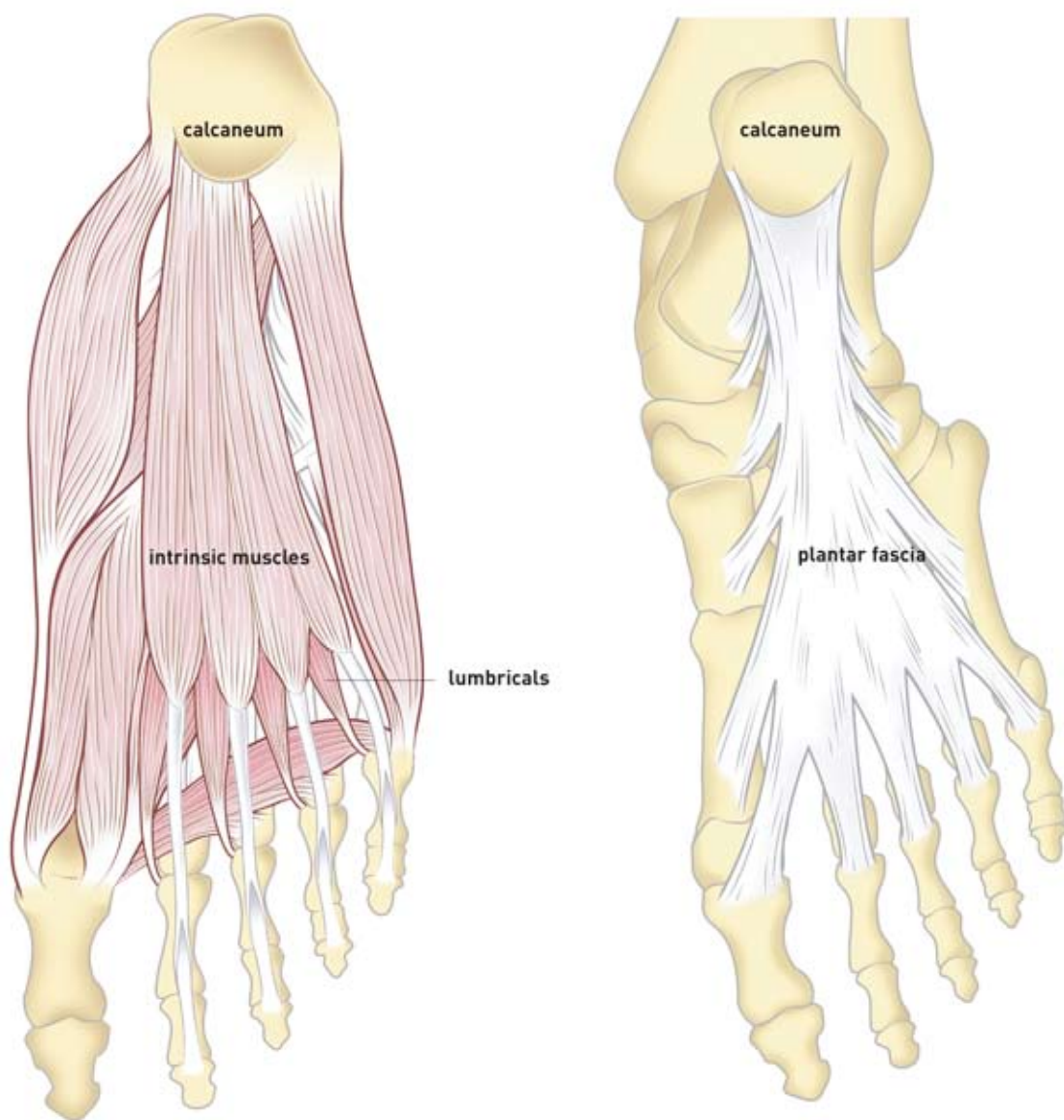
The **ankle joint** is the articulation between the leg and the foot. It is where the **tibia**, **fibula** and **talus** meet. The **malleoli**, the bones on either side of the joint that you can see, form the sides of the ankle joint, which is strengthened on both sides by the **medial** and **lateral ligaments**.

The foot is split into three sections: **rear**, **middle** and **fore**.

The rear foot consists of the **subtalar joint** and the **calcaneum**. This area is extremely important for runners, as it determines how the foot will land.

The midfoot is the arch of the foot and absorbs a lot of stress. It consists of five bones: the **cuboid**, **navicular** and three **cuneiforms**.

The forefoot consists of the long toe bones, called **metatarsals**, **tarsals** and **phalanges**.



Sole of foot

The foot has an intricate network of small muscles, the **intrinsic** and **lumbricals**, that help keep its shape.

Many tendons run under the foot, supporting the arch and working the toes from the leg.

The **sinus tarsi tunnel** (see opposite) can cause chronic lateral ankle pain in runners who overpronate.

The heel is connected to the forefoot via a long ligament, the **plantar fascia**, which is pulled tight during the gait cycle to load the foot.