



Information Sheet

Foot Information

Your forefoot includes the five metatarsal bones and toes (phalanges). The first metatarsal bone bears the most weight and also provides the attachment for several tendons. Near this are two small, oval-shaped bones (sesamoid). The second, third, and fourth metatarsal bones are well-protected with only minor tendon attachments and are less important for walking, running etc.

Out of a total of seven tarsal bones in your foot, the midfoot includes five (the navicular, cuboid, and three cuneiform). The distal row contains the three cuneiforms and the cuboid. The midfoot meets the forefoot at the five tarsometatarsal (TMT) joints. The hindfoot is made up of the calcaneus which is the largest tarsal bone and forms the heel. The talus resting on top of it forms the pivot of the ankle.

Toe joints point the toes towards or away from the ground and allow side-to-side movement. As a whole and excluding the toes, the foot can move outwards and inwards and all the many joints of the hindfoot and midfoot contribute to these complicated movements.

Although all the bones and joints in your foot give it flexibility an arch must also be formed to support weight. The foot has three arches which are known as medial, lateral and transverse and are maintained by the shape of the bones, ligaments, muscles and tendons.

Anatomy

Your foot is designed to cope with enormous pressure. It contains twenty-six bones and thirty-three joints. In addition it also made up of more than one hundred muscles, tendons and ligaments and, like the rest of the body, has a network of blood-vessels, nerves, skin and soft tissues. At best all these elements work together to provide us with balance, support and mobility but, if something goes wrong in one part then it can affect our bodies in other places.

Problems in the foot are commonly caused by injury, wear and tear, bone disease or inherited conditions but it is important to realise that environmental factors can also contribute. These include things like poorly-fitting shoes - running and walking on flat ground can also damage the foot and so it is important to ensure that your footwear is suitable for the type of recreation or hobby you might be considering.