

Anatomy of the Foot

Overview

Your feet contain 1/4 of the bones in your entire body. There are 26 bones in each foot. (There is actually 28 bones if you include the small sesamoid bones located beneath the first metatarsal head.) Your feet and ankles also have more than 100 muscles, tendons and ligaments. They can withstand enormous amounts of pressure and pounding and carry you through a lifetime of activity. Your feet combine structural stability and strength with a mechanical complexity that is truly astounding.

Your feet provide your body with support, balance and the ability to get you to places you want to go.

Your feet have 3 main parts which include the forefoot, midfoot and hindfoot.

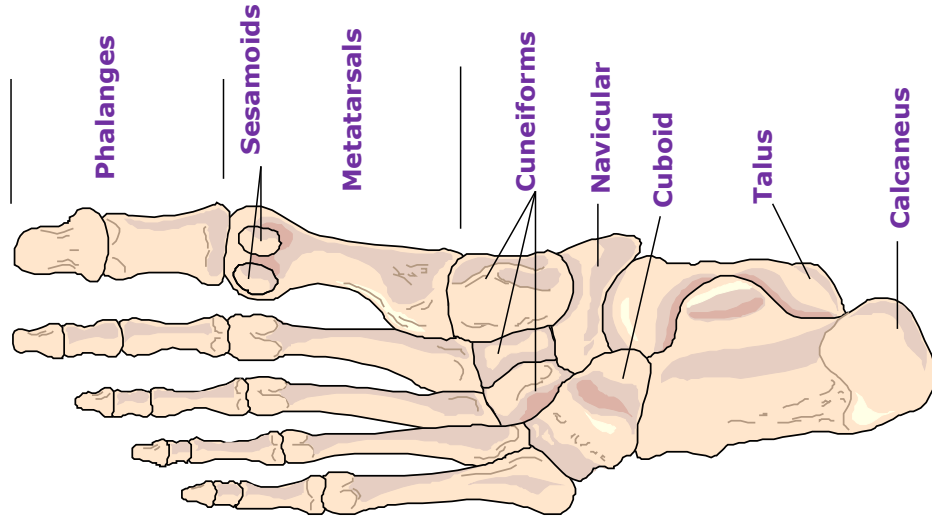
Your **forefoot** is made up of your 5 toes (phalanges) and their connecting long bones called the metatarsals. Also located in the forefoot are the sesamoids which are two small bones found under the first metatarsal head. The toes are each made up of smaller bones. The big toe has 2 phalanges while the other toes each have 3 bones. The range of motion of the big toe and efficiency of the MTP (metatarsophalangeal) joint where the big toe articulates with the head of the first metatarsal, are very important to your foot's ability to propel your body forward. Your forefoot will bear 1/2 the weight of your entire body as it balances pressure on the ball of your foot.

Your **midfoot** is made up of 5 tarsal bones (3 cuneiforms, the navicular and cuboid) and forms the foot's arch. This part of the foot acts as your body's natural shock absorber. The bones of your midfoot are connected to both the hindfoot and the forefoot by muscles and the plantar fascia connective tissue.

Your **hindfoot** has 3 joints and links your midfoot to your ankle. Your ankle (talus) is connected to the tibia and fibula which are the two long bones of your lower leg which forms a hinge by which the foot can move up or down. The calcaneus or heel bone is the largest bone in your foot also joins with the talus to form the subtalar joint. The subtalar joint allows side to side motion of your foot on the leg.

About muscles, tendons and ligaments...

Muscle is the tissue of your body which primarily functions as a source of power. **Tendons** are fibrous tissues that connect muscles to bones. **Ligaments** are fibrous tissues that connect bones to other bones.



Bottom View of Right Foot