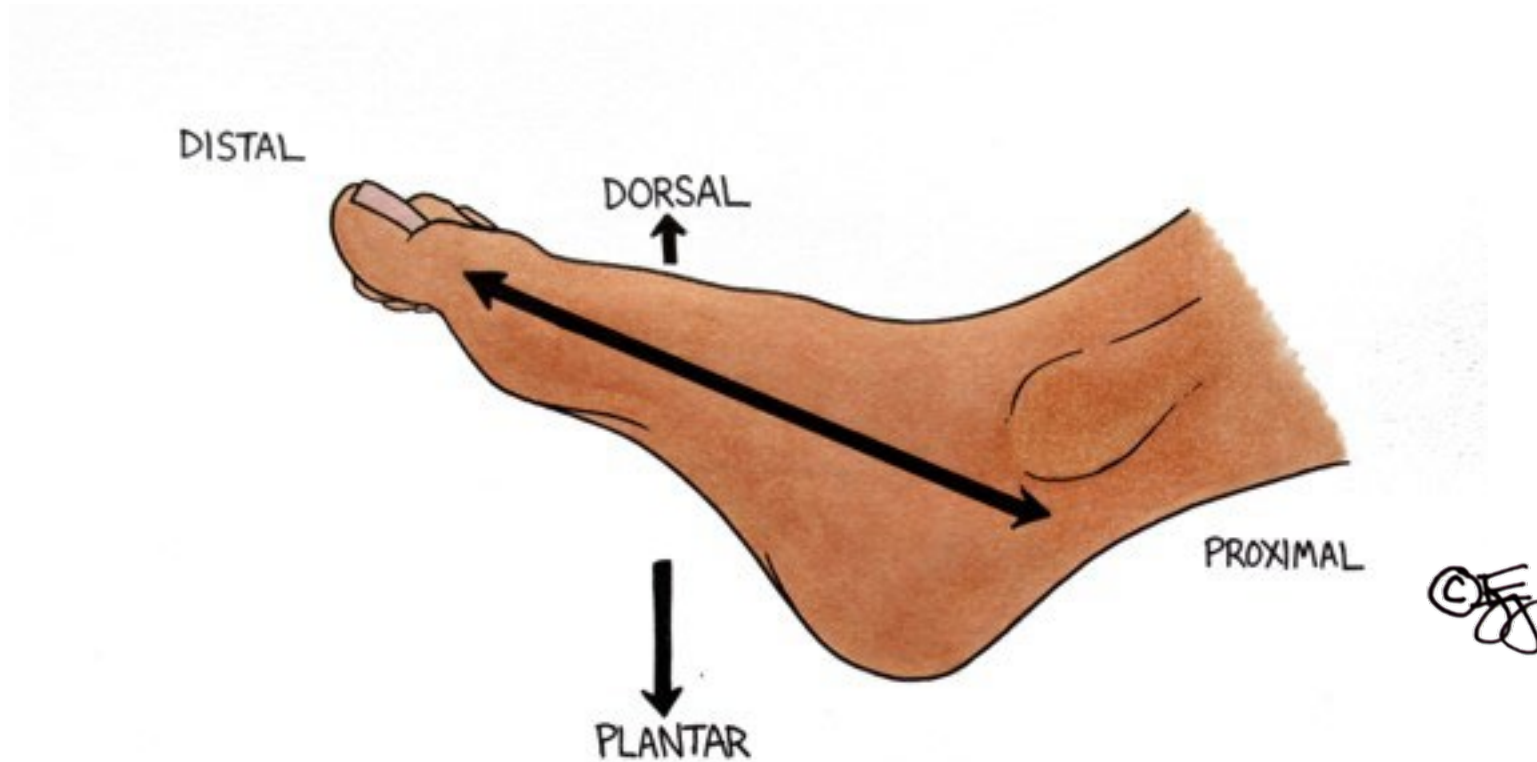


Terminology

It is important to learn the terminology as it relates to feet to properly communicate with referring physicians, when necessary, to understand physician notes and to identify the relationship between the anatomical structure of the foot and footwear.

Dorsal surface—top of the foot

Plantar surface— bottom of the foot



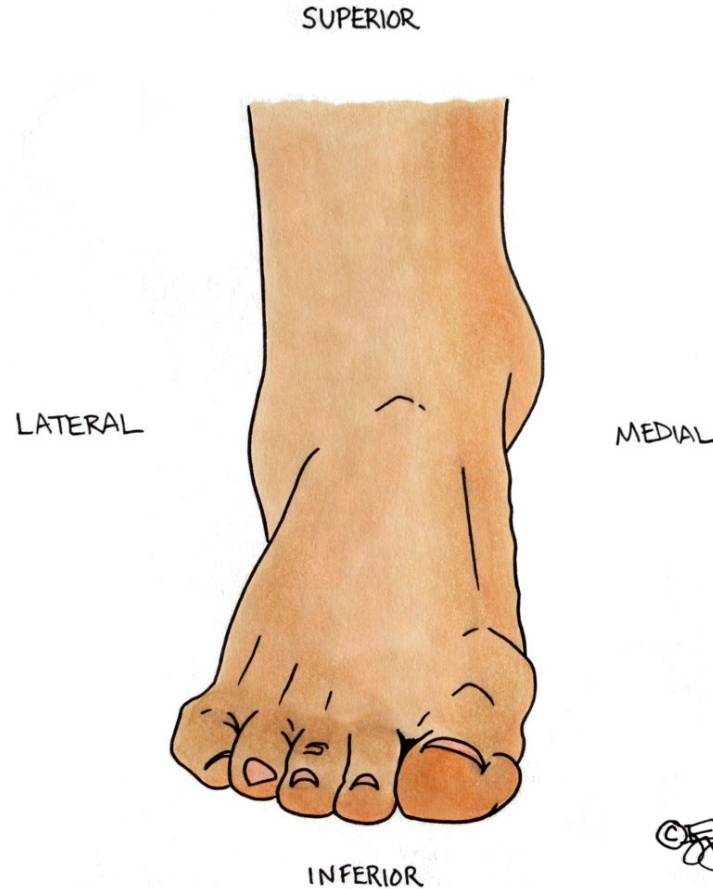
Proximal/Distal—
used to clarify a
location point or the
point of attachment

Proximal-closer to the
trunk or body

Distal-furthest from
point of reference

Superior—positioned above

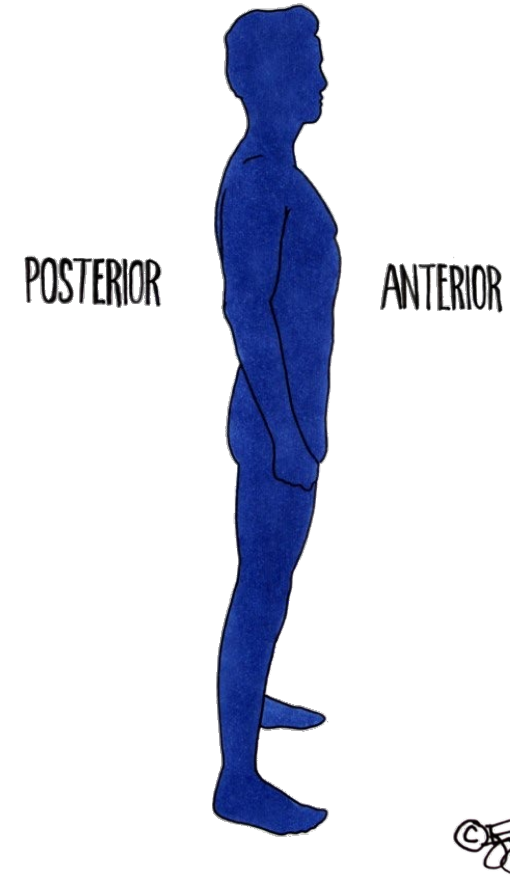
Lateral—outer edge
of the foot; smallest
toe and fibular side



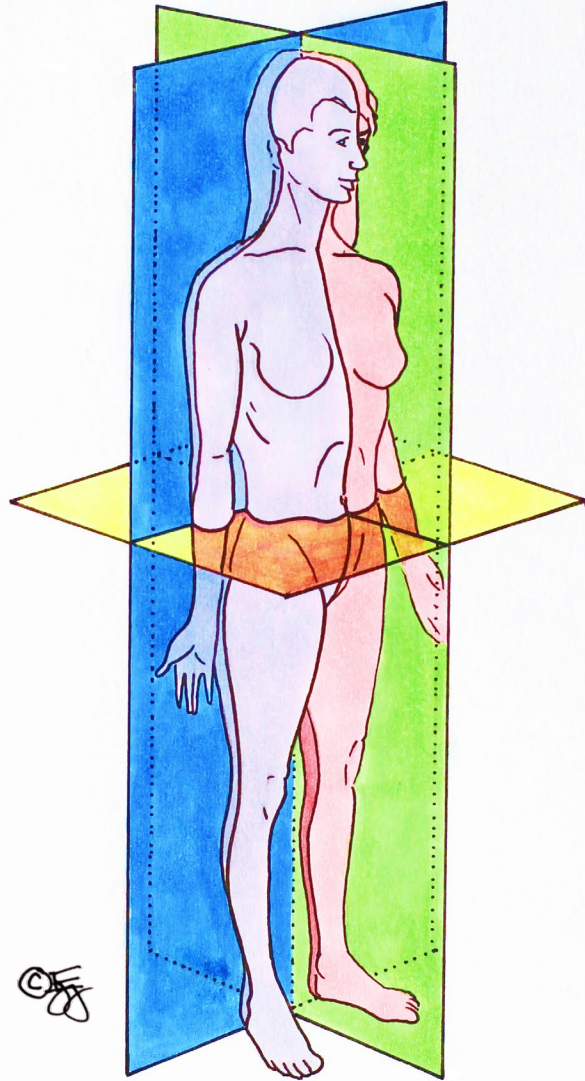
Medial—The inside
edge of the foot; great
toe and tibia

Inferior—positioned below

Posterior—refers to the rear



Anterior—refers to the front



The **anatomical position** is the point of reference for all movements of the body.

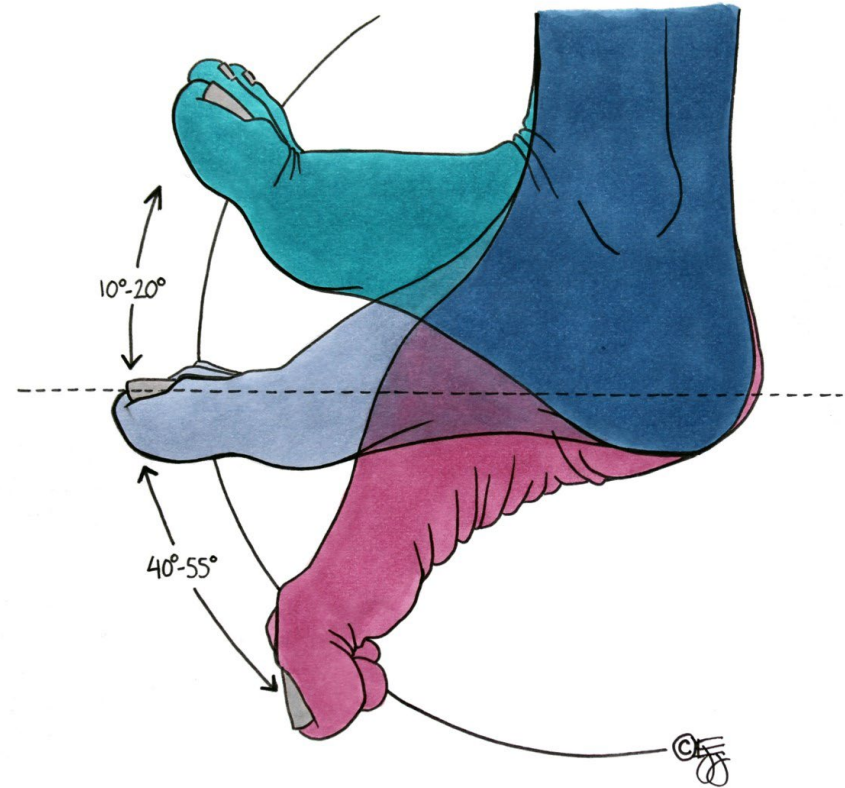
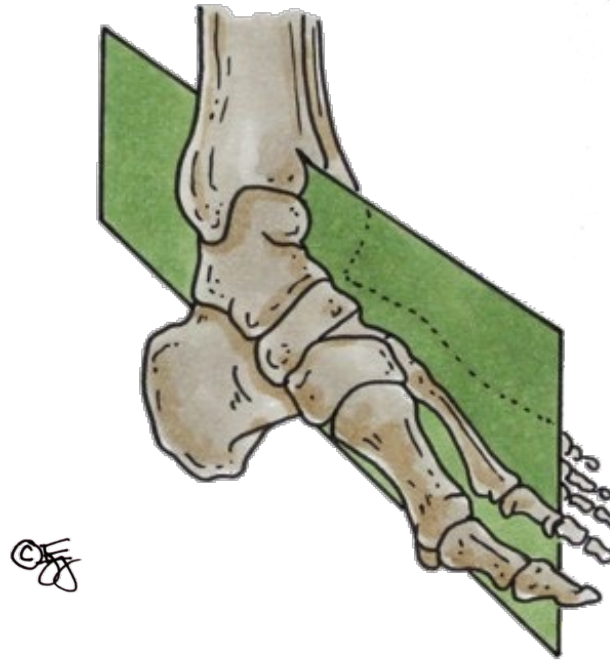
Cardinal Planes

- 3 basic planes of motion
- Divides the body with 3 imaginary lines
- Sagittal, Frontal/Coronal and Transverse

Sagittal Plane

Splits the foot into left and right half. Dorsiflexion (upward) and plantarflexion (downward).

Approximate normal dorsiflexion is 20° /plantarflexion is 45°

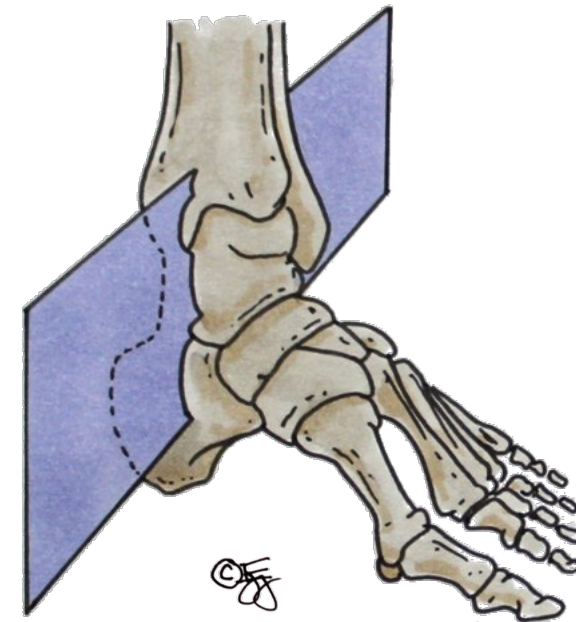
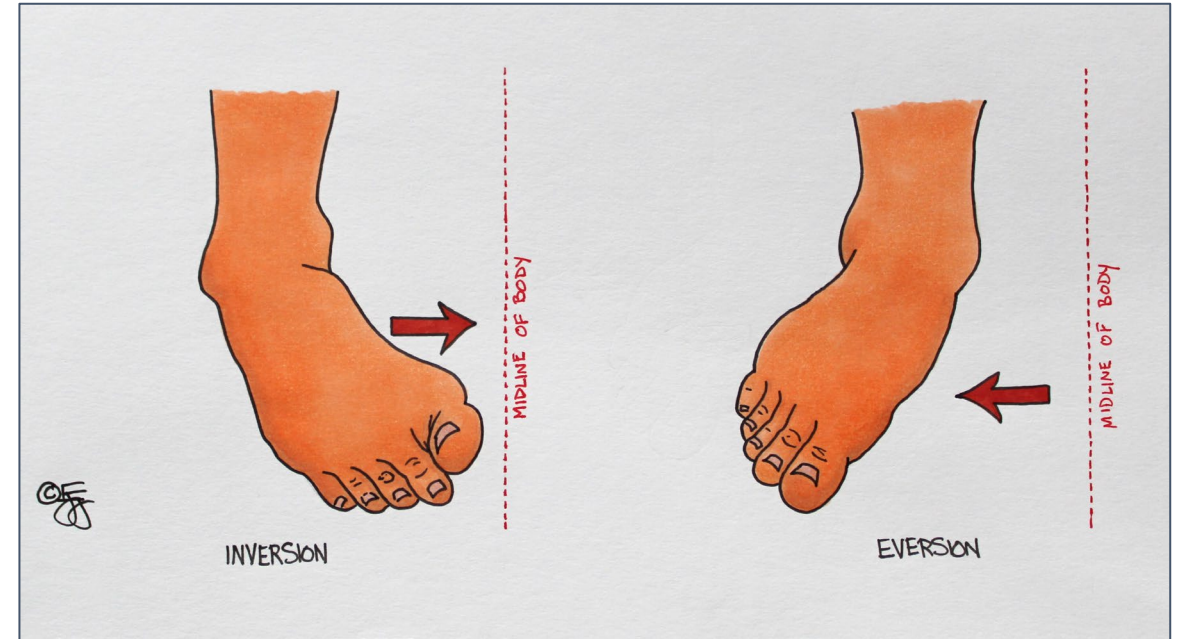


Frontal (Coronal) Plane

Divides the body into anterior and posterior.

Inversion: Turning the plantar surface of the foot toward the body.

Eversion: Turning the plantar surface of the foot away from the body.

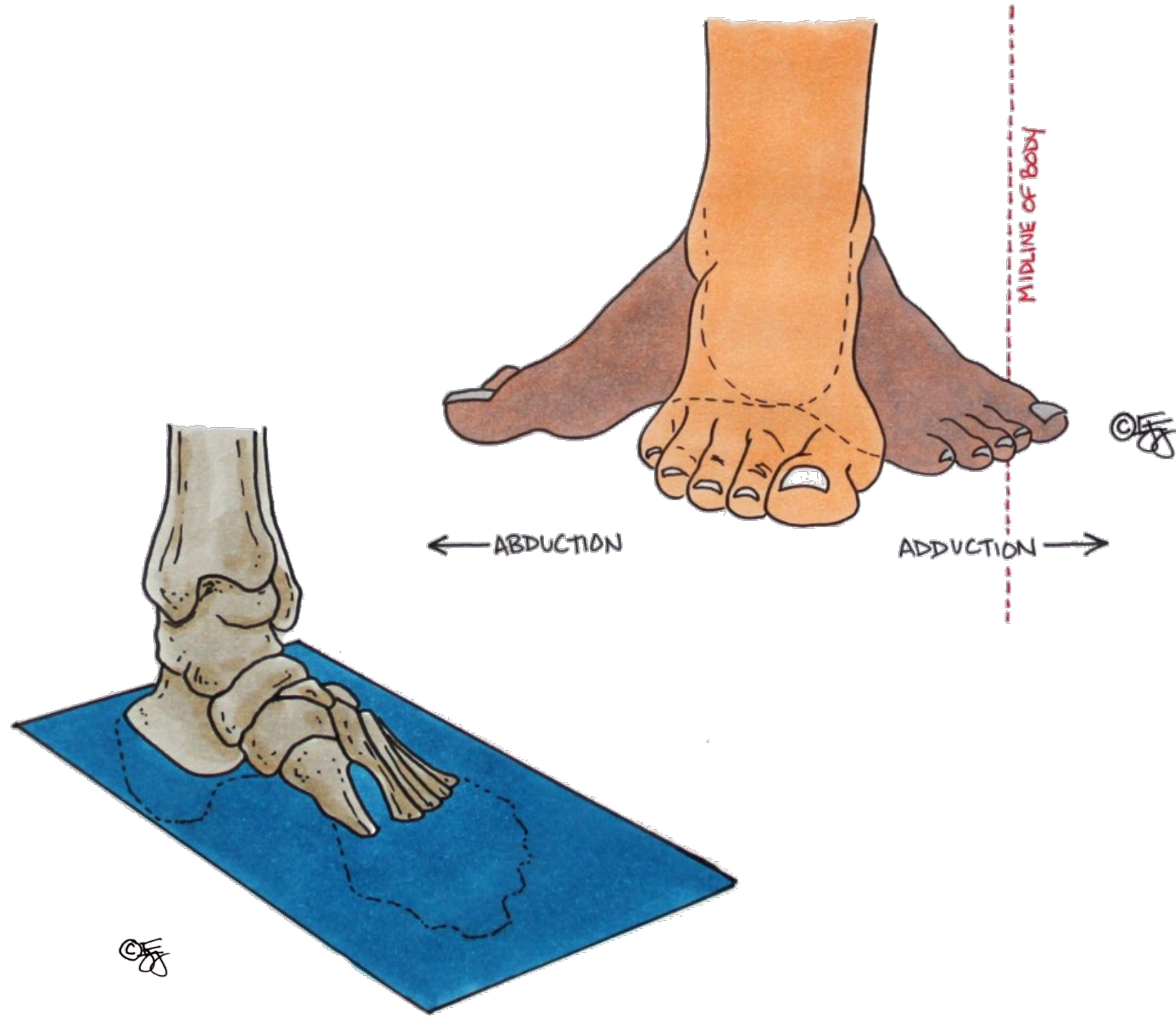


Transverse Plane

Divides the body into upper and lower section.

Abduction: Rotation of the foot away from the midline.

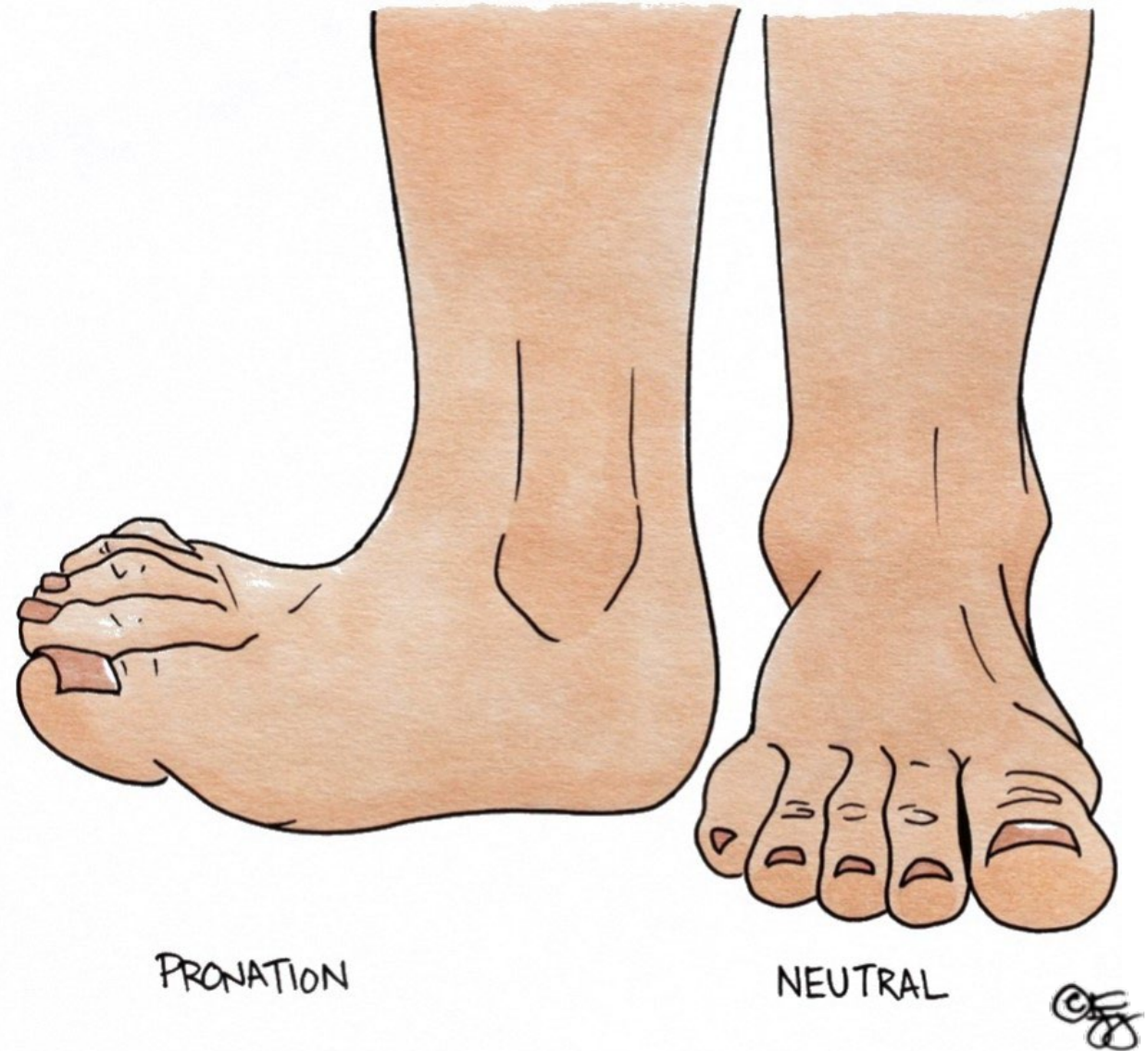
Adduction: Rotation of the foot towards the midline.



Pronation

Triplanar motion consisting of:

- Dorsiflexion in the Sagittal Plane
- Eversion in the Frontal Plane
- Abduction in the Transverse Plane



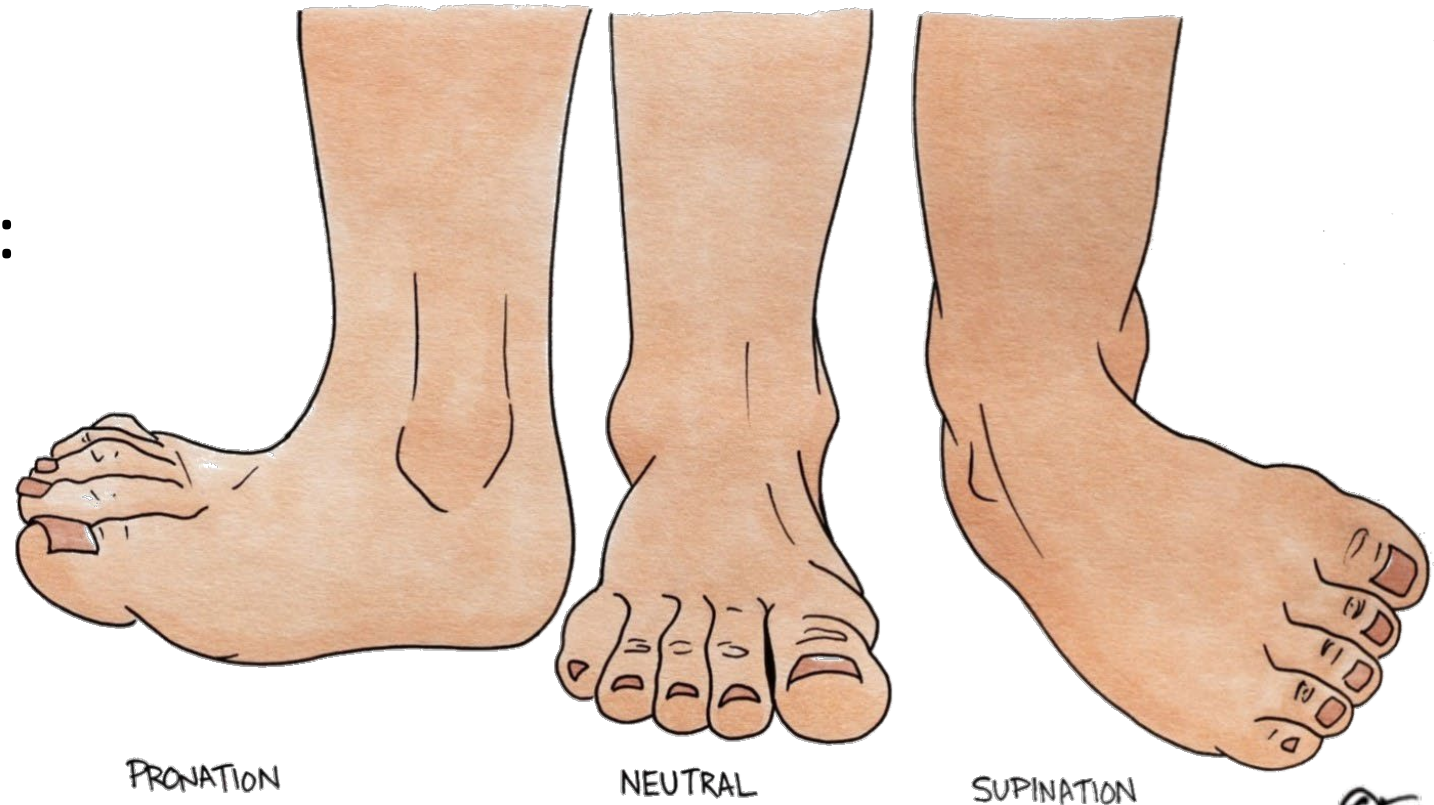
Supination

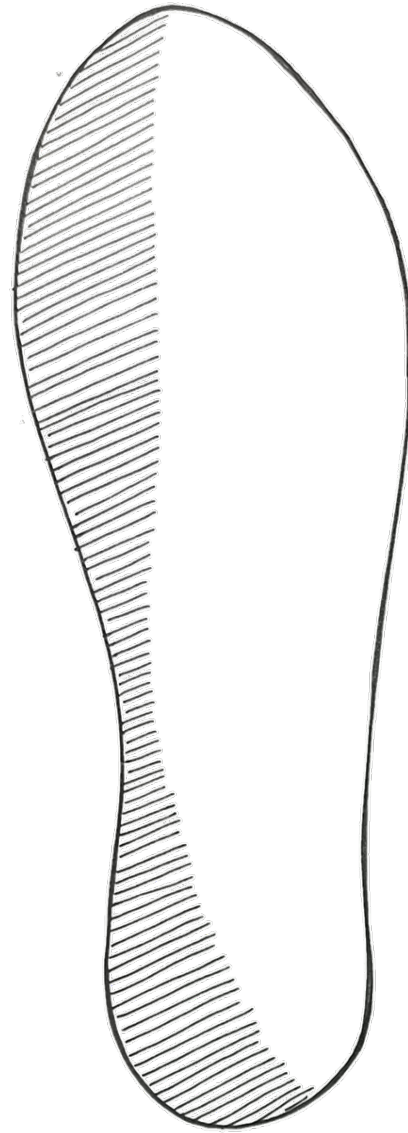
Triplanar motion consisting of:

Plantarflexion in the Sagittal Plane

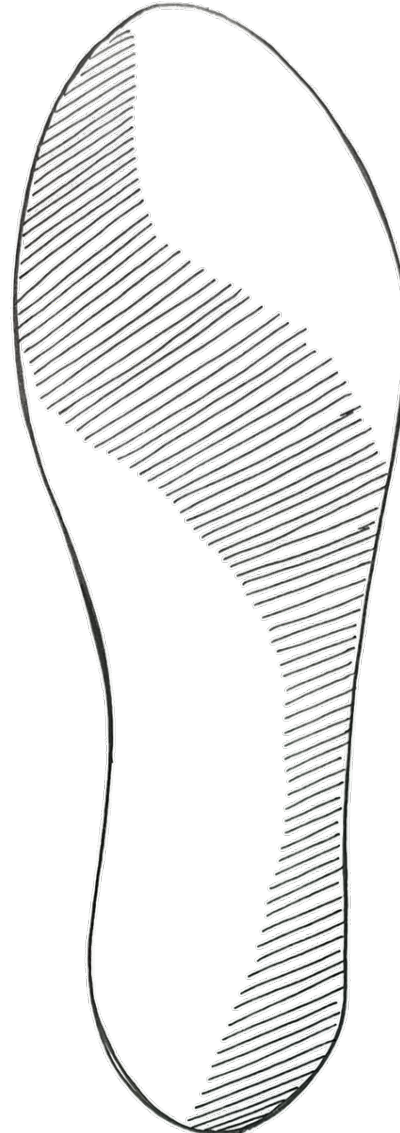
Inversion in the Frontal Plane

Adduction in the Transverse Plane





PRONATION



NORMAL

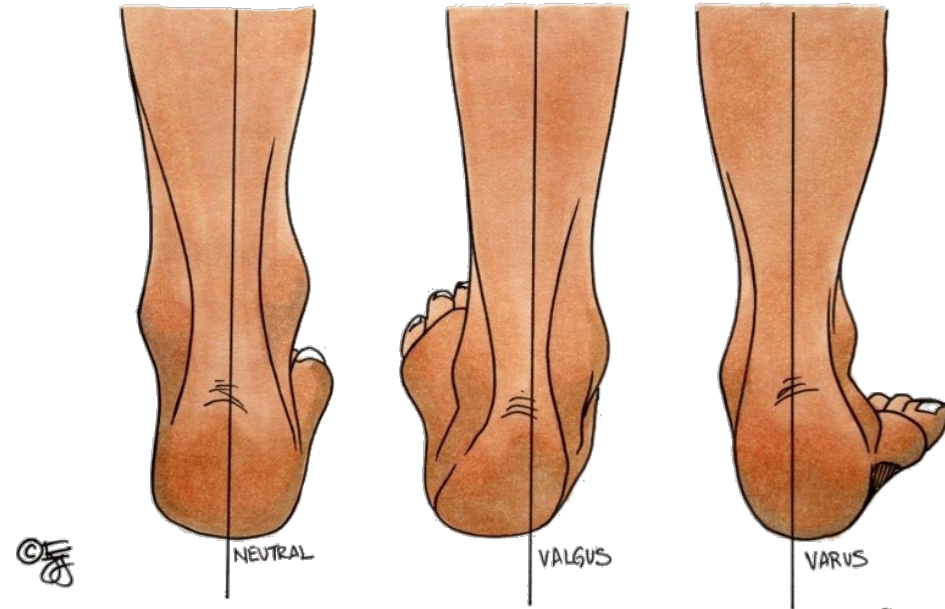


SUPINATION

© 

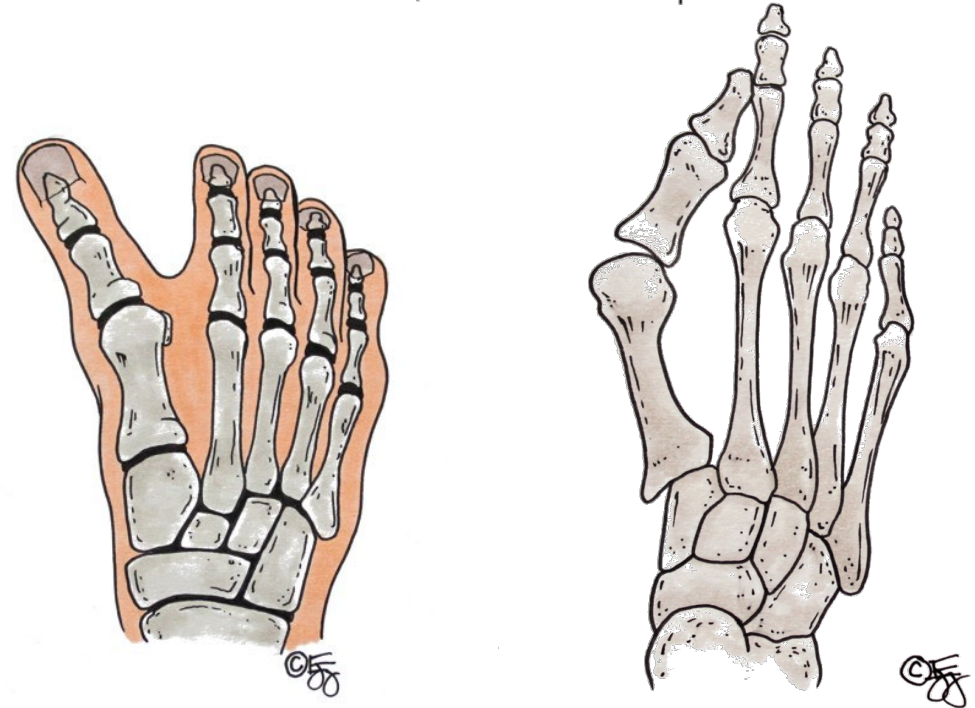
Varus

Deformity of a bone(s) of the leg or foot. A structural deformity of the foot. Part of the foot is **inverted** which is the anatomical position.

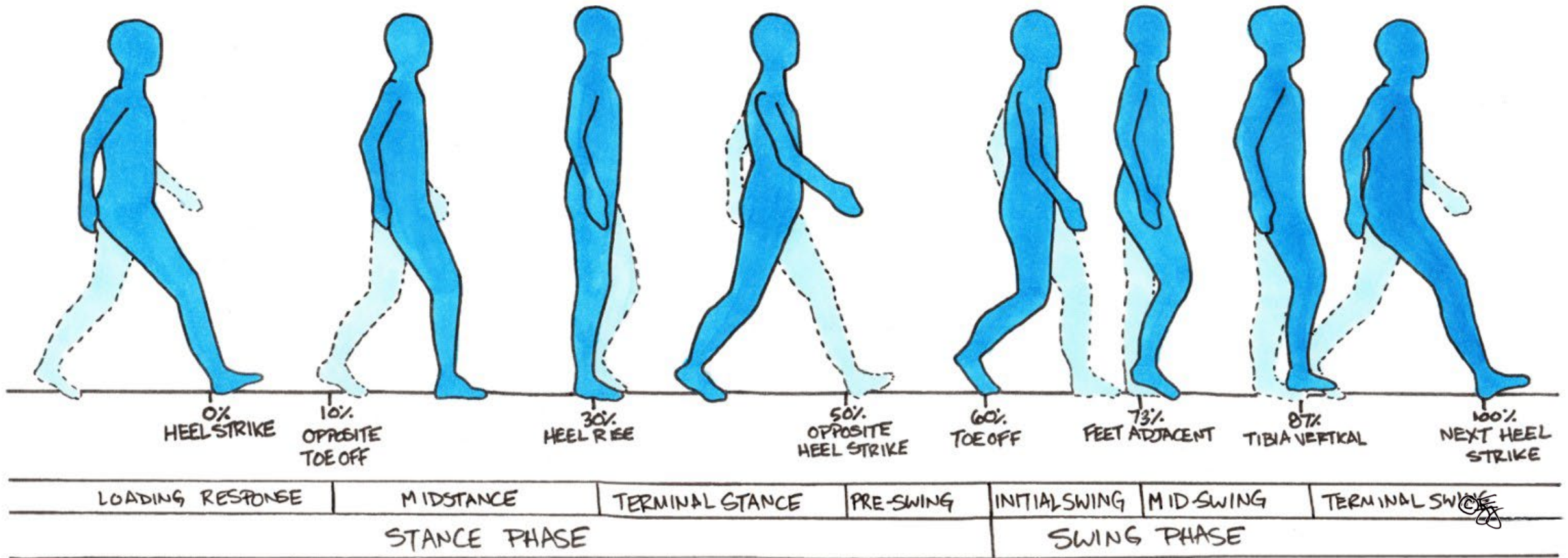


Valgus

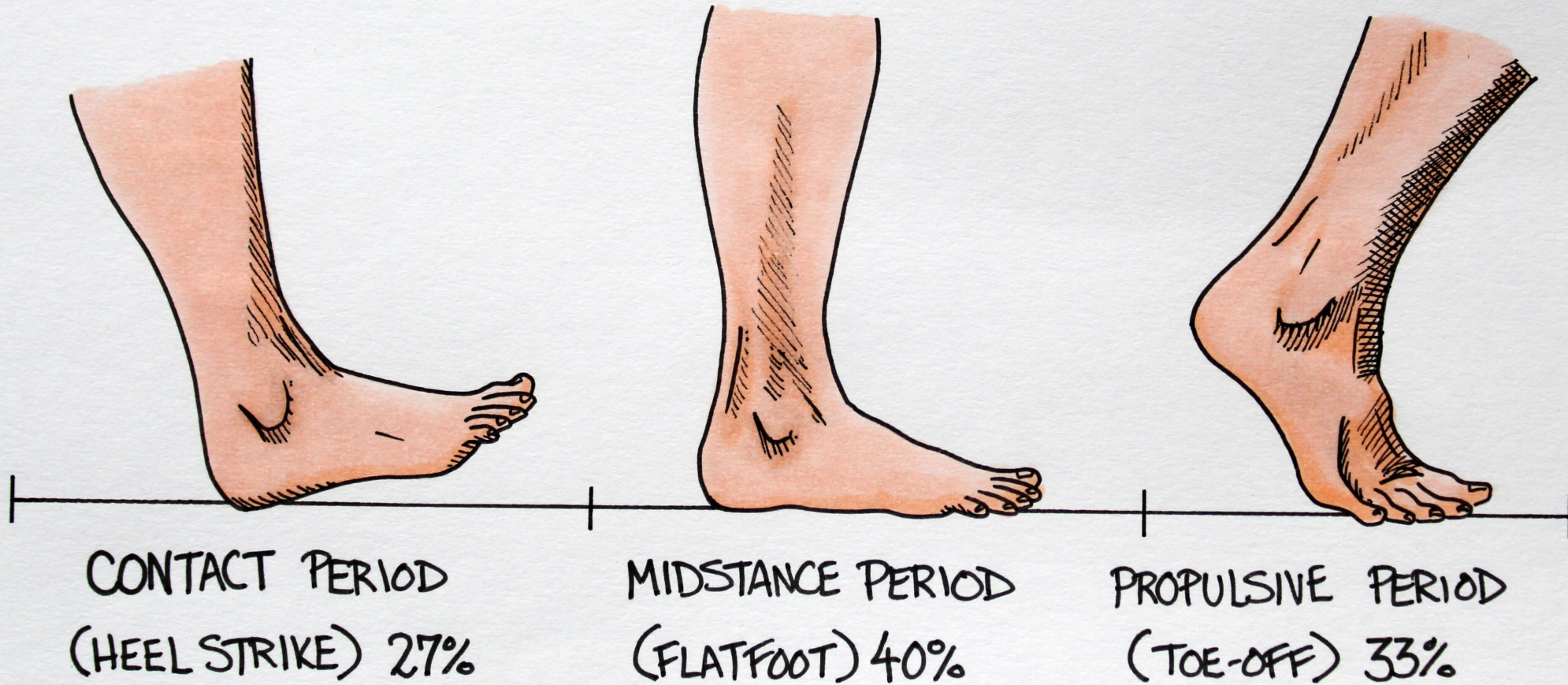
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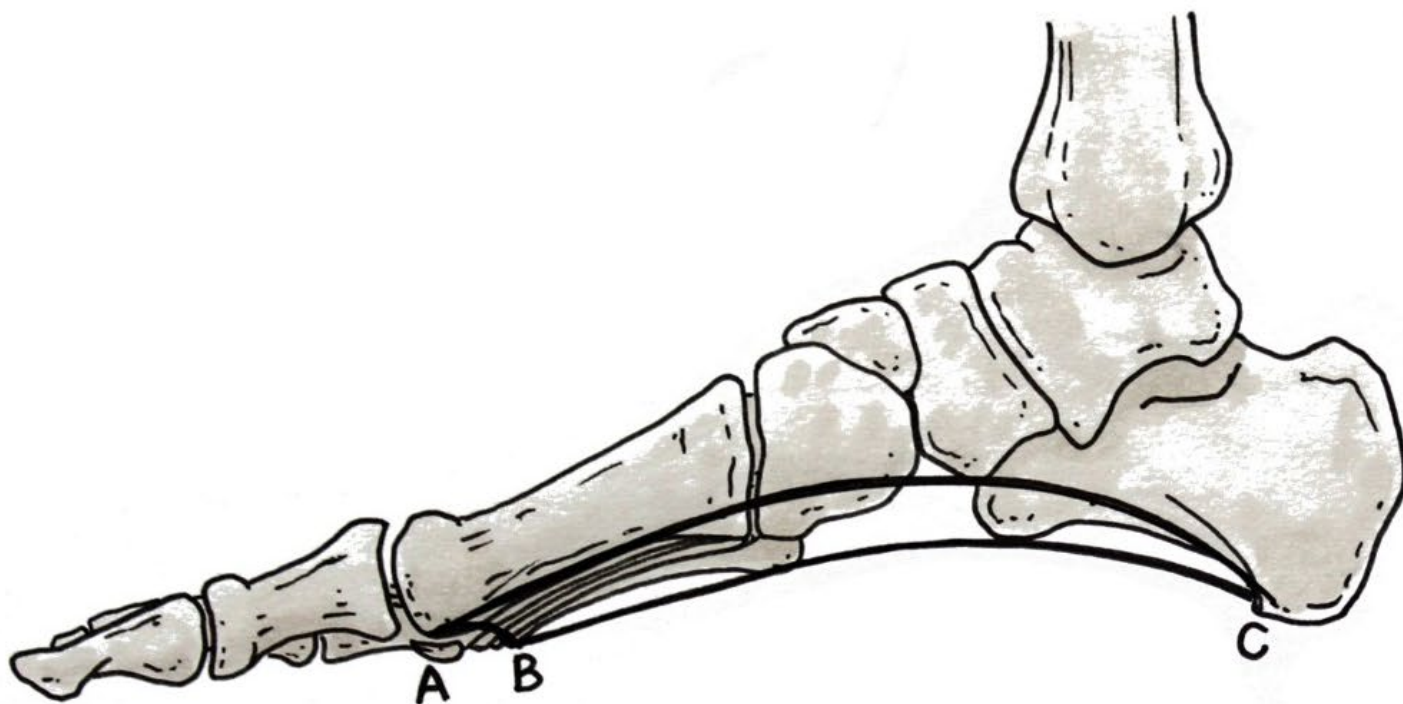


Gait Cycle: Stance Phase-Swing Phase

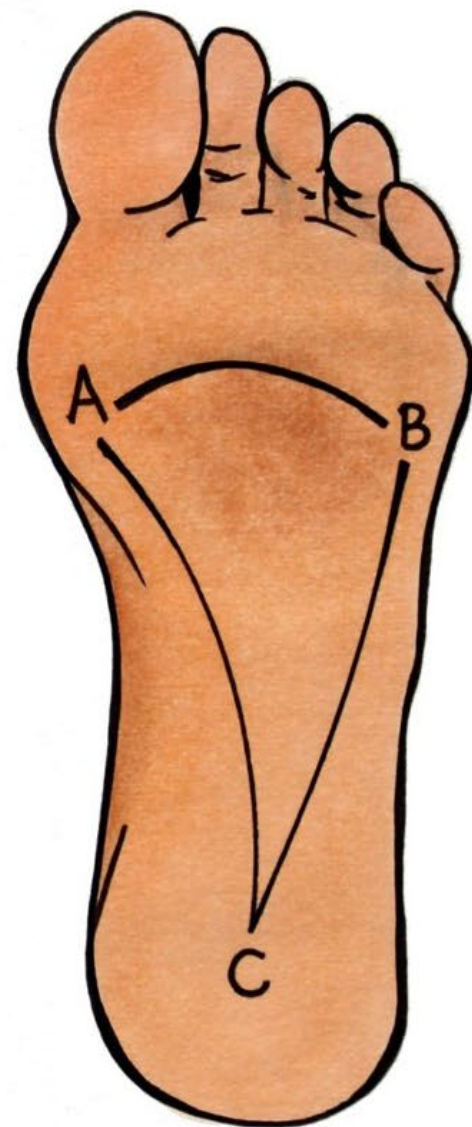


3 Periods of Stance Phase





$A \leftrightarrow C$ MEDIAL LONGITUDINAL ARCH
 $B \leftrightarrow C$ LATERAL LONGITUDINAL ARCH
 $A \leftrightarrow B$ ANTERIOR TRANSVERSE ARCH



©
 [Signature]

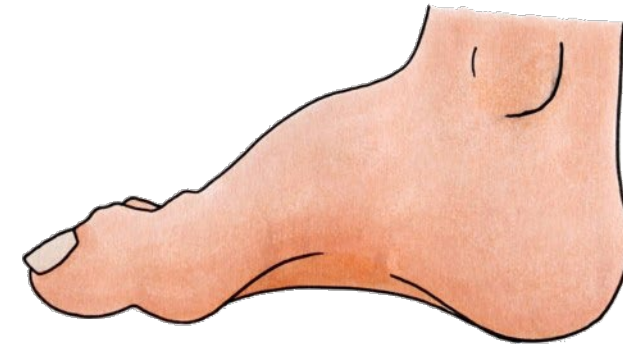
3 Types of Medial Longitudinal Arch

Pes Rectus—a foot with a normal arch; allows for shock absorbency



PES RECTUS

Pes Cavus—a foot with a high arch which does not flatten on weight bearing; weight is generally distributed to the lateral side of the foot



PES CAVUS

Pes Planus—flatfoot; a condition in which the arch has not developed normally and is flat



PES PLANUS