



ANKLE JOINT



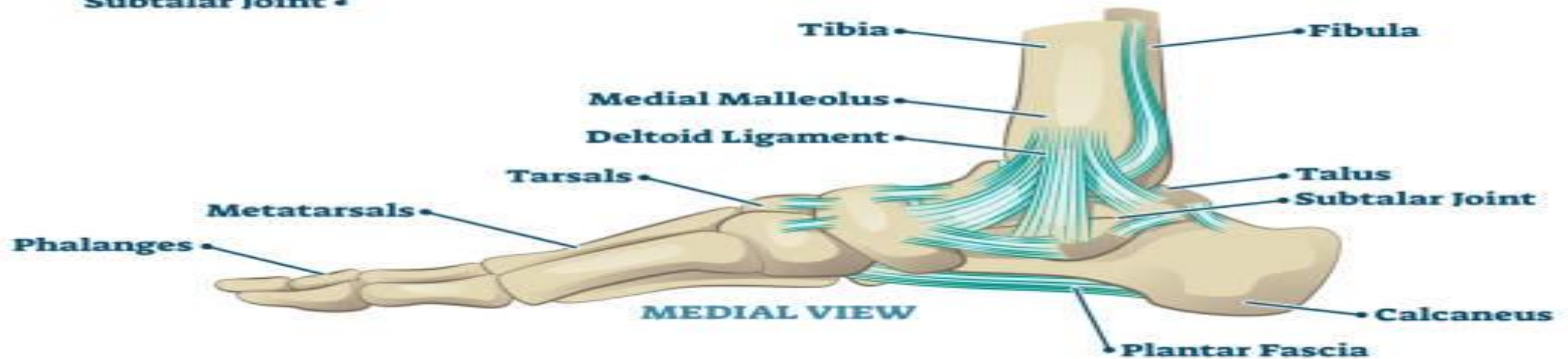
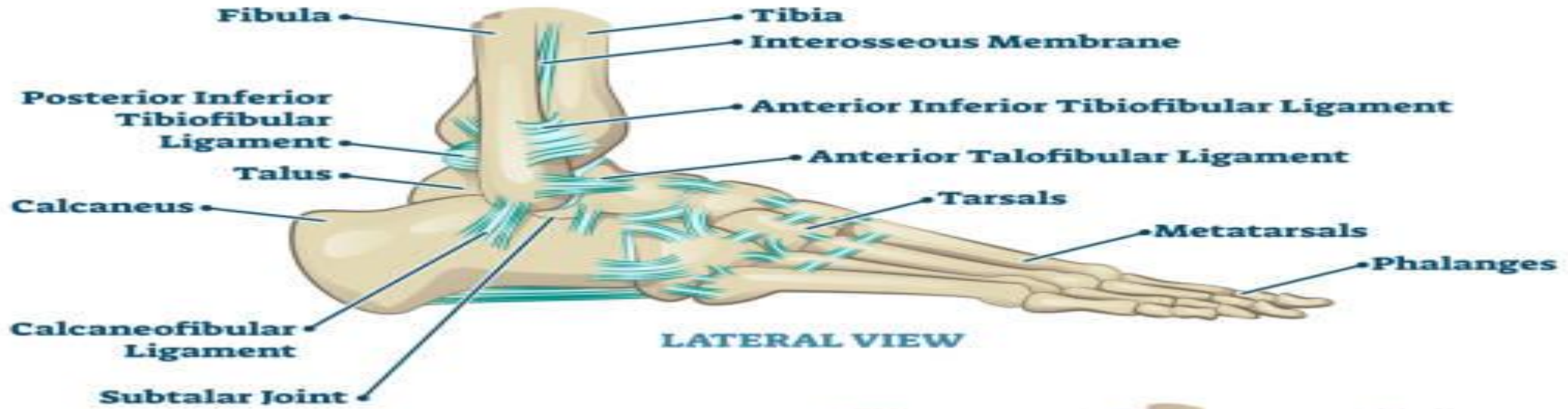
INTRODUCTION

TALOCRURAL JOINT

UNIAXIAL, SYNOVIAL, HINGE JOINT

BONES FORMING THE JOINT - LOWER END OF TIBIA AND MEDIAL MALLEOLUS - LATERAL MALLEOLUS OF FIBULA - ARTICULAR SURFACE OF TALUS – COMPLETE.

ANKLE JOINT





STABILITY OF ANKLE JOINT

STABILITY OF THE ANKLE JOINT:

MORTICES

DEEPENING BY LIGAMENTS

TENDONS CROSSING THE JOINT

COLLATERAL LIGAMENTS



CAPSULE

CAPSULE IS ATTACHED PROXIMALLY AND DISTALLY TO BONES JUST BEYOND ARTICULAR MARGINS.

POSTEROSUPERIOR:

IT IS ATTACHED TO THE INFERIOR TRANSVERSE TIBIOFIBULAR LIGAMENT •

ANTEROINFERIOR:

IT IS ATTACHED TO THE DORSUM OF THE NECK OF THE TALUS, A LITTLE BEYOND THE ARTICULAR MARGIN.



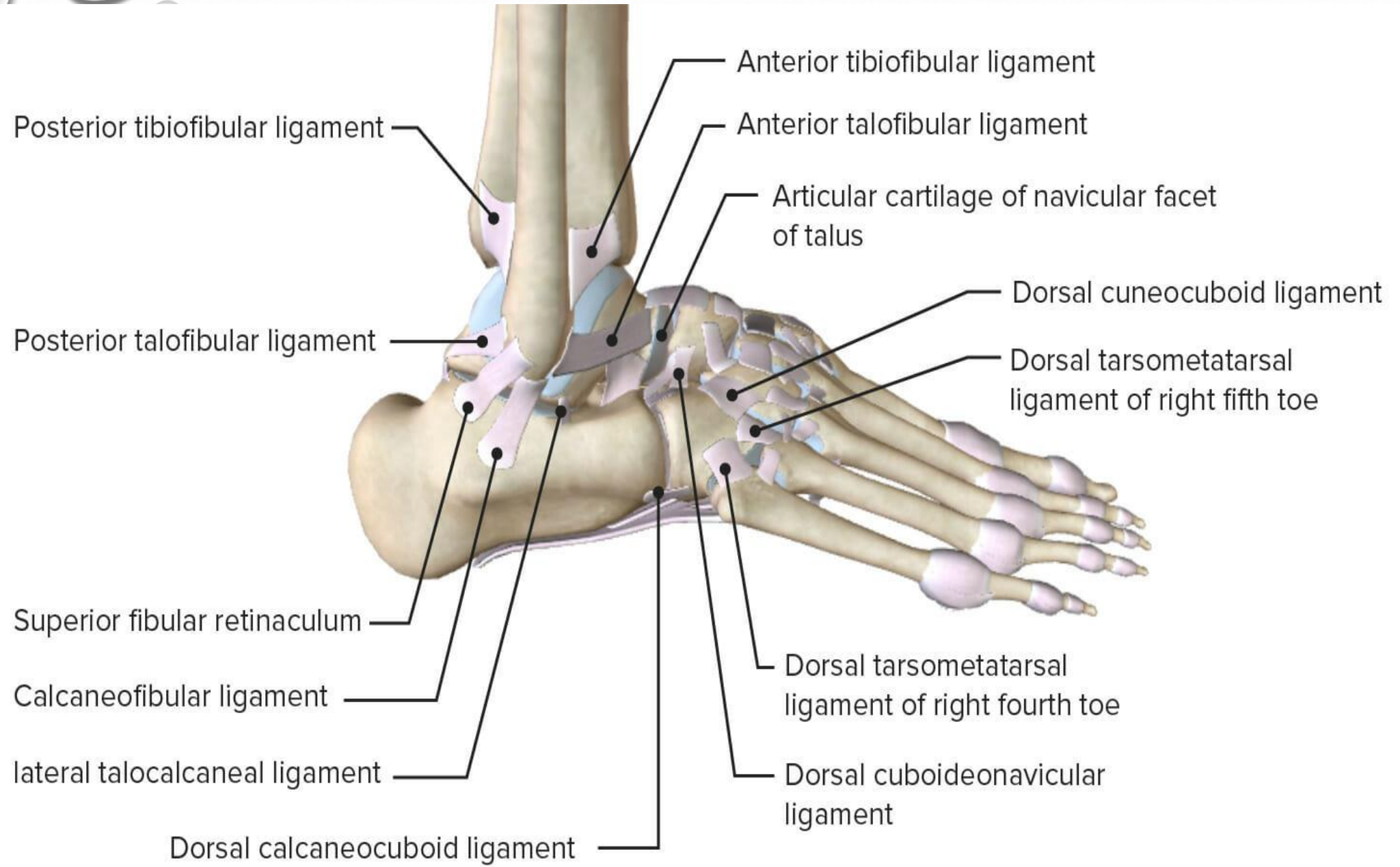
LIGAMENTS

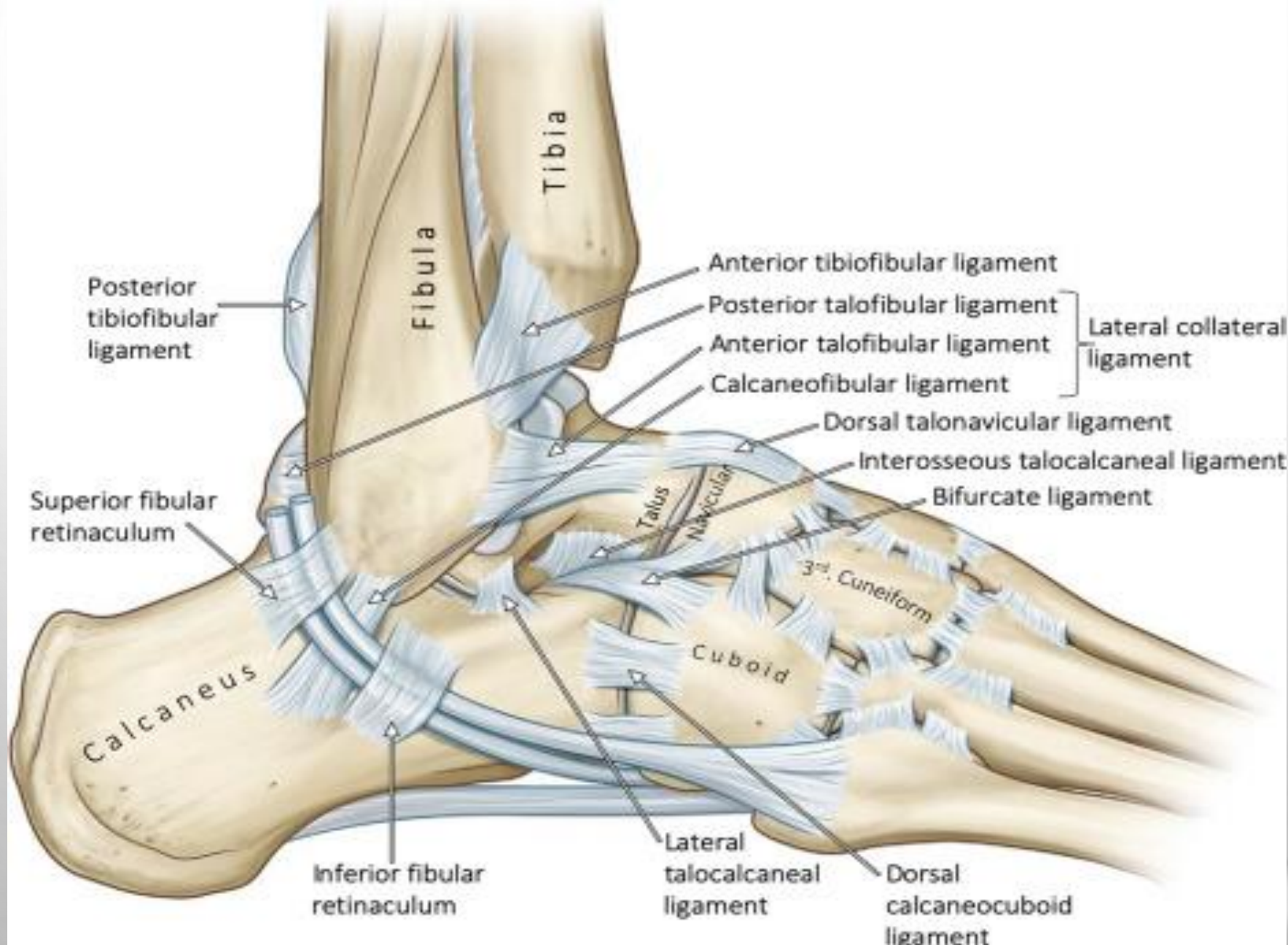
- ANTERIOR LIGAMENT OF ANKLE JOINT.
- POSTERIOR LIGAMENT OF ANKLE JOINT.
- BOTH THE LIGAMENTS ARE THIN AND LOOSE TO PERMIT MOVEMENTS



LIGAMENTS

- MEDIAL LIGAMENT OF ANKLE JOINT (DELTOID LIGAMENT)
- VERY STRONG LIGAMENT
- TRIANGULAR IN SHAPE - 2 PARTS, SUPERFICIAL AND DEEP
- LATERAL LIGAMENT OF ANKLE JOINT- 3 PARTS :
- ANTERIOR TALOFIBULAR LIGAMENT
- POSTERIOR TALOFIBULAR LIGAMENT
- CALCANEOFIBULAR LIGAMENT







SYNOVIAL MEMBRANE

- LINES THE INNER ASPECT OF THE CAPSULE EXCEPT IN PLACES WHERE ARTICULAR CARTILAGE IS PRESENT.
- ASCENDS UP AS A SMALL VERTICAL RECESS BETWEEN TIBIA AND FIBULA.



RELATIONS

ANTERIOR RELATIONS:

- TIBIALIS ANTERIOR,
- EXTENSOR HALLUCIS LONGUS
- ANTERIOR TIBIAL VESSELS
- DEEP PERONEAL NERVE
- EXTENSOR DIGITORUM LONGUS
- PERONEUS TERTIUS
- PNEUMONIC – TALL HIMALAYAS ARE NEVER DRY PLACES



RELATIONS

- POSTERIOR RELATIONS:
- TIBIALIS POSTERIOR
- FLEXOR DIGITORUM LONGUS
- POSTERIOR TIBIAL VESSELS
- TIBIAL NERVE
- FLEXOR HALLUCIS LONGUS, PERONEI
- PNEUMONIC – TALENTED DOCTORS ARE NEVER HUNGRY



BLOOD AND NERVE SUPPLY

- BLOOD SUPPLY :
- MALLEOLAR BRANCHES OF ANTERIOR AND POSTERIOR TIBIAL ARTERIES.
- NERVE SUPPLY :
- BRANCHES FROM TIBIAL NERVE,
- DEEP PERONEAL NERVE
- COMMON PERONEAL NERVE



MOVEMENTS

- UNIAXIAL HINGE JOINT
- DORSIFLEXION – 25 DEGREES
- PLANTAR FLEXION – 50 DEGREES



- **DORSIFLEXION:**

- TIBIALIS ANTERIOR • EDL • EHL • PERONEUS TERTIUS [EXTENSOR HALLUCIS AND DIGITORIUM LONGUS]

- **PLANTAR FLEXION:**

- GASTROCNEMIUS SOLEUS
- PLANTARIS •
- TIBIALIS POSTERIOR
- FHL [FLEXOR HALLUCIS LONGUS]
- FDL MOVEMENTS [FLEXOR DIGITORIUM LONGUS]



APPLIED ANATOMY

- POTT'S FRACTURE
- DISLOCATION OF THE ANKLE JOINT
- ANKLE SPRAIN