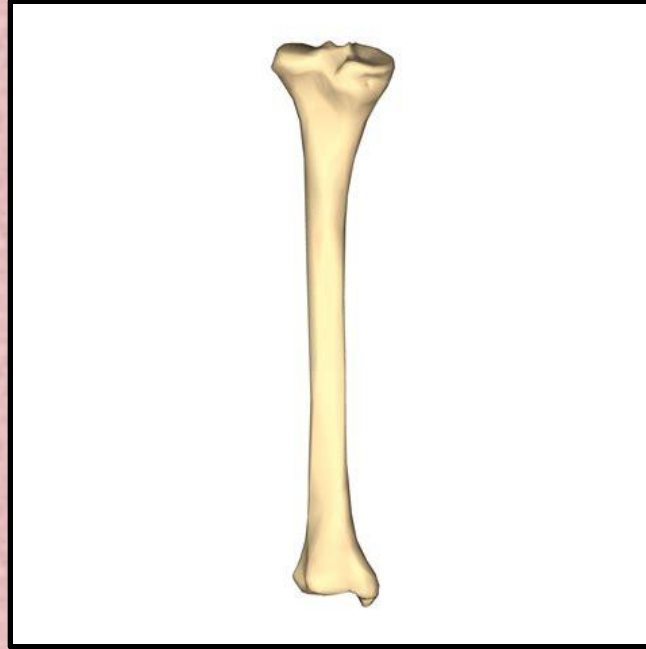
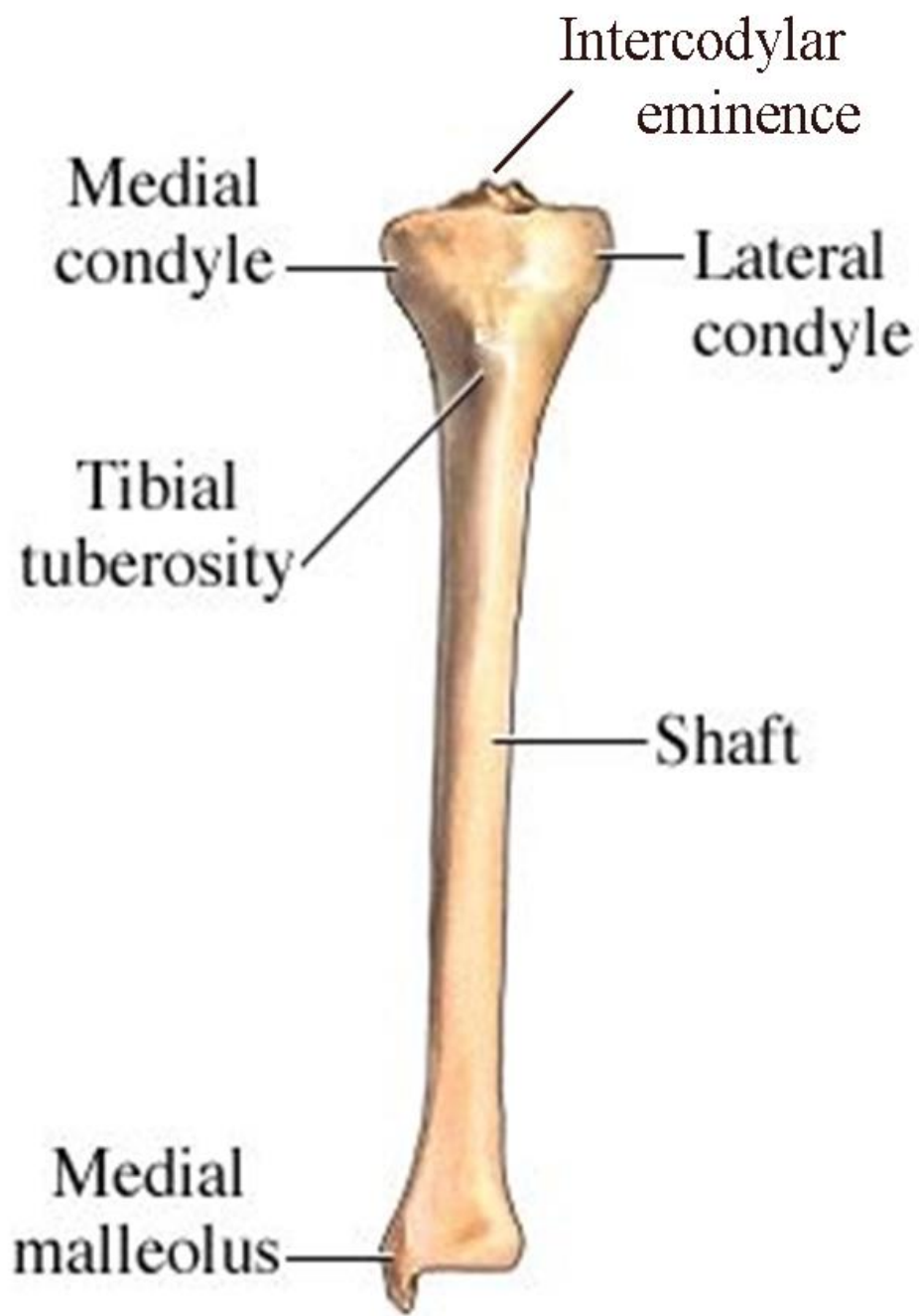


# Tibia(अंतःजंघास्थि)





- **Other name-** shin bone, shank bone
- The tibia (**latin name- shin bone**) is the medial bone of the leg. It extends from the knee to the ankle and is felt along its whole length on the anteromedial aspect of the leg.
- It has a shaft, an upper end and a lower end.

### **Side determination-**

- ❖ The upper end is broader and larger than the lower end.
- ❖ The medial side of the lower end projects downwards beyond the rest of the bone. The projection is called the **medial malleolus**.

❖ **The anterior border of the shaft is most prominent and crest like. It is curved and terminates below at the anterior border of the medial malleolus.**

### **Upper end**

- **The upper end of the tibia is expended to form a mass that projects medially, laterally and posteriorly beyond the shaft.**

- When viewed from above, it is seen to consist of 2 parts called the **medial and lateral condyles** which are separated by an **intercondylar area**.

### **Medial condyle-**

- Medial condyle is larger than the lateral condyle.
- Its superior surface articulates with the medial condyle of the femur.
- The articular surface is oval.

- **The central part of the surface is slightly concave and comes into direct contact with the femoral condyle.**
- **The peripheral part is flat and is separated from the femoral condyle by the medial meniscus.**
- **The lateral margin of the articular surface is raised to cover the medial intercondylar tubercle**

## **Lateral condyle-**

- **The lateral condyle overhangs the shaft more than the medial condyle.**
- **The superior surface of the condyle articulates with the lateral condyle of the femur.**
- **The articular surface is nearly circular.**
- **The central part is slightly concave and comes in direct contact with the femur**

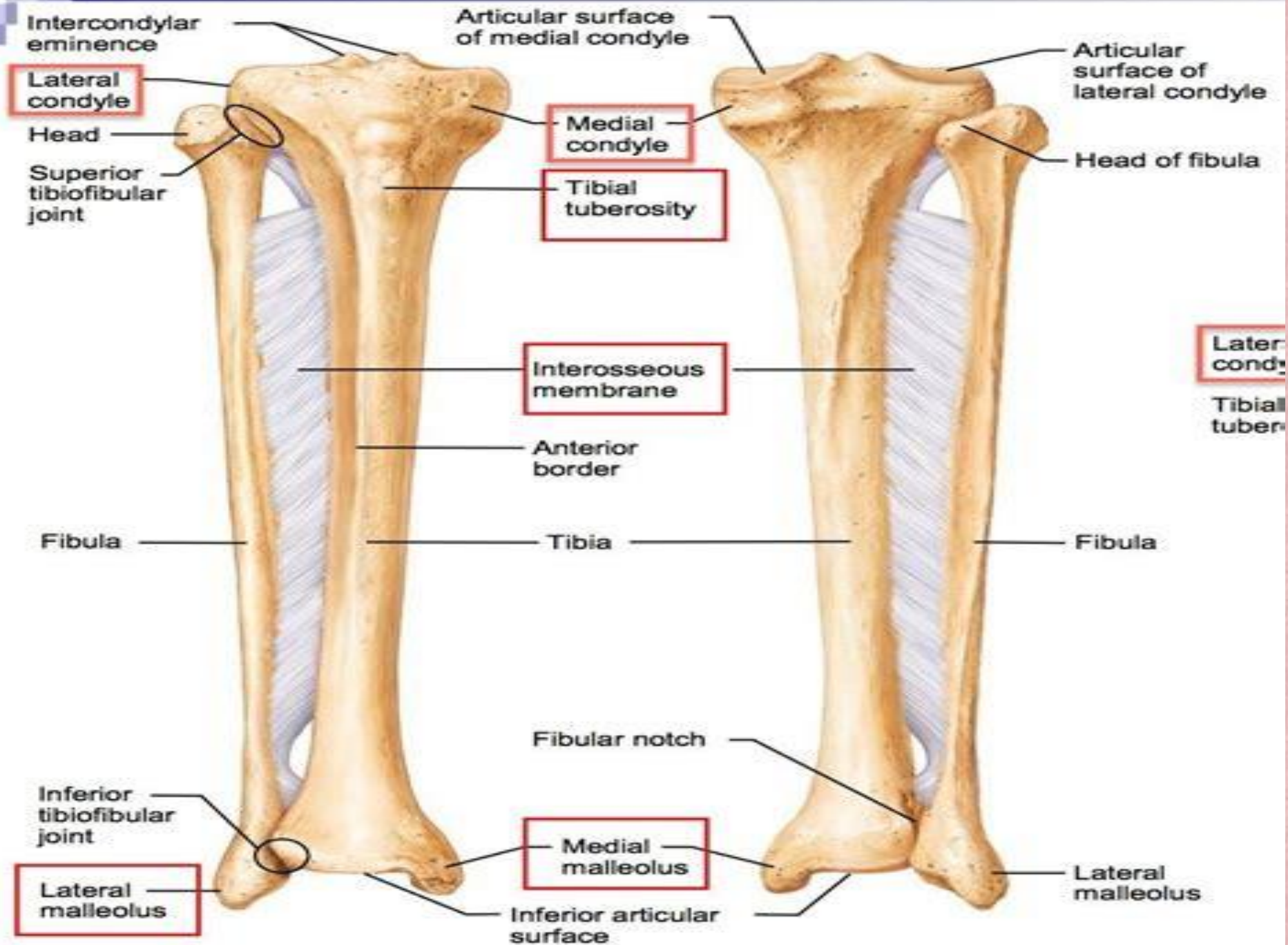
- The peripheral part is flat and is separated from the femur by the lateral meniscus.
- The articular surface has a raised medial margin which covers the lateral intercondylar tubercle.
- The posteroinferior aspect of the lateral condyle articulate with the fibula.
- The fibular facet is flat, circular and is directed downwards, backwards and laterally.

## **Intercondylar area-**

- It is the roughened area on the superior surface between the articular surfaces of the two condyles. The area is narrowest in its middle part. This part is elevated to form the **intercondylar eminence** which is flanked by the **medial and lateral intercondylar tubercles**.

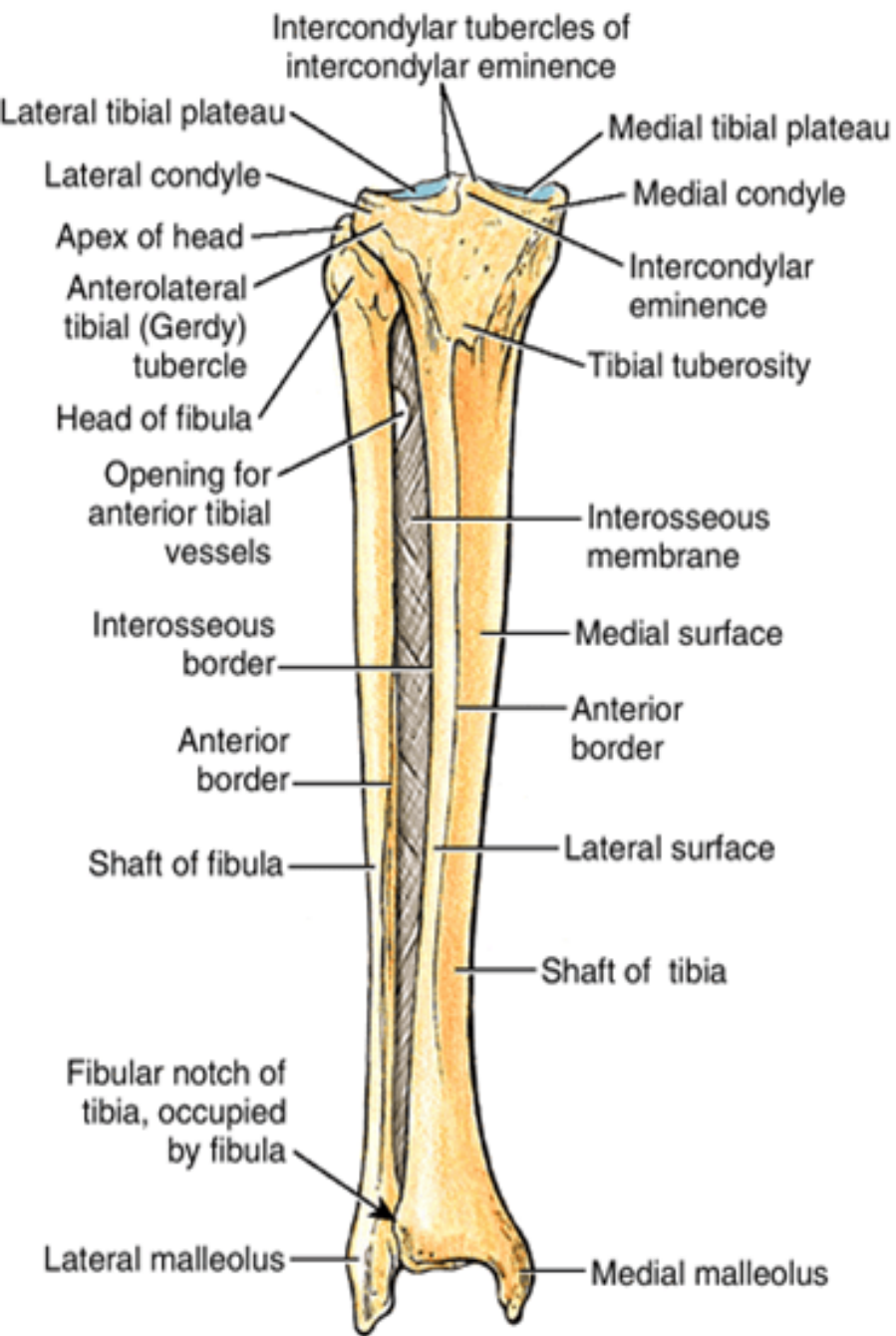
# Tuberosity of the tibia

- ✓ It is a prominence located on the anterior aspect of the upper end of the tibia.
- ✓ It forms the anterior limits of the intercondylar area.
- ✓ Inferiorly it is continuous with the anterior border of the shaft.
- ✓ The tuberosity is divided into an upper smooth area and a lower rough area.

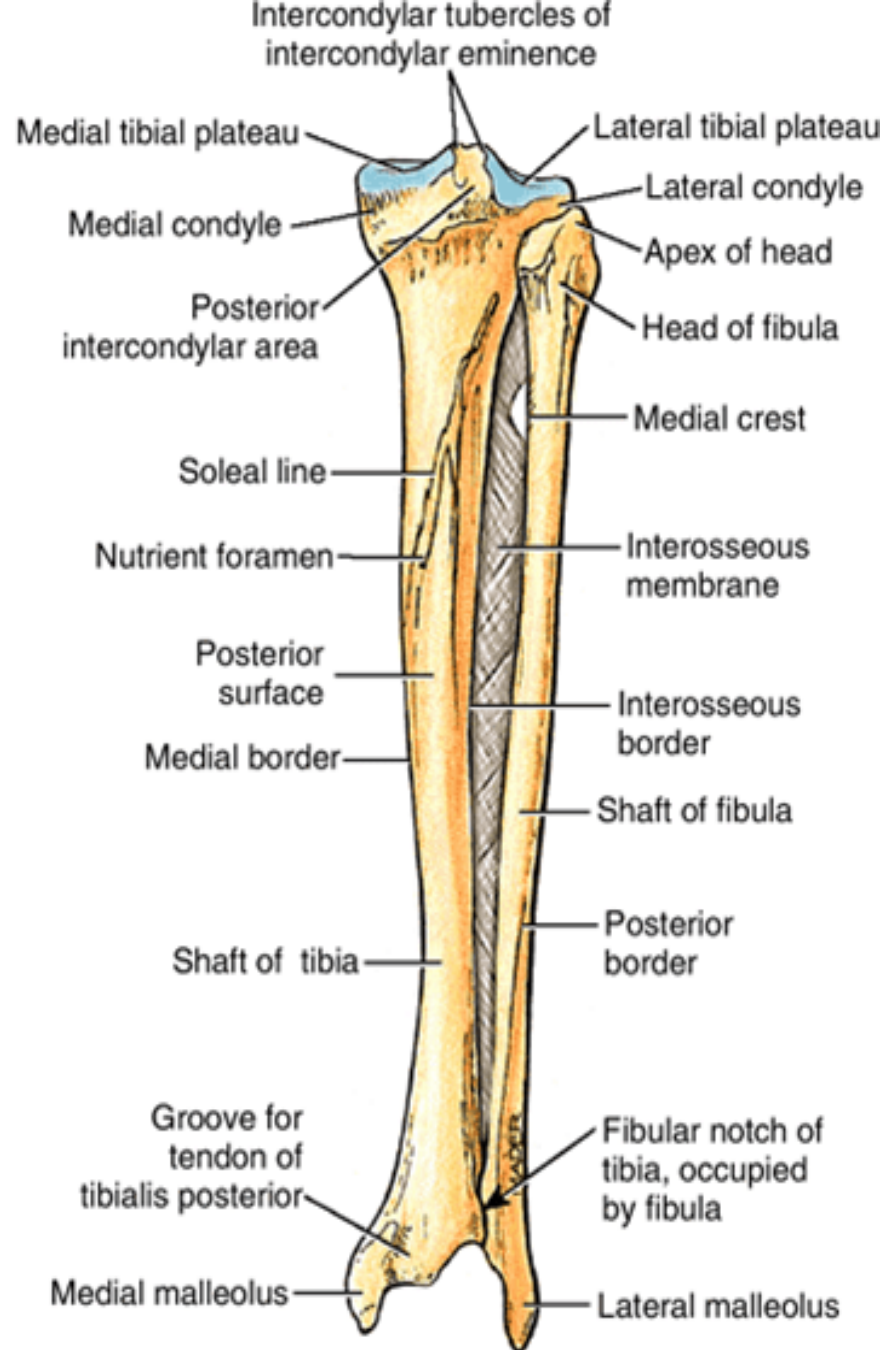


**(a) Anterior view**

**(b) Posterior view**



**A Anterior view**



**B Posterior view**

- **Shaft-**
- The shaft of the tibia is prismoid in shape. It has **3 borders- anterior, medial and interosseous** and **3 surfaces- lateral, medial and posterior.**

## **Borders-**

### **Anterior border-**

- it is sharp and S- shaped being convex medially in the upper part and convex laterally in the lower part.

- It extends from the tibial tuberosity above to the anterior border of the medial malleolus below. It is subcutaneous and forms the shin.

### **Medial border-**

- It is rounded.
- It extends from the medial condyle above to the posterior border of the medial malleolus below.

**Interosseous or lateral border** extends from the lateral condyle a little below and in front of the fibular facet, to the anterior border of the fibular notch.

### **Surfaces-**

**Lateral sur.-** it lies between the anterior and interosseous borders.

**Medial surface-** it lies between the anterior and medial borders. it is subcutaneous.

**Posterior surface-** it lies between the medial and interosseous borders.

This part is crossed obliquely by a rough ridge called the soleal line.

The soleal line begins just behind the fibular facet, runs downwards and medially and terminates by joining the medial border at the junction of its upper and middle thirds.

- **Above the soleal line- the posterior surface is in the form of a triangular area. The area below the soleal line is elongated.**
- **It is divided into medial and lateral parts by a vertical ridge.**

**Lower end-**

**It is slightly expanded.**

**It has 5 surfaces**

- Medially it is prolonged downwards as the medial malleolus.

**Anterior surface**

**Medial surface-** subcutaneous

**Lateral surface-** triangular fibular notch

**Inferior surface-** articular, it articulates with the superior trochlear surface of the talus and thus part in forming the ankle joint.

## **Medial malleolus**

- **It is a short but strong process which projects downwards from the medial surface of the lower end of the tibia.**
- **It forms a subcutaneous prominence on the medial side of the ankle.**