- The Fibula is the lateral bone of the leg and is homologous with the ulna of the forearm.

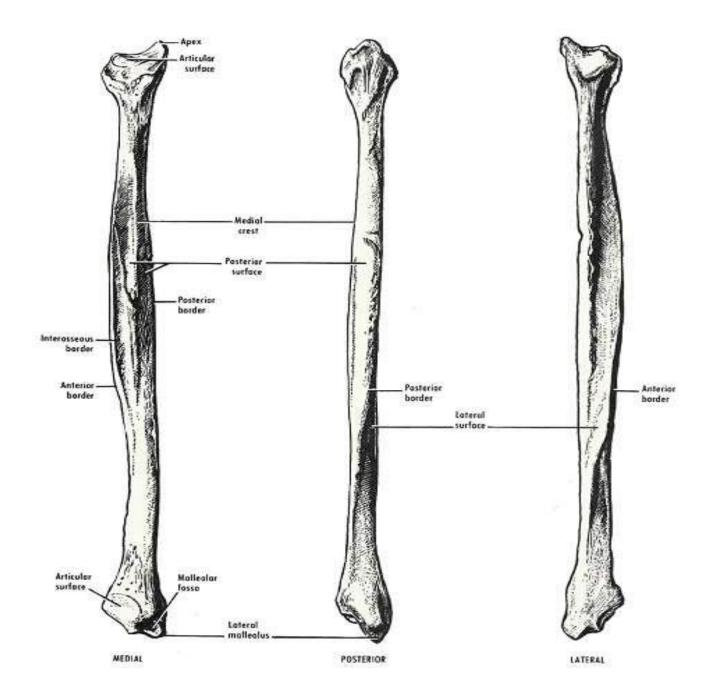
  In Latin, the term fibula means "pin"; therefore the lateral bone of leg is rightly referred to as fibula because it's a long pin-like bone.
- Its main function is to act as an attachment for muscles, and not as a weight-bearer.

## Side Determination

- 1. The upper end is irregular expended in all directions.
- 2. The lower end is flattened from side to side and form the malleolus
- 2. The medial side of the lower end bears a triangular articular facet anteriorly, and a deep or malleolar fossa posteriorly.

## Articulations of the fibula

- It has three main articulations:
- Proximal tibiofibular joint articulates with the lateral condyle of the tibia.
- Distal tibiofibular joint articulates with the fibular notch of the tibia.
- Ankle joint articulates with the talus bone of the foot.



Features

The fibula has an upper end, a shaft and a lower end.

# Upper End or Head

- It is slightly expanded in all directions. The superior surface bears a circular articular facet which articulates with the lateral condyle of the tibia.
- The apex of the head or the styloid process projects upwards from its posterolateral aspect.
- The constriction immediately below the head is known as the neck of the fibula

In front of and medial to the styloid proccess, the head shows a circular facet for articulation with the tibia to form the superior tibiofibular joint

# Shaft

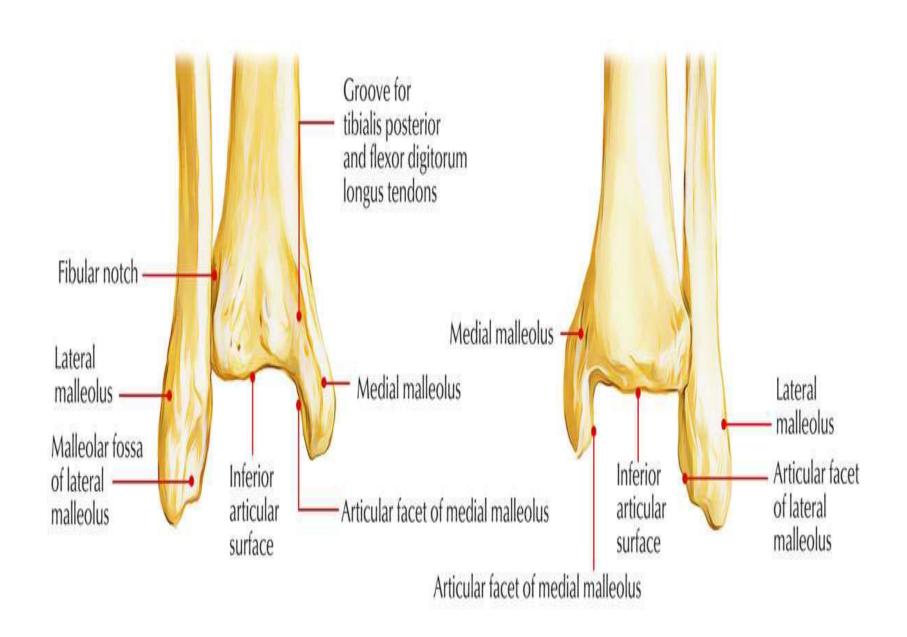
 The shaft shows considerable variation in its form because it is moulded by the muscles attached to it. It has three borders—anterior, posterior and interosseous; and three surfaces—medial, lateral and posterior

#### **Borders**

- The anterior border begins just below the anterior aspect of the head. At its lower end it divides to enclose an elongated triangular area which is continuous with the lateral surface of the lateral malleolus.
- The posterior border is rounded. Its upper end lies in line with the styloid process. Below, the border is continuous with the medial margin of the groove on the back of the lateral malleolus.
- The interosseous or medial border lies just medial to the anterior border, but on a more posterior plane. It terminates below at the upper end of a roughened area above the talar facet of the lateral malleolus. In its upper two-thirds, the interosseous border lies very close to the anterior border and may be indistinguishable from it.

# Surfaces

- The medial surface lies between the anterior and interosseous borders. In its upper twothirds, it is very narrow, measuring 1 mm or less
- The lateral surface lies between the anterior and posterior borders. It is twisted backwards in its lower part (Fig.2.37B).
- The posterior surface is the largest of the three surfaces. It lies between the interosseous and posterior borders. In its upper two-thirds, it is divided into two parts by a vertical ridge called the medial crest



## Lower End or Lateral Malleolus

- The tip of the lateral malleolus is 0.5 cm lower than that of the medial malleolus,
  - It has the following four surfaces.
- The anterior surface is rough and rounded. The posterior surface is marked by a groove. The lateral surface is subcutaneous. The medial surface bears a triangular articular facet for the talus anteriorly and the malleolar fossa posteriorly.

### **CLINICAL SIGNIFICANCE**

### BONE GRAFTS

- Since the fibula doesn't take part in the transmission of
- body weight, it's a common source of bone for grafting.
- The upper and lower ends of the fibula are subcutaneous and palpable.
- The common peroneal nerve can be rolled against the neck of the fibula. This nerve is commonly injured here.
- In the first stage of Pott's fracture, the lower end of the fibula is fractured spirally.