



Human Anatomy - 2nd year



Anatomy Of Mandible Lecture (4)

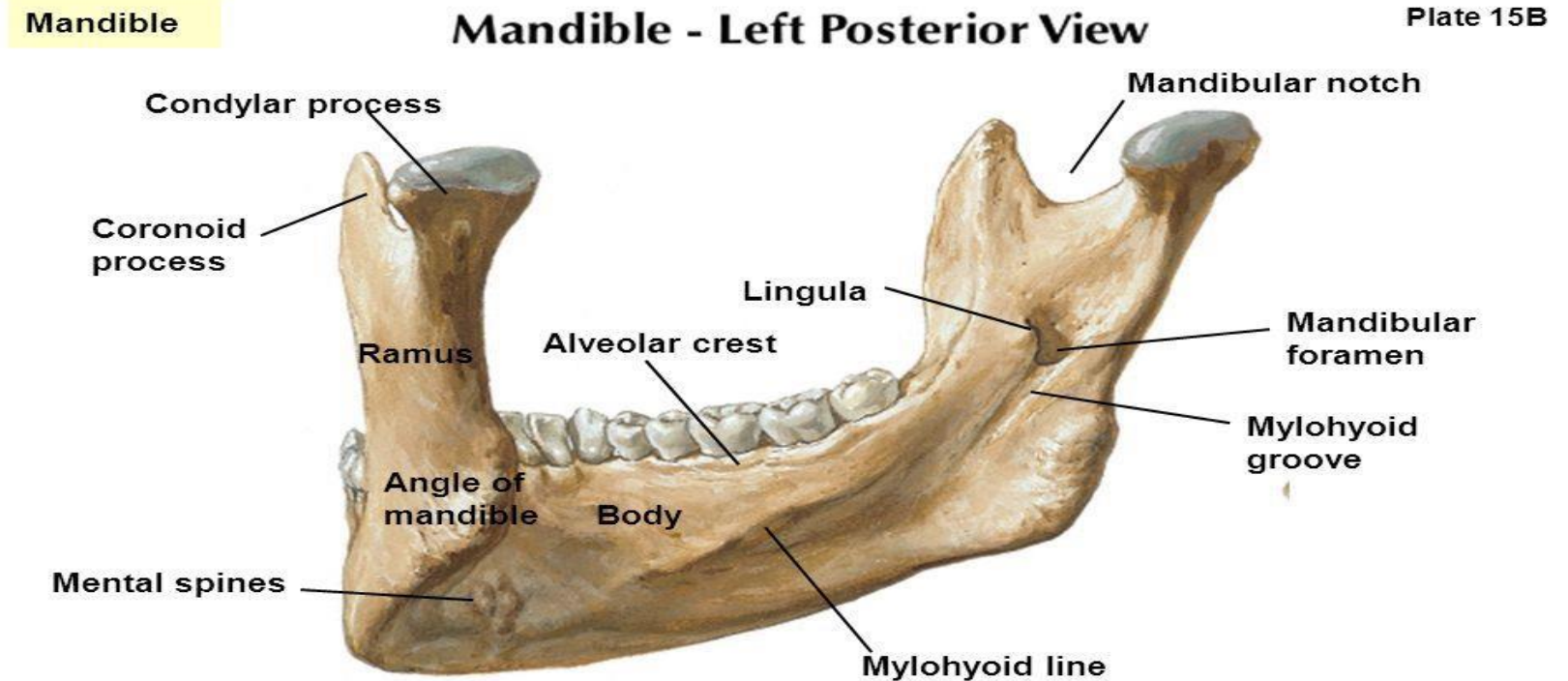
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Objective Learning

1. Identify the parts of the mandible
2. Recognize the bony landmarks of the mandible



Anatomy Of The Mandible

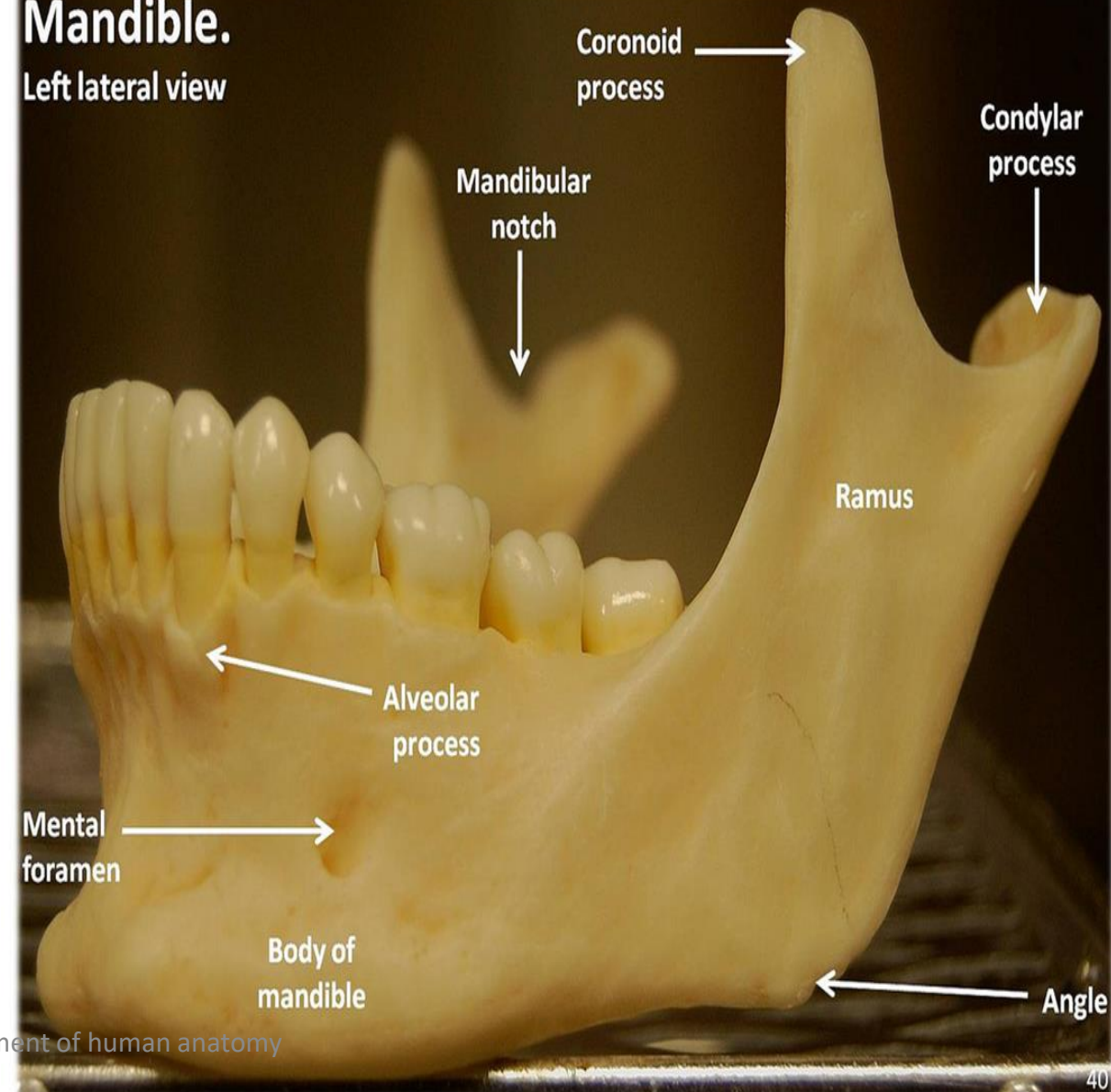
Mandible is the largest, strongest and lowest bone of the face .

It consisted of

1. Body of mandible
2. Right and left rami
3. Angle of mandible where the body and ramus are met.

Mandible.

Left lateral view



The Body Of The Mandible

It is curved bone look like :
horse shoe and has

☠️ **Two Surfaces**

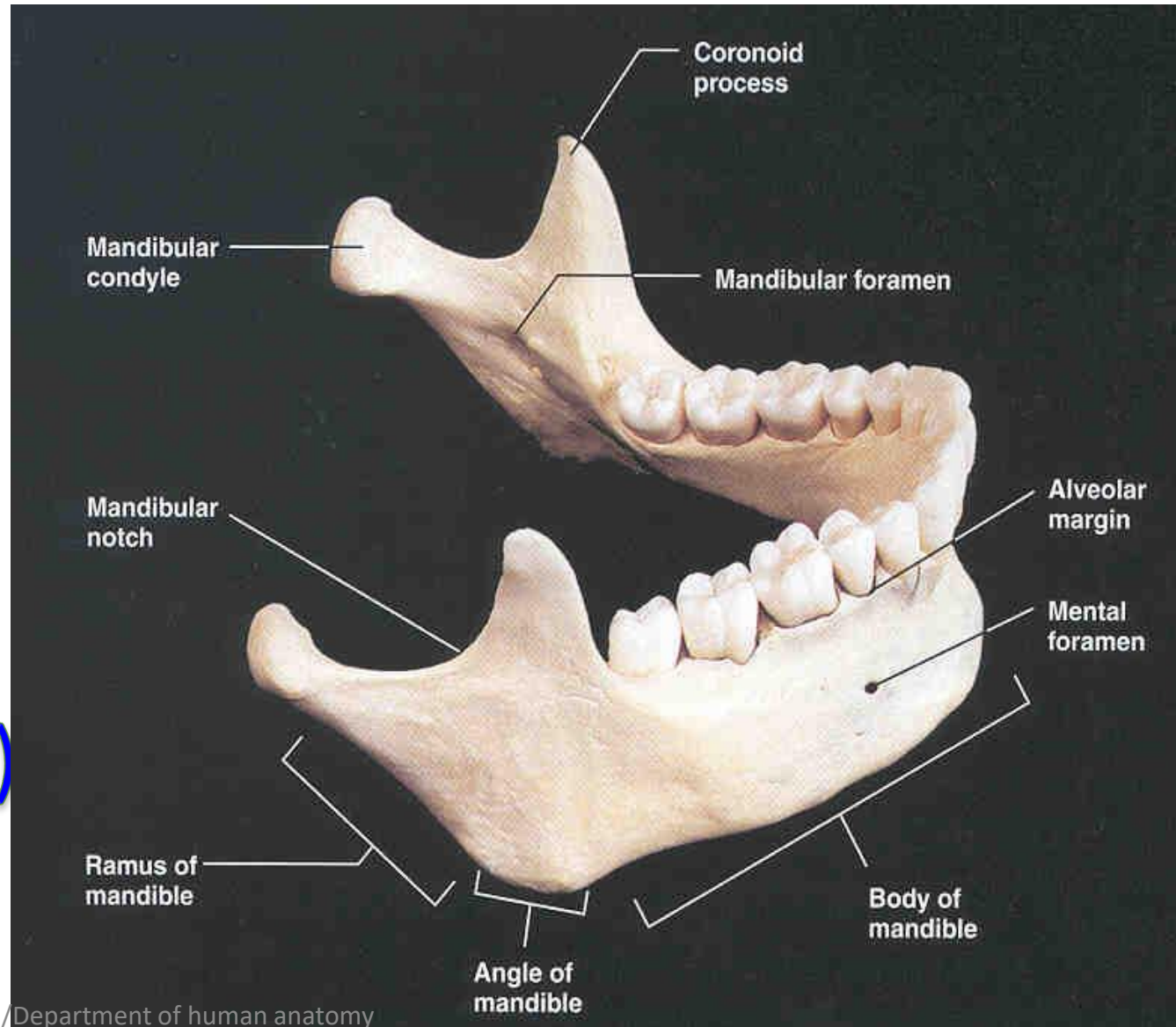
* External surface

* Internal surface

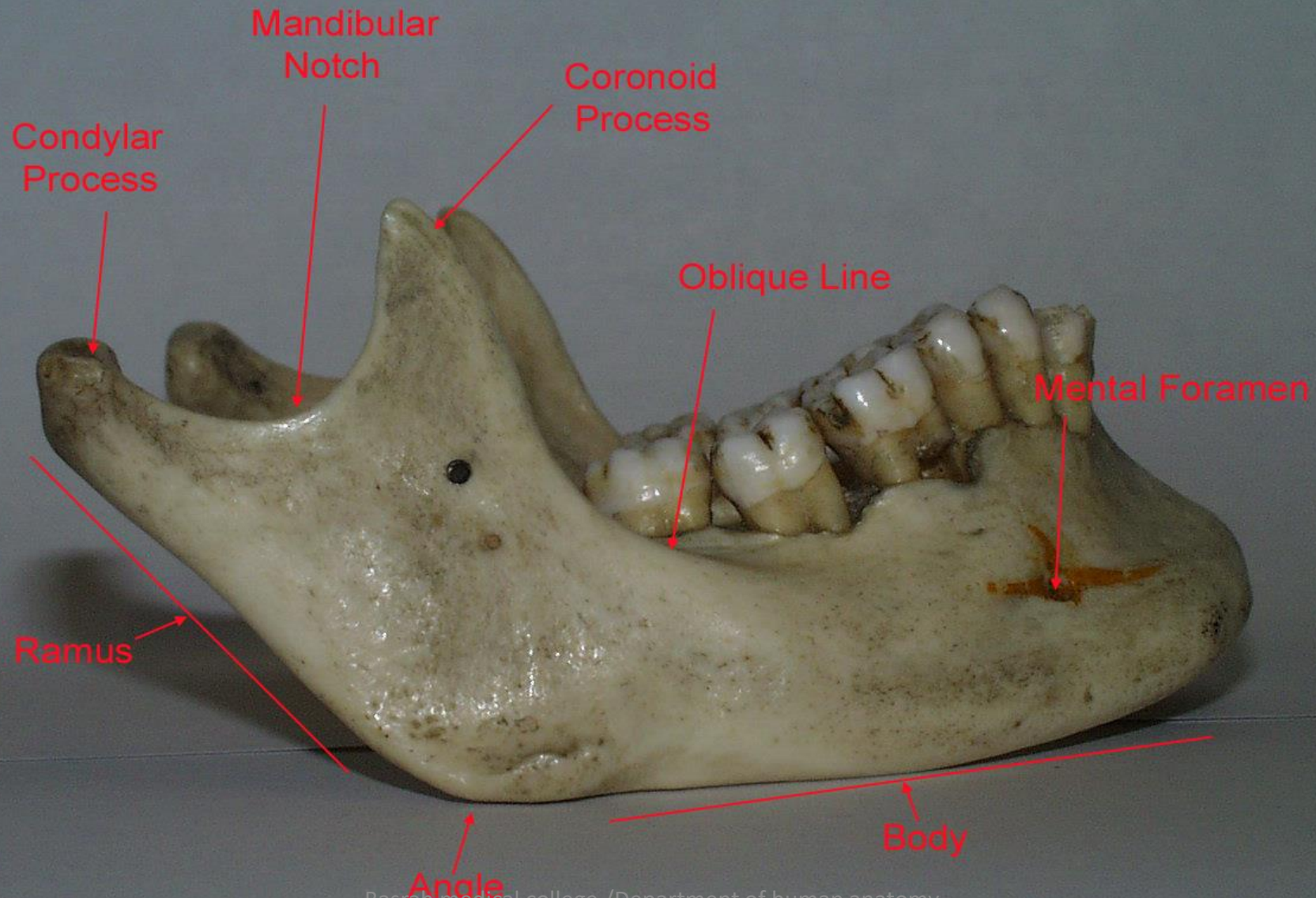
☠️ **Two Borders**

. Superior (Alveolar border)

. Inferior (Base of mandible)



External surface



External surface

1. Symphysis menti : is a ridge where the Rt and Lt bones are joined

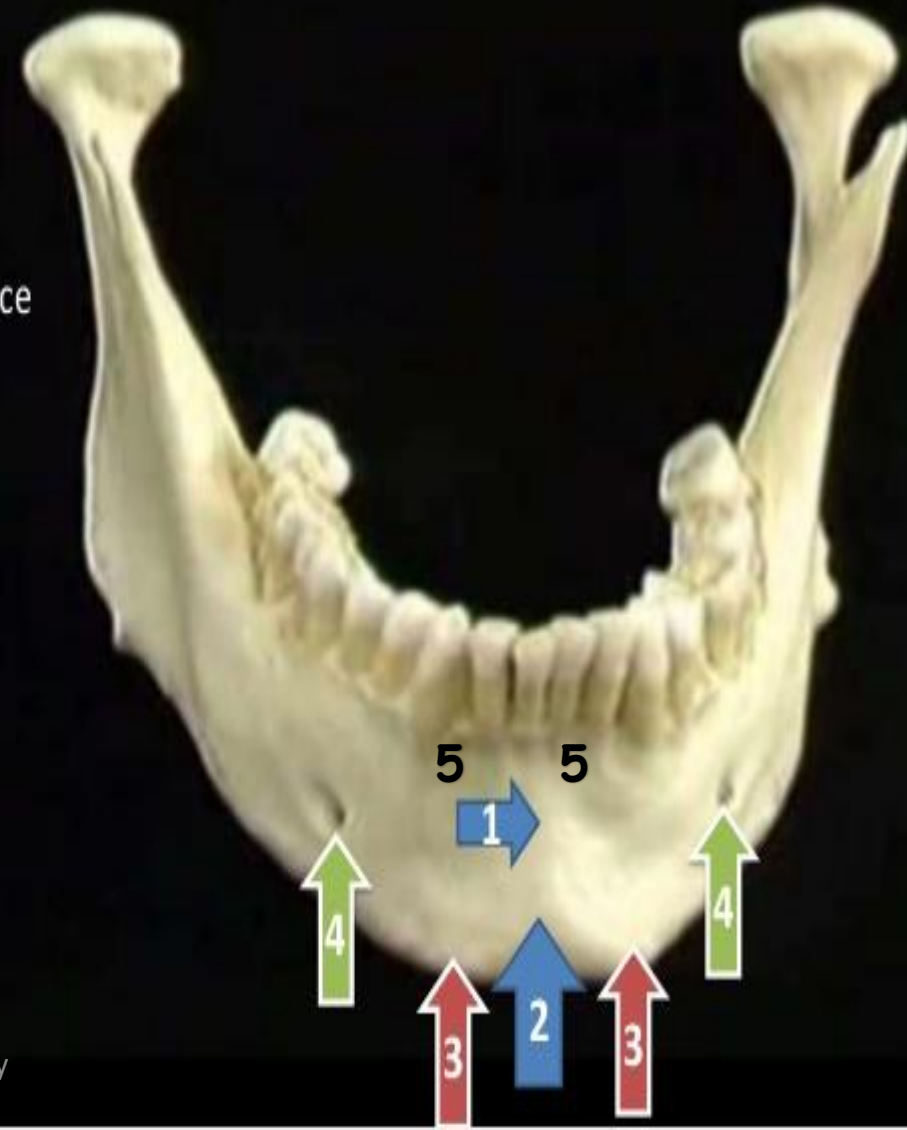
2. Mental protuberance :triangular eminence below the ridge

3. Mental tubercles : the elevated area of the base of mental protuberance

4. Mental foramen below the second premolar teeth for mental vessels and nerve .

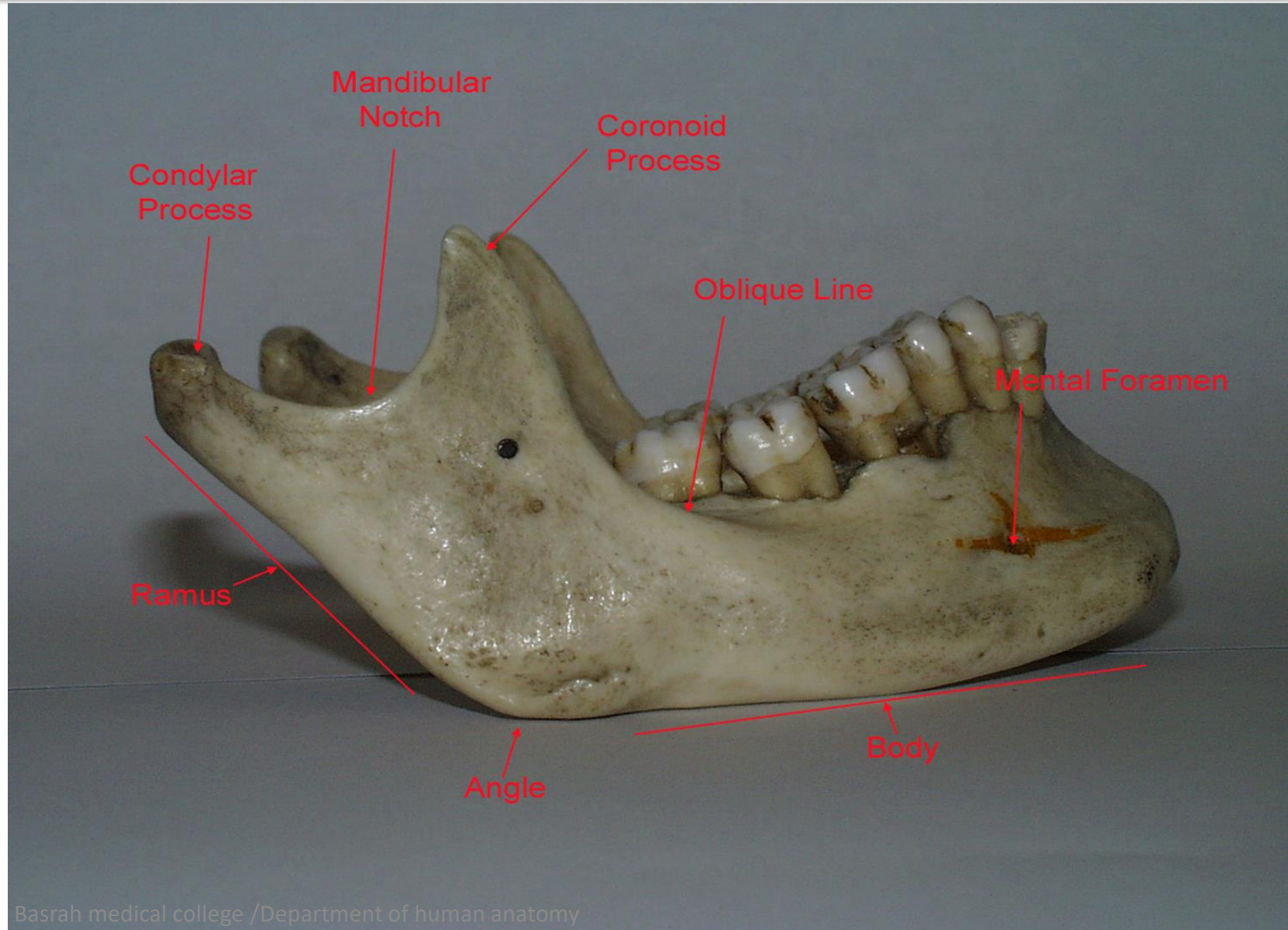
5 . Incisive fossa on either side of symphysis menti

- 1) Symphysis menti
- 2) Mental protuberance
- 3) Mental tubercle
- 4) Mental foramen



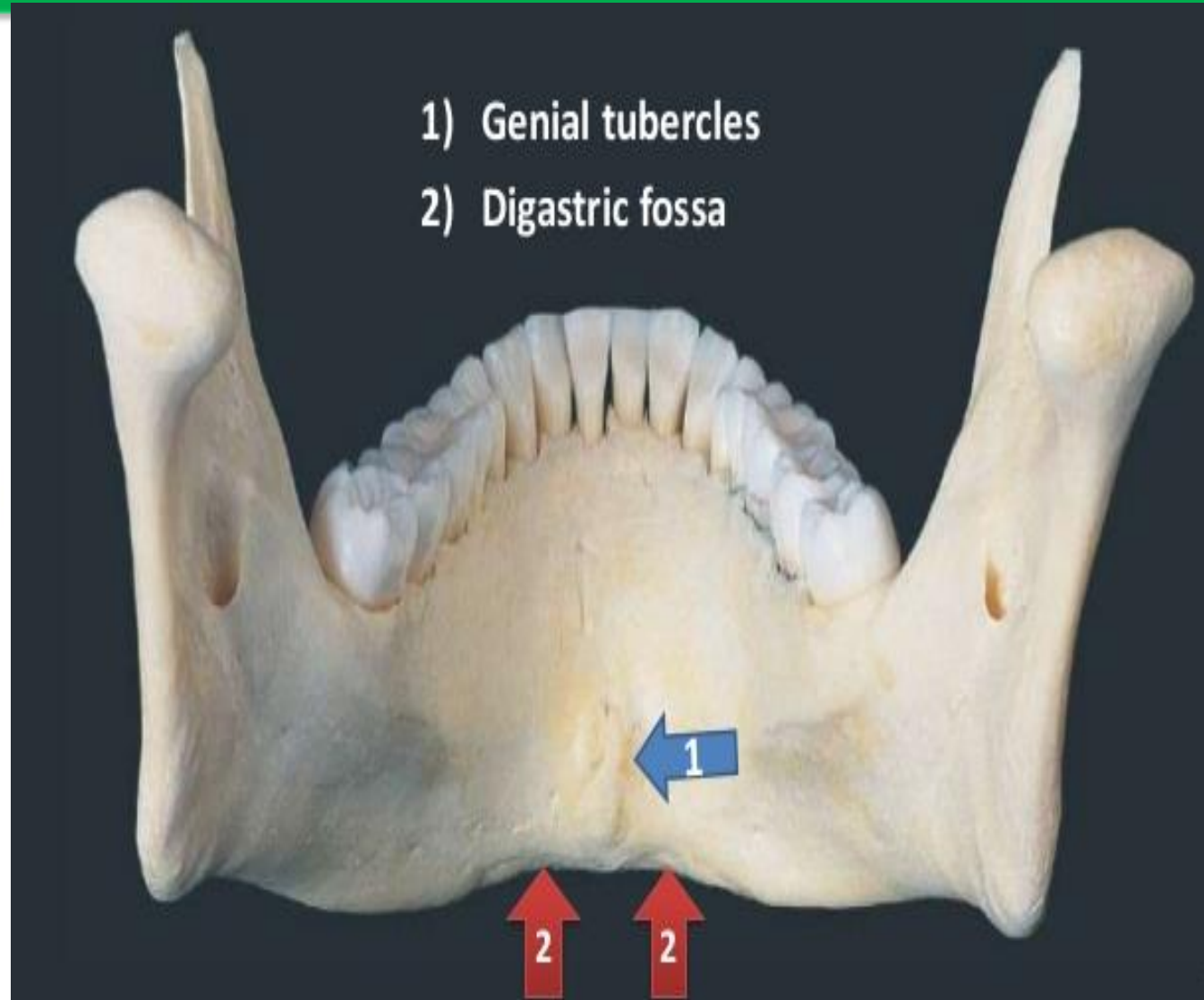
External surface

6 . Oblique line : runs upward ,backward to be continuous with anterior border of ramus

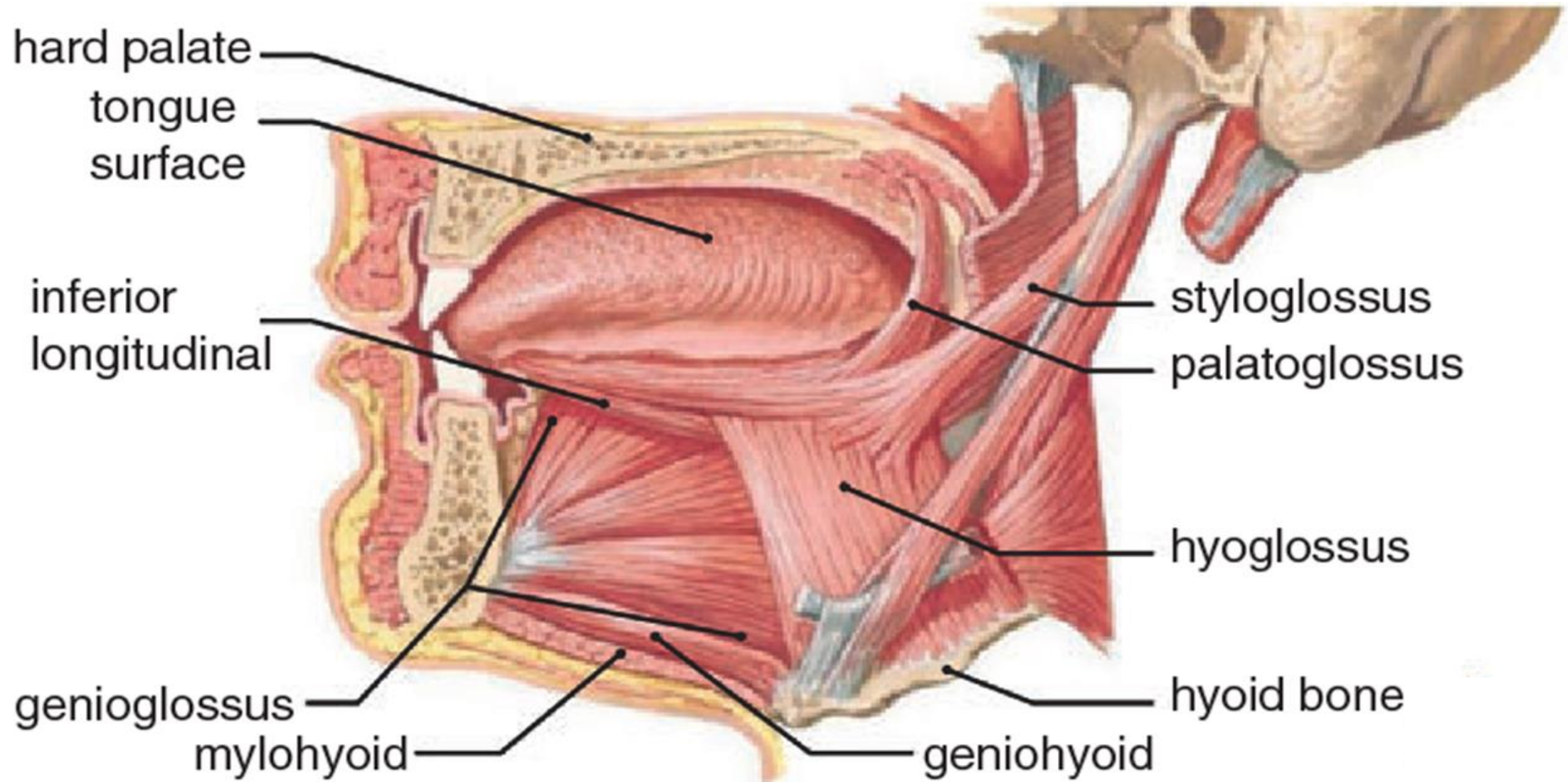


Internal Surface

1. The genial tubercle :
also known as the mental spine, is a slight projection found on the internal side of the mandible. It consists of four spines (the superior, inferior, right, and left spines), and it provides attachment for the genioglossus and geniohyoid muscles.

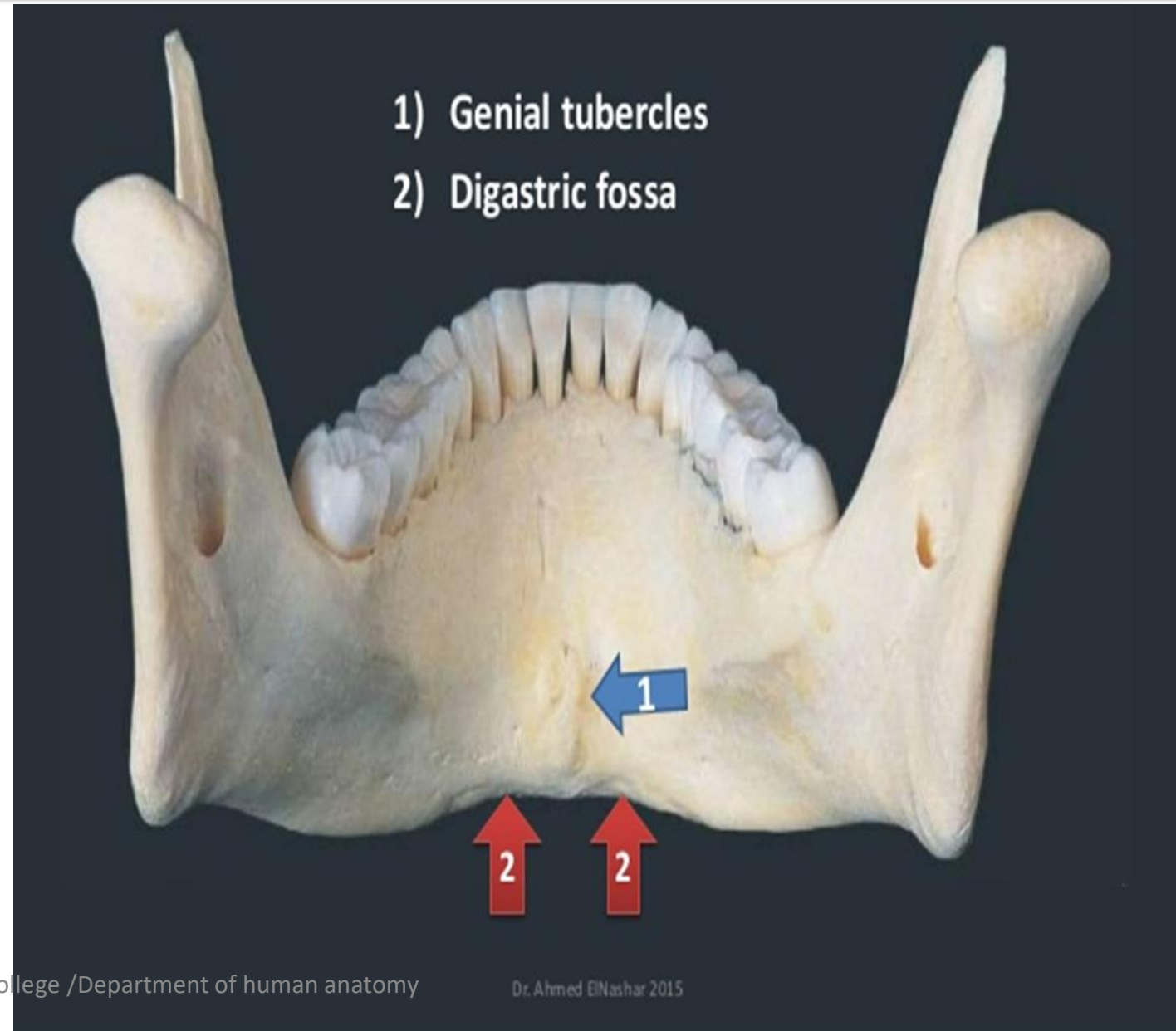


Anatomy Of The Mandible



Internal Surface

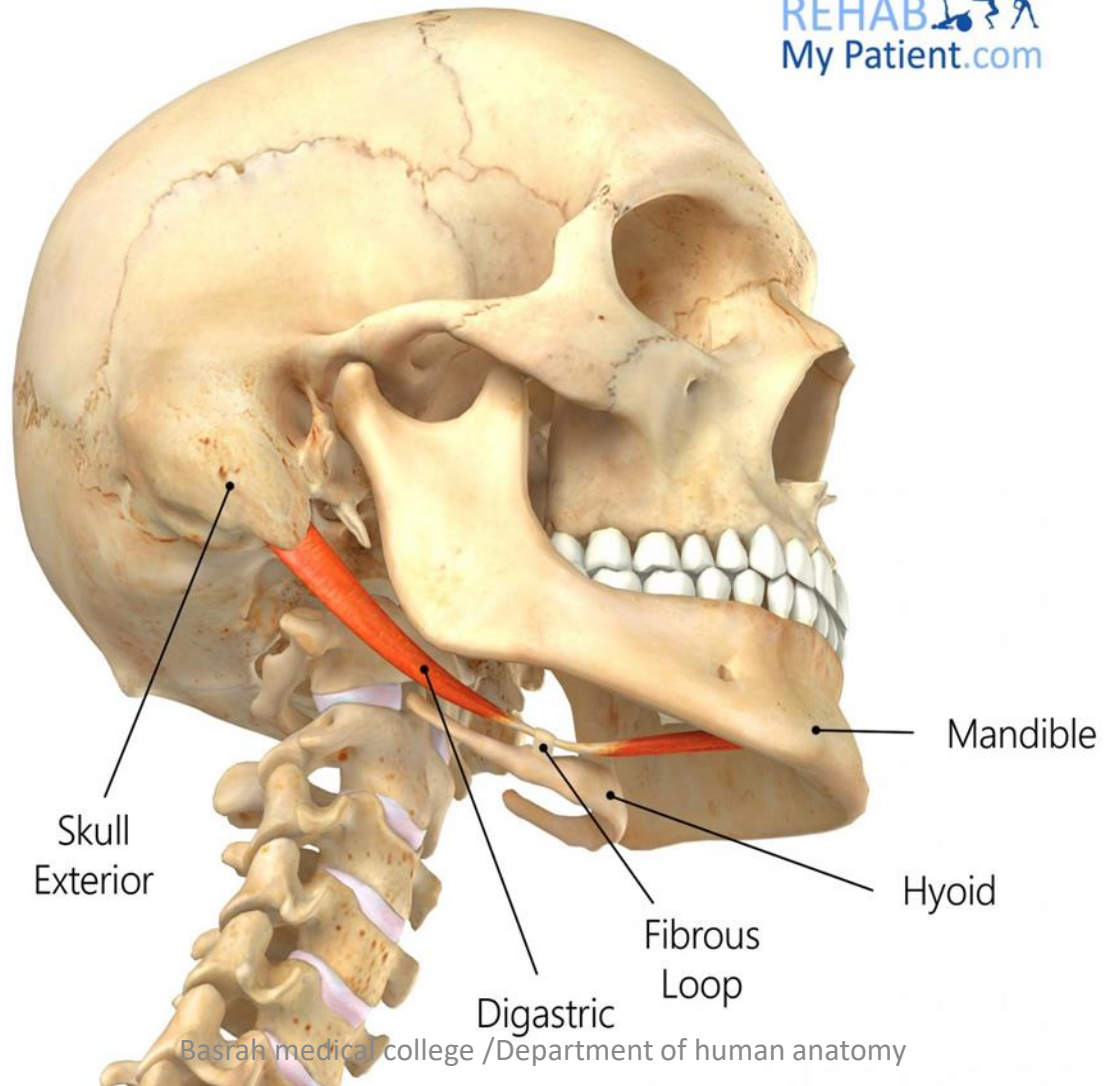
2. **Digastric Fossa** : On either side of mid line : oval depression for anterior belly of digastric.



Internal Surface

Digastric

REHAB
My Patient.com



Internal surface

3. Mylohyoid line:
Extends diagonally from the lower part of **symphysis menti** to the inner surface of the alveolar border a little below the **third molar tooth**.

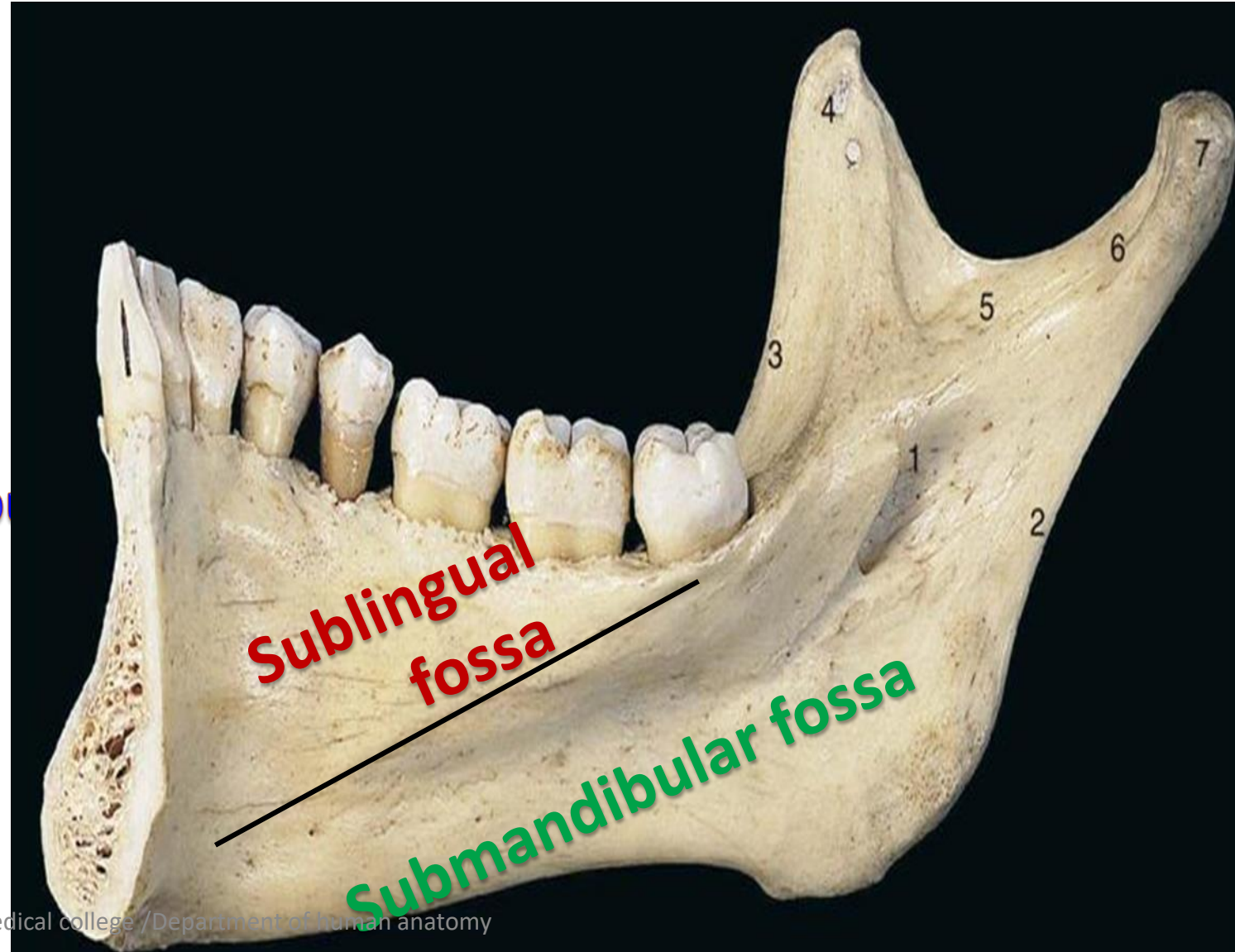


This line gives attachment to the mylohyoid muscle, and divides the internal surface into an upper, and lower fossae.

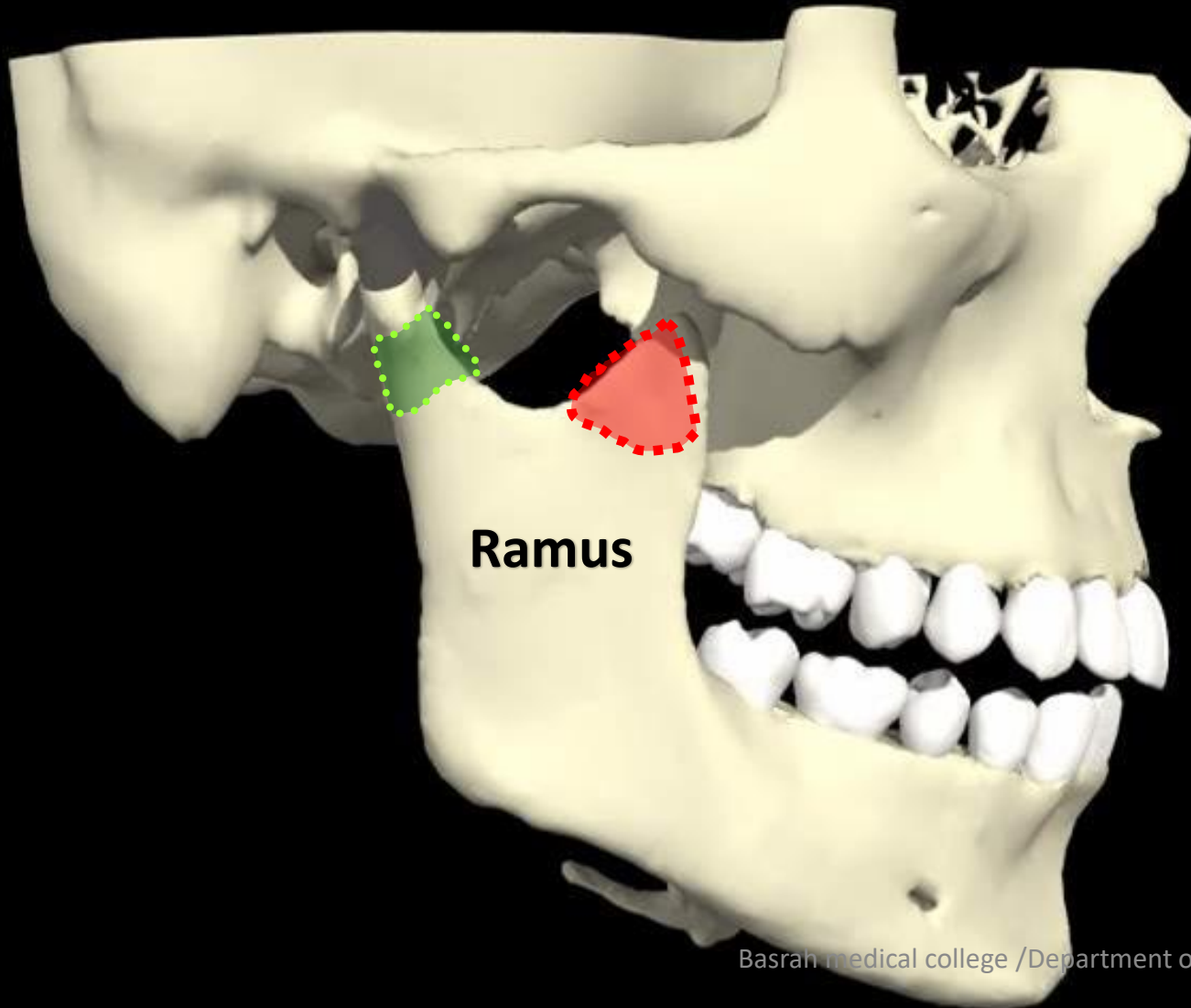
Internal surface

4. Upper **sublingual fossa** for the sublingual gland .

5. Lower concave **submandibular fossa** for the lateral surface of superficial part of the submandibular gland.



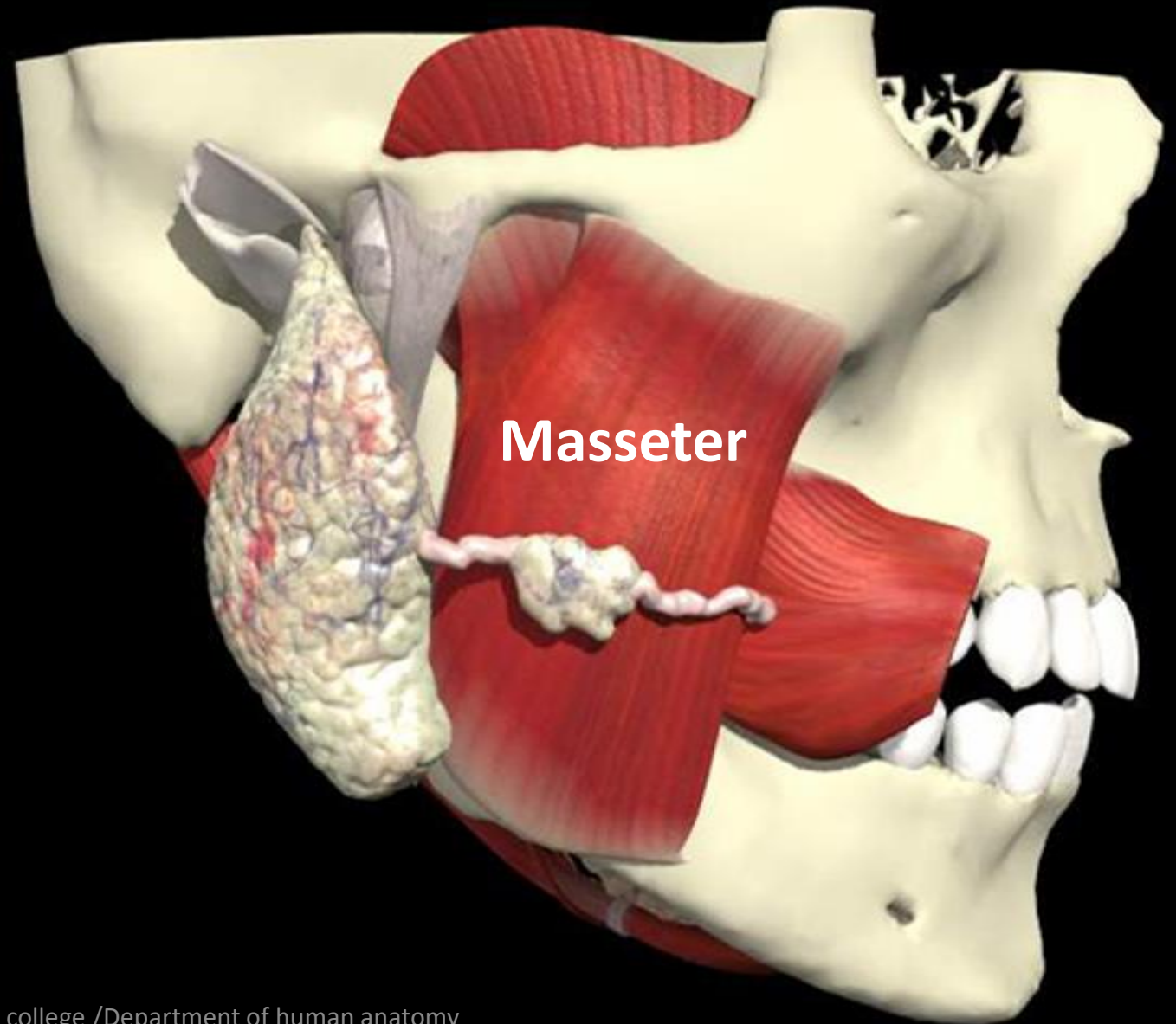
The Ramus Of The Mandible



The Ramus :
is quadrilateral
in shape, and
has two
surfaces, four
borders, and
two processes

Ramus Of The Mandible

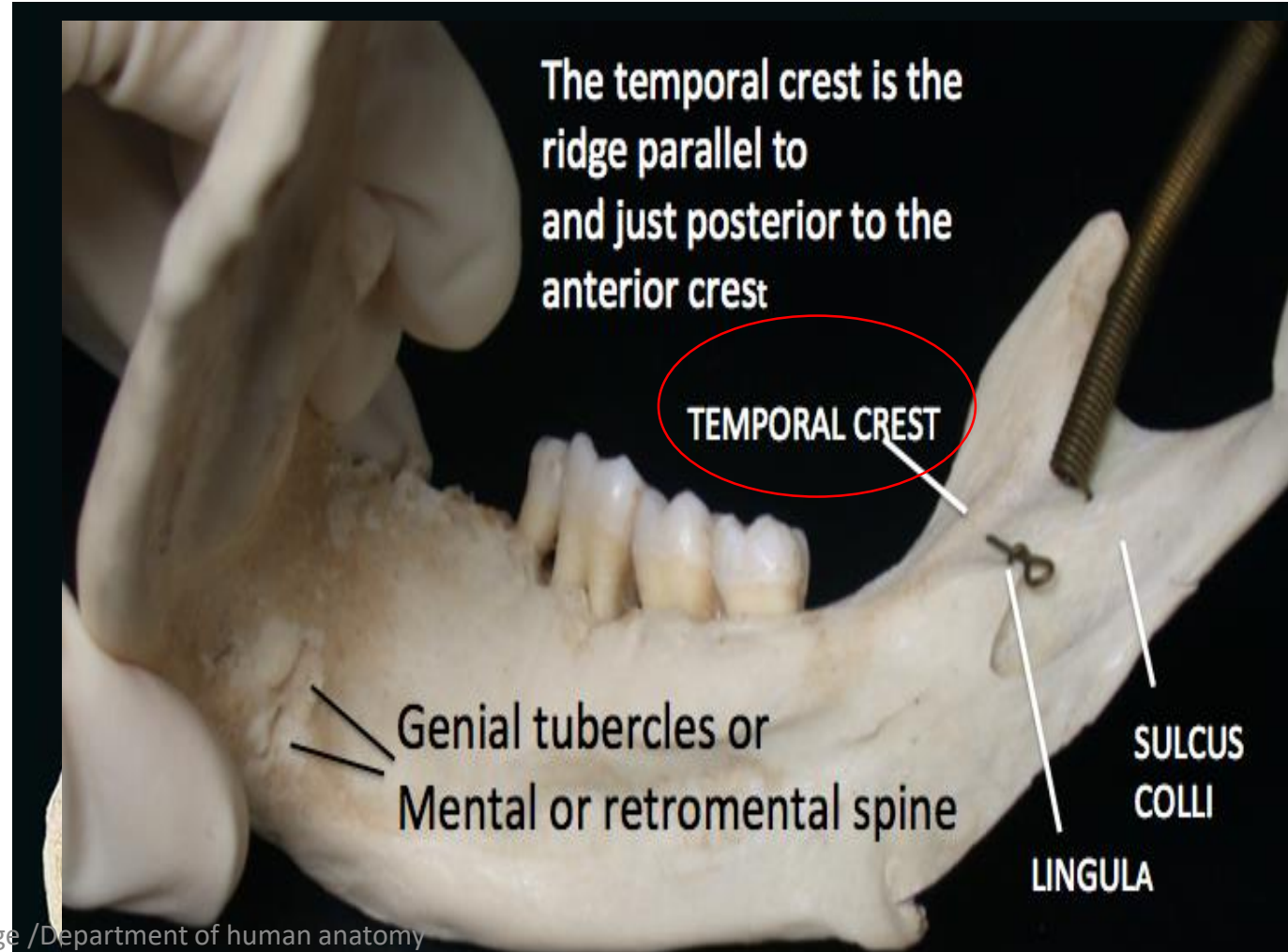
Lateral surface :
is flat and
marked by
oblique ridges
at its lower part;
it gives
attachment to
the Masseter.



Medial Surface Of Ramus

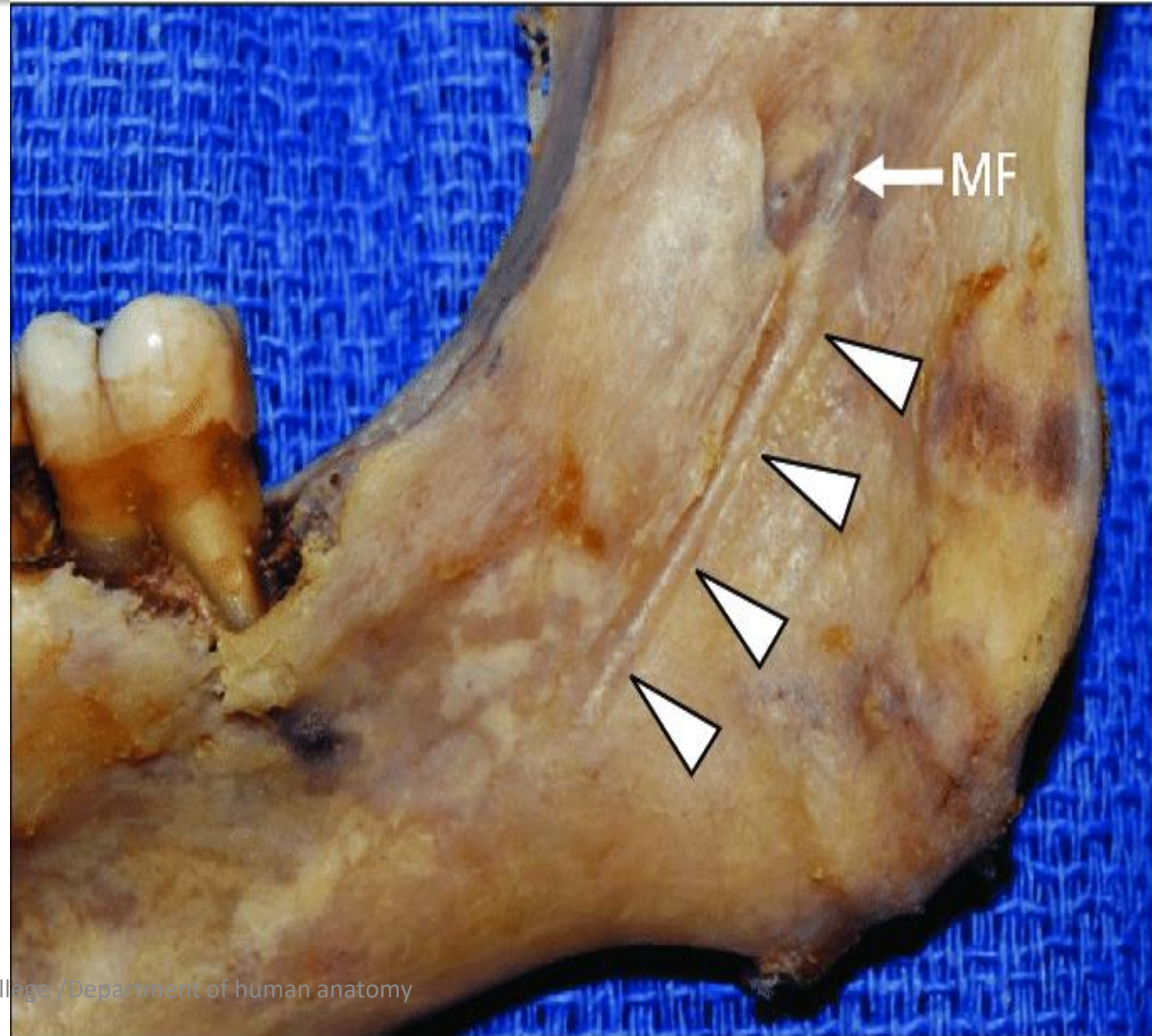
1. **The mandibular foramen** is located on the internal surface of the ramus of the mandible. It serves as a conduit for the inferior alveolar nerve and inferior alveolar artery. They travel through the mandibular foramen, into the mandibular canal, and exit at the mental foramen

2. **Temporal crest** : The temporal crest is a bony ridge for the attachment of the temporalis muscle, located at the anterior margin of ramus



Ramus Of The Mandible

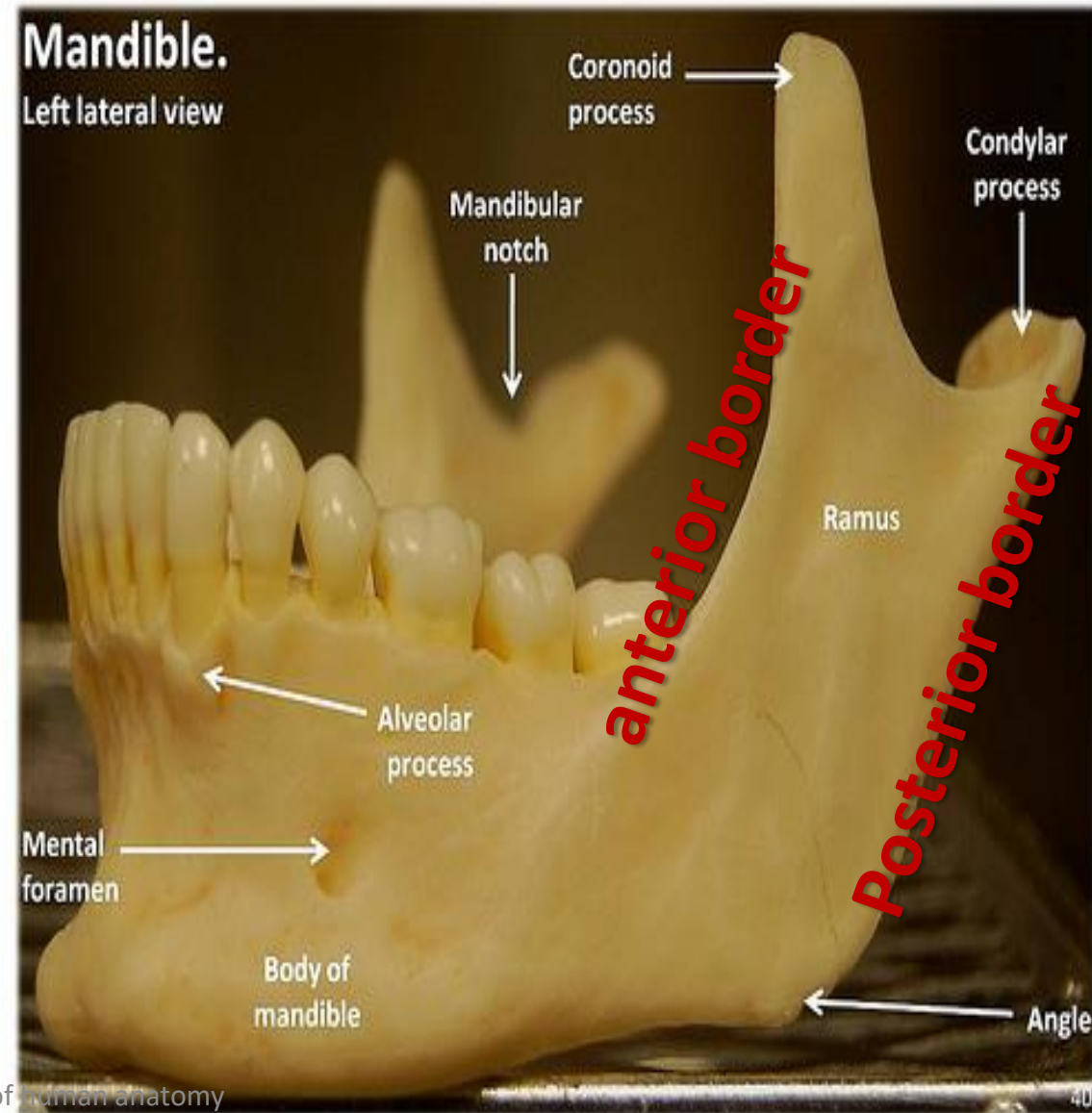
3. **Lingula mandibulæ:** sharp spine which gives attachment to the sphenomandibular ligament.
4. **Mylohyoid Groove :** Runs obliquely and downward for mylohyoid vessels and nerves



Borders Of Ramus Of Mandible

1. The anterior border is thin above, thicker below, and continuous with the oblique line.

2. The posterior border is thick, smooth, rounded, and covered by the parotid gland



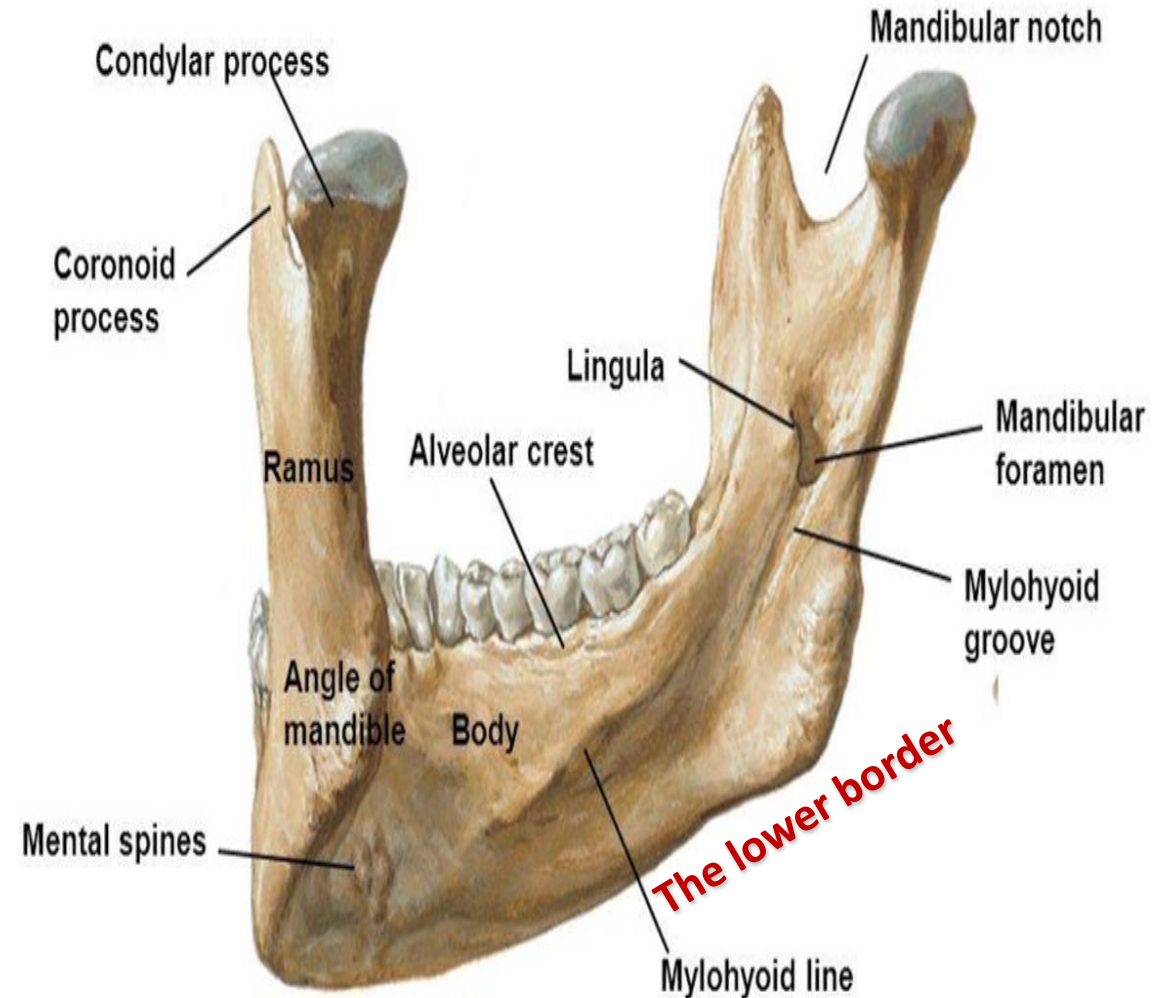
Borders Of Ramus Mandible

3. The lower border is thick, straight, and continuous with the inferior border of the body of the bone.

Mandible

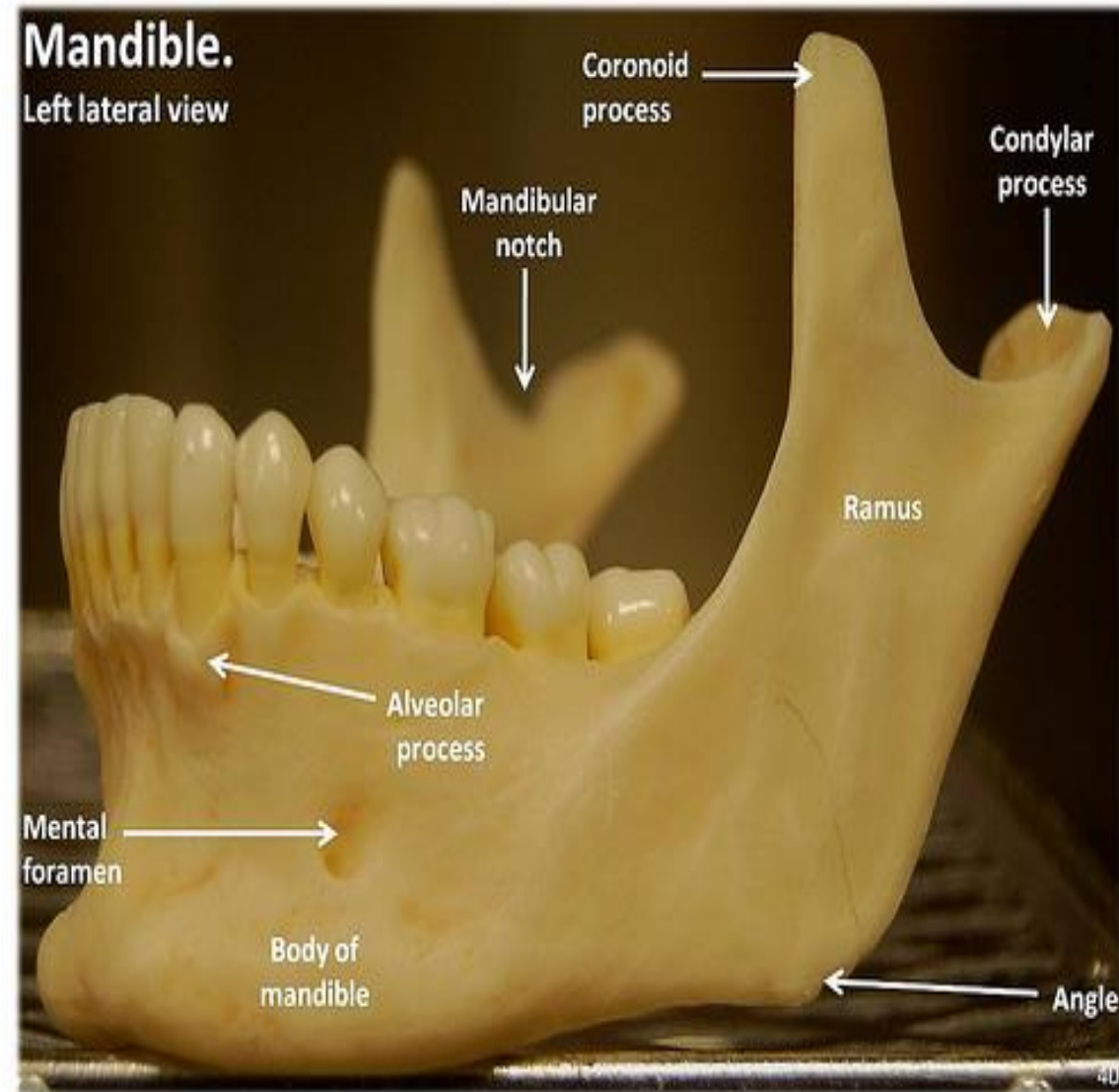
Mandible - Left Posterior View

Plate 15B



Borders Of Ramus Of Mandible

4. The upper border :
thin, and is bounded by
two processes,
the coronoid in front and
the condyloid behind,
separated by a deep
concavity,
the mandibular notch



Process of ramus of mandible

Condylod Process

Coronoid Process



Coronoid Process

The Coronoid Process: is a thin, triangular eminence, which is flattened from side to side and varies in shape and size.

1. **anterior border** is convex and is continuous below with the anterior border of the ramus.
2. **posterior border** is concave and forms the anterior boundary of the mandibular notch.
3. **lateral surface** is smooth, and affords insertion to the Temporalis and Masseter.
4. **medial surface** gives insertion to the Temporalis



Condylloid process



Consisted of

- 1. condyle**, presents an articular surface for articulation with mandibular fossa of temporal bone at the temporomandibular joint
- 2. Neck** : constricted portion

Mandibular notch

The mandibular notch :
Is a deep semilunar depression separates the two processes, and it is crossed by the masseteric vessels and nerve.

