

# **GENERAL ANATOMY**

---

**DPT**

**1<sup>ST</sup> SEMESTER**

**DR DANISH**

# SPECIAL TERMS OF POSITIONS

---

- In addition to commonly used anatomical terms there are some specific terms used for specific region, organ or part of the body

# Dorsal

---

**Meaning:** Toward the back.

- **Latin Origin:** *Dorsum* = back.
- Commonly used to describe the **posterior** surface of the body.
- In the **hand**, the back surface is the **dorsal surface**.
- In the **foot**, the top surface is the **dorsal surface**.
- **Note:** In human anatomy, *dorsal*  $\approx$  *posterior*.

# Ventral

---

- **Meaning:** Toward the belly or front.
- **Latin Origin:** *Venter* = belly or abdomen.
- Commonly used as a **substitute for anterior** in human anatomy.
- The **superior surface of the tongue** = dorsal surface.
- The **inferior surface of the tongue** = ventral surface

# Cranial

---

- **Meaning:** Toward the head or skull.
- **Latin Origin:** *Cranium* = skull.
- Can be used interchangeably with **superior** in humans.
- Indicates a structure located **near or toward the head**

# Cephalic

---

- **Meaning:** Of or relating to the head.
- Commonly used in **gross anatomy and embryology**.
- Directional term meaning **toward the head**

# Caudal

---

- **Meaning:** Toward the tail or lower part of the body.
- **Latin Origin:** *Cauda* = tail.
- Although adult humans lack tails, this term refers to the **inferior** direction.
- In embryology, used to describe structures **toward the developing tail end**.
- Opposite of **cranial**.

# Terms of Movements

---

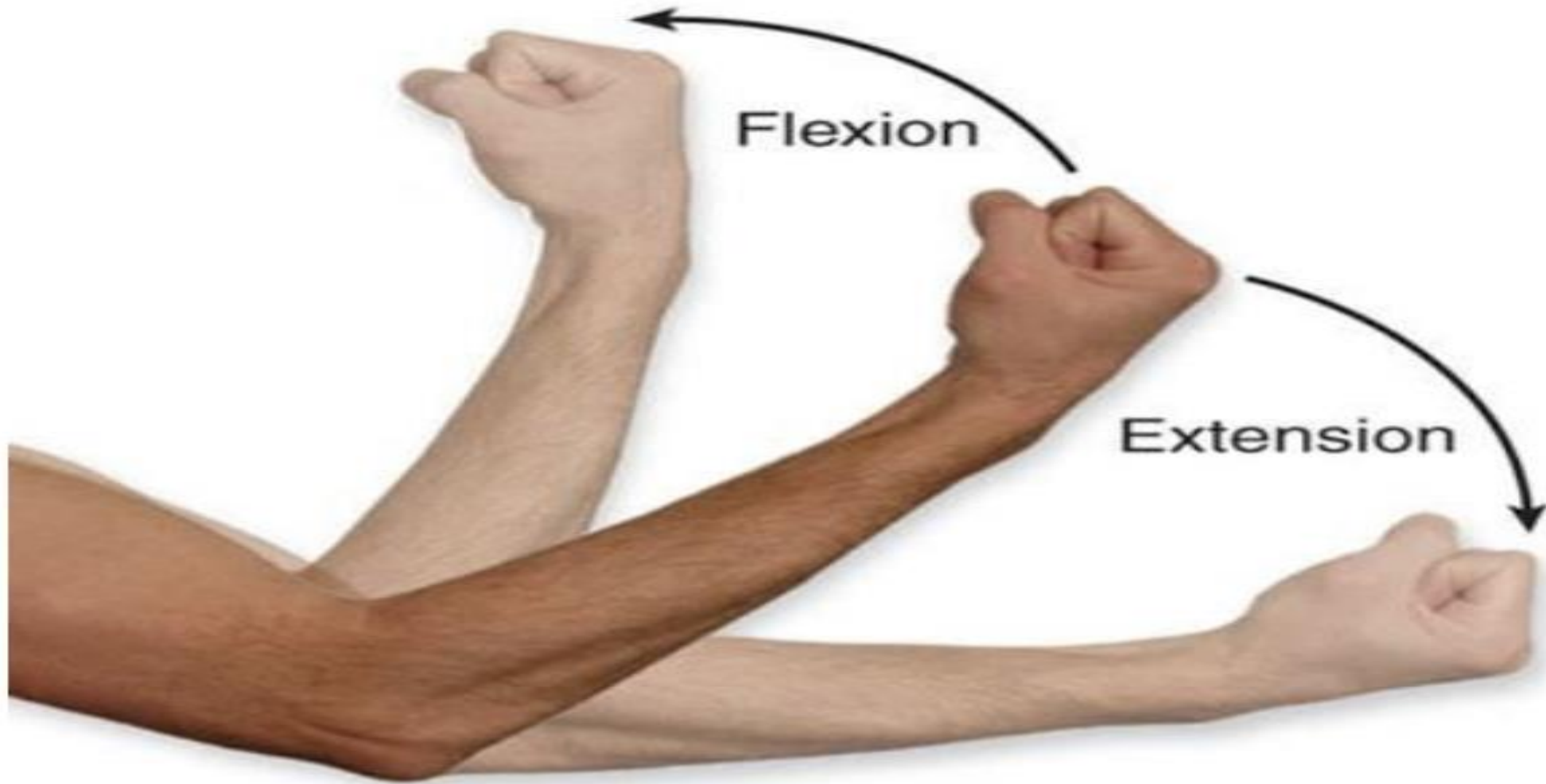
- **Flexion:**
- Bending movement that decreases the angle between two parts.
- Example: Flexion at the elbow joint brings forearm closer to the arm



# continued

---

- **Extension:**
- Straightening movement that increases the angle between body parts.
- Example: Straightening the knee



Flexion

Extension

# continued

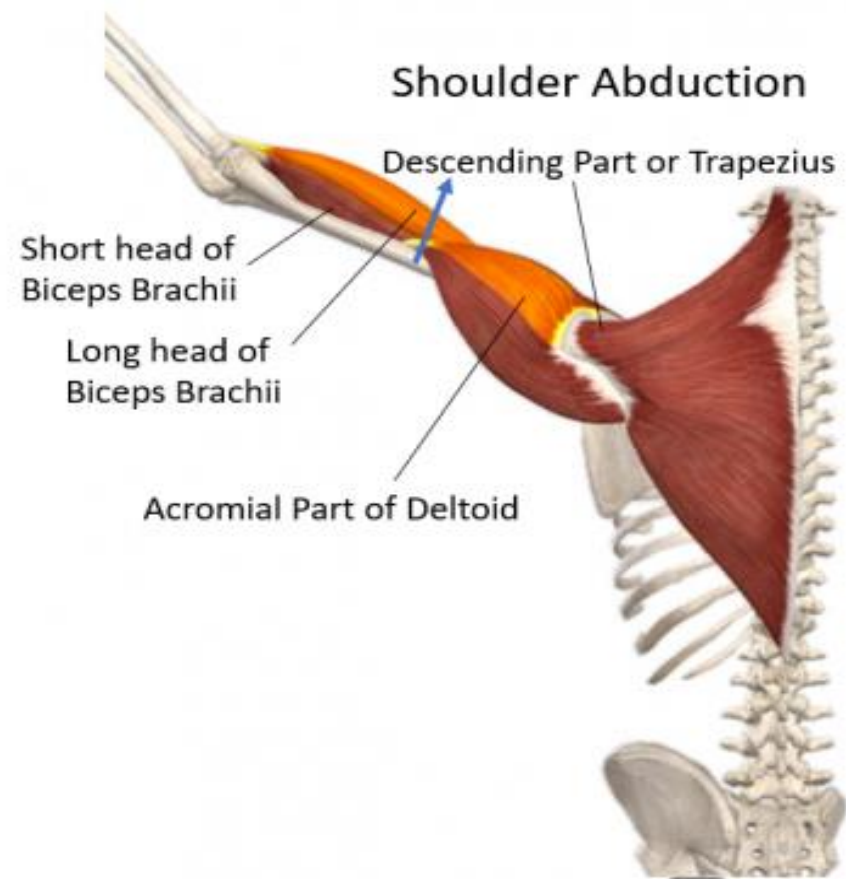
---

- **Abduction:**
- Movement away from the midline of the body.
- Example: Raising the arm sideways away from the trunk

# Continued

---

- **Adduction:**
- Movement toward the midline of the body.
- Example: Bringing the arm back to the side of the body.



Short head of Biceps Brachii

Long head of Biceps Brachii

Acromial Part of Deltoid

### Shoulder Abduction

Descending Part of Trapezius

**3D4MEDICAL**  
Transforming Medical Learning



Pectoralis Major

Coracobrachialis

Teres Major

Latissimus Dorsi

### Shoulder Adduction

**3D4MEDICAL**  
Transforming Medical Learning

# continued

---

- **Rotation:**
- Movement around the longitudinal axis.
- **Medial (internal) rotation:** Turns the anterior surface toward the midline.
- **Lateral (external) rotation:** Turns it away from the midline.

# continued

---

- **Circumduction:**
- Combination of flexion, extension, abduction, and adduction.
- Distal end moves in a circular motion.

# continued

---

- **Pronation:**
- Rotation of the forearm so the palm faces downward or backward.



# continued

---

- **Supination:**
- Rotation of the forearm so the palm faces upward or forward

# continued

---

- **Inversion:**
- Turning the sole of the foot inward toward the midline

# continued

---

- **Eversion:**
- Turning the sole of the foot outward away from the midline

# continued

---

- **Elevation:**
- Lifting a body part upward.
- Example: Shrugging the shoulders

# continued

---

- **Depression:**
- Lowering a body part downward.
- Example: Dropping the shoulders.

# continued

---

- **Protraction:**
- Moving a body part forward (anteriorly).
- Example: Pushing the jaw forward.

# continued

---

- **Retraction:**
- Moving a body part backward (posteriorly).
- Example: Pulling the jaw backward.

# continued

---

- **Opposition:**
- Movement by which the thumb touches the tip of another finger.







T<sub>1</sub>

H<sub>4</sub>

A<sub>1</sub>

N<sub>1</sub>

K<sub>5</sub>

Y<sub>4</sub>

O<sub>1</sub>

U<sub>1</sub>

A<sub>1</sub>

H<sub>4</sub>

R<sub>1</sub>

D<sub>2</sub>

S<sub>1</sub>

A<sub>1</sub>

E<sub>1</sub>

G<sub>2</sub>

C<sub>3</sub>

L<sub>1</sub>

L<sub>1</sub>

L<sub>1</sub>

L<sub>1</sub>

