

# **GENERAL ANATOMY**

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**DPT**

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

**DR DANISH**

# SPECIAL TERMS OF POSITIONS

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

# Dorsal

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**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

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- **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

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- **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

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

# Caudal

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- **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

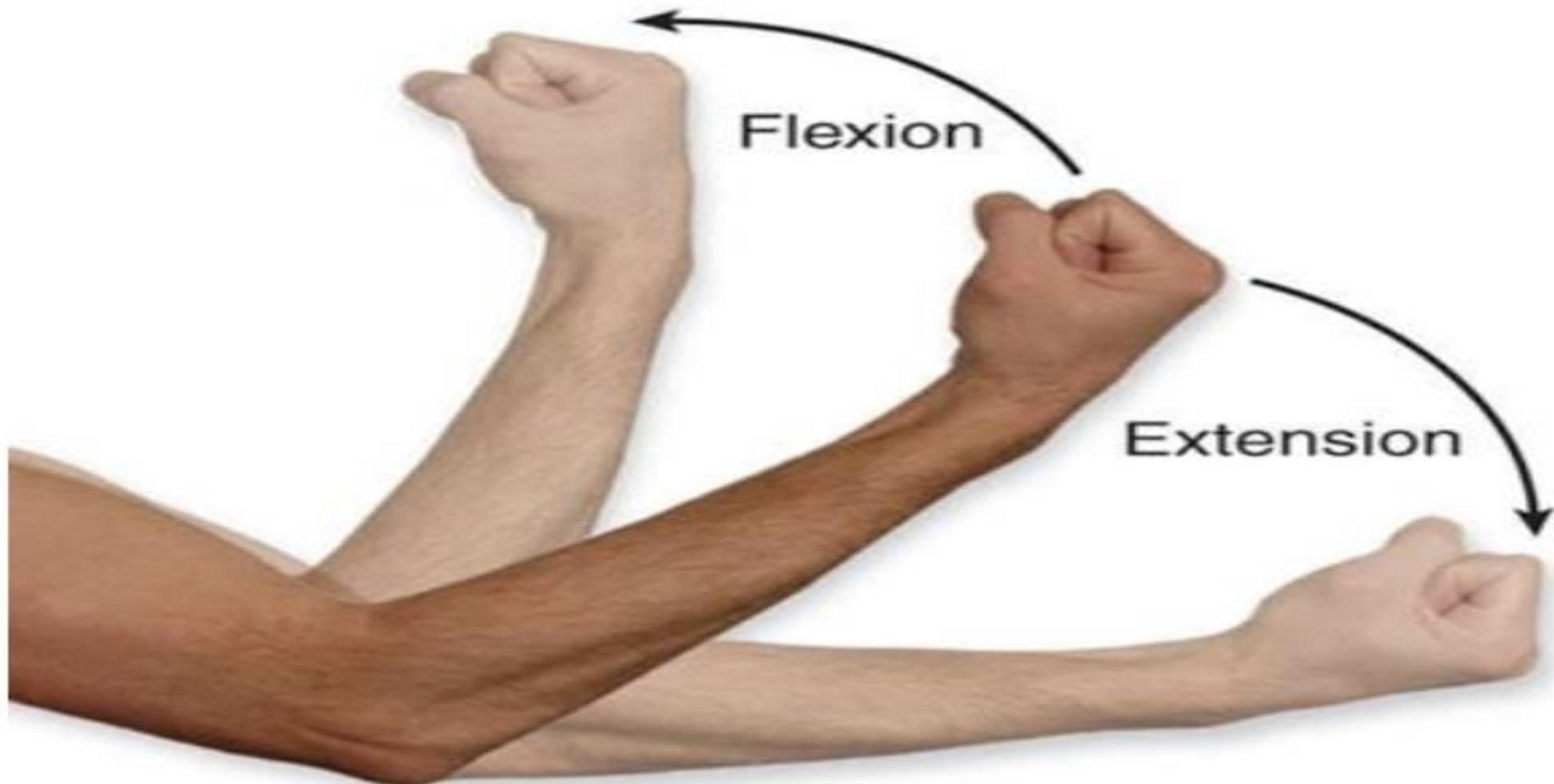
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- **Flexion:**
- Bending movement that decreases the angle between two parts.
- Example: Flexion at the elbow joint brings forearm closer to the arm

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



# continued

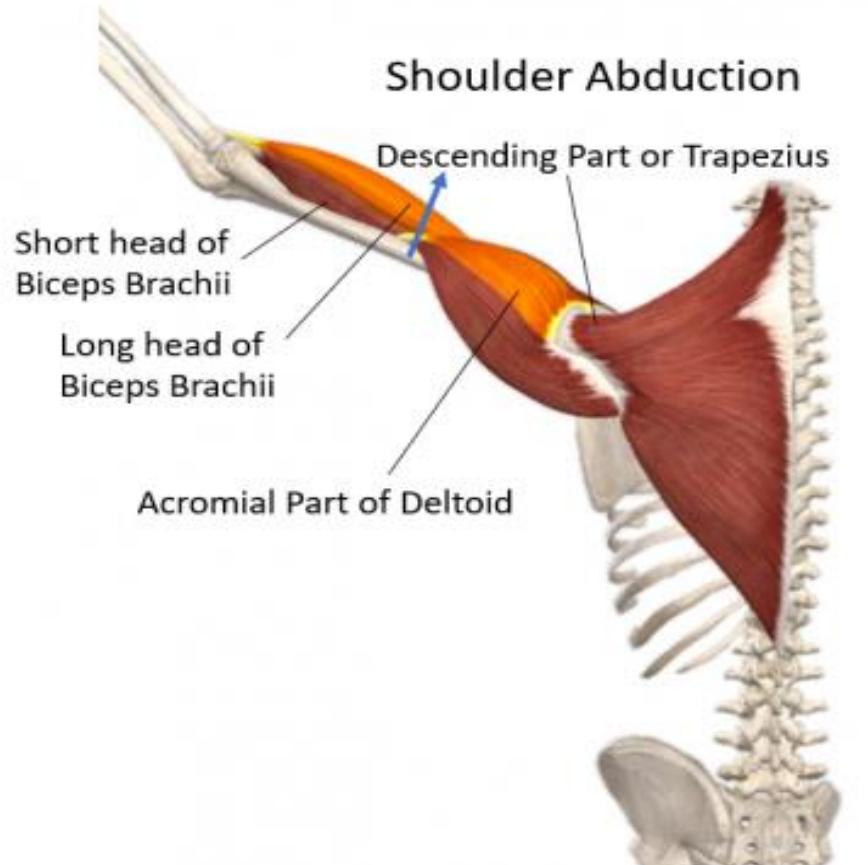
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- **Abduction:**
- Movement away from the midline of the body.
- Example: Raising the arm sideways away from the trunk

# Continued

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



# continued

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- **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.

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

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

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

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

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

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

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

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

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

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- **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>

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G<sub>2</sub>

C<sub>3</sub>

F

