

# Introduction to anatomy and anatomical terms

BY

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# The objectives of the lecture

- \*identify what is anatomy •
- \*describe major anatomical terms •

# What is anatomy??

**Anatomy** is the science of the structure and function of the body. •

The term anatomy consist of two parts •

\*Ana which means a way •

\*Tomy which means to cut •

# Directional Terms

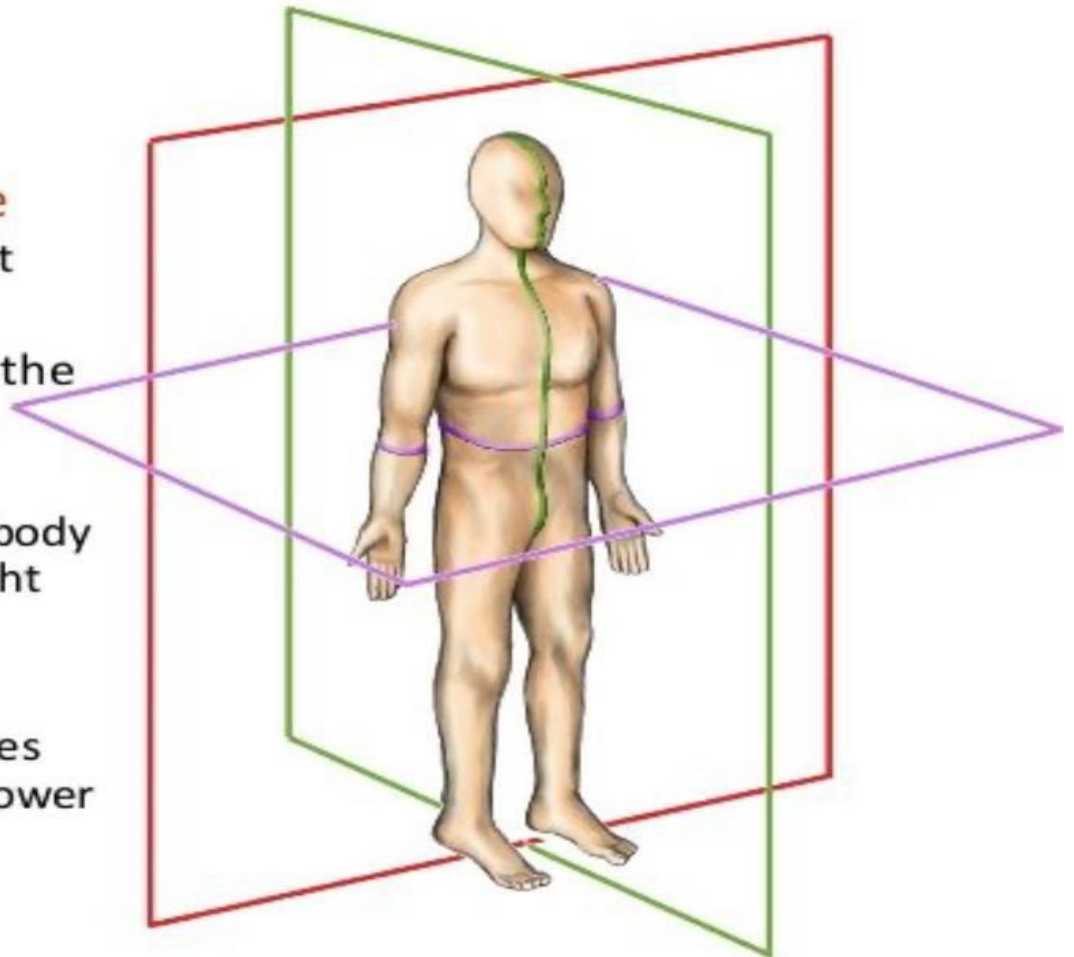
The **anatomical position** of the body is our standard position when discussing anatomy.

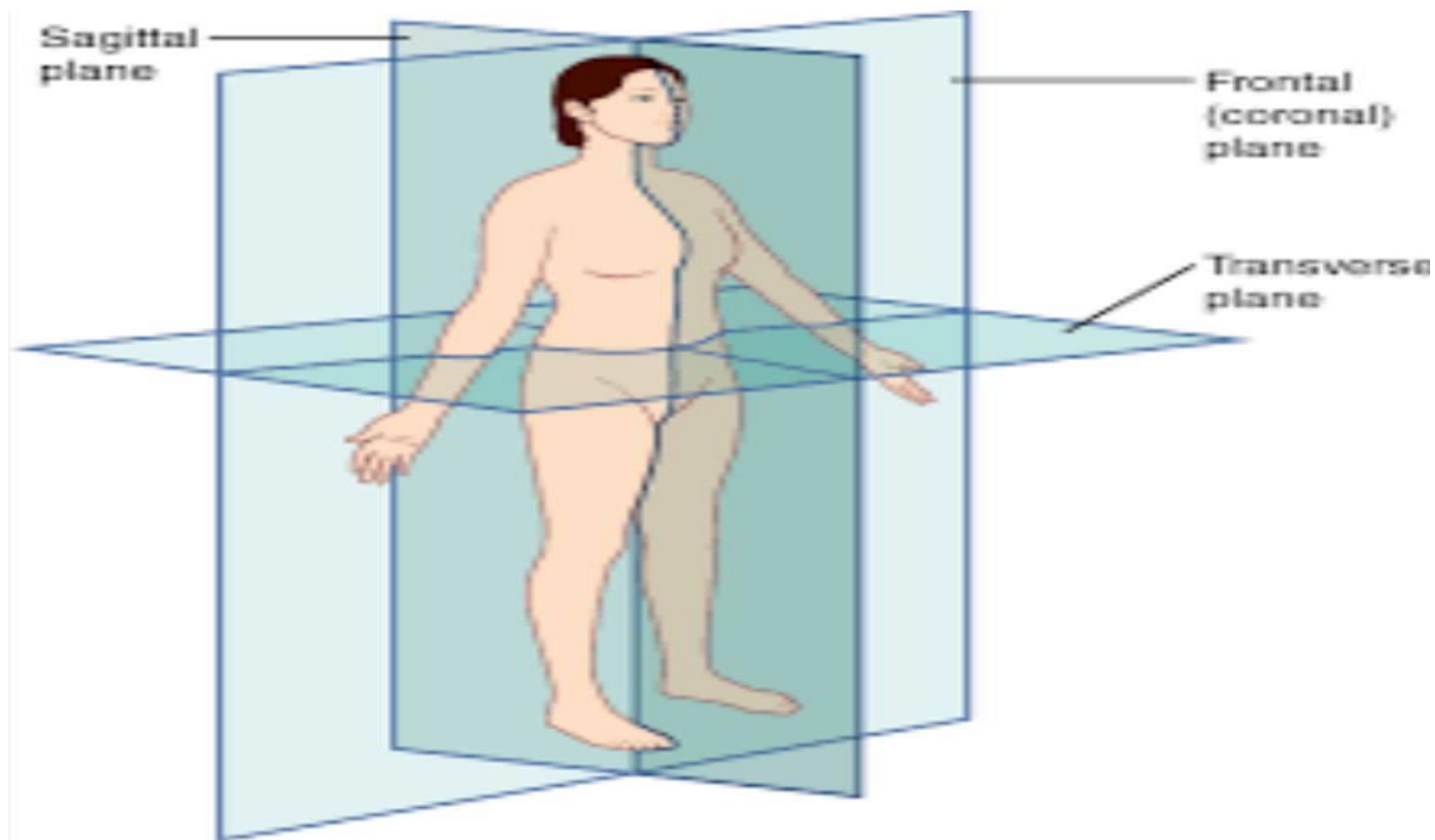
- The body is standing erect
- The feet are together or close together
- The arms are on the sides with palms facing forward
- The head is erect and is looking straight ahead
- Let's all try! Stand up next to your seat!

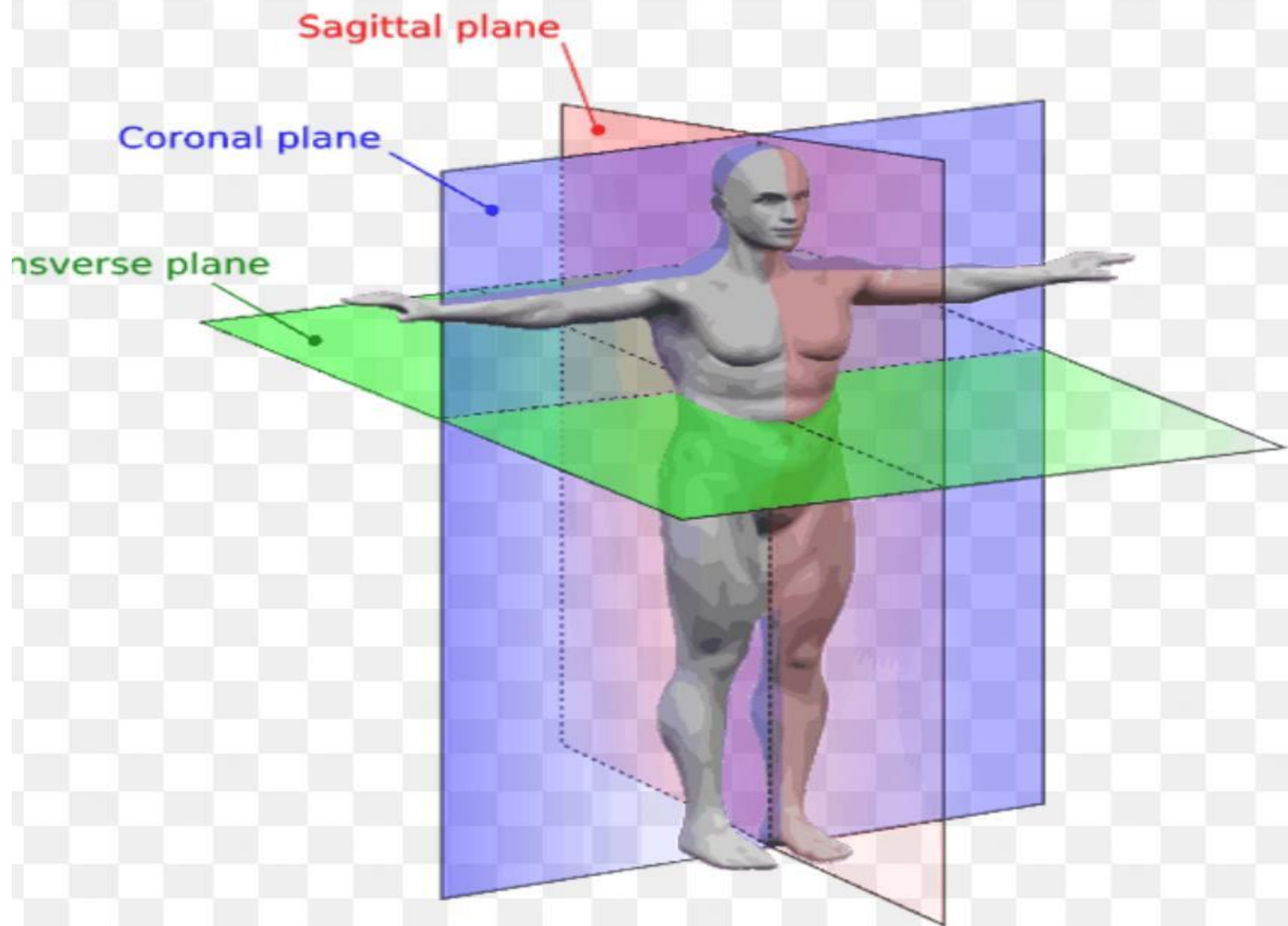


# Anatomical Planes

- Anatomical position
  - Anatomical planes
- **Coronal (Frontal) Plane** divides the body into front and back sections
- **Sagittal Plane** divides the body into left and right sections
  - **Median** - divides the body into equal left and right parts
- **Axial (Horizontal or Transverse) Plane** - divides the body into upper and lower segments







# Anatomical/ Directional Terms

**Distal** - further from trunk

**Proximal** - closer to trunk

**Lateral** - away from midline

**Medial** - closer to midline

**Anterior** - front side (aka ventral)

**Posterior** - back side (aka dorsal)

**Superior** - closer to head (aka cranial)

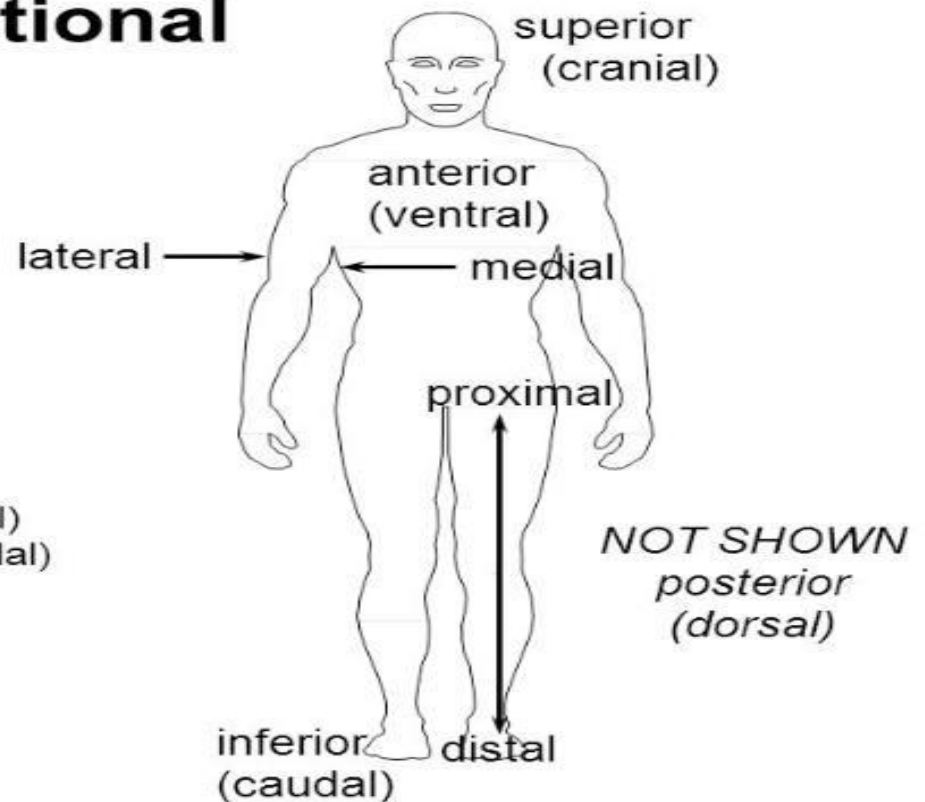
**Inferior** - further from head (aka caudal)

**Superficial** - closer to surface

**Deep** - further from surface

**Plantar** - bottom of foot

**Dorsal** - top of foot





## PROXIMAL/DISTAL IPSILATERAL/ CONTRA LATERAL

- Proximal closer to root of limbs
- Distal further away from the root of limbs
- Reference point -- the origin of a structure



# Flexion-Extension

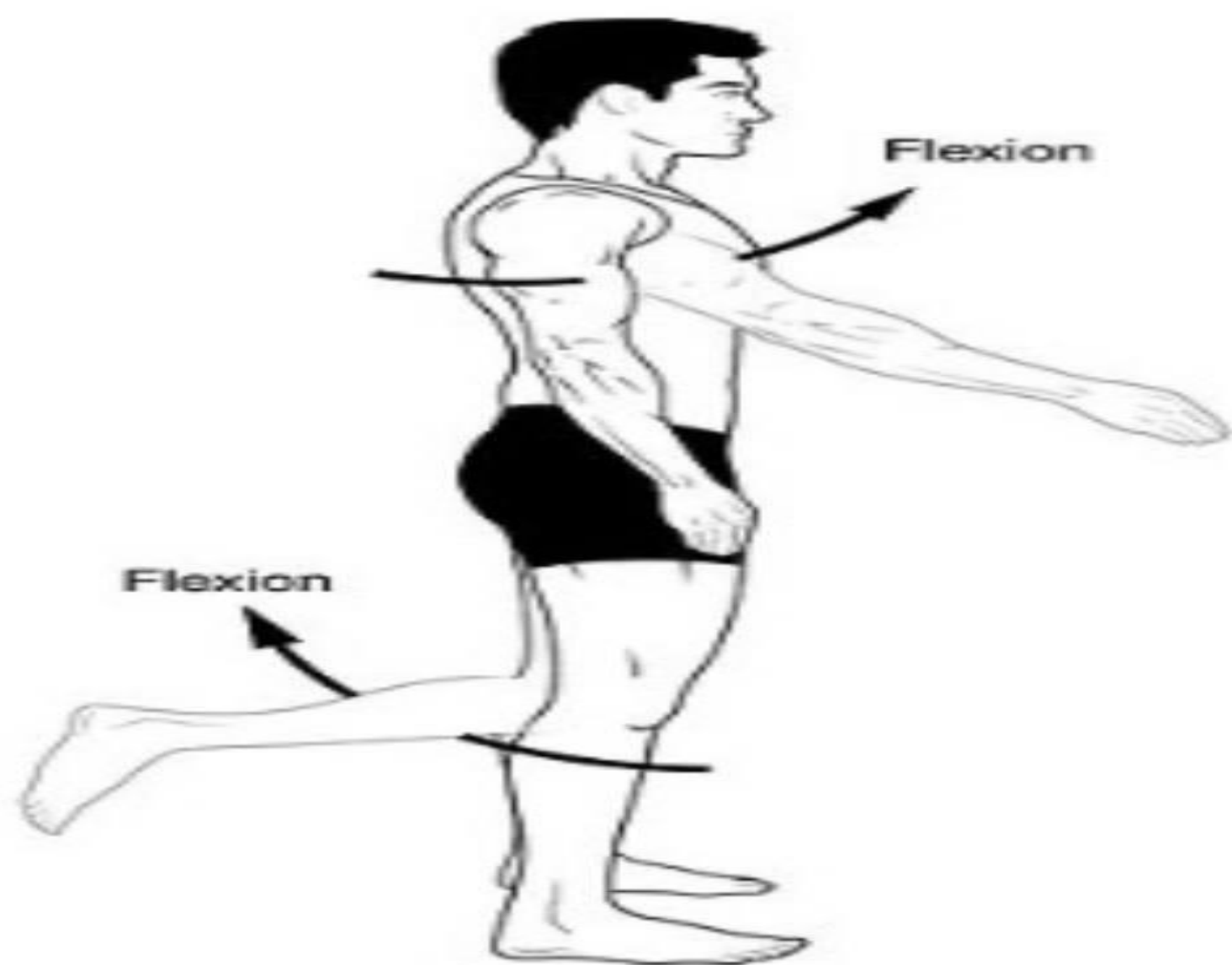
- **Flexion** - reduces the angle between two bones at a joint
- **Extension** - increases the angle between two bones at a joint
- Usually a sagittal plane movement
- E.g., Biceps curl
  - Lifting the weight reduces the angle at the joint = flexion
  - Lowering the weight increases the angle at the joint = extension



Flexion



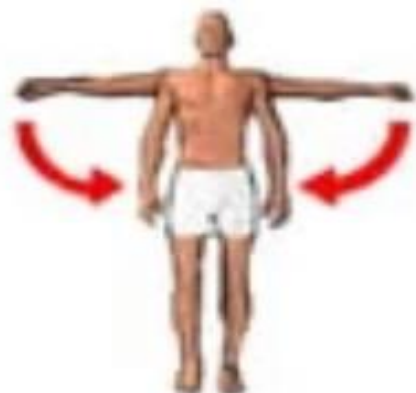
Extension



# Movements

## Adduction

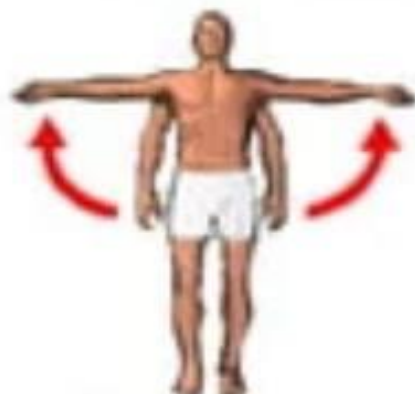
- Moving a body part towards the midline of the body



Adduction

## Abduction

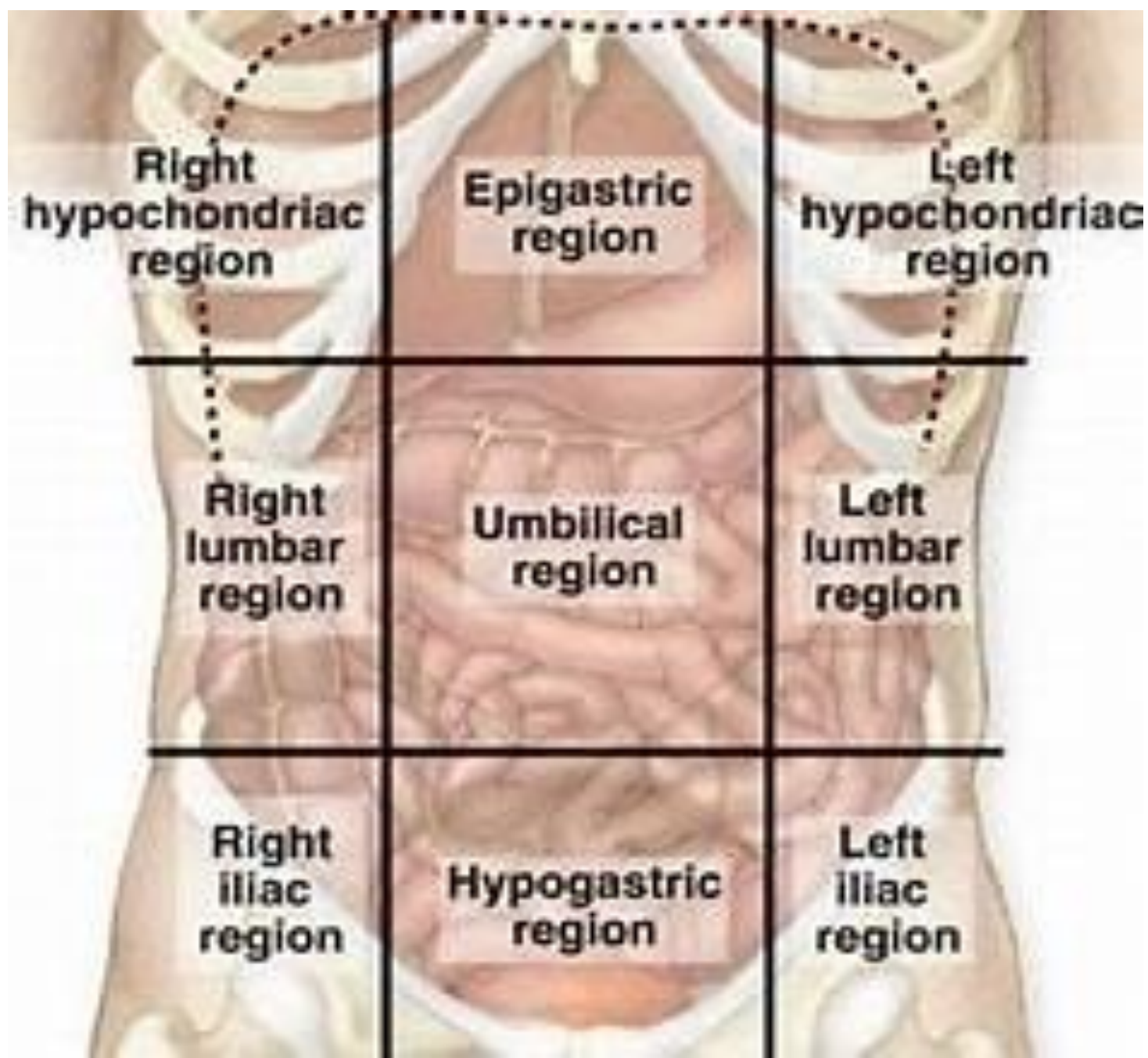
- Moving a body part away from the midline of the body



Abduction

## □ INTRODUCTION: -

- THE URINARY SYSTEM IS THE MAIN EXCRETORY SYSTEM AND CONSISTS OF THE FOLLOWING STRUCTURES:
- **2 KIDNEYS**, WHICH SECRETE URINE
- **2 URETERS** THAT CONVEY THE URINE FROM THE KIDNEYS TO THE URINARY BLADDER
- **THE URINARY BLADDER**, WHICH COLLECTS AND STORES URINE
- **THE URETHRA** THROUGH WHICH URINE LEAVES THE BODY.
- URINE IS STORED IN THE BLADDER AND EXCRETED BY THE PROCESS OF MICTURITION.





# HUMAN KIDNEY ANATOMY

