

Introduction to Anatomical and Medical Nomenclature

Hemn A Rahman, MSc

Salahaddin University – Erbil

College of Science / Physics Department / 3rd Year Medical Physics Branch

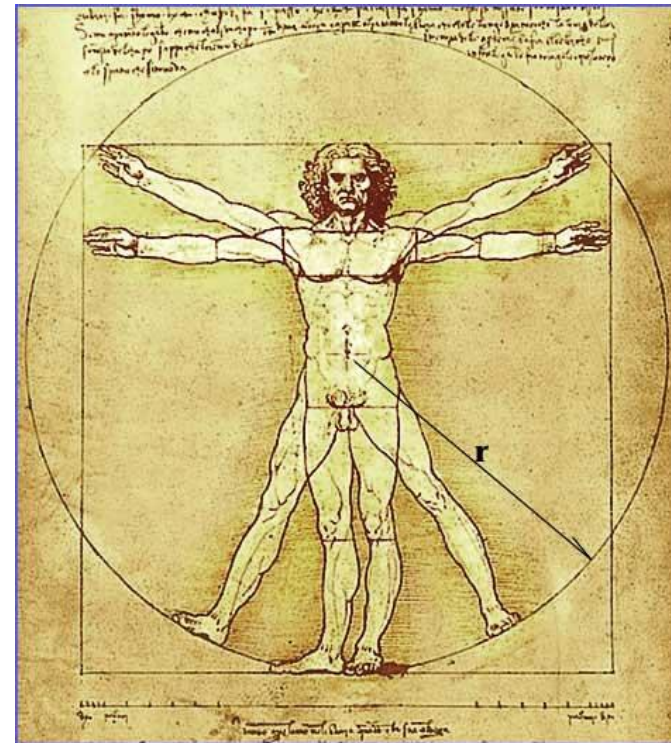
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Objective

- Human gross anatomy
 - The anatomical position
 - Aspect descriptors
 - Body planes
 - Body Cavities
 - Divisions of the body
- Human movements terms
 - Basic elements
 - Complex examples

The Anatomical Position

- The anatomical position is based on *Leonardo Da Vinci's* Anatomical Man (Vitruvian man).

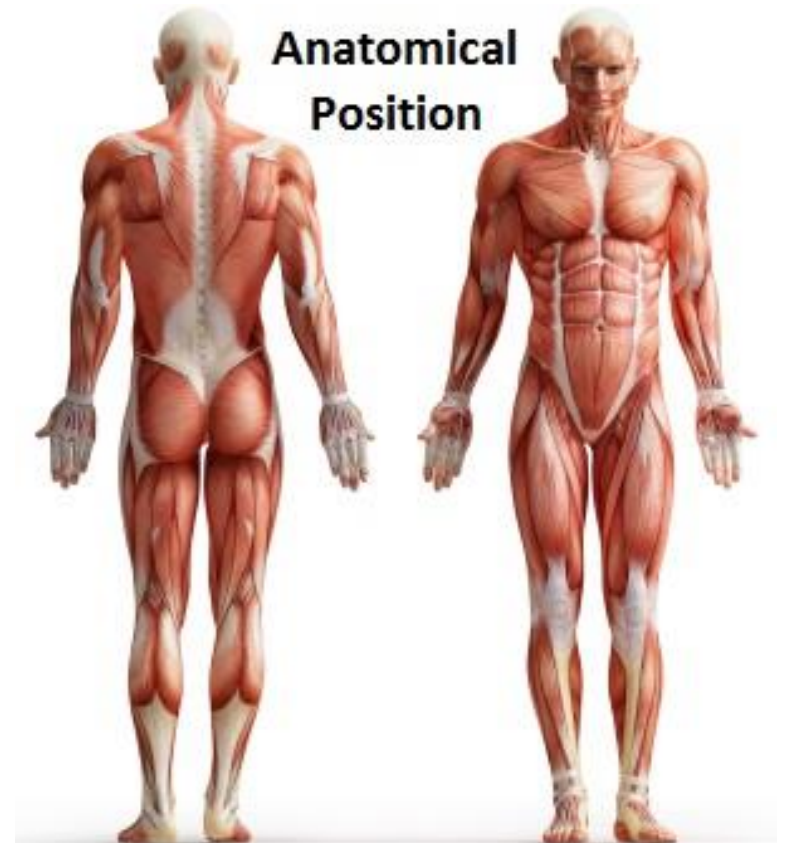


**Anatomical
Position**



The Anatomical Position

- The modern anatomical position is also known as the Upright Reference Position;
 - Erect
 - Eyes gazing straight ahead
 - Straight back
 - Straight limbs
 - Arms by side, thumbs outwards
 - Legs, feet, and large toes inwards



The Anatomical Position



Supine



Prone



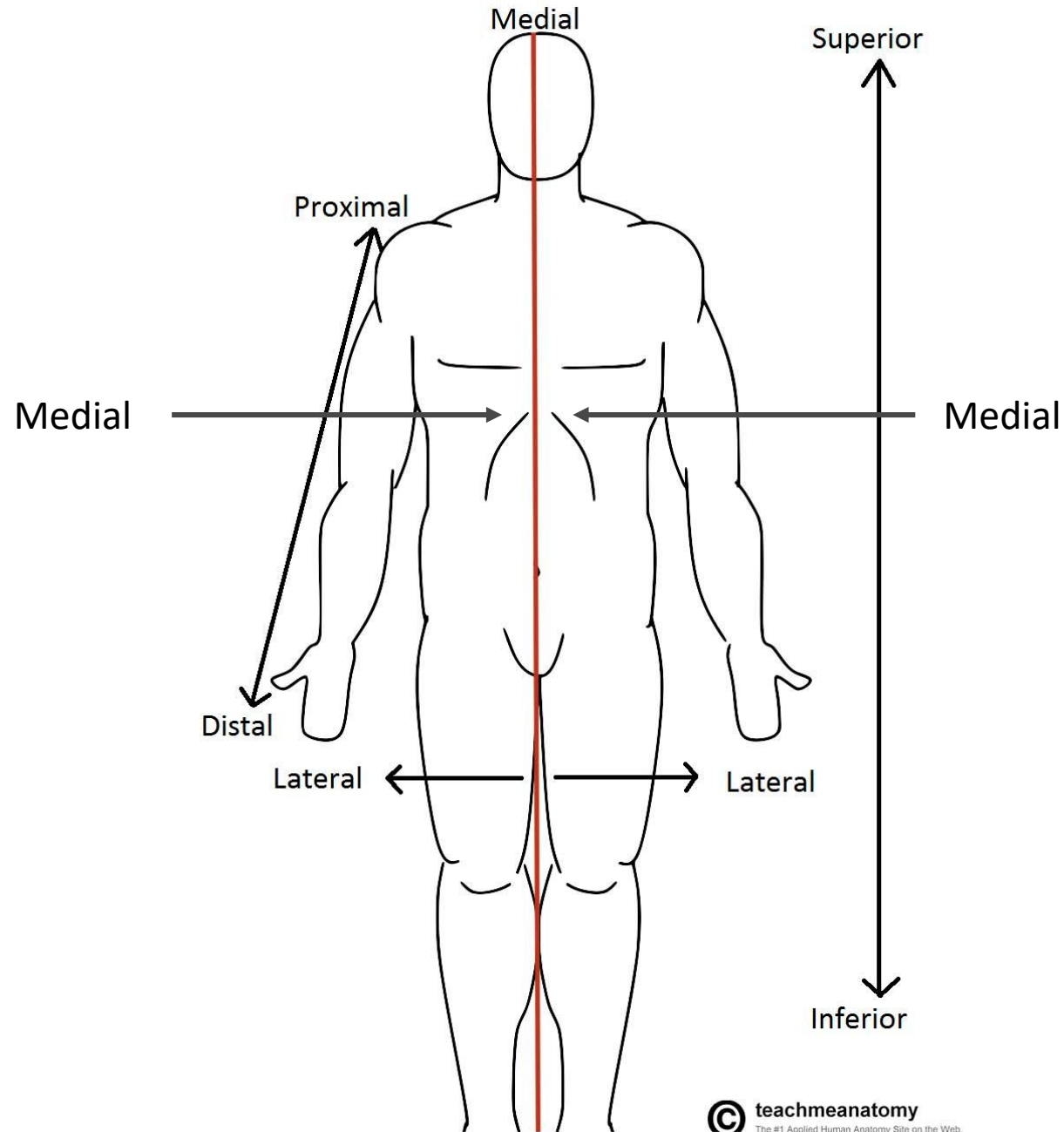
Right Lateral Recumbent



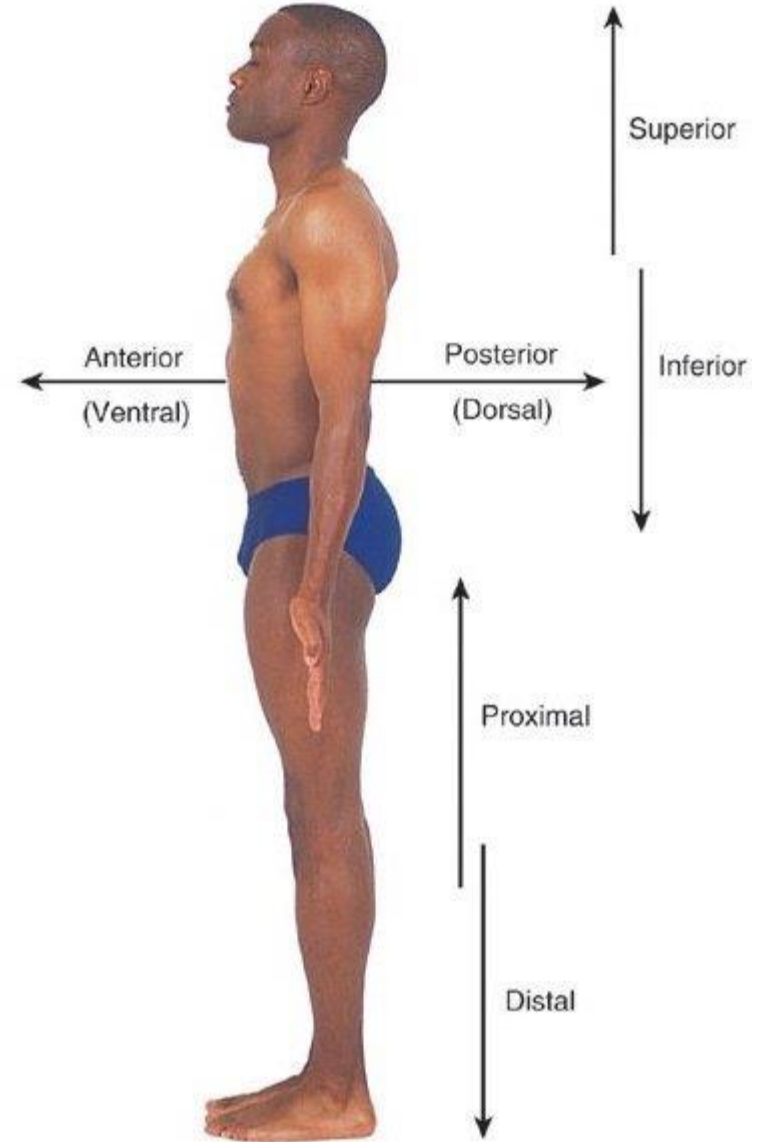
Left Lateral Recumbent

Aspect Descriptors

- Medial – towards the mid-line
- Lateral – away from the mid-line
- Superior – above the arbitrary point
- Inferior – below the arbitrary point



Aspect Descriptors



Aspect Descriptors – Examples

- Right or Left?
 - Left
- Dorsal or Ventral?
 - Dorsal



Body Planes

Body Planes

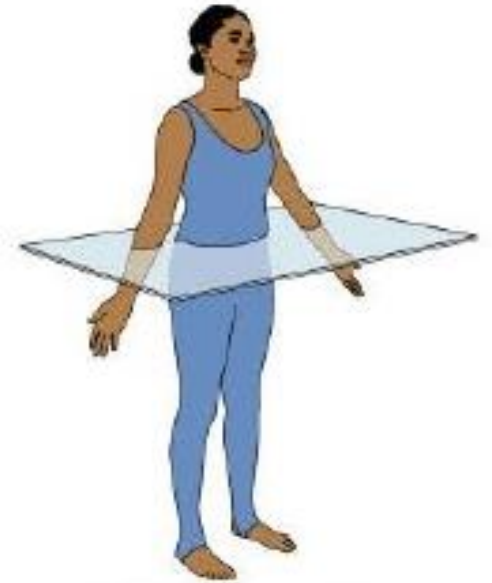
- Sagittal
- Coronal (Frontal)
- Axial (Transverse)



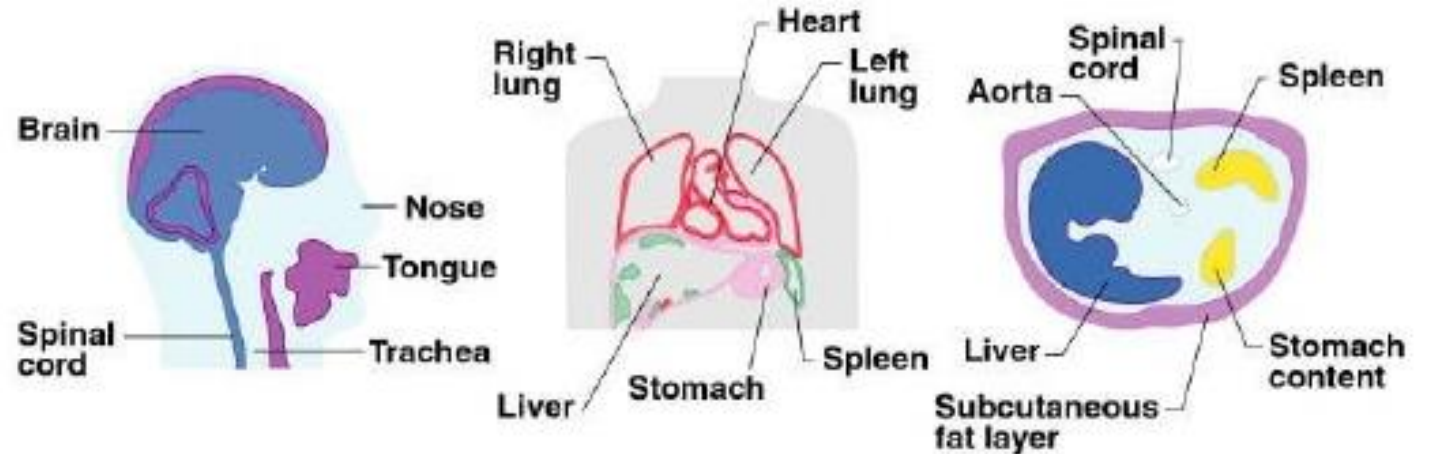
(a) Median (midsagittal)



(b) Frontal (coronal) plane



(c) Transverse plane

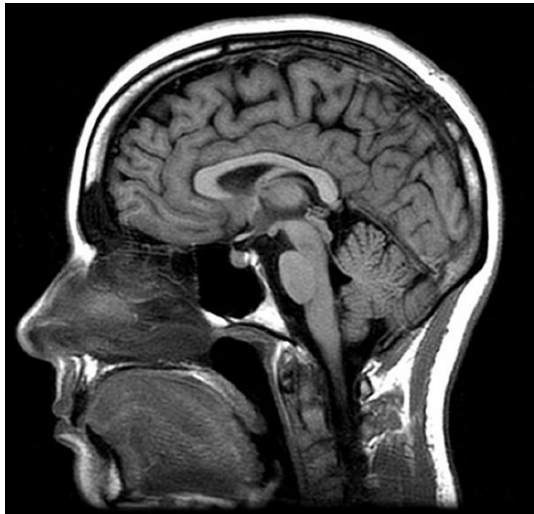


Body Planes

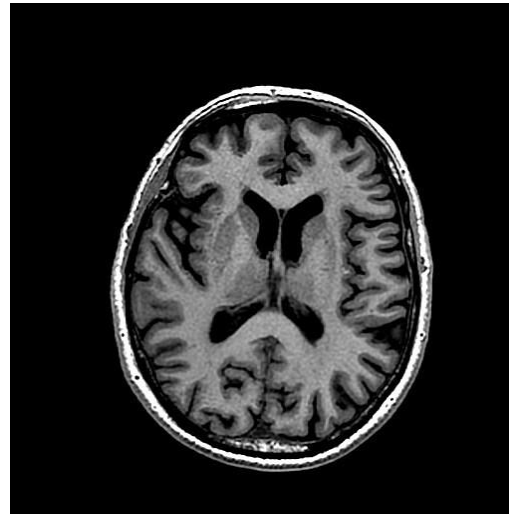
- Sagittal Plane: It is the vertical plane that divides the body into *right* and *left* sections.
- Coronal Plane: It is the vertical plane that divides the body into *anterior* and *posterior* (front and back) sections.
- Axial Plane: It is the horizontal plane that divides the body into *superior* and *inferior* sections.

Body Planes – Examples

Sagittal plane



Axial plane



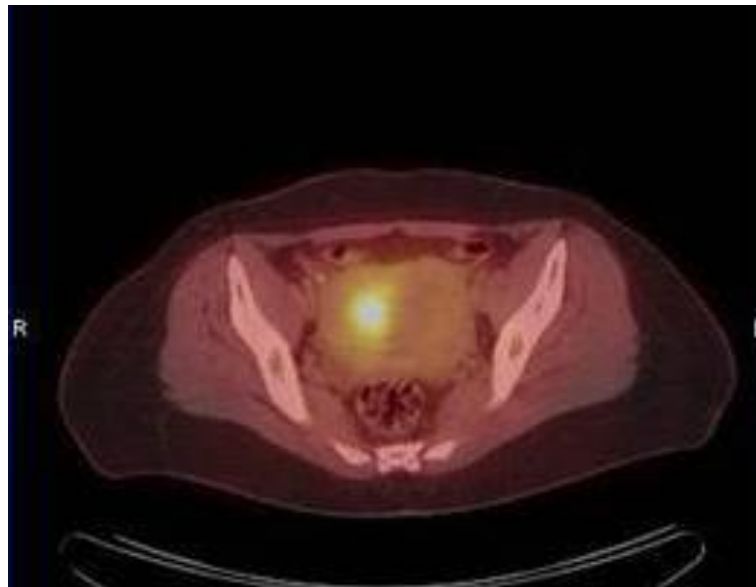
Coronal p



Sagittal view



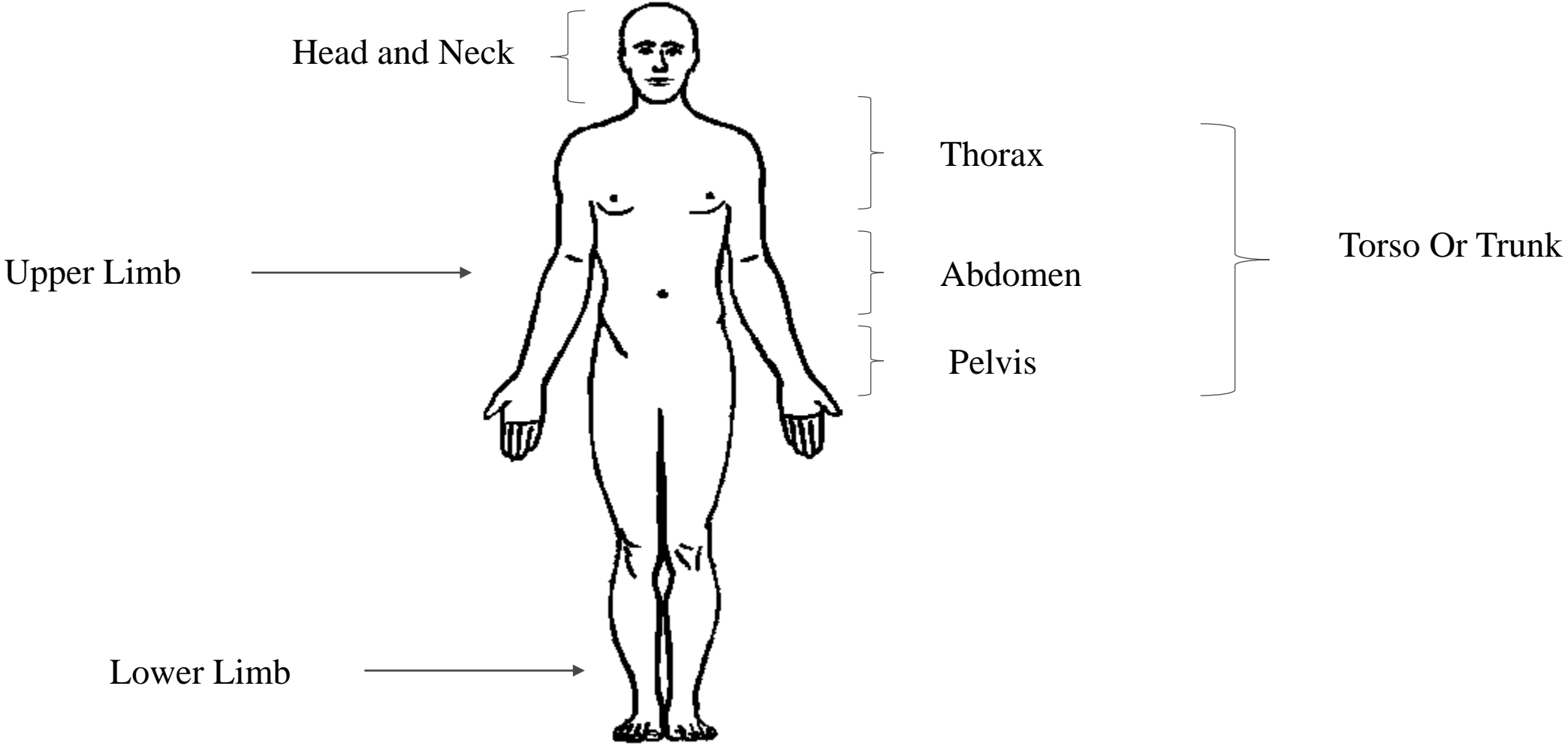
Axial view



Coronal view



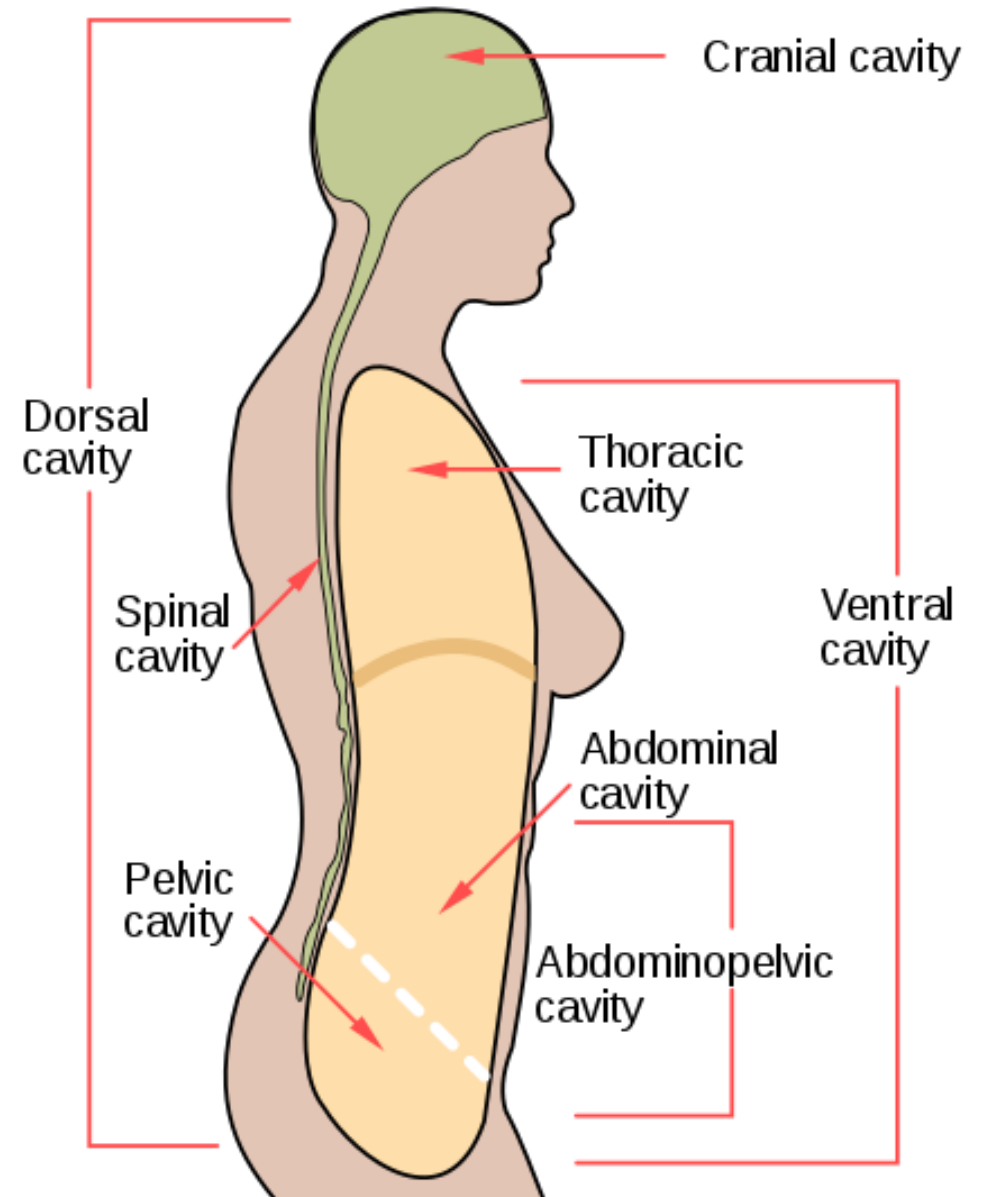
Division of the Body

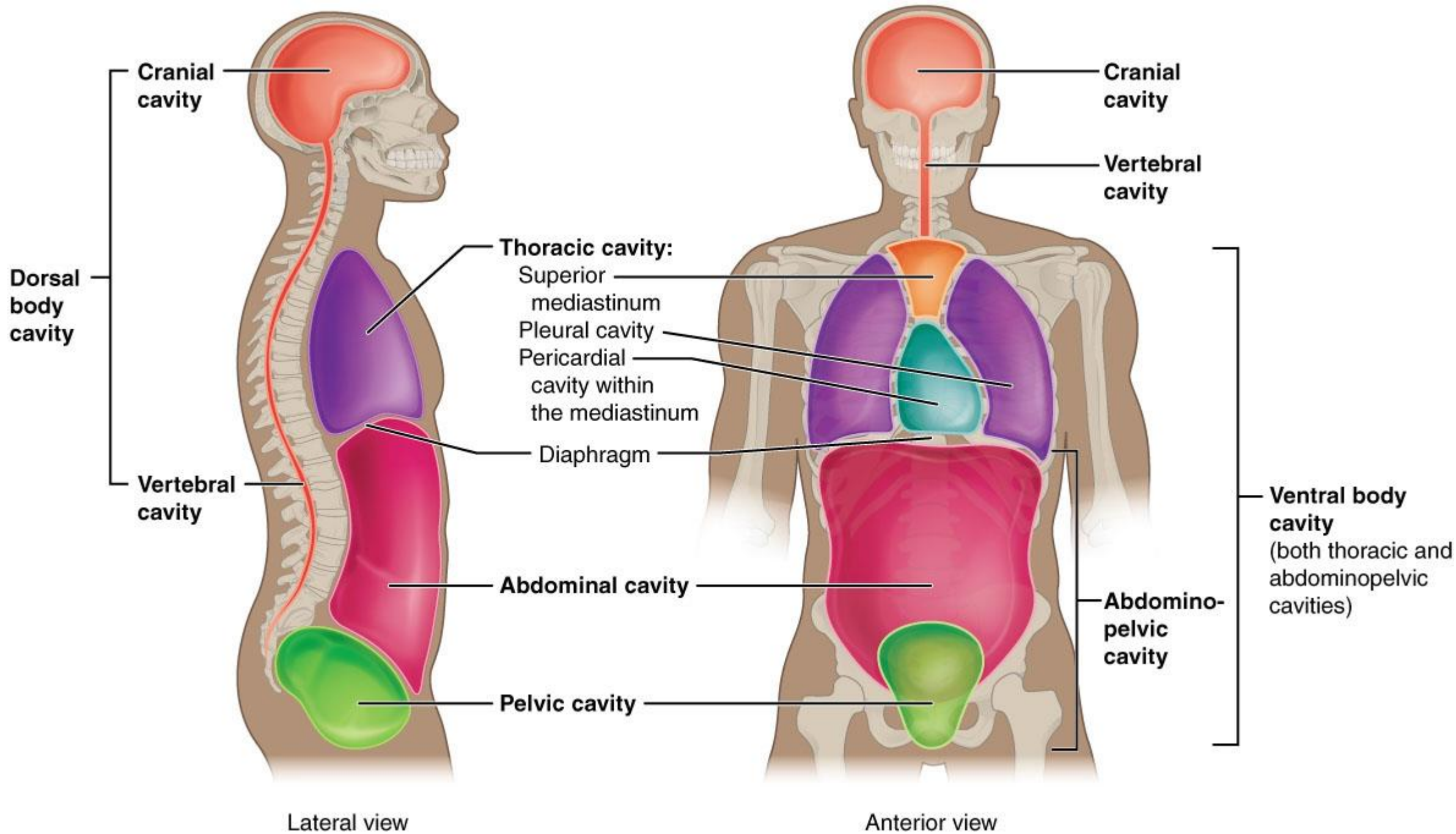


Body Cavities

Body Cavities

- The cavities, or spaces, of the body contain the internal organs,





Body Cavities

The cavities include:

- **Dorsal body cavity**

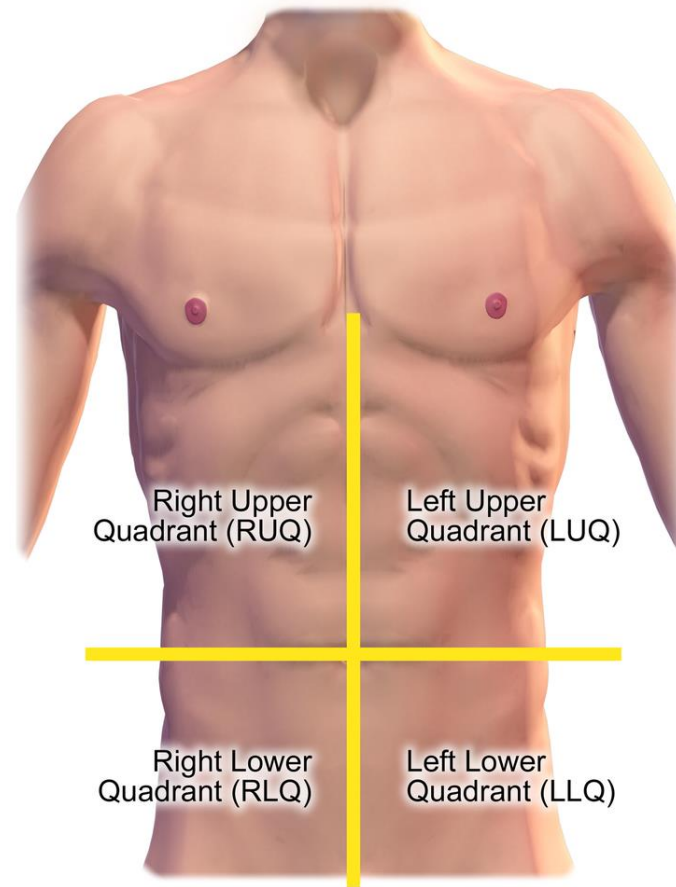
- **Cranial cavity:** enclosed by the skull and contains the brain
- **Spinal canal:** enclosed by the spine and contains the spinal cord.

- **Ventral body cavity**

- **Thoracic cavity:** enclosed by the ribcage and contains the lungs and heart.
- **Abdominopelvic cavity:**
 - **Abdominal cavity:** enclosed by the ribcage and pelvis and contains the kidneys, ureters, stomach, intestines, liver, gallbladder, and pancreas.
 - **Pelvic cavity:** enclosed by the pelvis and contains bladder, anus and reproductive system.

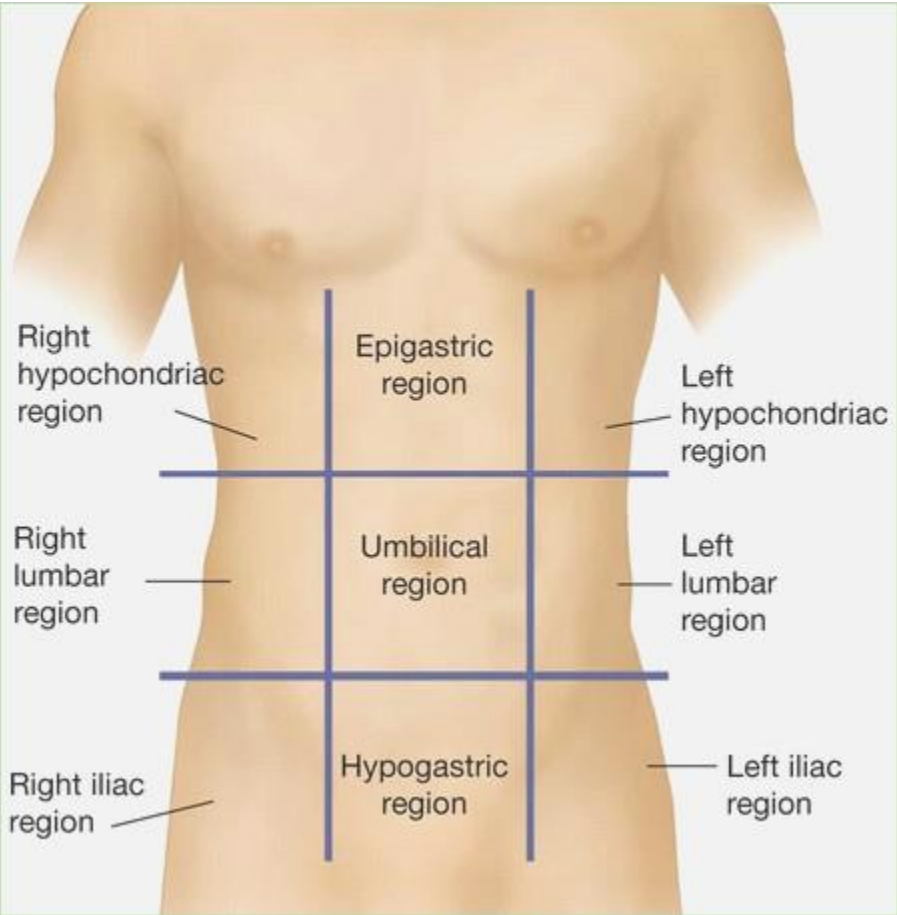
Abdominal Quadrants & Regions

Abdominal Quadrants



**Abdominopelvic
Quadrants**

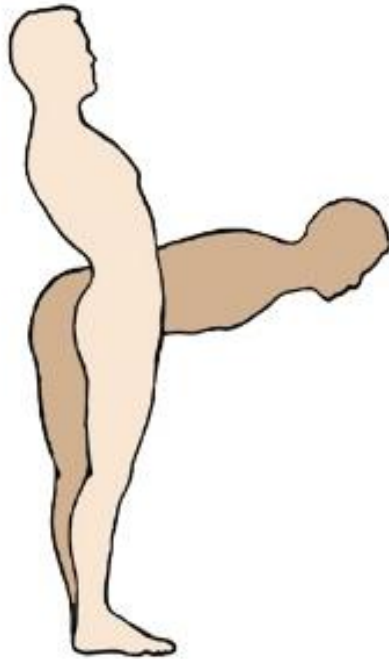
Abdominal Regions



Human Movements Terms

- Neck and trunk

Flexion and Extension



Left and Right Side Bending

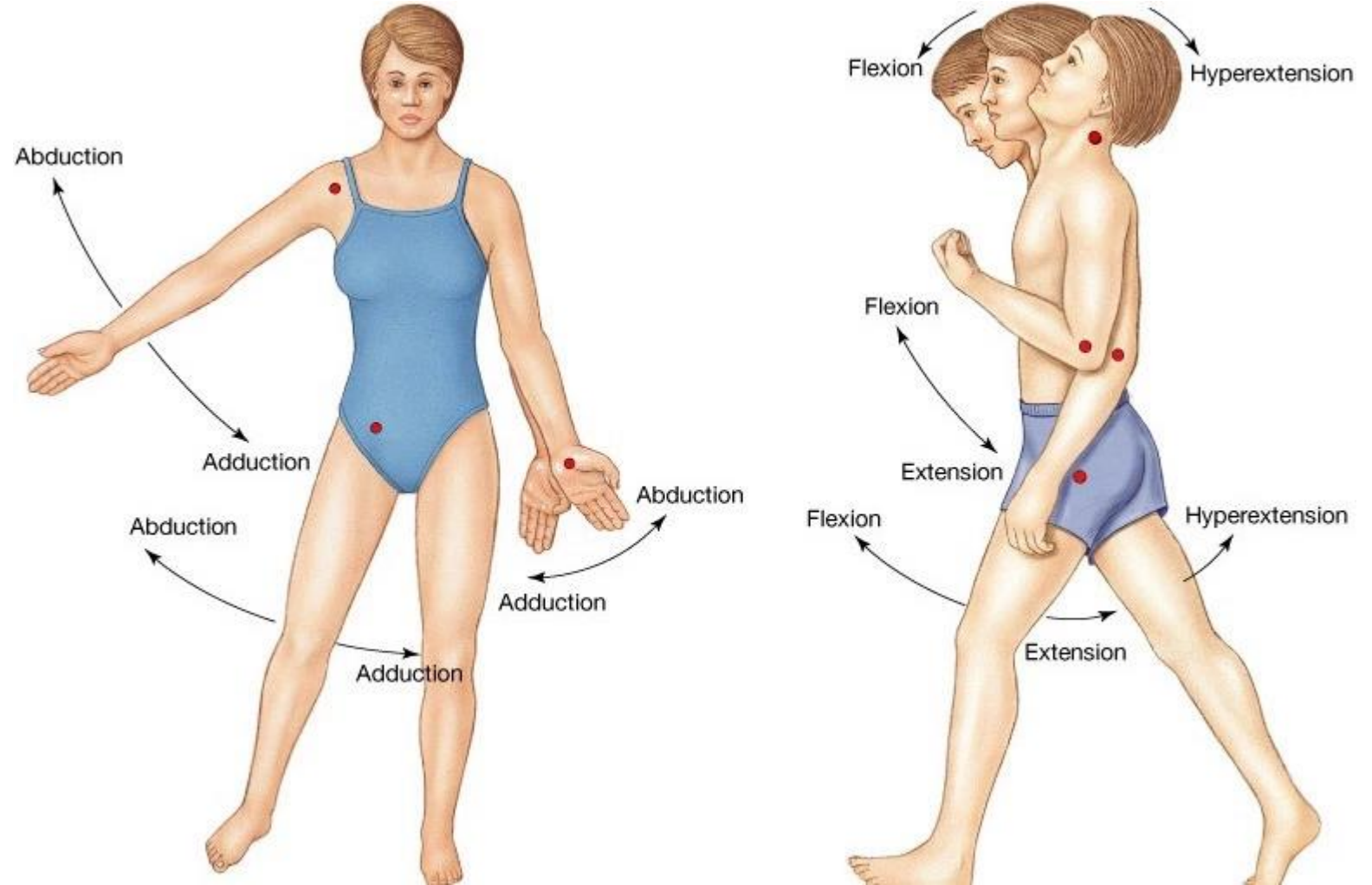


Left and Right Rotation



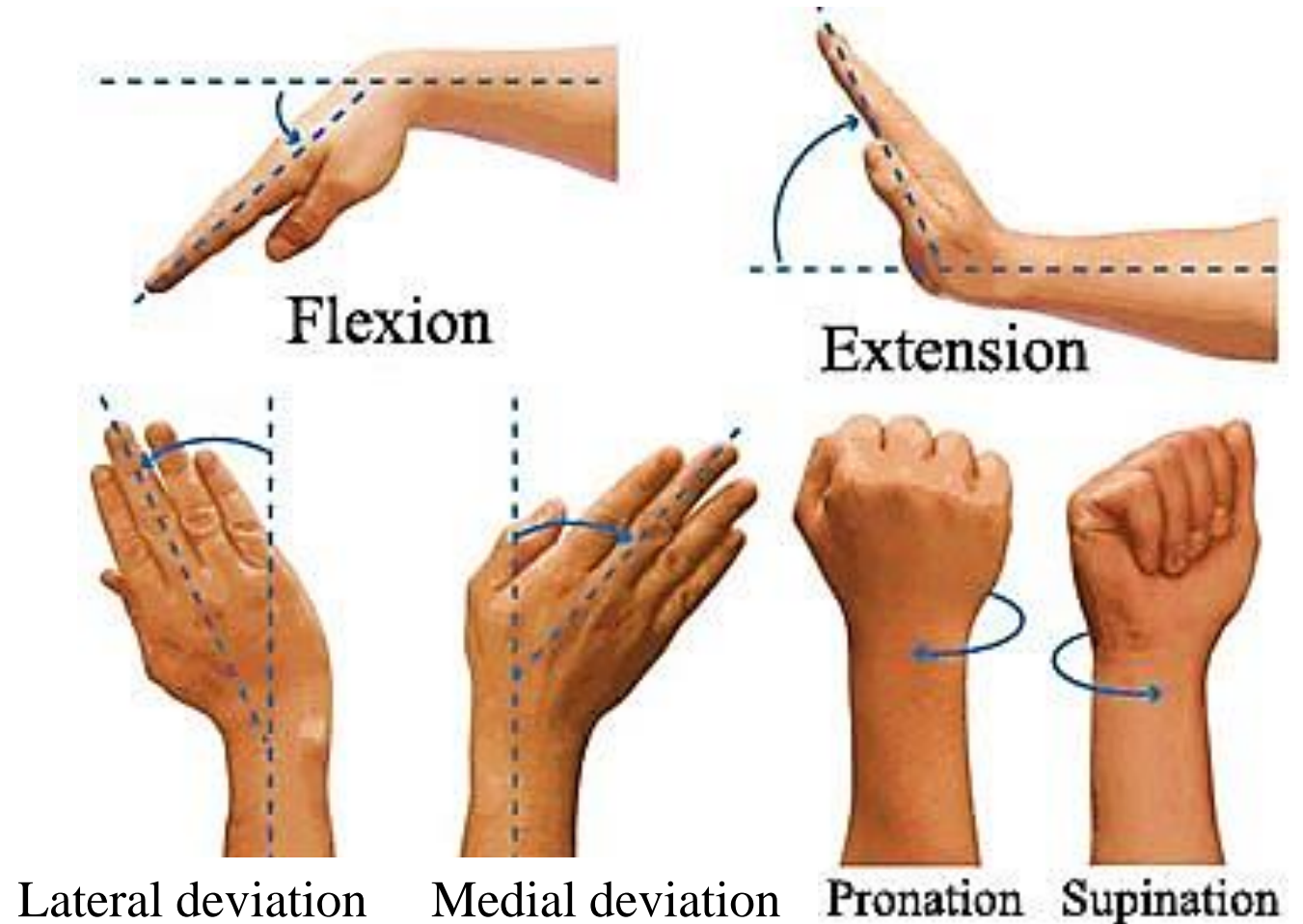
Human Movements Terms

- Limbs

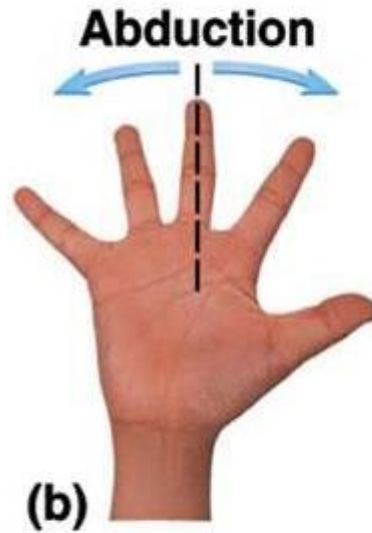


Human Movements Terms

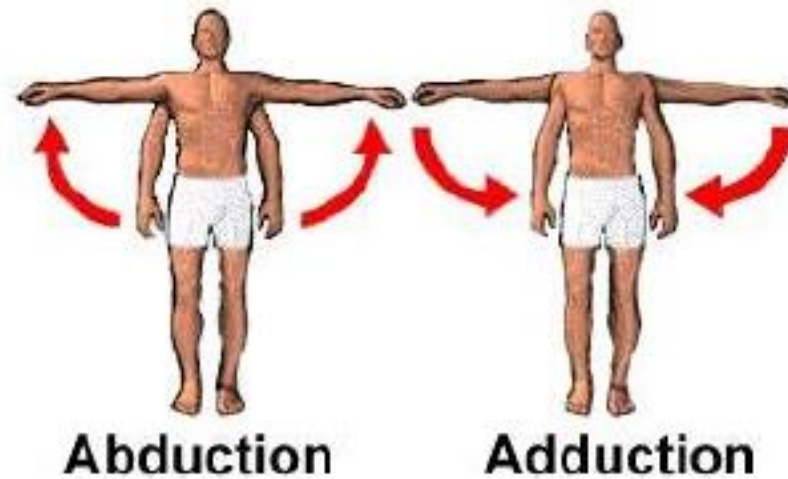
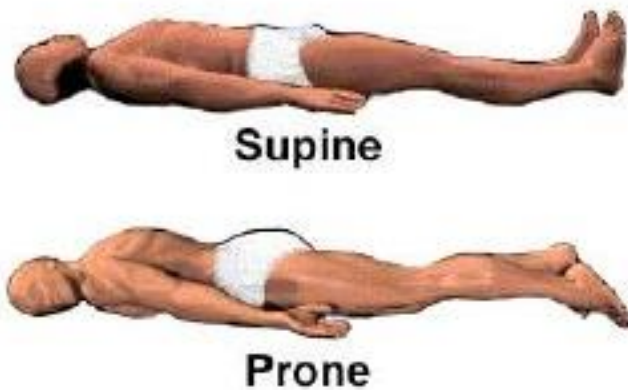
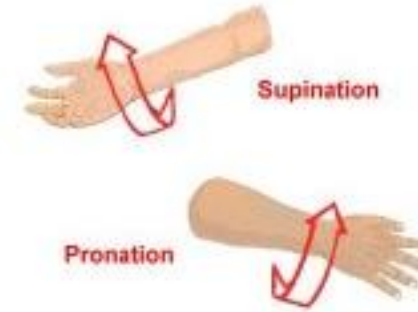
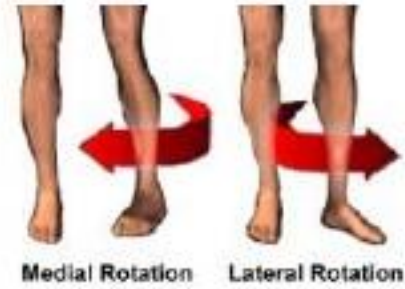
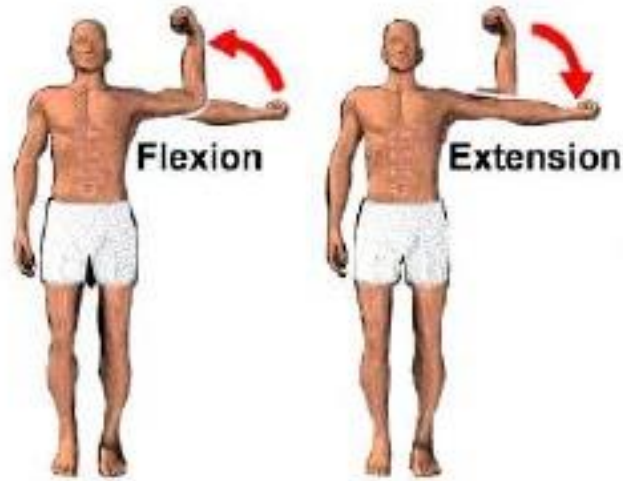
- Hand and wrist



Human Movements Terms

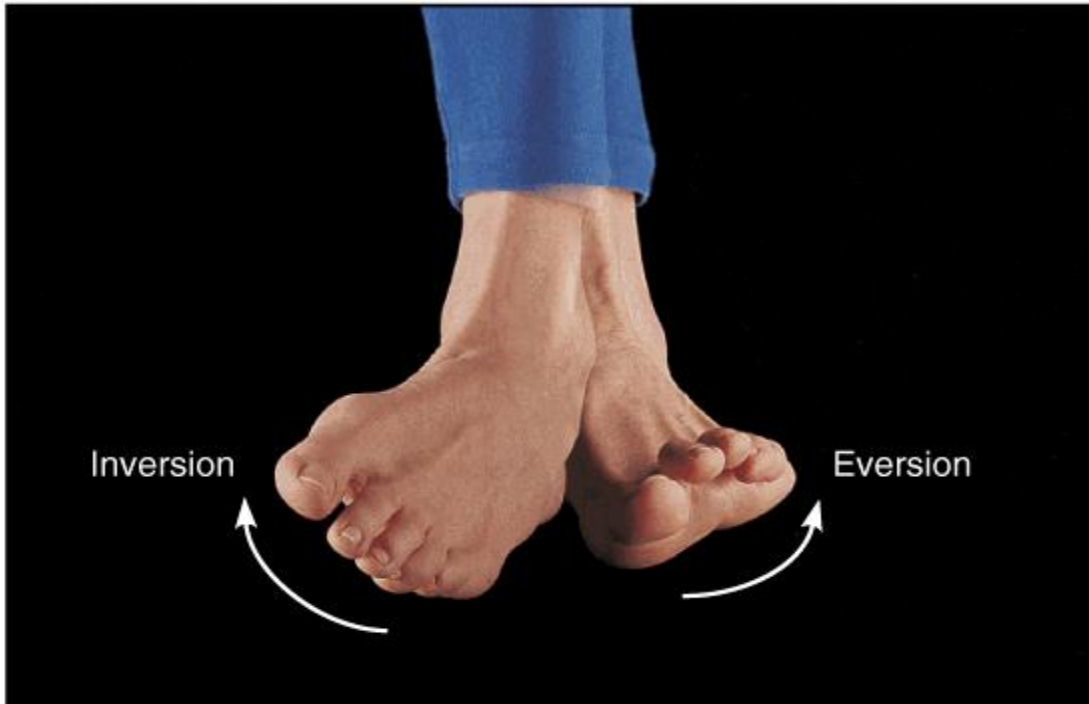


Human Movements Terms



Human Movements Terms

- Ankle and feet



Some Examples

Some Examples

- In the anatomical position, the thumbs point:
 1. In, toward the body
 2. Out, away from the body
 3. Forward
 4. Backward

Some Examples

- The armpit or axilla is _____ to the hip

1. Superior

2. Inferior

3. Distal

4. Proximal

Some Examples

- The cavity contains the heart, lungs, trachea, esophagus and large blood vessels is _____ .
 1. Dorsal
 2. Abdominopelvic
 3. Cranial
 4. Thoracic

References

- For the human movement terms

<http://teachmeanatomy.info/the-basics/anatomical-terminology/terms-of-movement/>

<http://www.davedraper.com/fusionbb/showtopic.php?tid/17715/>

<http://www.otpbooks.com/human-movement-terminology-cheatsheet/>

***Any* Questions?**

