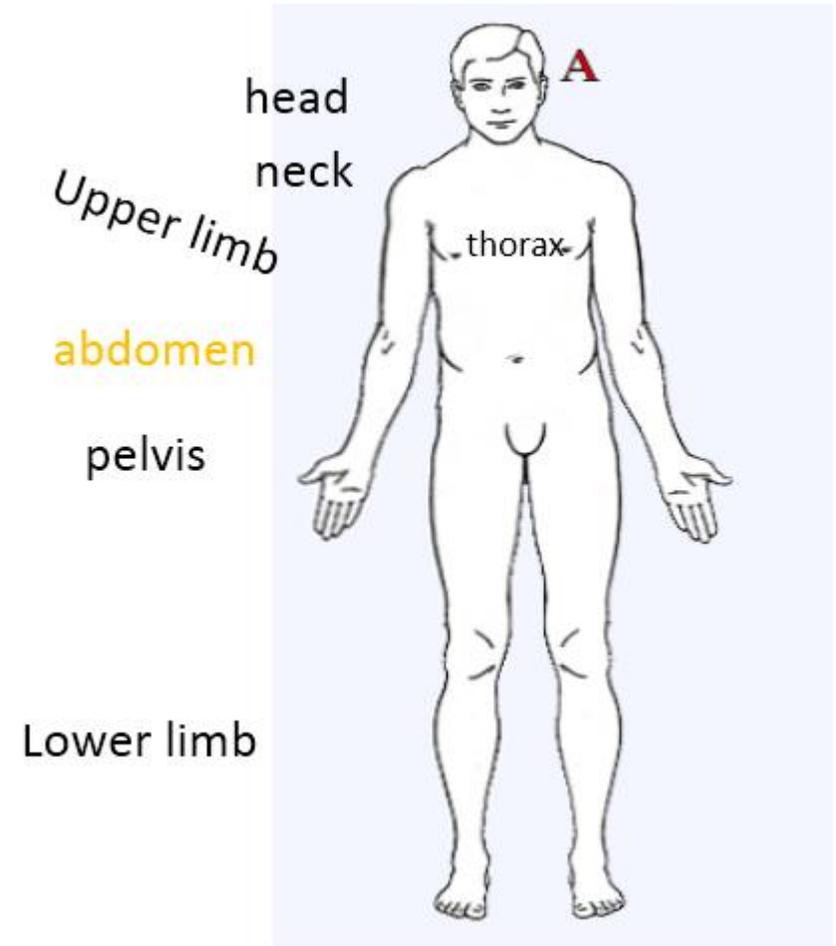


Anatomy

- * **Definition:** anatome = up (ana) + cutting (tome).
- * **Descriptive anatomy: Regional or Systemic.**
 - * **Regional Anatomy** : parts of body e.g. head, neck, thorax, abdomen, upper limb & lower limb.
 - * **Systemic Anatomy**: e.g. cardiovascular system, respiratory system, urinary system, etc.
- * **Developmental Anatomy (Embryology).**
- * **Applied Anatomy (clinical).**
- * **Radiological Anatomy.**
- * **Surface Anatomy.**

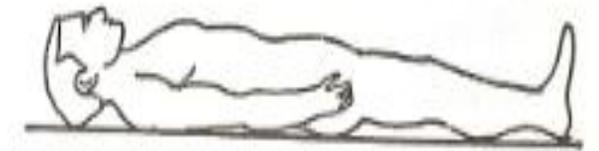
Body Regions

1. Head and Neck.
2. Abdomen & Pelvis.
3. Lower limb.
4. Upper limb.
5. Thorax.
6. Brain & spinal cord (Neuroanatomy).



Anatomical Position

- **Body erect (person standing).**
- **Face directed forward.**
- **Limbs at sides of body.**
- **Legs & feet close together.**
- **Palms directed forward.**



supine

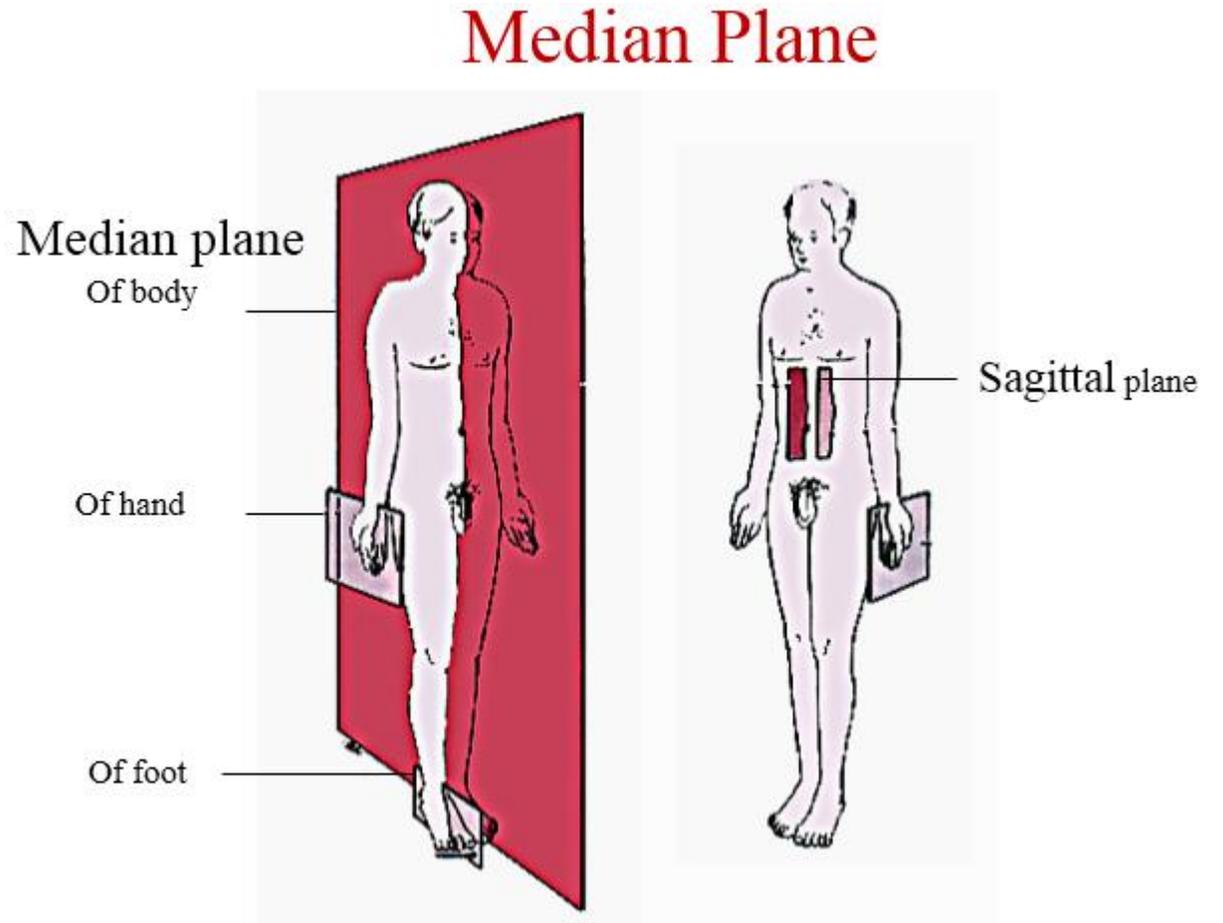


prone

Anatomical Planes

* Median (midsagittal) plane = vertical in midline, divides body into right & left equal parts.

* * Parasagittal = vertical, parallel to median.

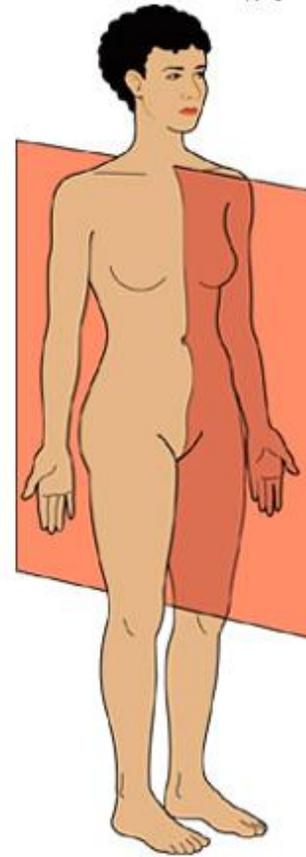


Anatomical Planes

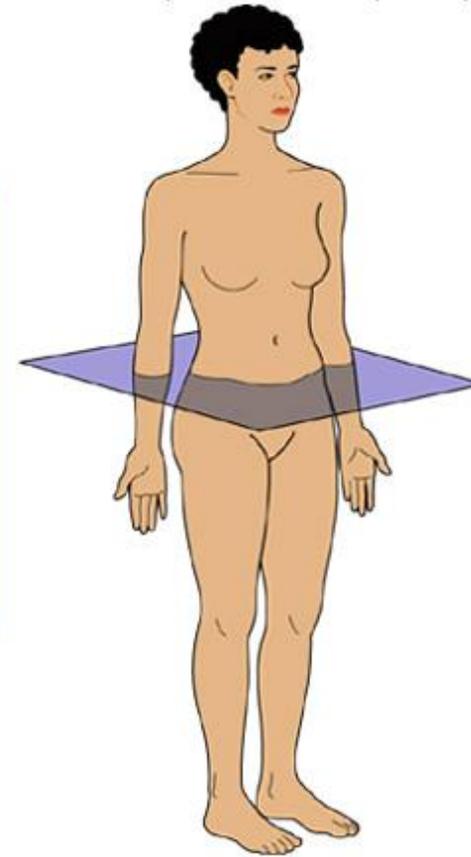
* Coronal plane = vertical, perpendicular to median, divides body into anterior & posterior parts.

* Horizontal (transverse) = perpendicular to median & coronal planes divides body into upper & lower parts.

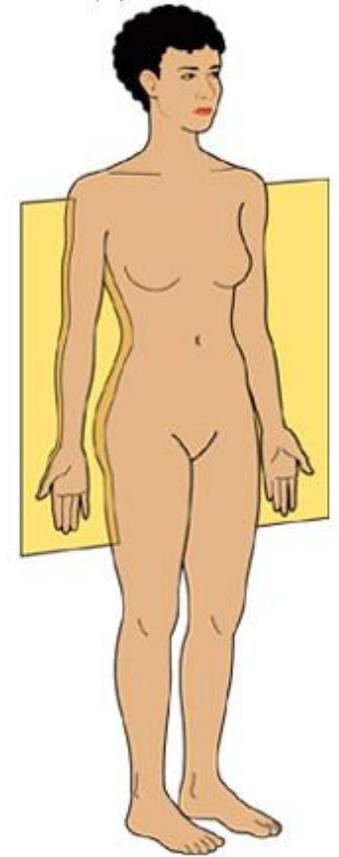
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Sagittal plane
(median plane)

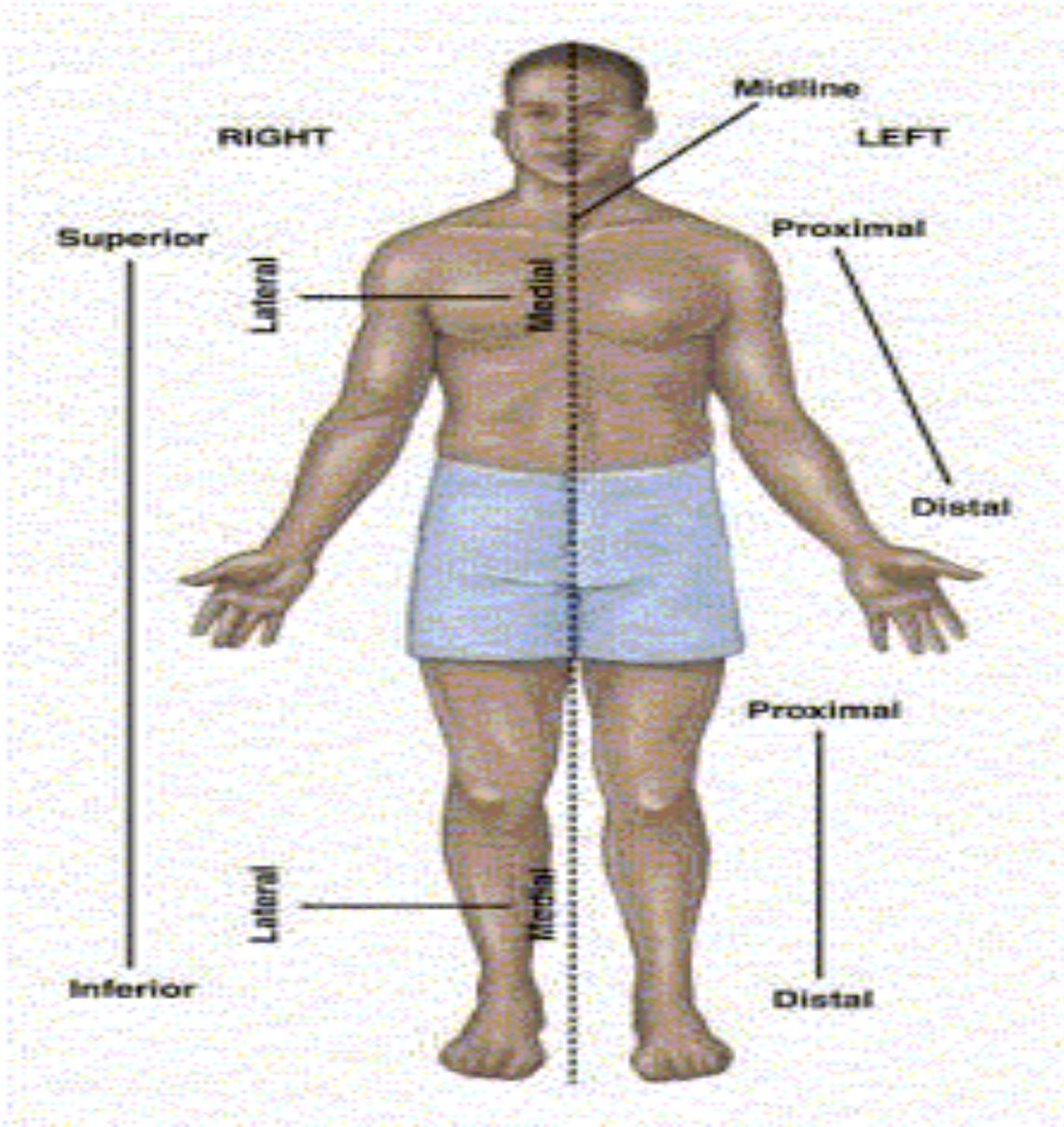


Transverse plane
(horizontal plane)



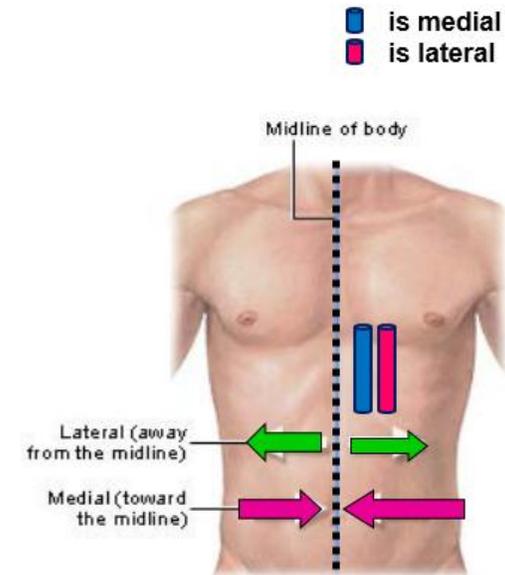
Coronal plane
(frontal plane)

Anatomical Terms



1. Medial & Lateral:

- * Medial = closer to median plane.
- * Lateral = away from median plane.



2. Anterior & posterior:

- **Anterior or Ventral** → towards the front of the body
- **Posterior or dorsal** → towards the back of the body
- **Anterior surface of hand** → palmar surface
- **Posterior surface of hand** → dorsal surface
- **Upper surface of foot** → dorsal surface
- **Lower surface of foot** → plantar surface



3. Superior & inferior:

- * **Superior (cephalic or cranial) = towards head.**
- * **Inferior (caudal) = towards feet.**



4. Proximal & Distal:

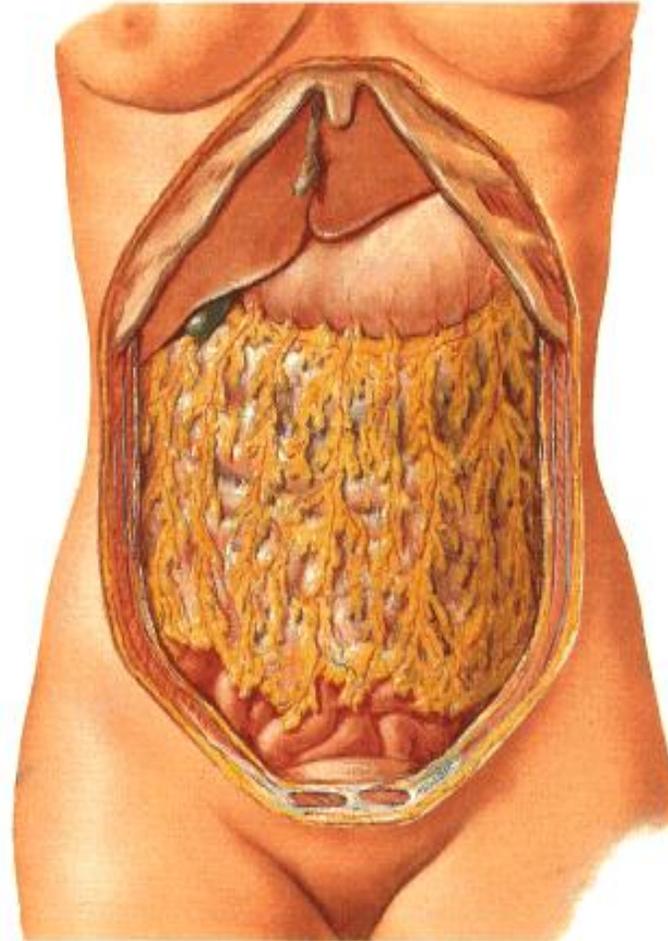
- * Proximal → closer to trunk.**
- * Distal → away from trunk.**



5. Superficial &

Deep:

- * Superficial → towards surface of body.**
- * Deep → away from surface of body.**



Anatomical Terms

- * **Medial = closer to median plane.**
- * **Lateral = away from median plane.**
- * **Anterior (ventral) = towards front of body.**
- * **Posterior (dorsal) = towards back of body.**
- * **Superior (cephalic or cranial) = towards head**
- * **Inferior (caudal) = towards feet.**
- * **Superficial = towards surface of body.**
- * **Deep = towards center of body.**
- * **Proximal = nearer origin.**
- * **Distal = further from origin.**

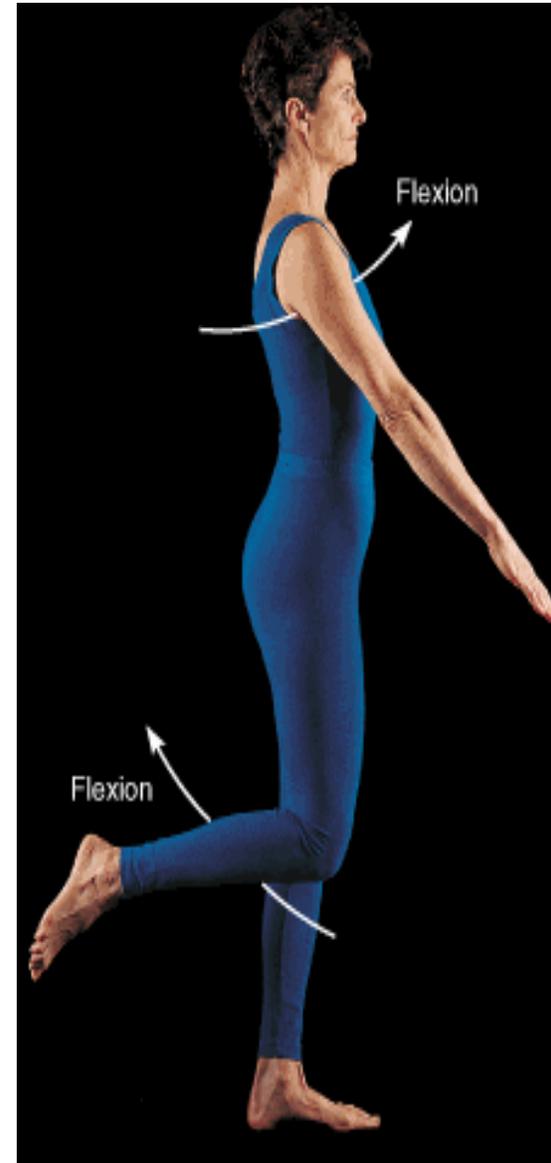
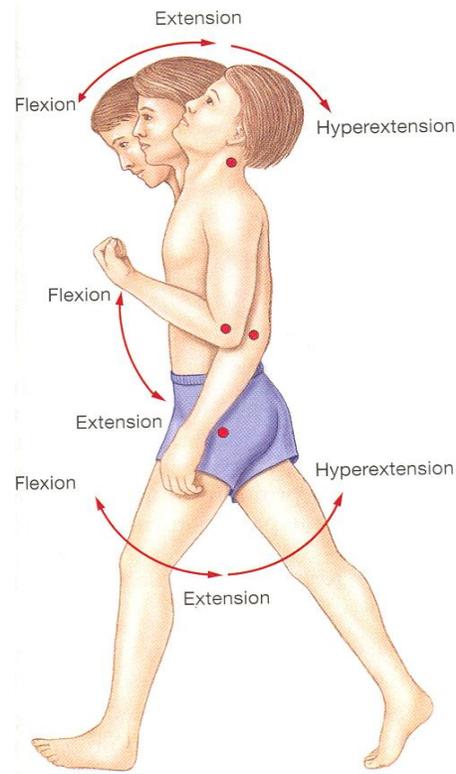
- * **External (outer):** means towards the surface and applies to the hollow-out structure.
- * **Internal (inner):** means towards the cavity of a hollow-out structure.
- * **Central:** means towards the center of the body.
- * **Peripheral:** means away from the center of the body.
- * **Ipsilateral:** means of the same side of the body.
- * **Contralateral :** means of the opposite side of the body.

Specific terms for the limbs :

- **In the forearm :** radial = lateral & ulnar = medial.
- **In the hand :** palmar = anterior & dorsal = posterior.
- **In the leg:** fibular = lateral & tibial = medial.
- **In the foot:** plantar = inferior & dorsal = superior.

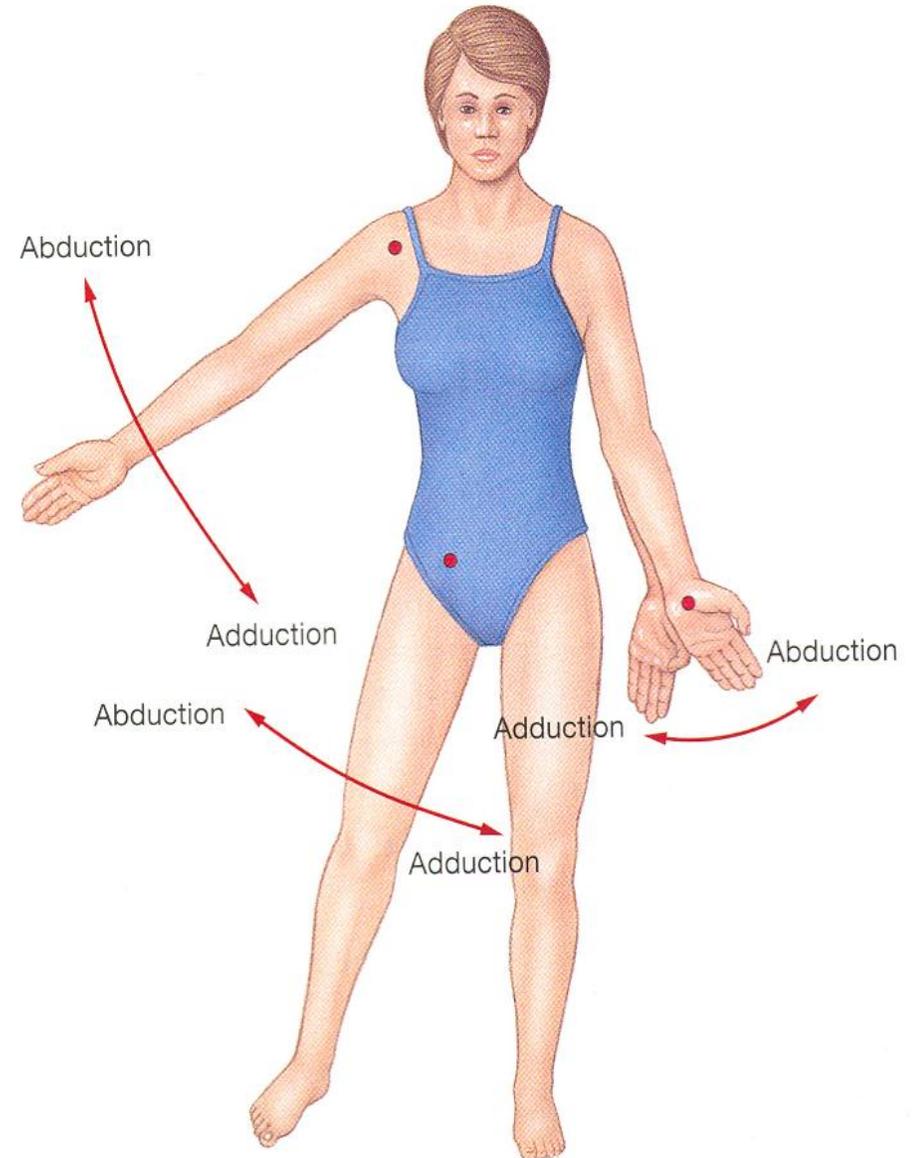
Anatomical Terms of Movements

- **Flexion** → to bend = angle = approximation of 2 ventral surfaces
- **Extension** → to stretch = straighten = approximation of 2 dorsal surfaces.

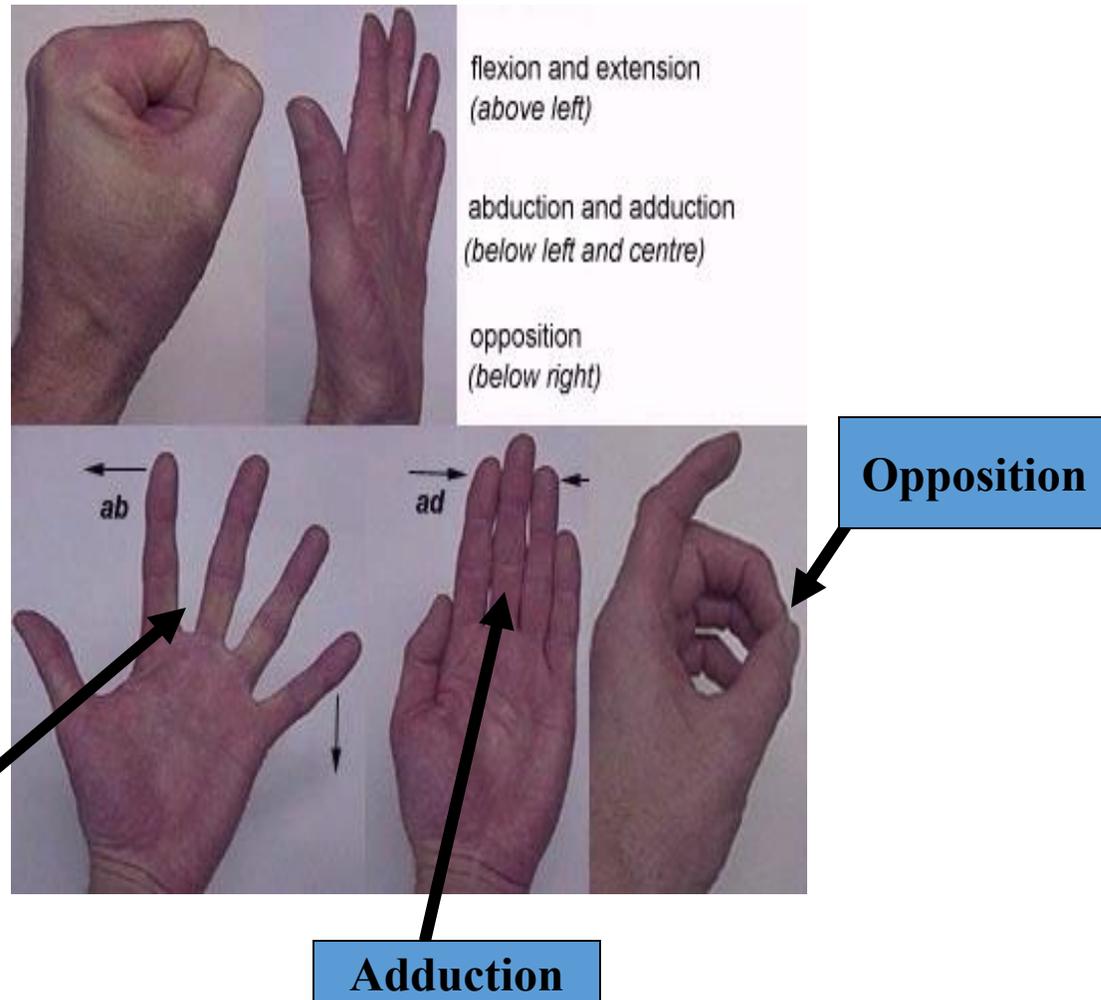


• **Abduction** →
moving a part
away from
midline.

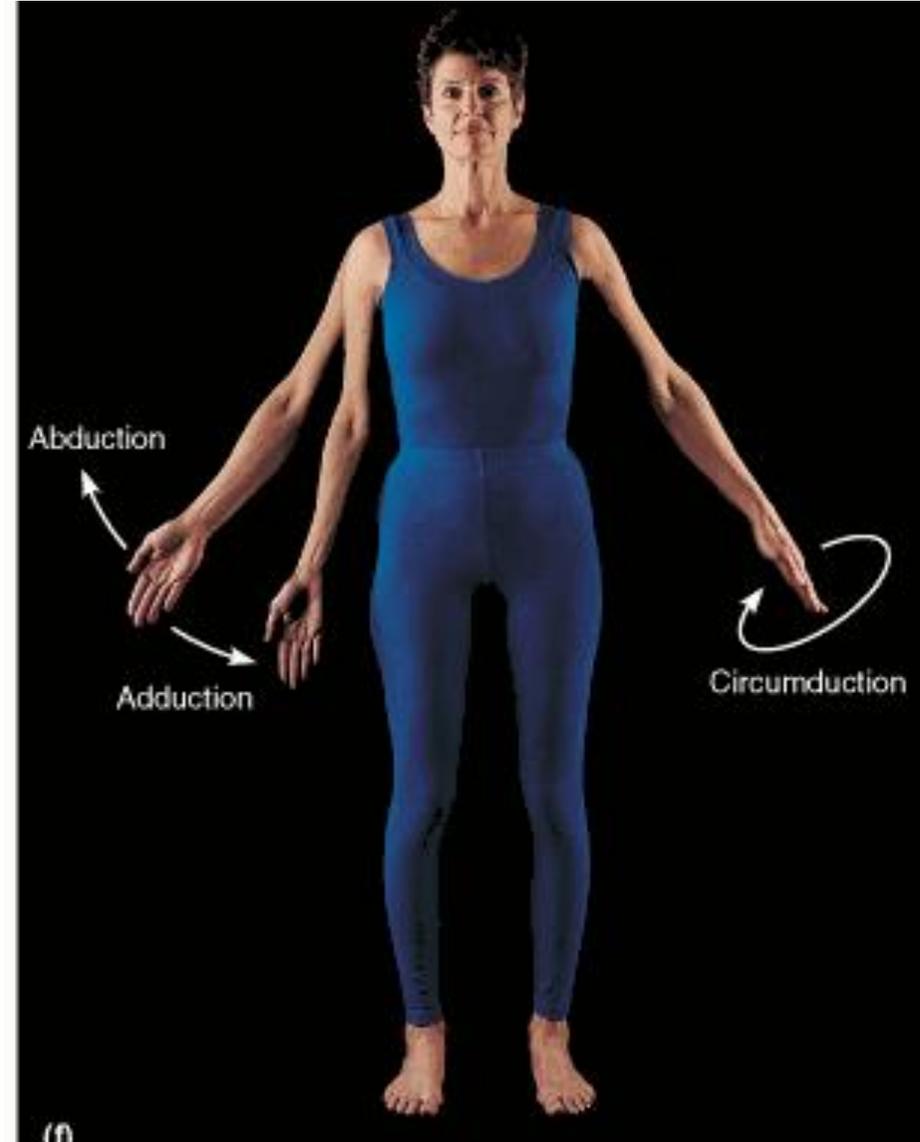
• **Adduction** →
moving a part
towards the
midline.



- **Abduction of fingers & toes** → spreading of fingers or toes apart.
- **Adduction of fingers & toes** → drawing or approximating fingers or toes together.

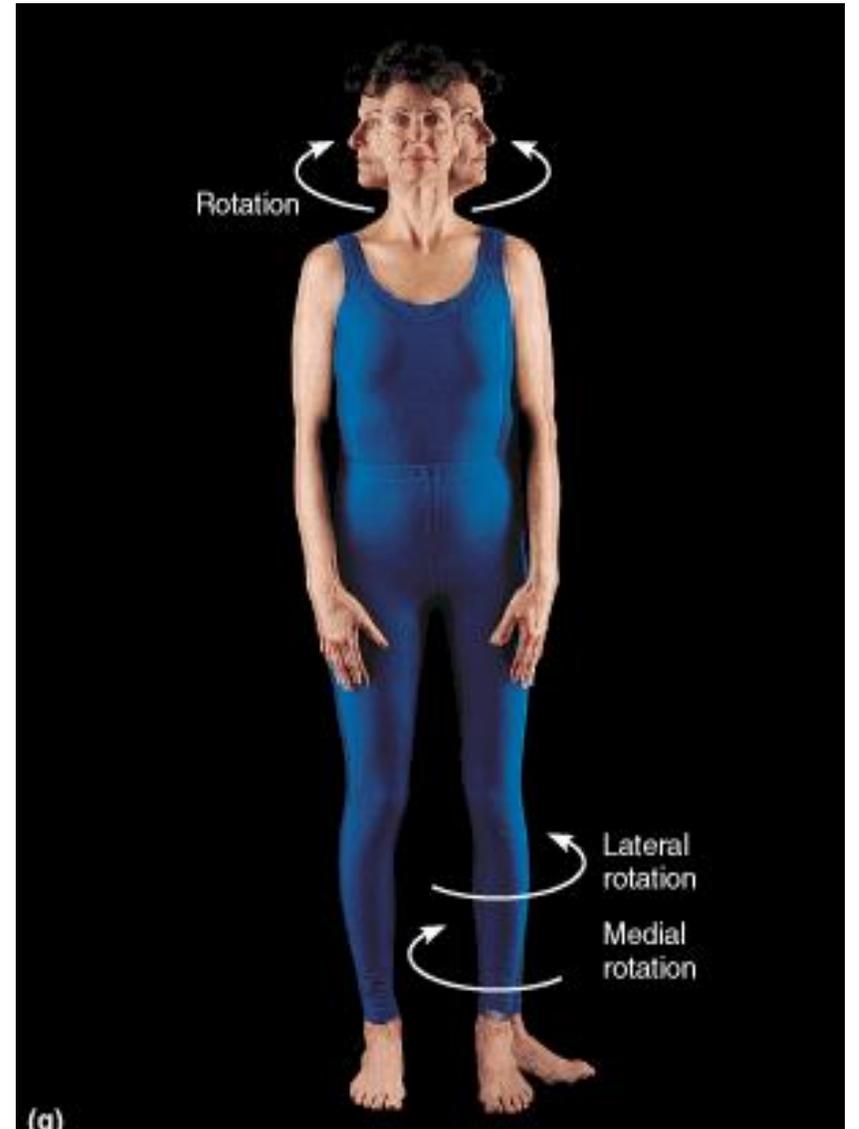


- **Opposition:**
- **Circumduction** →
the combination
in sequence of
movements of
flexion, abduction,
extension &
adduction.

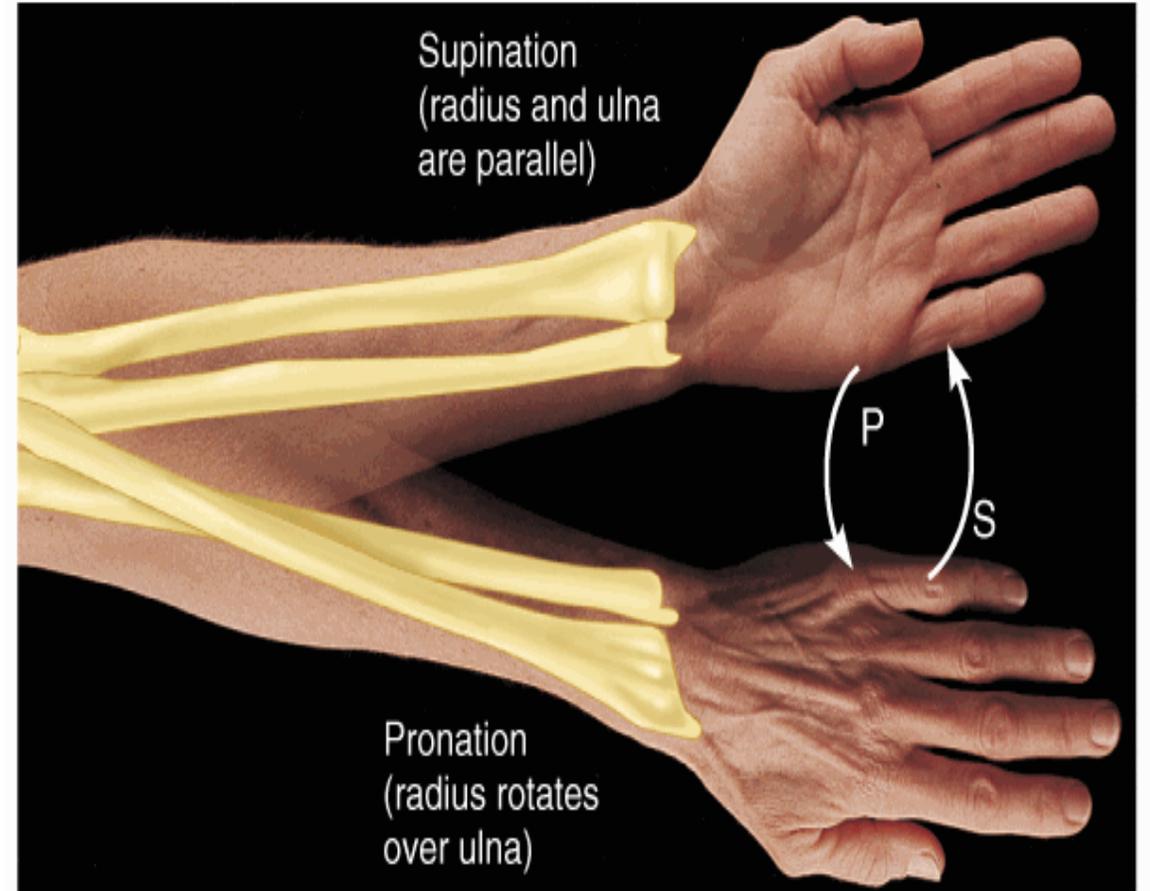


- **Medial rotation** →
brings anterior surface
to face medially

- **Lateral rotation** →
brings anterior surface
to face laterally

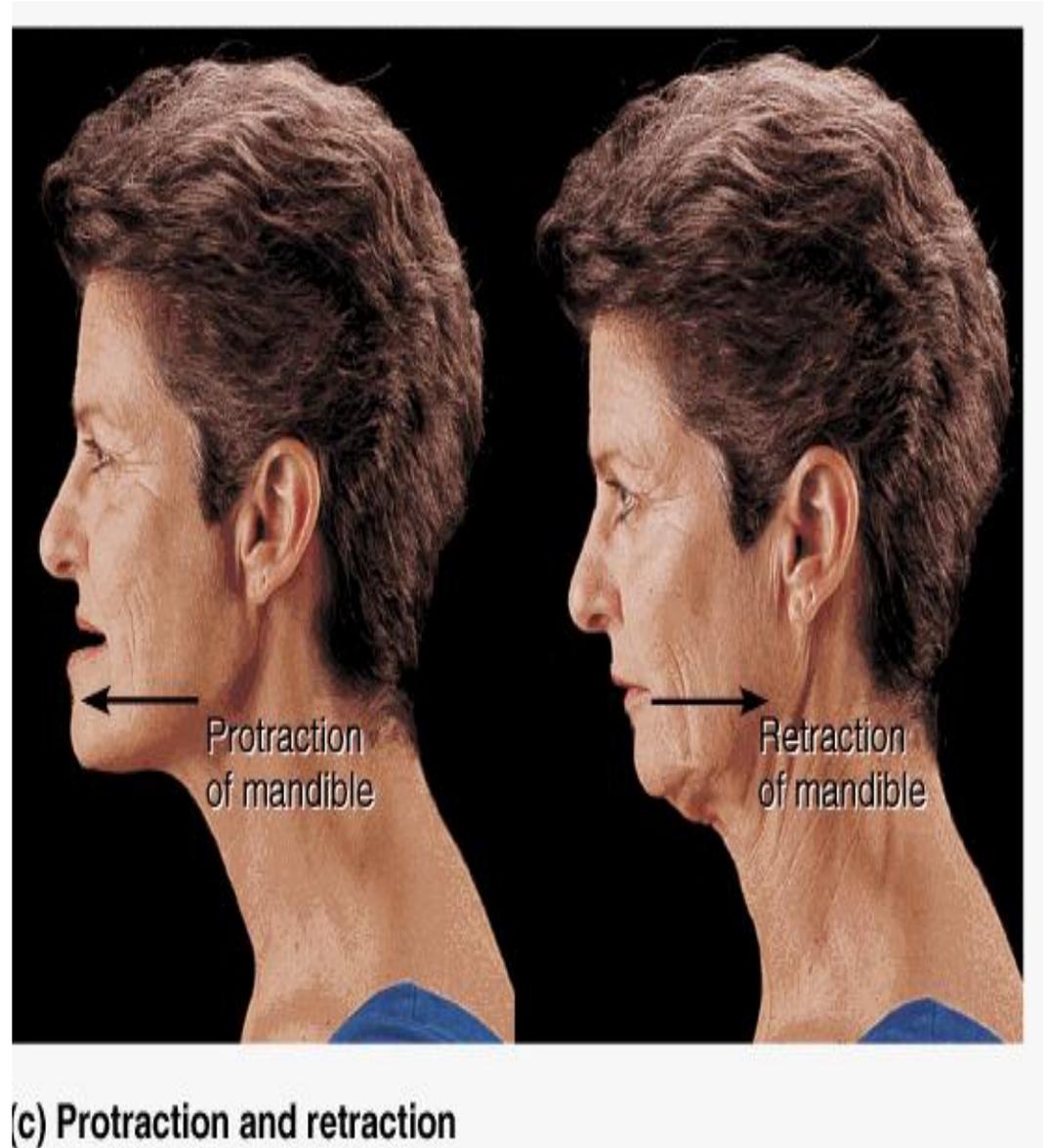


- **Pronation** → medial rotation of forearm which brings palm of hand to face posteriorly
- **Supination** → lateral rotation of forearm which brings palm of hand to face anteriorly



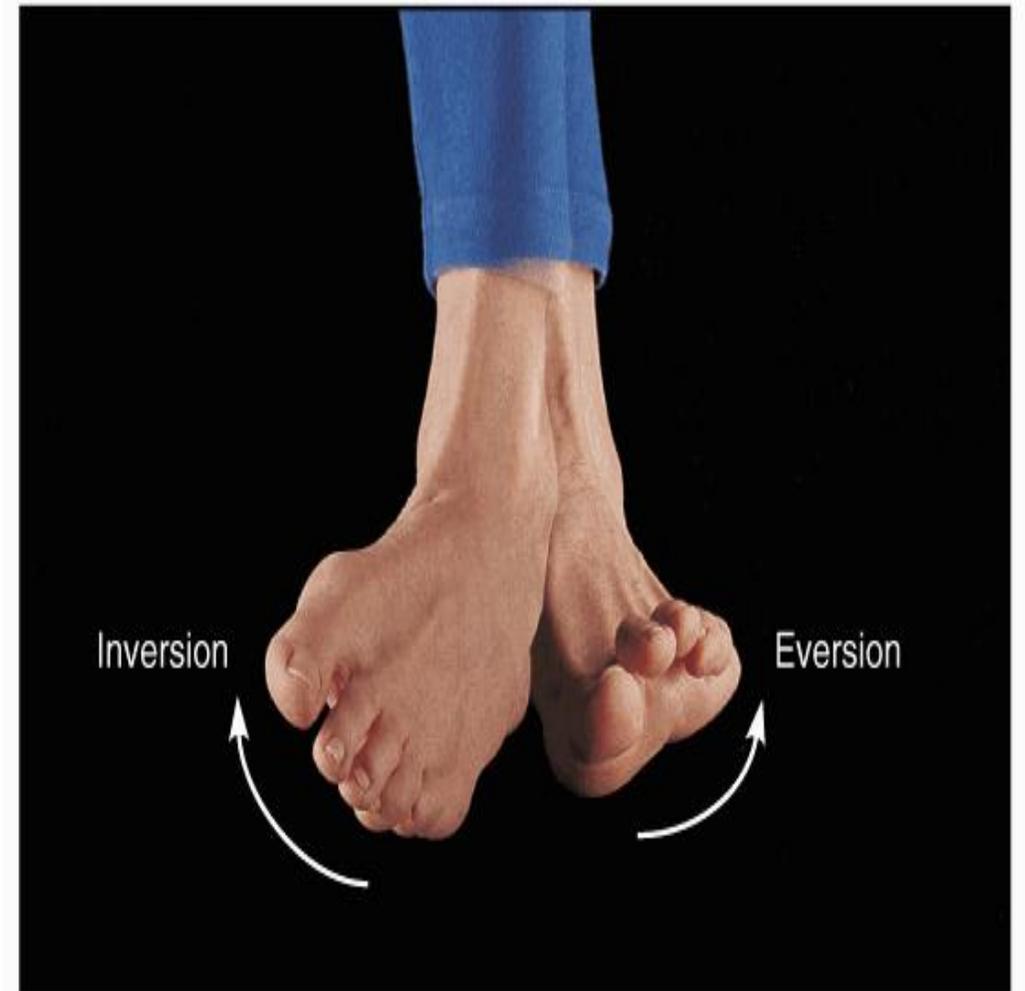
(a) Supination (S) and pronation (P)

- **Protraction** → moving the jaw forwards.
- **Retraction** → moving the jaw backwards.
- **Protraction & retraction can also occur at the shoulders.**



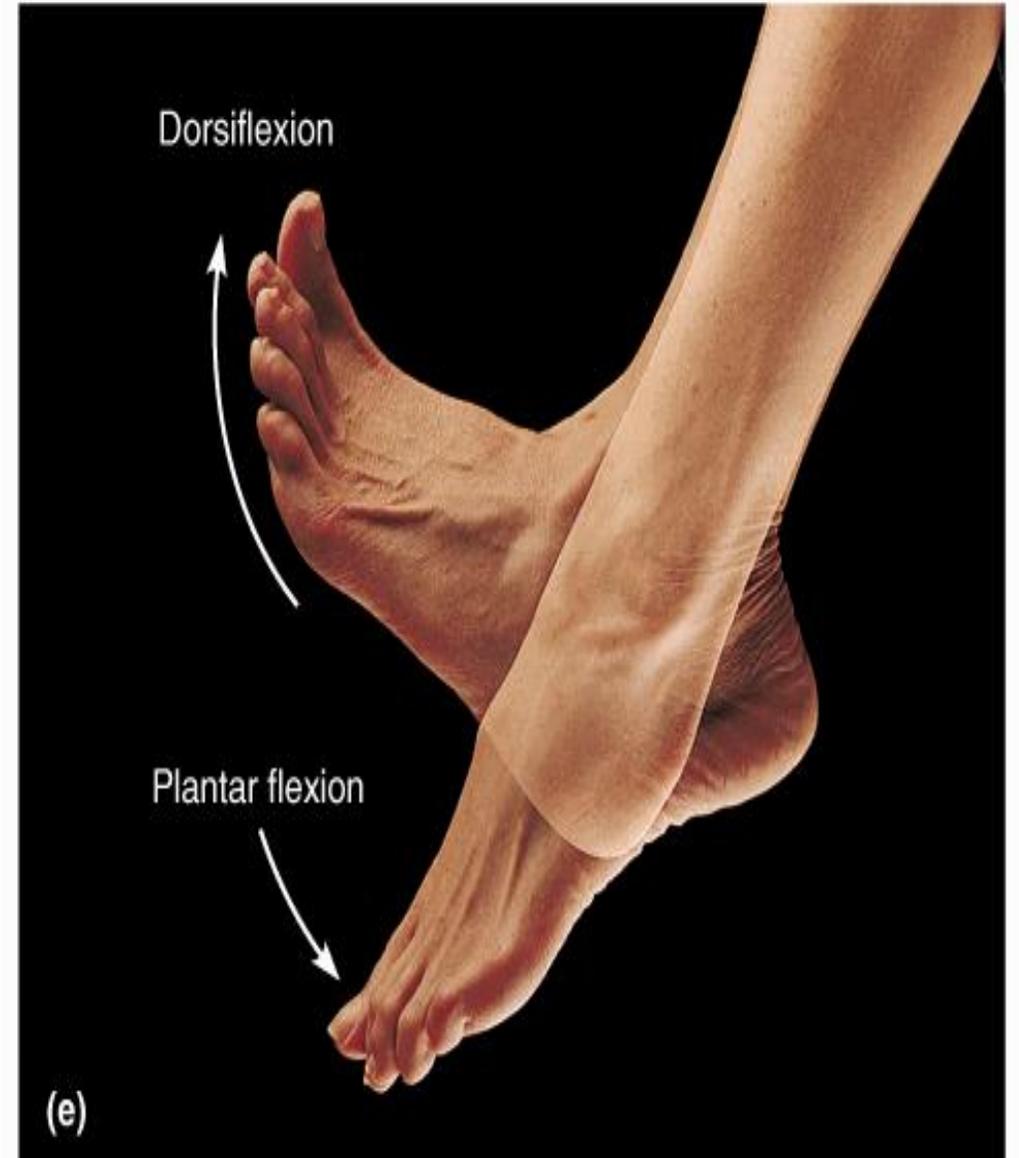
- **Inversion** → moving foot so that sole faces medially.

- **Eversion** → moving foot so that sole faces laterally.



(b) Inversion and eversion

- **Dorsiflexion** → bending foot or ankle upwards.
- **Plantar flexion** → bending foot or ankle downwards.



Body Cavities

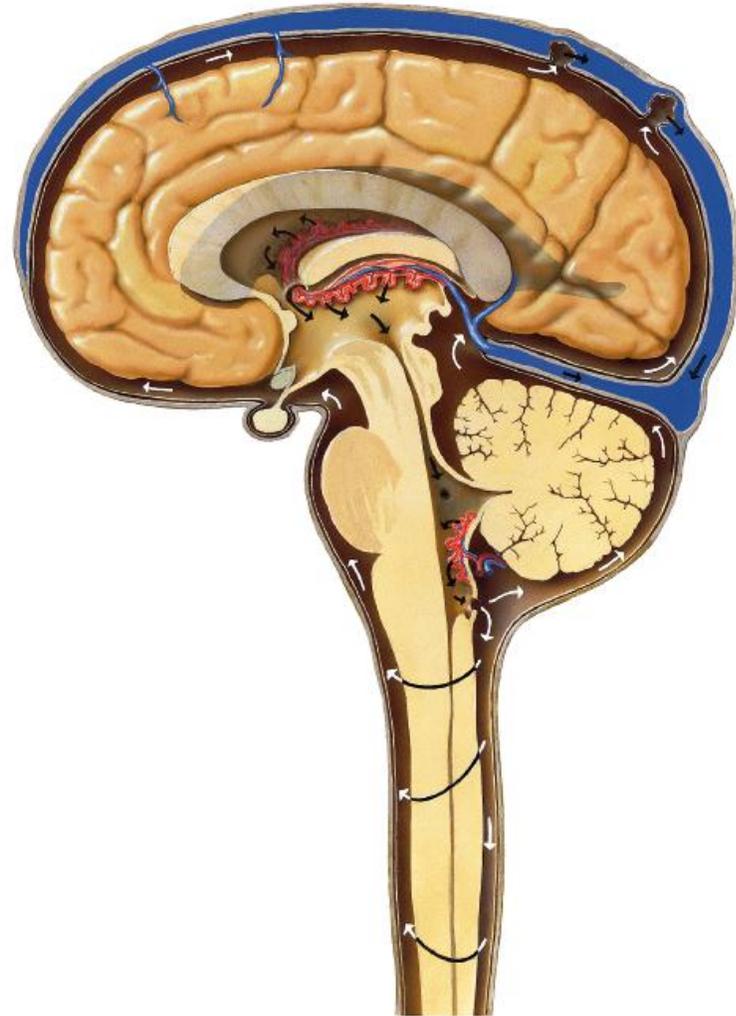
1. Cranial Cavity

- * The cavity inside the skull.
- * Contains the brain.



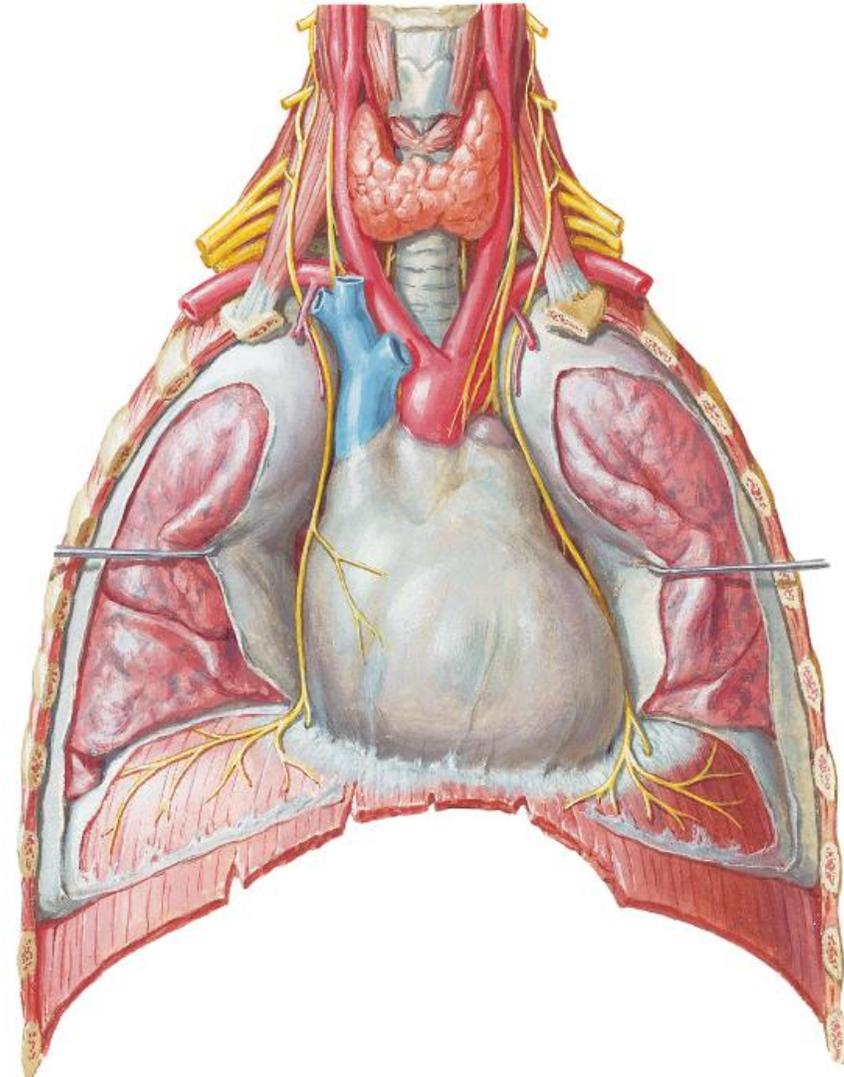
2. Vertebral Cavity

- * The cavity of the vertebral column.
- * Contains the spinal cord.



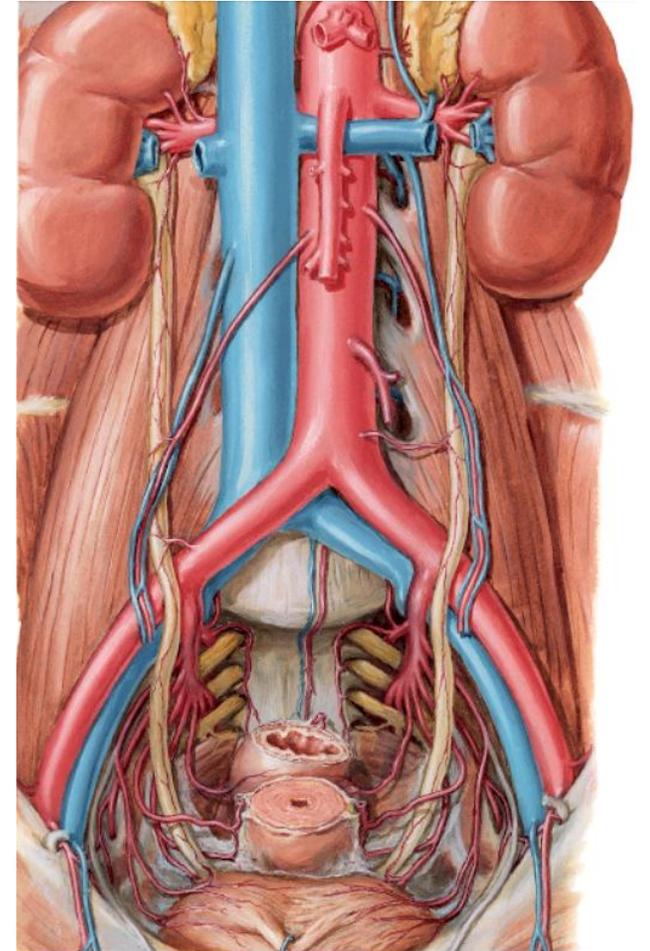
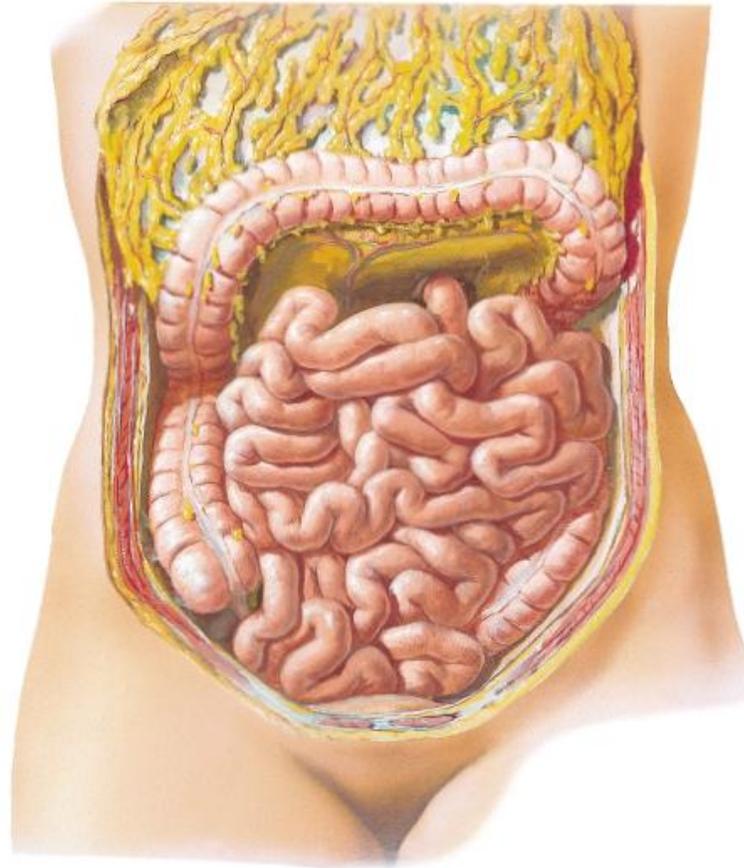
3. Thoracic Cavity

- * Contains the heart inside the pericardial cavity.
- * Contains the lungs inside the pleural cavities.



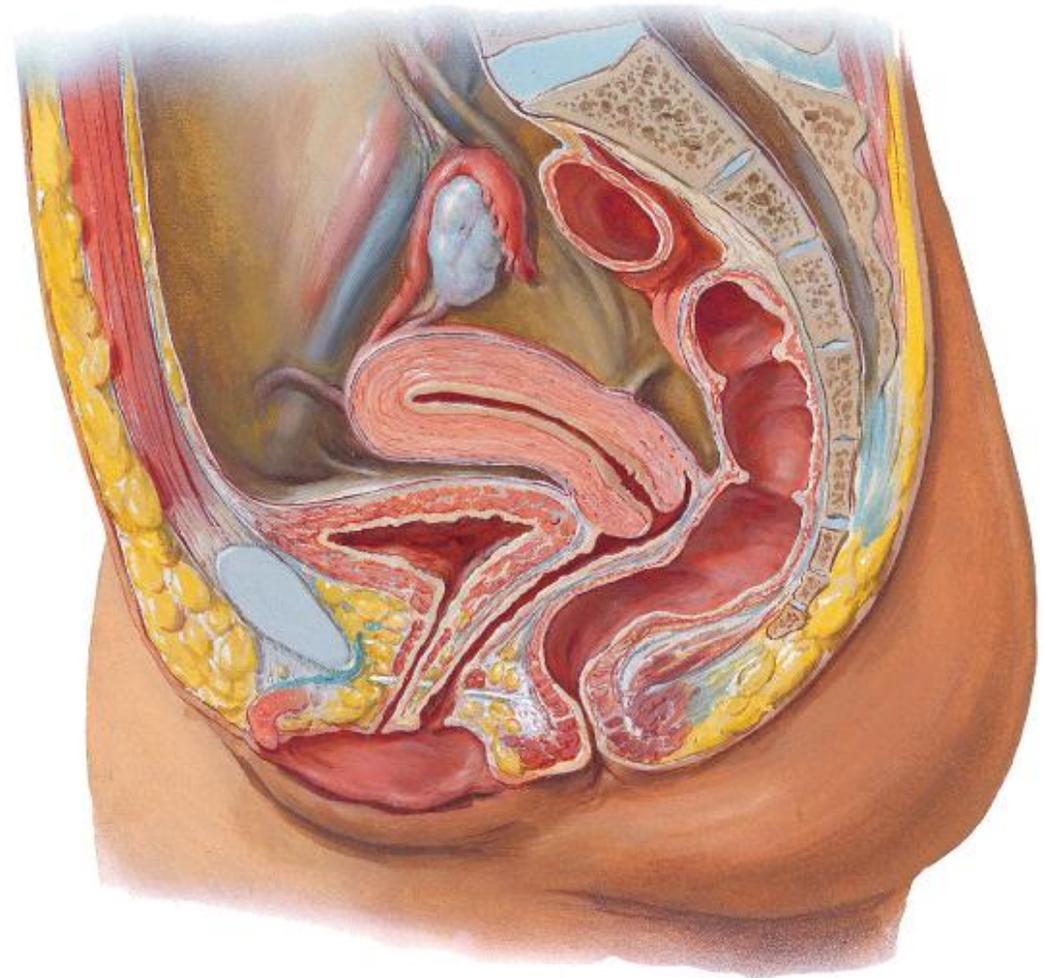
4. Abdominal Cavity

*** Contains abdominal organs such as organs of gastro-intestinal tract & kidneys.**



5. Pelvic Cavity

*** Contains pelvic organs such as urinary bladder, rectum & uterus & ovaries (in females).**





Thank You
Thank You
Thank You!!!!