

ANP 1106 (sections A, C)

(Winter, 2016)

1. Anatomical Terms
2. Integumentary System
3. Anatomy of the Skeletal System
4. Anatomy and Physiology of the Joints
5. Anatomy of the Muscular System
6. Anatomy of the Nervous System
7. Physiology of the Nervous System

Course Web Site

Course Content for ANP1106A: Communication and Movement - the Anatomy and Physiology of the Integumentary, Musculoskeletal and Nervous Systems

Build Content ▾ Assessments ▾ Tools ▾



Syllabus



Link to Mastering A & P

This link takes you to the login page for Mastering A and P. If you already registered with Mastering last term with your purchased Access Code, then you are still OK for this term. The course ID for our web site that contains the Mastering Assignments and other activities is MAPCARNEGIE64980.



Topics 1 & 2: Anatomical Terms and the Integumentary System



Topic 3: Anatomy of the Skeletal System



Topic 4: Anatomy and Physiology of the Joints

20151_PS30779_ANP1106_A (Human Anatomy and Physiology II)

Home Page

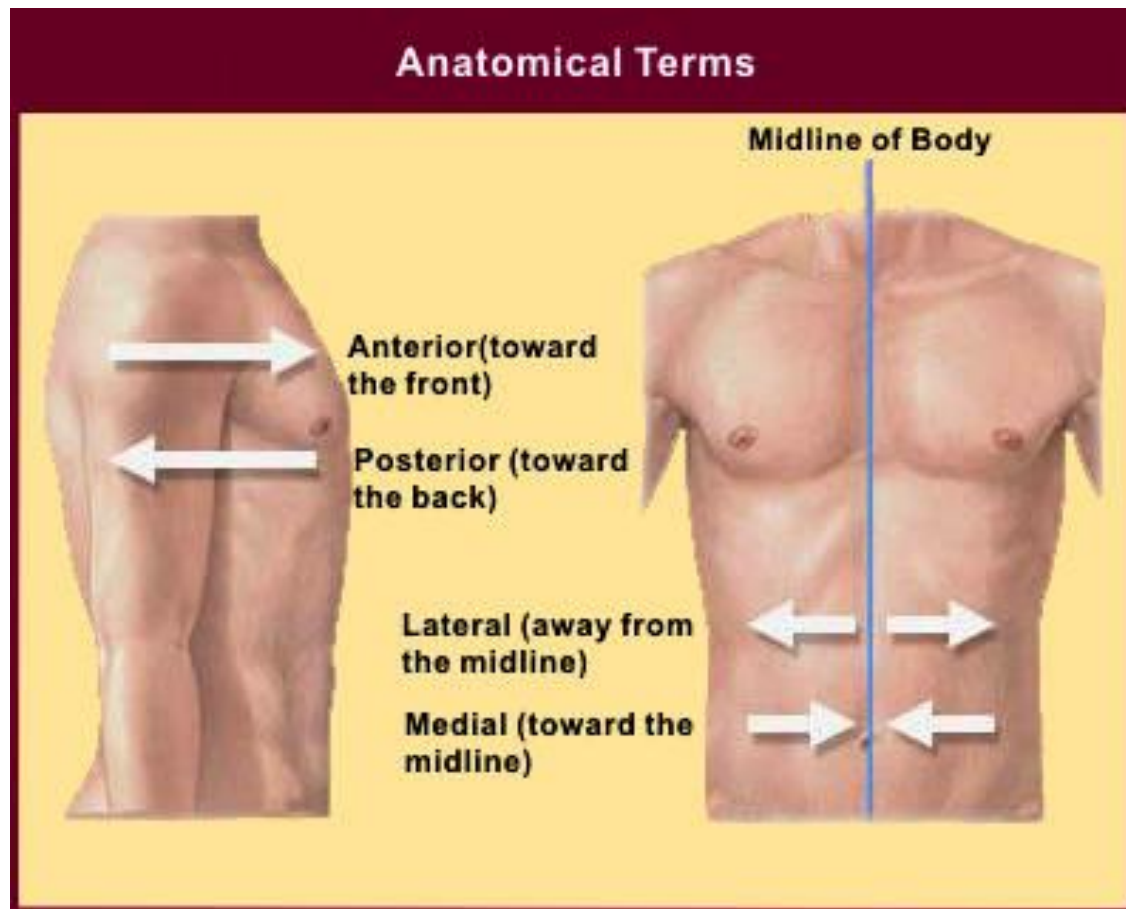
Course Content for ANP1106A: Communication and Movement - the Anatomy and Physiology of the Integumentary, Musculoskeletal and Nervous Systems

COURSE MANAGEMENT

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TOPIC #1: ANATOMICAL TERMS

1.1 Become familiar with anatomical nomenclature (pp. 11-20)



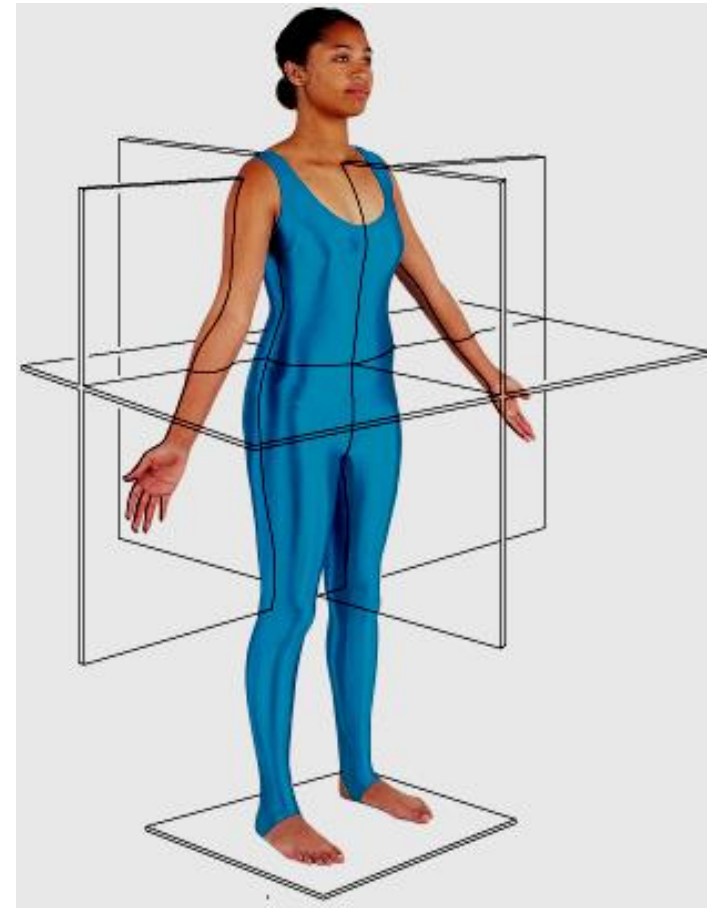
1.1. Describe the anatomical position, the regional and the directional terms as well as planes and sections

The Anatomical Position of the Human Body (see Table 1.1)

to describe body parts/positions precisely & with as few words as possible:

- an initial reference point = body in **standard anatomical position**
- an indication of direction - remember that “**right**” and “**left**” refer to the patient or the cadaver, **not** the observer

The anatomical position is very simple: body erect, feet slightly apart, and palms face forward with thumbs pointing away from body.

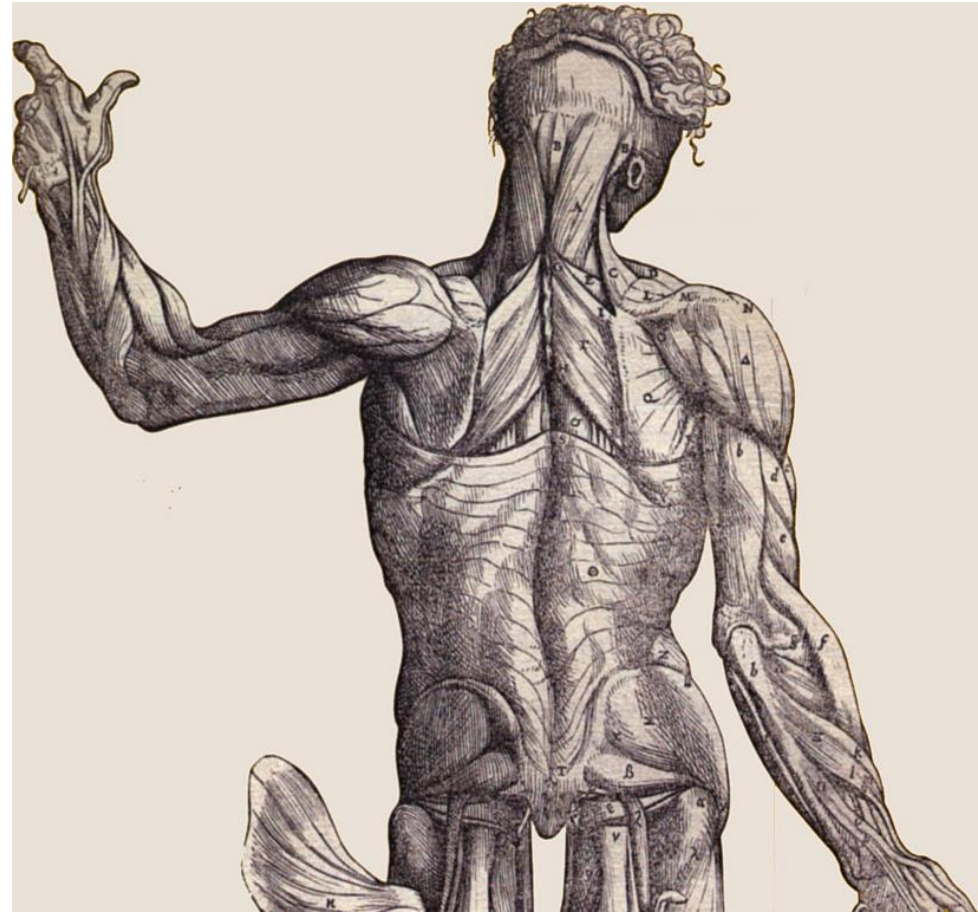


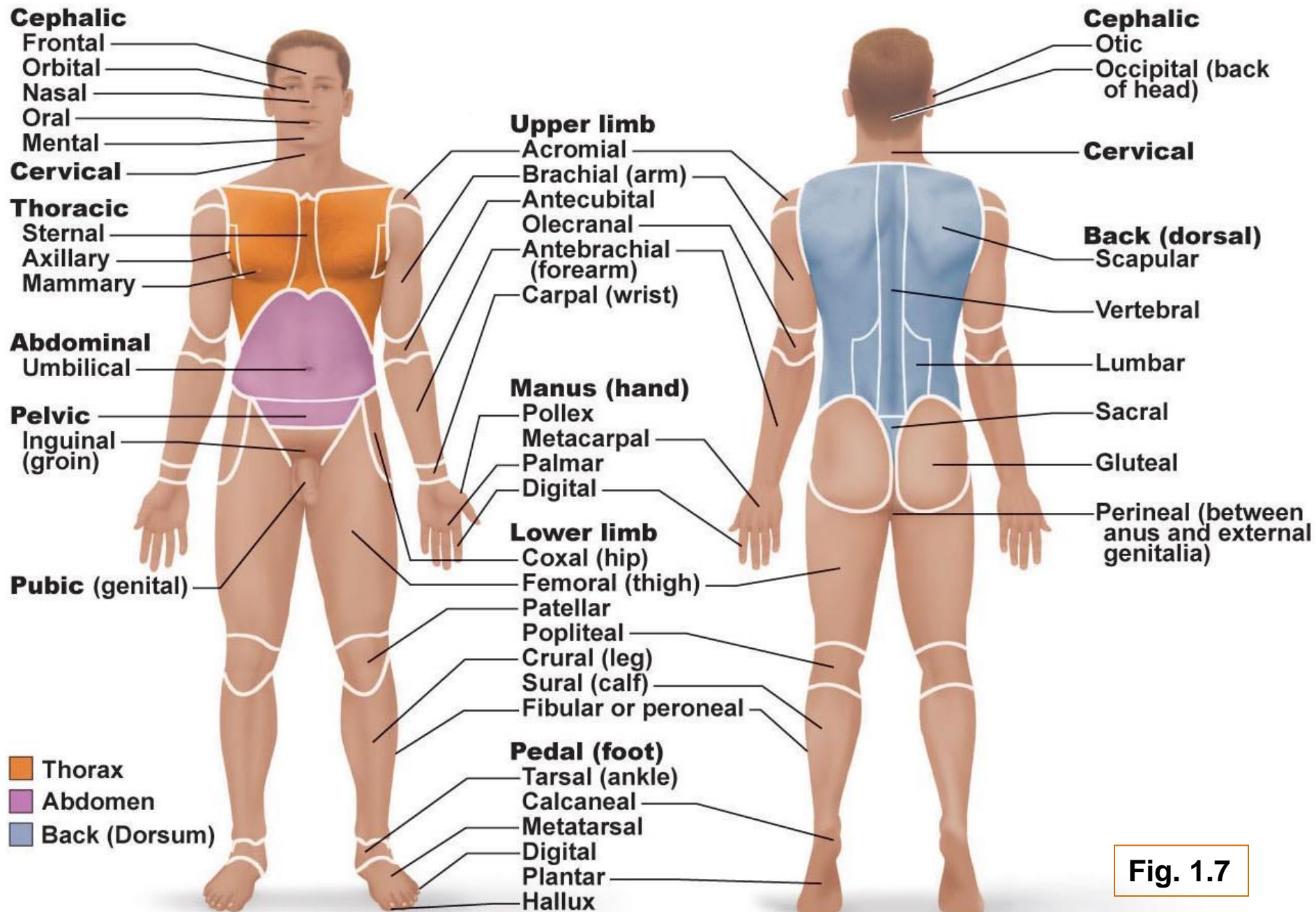
Regional Terms:

2 fundamental divisions of body:

1. **axial part:** = head, neck & trunk
2. **appendicular part:** = appendages or limbs attached to axis

then **regional terms** (see fig. 1.7) used to designate specific areas within the axial or appendicular part of the body





(a) Anterior/Ventral

(b) Posterior/Dorsal

Fig. 1.7

Body Planes & Sections

3 common body planes - 2 are **vertical** & 1 is **horizontal**

- 1) **sagittal plane:** vertical plane that divides body into **right** & **left** parts

Why not right and left **halves**? What is a **midsagittal** or **median** plane? What is a **parasagittal** plane?

- 2) **frontal plane:** vertical plane that divides the body into **anterior** and **posterior** parts; also called a **coronal** plane

- 3) **transverse or horizontal plane:** from right to left dividing the body into **superior** and **inferior** parts
transverse section = cross-section

What is an **oblique** section??

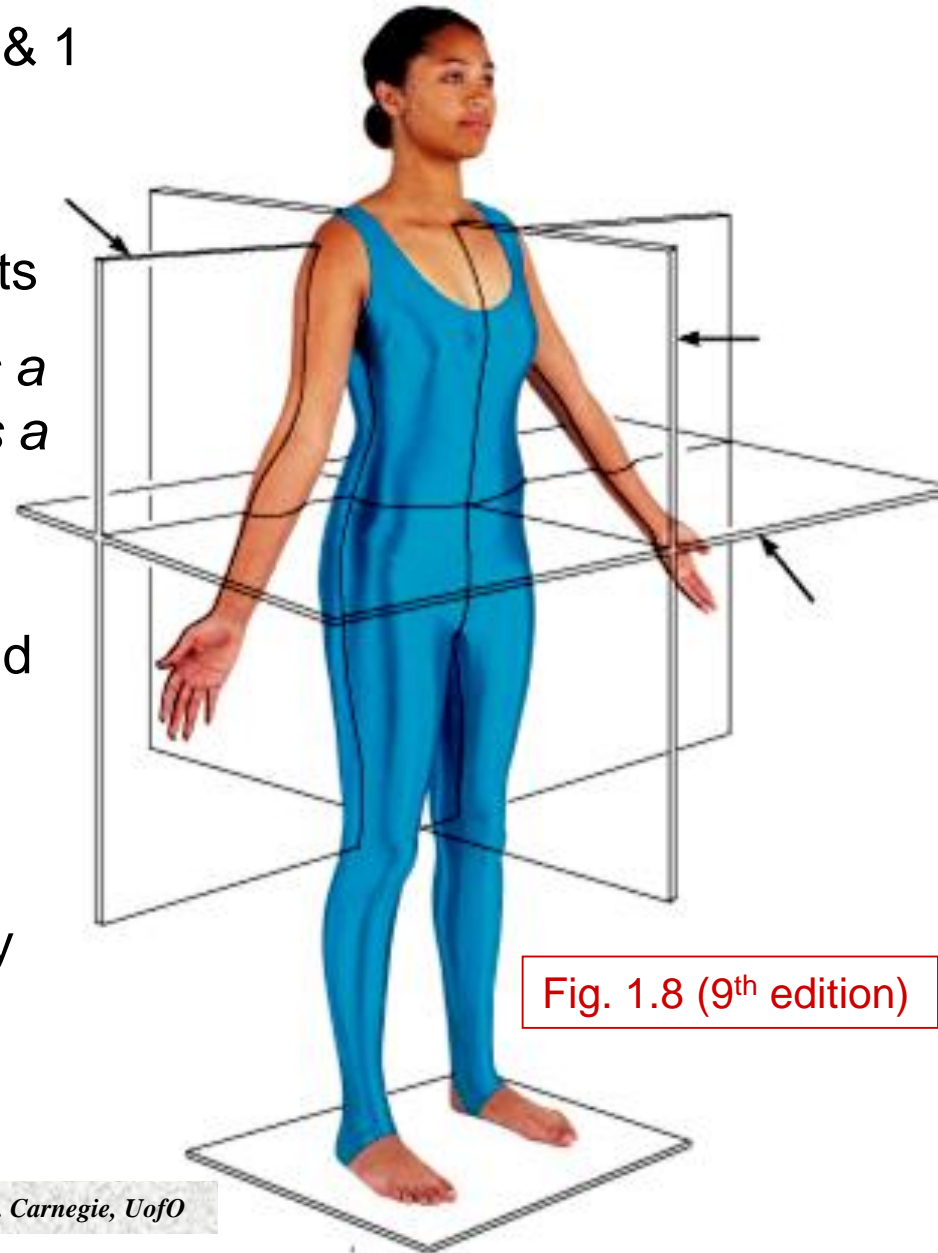


Fig. 1.8 (9th edition)

TERM	DEFINITION	EXAMPLE
Superior (cranial)	Toward the head end or upper part of a structure or the body; above	The head is superior to the abdomen.
Inferior (caudal)	Away from the head end or toward the lower part of a structure or the body; below	The navel is inferior to the chin.
Anterior (ventral)	Toward or at the front end of the body; in front of	The breastbone is anterior to the spine.
Posterior (dorsal)	Toward or at the back of the body; behind	The heart is posterior to the breastbone.
Medial	Toward or at the midline of the body; on the inner side of	The heart is medial to the arm.
Lateral	Away from the midline of the body; on the outer side of	The arms are lateral to the chest.
Intermediate	Between a more medial and a more lateral structure.	The collarbone is intermediate between the breastbone and shoulder.
Proximal	Closer to the origin of the body part of the point of attachment	The elbow is proximal to the wrist.
Distal	Farther from the origin of the body part or the point of attachment	The knee is distal to the thigh.
Superficial	Toward or at the body surface .	The skin is superficial to the skeletal muscles.
Deep	Away from the body surface; more internal	The lungs are deep to the skin.

1.2 Describe the body cavities

1. Dorsal body cavity:

cranial cavity: enclosed by _____ and houses the _____ .

vertebral (spinal) cavity: enclosed by _____ and houses the _____ .

Both cavities are continuous and well-protected

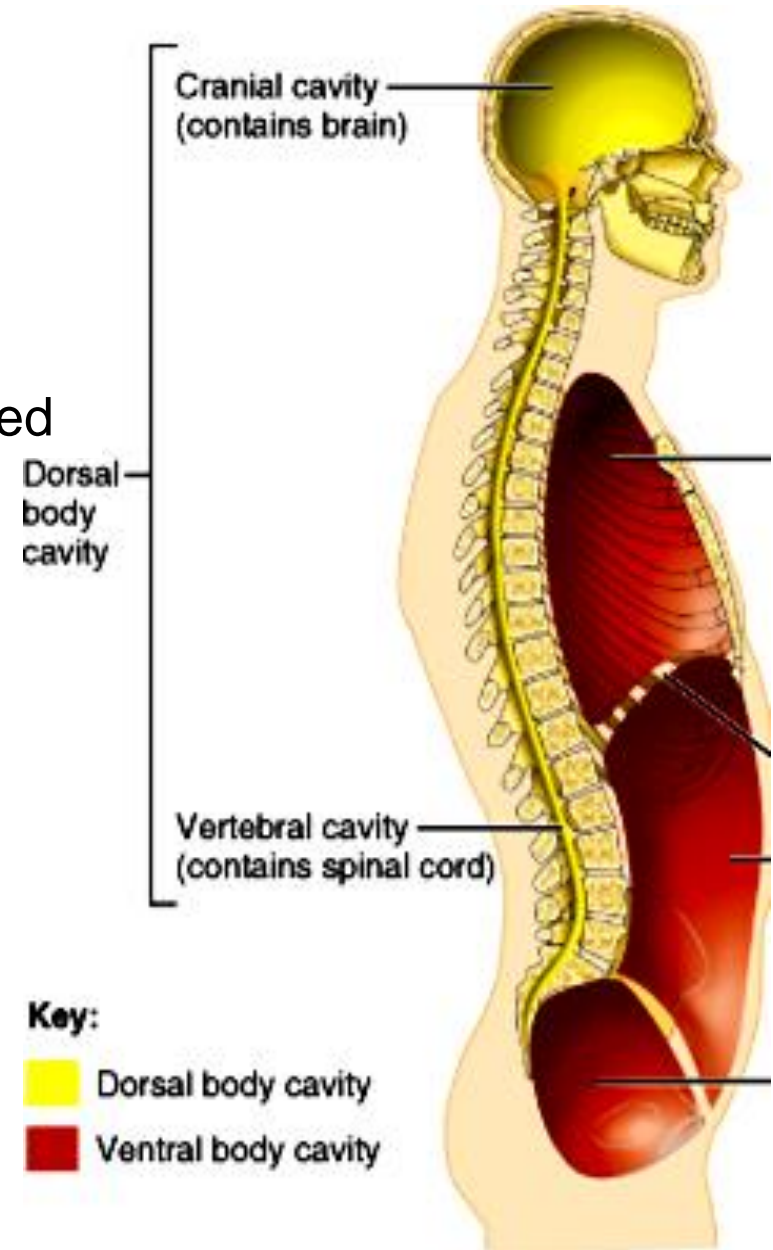


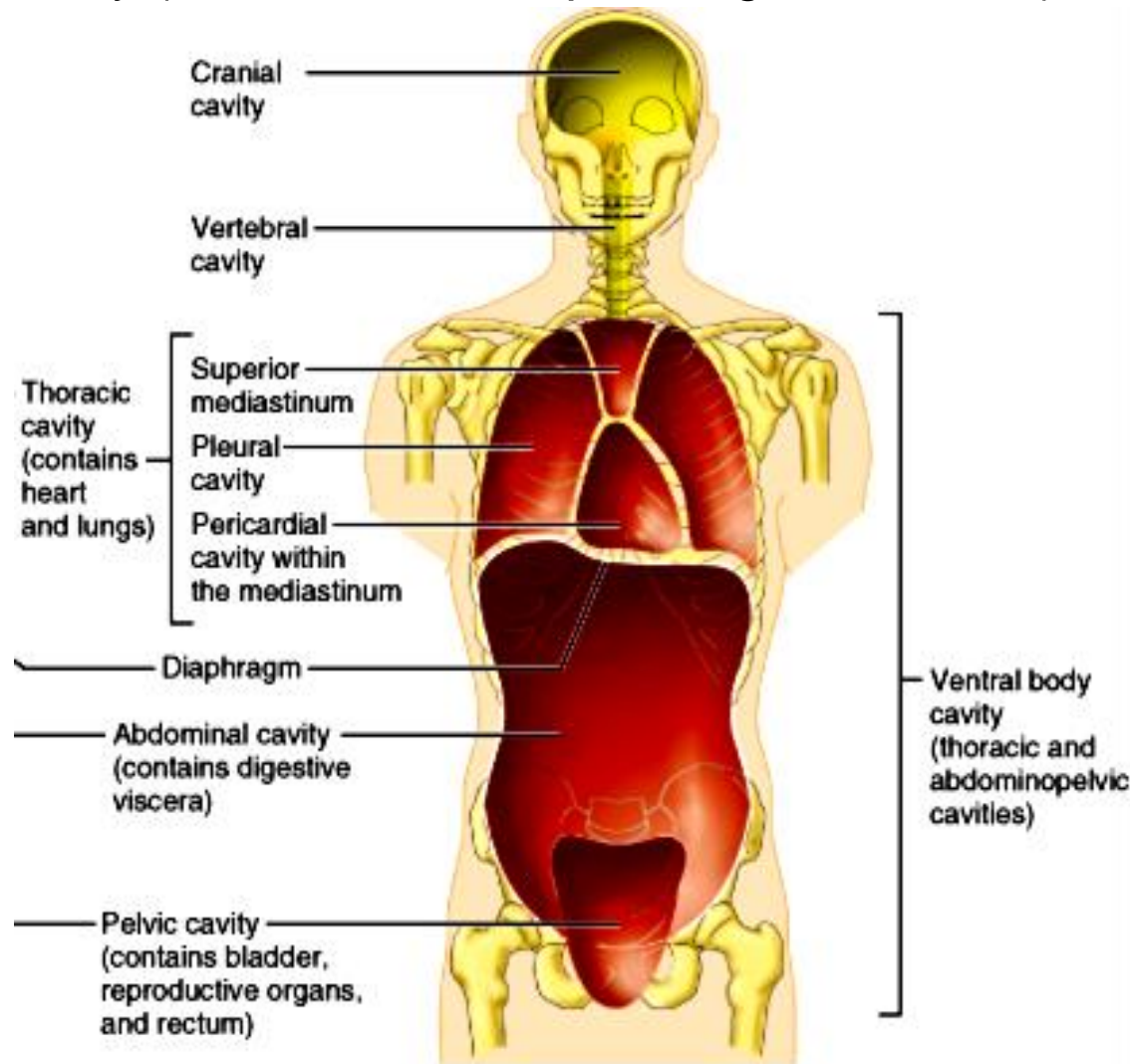
Fig. 1.9

2. Ventral body cavity:

larger; houses the viscera

thoracic cavity: 2 lateral **pleural** cavities + central **pericardial** cavity

abdominopelvic cavity: superior **abdominal** cavity (stomach, intestines, spleen, liver) & inferior **pelvic** cavity (bladder, some reprod organs, rectum)



(b) Anterior view

What structure separates the thoracic and abdominopelvic cavities?? The abdominal and pelvic cavities??

In which body cavity do the organs receive the least protection from physical trauma??

Abdominopelvic Quadrants

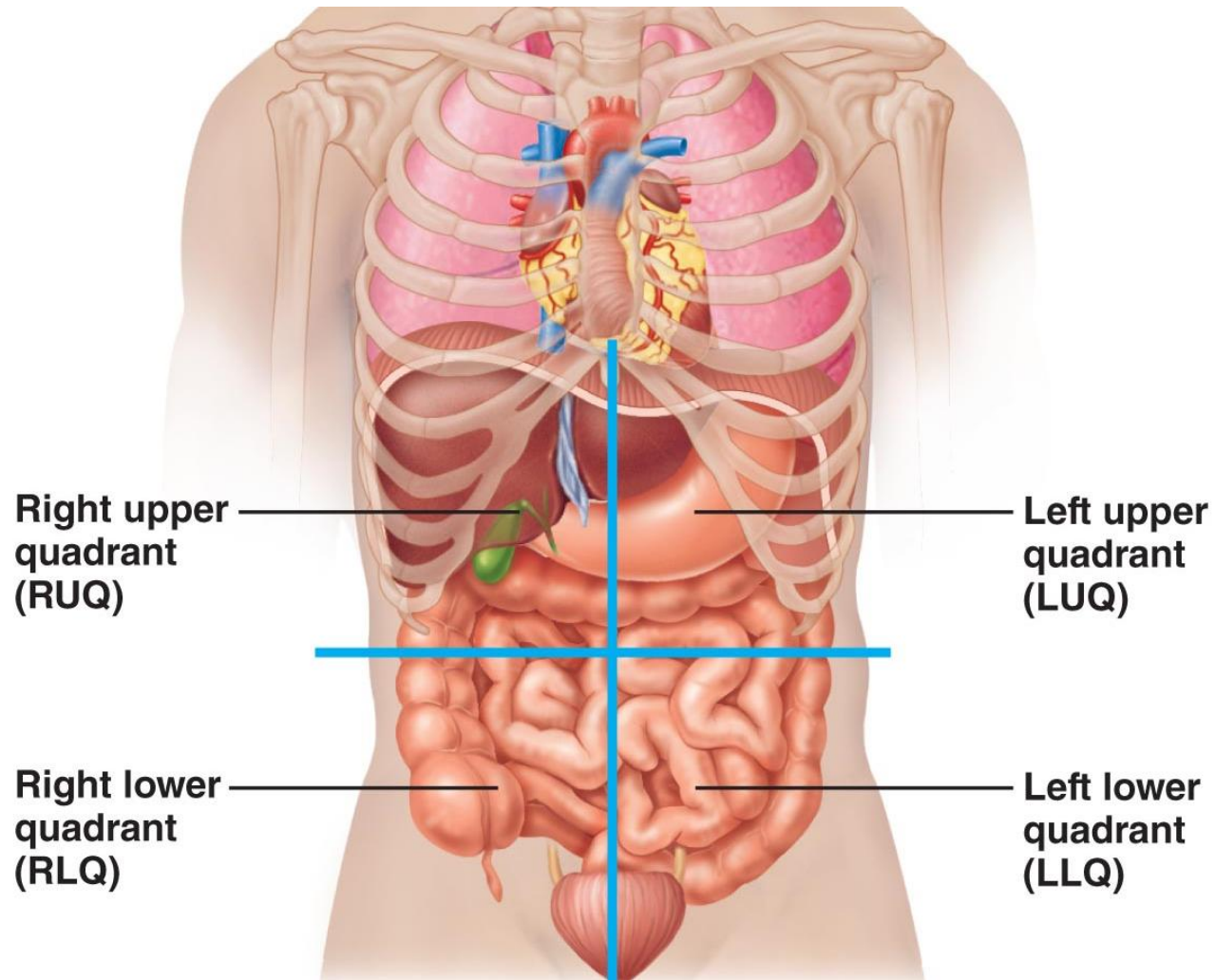
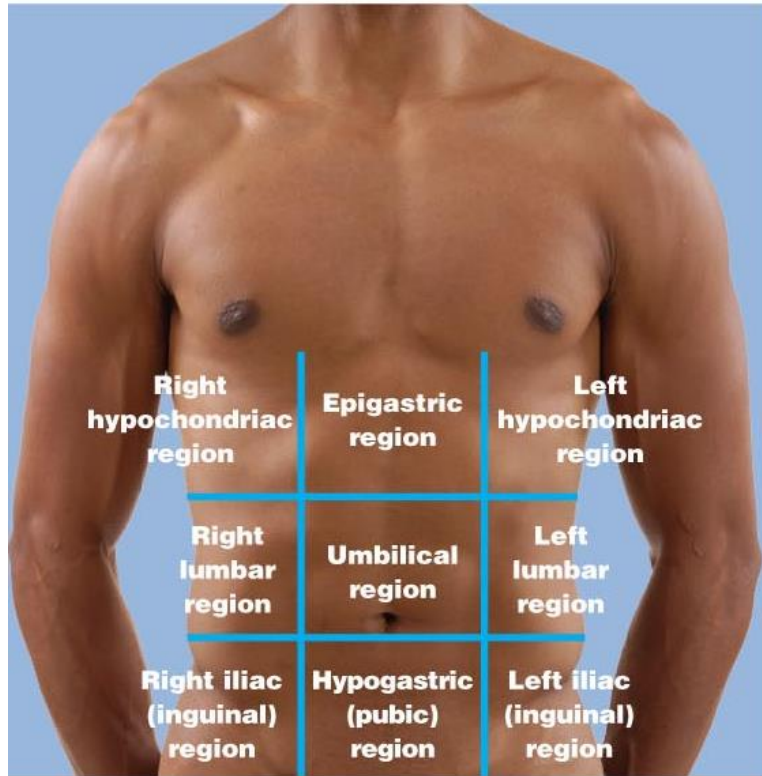
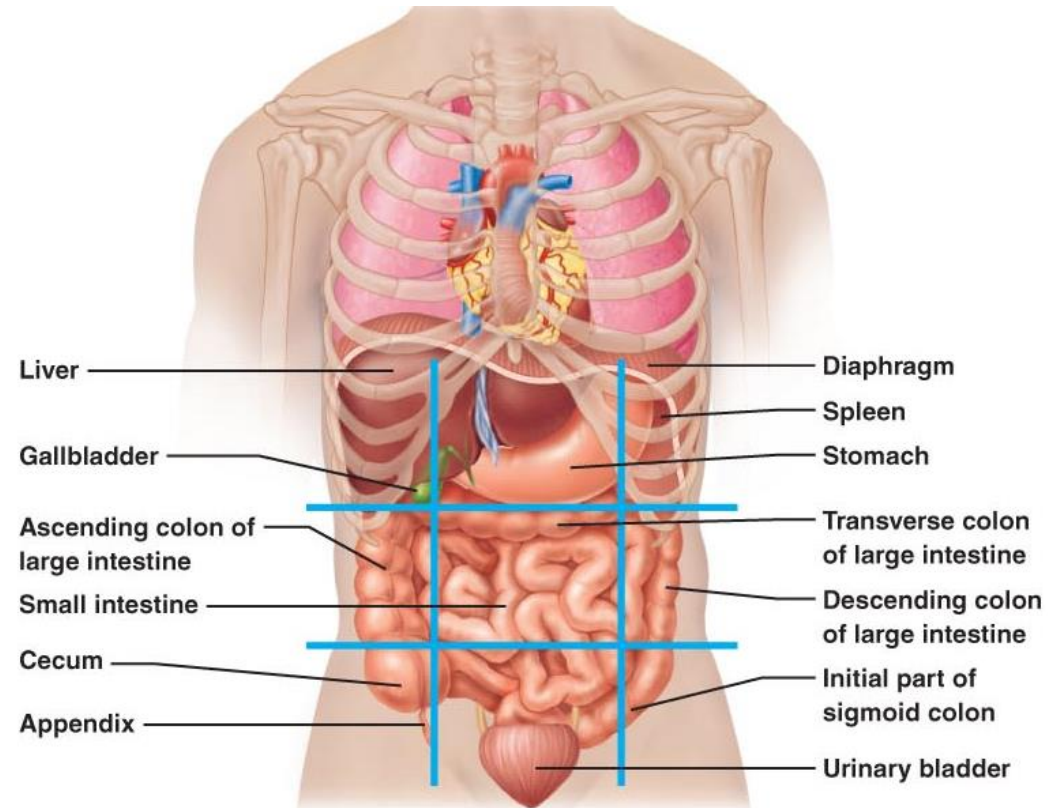


Fig. 1.11: Transverse and median planes intersect at the umbilicus

Nine abdominopelvic regions



(a) Nine regions delineated by four planes



(b) Anterior view of the nine regions showing the superficial organ

Fig. 1.12: This division method is used primarily by anatomists