

HBB EXAM NOTES 2013- ANATOMY

Tissue Types (Lec 2)

Qu. What are the 4 basic tissue types found in the human body?

1. Connective tissue → connects
2. Epithelial tissue → covers outside or inside
3. Muscular tissue → enables movement
4. Nervous tissue → innervates/ sends info to muscles and brain

Epithelial Cells (Lec 2)

Qu. What does epithelial tissue do?

- Covers a body surface or lines a body cavity or tube
- Lines passageways that communicate with the outside world. Eg. Mouth → digestive system
- Covers walls and organs in the ventral body cavities. Eg. Thoracic cavity, abdominopelvic cavity...etc.

Qu. What are the characteristics of epithelial tissue?

- Specialised contacts (desmosomes and gap junctions) between epithelial cells holds the cells firmly together → stops things from passing through it
- One free surface → Has connective tissue on one side, and nothing on the other side (free surface)
- Supported by connective tissue
- Has nerve supply (innervated)
- No blood vessels (avascular) → poor blood supply
- Regeneration → bottom layer of cells is constantly being regenerated

Qu. What are the 3 different shapes of epithelial cells?

1. Squamous (flat, looks like a scale)
2. Cuboidal (cube from frontal view, but hexagonal from bird's eye view)
3. Columnar (rectangle from frontal view, but hexagonal from bird's eye view)

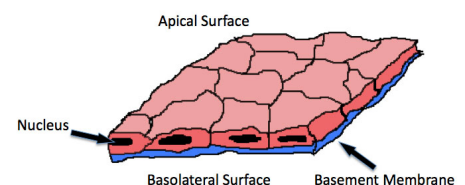
Qu. What are the 2 different ways epithelial cells can be layered?

- Simple layer: 1 layer
- Stratified layer: many layers

Qu. Where can simple squamous cells be found?

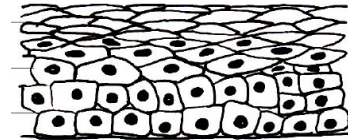
- Alveoli of lungs
- Serous membranes
- Lining of heart and blood vessels

**** Needs thin layer to allow for easy movement of gases**



Qu. Where can stratified squamous cells be found?

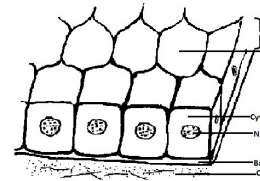
- Outer layer of skin
- Linings of oesophagus, trachea



Qu. Where can simple cuboidal epithelial cells be found?

*They secrete and absorb!

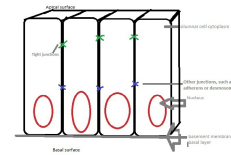
- Kidney tubules
- Ducts and secretory sections of small glands



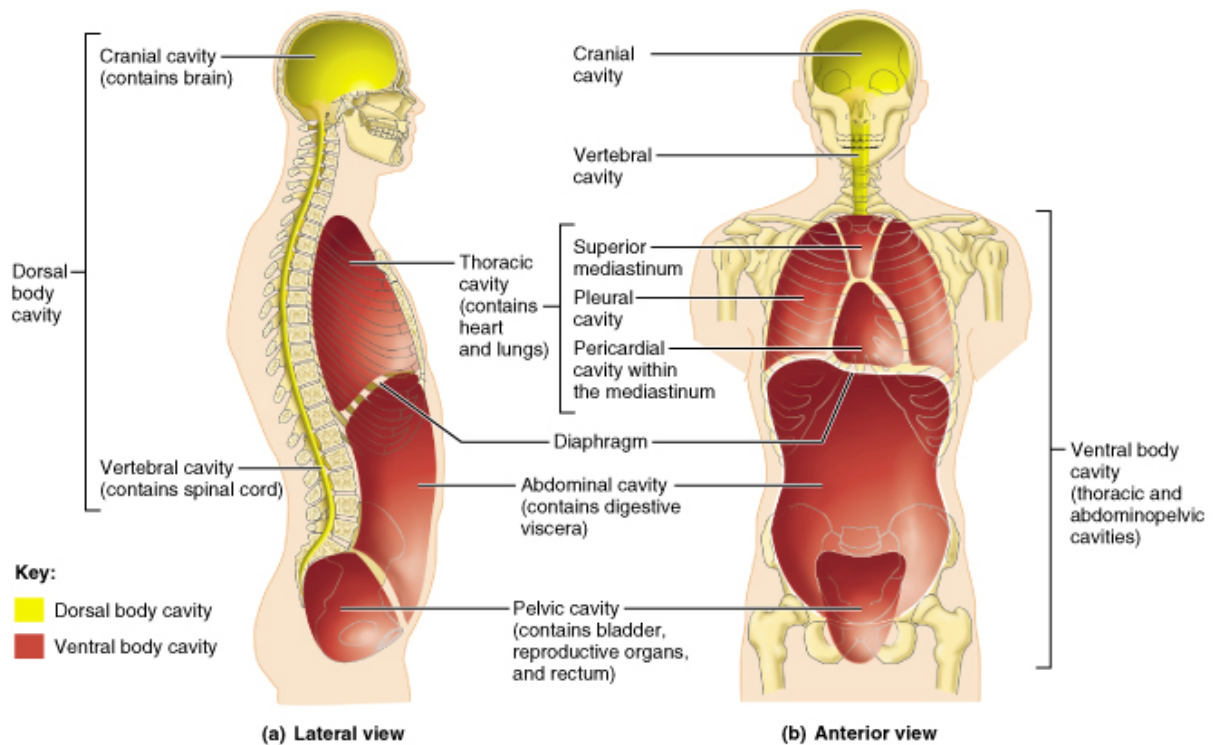
Qu. Where can simple columnar epithelial cells be found?

*They have micro-villi or cilia!

- Digestive tract (secretory)
- Bronchi, uterine tubes (ciliated)



Qu. What are the body cavities in the dorsal and ventral zones?



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Qu. Describe the tissue walls around body cavities?

- Can be hard or soft tissue walls
- Normally lined with secretory (serous) membranes

Qu. What is a serous membrane?

- A membrane that produces serous fluid

Qu. Which body cavities do serous membranes line?

- Only the ventral body cavities → AKA the parietal membranes