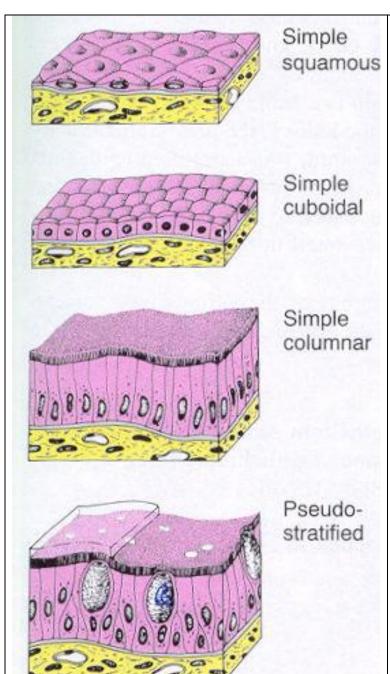
محاضرات الانسجة العملي م. نور عدنان عزاوي م. مروة عادل حميد

## **Epithelial tissue (epithelium)**

## -SIMPLE EPITHELIA – only 1 (single) layer on basement membrane



Squamous – single layer of flattened thin cells with little cytoplasm and prominent nucleus.

Endothelium – squamous epithelium in blood vessels, lymphatic vessels

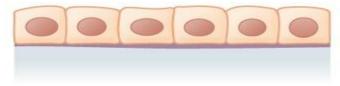
<u>Mesothelium</u> - squamous epithelium of mesodermal origin lining. (peritoneum, pleura,



pericardium

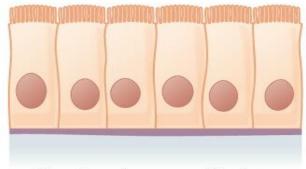
Simple squamous epithelium

<u>Cuboidal</u> - cell height, width and depth are the same, round centrally placed nucleus. , lines kidney tubules and thyroid gland



Simple cuboidal epithelium

<u>Columnar</u> - cell height greater than width, nucleus elliptical or cigar shaped. (In the intestines, in the oviduct, ovary)

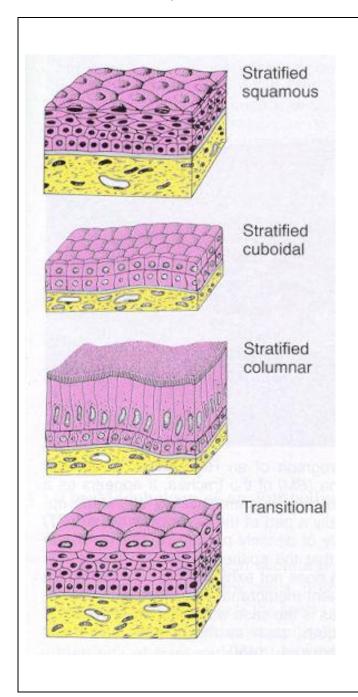


Simple columnar epithelium

Pseudostratified – single layer but nuclei situated at different levels in the cell. All cells are in contact with the basement membrane, but not all cells reach the apical surface. Both conditions create the illusion of several cell layers. (In the respiratory passages – nasal cavity, larynx, trachea, bronchi)

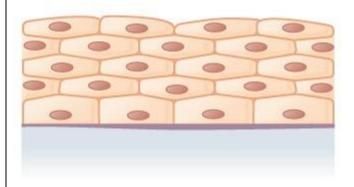
## -STRATIFIED EPITHELIUM: A stratified epithelium consists of

several layers of cells



<u>Stratified squamous</u> – resiting to mechanical influences (press)

non-keratinised (mouth cavity, vocal cords, vagina, anus)
 keratinised (epidermis of the skin) – the cells are released continously from the surface



## Stratified squamous epithelium

<u>Stratified columnar</u> – 2 or more layers of cells, columnar cells form the upper layer

<u>Transitional</u> - stratified, top layer dome or umbrella shaped( urinary bladder). Epithelium change the shape of cells and number of layers according to wall conditions of urinary passages – distansion or contraction.