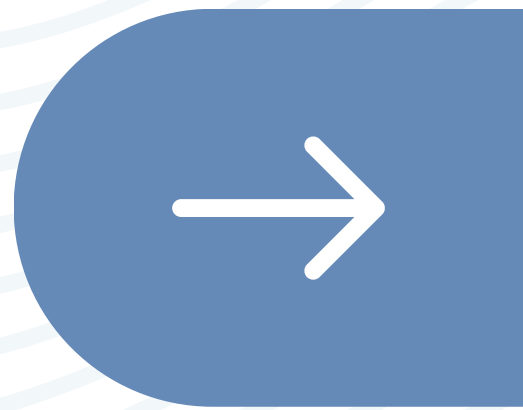


#DIBS BY NEXTILLO

DAILY INFORMATION BULLETIN SERVICE

TYPES OF EPITHELIUM





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DAILY INFORMATION BULLETIN SERVICE

TYPES OF EPITHELIUM

Epithelial tissues are widespread throughout the body. They form the covering of all body surfaces, line body cavities and hollow organs, and are the major tissue in glands. They perform a variety of functions that include protection, secretion, absorption, excretion, filtration, diffusion, and sensory reception. The cells in epithelial tissue are tightly pack.

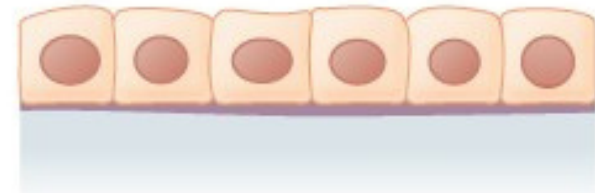


CLASSIFICATION

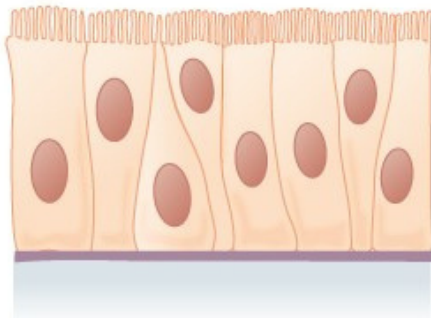
Simple squamous epithelium



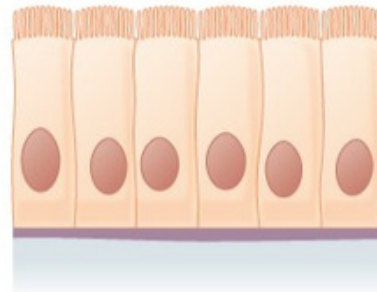
Simple cuboidal epithelium



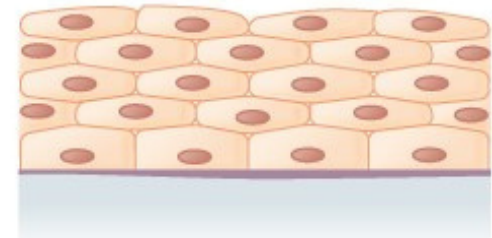
Pseudostratified columnar epithelium



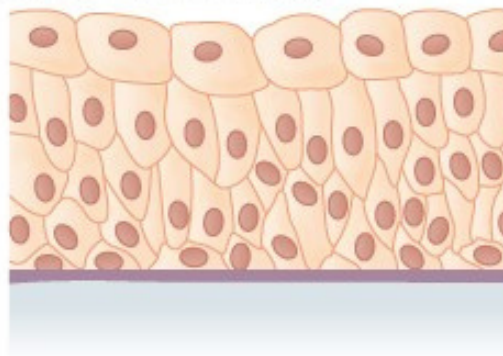
Simple columnar epithelium



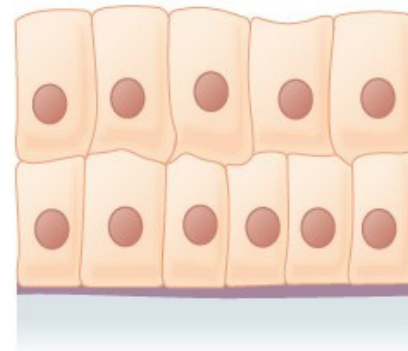
Stratified squamous epithelium



Transitional epithelium



Stratified columnar epithelium





TYPES OF EPITHELIAL CELLS, LOCATIONS AND ITS FUNCTIONS

Simple Squamous Epithelium

- **Location:** *Air sacs of lungs and the lining of the heart, blood vessels and lymphatic vessels.*
- **Function:** *Allows materials to pass through by diffusion and filtration and secretes lubricating substance.*

Simple Cuboidal Epithelium

- **Location:** *In ducts and secretory portions of emalt glands and in kidney tubules.*
- **Function:** *Secretes and absorbs.*



TYPES OF EPITHELIAL CELLS, LOCATIONS AND ITS FUNCTIONS

Simple Columnar Epithelium

- **Location:** *Ciliated tissues are in bronchi, uterine tubules and uterus, smooth(non ciliated tissues) are in digestive tract, bladder.*
- **Function:** *Absorption, it also secretes mucous and enzymes.*

Pseudostratified Columnar Epithelium

- **Location:** *Ciliated tissues lines the trachea and much of the upper respiratory tract.*
- **Function:** *Secretes mucus, ciliated tissue moves mucus.*



TYPES OF EPITHELIAL CELLS, LOCATIONS AND ITS FUNCTIONS

Stratified Squamous Epithelium

- ***Location:*** Lines the esophagus, mouth and vagina.
- ***Function:*** Protects against abrasion.

Stratified Cuboidal Epithelium

- ***Location:*** Sweat glands, salivary glands and mammary glands.
- ***Function:*** Protective tissue.



TYPES OF EPITHELIAL CELLS, LOCATIONS AND ITS FUNCTIONS

Stratified Columnar Epithelium

- ***Location:*** The male urethra and ducts of some glands.
- ***Function:*** Secretes and protects.

Transitional epithelium

- ***Location:*** Lines the bladder, urethra and the ureters.
- ***Function:*** Allows the urinary organs to expand and stretch.



HISTOLOGY AND CYTOCHEMISTRY

- *Epithelial cells have specialized cytoskeletons comprised of microtubules, actin filaments, and intermediate filaments.*
- *Intermediate filaments provide structural resilience to the cytoskeleton.*
- *Glial filaments are in astrocytes, neurofilaments are found in nerves, desmin filaments are found in muscles, vimentin filaments are seen in the mesenchyme, and keratin, which occur in epithelial cells.*
- *Loss of keratin can cause or predispose a person to many diseases.*



MCQ

Question:

Q. Middle 1.5 cm of anal canal is lined by?

- A.) *Keratinized stratified squamous epithelium*
- B.) *Non keratinized stratified squamous epithelium*
- C.) *Columnar epithelium*
- D.) *Pseudocolumnar epithelium*

Ans - B.) Non keratinized stratified squamous epithelium