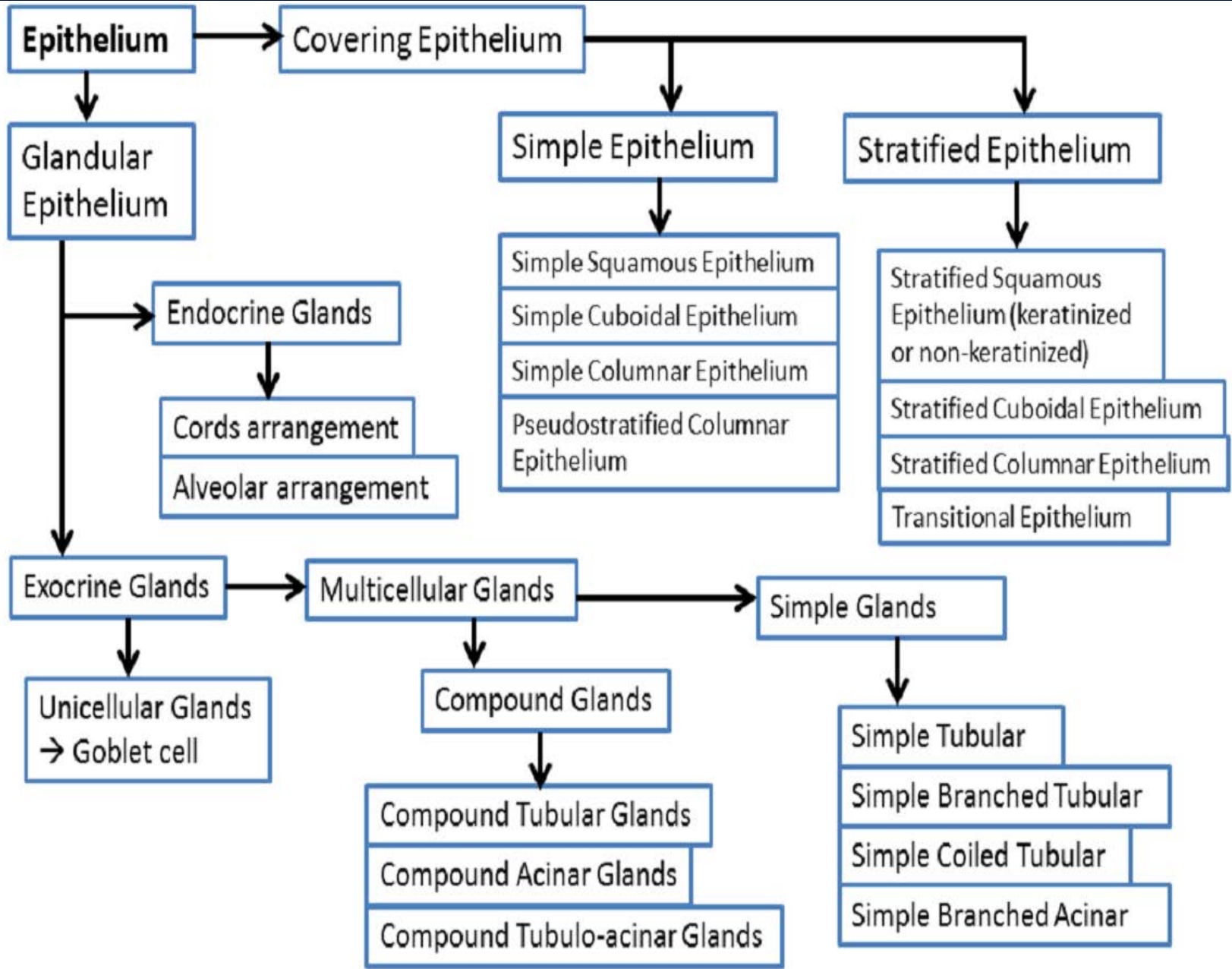


Biology



Glandular epithelium:

- Glands are classified into three major groups on the basis of the method of distribution of their secretory products:
 - exocrine glands
 - endocrine glands
 - mixed glands

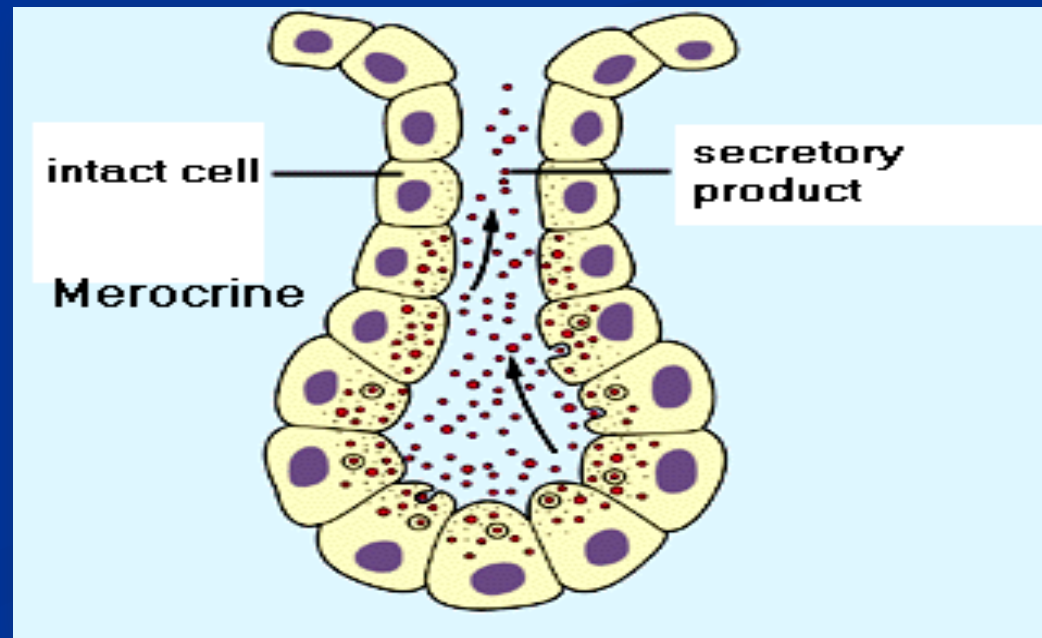
Exocrine glands:

Classification of exocrine glands:

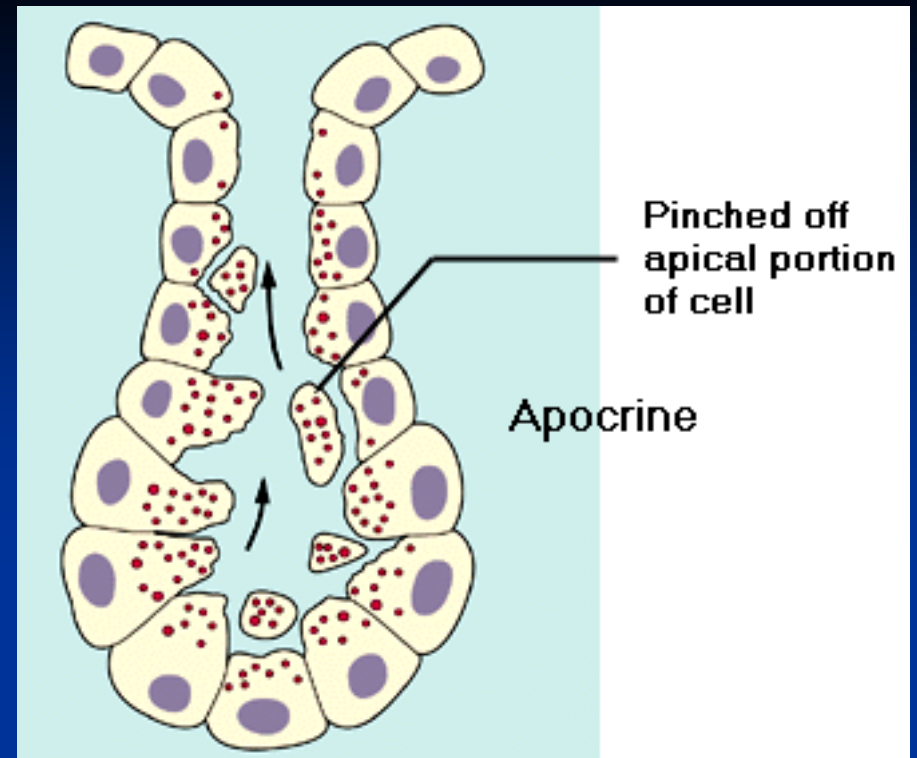
1. Exocrine Glands Classified by Mechanisms of Secretion:

- Exocrine glands classified according to the mode or way in which the secretory products leave the cell into:

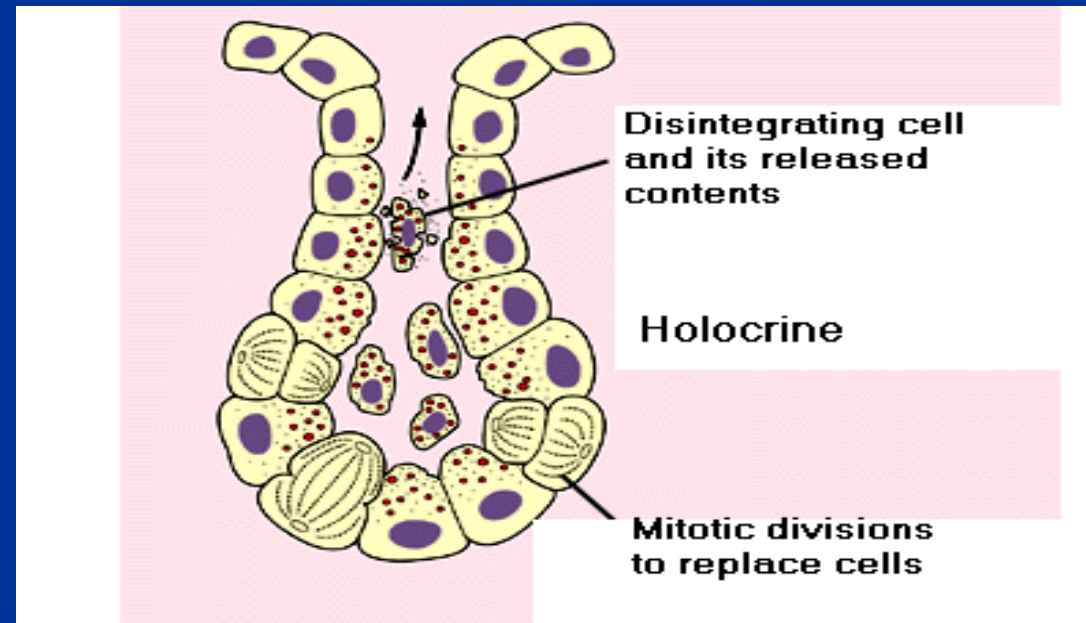
(a) Merocrine (or eccrine) secretion:



(b) Apocrine secretion:



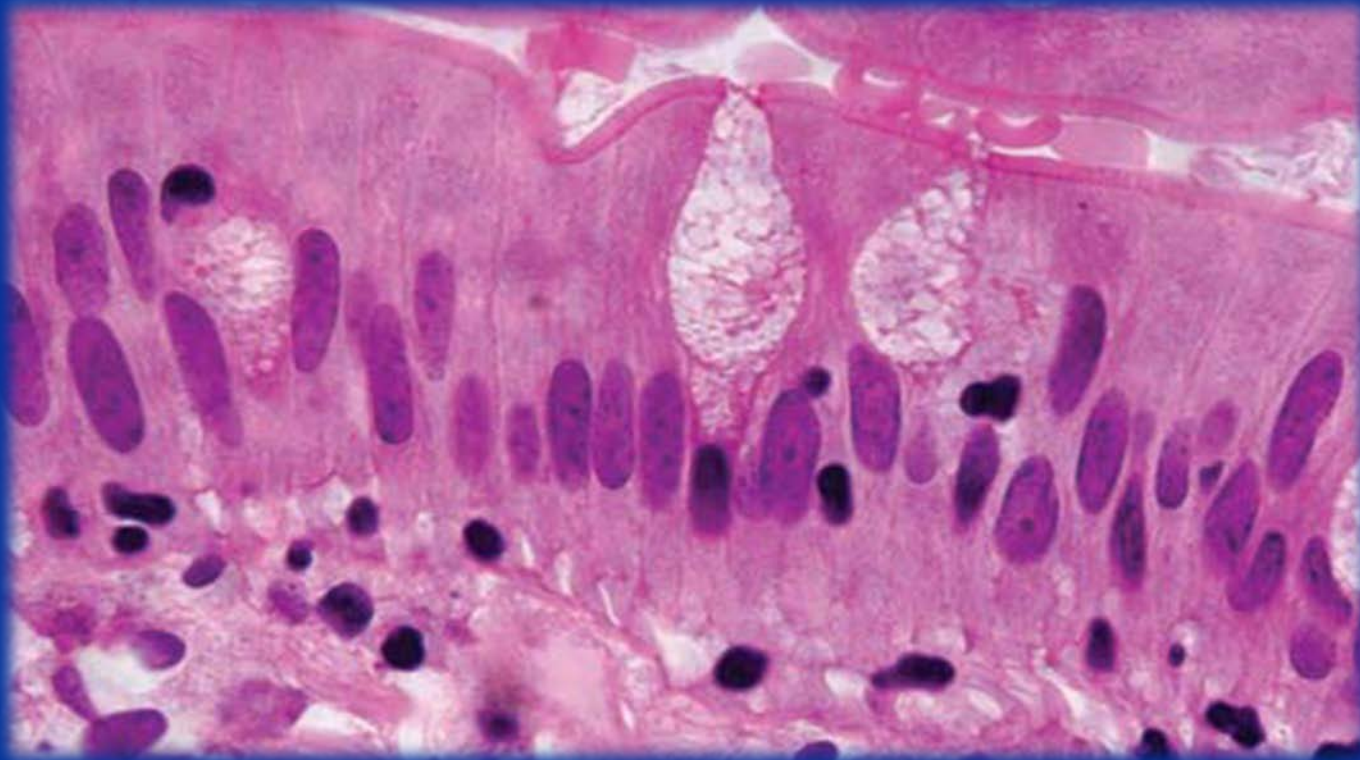
(c) Holocrine secretion:



2. Exocrine Glands Classified by Morphology:

Exocrine glands are classified according to the no. of cells into two groups:
unicellular glands
multicellular glands.

■ Unicellular exocrine glands:



- **Multicellular exocrine glands:**
- Multicellular exocrine glands are classified according to the organization of their duct components into simple or compound glands.

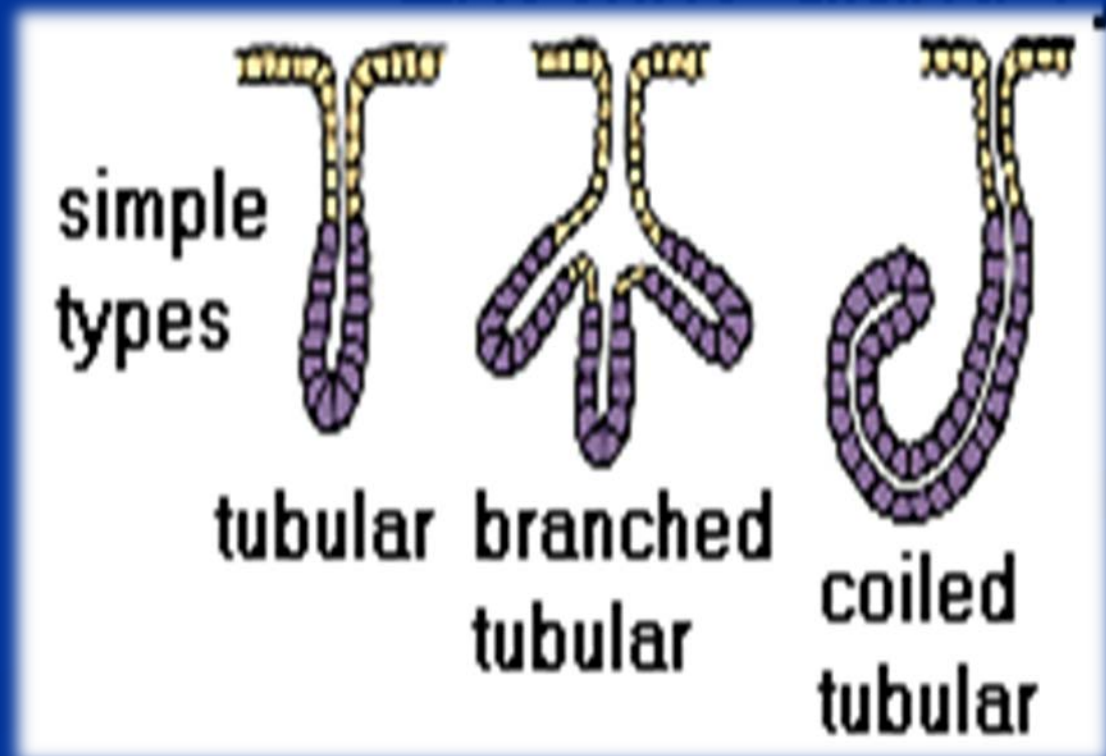
- Multicellular exocrine glands are classified according to the organization of their secretory components into straight and branched and coiled:
- Multicellular exocrine glands are classified according to the shape of secretory units in both simple and compound glands into:
 - tubular
 - alveolar (acinar)
 - tubulo-acinar (alveolar)

1. simple tubular glands:

a. simple straight tubular glands:

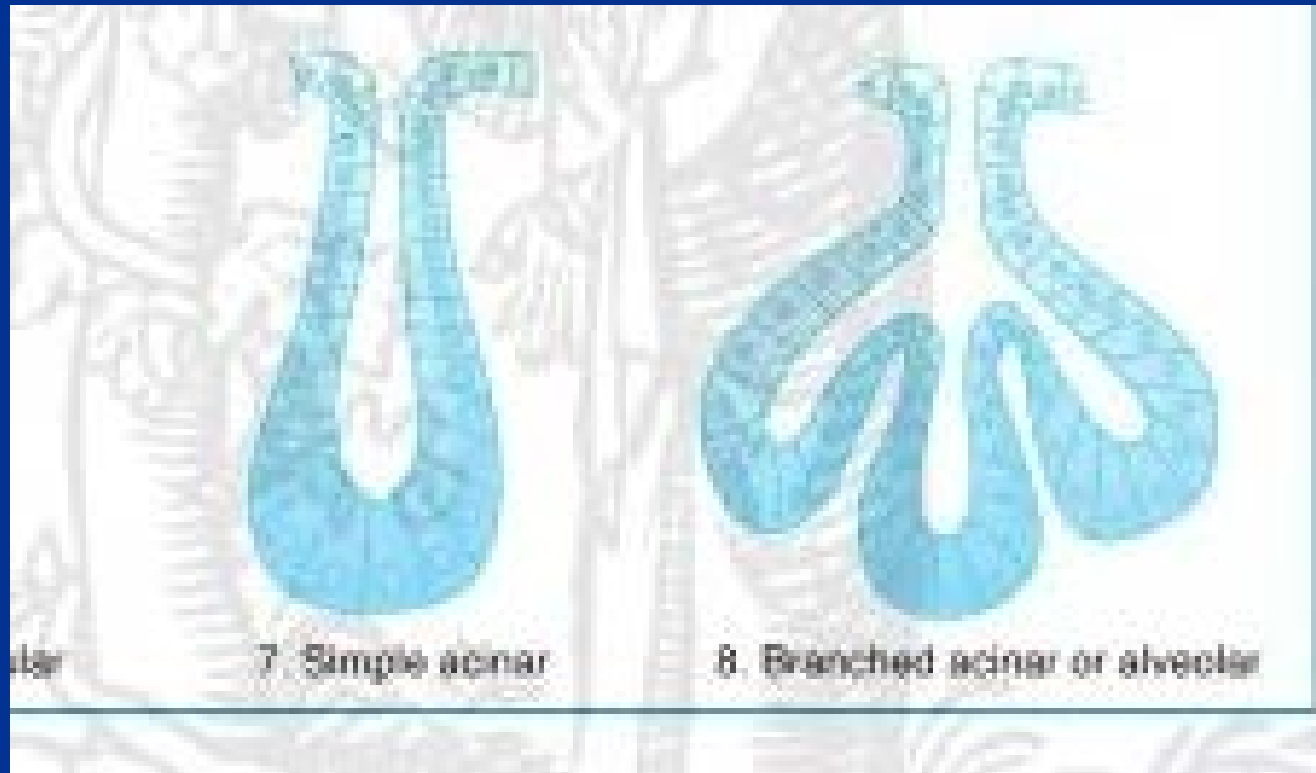
b. simple branched tubular glands:

c. simple coiled tubular glands:



2. simple acinar glands (simple alveolar)

- a. simple straight acinar glands:
- b. simple branched acinar glands:

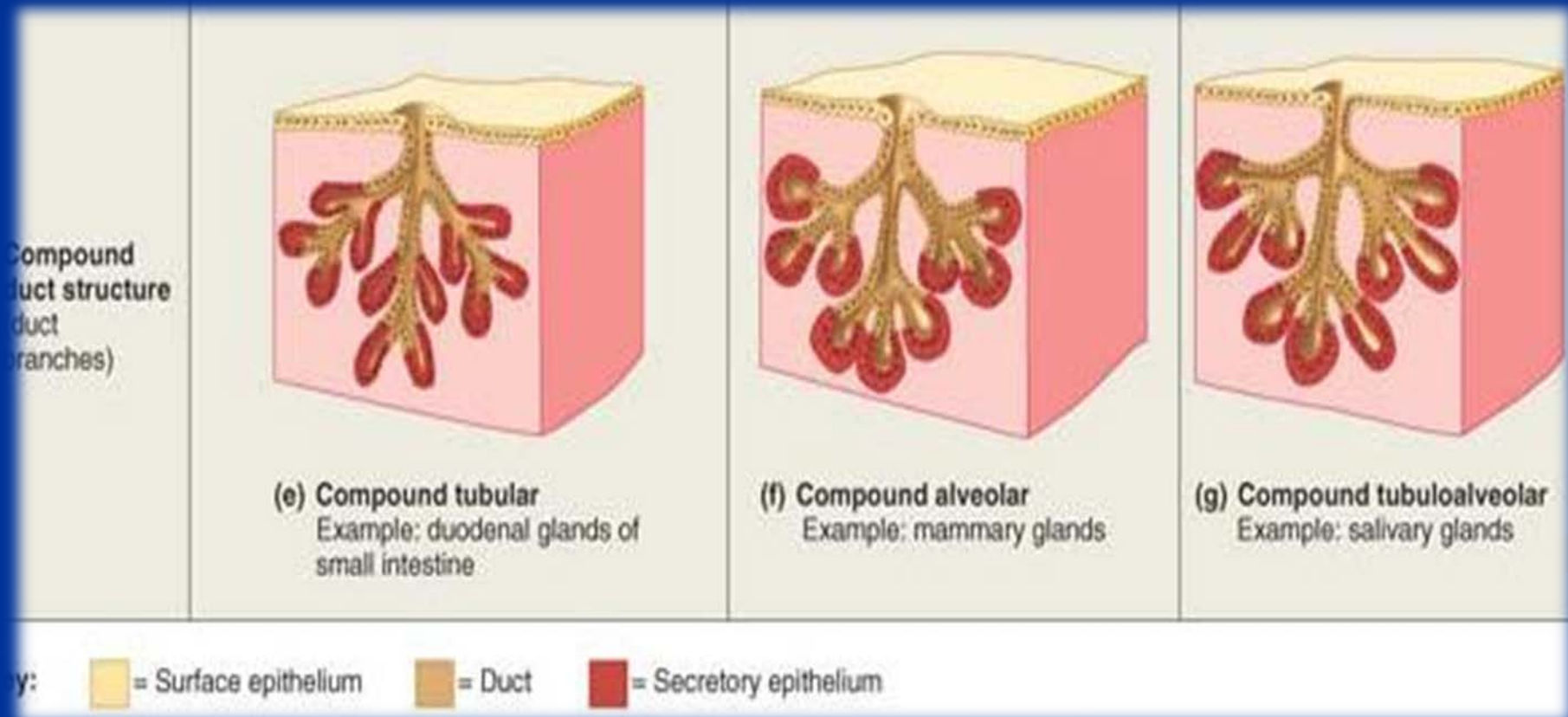


2. compound multicellular exocrine glands:

a. compound tubular glands:

b. compound acinar or alveolar glands:

c. compound tubuloacinar (tubuloalveolar):



Classification of glandular ep. :-

① according to morphology :-

① unicellular

② multicellular :- classified according to the following

① organization of the duct system

① simple

② compound

② organization of the secretory portion

① straight

② branched

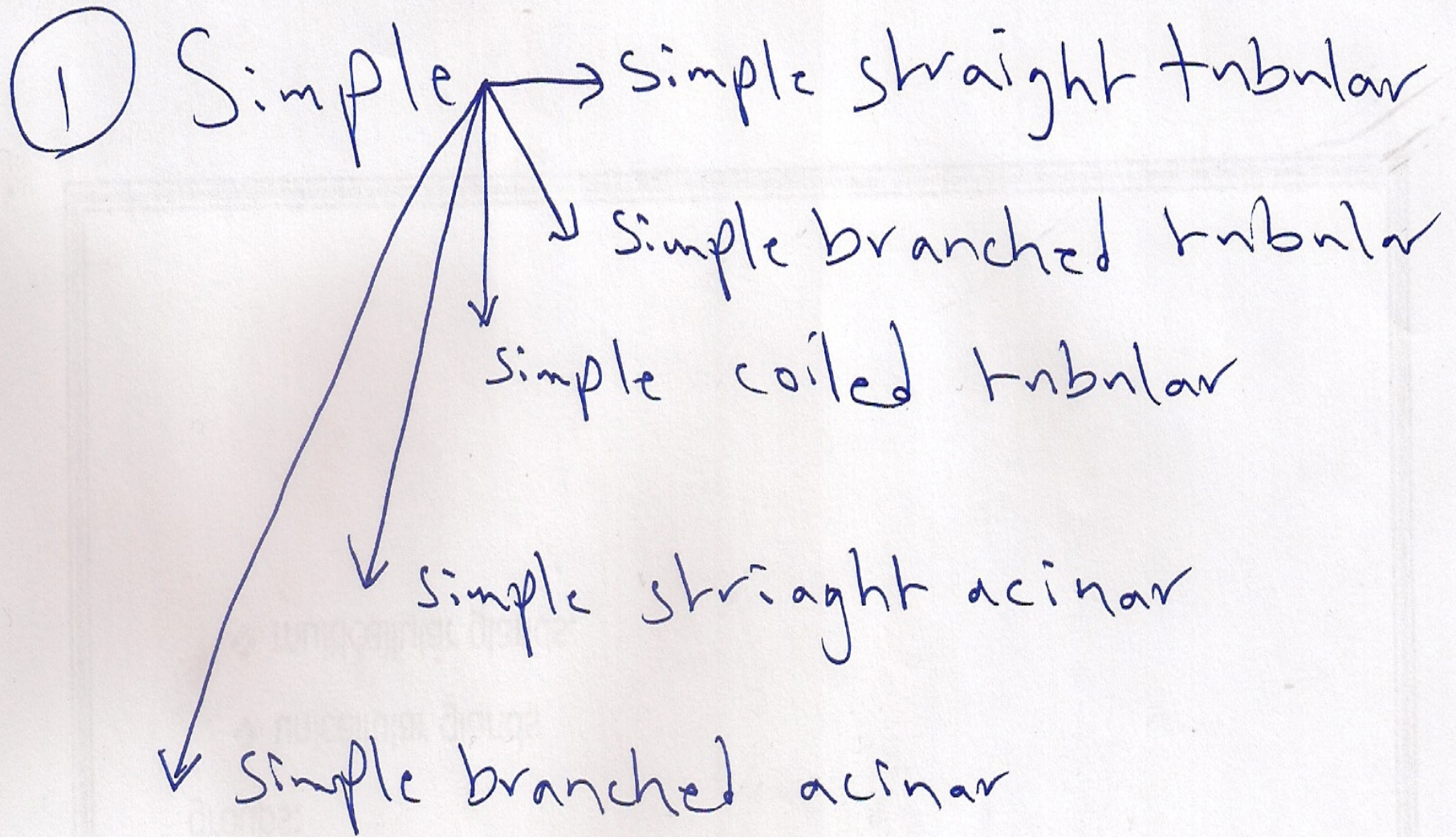
③ coiled

③ shape of the secretory portion

① tubular

② acinar

③ tubulo-acinar



② Compound (only classified according to the shape of secretory part)

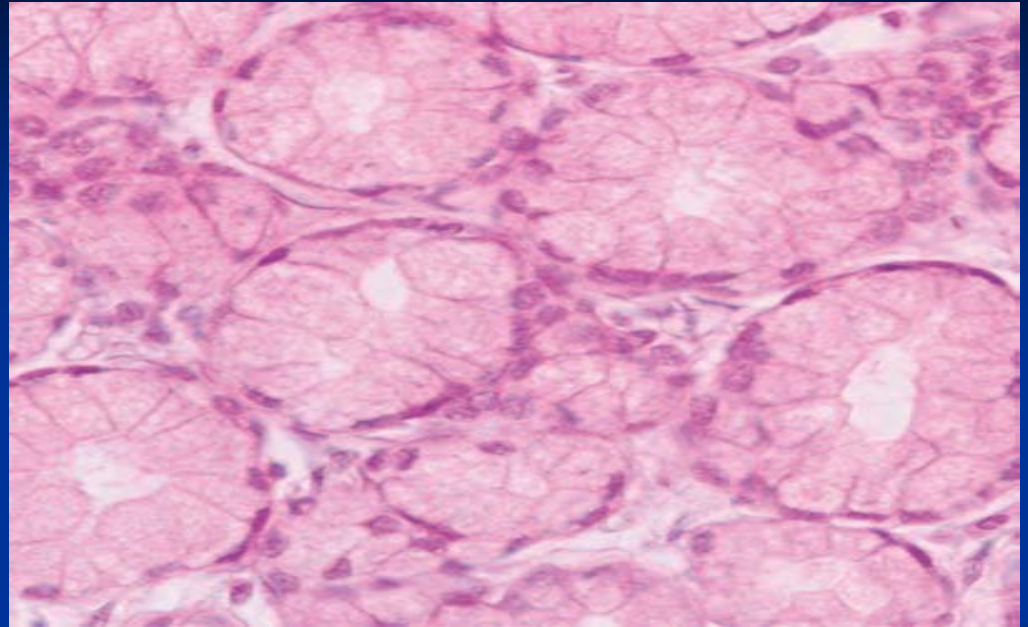
Compound tubular

Compound acinar (alveolar)

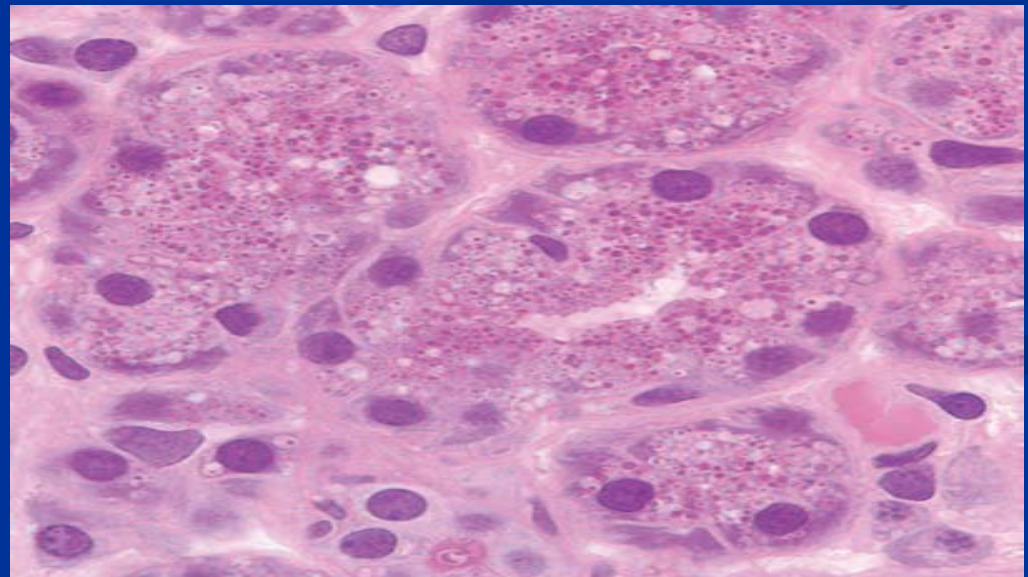
Compound tubulo alveolar
or
(tubulo-acinar)

3. Exocrine Glands Classified by Product:

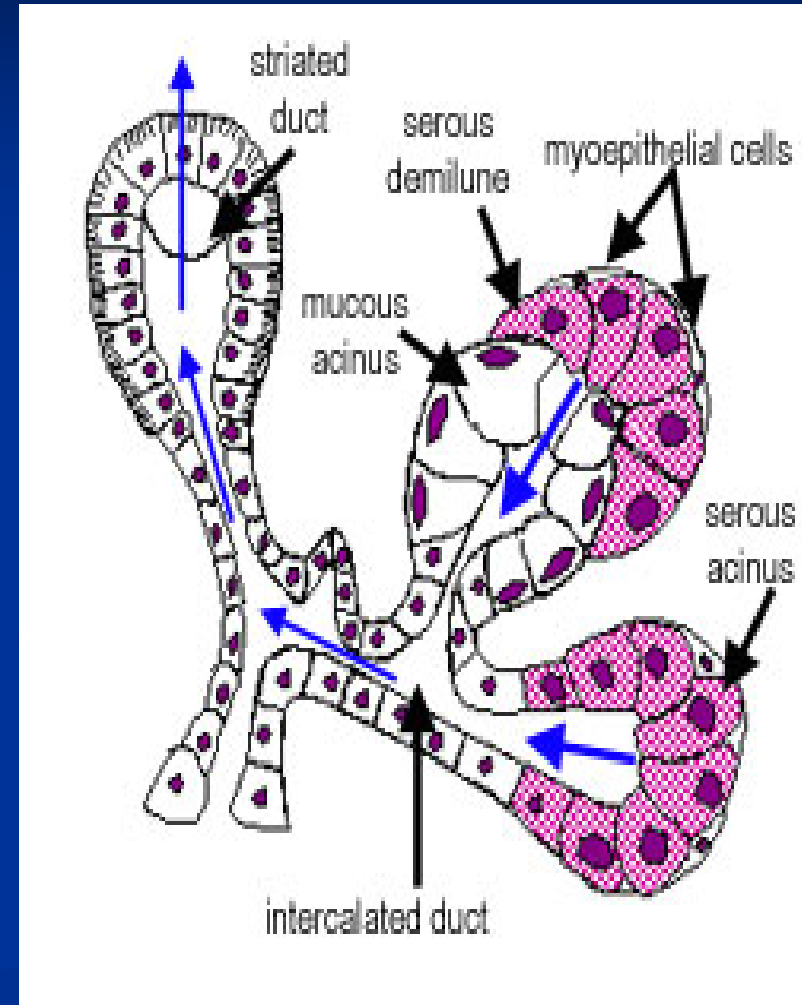
a. Mucous cells:



b. Serous cells:



- 3. Mixed: These glands have both serous and mucous cells.
- The mucous cells ends are capped by serous cells that secrete between the mucous cells' intercellular space. These serous caps on mucous cells are called serous demilunes.
- The mucous cells are surrounded by myoepithelial cells.
- The serous cells are surrounded by myoepithelial cells.
- The serous cells are surrounded by myoepithelial cells.
- The serous cells are surrounded by myoepithelial cells.



Endocrine glands:

- polypeptide (or protein)-secreting cells
- steroid-secreting cells.

**Epithelial cell renewal:
continuously renewing
cell populations.**

stable cell populations

Most of the cancers of the body are the result of uncontrolled proliferation of epithelial cells.

THANK YOU