

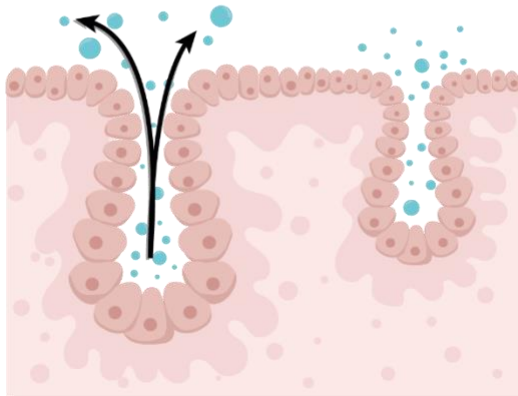
TOPIC: GLANDULAR EPITHELIAL TISSUE

- **Glandular Epithelial Tissue:** epithelial tissue that forms _____.
 - **Recall: Gland:** a cell or group of cells that _____ a product (e.g., sweat, bile, or hormones).
- Glands can be categorized into _____ major groups: 1) *Exocrine* Glands & 2) *Endocrine* Glands.

Exocrine Gland

Secretions **exit** into body surface or cavity.

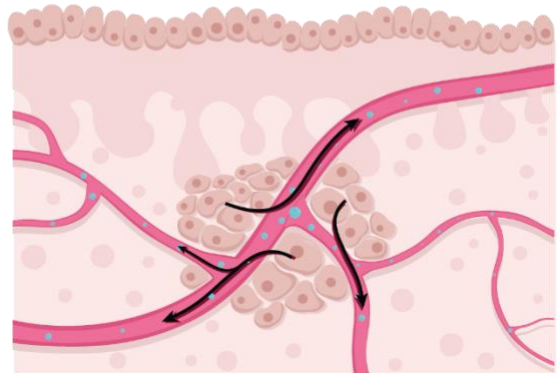
- Multicellular glands use _____
- E.g: Secretes mucus, sweat, oil, and milk



Endocrine Gland

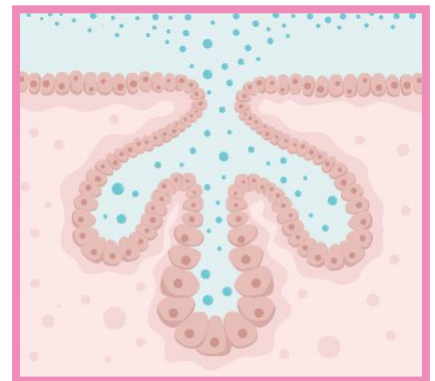
Secretions **enter** into _____

- Do NOT use ducts
- Secretes hormones (chemical messengers) that can affect distant organs



EXAMPLE: The gland at the right releases product. Use evidence from the image to determine if the structure is an endocrine or exocrine gland.

- a) Endocrine.
- b) Exocrine.



PRACTICE: A mother breastfeeding her infant is utilizing what type of gland for that process?

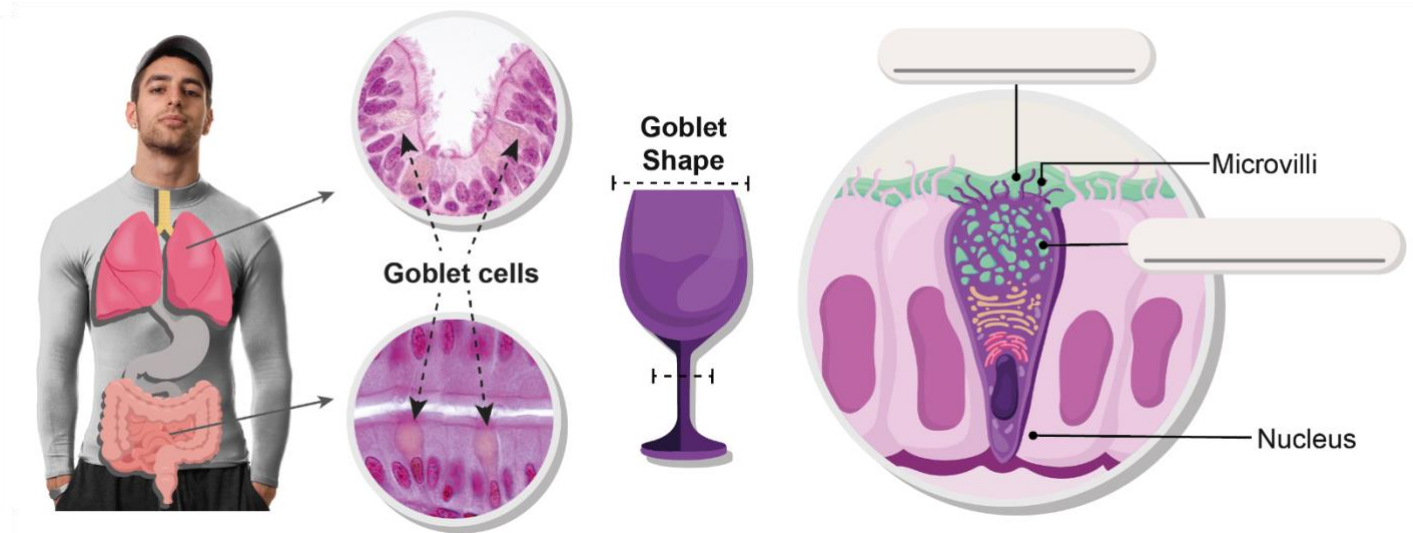
- a) Paracrine.
- b) Endocrine.
- c) Exocrine.
- d) Stratified.

TOPIC: GLANDULAR EPITHELIAL TISSUE

Unicellular Exocrine Glands – Goblet Cells

- **Unicellular Exocrine Gland:** single-celled exocrine gland.
- _____ **Cells:** most common unicellular exocrine gland; named because it's shape resembles a goblet.
 - Found in _____ & intestinal tracts.
 - Secretes vesicles filled with _____ (a glycoprotein that forms *mucus*) via exocytosis.

EXAMPLE: Label the missing words on the diagram of the goblet cell below.



PRACTICE: Which of the following is a primary function of goblet cells?

- a) Lubricating and protecting the epithelium.
- b) Secreting mucus.
- c) Producing hormones.
- d) Absorbing wastes.

PRACTICE: If you had many more goblet cells than you're supposed to, which symptom are you most likely to experience?

- a) A dry throat.
- a) Low hormone levels.
- b) Difficulty breathing.
- c) High blood pressure.

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Multicellular Exocrine Glands: Mode of Secretion

● **Multicellular Exocrine Gland:** composed of *multiple* cells; structurally more complex than unicellular glands.

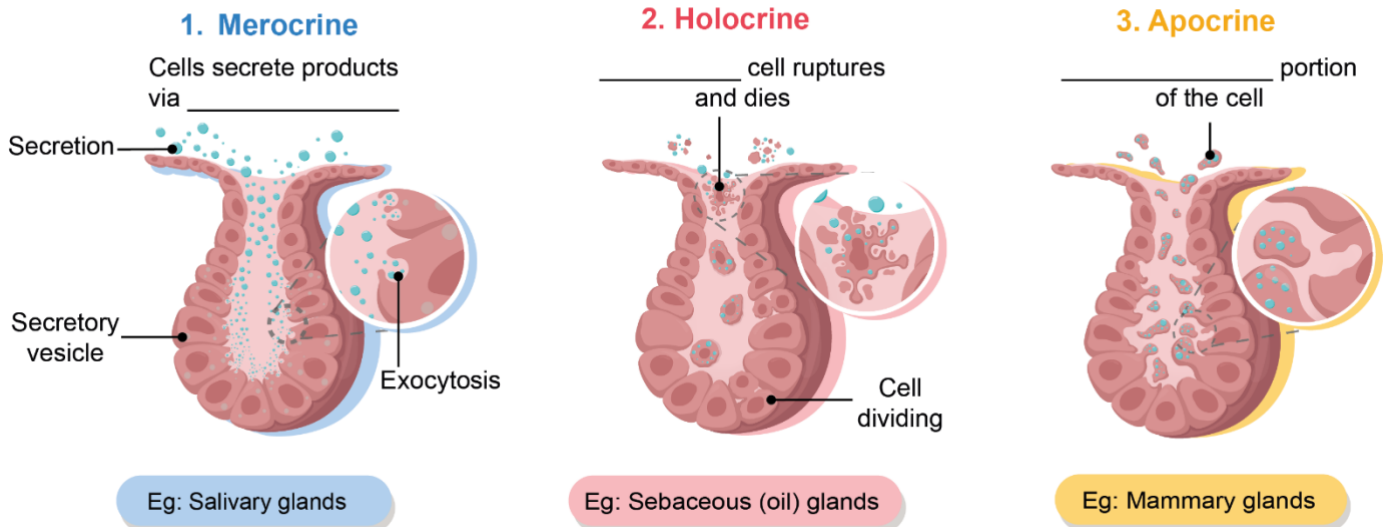
■ Can be grouped into _____ types based on their *modes of secretion*:

1. **Merocrine (Eccrine):** merely uses _____ to secrete products (*most common*).

2. **Holocrine:** **whole** cell _____ & _____ to secrete products (holo = **whole**).

3. **Apocrine:** _____ portion of the cell sheds off to secrete products, but cell doesn't die.

Multicellular Exocrine Glands: Modes of Secretion



PRACTICE: Which type of multicellular gland needs to be completely regenerated each time it secretes product?

- a) Merocrine.
- b) Apocrine.
- c) Holocrine.
- d) None of these.

PRACTICE: Which type of gland doesn't need to be repaired at all after secretion?

- a) Merocrine.
- b) Apocrine.
- c) Holocrine.
- d) None of these.

PRACTICE: Which type of secretion is most consistent with how goblet cells secrete?

- a) Merocrine.
- b) Apocrine.
- c) Holocrine.
- d) None of these.