

Endocrine Histology

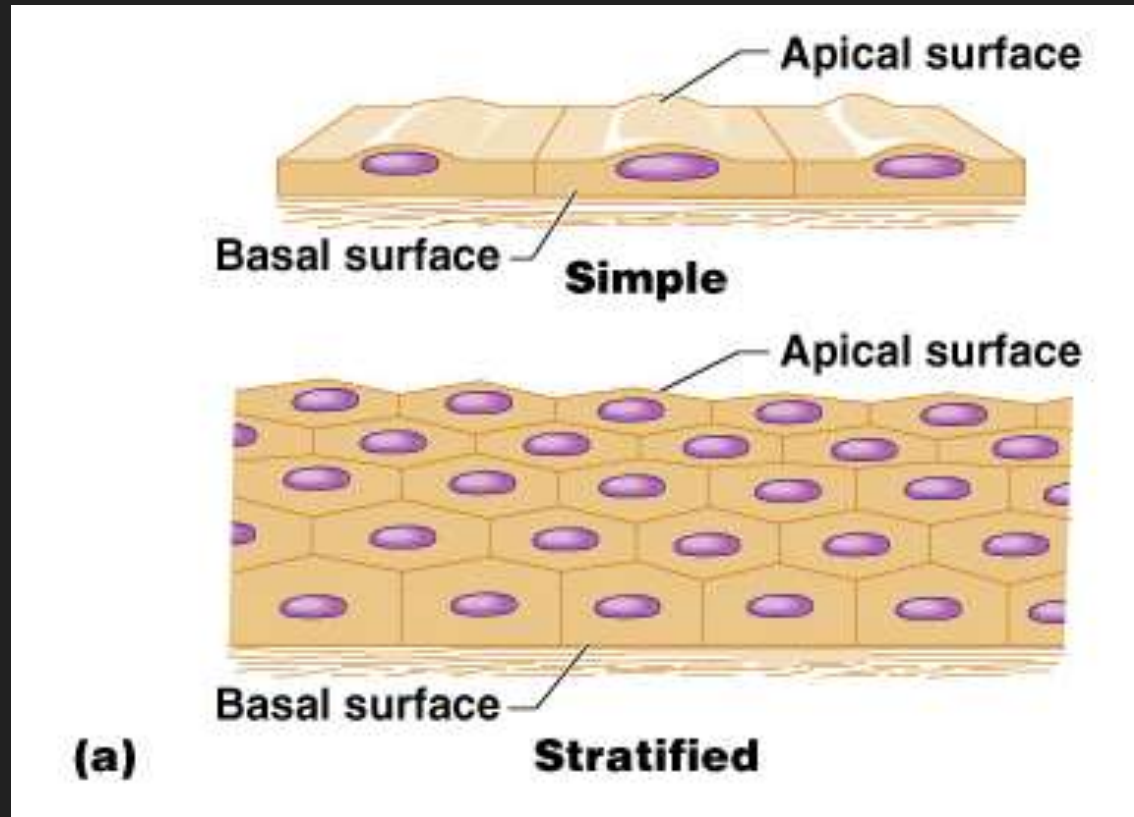
EQ: Compare and contrast the different types of tissues found in the endocrine system.

Epithelial Tissues

- Found in different areas
 - Body coverings
 - Body linings
 - Glandular tissue: Glands in the body
- Functions
 - Protection
 - Absorption
 - Filtration
 - Secretion

Classification of Epithelium

- Number of cell layers
 - Simple – one layer
 - Stratified – more than one layer



Classification of Epithelium

○ Shape of cells

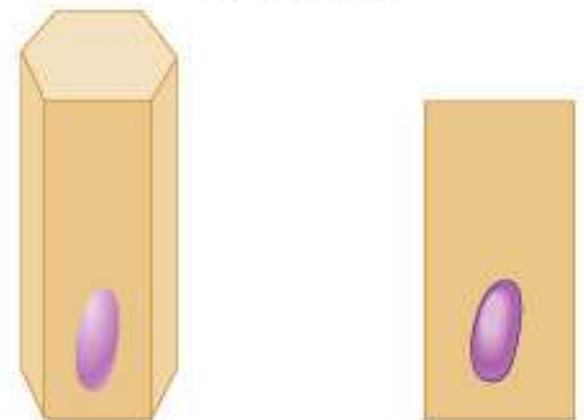
- Squamous – flattened
- Cuboidal – cube-shaped
- Columnar – column-like



Squamous



Cuboidal

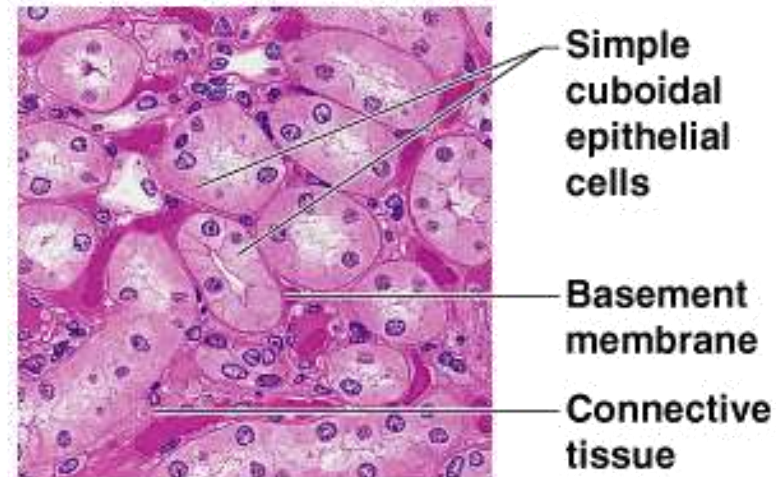
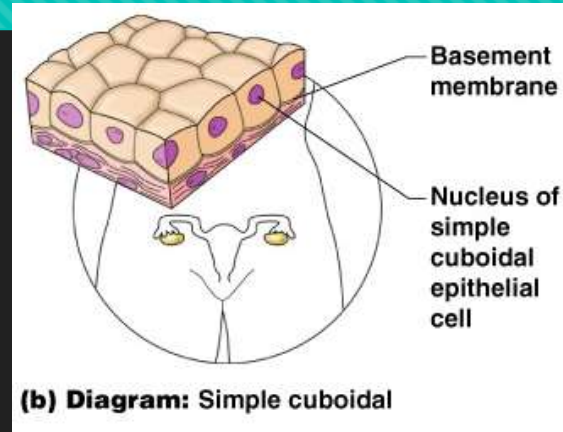


(b)

Columnar

Simple Epithelium

- Simple cuboidal
 - Single layer of cube-like cells
 - Common in glands and their ducts
 - Forms walls of kidney tubules



Photomicrograph: Simple cuboidal epithelium in kidney tubules (400x).

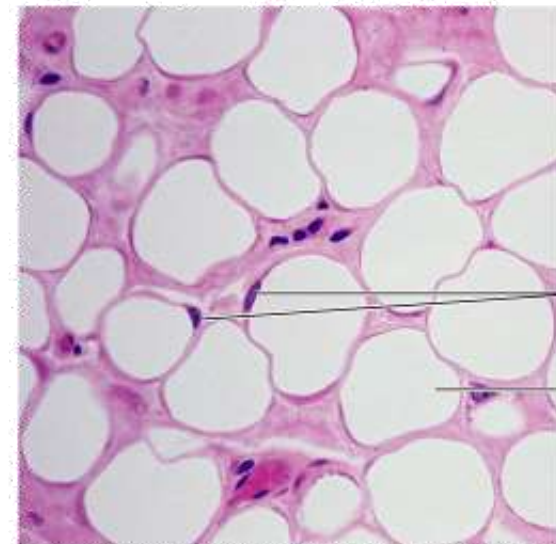
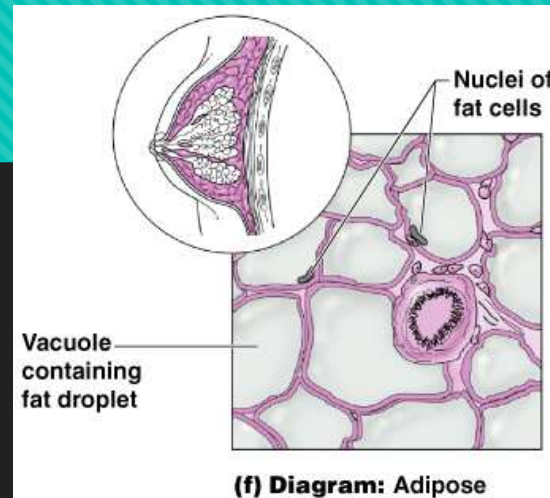
Connective Tissue

- Found everywhere in the body
- Includes the most abundant and widely distributed tissues
- Functions
 - Binds body tissues together
 - Supports the body
 - Provides protection

Connective Tissue Types

○ Adipose tissue

- Matrix is an areolar tissue in which fat globules predominate
- Many cells contain large lipid deposits
- Functions
 - Insulates the body
 - Protects some organs
 - Serves as a site of fuel storage



Photomicrograph: Adipose tissue from the subcutaneous layer beneath the skin (600x).