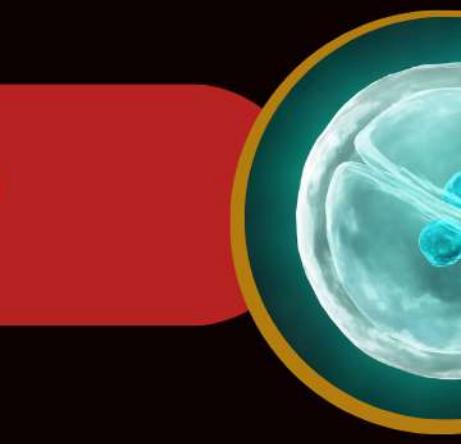
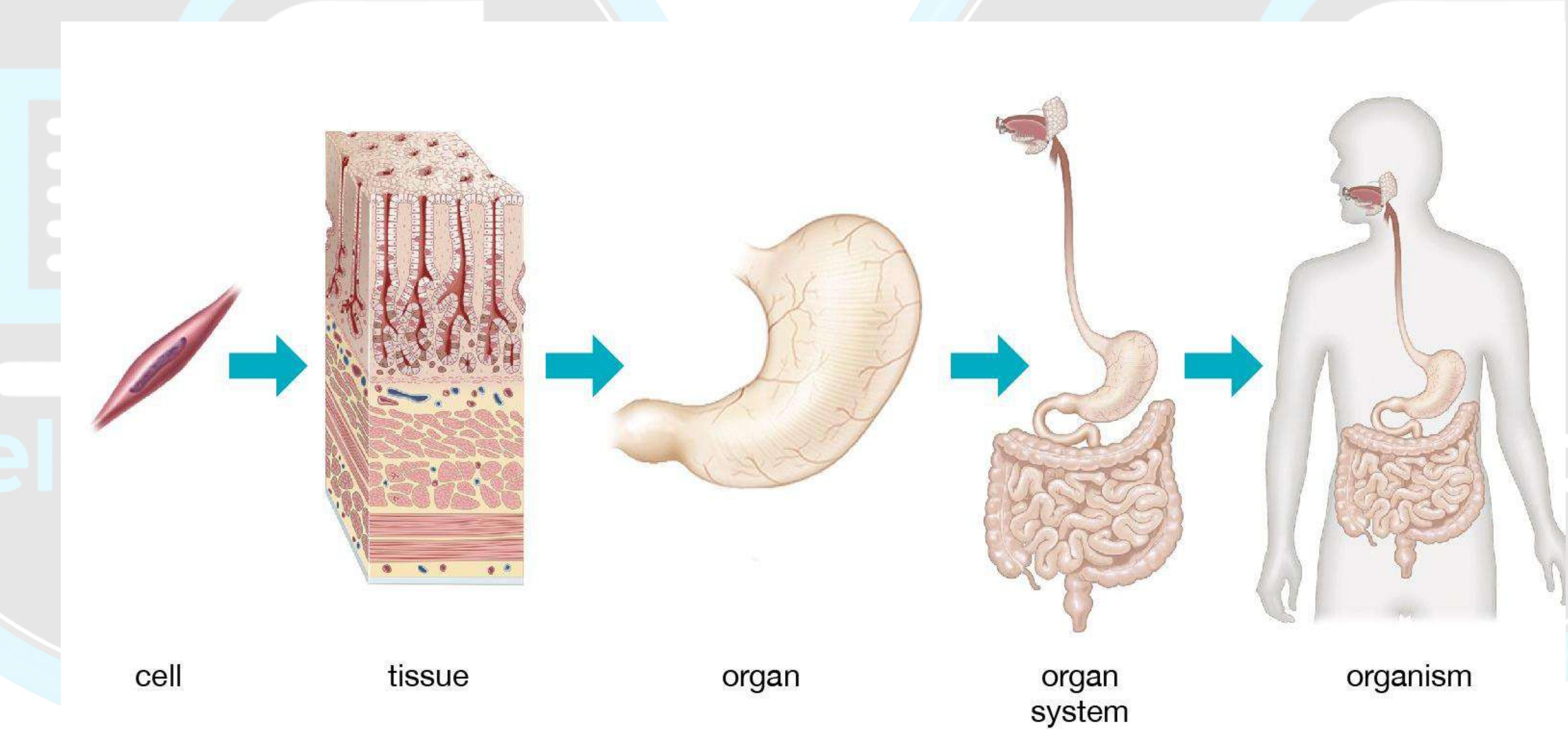


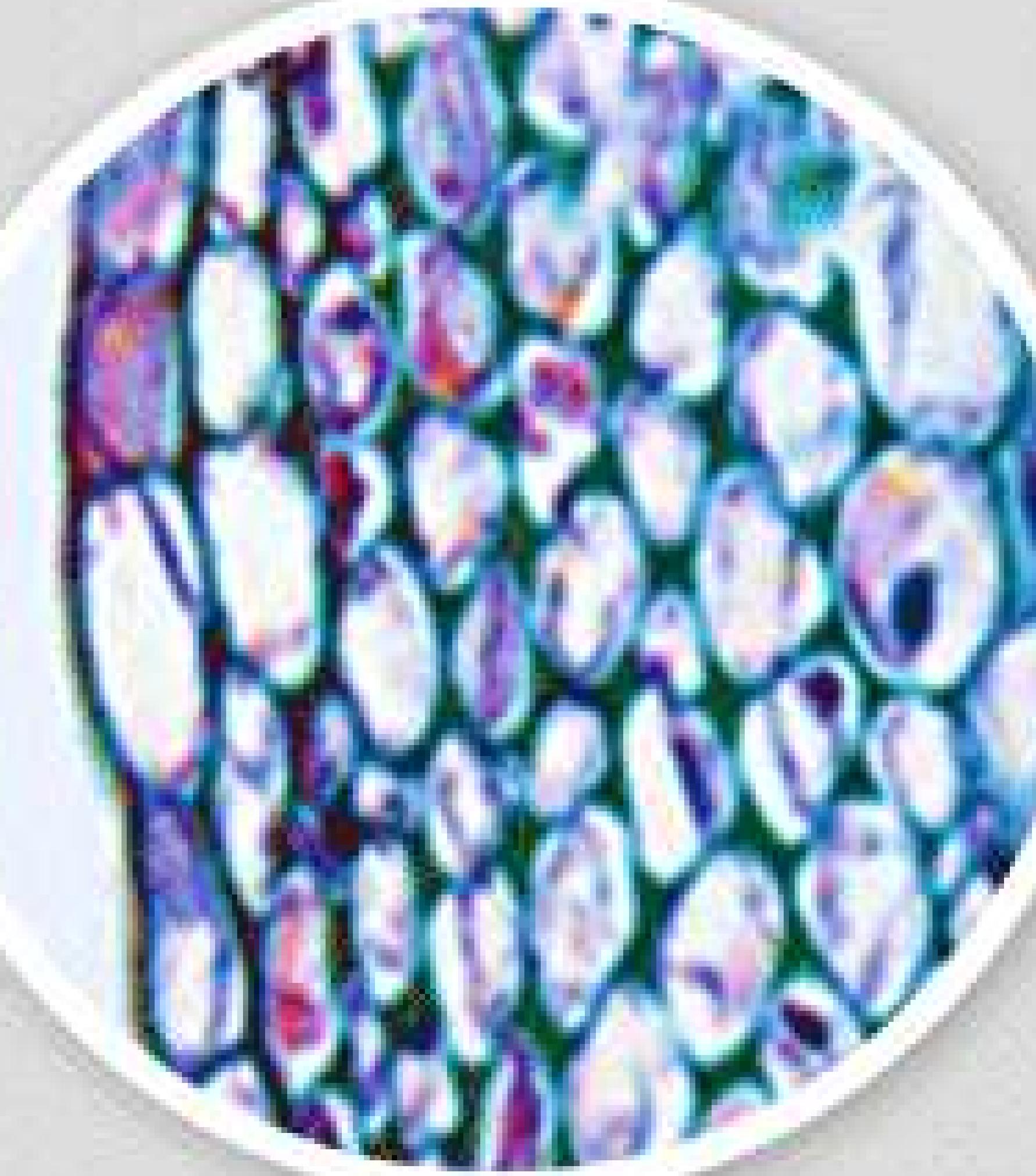
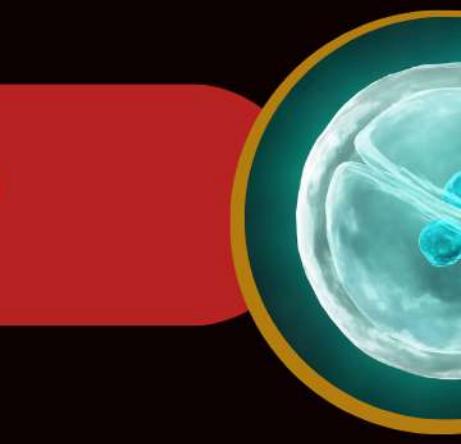
Tissue (բան)



- समान उत्पत्ति तथा समान कार्यों को सम्पादित करने वाली **कोटिकाओं** के समूह को **ऊतक (Tissues)** कहते हैं। A group of cells

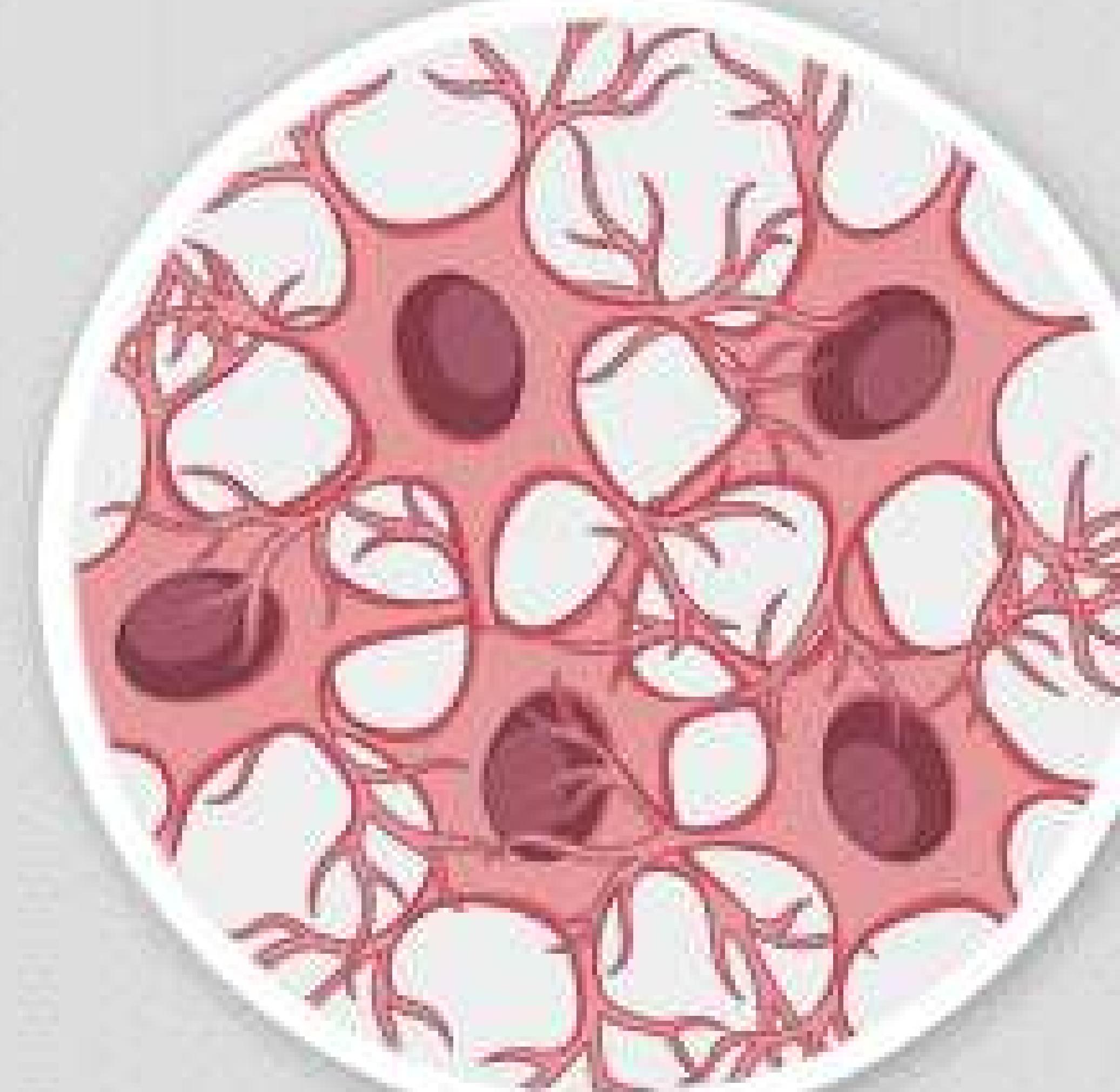
Having Similar Origin And Performing Similar Functions Are Called **Tissues**.



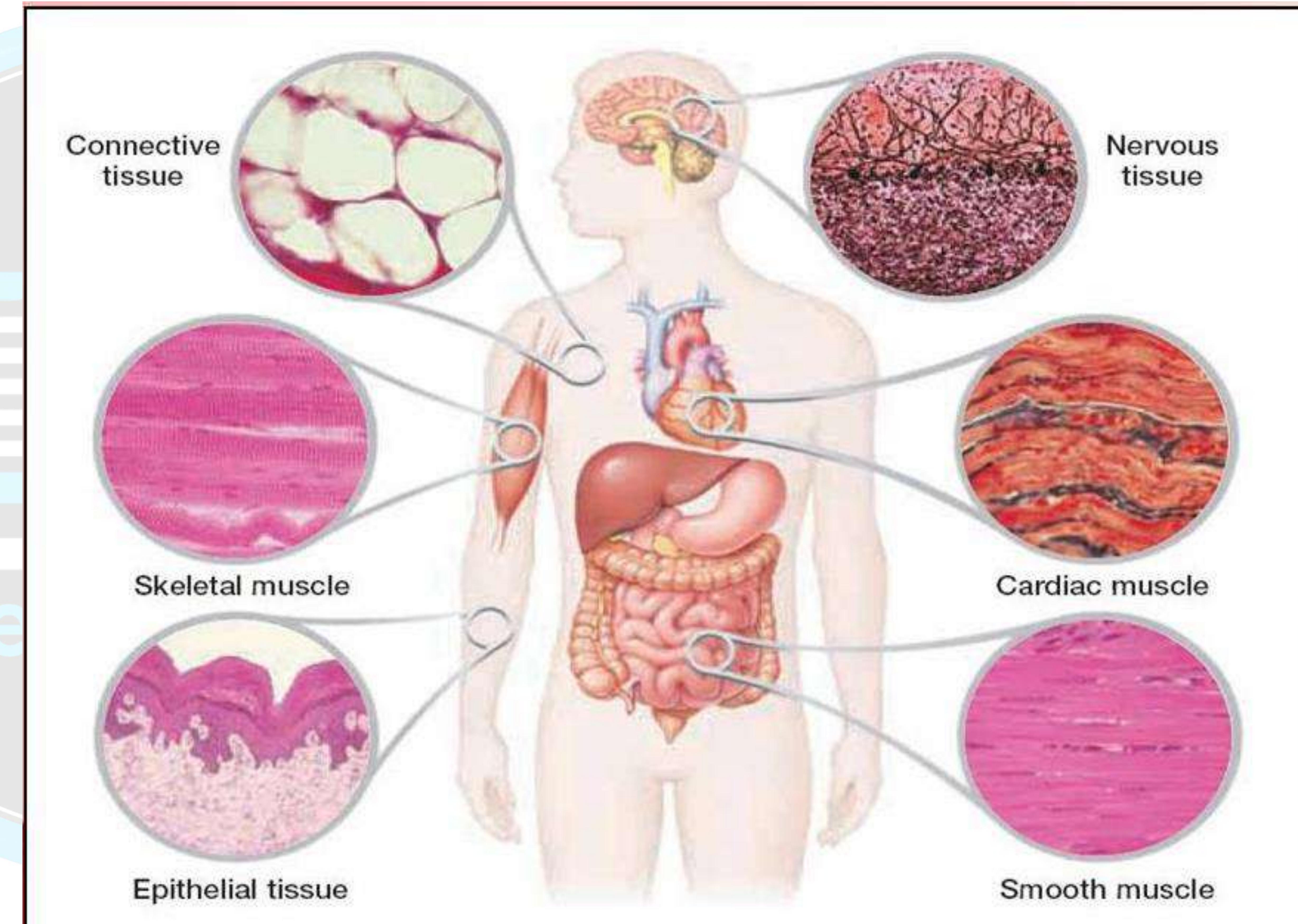
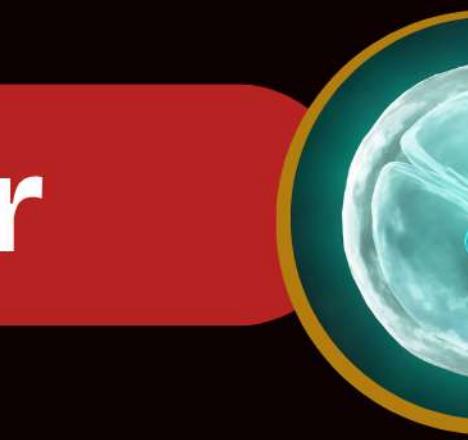


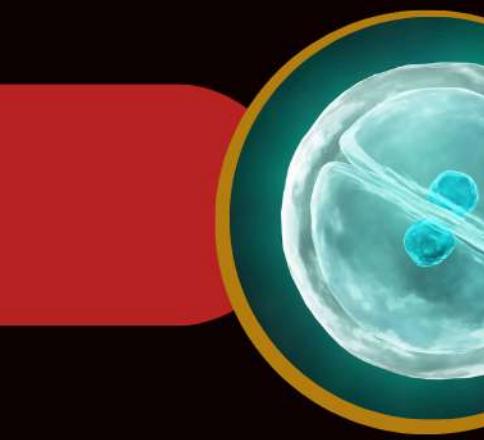
PLANT TISSUES

VS



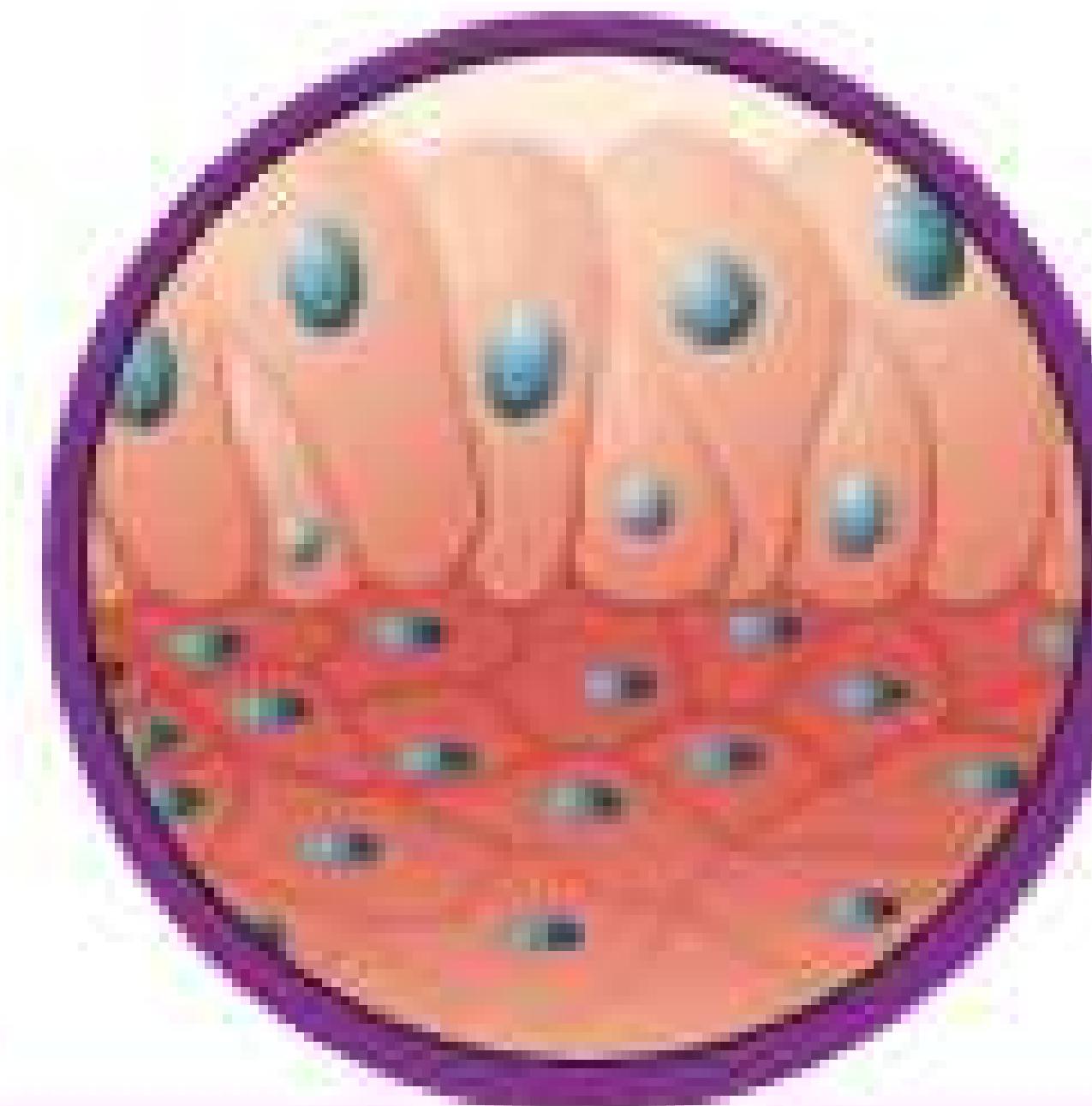
ANIMAL TISSUES





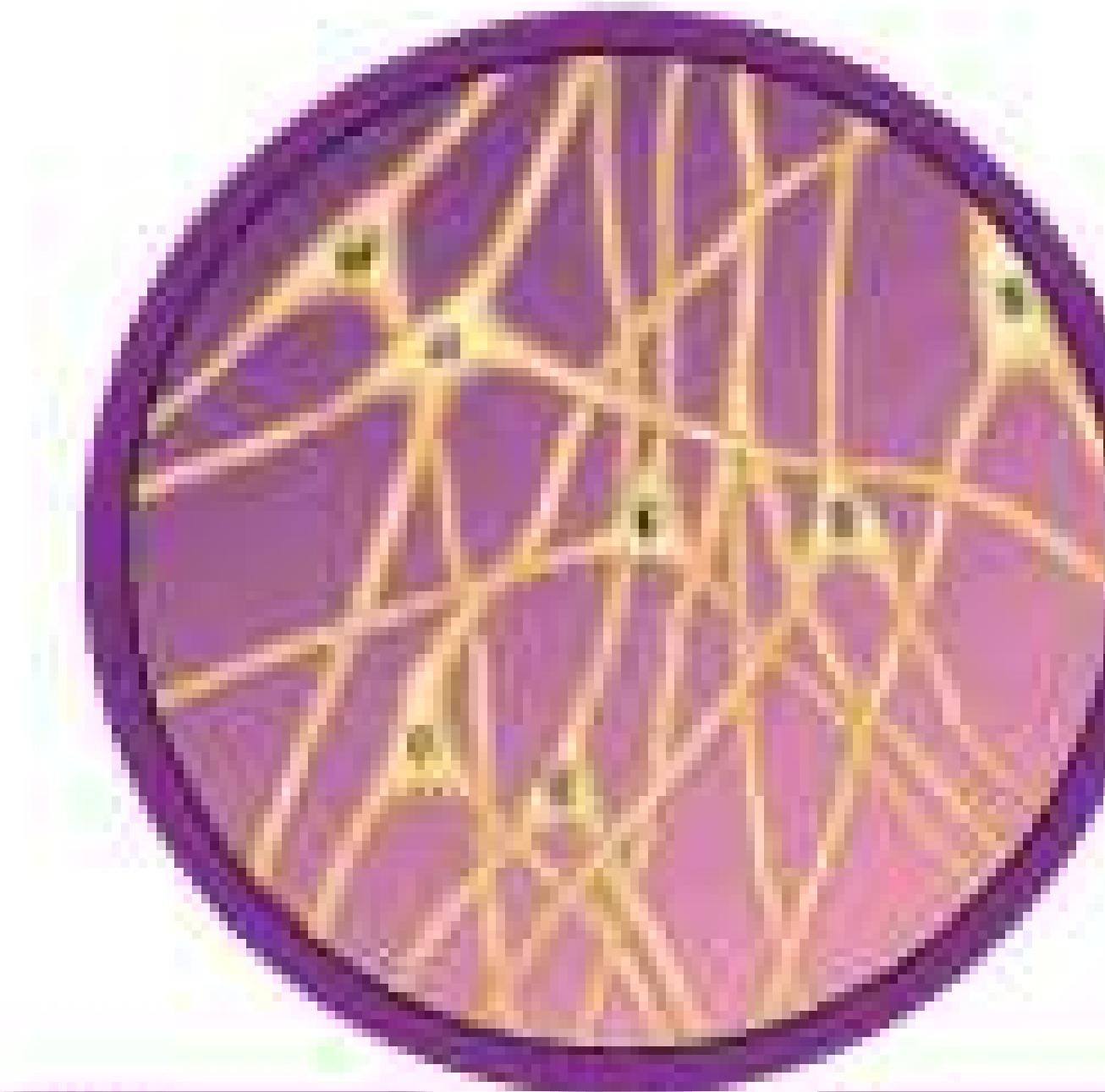
Animal Tissue (जंतु ऊतक)

Epithelial Tissue
(उपकला ऊतक)



Epithelial tissue

Nervous Tissue
(तंत्रिका ऊतक)



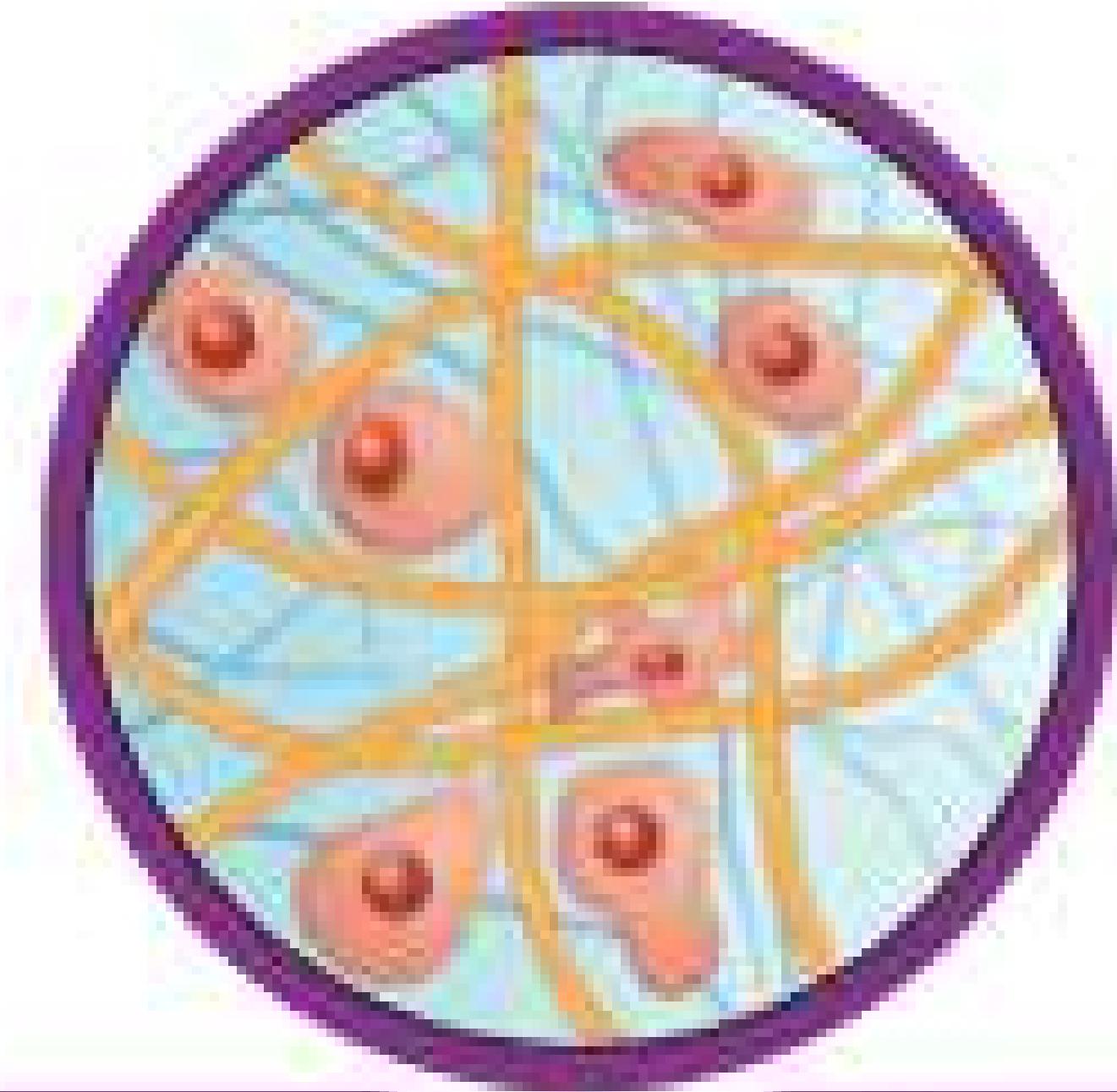
Nervous tissue

Muscular Tissue
(मांसपेशी ऊतक)

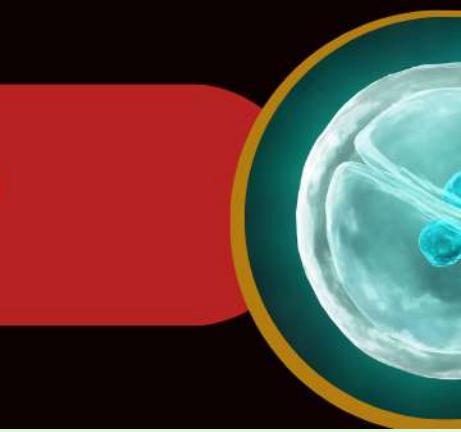


Muscle tissue

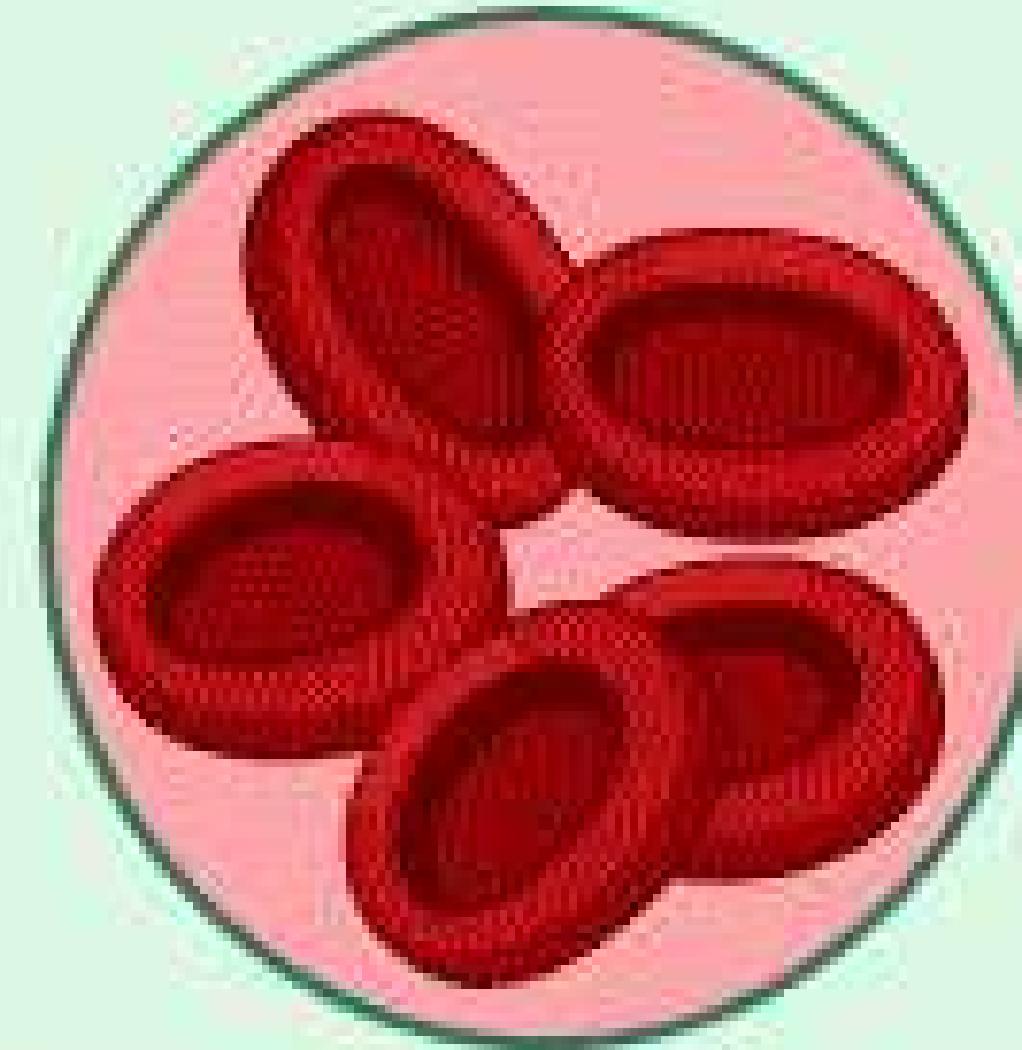
Connective Tissue
(संयोजी ऊतक)



Connective tissue



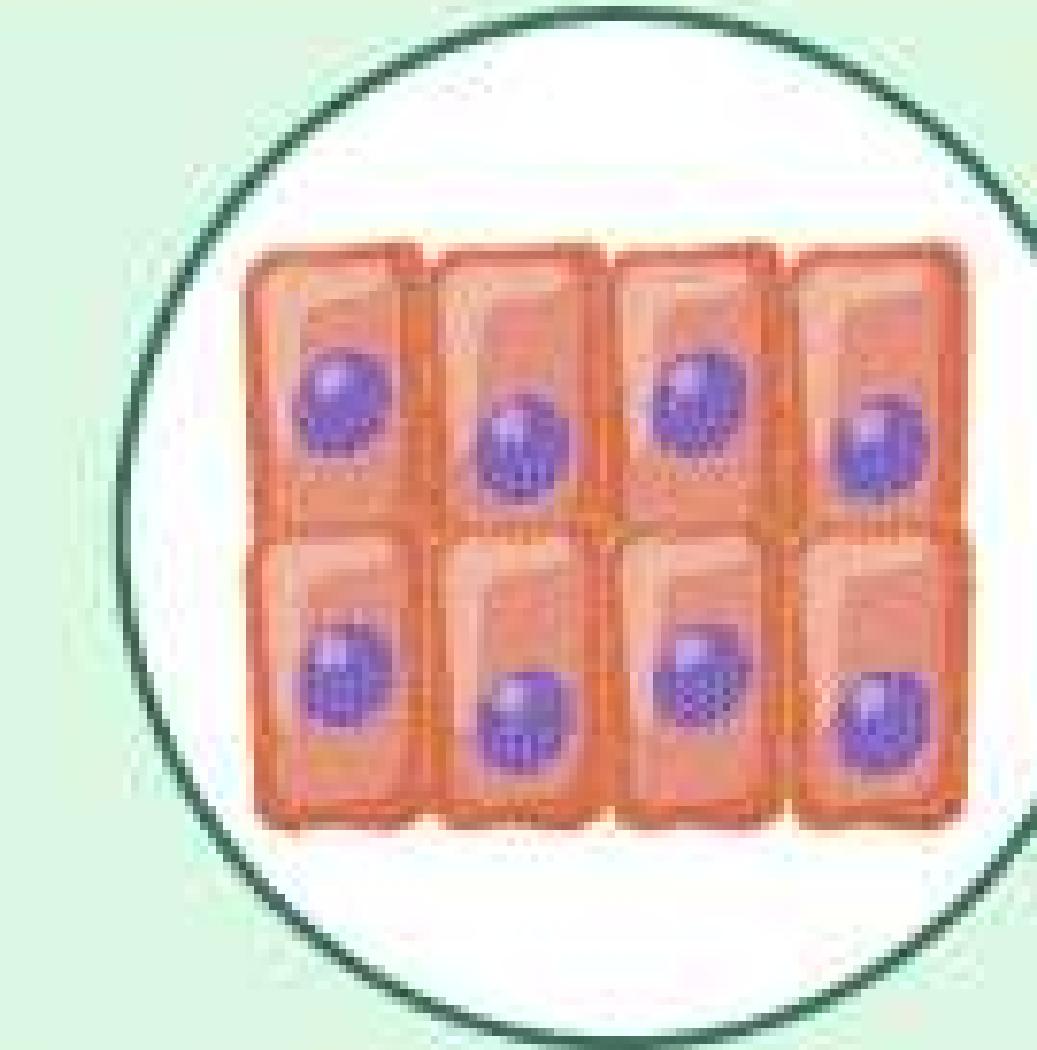
Types of Animal Tissue



Blood



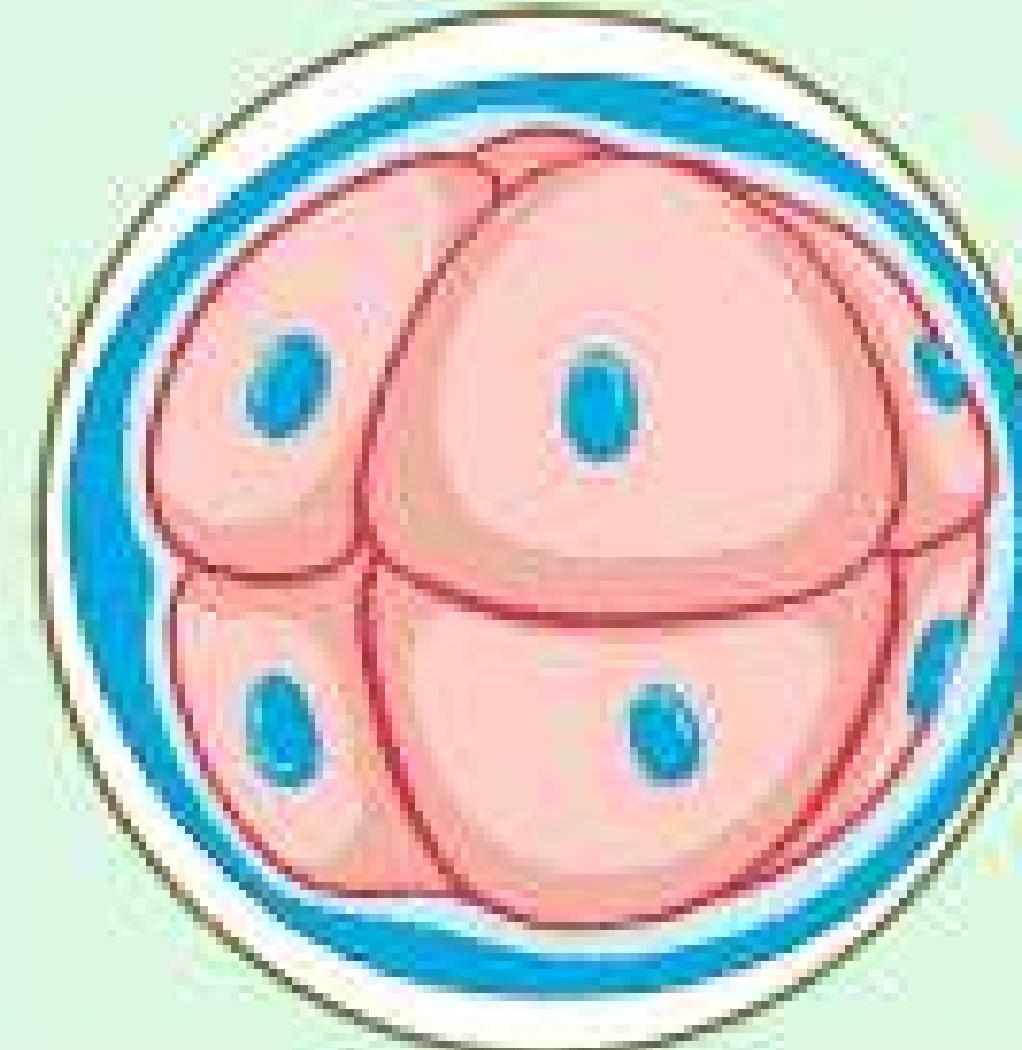
Bone Tissue



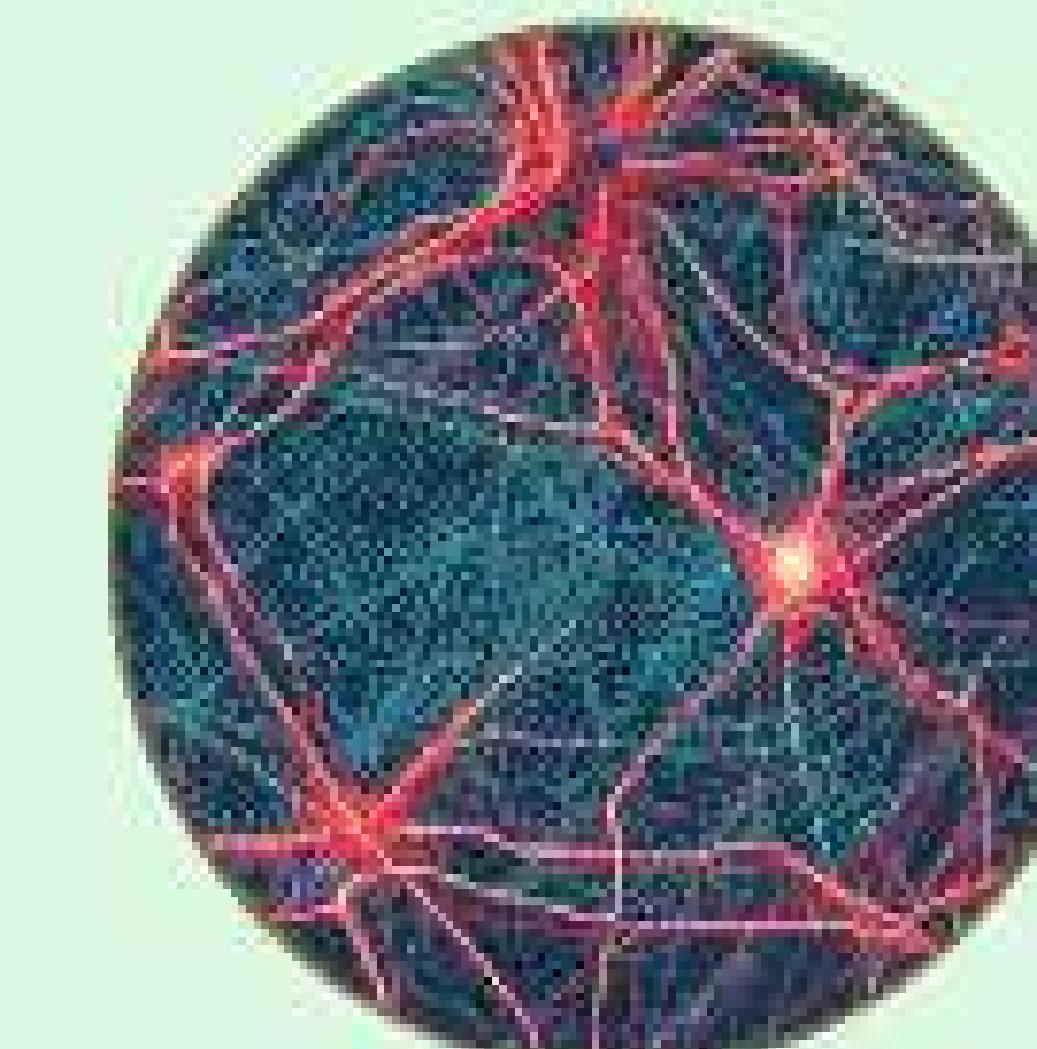
Epithelial Tissue



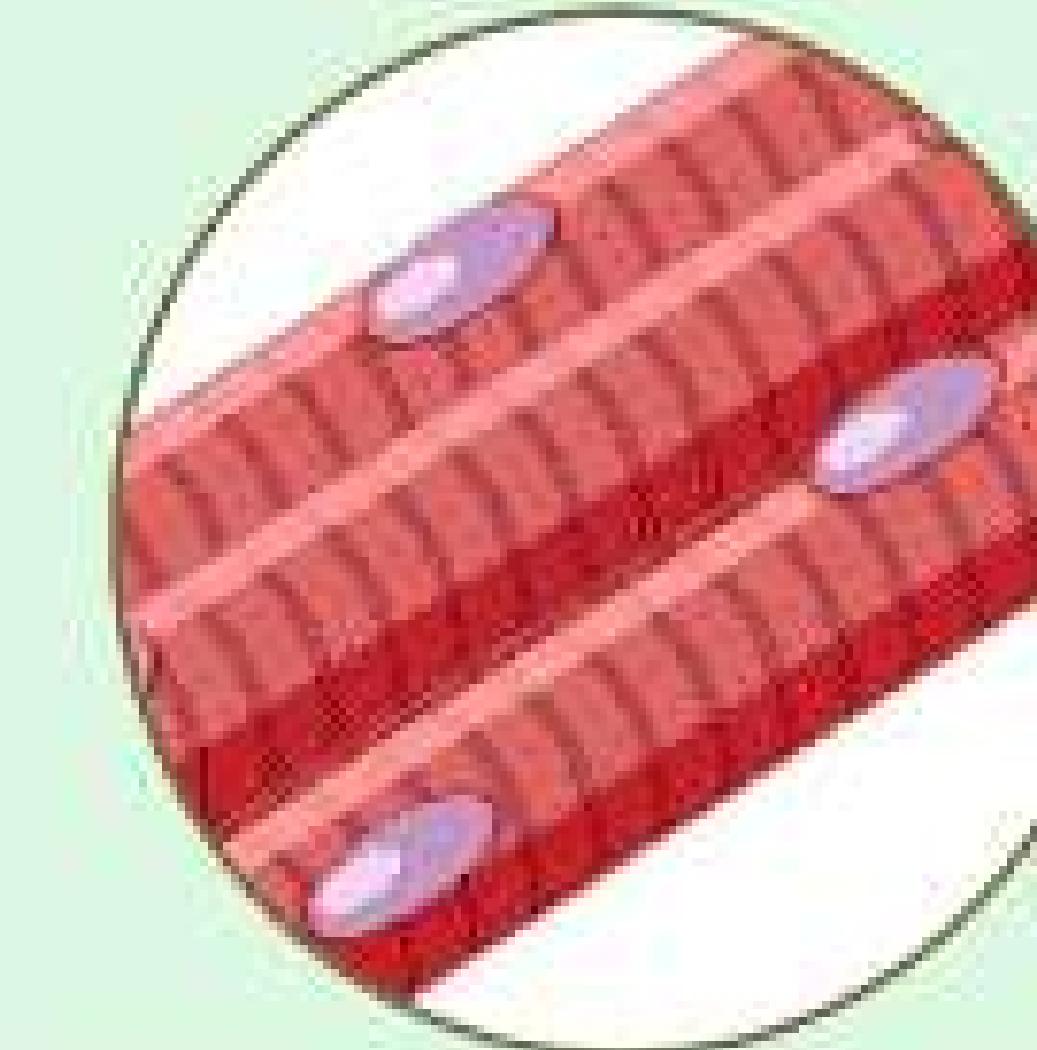
Cartilage Tissue



Adipose Tissue



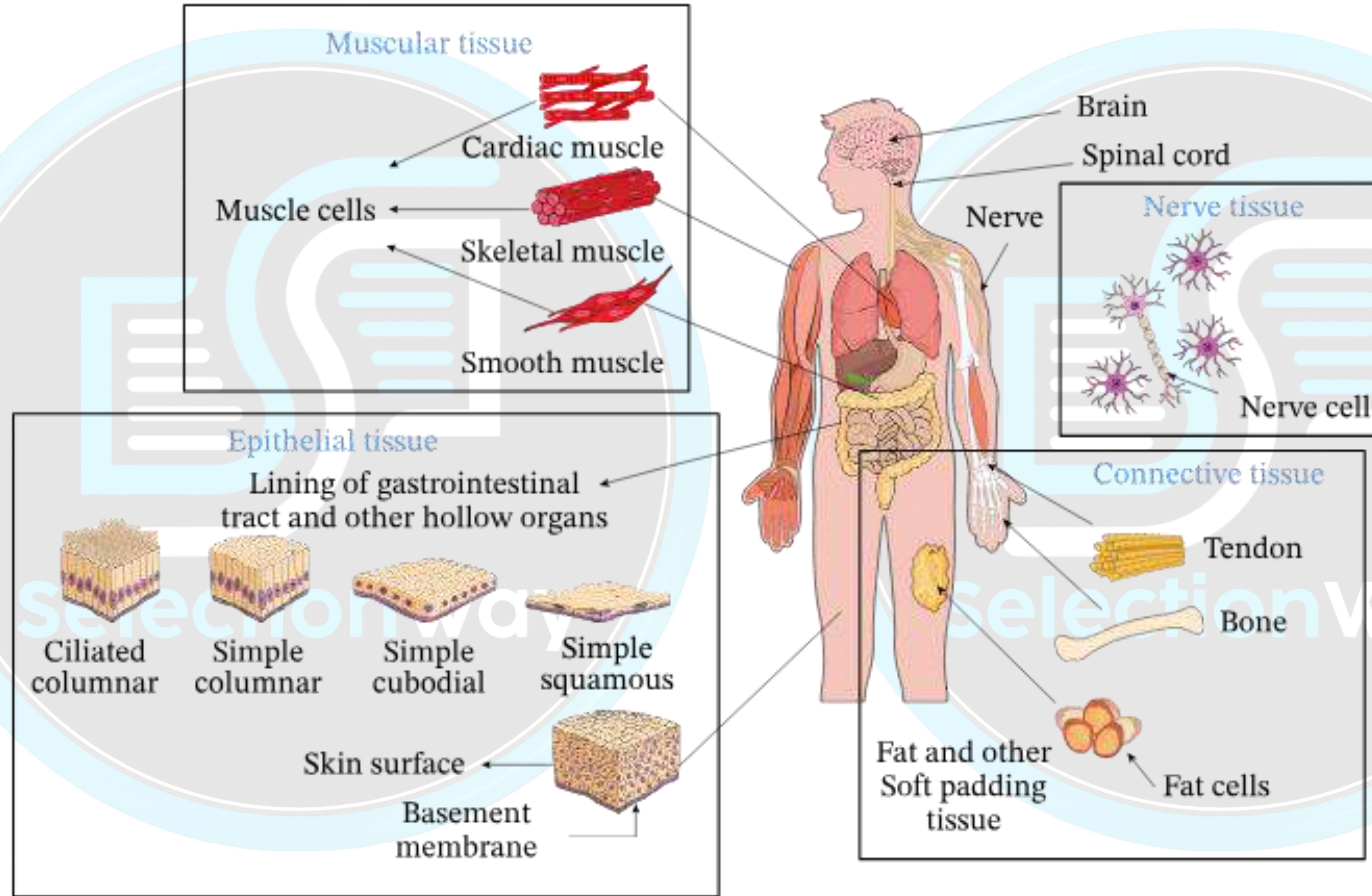
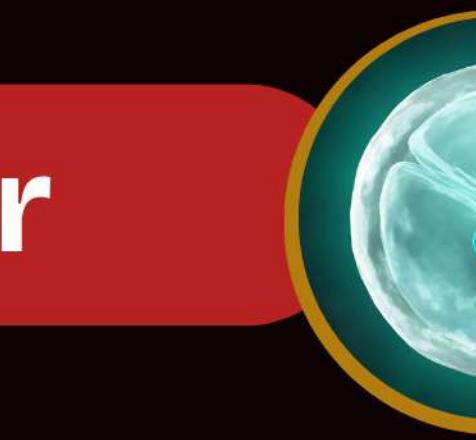
Nervous Tissue

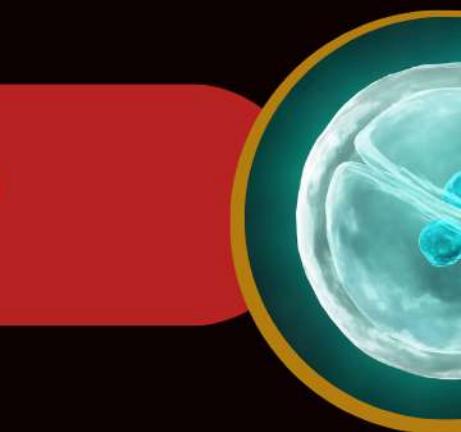


Muscle Tissue



Connective Tissue



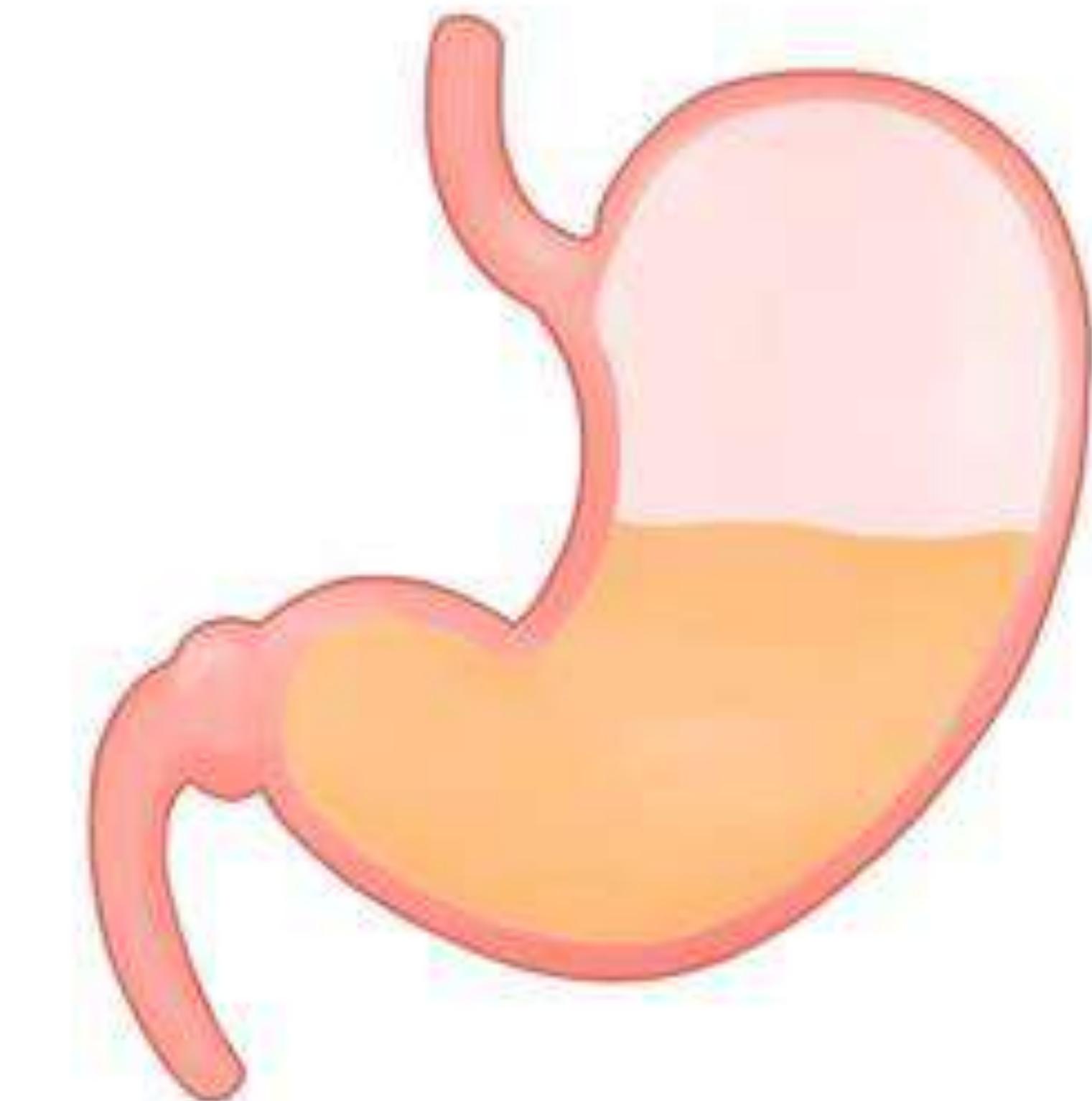
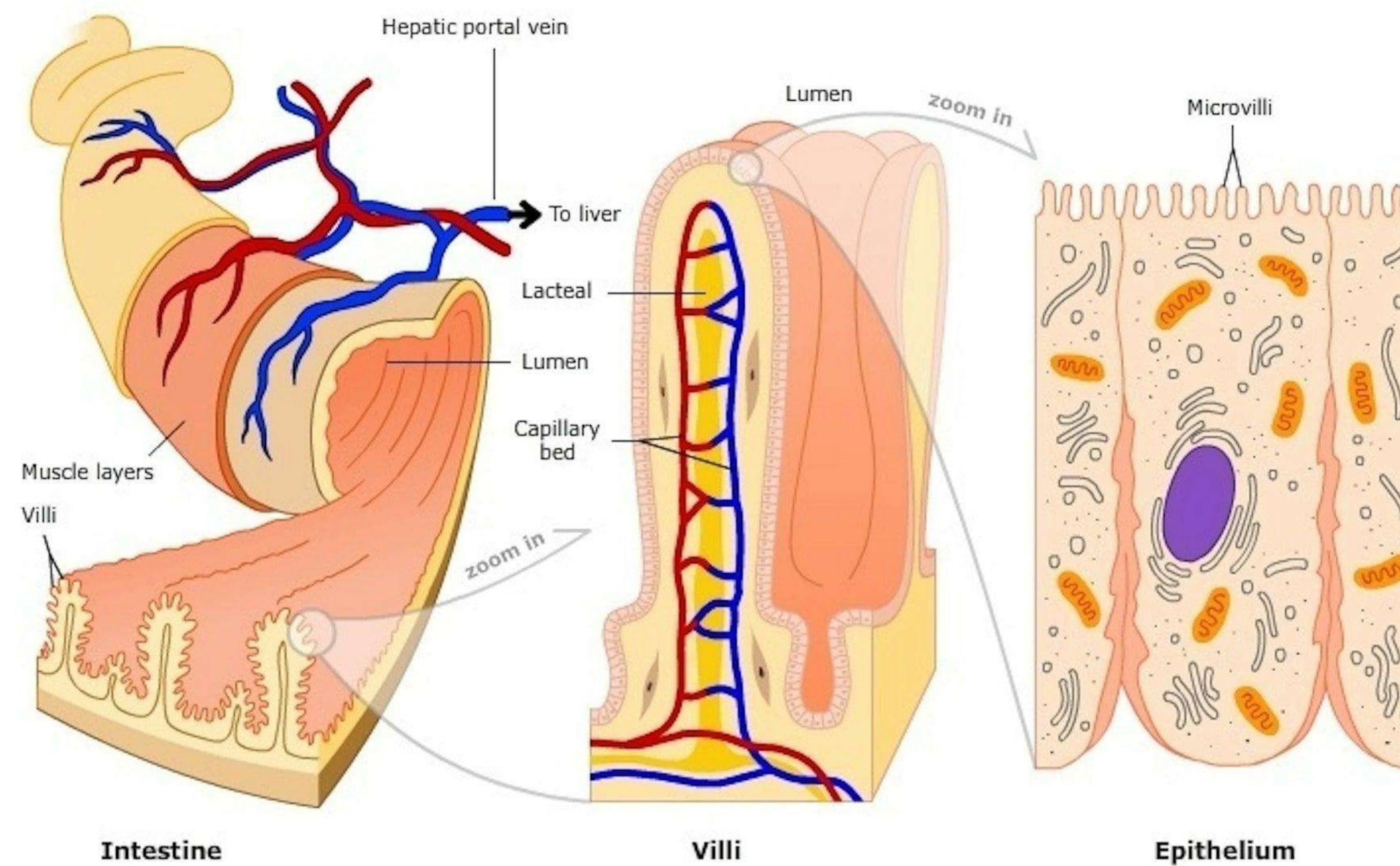


Epithelial Tissue (उपकला ऊतक)

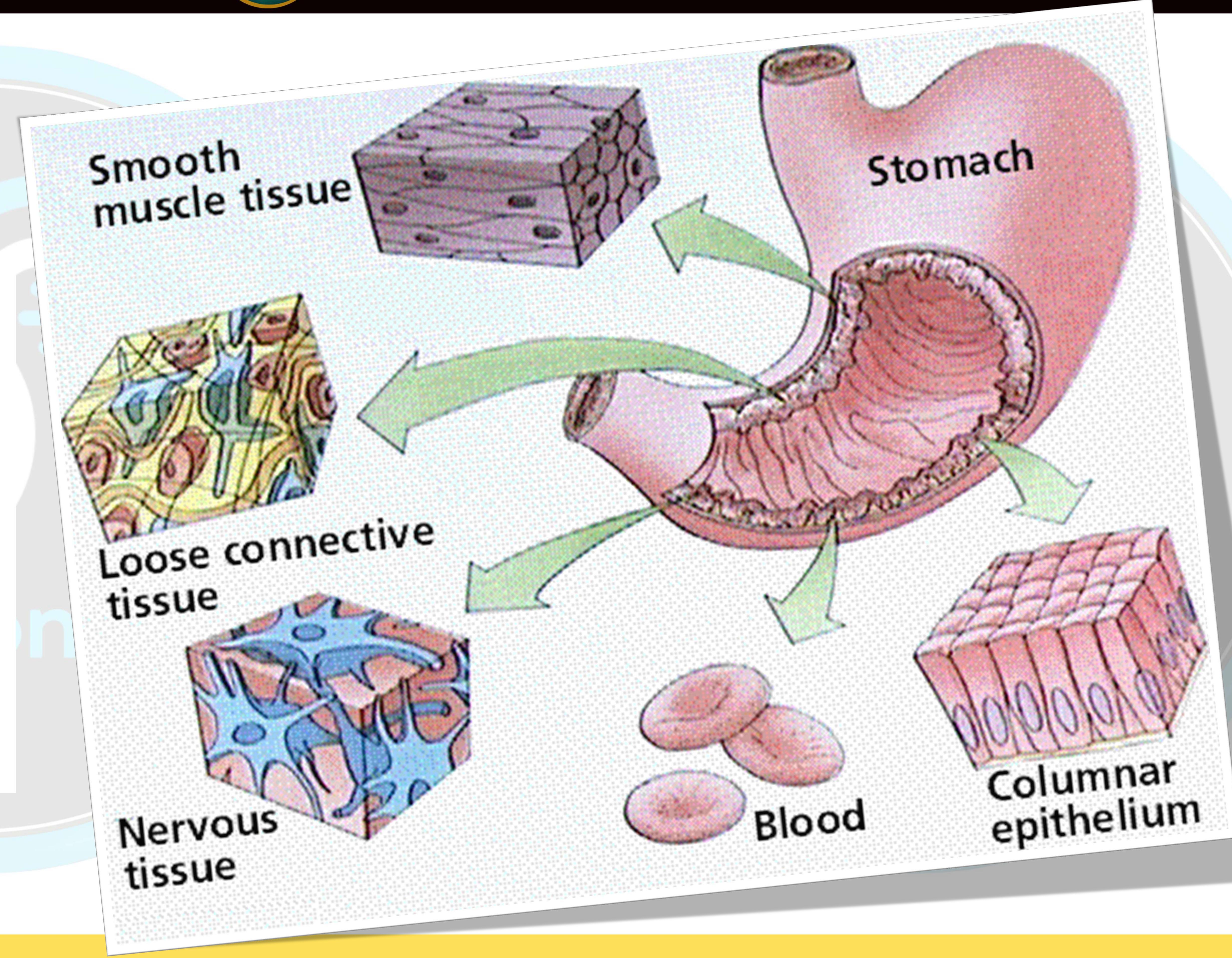
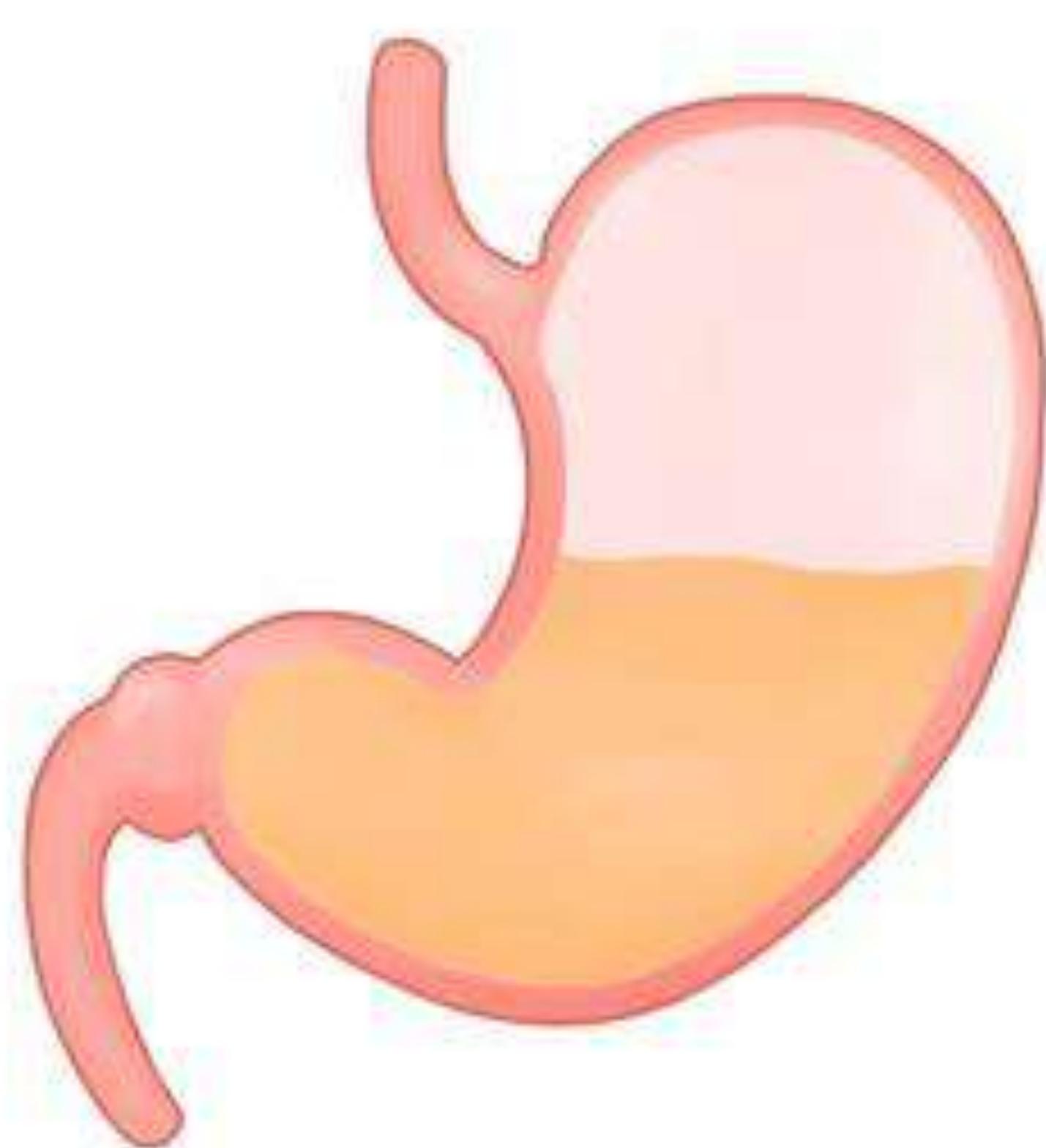
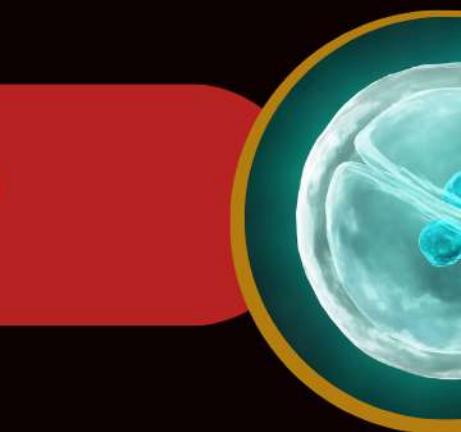
Epithelial Tissue Is A Protective Covering Present On The Outer Surface Of The Body

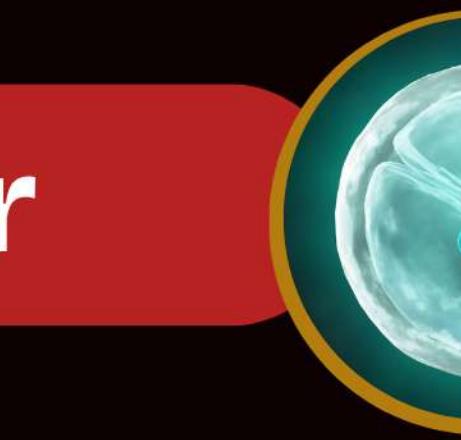
And Lining Of Internal Organs.

उपकला ऊतक एक सुरक्षात्मक परत है, जो **शरीर की बाहरी सतह और आंतरिक अंगों की आंतरिक परत** पर पाई जाती है।







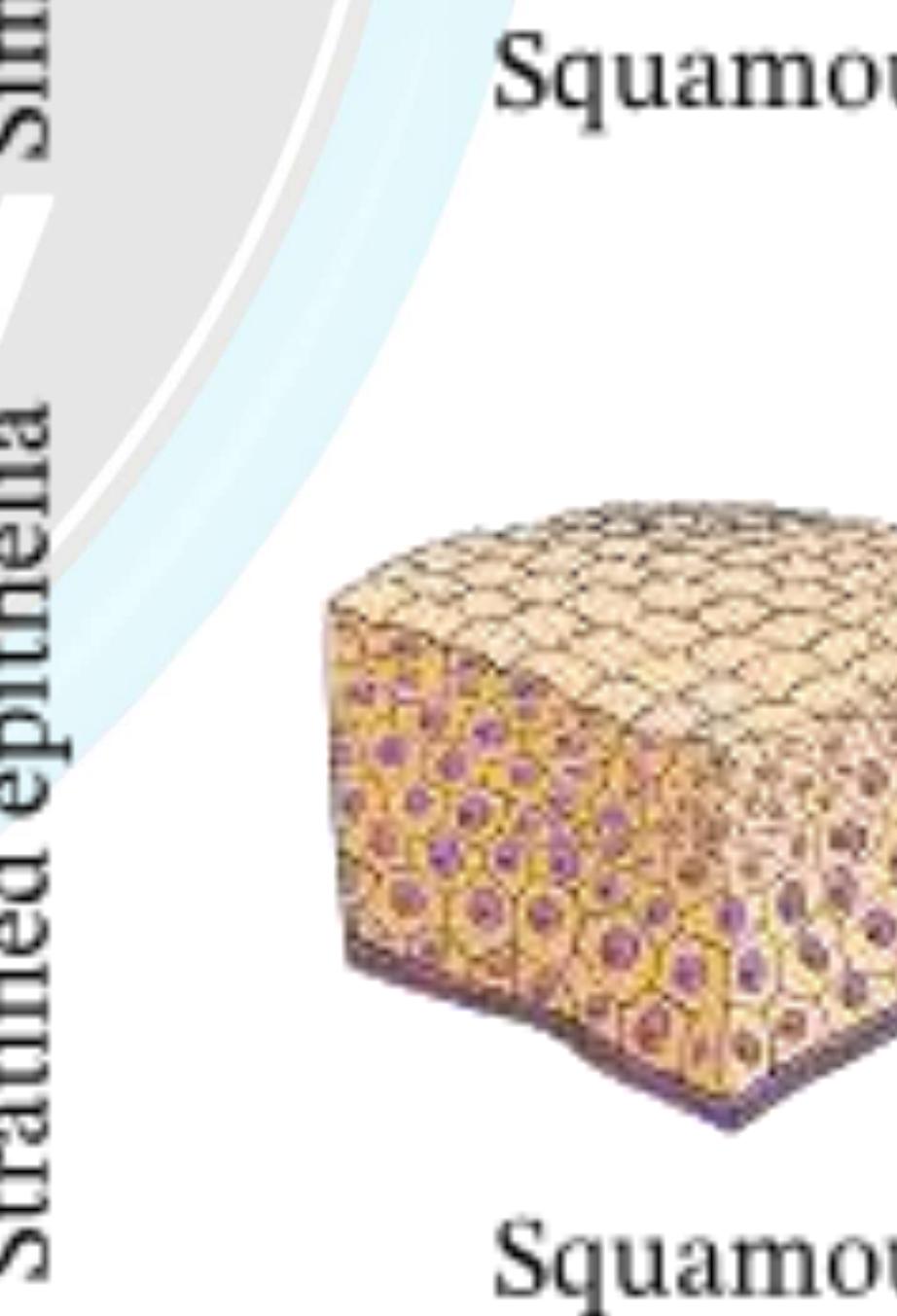


Epithelial Tissue (उपकला ऊतक)



- The Cells Are Tightly Packed With Almost No Intercellular Space And Lie On A Basement Membrane.
- इसकी कोणिकाएँ **आपस में सघन रूप से जुड़ी होती हैं** और **इनके बीच लगभग कोई अंतरकोणिकीय स्थान नहीं होता।** यह बेसमेंट डिल्ली पर स्थित रहती है।

Stratified epithelia

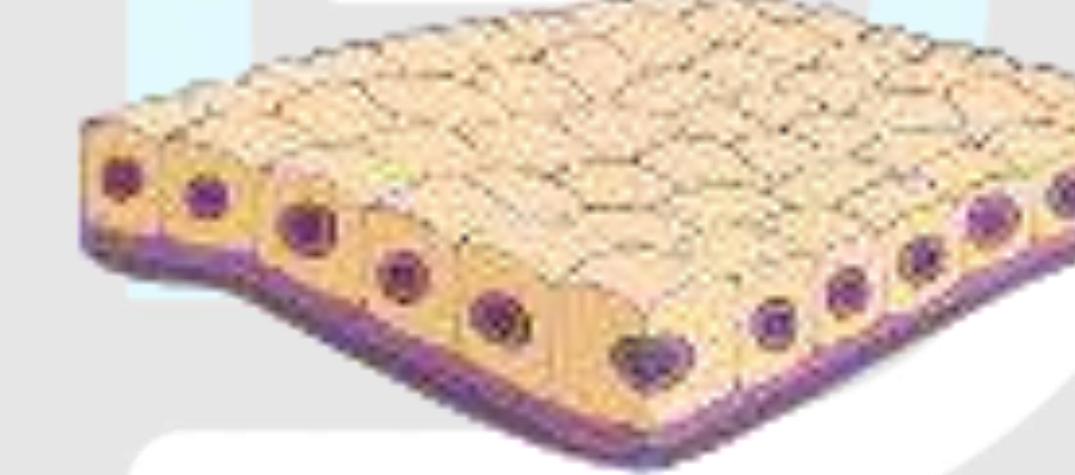


Simple epithelia

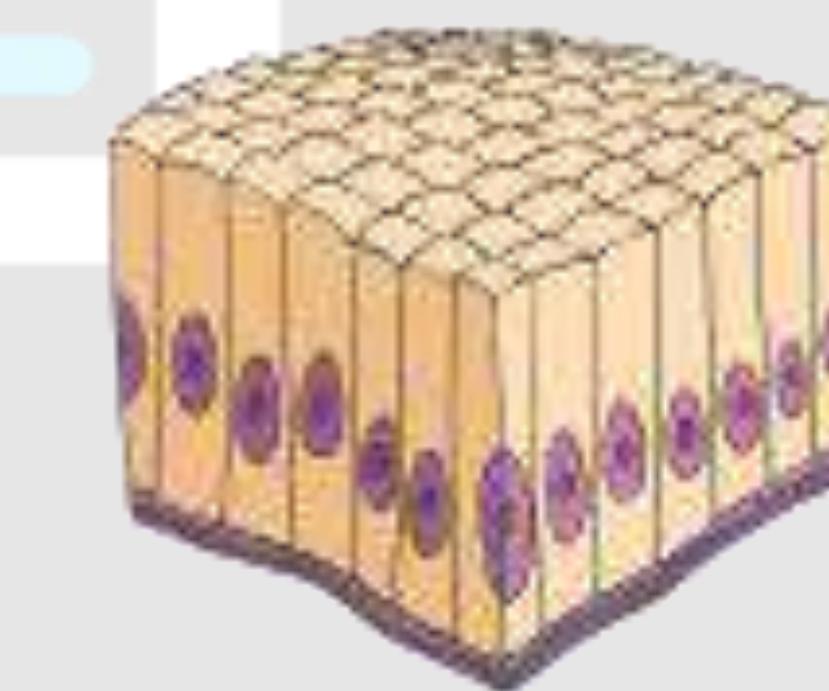


Squamous

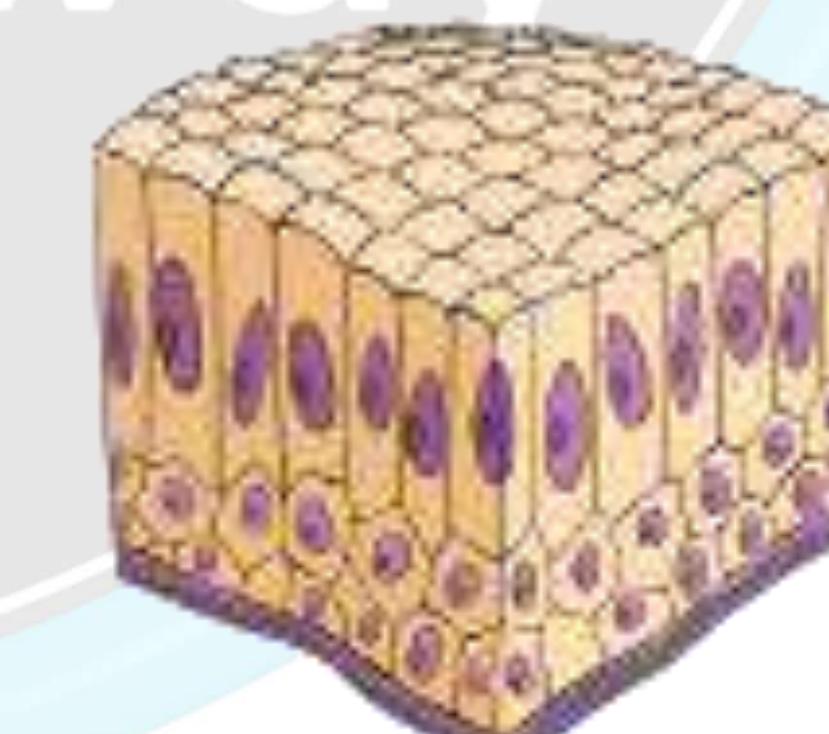
Cuboidal



Columnar

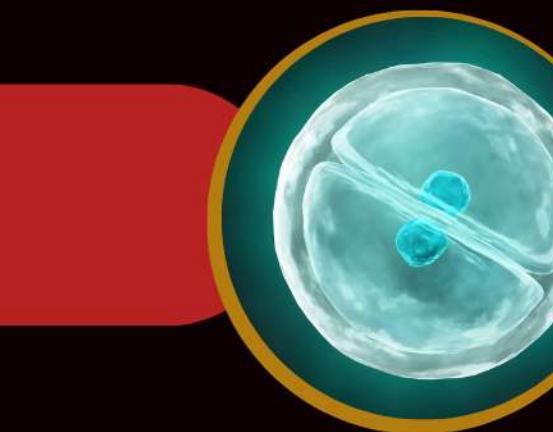


Cuboidal



Columnar

SelectionWay



Epithelial Tissue (उपकला ऊतक)

Blood Supply / रक्त आपूर्ति

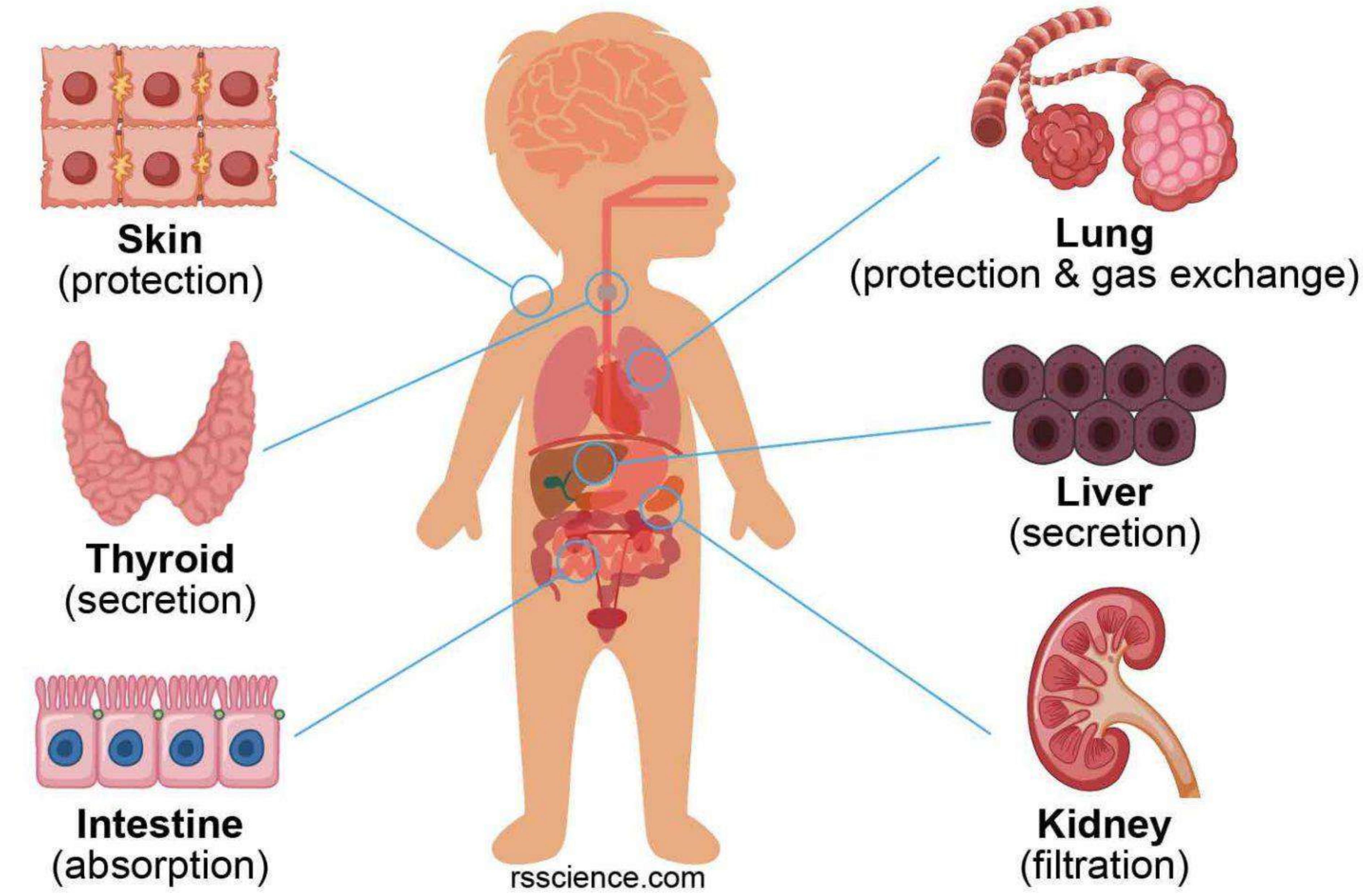
👉 **Epithelial Tissue Is Avascular** (Without Blood Vessels).

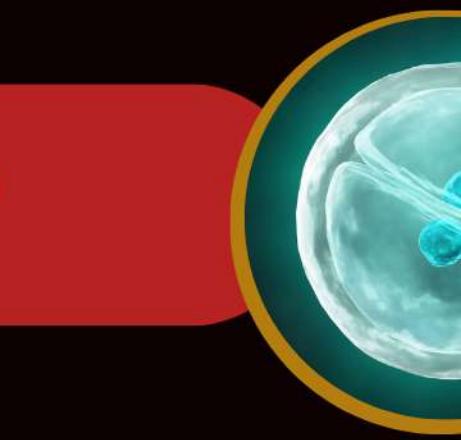
It Receives **Nutrition By Diffusion From Underlying Connective Tissue.**

👉 **उपकला ऊतक अवस्कुलर होता है** (रक्त वाहिकाएँ नहीं होतीं)।

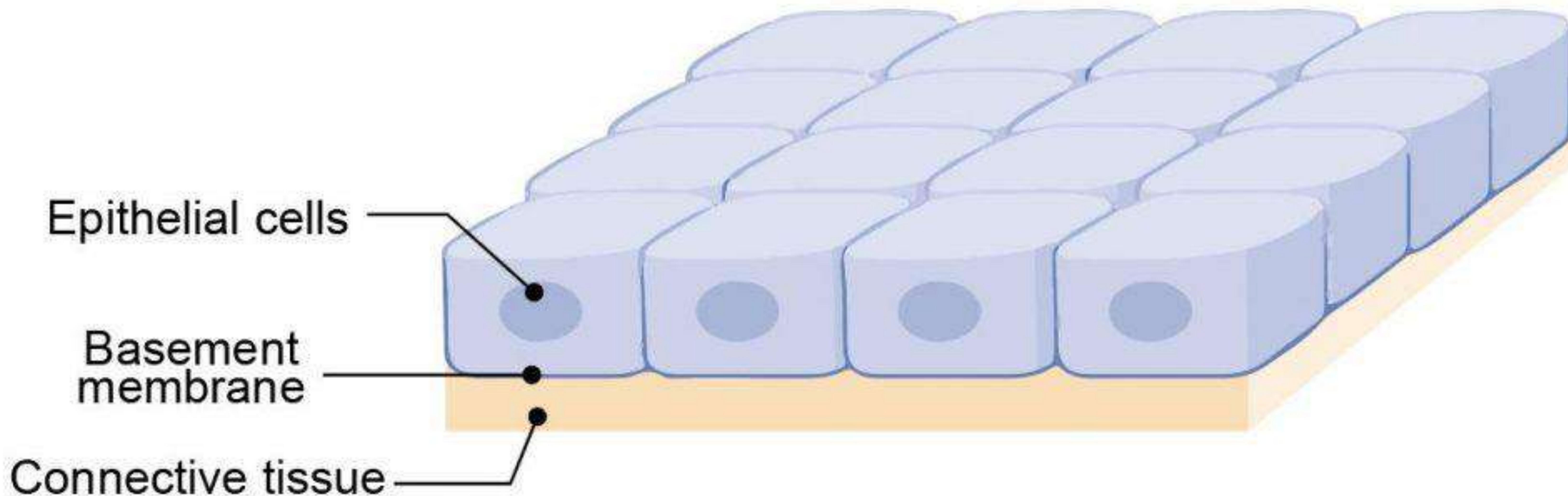
इसे पोषण नीचे स्थित संयोजी ऊतक से विसरण (Diffusion) द्वारा प्राप्त होता है।

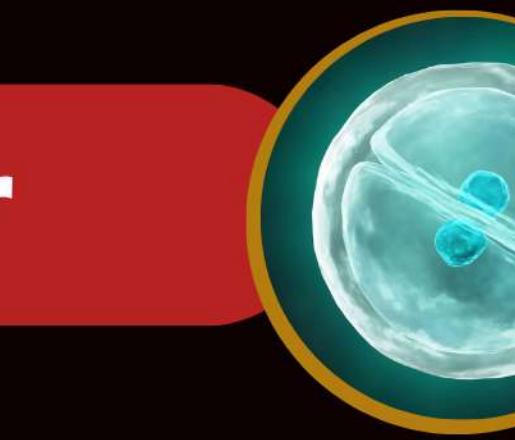
Examples of Epithelial Tissues and Their Functions





Epithelial Tissue
(उपकला ऊतक)





Epithelial Tissue (उपकला ऊतक)

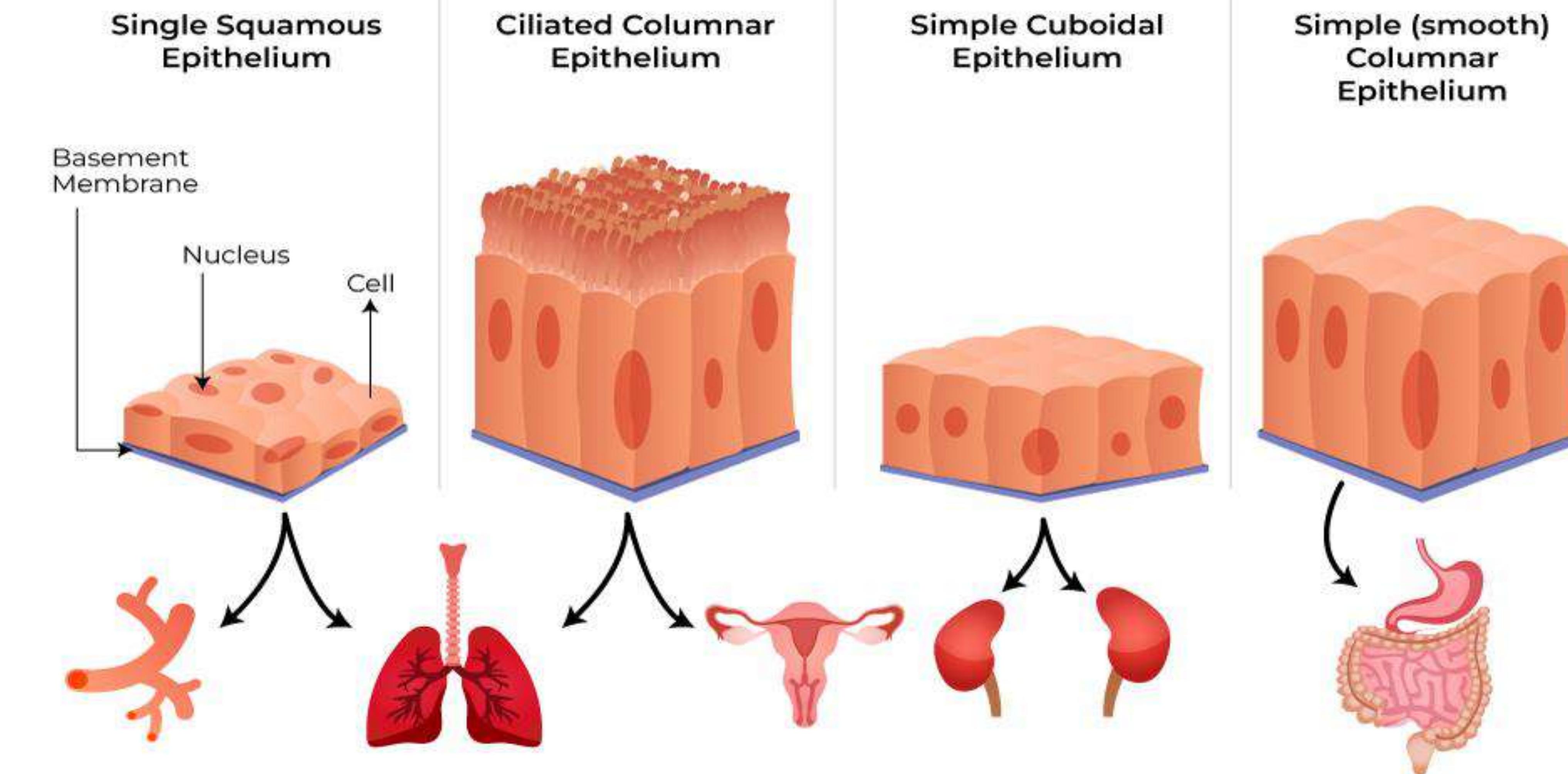
Regeneration / पुनर्जनन

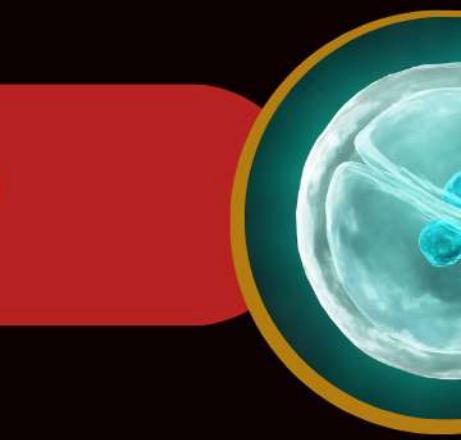
It Has A **High Power Of Regeneration Due To Continuous Cell Division.**

लगातार कोशिका विभाजन के कारण इसमें पुनः निर्माण (Regeneration) की क्षमता अधिक होती है

Selection

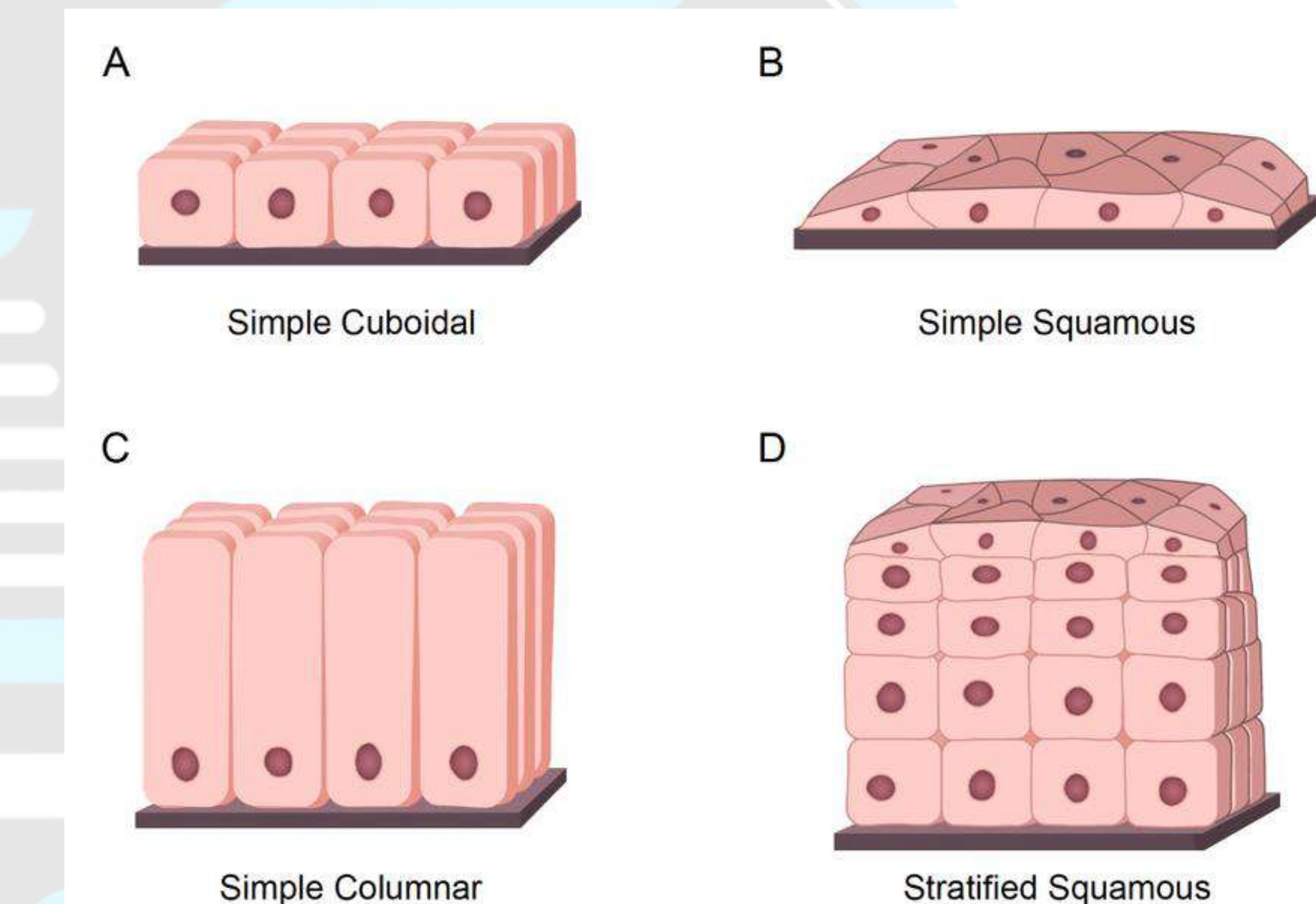
Epithelial Cell

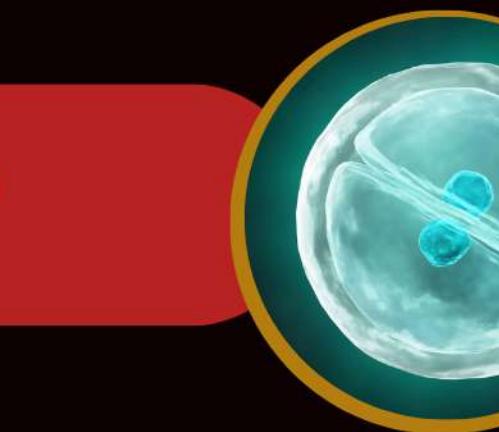




Epithelial Tissue
(उपकला ऊतक)

- 1. **Squamous Epithelium (स्क्वैमस उपकला)**
- 2. **Cuboidal Epithelium (क्यूबॉडल उपकला)**
- 3. **Columnar Epithelium (कॉलमर उपकला)**
- 4. **Ciliated Epithelium (सिलीएटेड उपकला)**
- 5. **Glandular Epithelium (ग्रंथिय उपकला)**





1. Simple Squamous Epithelium (सरल स्क्वैमस उपकला / सरल चपटी उपकला)

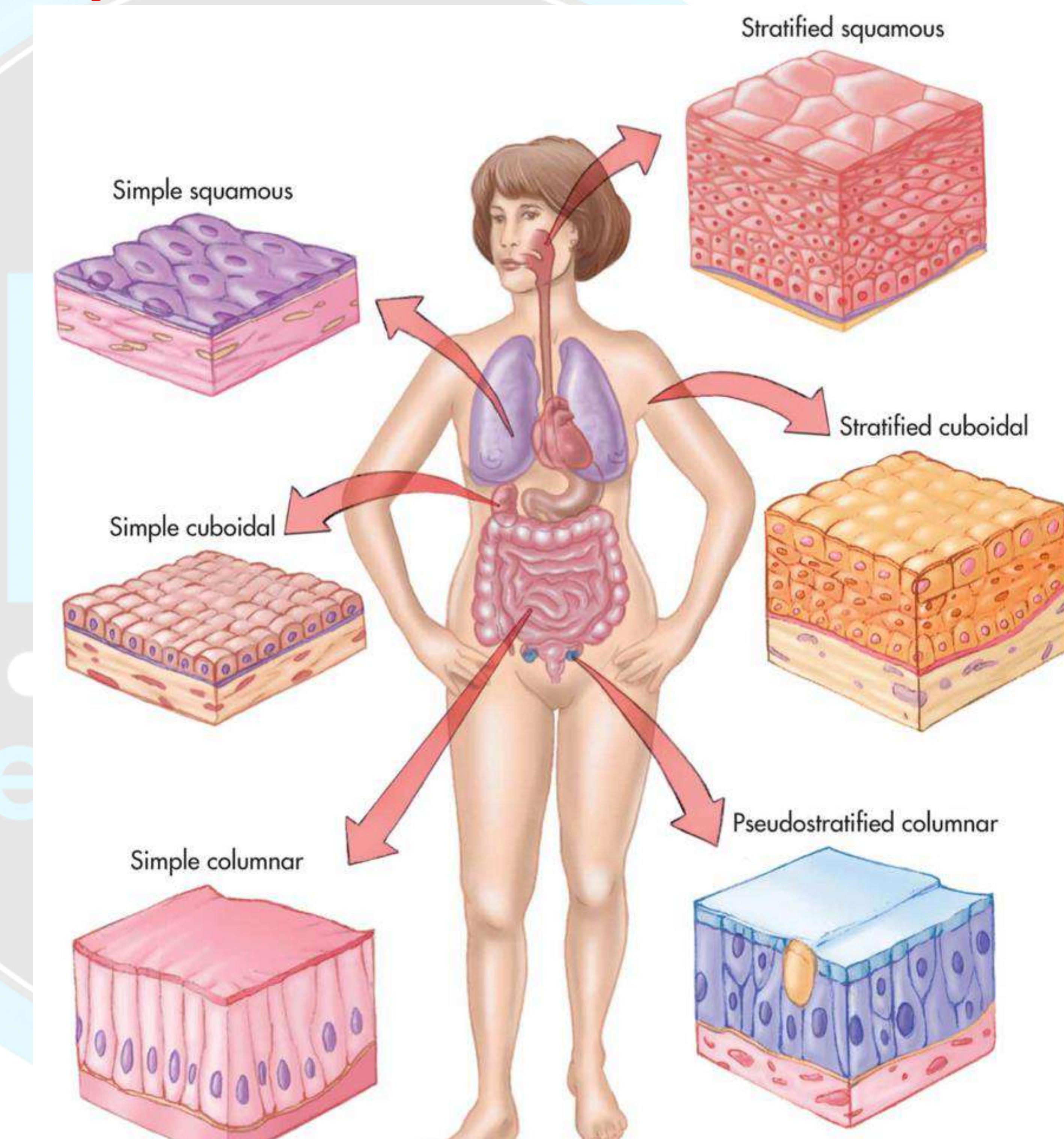
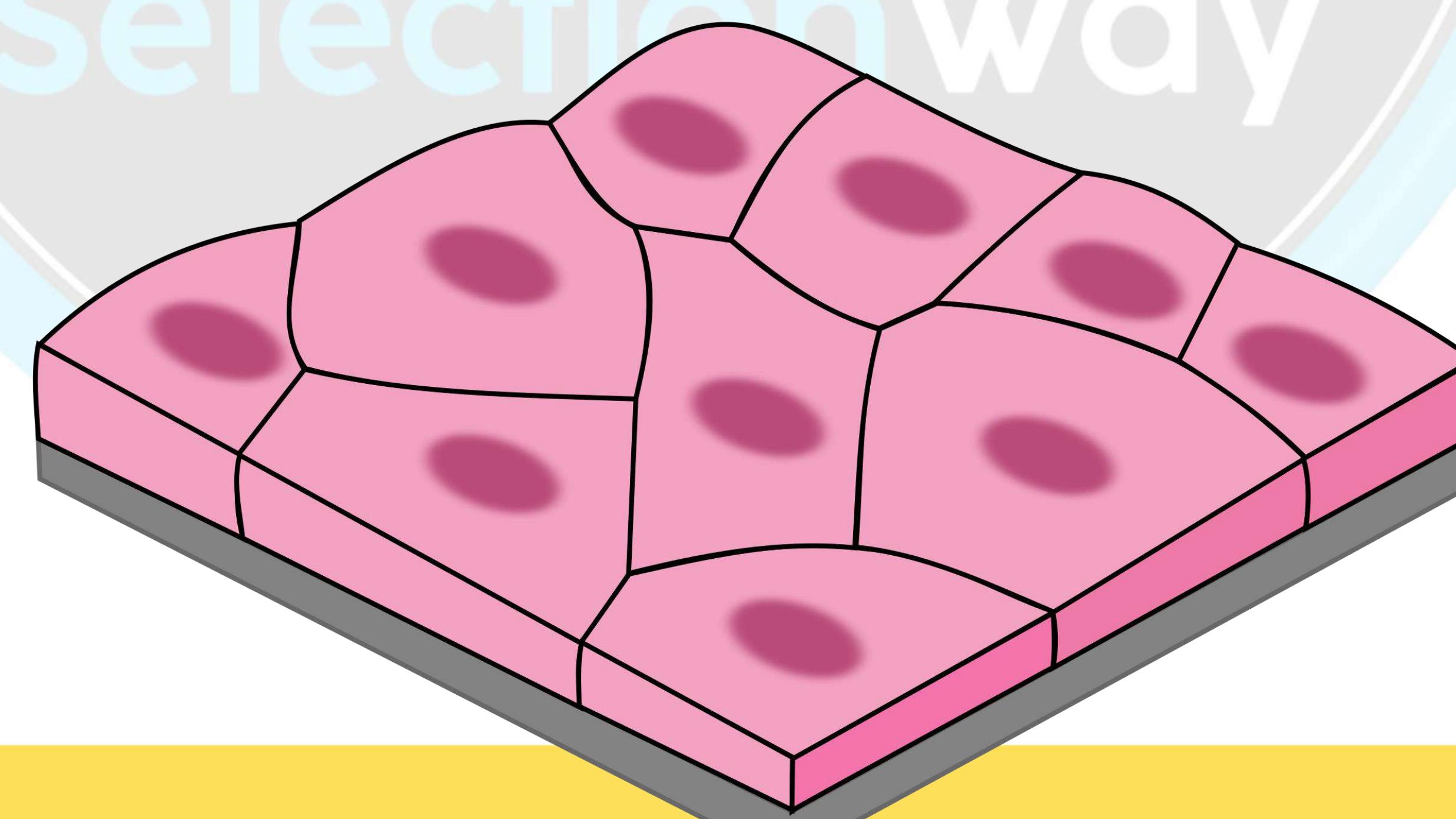
👉 **Shape (आकृति):** Thin, flat, single layer of cells

पतली, चपटी, एक परत वाली कोटिकाएँ

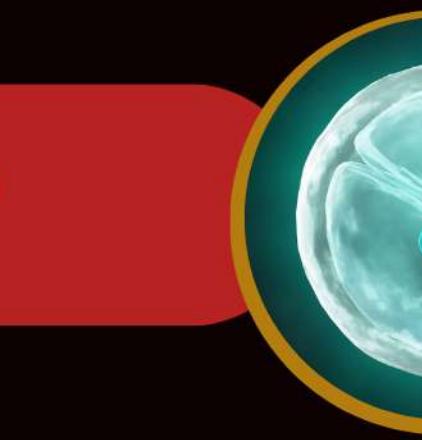
👉 **Where (कहाँ मिलती है):** Alveoli of lungs, Blood capillaries

फेफड़ों की वायुकोष, रक्त केरिकाएँ

👉 **Function (कार्य):** Diffusion & Filtration / प्रसरण व छानना



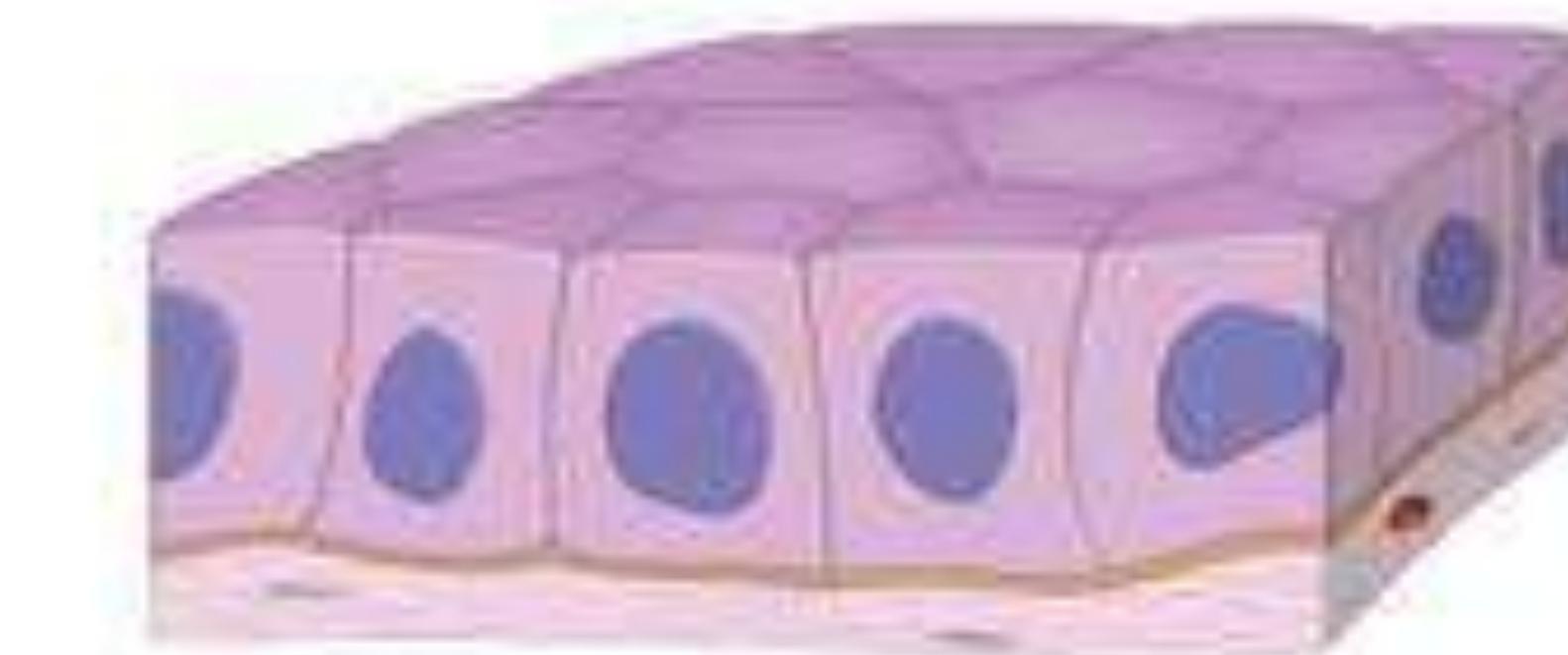




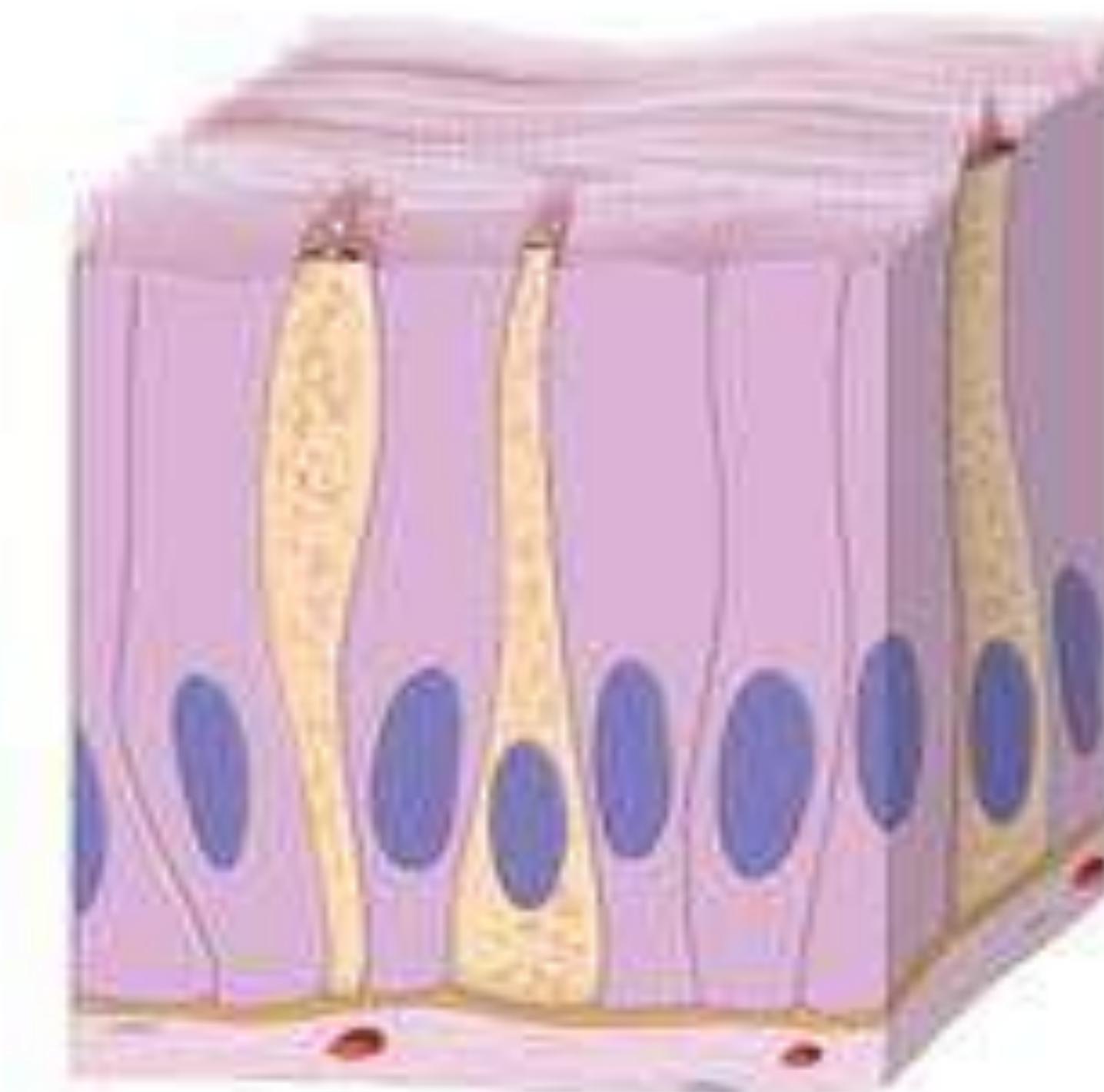
Simple epithelia



Squamous

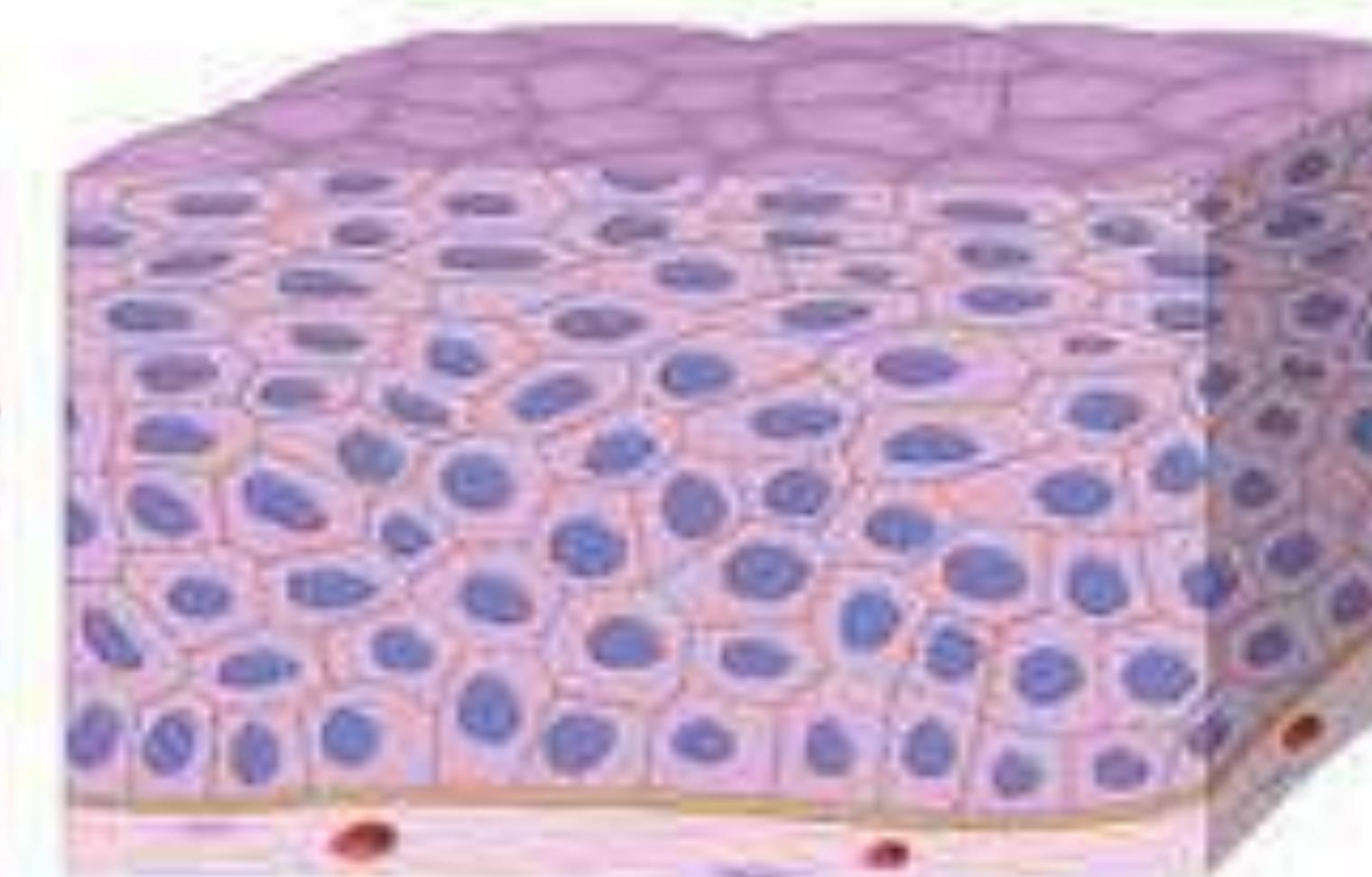


Cuboidal

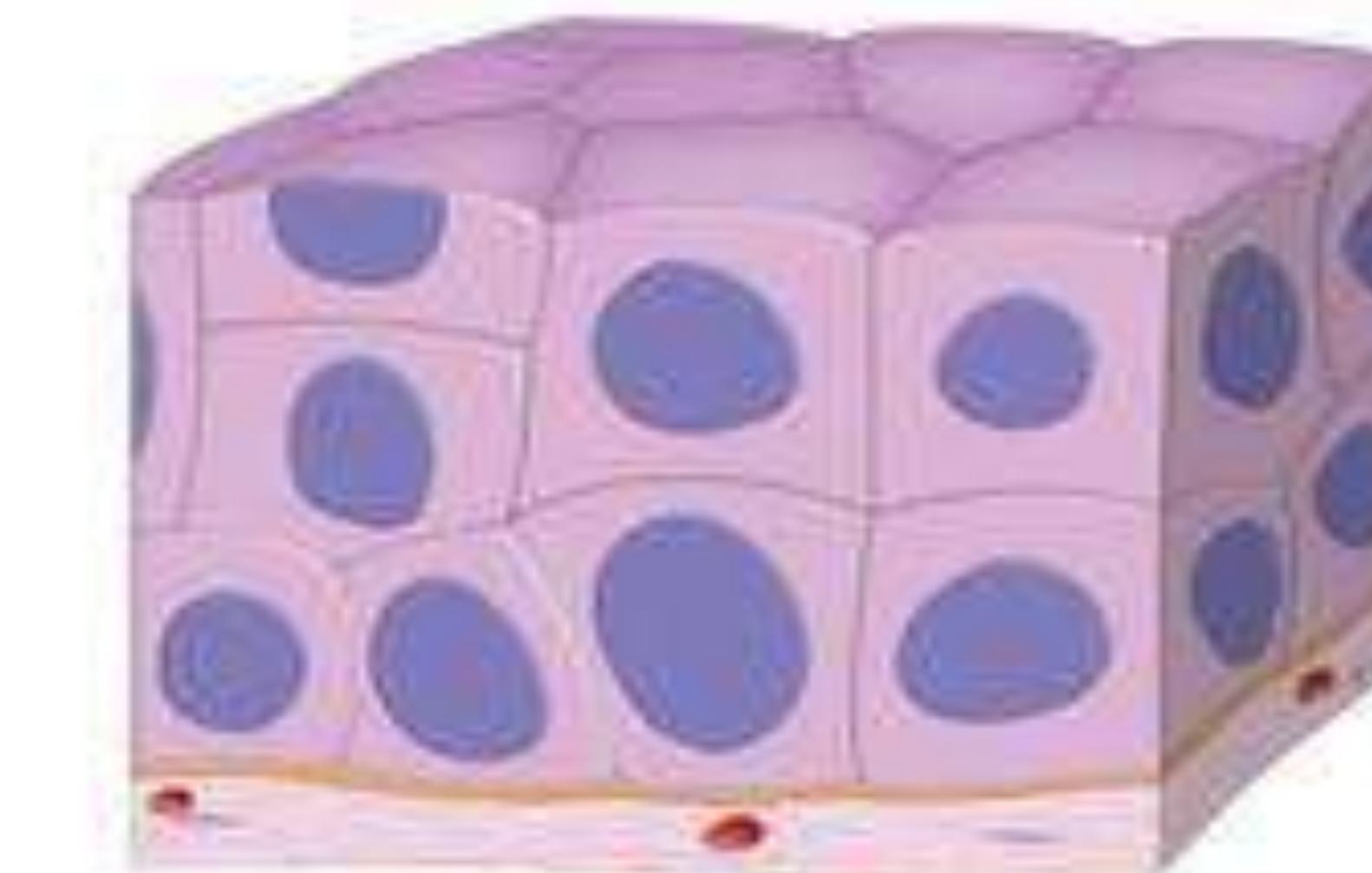


Columnar

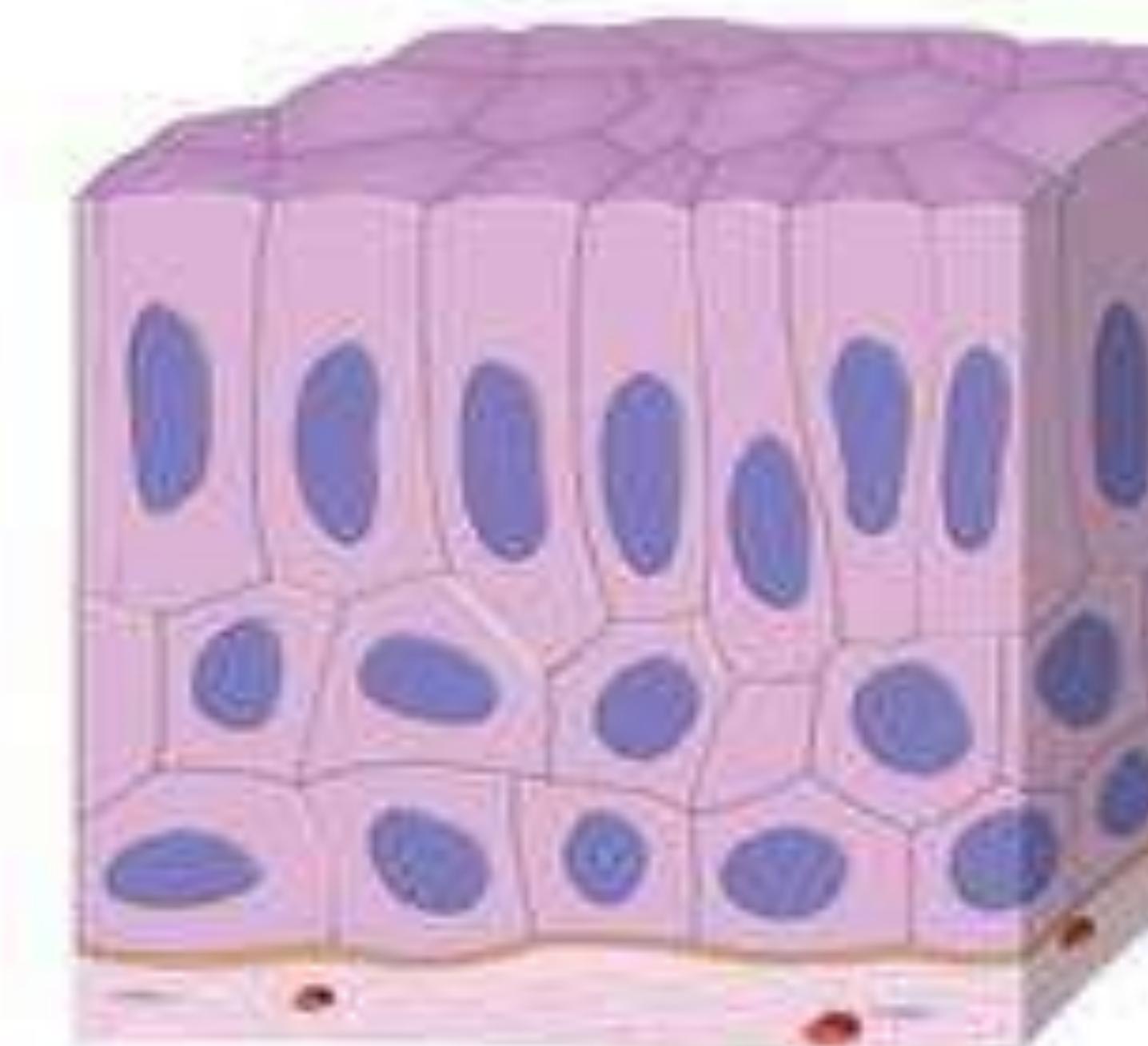
Stratified epithelia



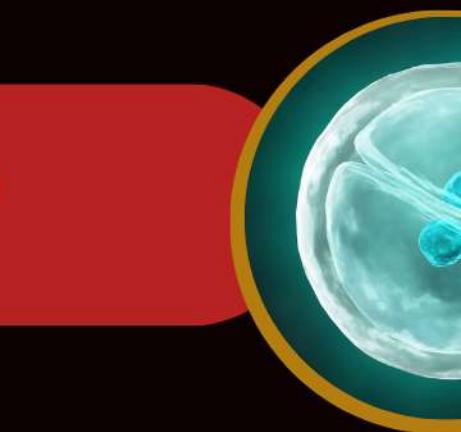
Squamous



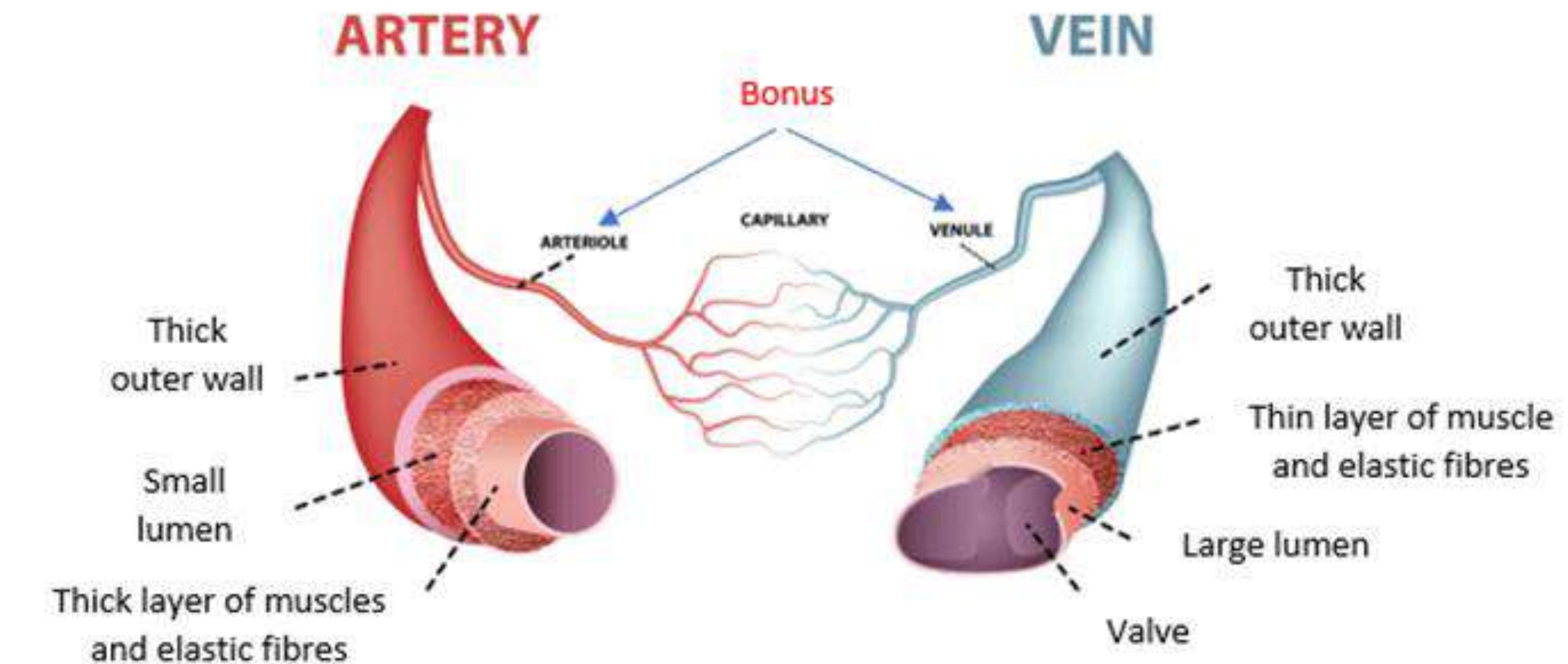
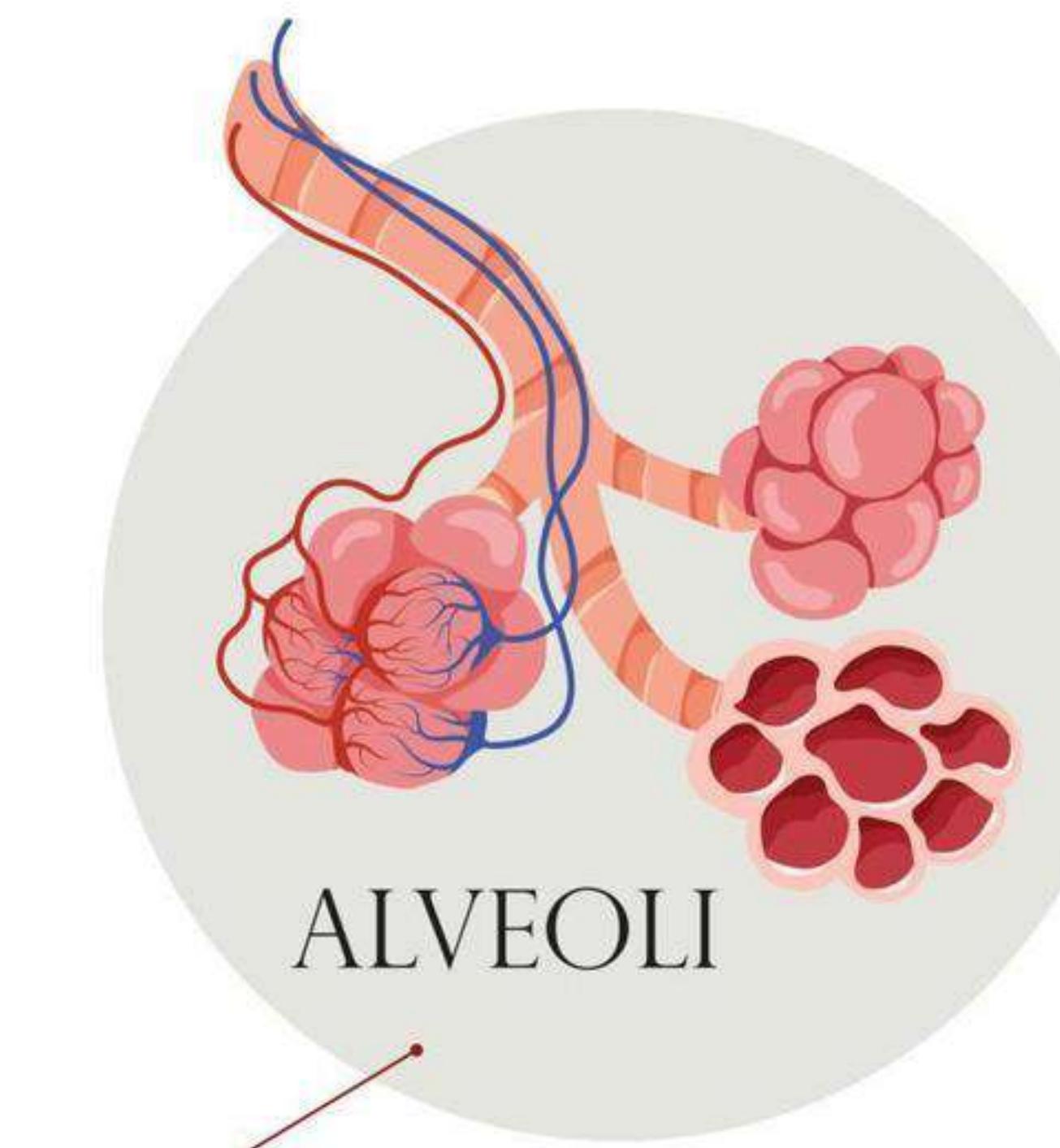
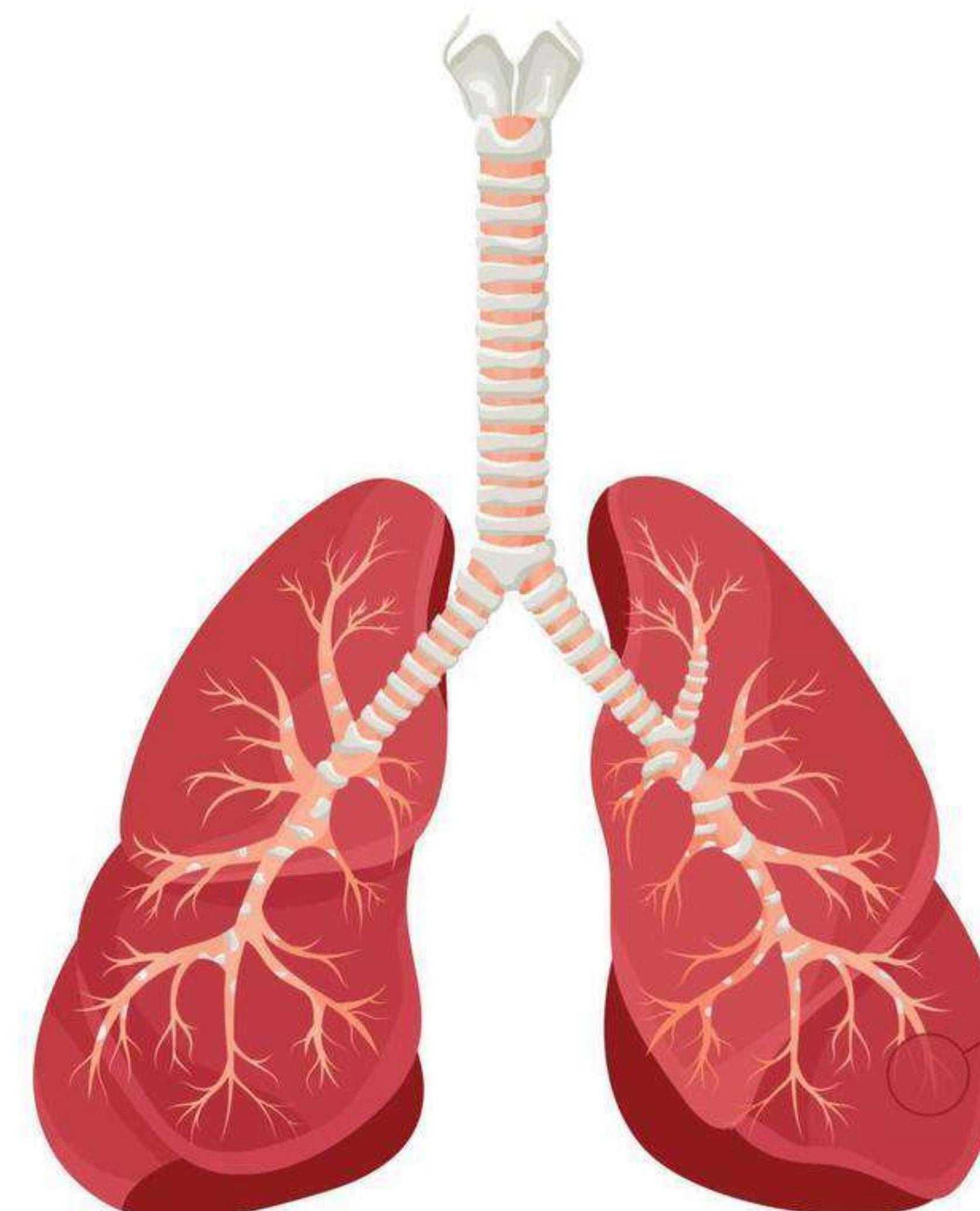
Cuboidal

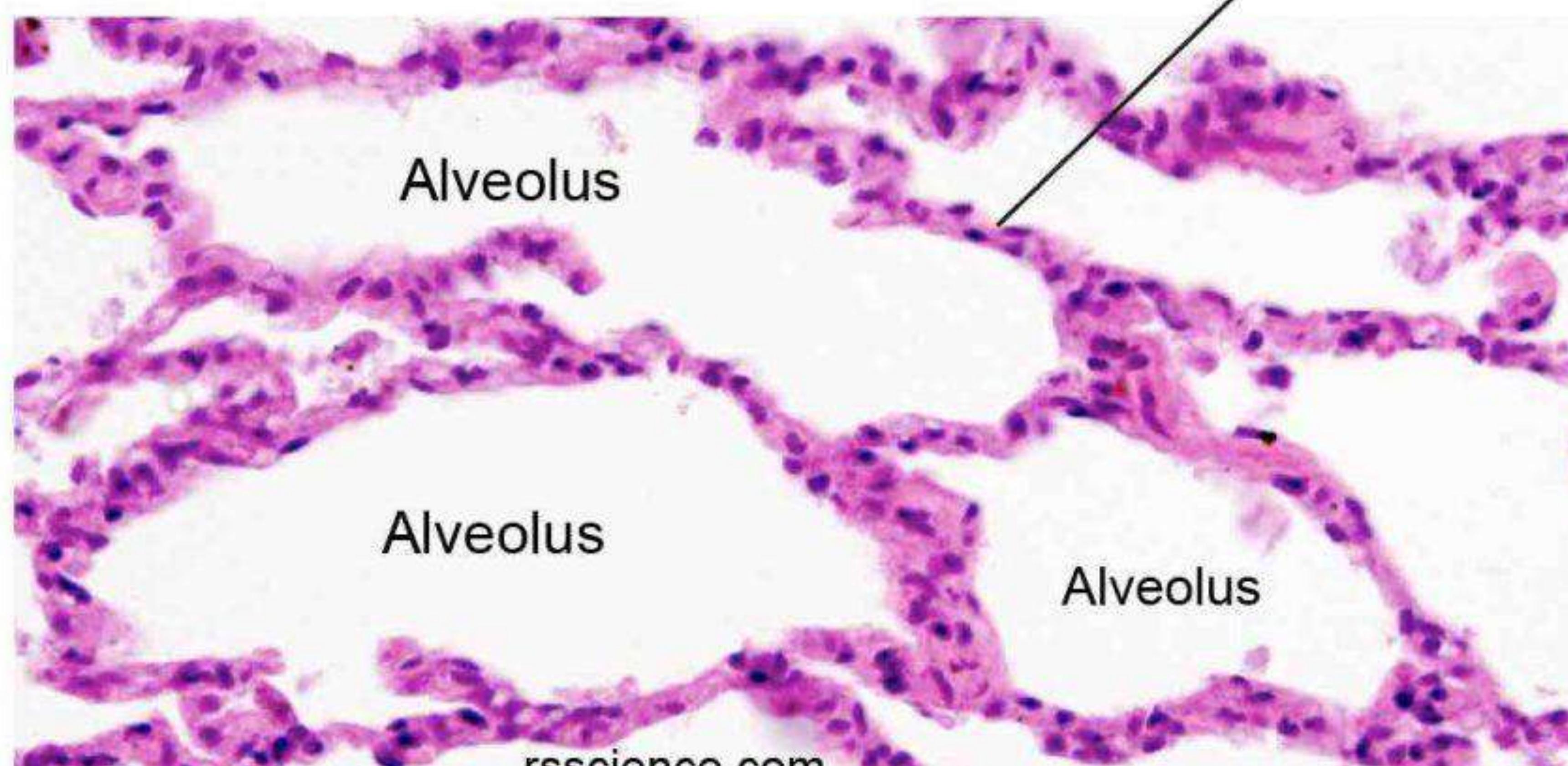
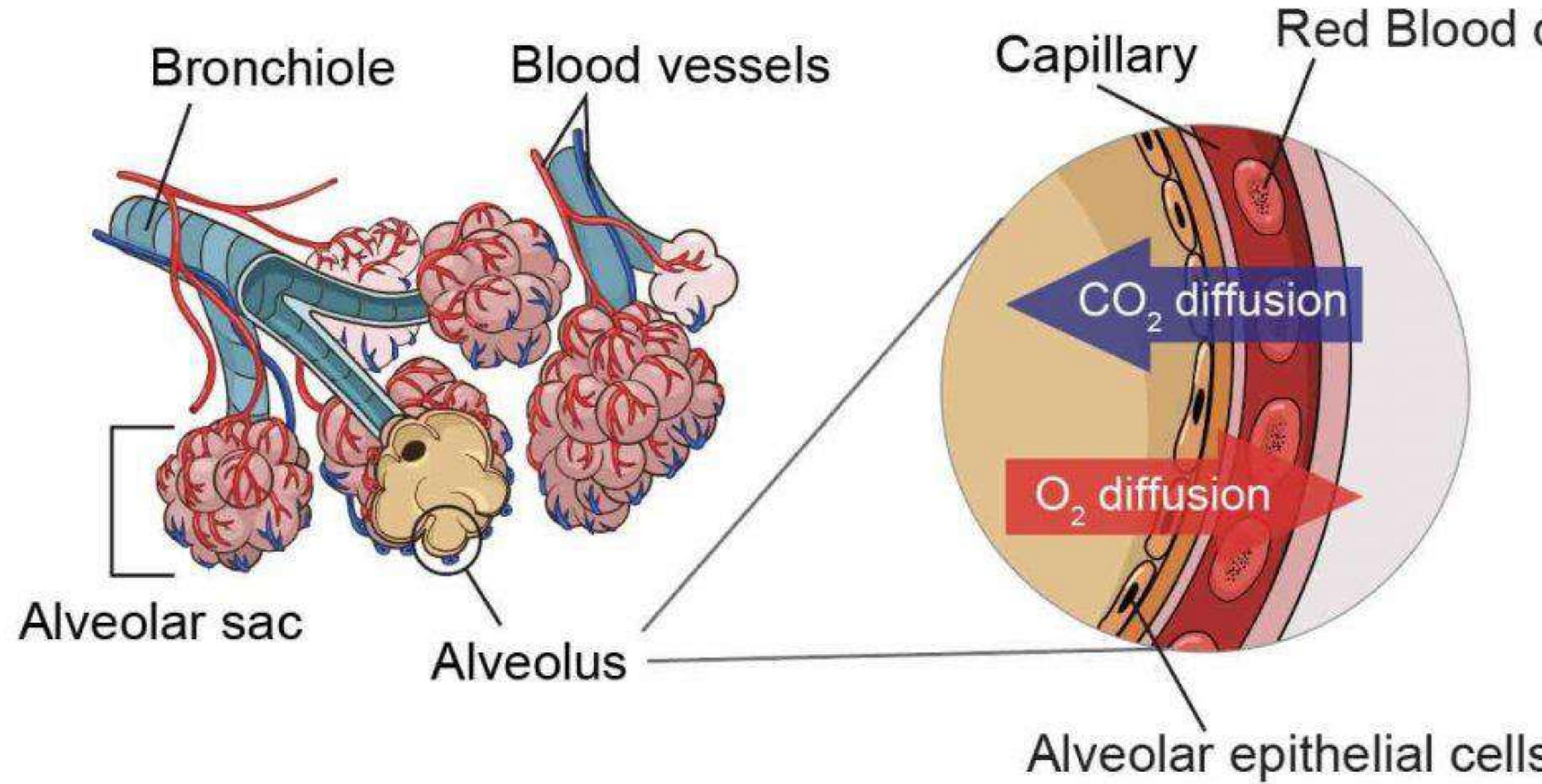
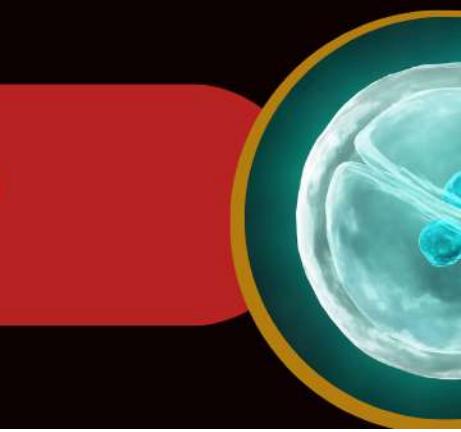


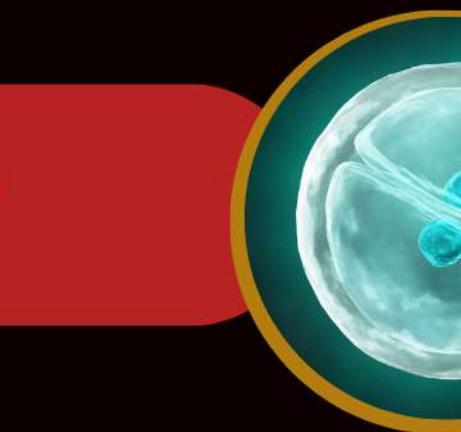
Columnar



1. Simple Squamous Epithelium (सरल स्क्वैमस उपकला / सरल चपटी उपकला)





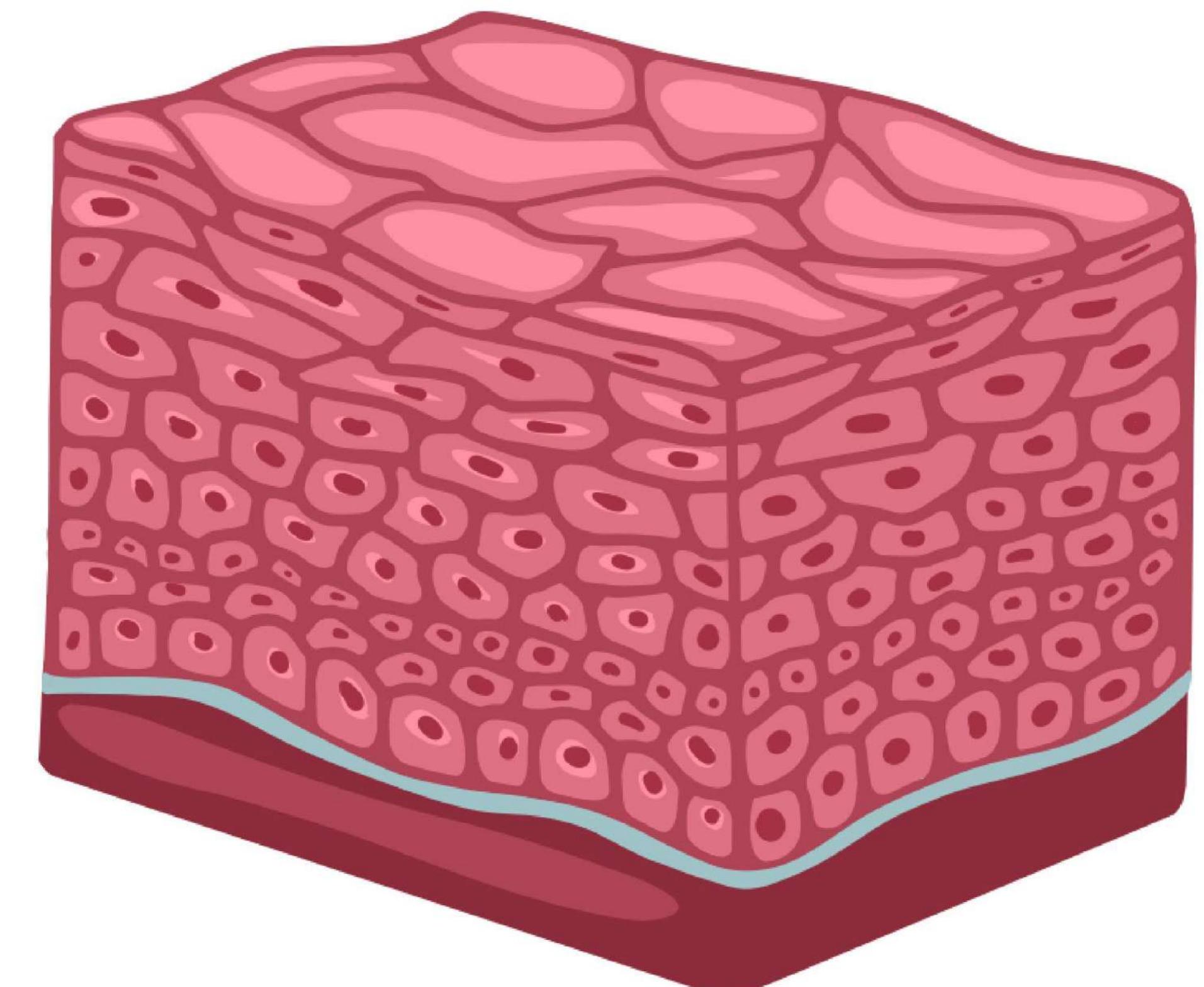
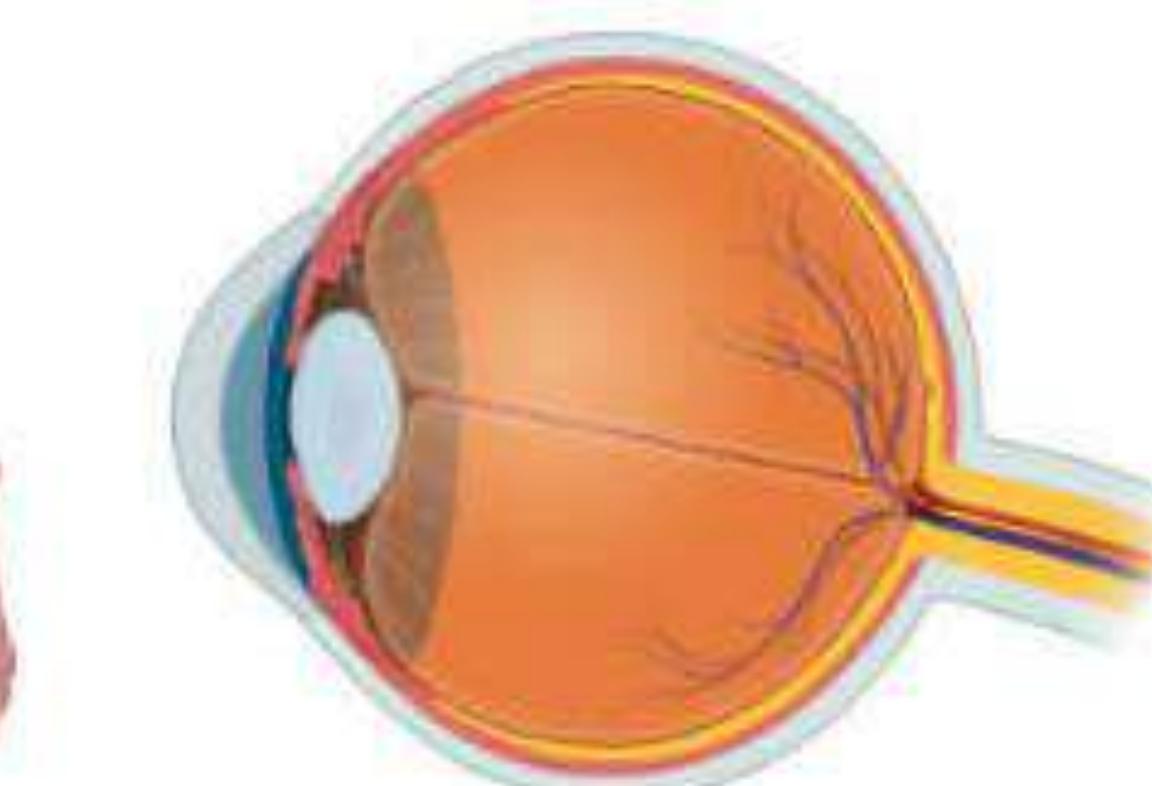
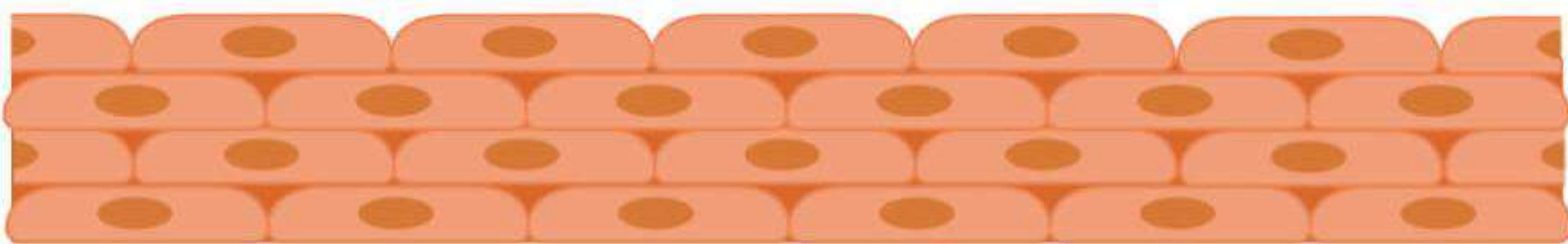


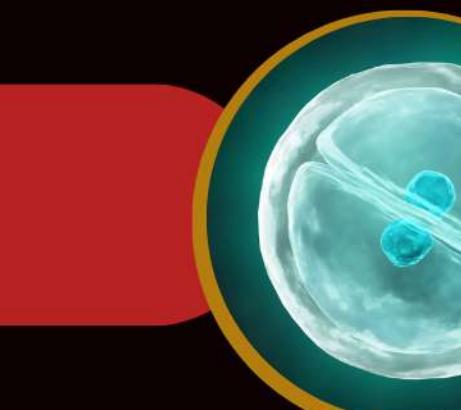
2. Stratified Squamous Epithelium (स्तरीकृत द्व्यवैमास उपकला / परतदार चपटी उपकला)

☞ **Shape (आकृति):** Multi-layered, outer cells flat / कई परतें, ऊपरी कोणिकाएँ चपटी

☞ **Where (कहाँ मिलती है):** Skin, Mouth lining, Esophagus / त्वचा, मुखगुहा, अन्जनली

☞ **Function (कार्य):** Protection from friction & infection / घर्षण और संक्रमण से सुरक्षा





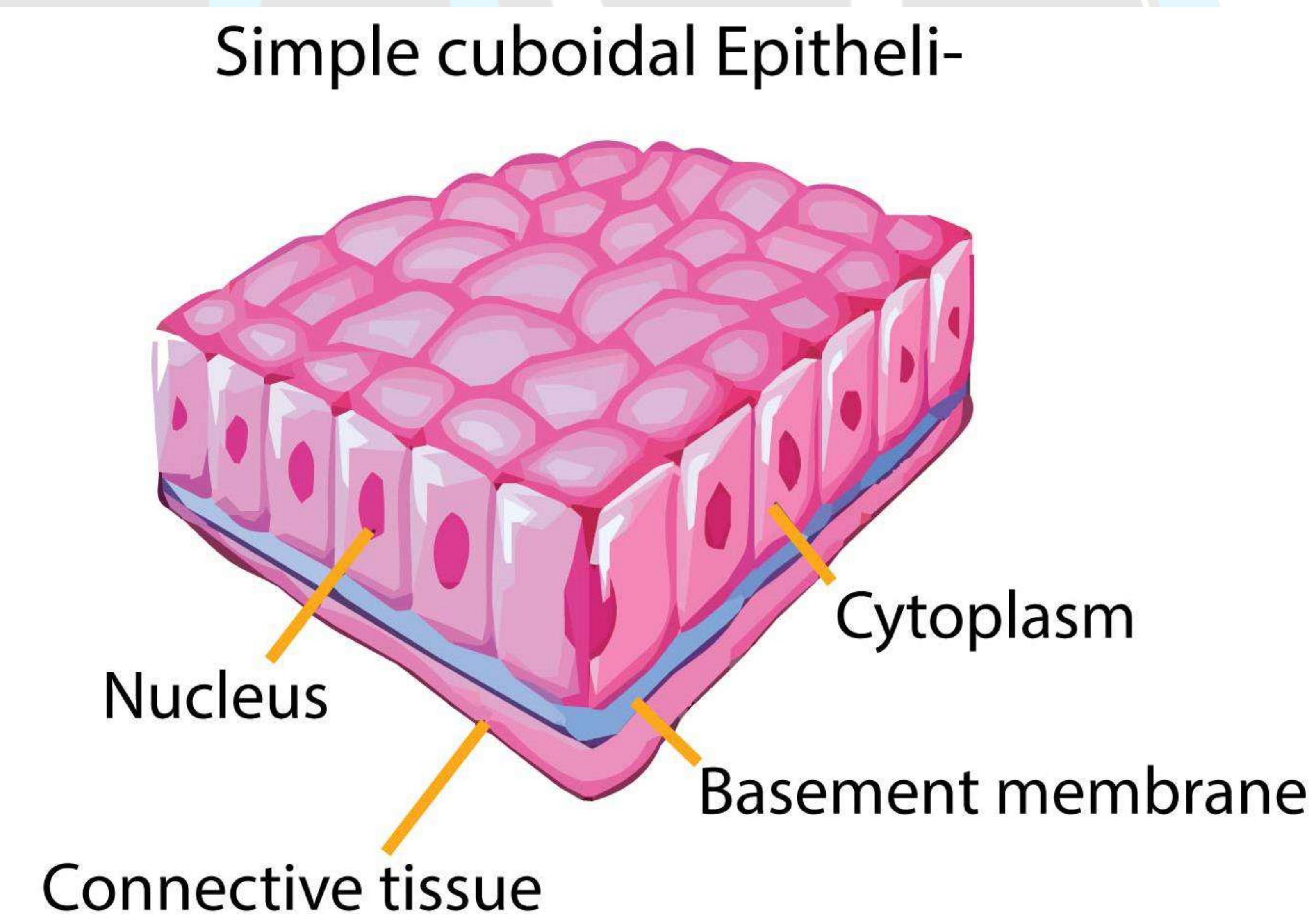
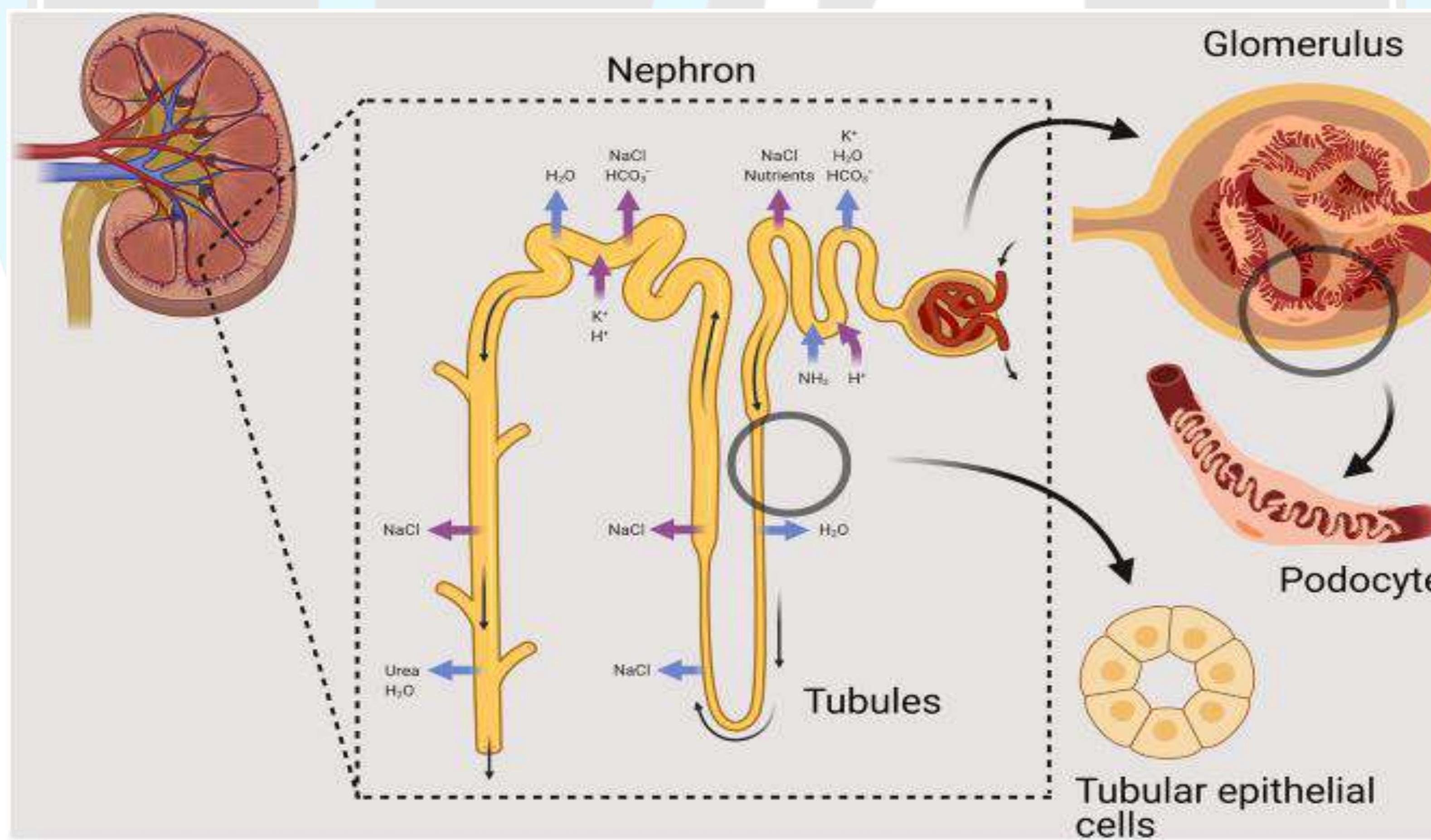
3. Simple Cuboidal Epithelium (सरल क्यूबॉडल उपकला / सरल घनाभ उपकला)

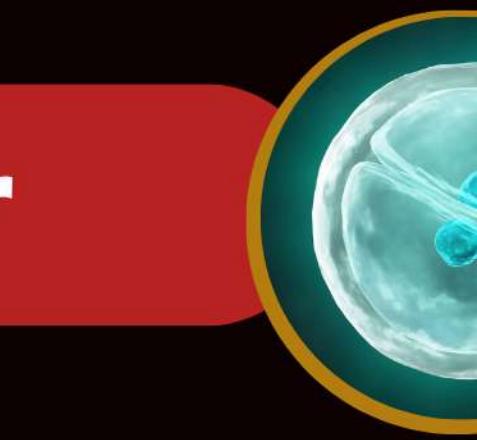
👉 **Shape (आकृति):** Cube-shaped, single layer / घनाकार कोणिकाएँ, एक परत

👉 **Where (कहाँ मिलती है):** Kidney tubules, Gland ducts / वृक्क नलिकाएँ, ग्रंथि की नलिकाएँ

👉 **Function (कार्य):** Absorption & Secretion / अवशोषण व छवण

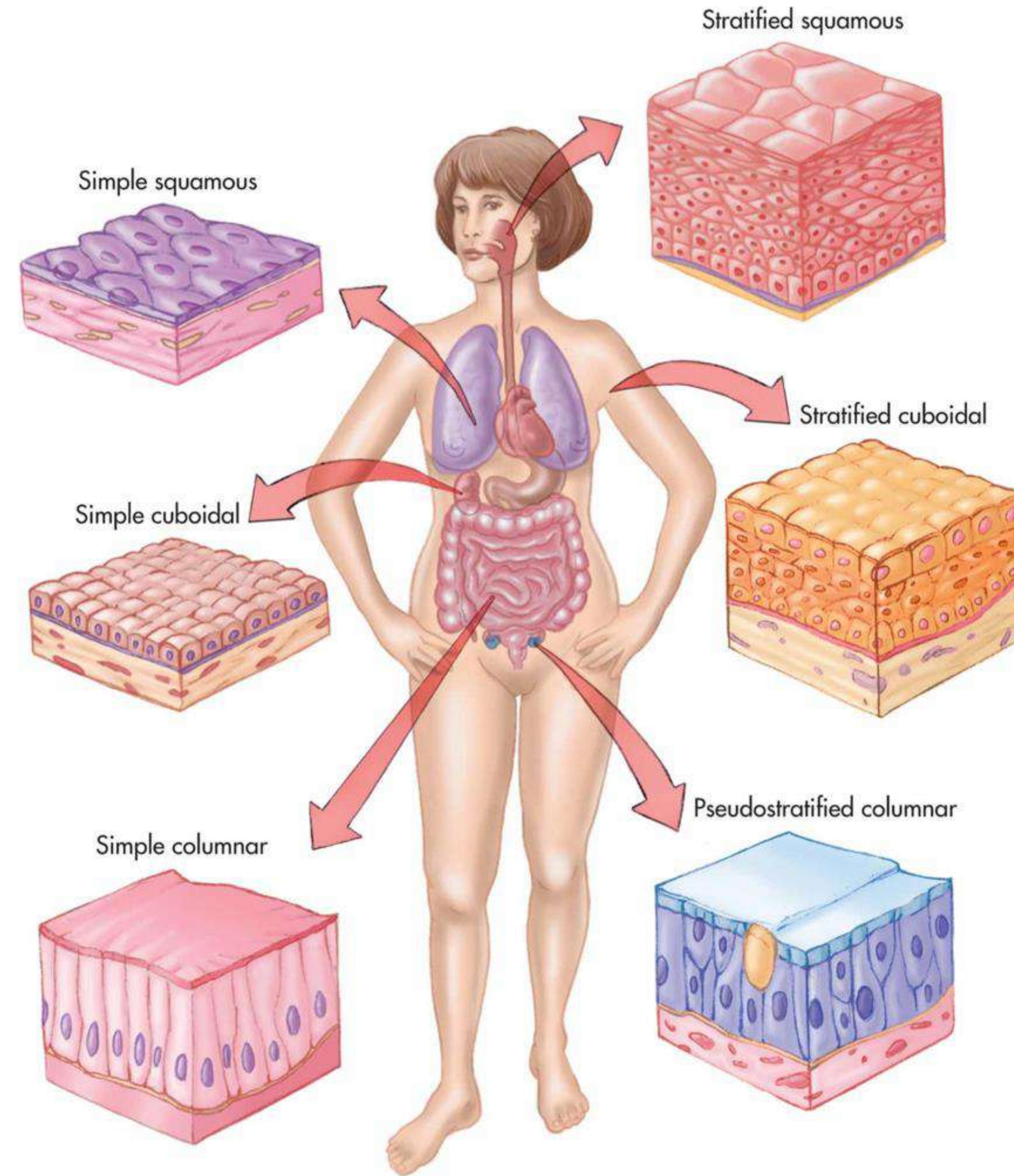
👉 **Example (उदाहरण):** Kidney tubules (वृक्क नलिकाएँ)

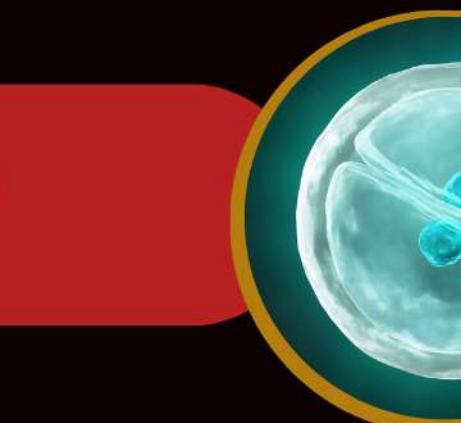




Selection

onWay





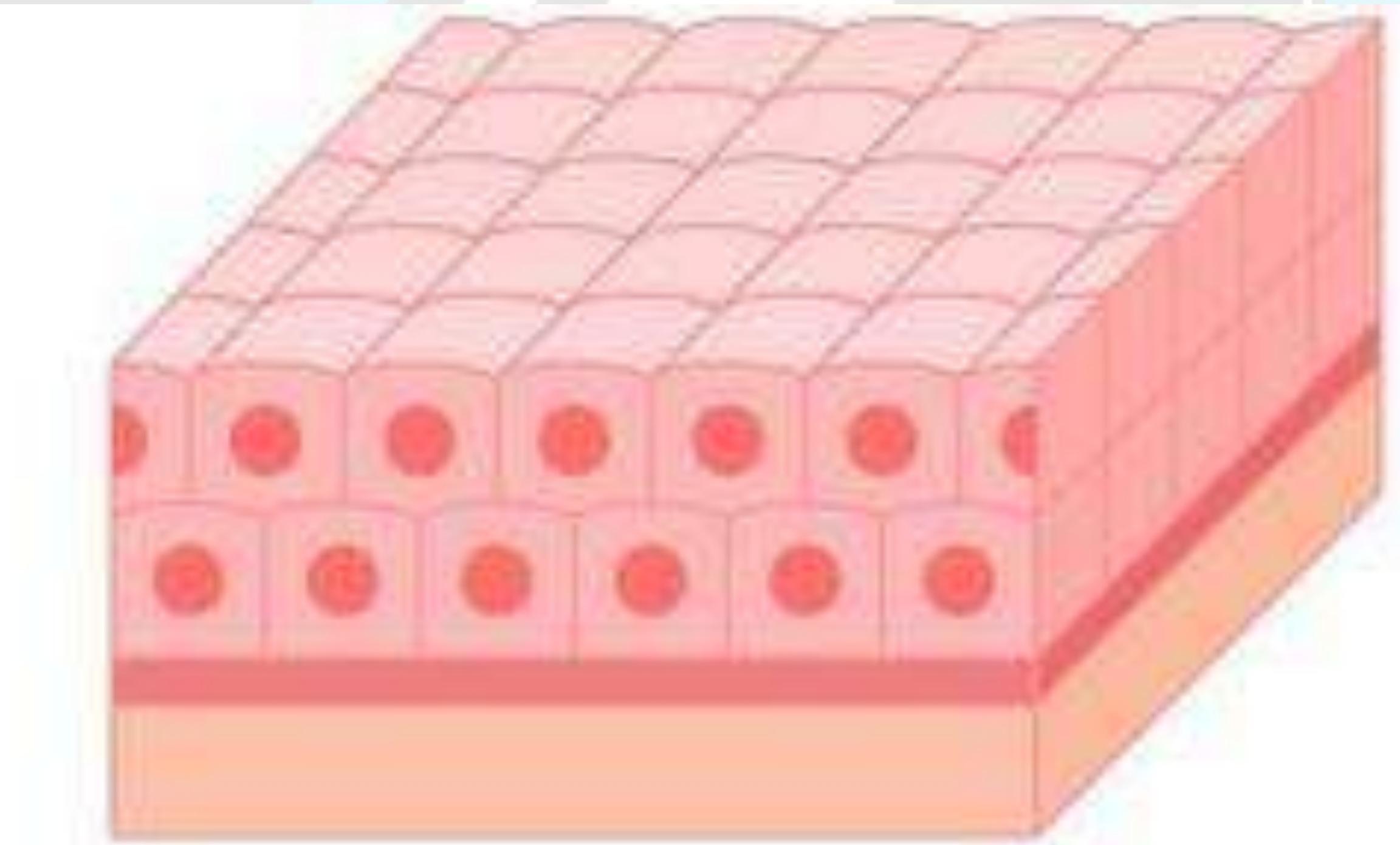
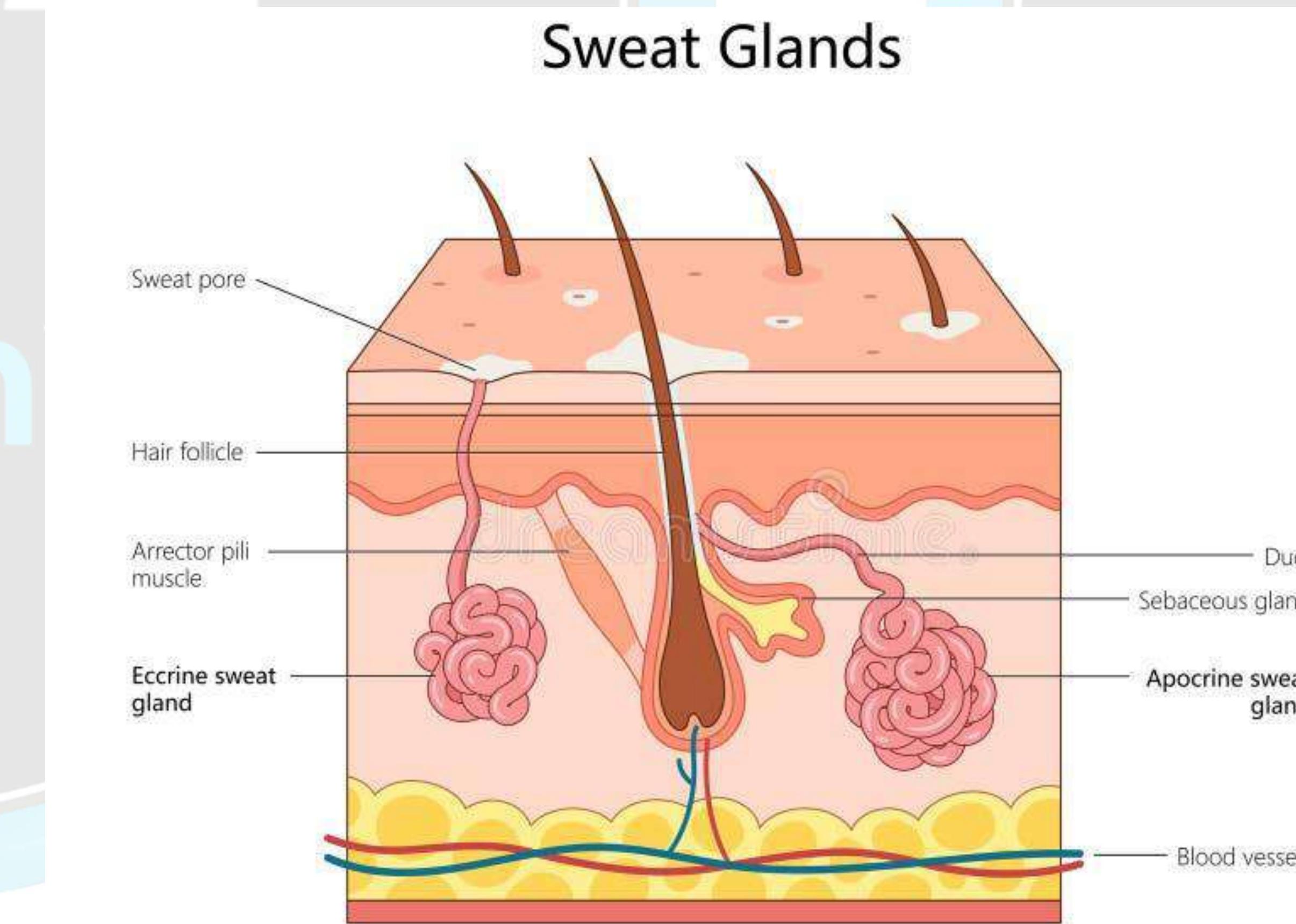
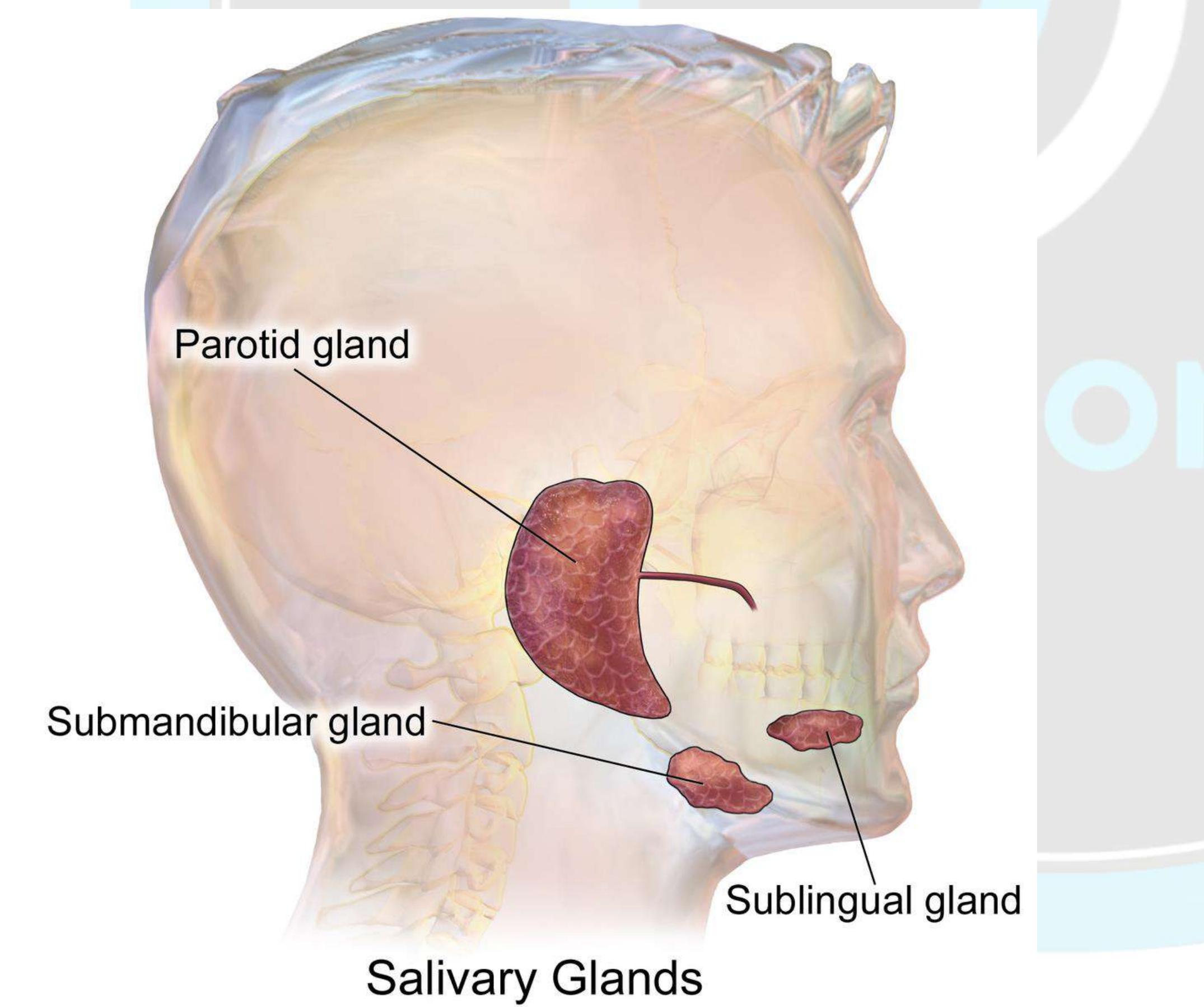
4. Stratified Cuboidal Epithelium (स्तरीकृत क्यूबॉडल उपकला / परतदार घनाभ उपकला)

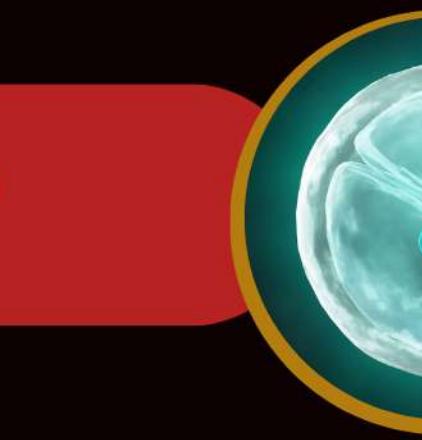
👉 **Shape (आकृति):** Multiple cube-shaped layers / घनाकार कोणिकाओं की कई परतें

👉 **Where (कहाँ मिलती है):** Larger ducts of glands / बड़ी ग्रंथियों की नलिकाएँ

👉 **Function (कार्य):** Protection & Secretion / सुरक्षा व स्रवण

👉 **Example (उदाहरण):** Sweat glands (स्वेद ग्रंथियाँ), Salivary glands (लार ग्रंथियाँ)

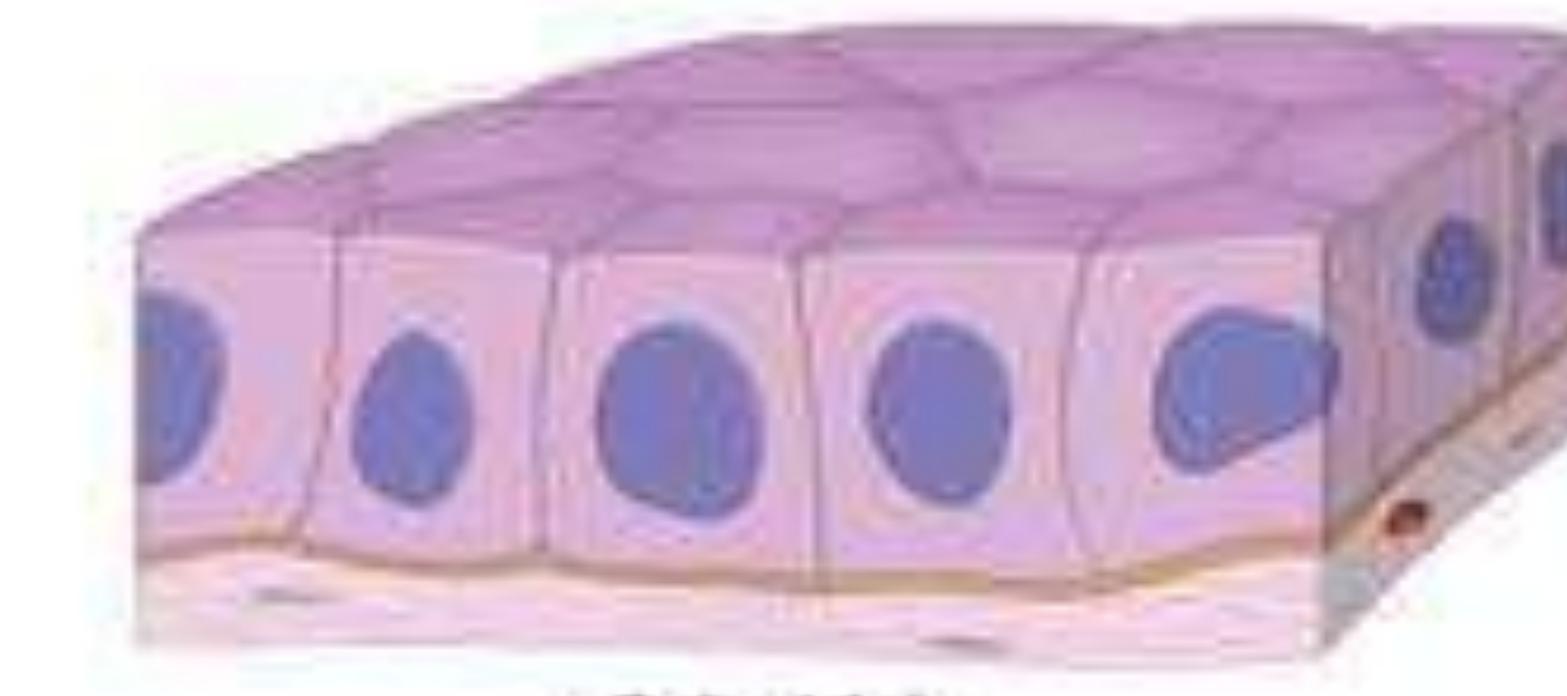




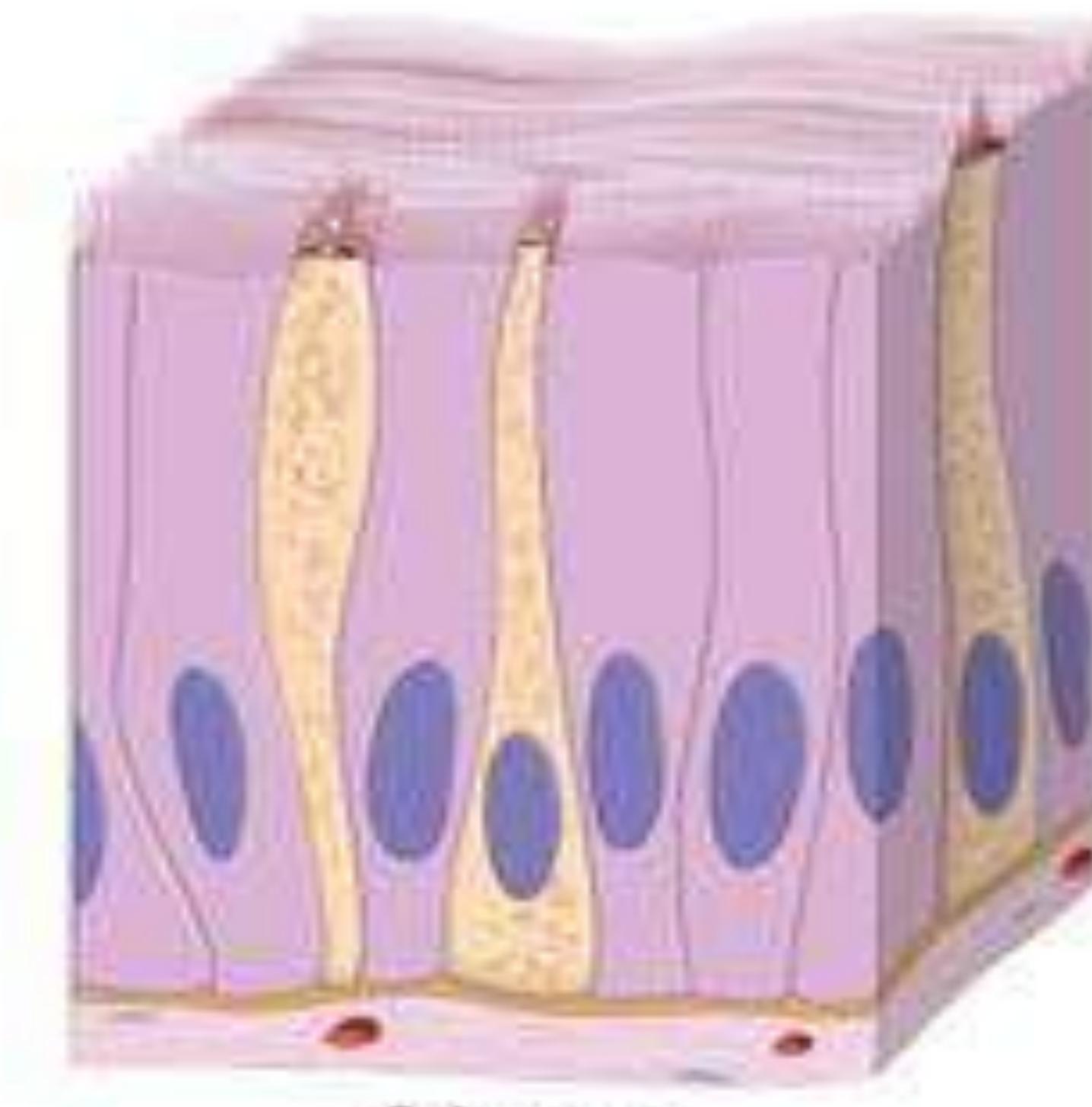
Simple epithelia



Squamous

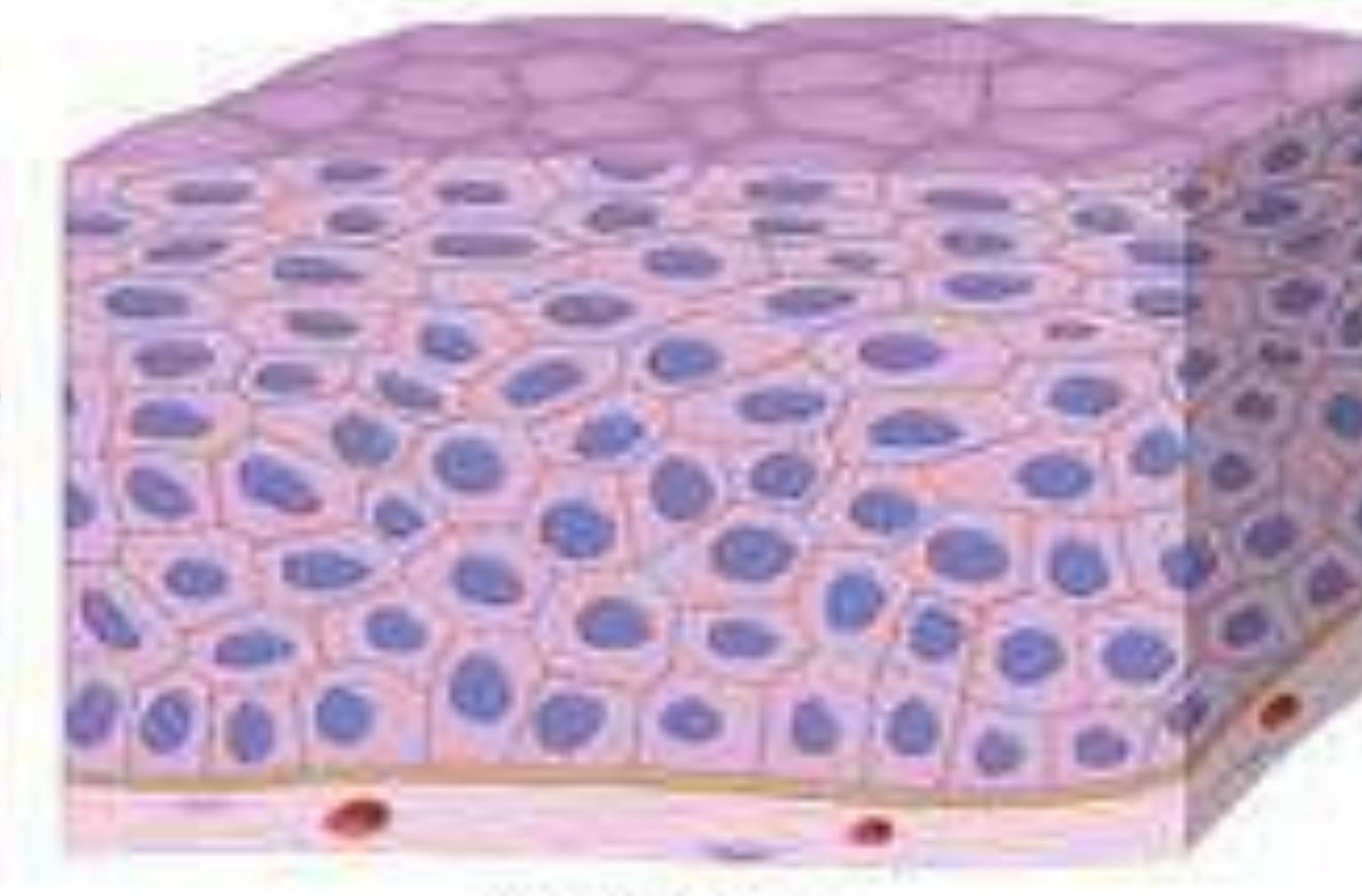


Cuboidal

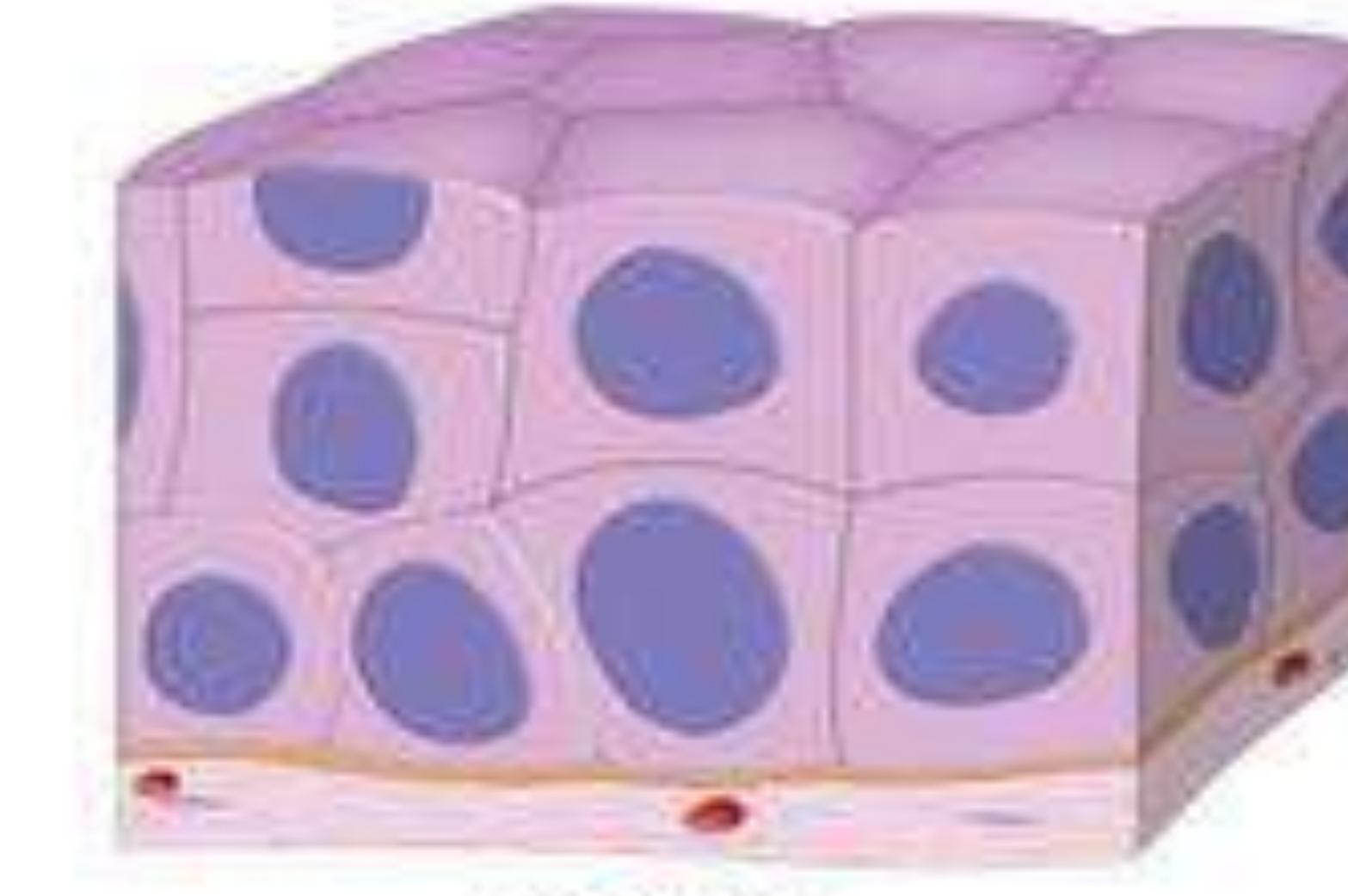


Columnar

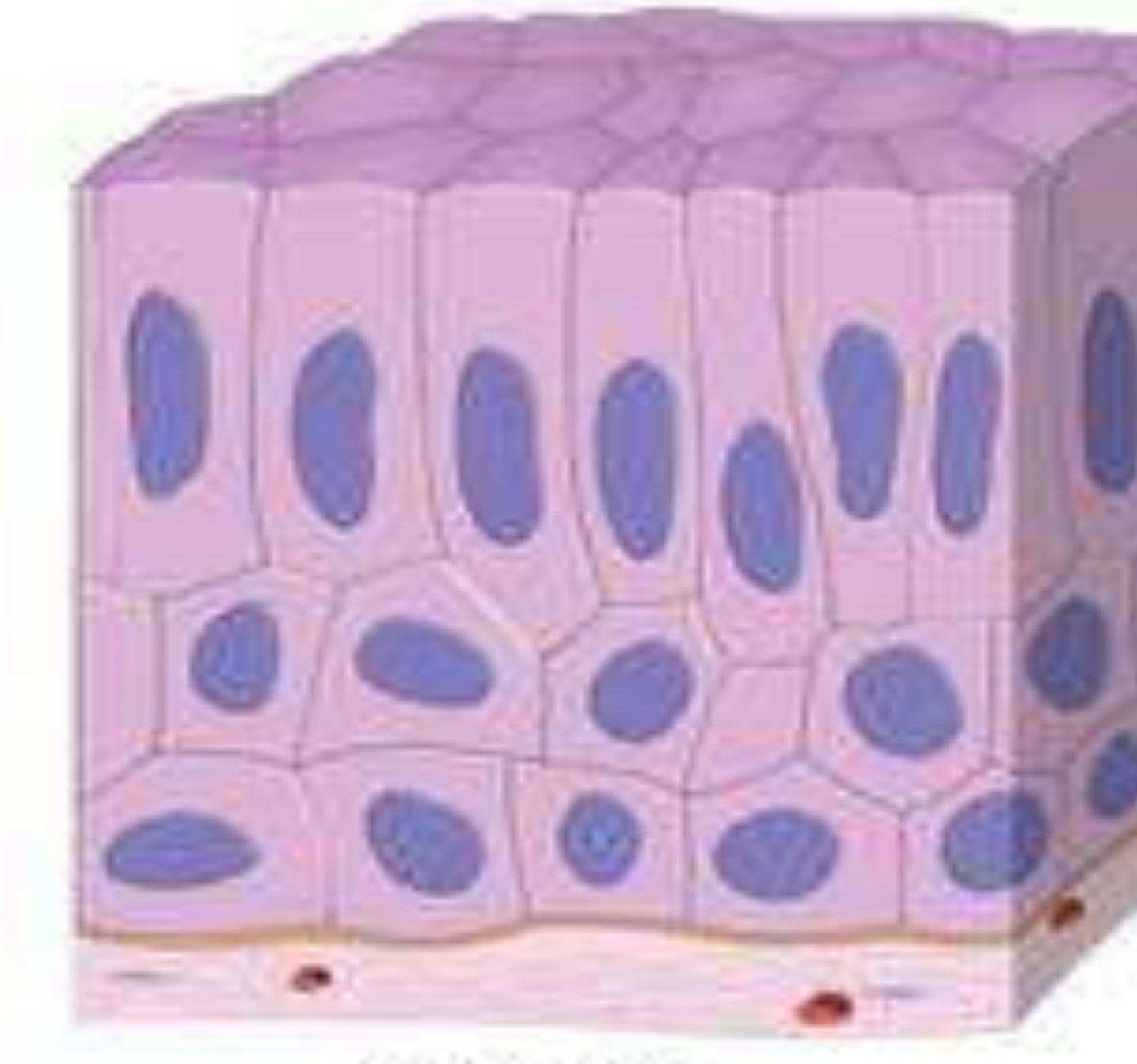
Stratified epithelia



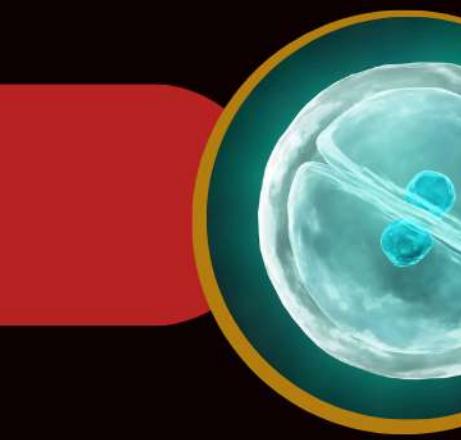
Squamous



Cuboidal



Columnar



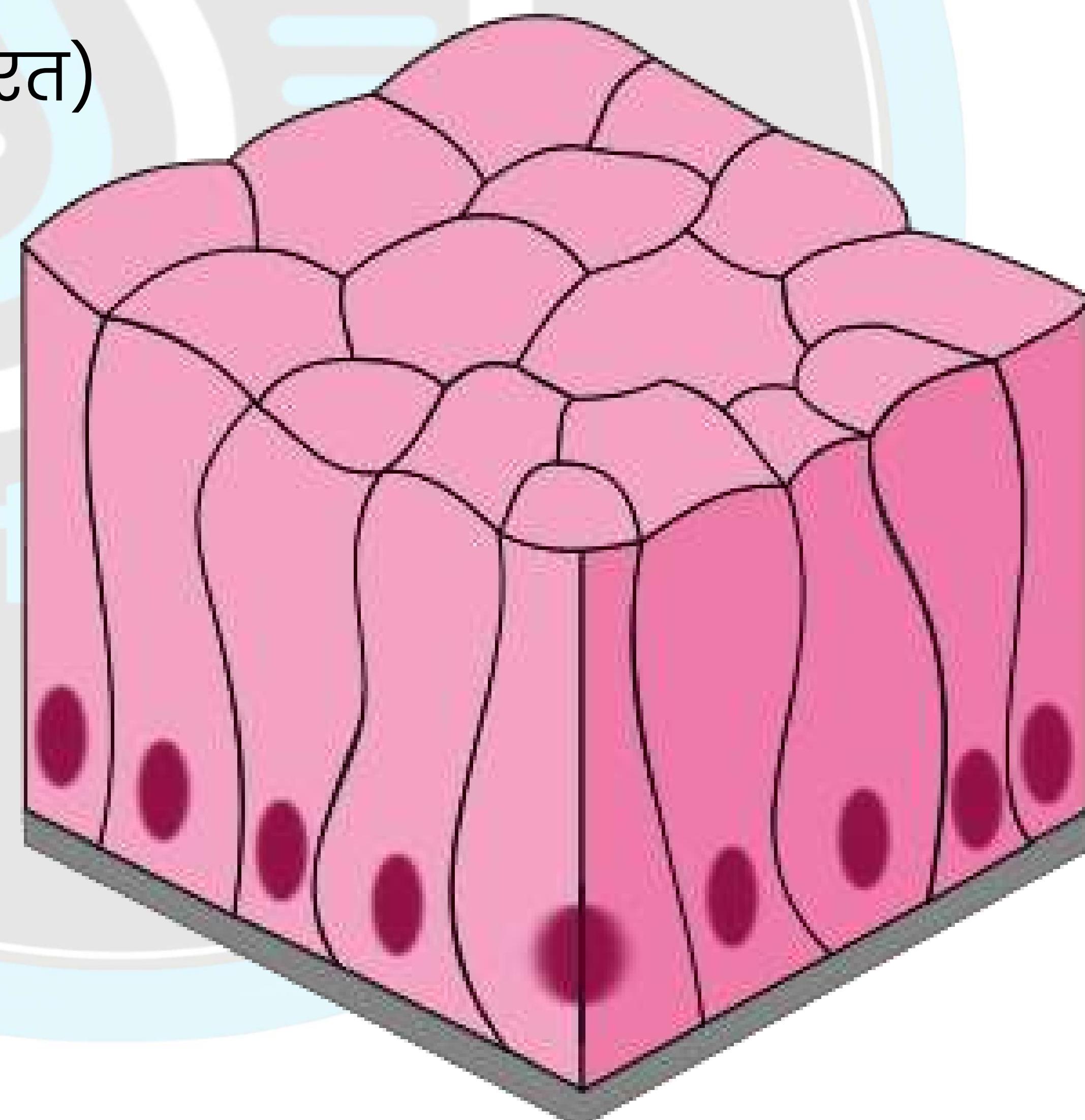
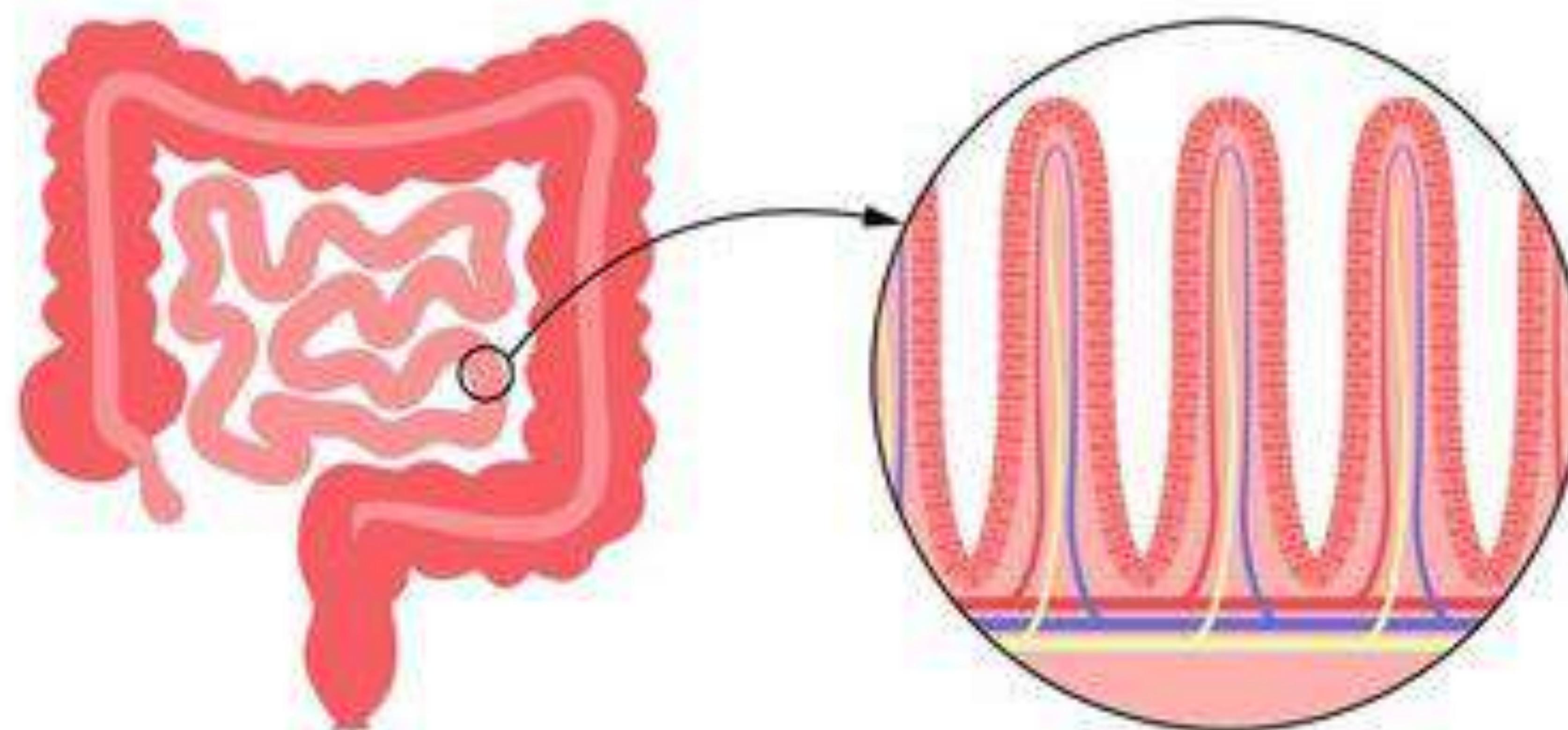
5. Simple Columnar Epithelium (सरल कॉलमर उपकला / सरल स्तंभनुमा उपकला)

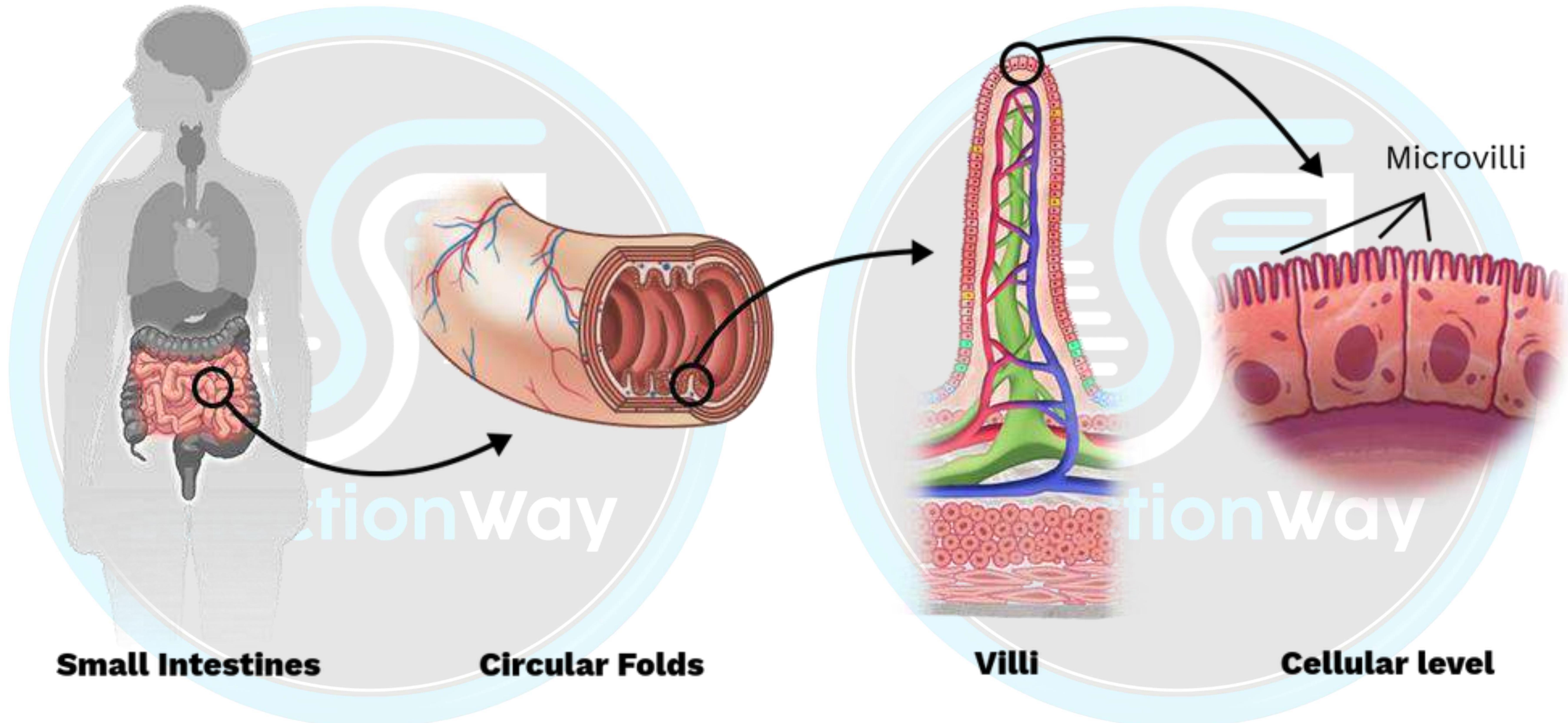
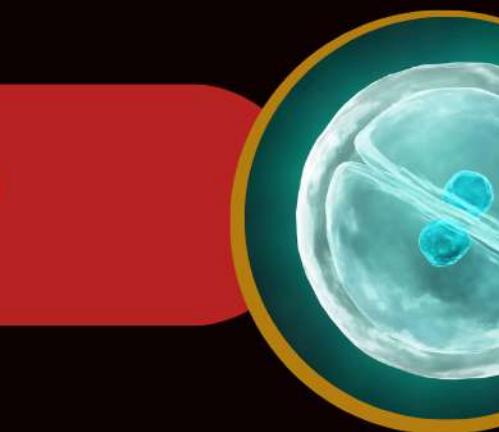
Shape (आकृति): Tall pillar-like cells, one layer / लंबी स्तंभ जैसी कोरिकाएँ, एक परत

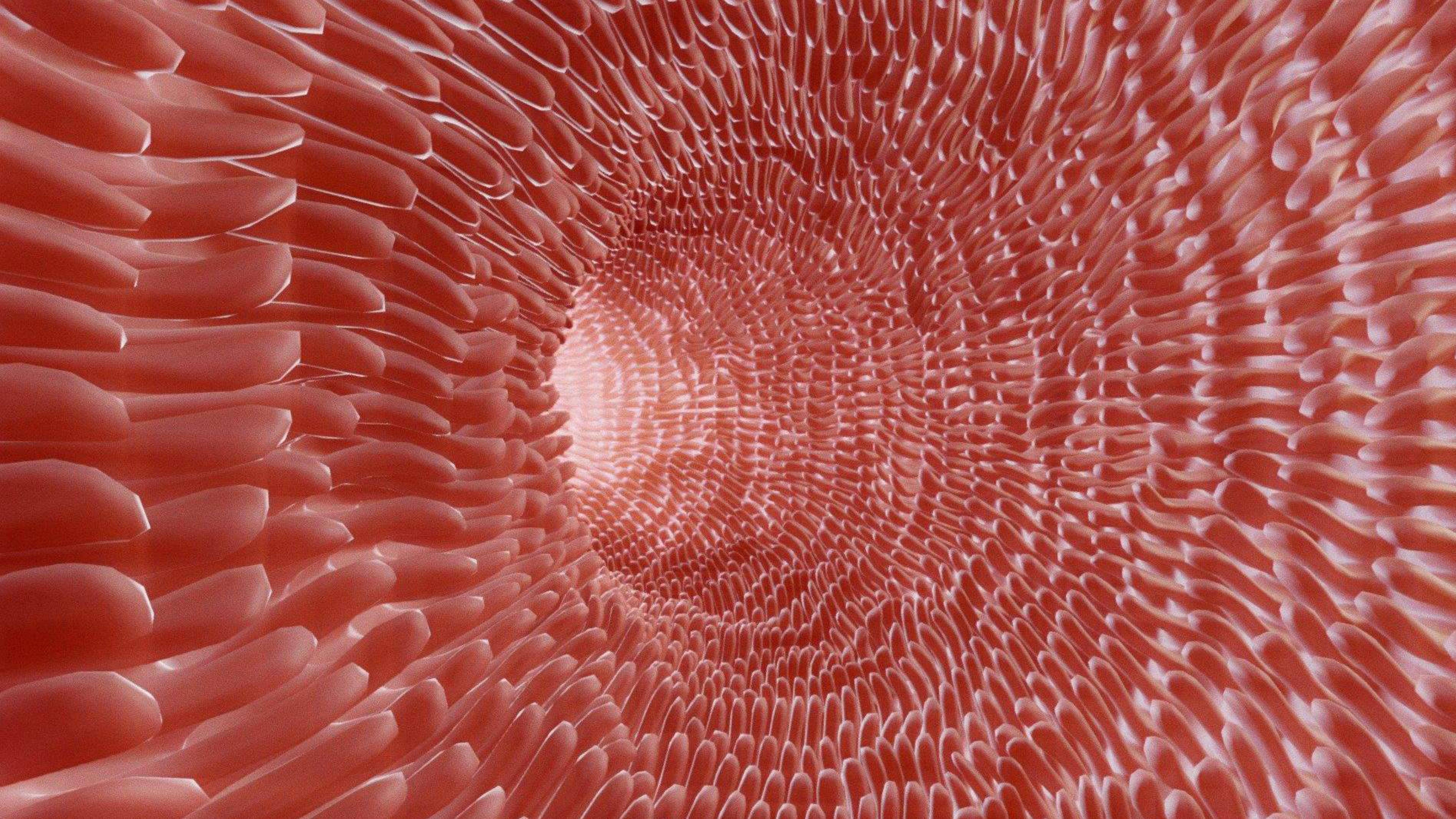
Where (कहाँ मिलती है): Intestine, Stomach / आंत, आमाशय

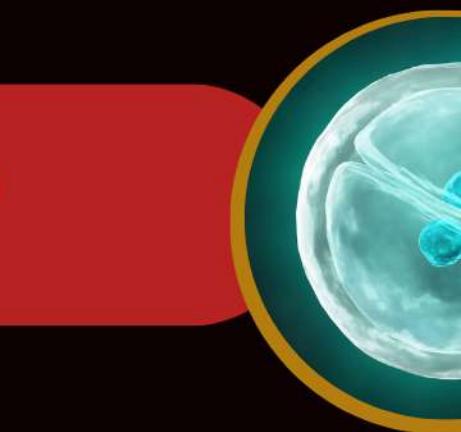
Function (कार्य): Absorption of nutrients & Secretion of enzymes / पोषक तत्वों का अवशोषण व एंजाइम का स्रवण

Example (उदाहरण): Small intestine lining (छोटी आंत), Stomach lining (आमाशय की परत)





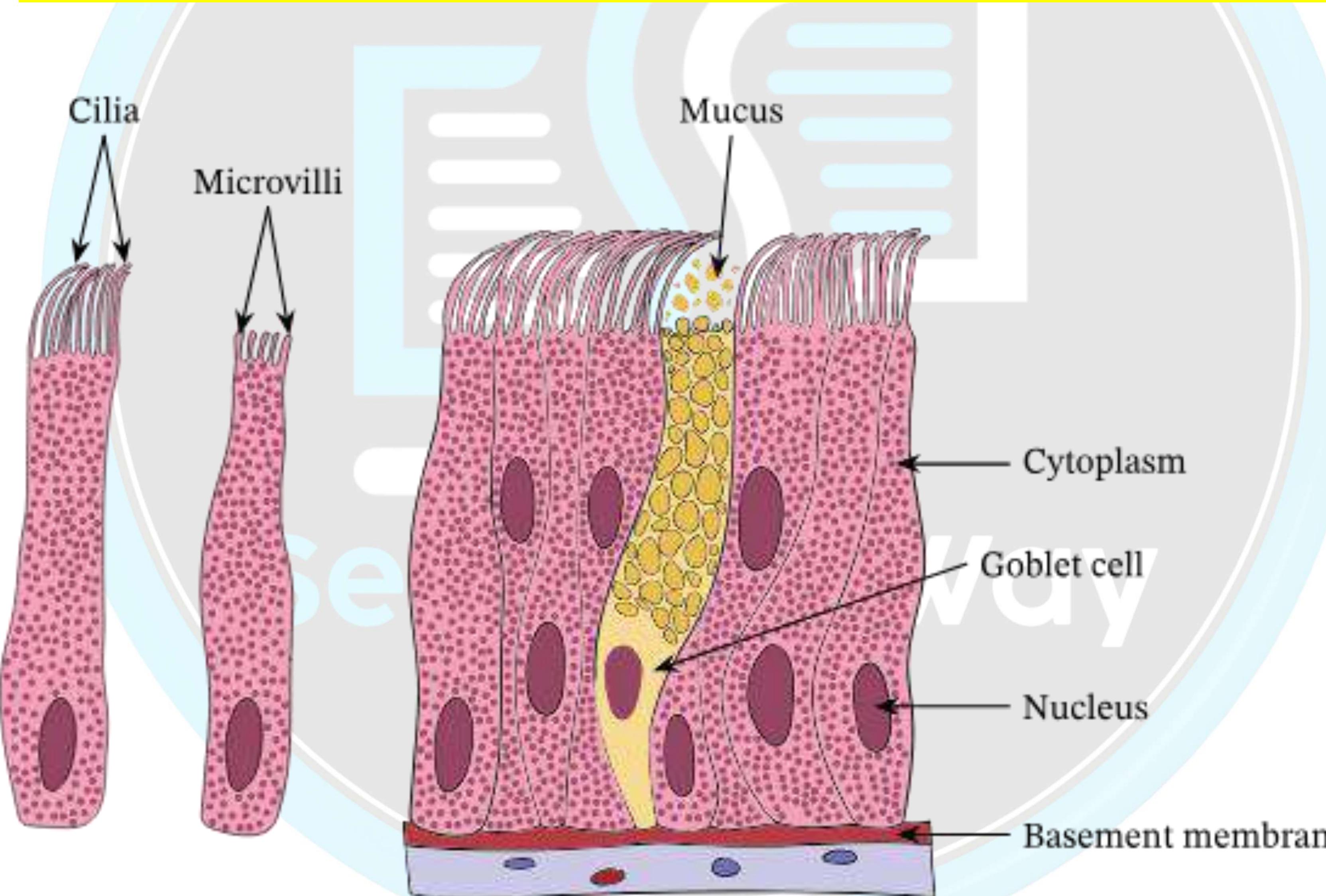




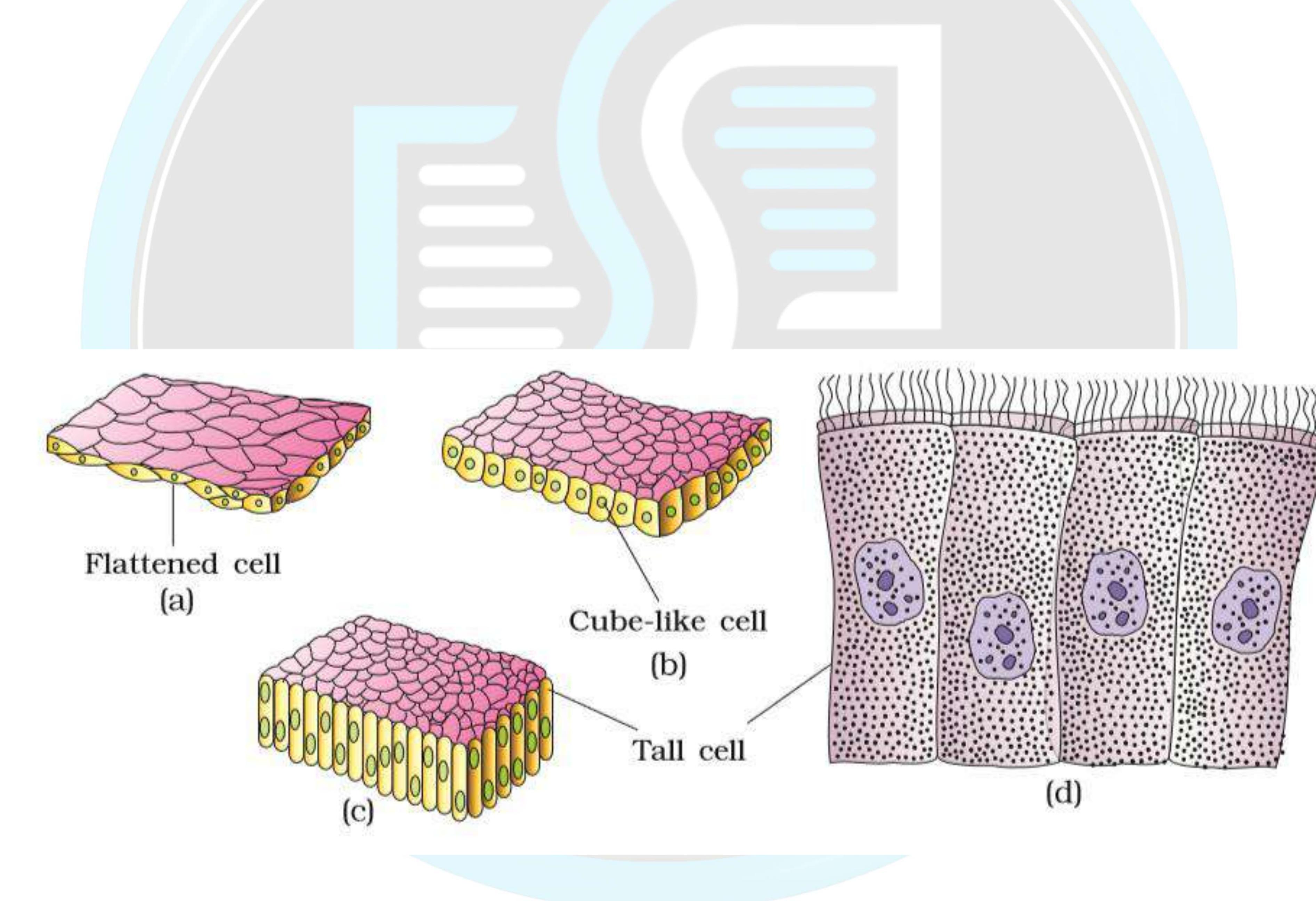
Ciliated Epithelium (कशाभिकाय उपकला)

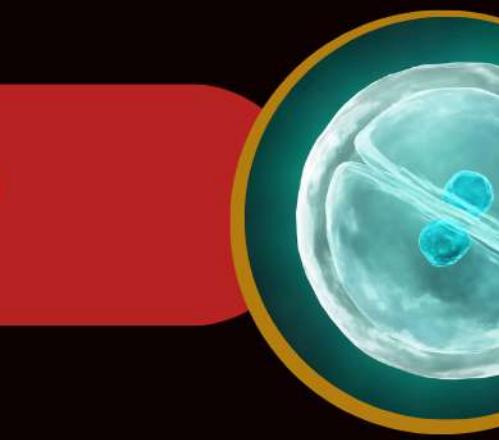
Shape (आकृति): Columnar or Cuboidal cells with hair-like projections (Cilia) on their surface / कॉलमर या क्यूबॉडल

कोशिकाएँ जिनकी सतह पर बाल जैसे संरचनाएँ (सिलिया) होती हैं।



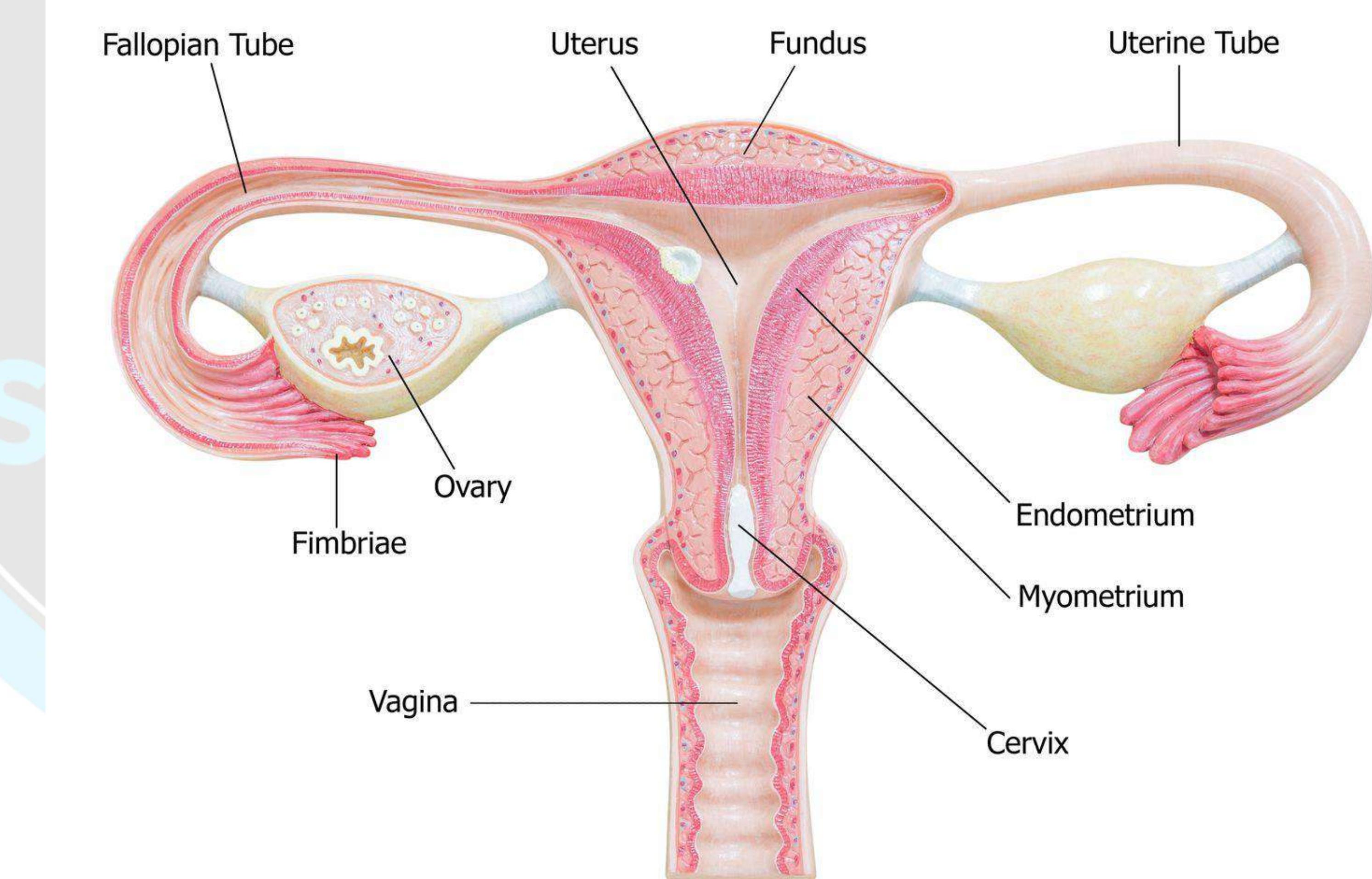
Ciliated columnar epithelium

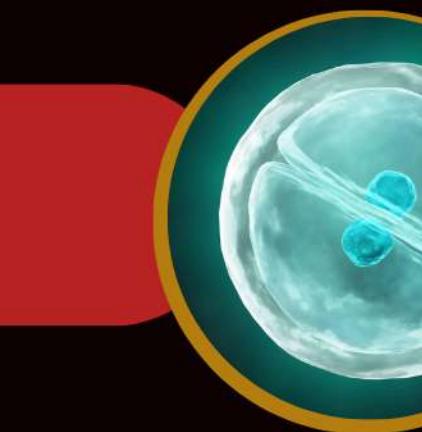




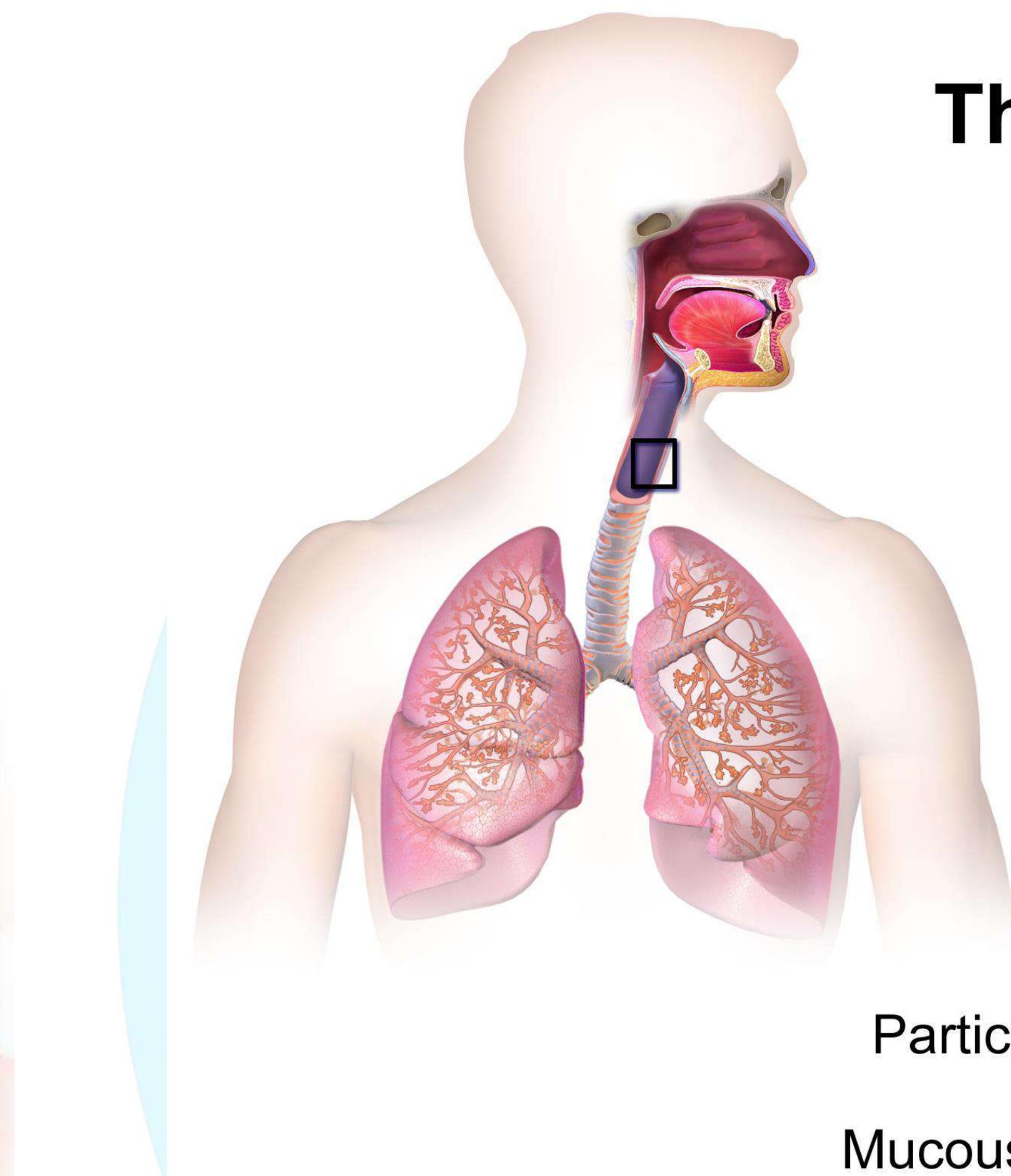
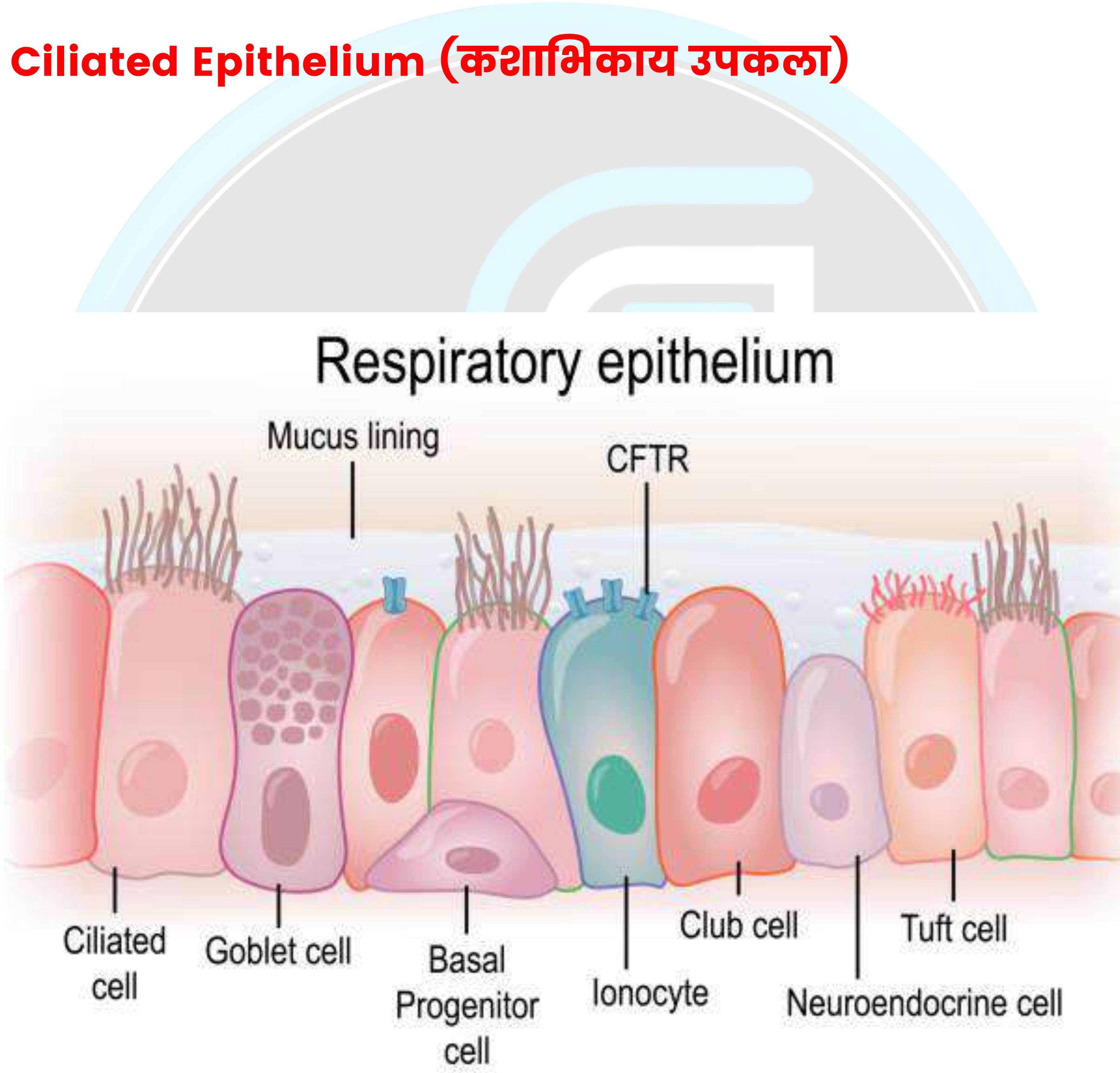
Ciliated Epithelium (कशाभिकाय उपकला)

- 👉 **Where (कहाँ मिलती है):** Respiratory tract (Trachea, Bronchi), Fallopian tubes / श्वसन तंत्र (श्वासनली, श्वसनी), फैलोपियन नलिकाएँ
- 👉 **Function (कार्य):** Movement of mucus, dust, and ovum with the help of cilia / सिलिया की मदद से बलगम, धूलकण व अंडाणु (Ovum) को गति देना

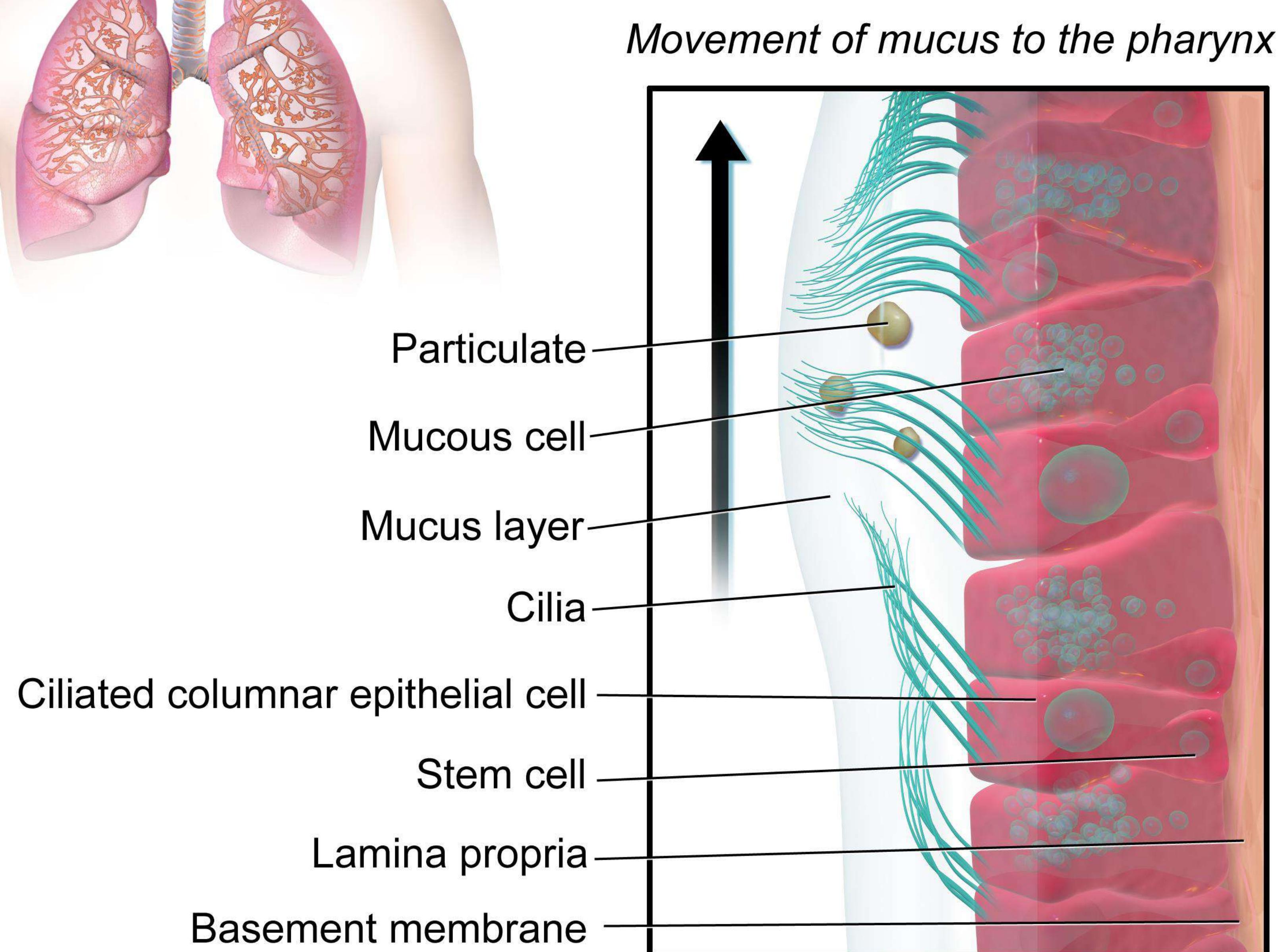


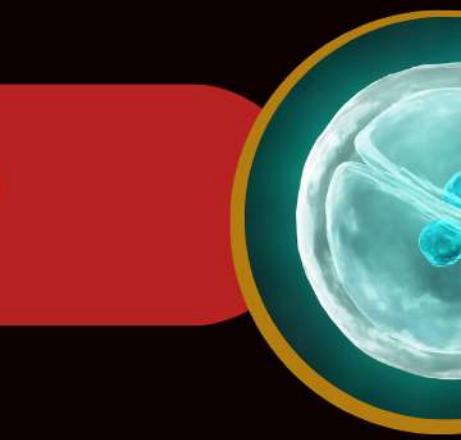


Ciliated Epithelium (कणाभिकाय उपकला)



The Respiratory Epithelium



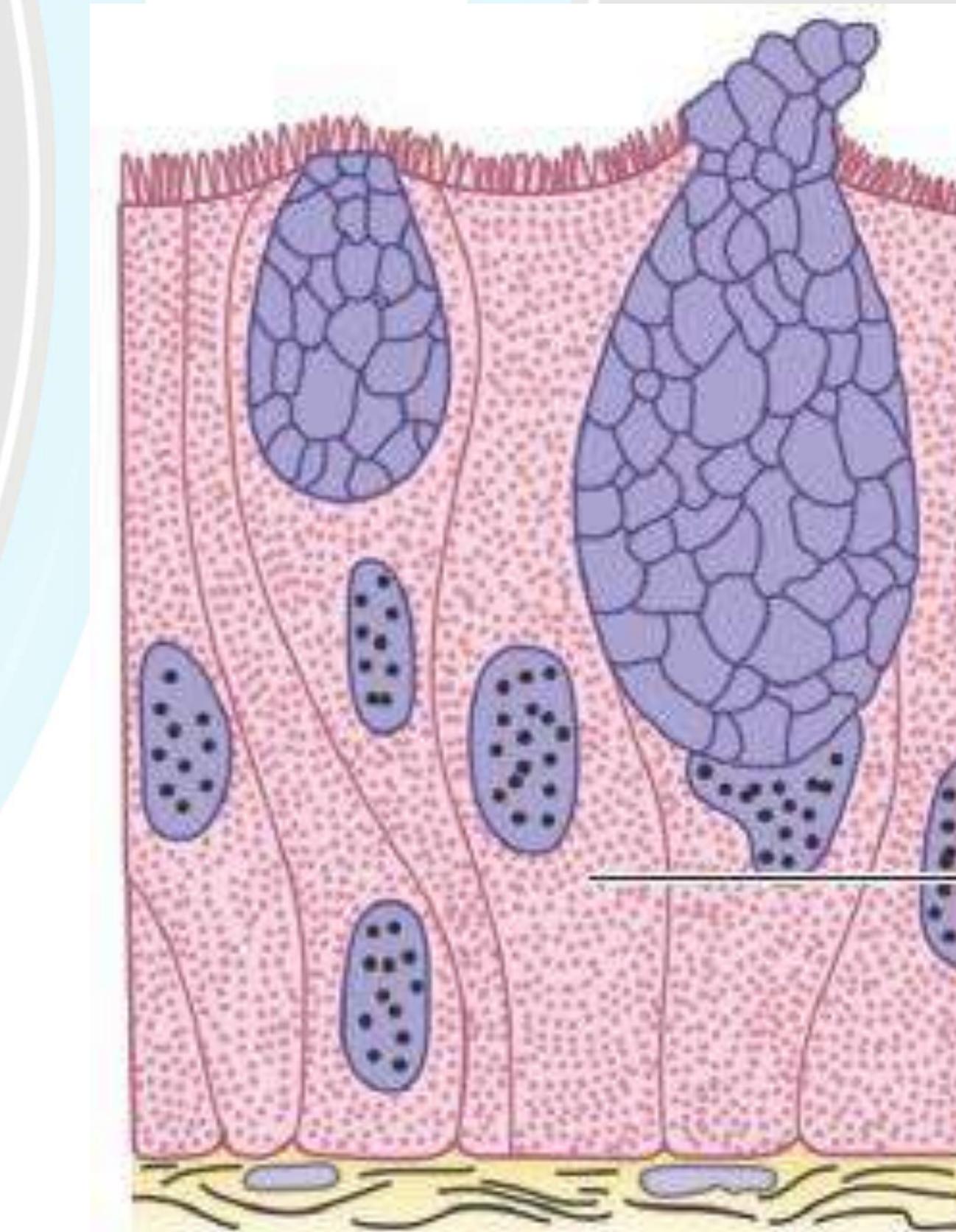
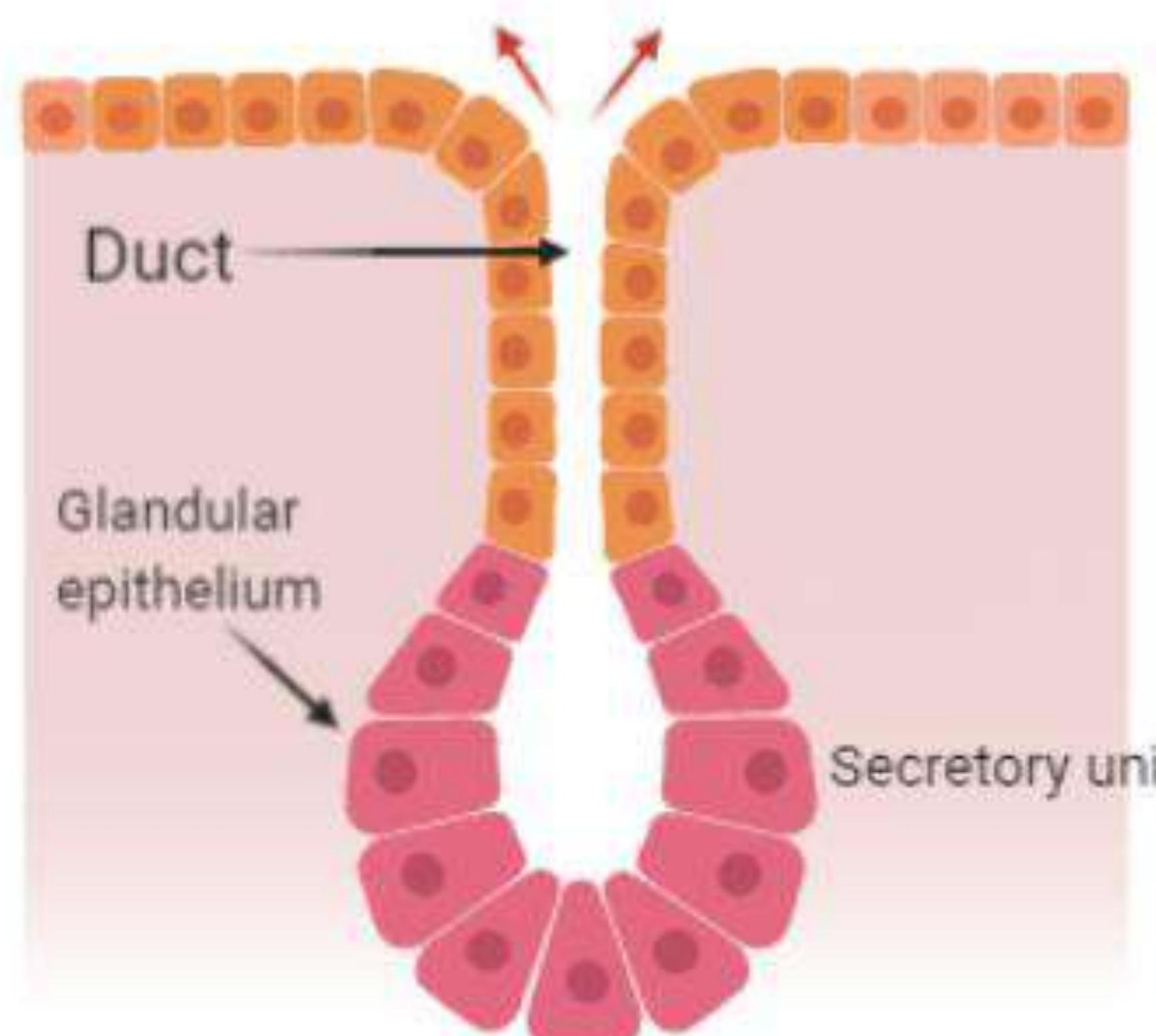


ગ્રંથિય ઉપકલા (Glandular Epithelium)

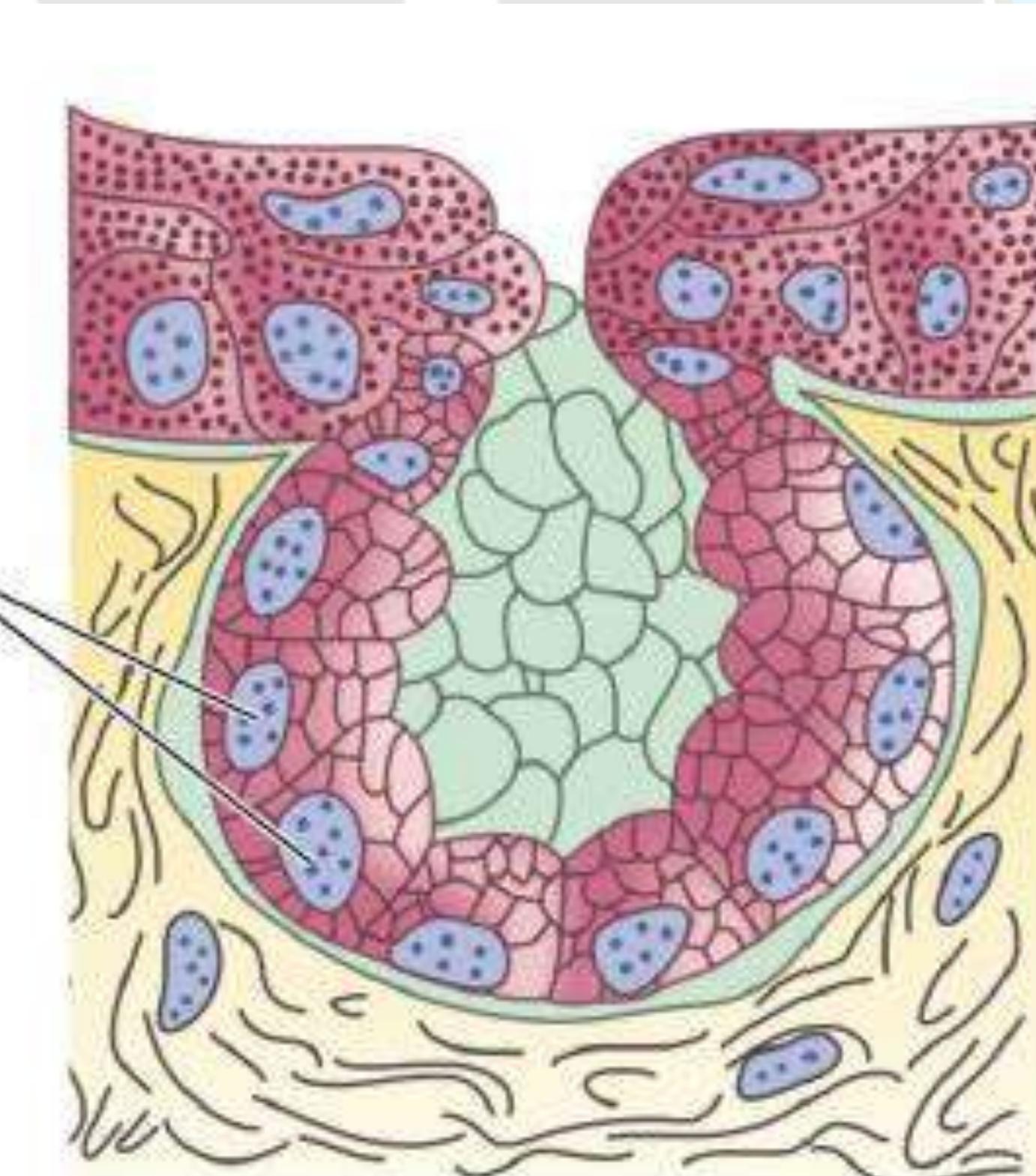
👉 Glandular Epithelium Is An Epithelial Tissue In Which Cells Are Specialized For Secretion Of Substances Like Enzymes

Hormones, Sweat, Mucus, And Saliva.

👉 ગ્રંથિય ઉપકલા વણ ઉપકલા ઊતક હૈ જિસકી કોરિકાએ ઉંજાડમ, હાર્મોન, પસીના, બલગમ ઔર લાર જૈસે પદાર્થોં કે લ્યવણ (Secretion) મેં વિશેષ હોતી હુંદી હૈ.

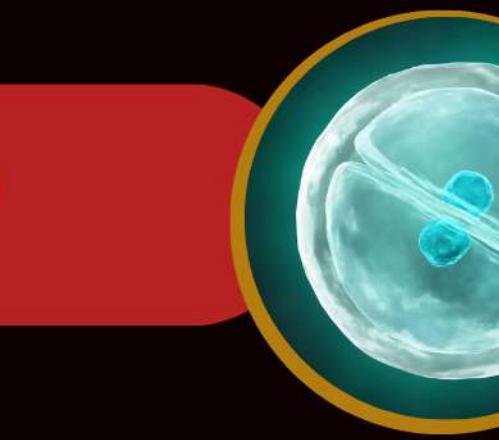


(a)



(b)

Figure 3.3 Glandular Epithelium:

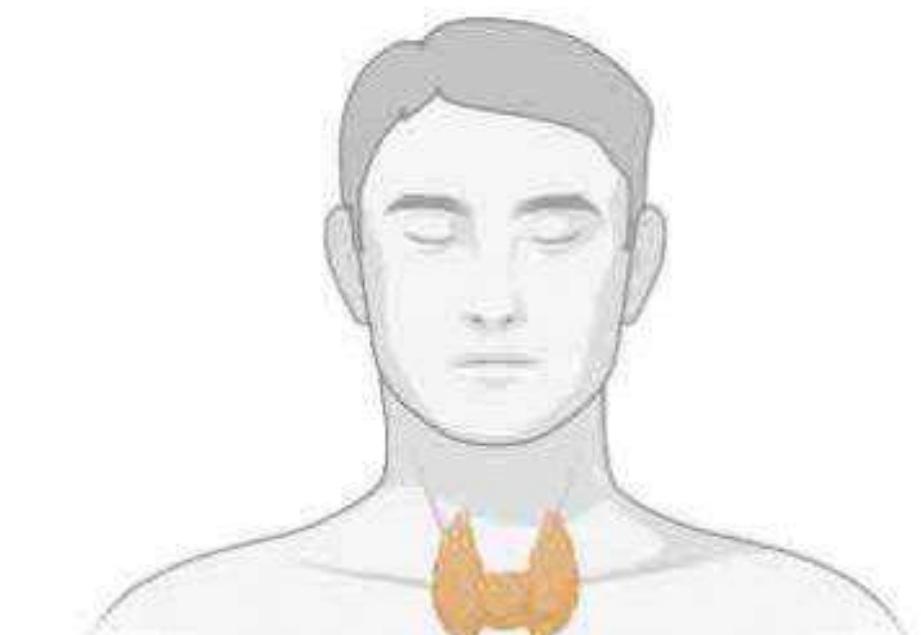
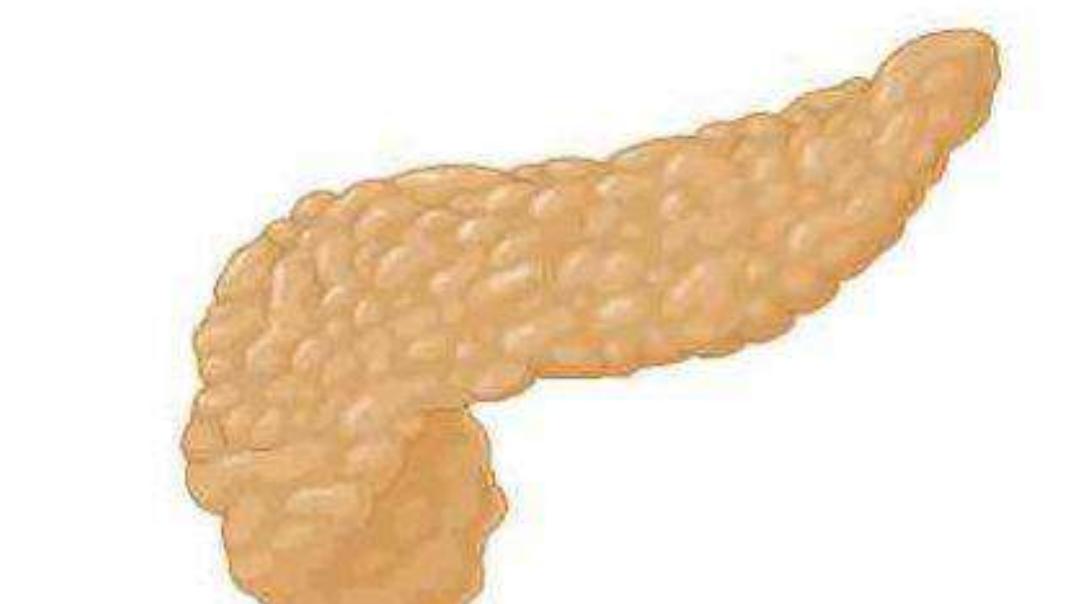
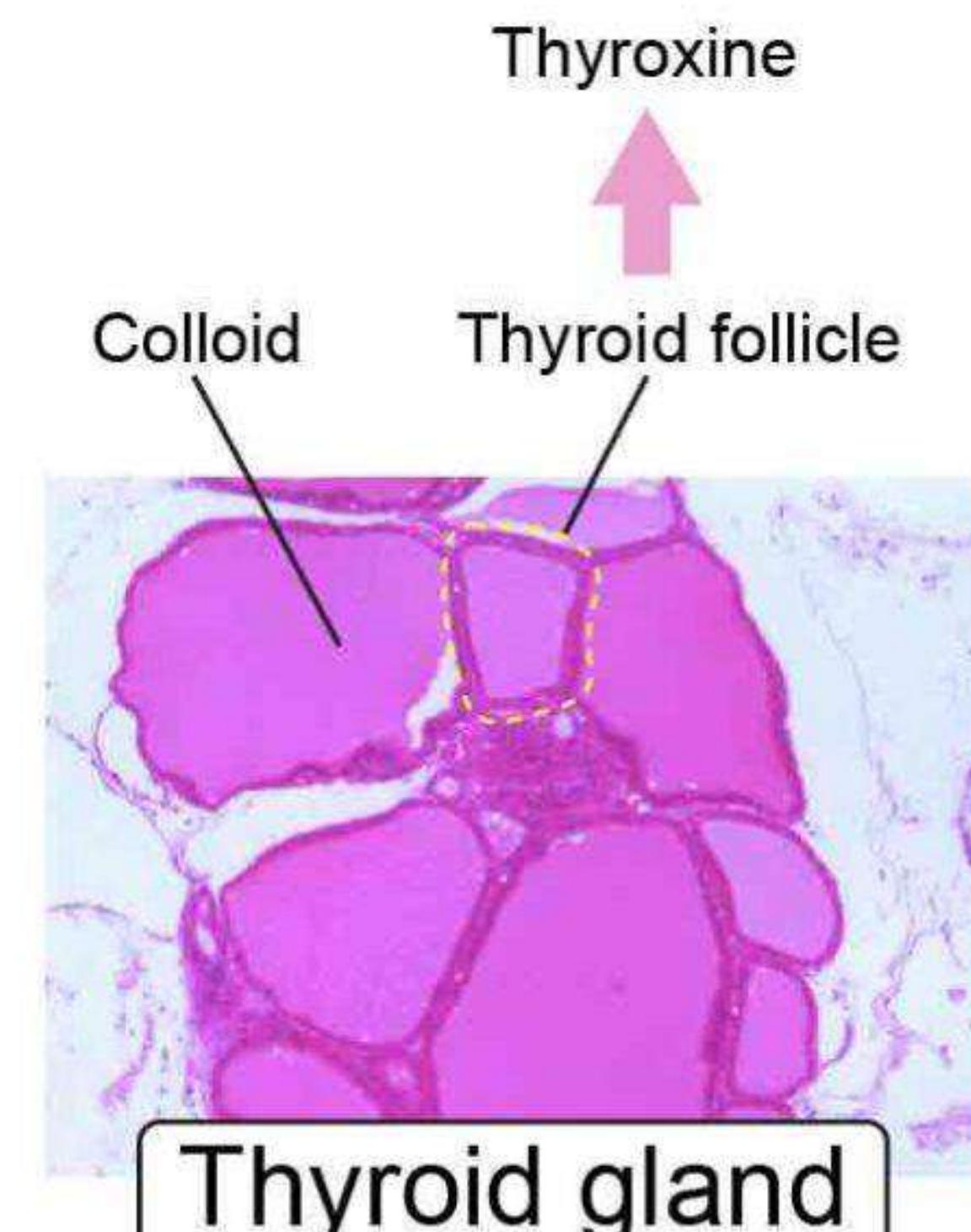
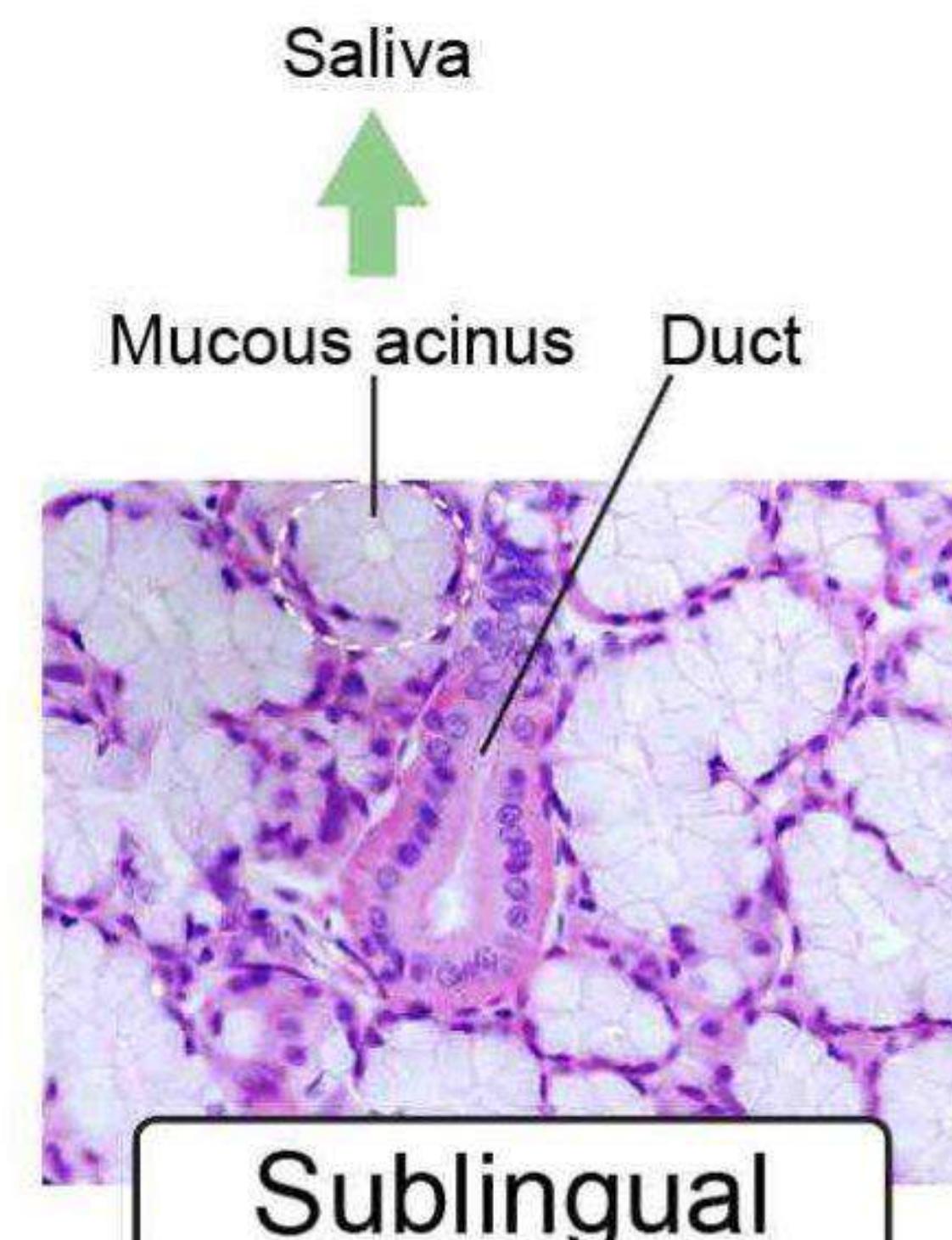
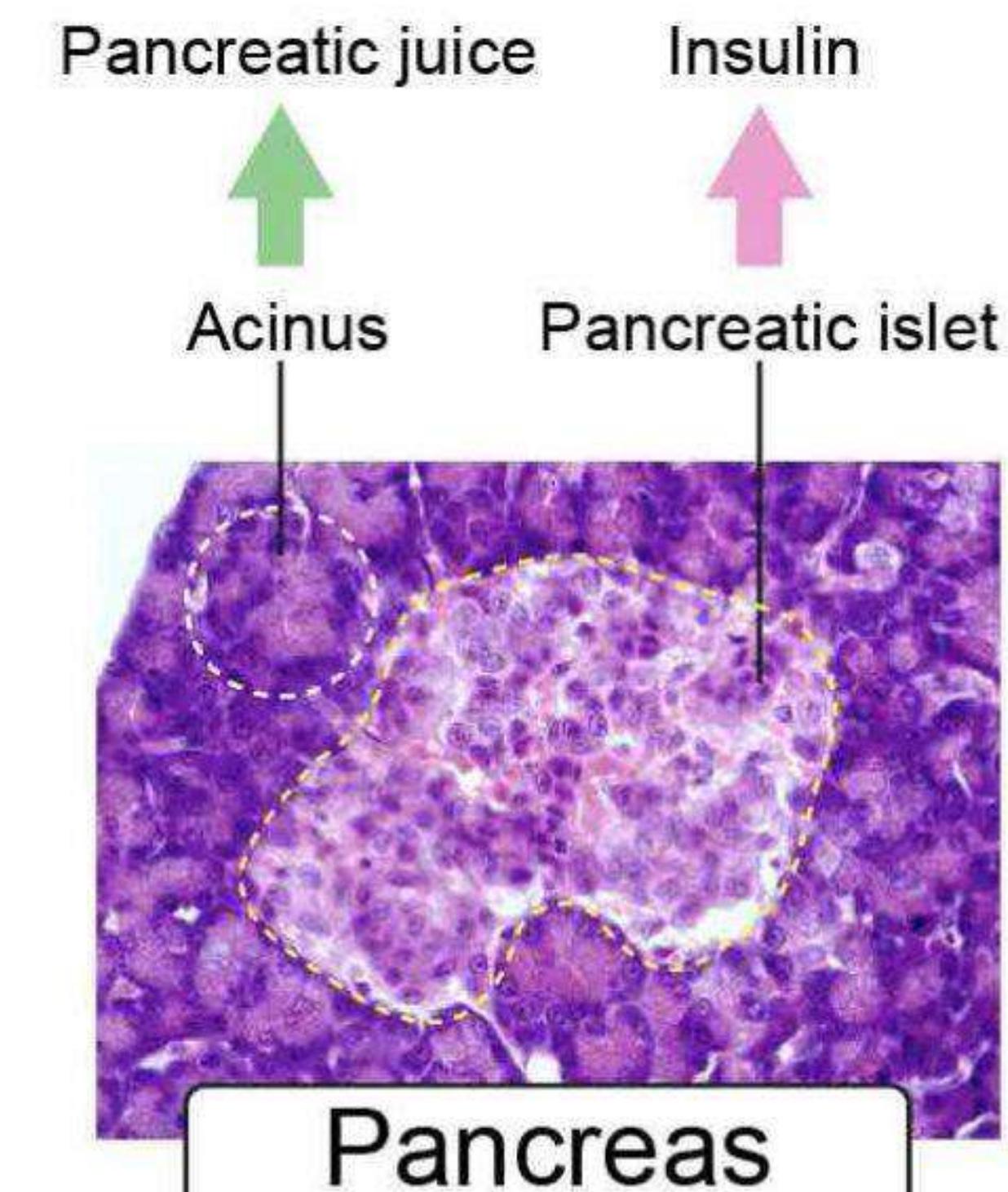


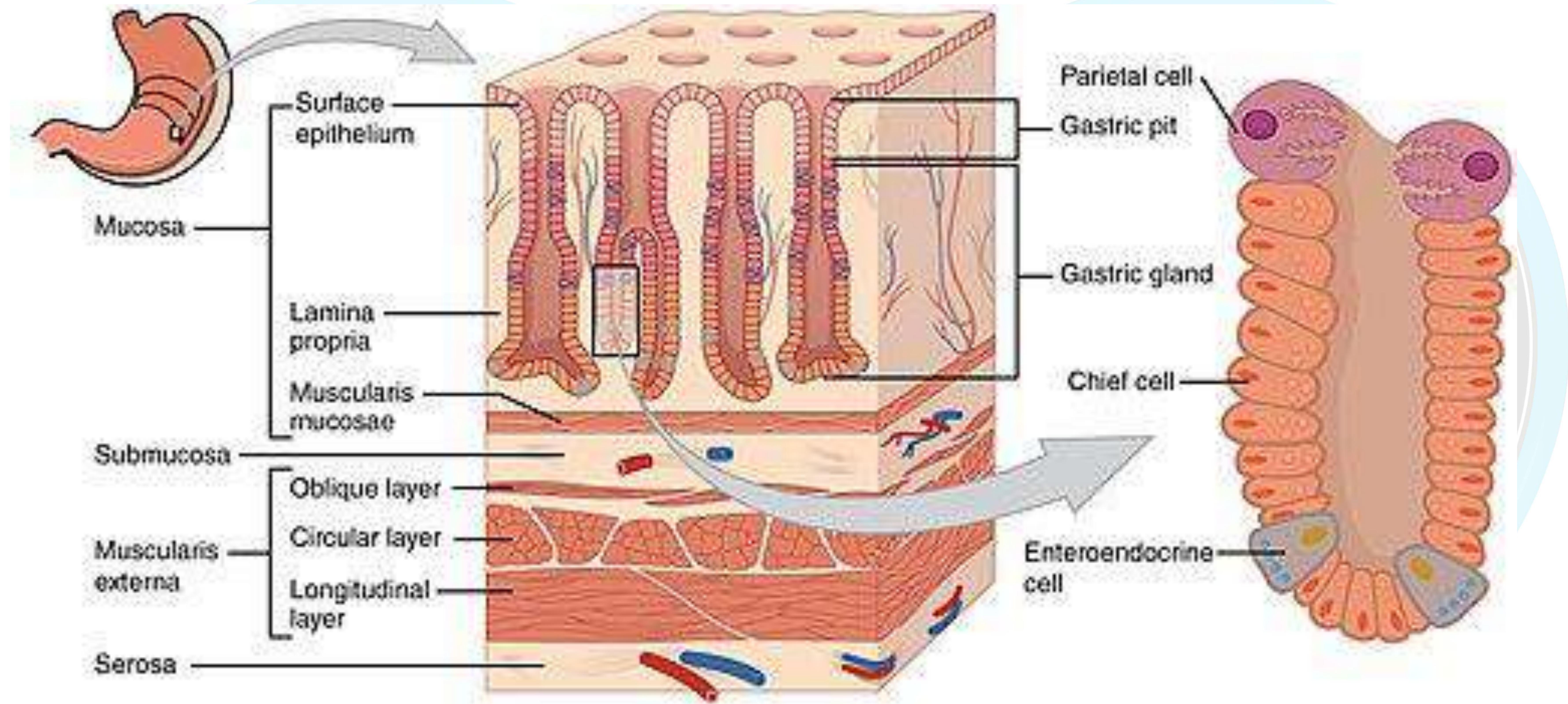
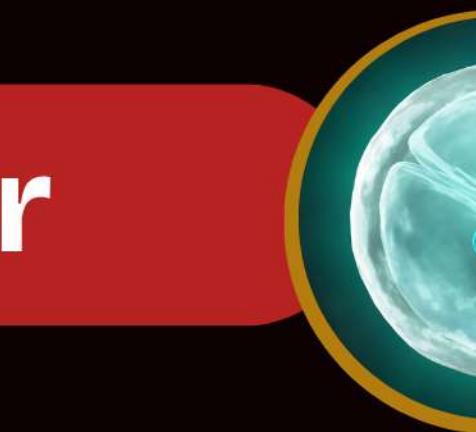
■ Glandular Epithelium (ग्रंथिय उपकला)

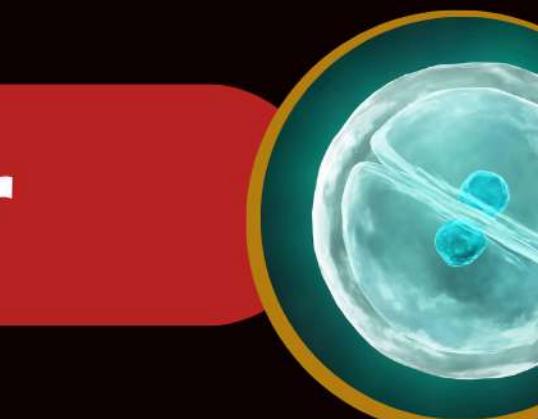
Where found (कहाँ पाई जाती है)

- Sweat glands (स्वेद ग्रंथि)
- Salivary glands (लार ग्रंथि)
- Gastric glands (जठर ग्रंथि)
- Pancreas (अग्न्याशय)
- Intestinal glands (आंत्र ग्रंथि)
- Thyroid & Pituitary gland (थायरॉड व पिट्यूटरी ग्रंथि – Endocrine)

Examples of Glandular Epithelial Tissues







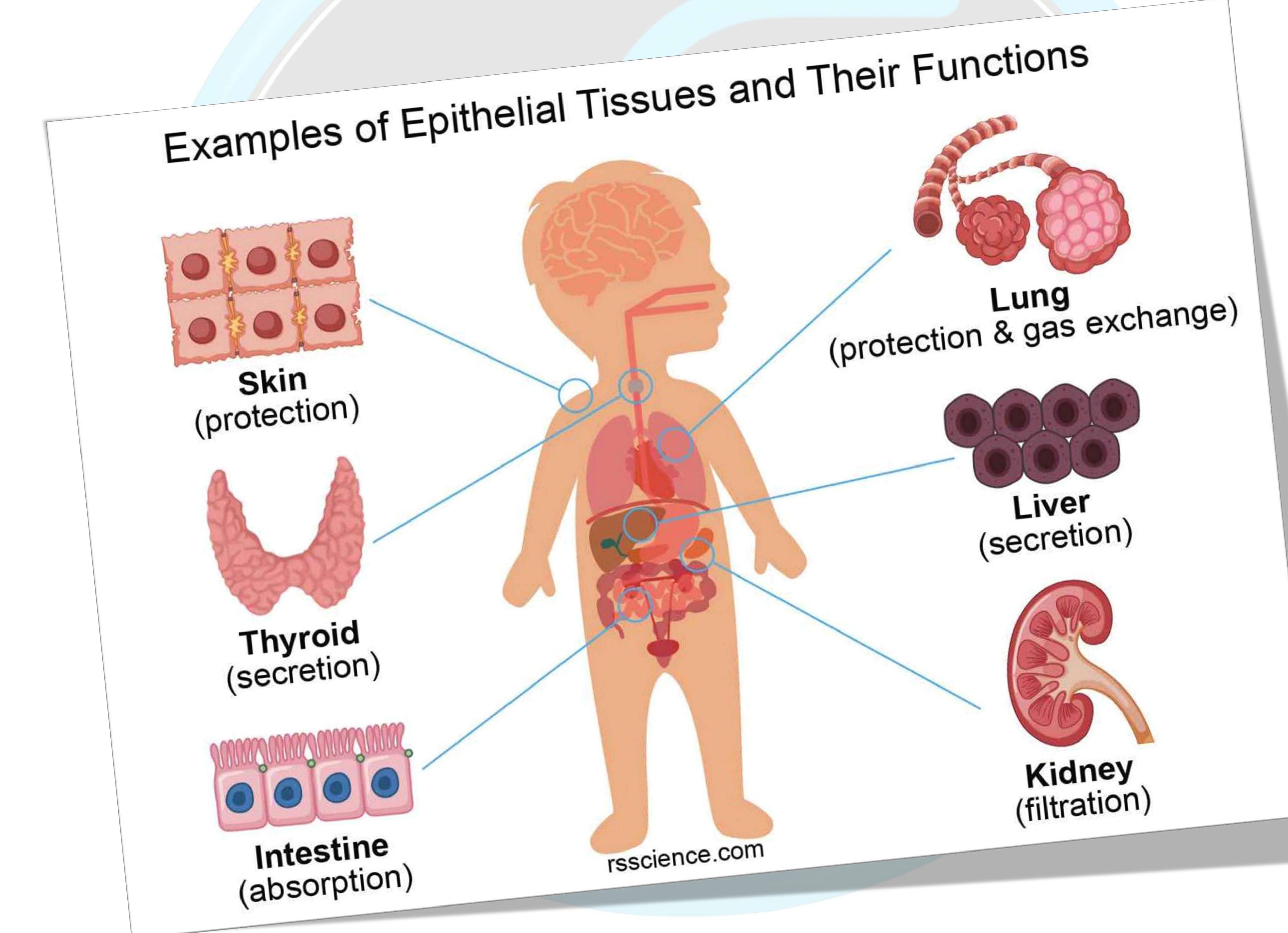
01

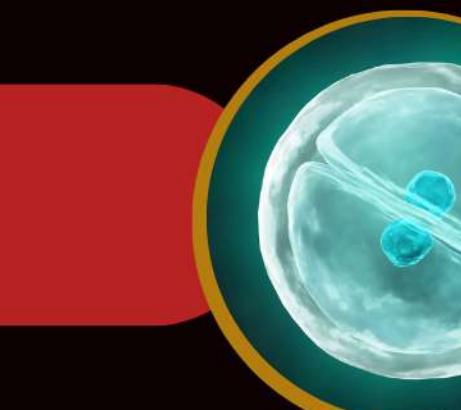
निम्न में से कौन सा ऊतक वृक्क नलिकाओं की भित्तियों का निर्माण करता है?

Which of the following tissues forms the lining of kidney tubules?

Exam: RRB Group-D – 16/09/2022 (Shift-II)

- (a) संयोजी ऊतक / Connective tissue
- (b) तंत्रिका ऊतक / Nervous tissue
- (c) पेशी ऊतक / Muscular tissue
- (d) उपकला ऊतक / Epithelial tissue





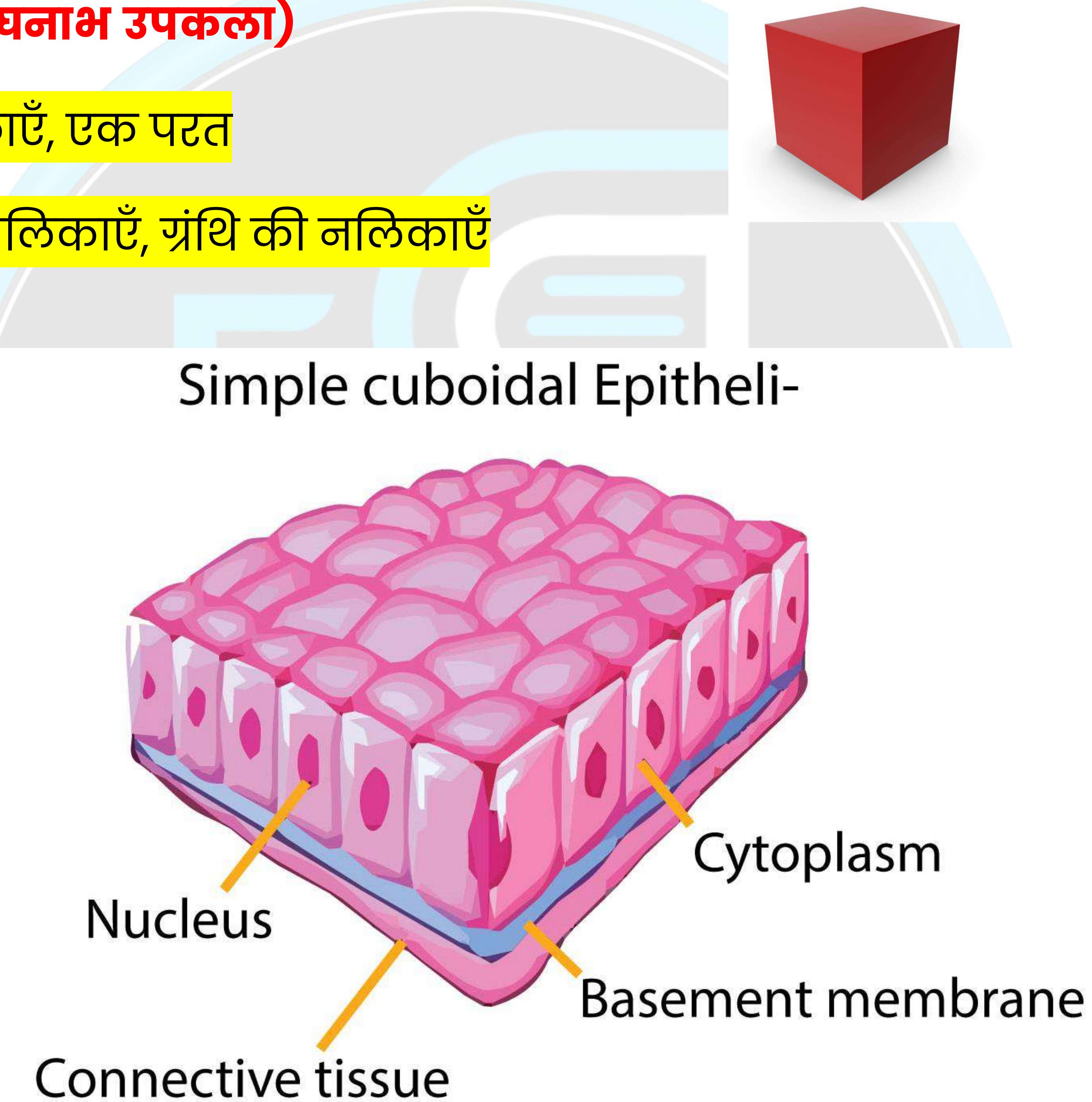
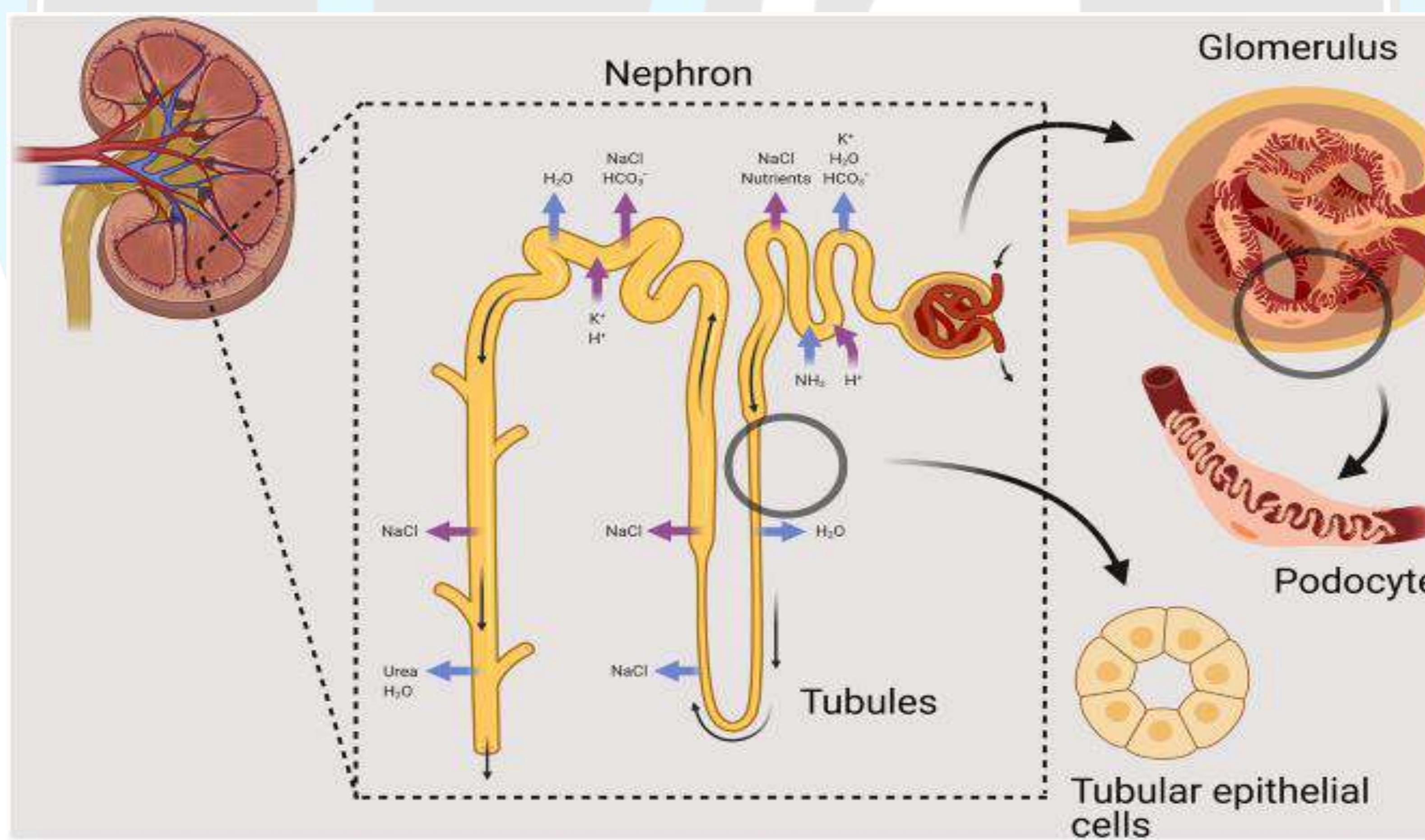
3. Simple Cuboidal Epithelium (सरल क्यूबॉडल उपकला / सरल घनाभ उपकला)

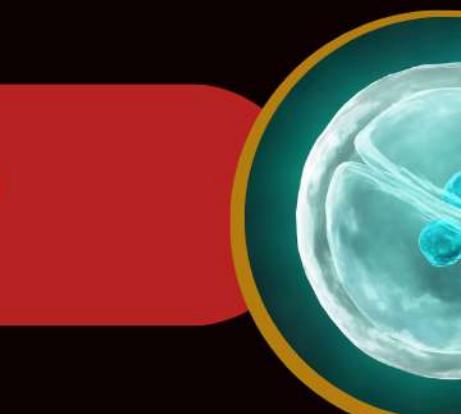
👉 **Shape (आकृति):** Cube-shaped, single layer / घनाकार कोणिकाएँ, एक परत

👉 **Where (कहाँ मिलती है):** Kidney tubules, Gland ducts / वृक्क नलिकाएँ, ग्रंथि की नलिकाएँ

👉 **Function (कार्य):** Absorption & Secretion / अवशोषण व स्रवण

👉 **Example (उदाहरण):** Kidney tubules (वृक्क नलिकाएँ)





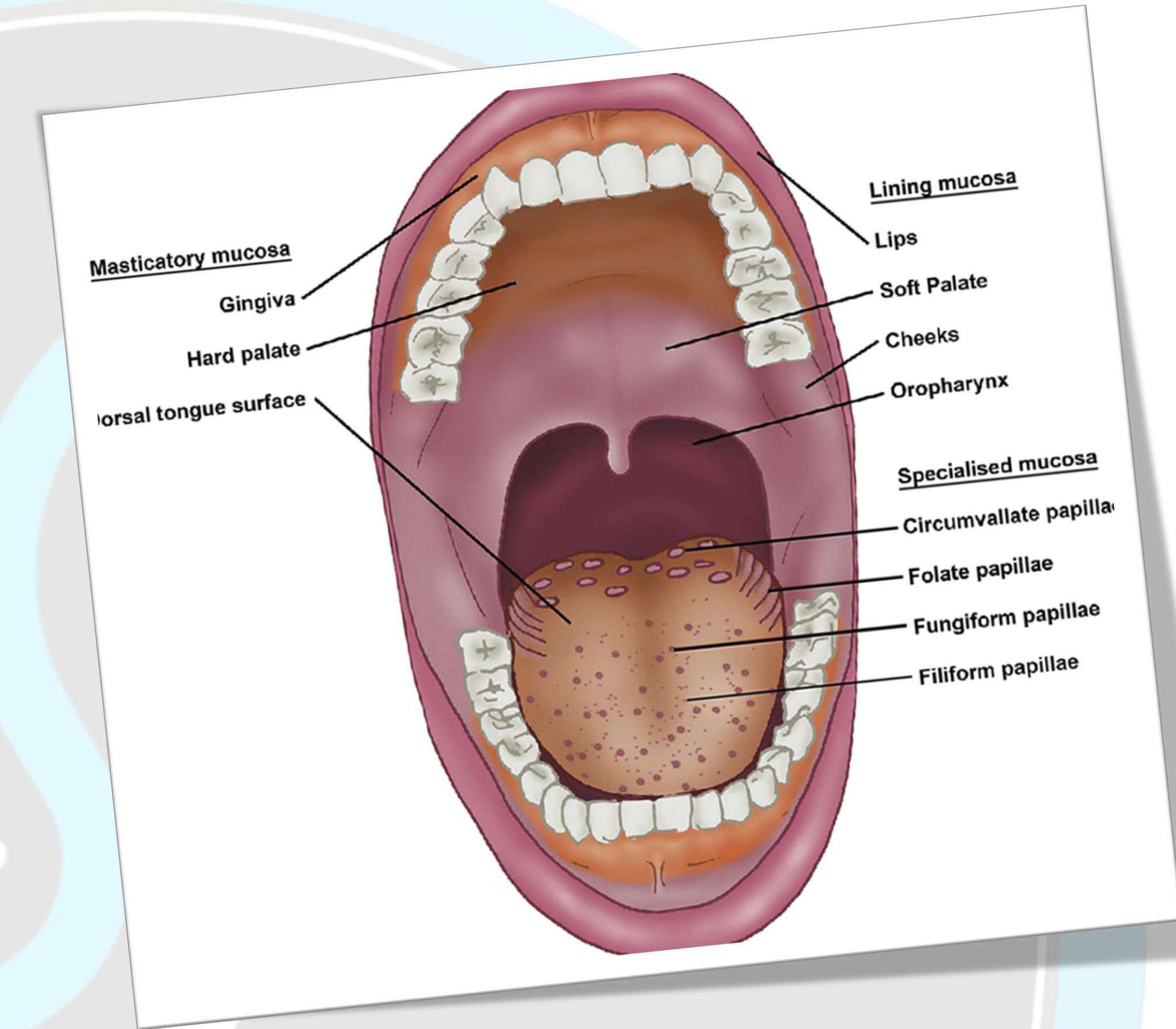
02

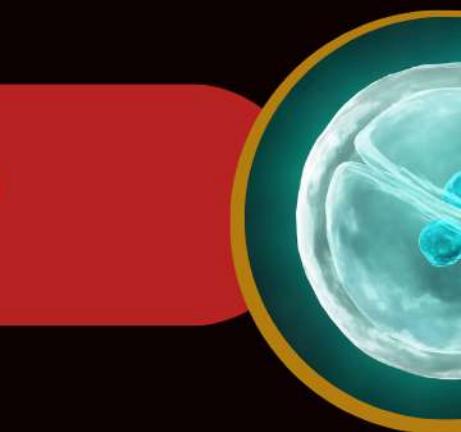
मुँह की परत से बनी होती है।

The lining of the mouth is made up of

Exam: RRB Group-D – 12/12/2018 (Shift-I)

- (a) घनाकार उपकला (Cuboidal Epithelium)
- (b) Simple Squamous Epithelium (सरल चपटी उपकला)
- (c) पर्दार उपकला (Squamous Epithelium)
- (d) स्तंभाकार उपकला (Columnar Epithelium)



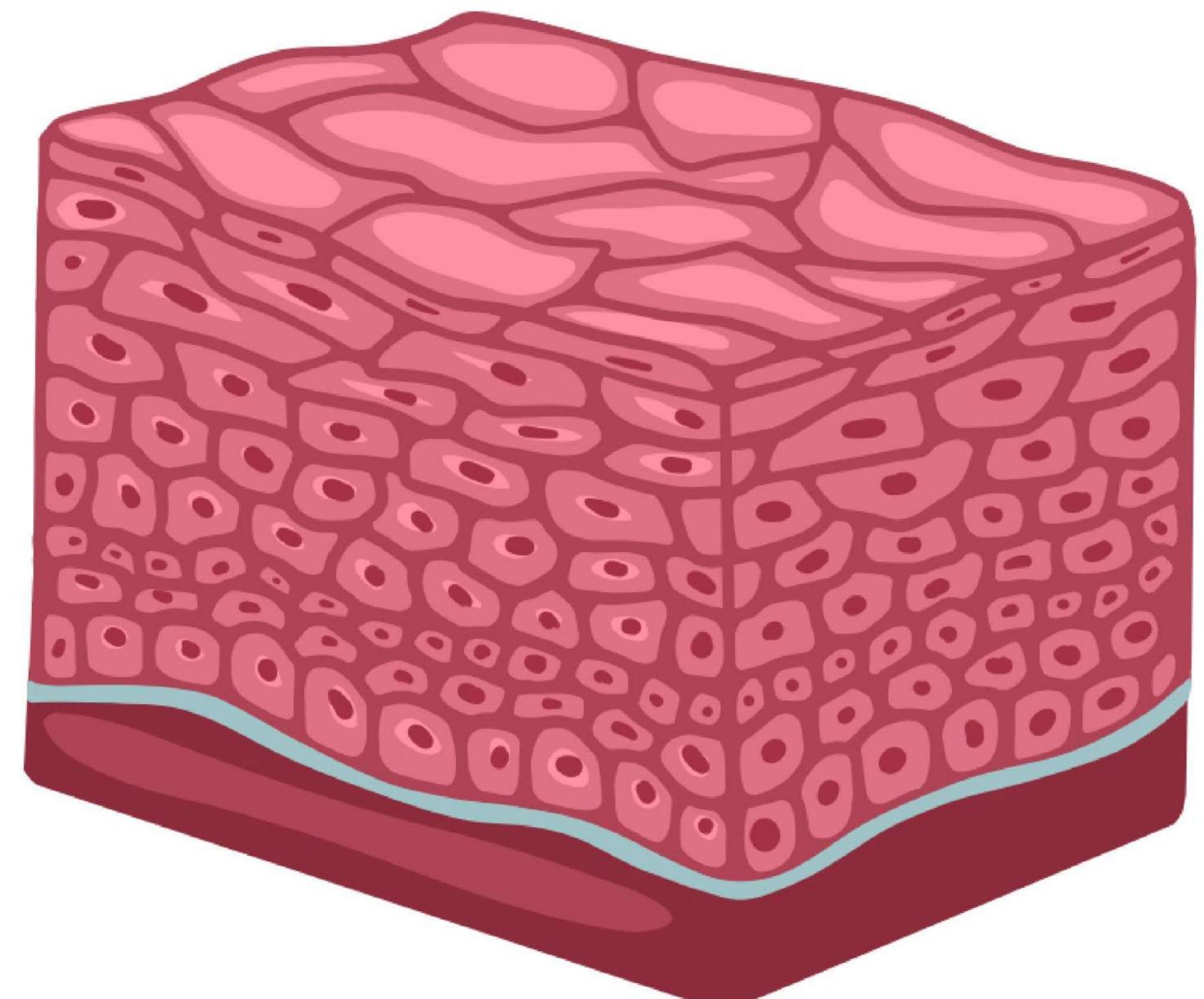
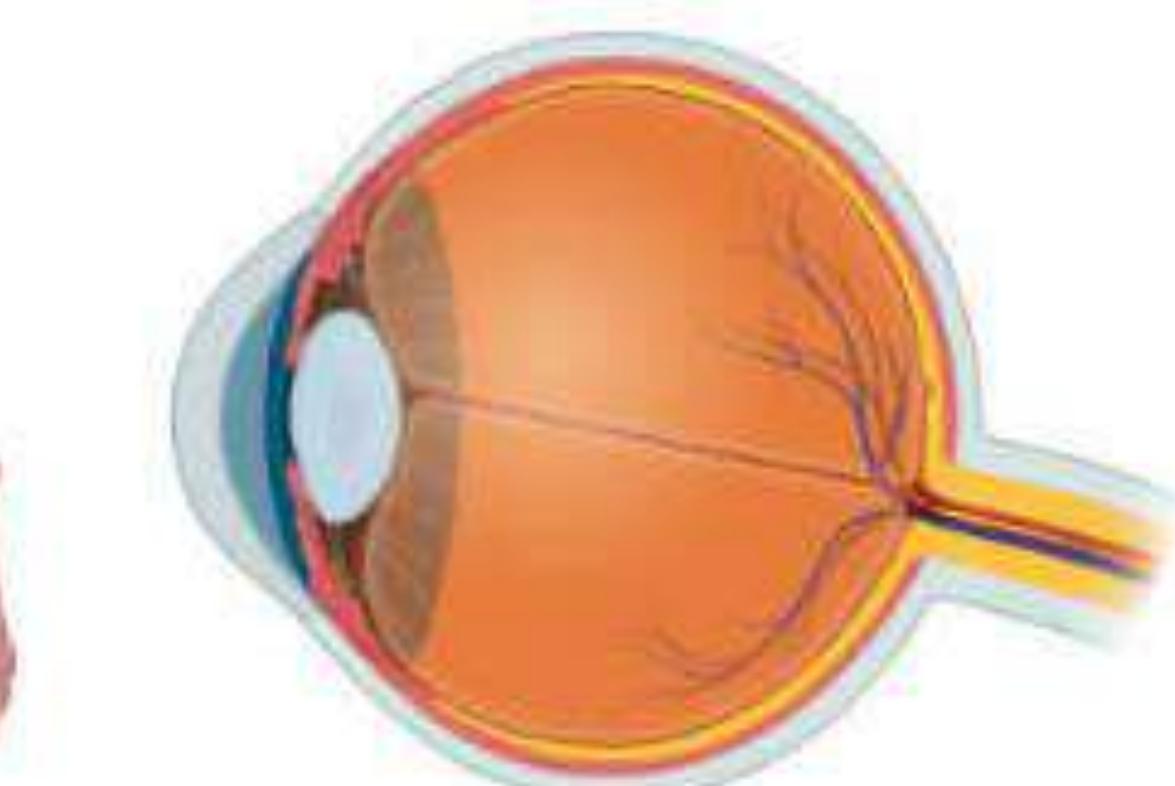
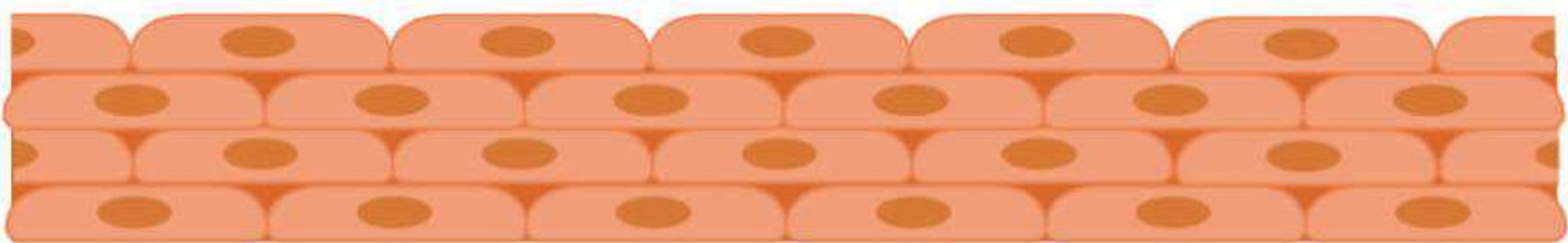


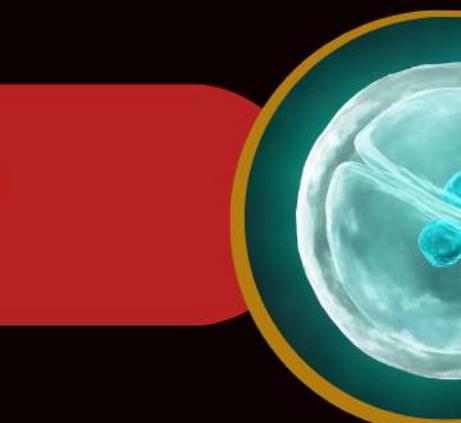
2. Stratified Squamous Epithelium (स्तरीकृत द्व्यवैमास उपकला / परतदार चपटी उपकला)

☞ **Shape (आकृति):** Multi-layered, outer cells flat / कई परतें, ऊपरी कोणिकाएँ चपटी

☞ **Where (कहाँ मिलती है):** Skin, Mouth lining, Esophagus / त्वचा, मुखगुहा, अन्जनली

☞ **Function (कार्य):** Protection from friction & infection / घर्षण और संक्रमण से सुरक्षा



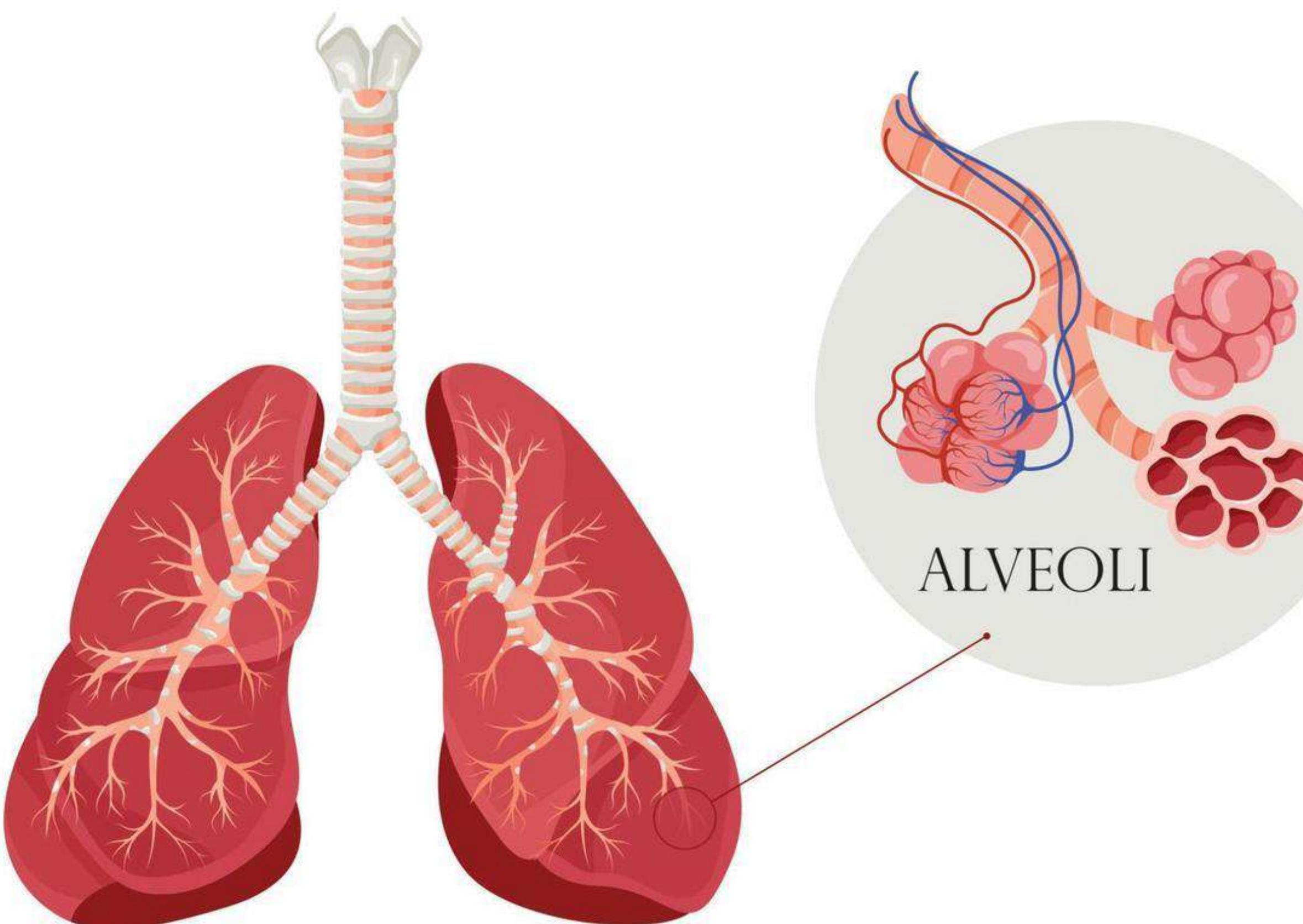


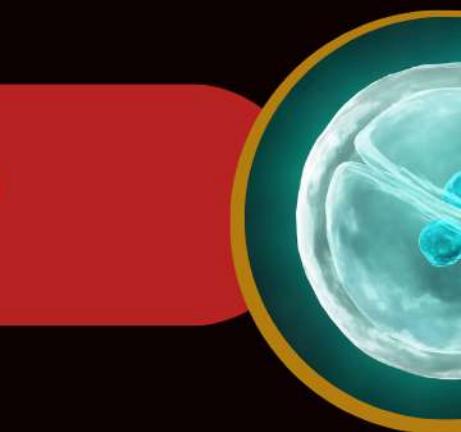
03

फेफड़े के वायुकोष्ठों (Alveoli of Lungs) की परत किस प्रकार की उपकला से बनी होती है?

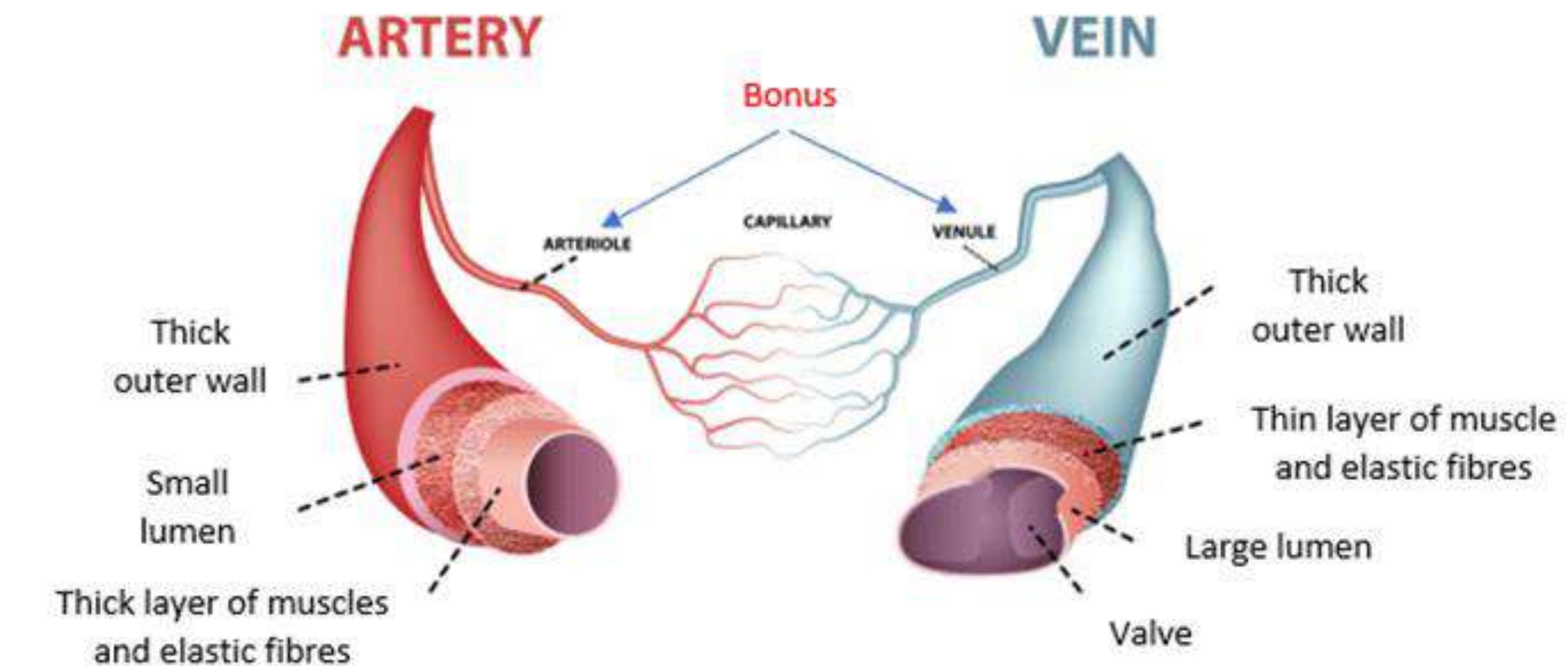
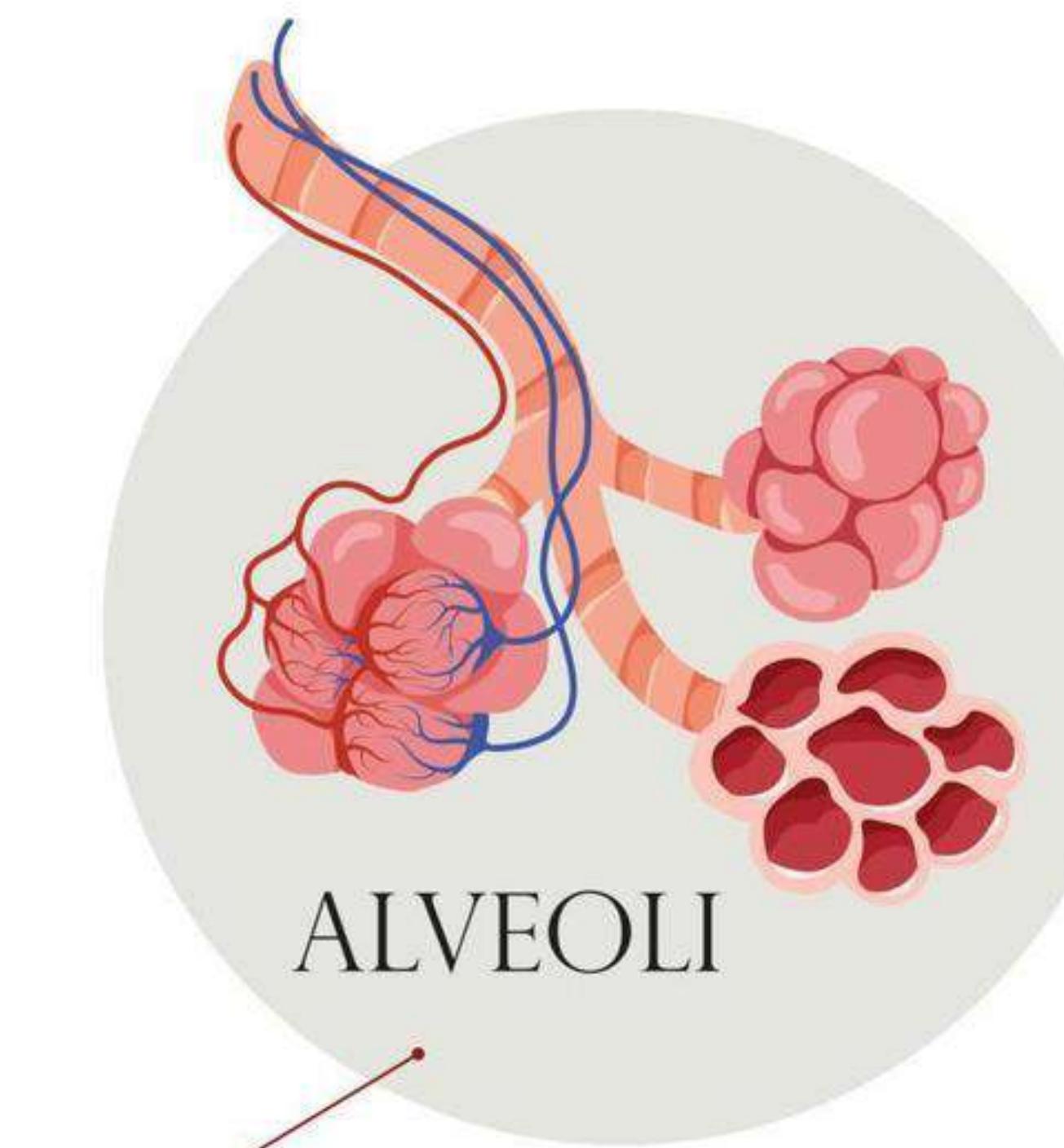
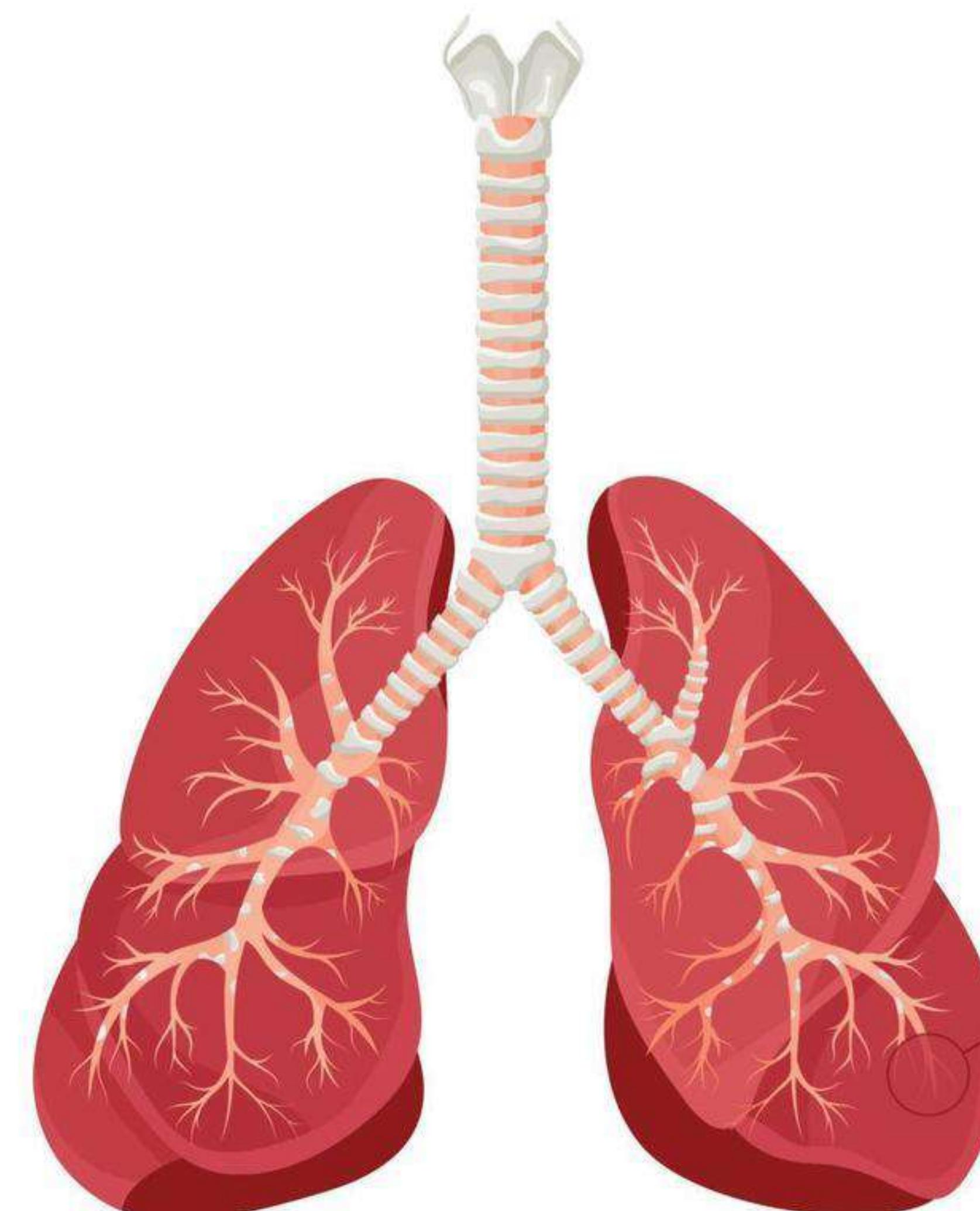
Which epithelium lines the alveoli of lungs?

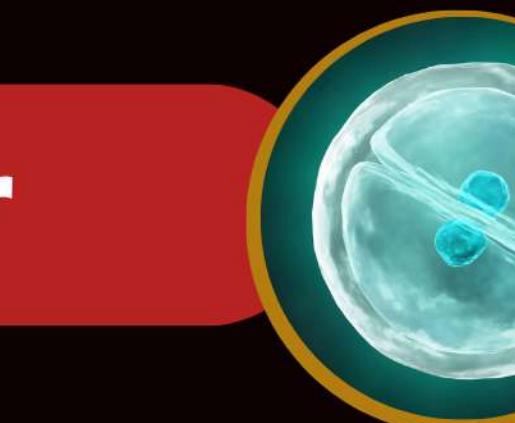
- (a) स्तंभाकार उपकला / Columnar Epithelium
- (b) पर्दार उपकला / Squamous Epithelium
- (c) घनाकार उपकला / Cuboidal Epithelium
- (d) स्तरीकृत उपकला / Stratified Epithelium





1. Simple Squamous Epithelium (सरल स्क्वैमस उपकला / सरल चपटी उपकला)





04

ग्रसनी (Pharynx) और श्वासनली (Trachea) की आंतरिक सतह किस प्रकार की उपकला से ढकी होती है?

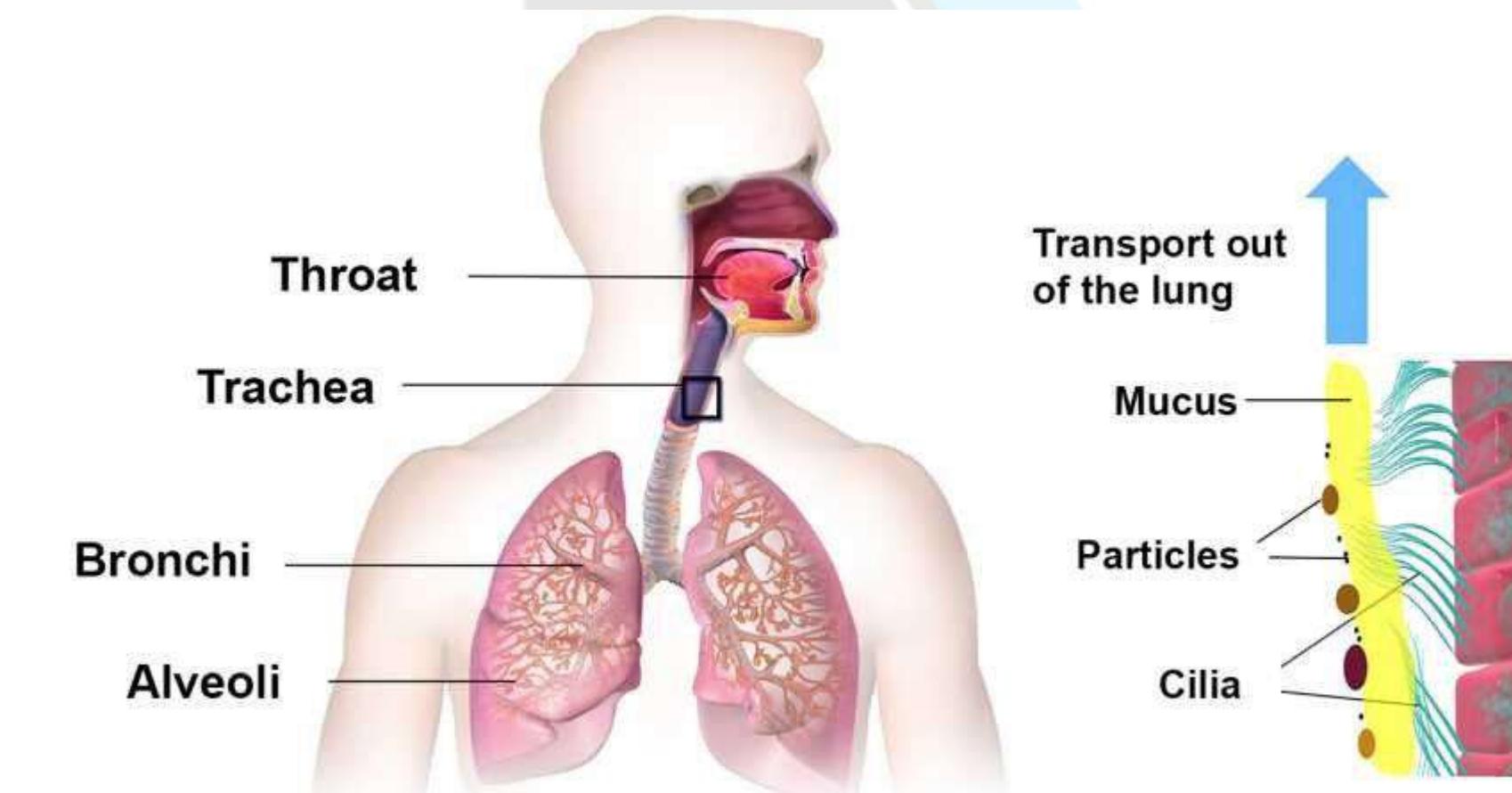
Which epithelium covers the lining of pharynx and trachea?

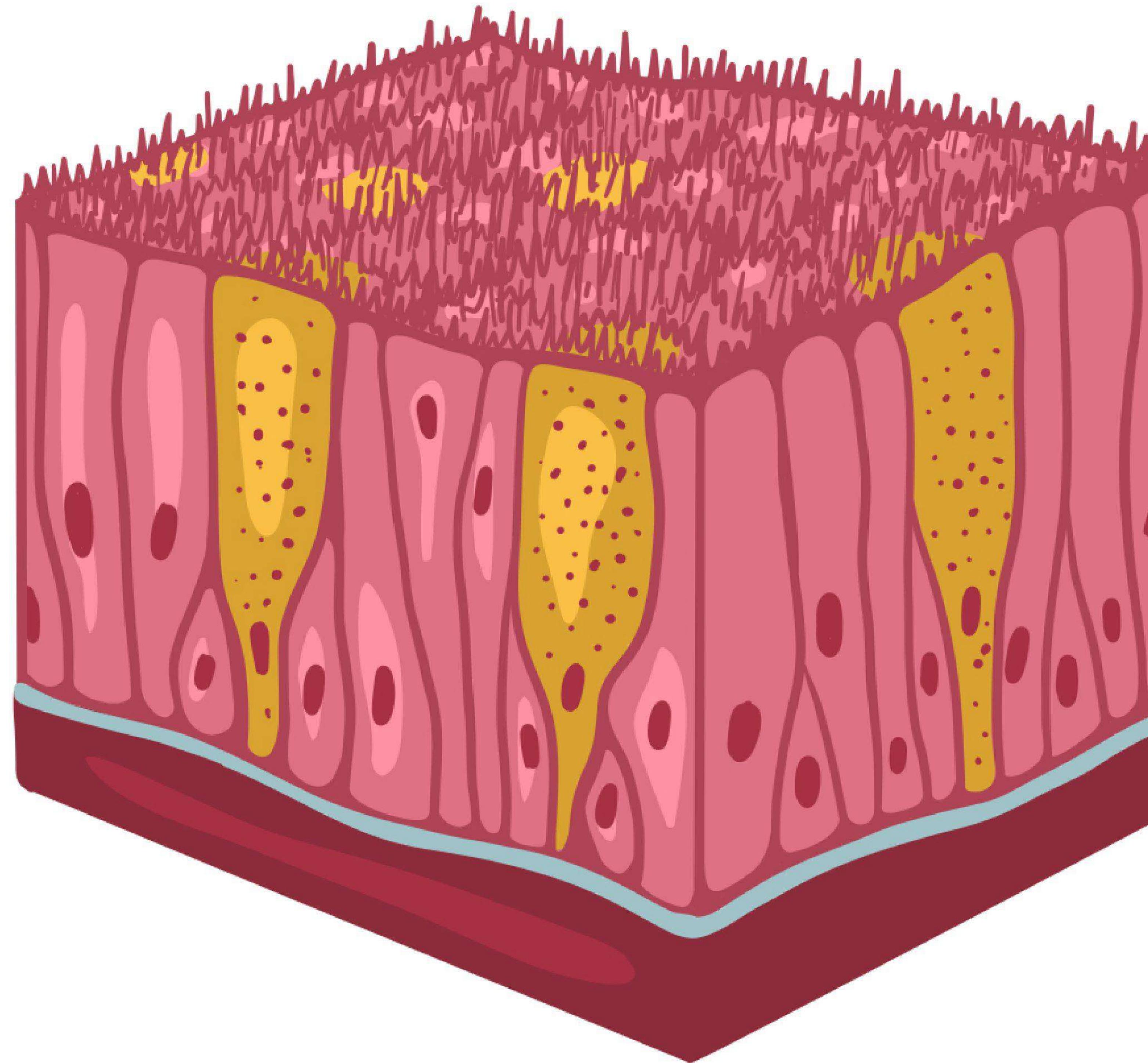
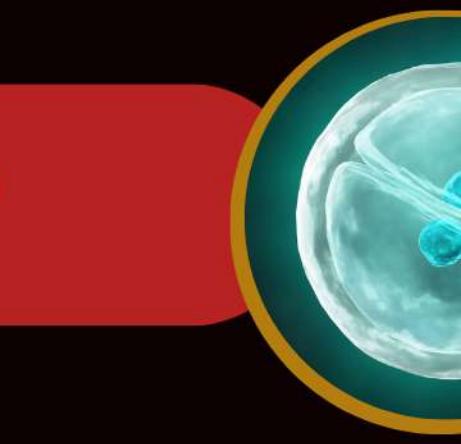
(a) पर्दार उपकला / Squamous Epithelium

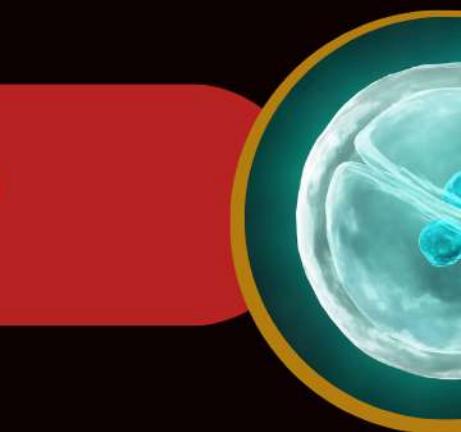
(b) छद्मस्तरीकृत स्तंभाकार उपकला / Pseudostratified Columnar Epithelium

(c) घनाकार उपकला / Cuboidal Epithelium

(d) स्तरीकृत उपकला / Stratified Epithelium





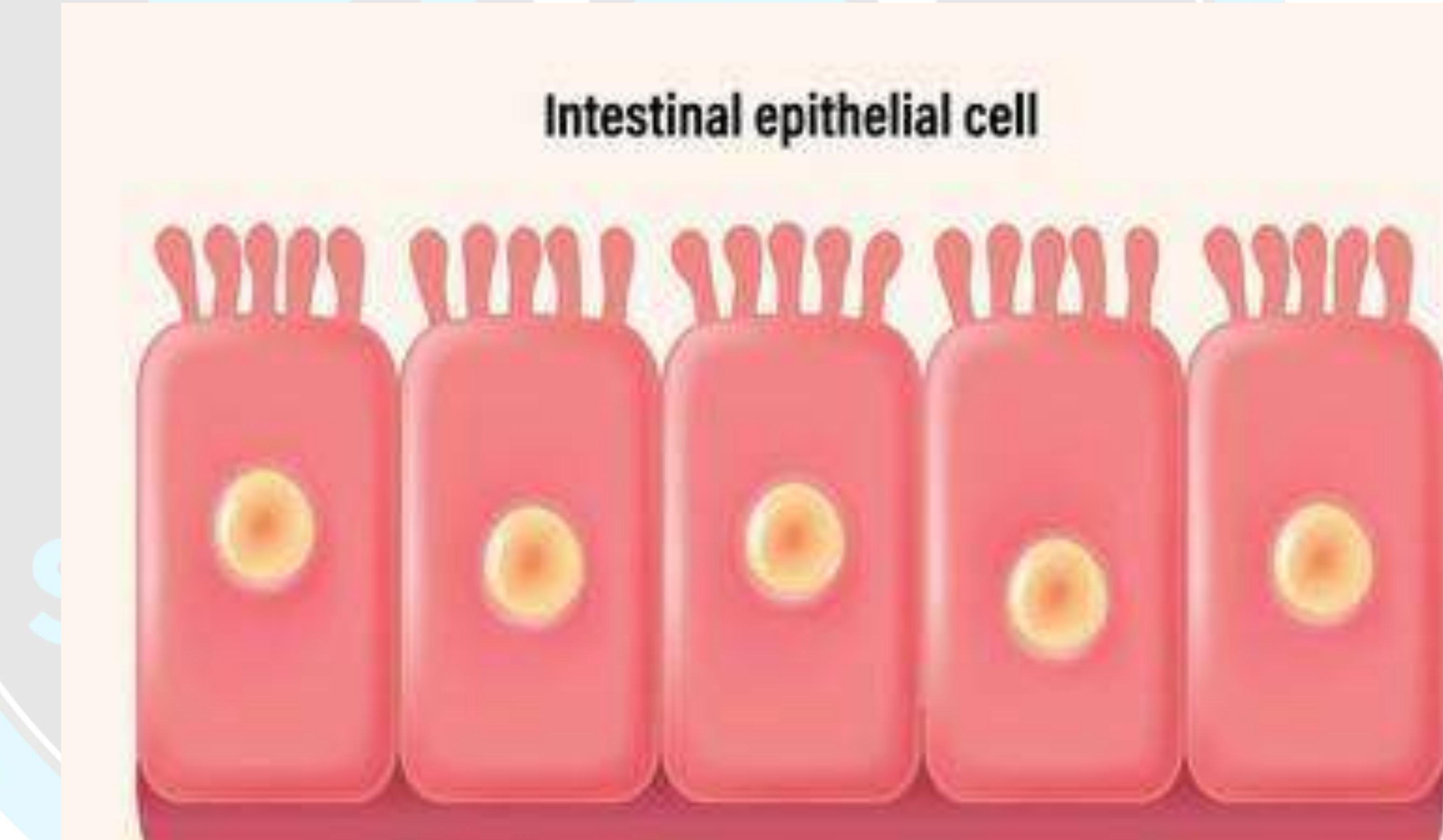


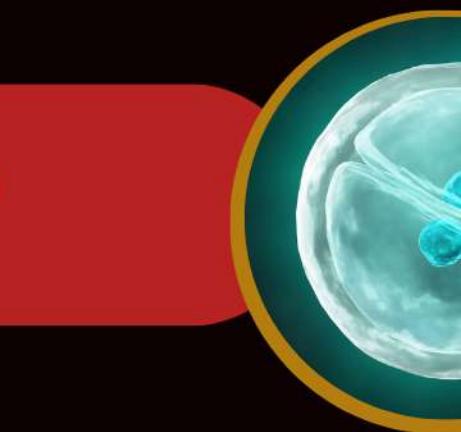
05

आंत (Intestine) की भीतरी परत पर कौन-सा उपकला पाया जाता है?

Which epithelium lines the intestine?

- (a) स्तंभाकार उपकला / Columnar Epithelium
- (b) घनाकार उपकला / Cuboidal Epithelium
- (c) पर्तदार उपकला / Squamous Epithelium
- (d) स्तरीकृत उपकला / Stratified Epithelium





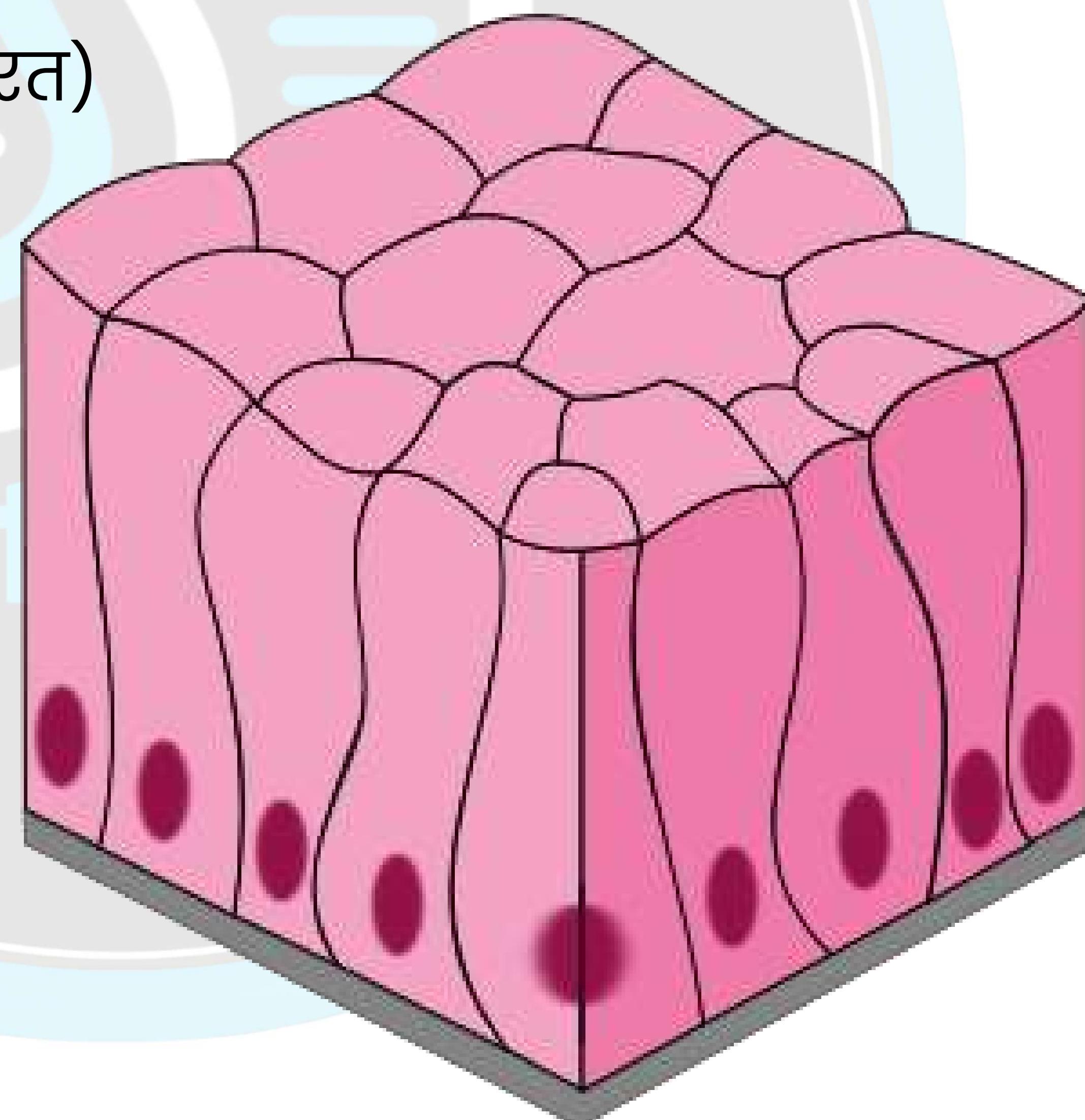
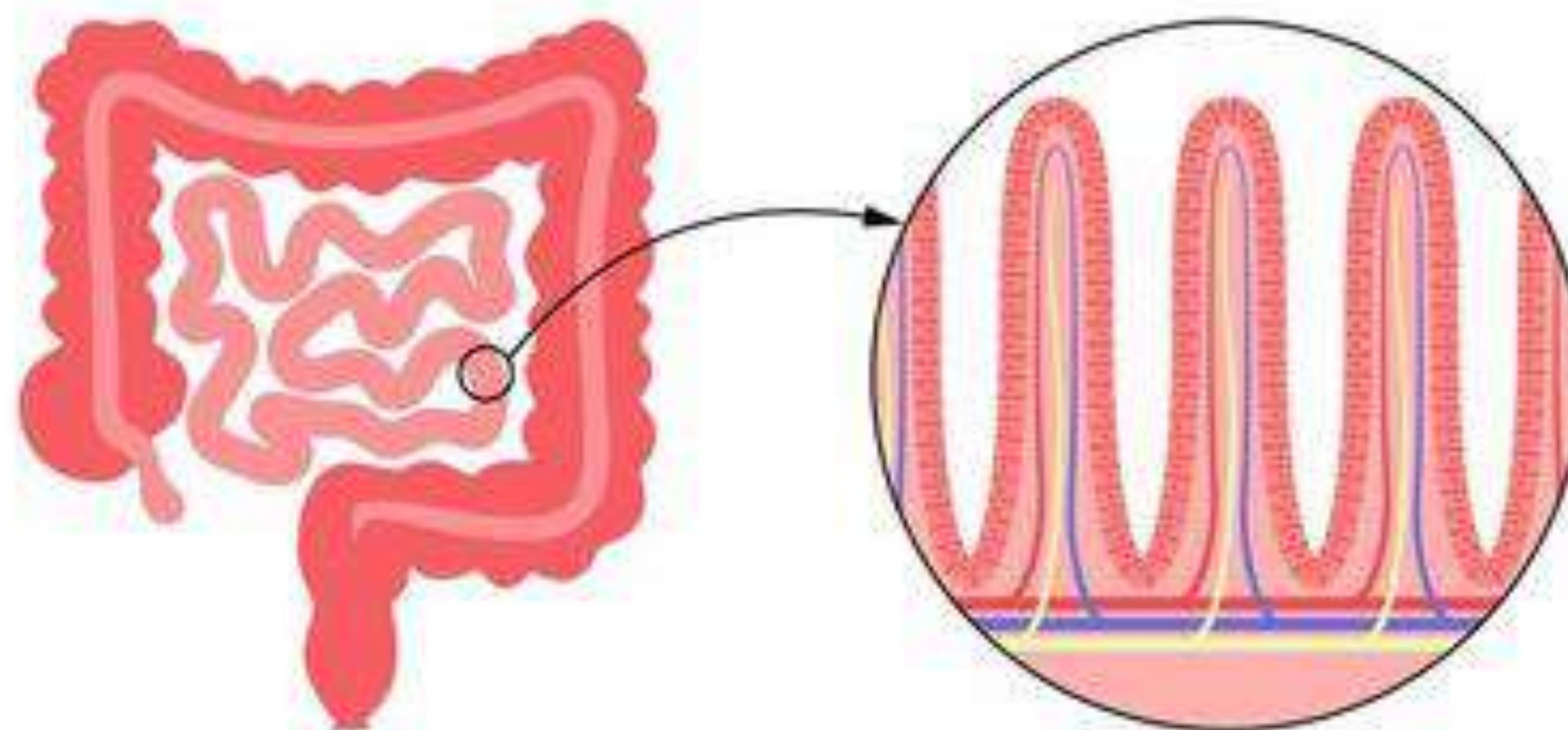
5. Simple Columnar Epithelium (सरल कॉलमर उपकला / सरल स्तंभनुमा उपकला)

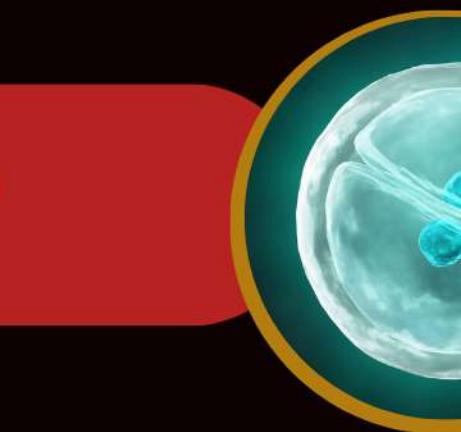
Shape (आकृति): Tall pillar-like cells, one layer / लंबी स्तंभ जैसी कोरिकाएँ, एक परत

Where (कहाँ मिलती है): Intestine, Stomach / आंत, आमाशय

Function (कार्य): Absorption of nutrients & Secretion of enzymes / पोषक तत्वों का अवशोषण व एंजाइम का स्रवण

Example (उदाहरण): Small intestine lining (छोटी आंत), Stomach lining (आमाशय की परत)





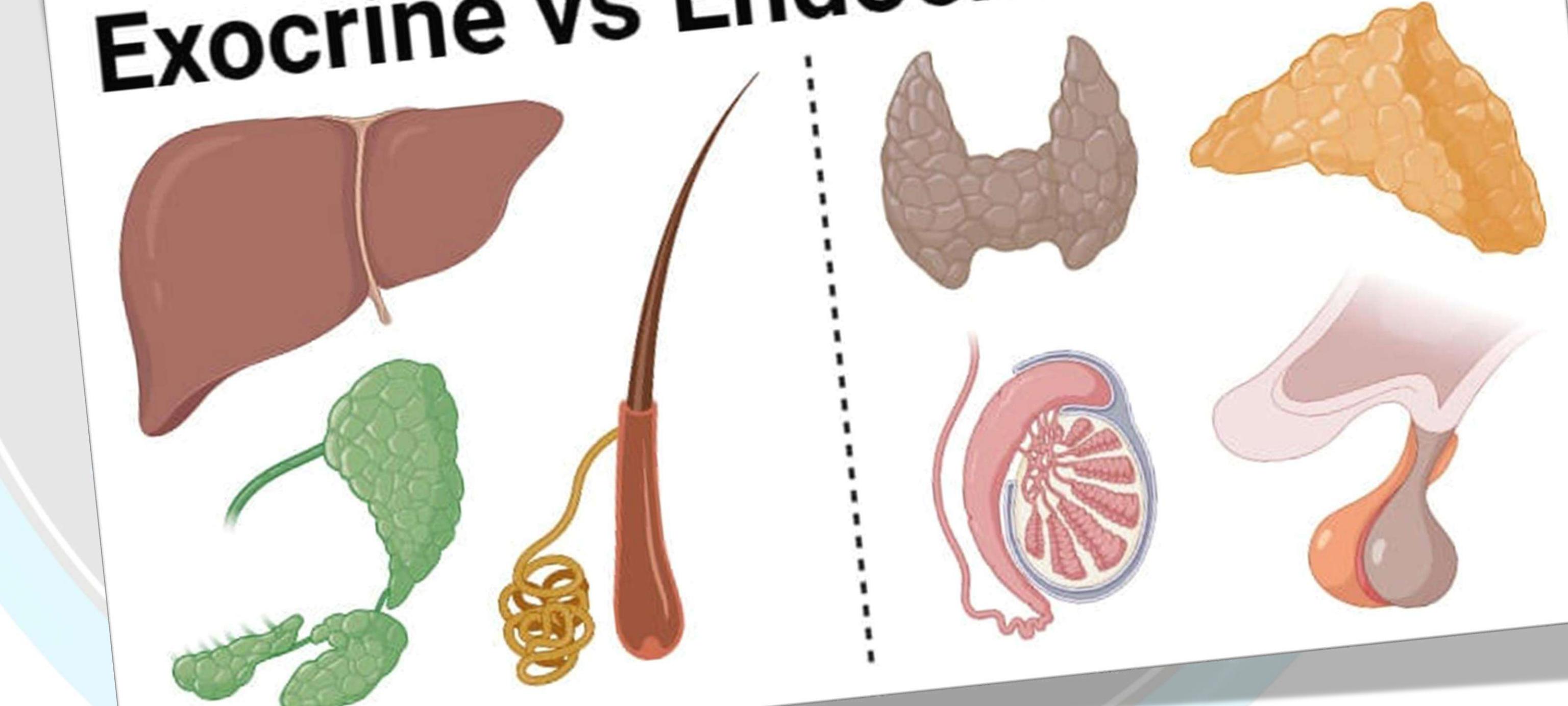
06

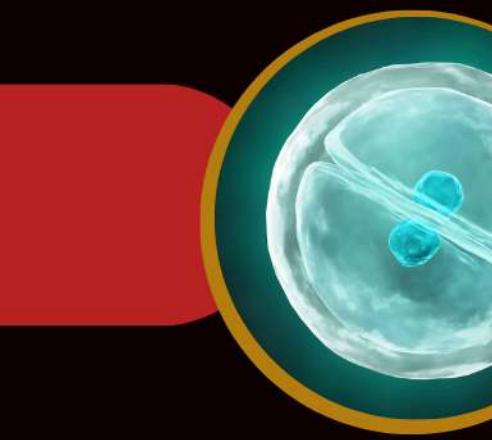
ग्रंथियाँ (Glands) किस प्रकार की उपकला से बनी होती हैं?

Which epithelium forms the glands?

- (a) ग्रंथिय उपकला / Glandular Epithelium
- (b) स्तंभाकार उपकला / Columnar Epithelium
- (c) घनाकार उपकला / Cuboidal Epithelium
- (d) पर्तदार उपकला / Squamous Epithelium

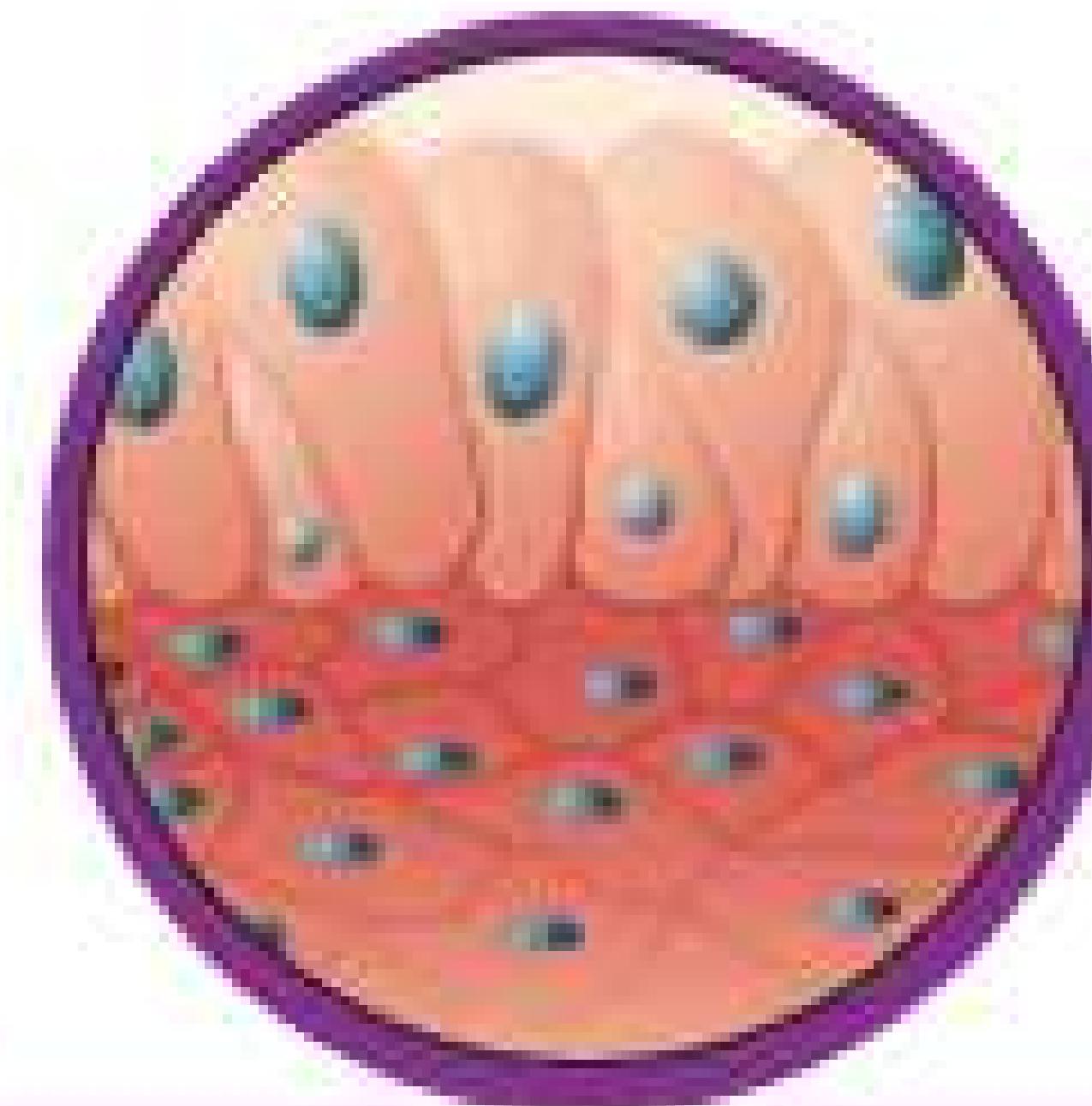
Exocrine vs Endocrine Glands





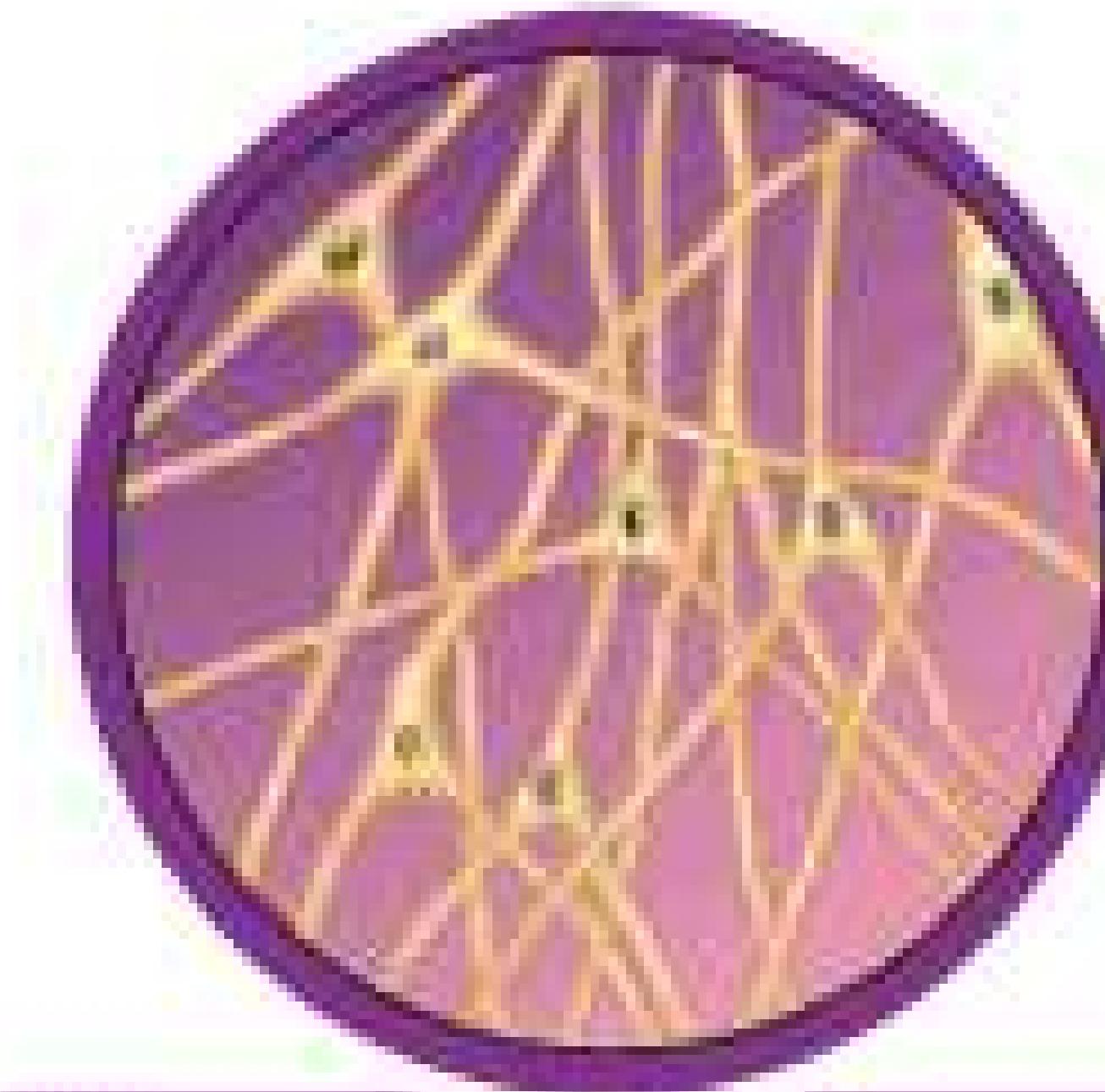
Animal Tissue (जंतु ऊतक)

Epithelial Tissue
(उपकला ऊतक)



Epithelial tissue

Nervous Tissue
(तंत्रिका ऊतक)



Nervous tissue

Muscular Tissue
(मांसपेशी ऊतक)

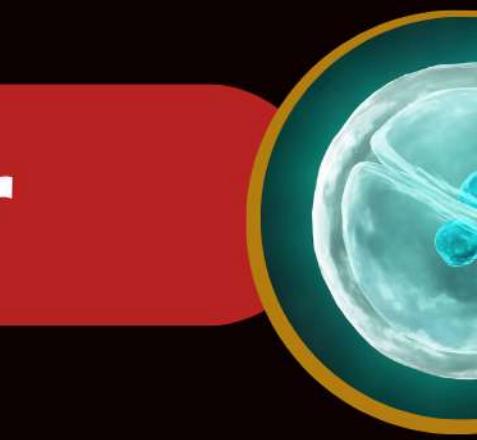


Muscle tissue

Connective Tissue
(संयोजी ऊतक)



Connective tissue

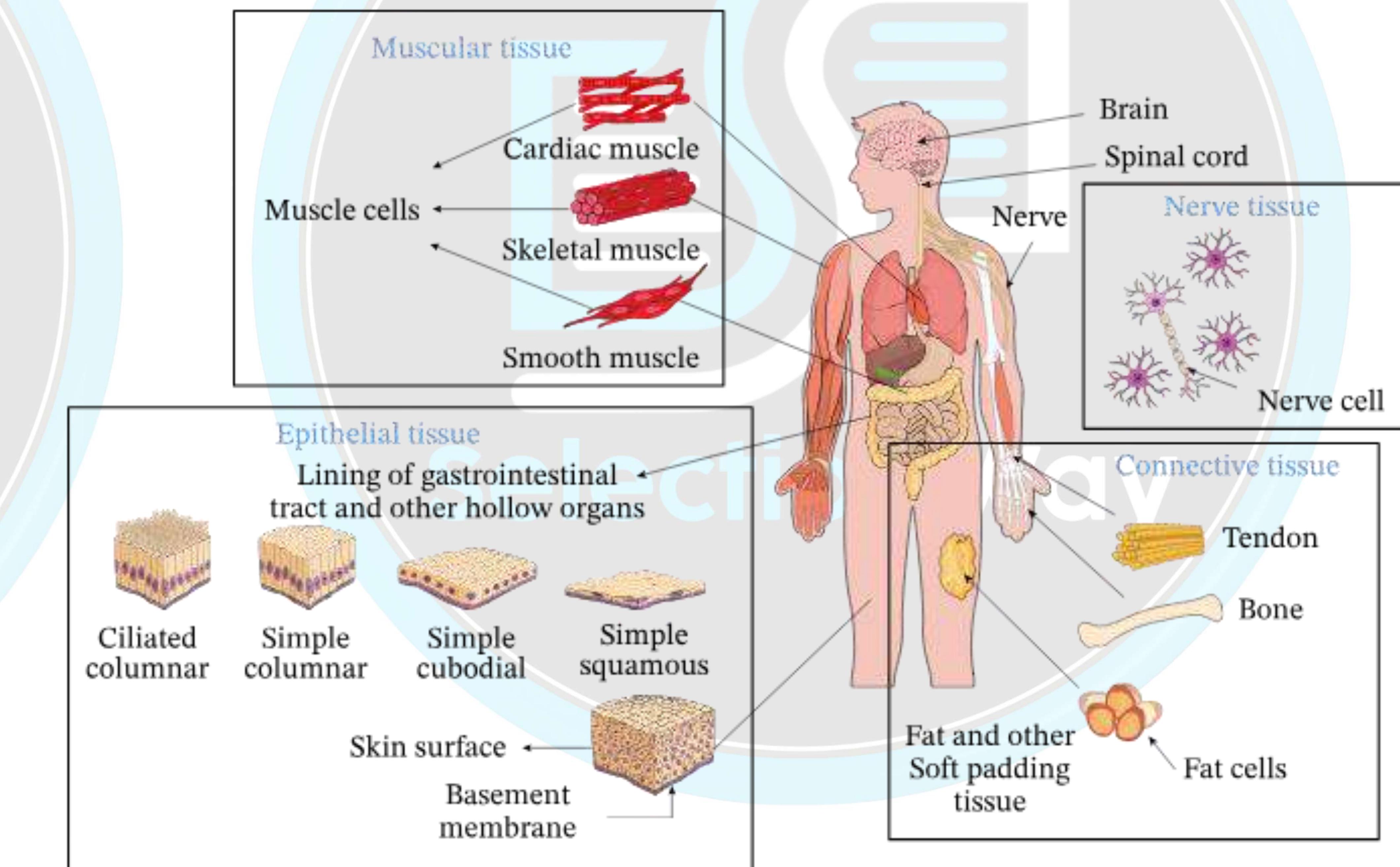


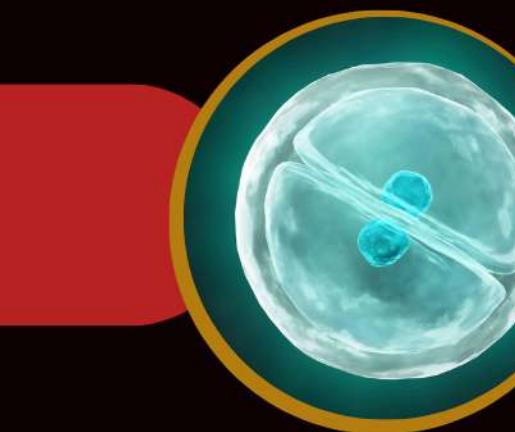
Connective Tissue

(संयोजी ऊतक)

👉 **Connective Tissue Is The Supporting Tissue That Connects, Binds, And Provides Strength To Different Body Parts.**

👉 **संयोजी ऊतक सहायक ऊतक है जो विभिन्न अंगों को जोड़ता, बाँधता और मजबूती प्रदान करता है।**





Connective Tissue (संयोजी ऊतक)

Structure / संरचना

👉 It Has Widely Spaced Cells.

इसकी कोणिकाएँ **आपस में दूर-दूर होती हैं।**

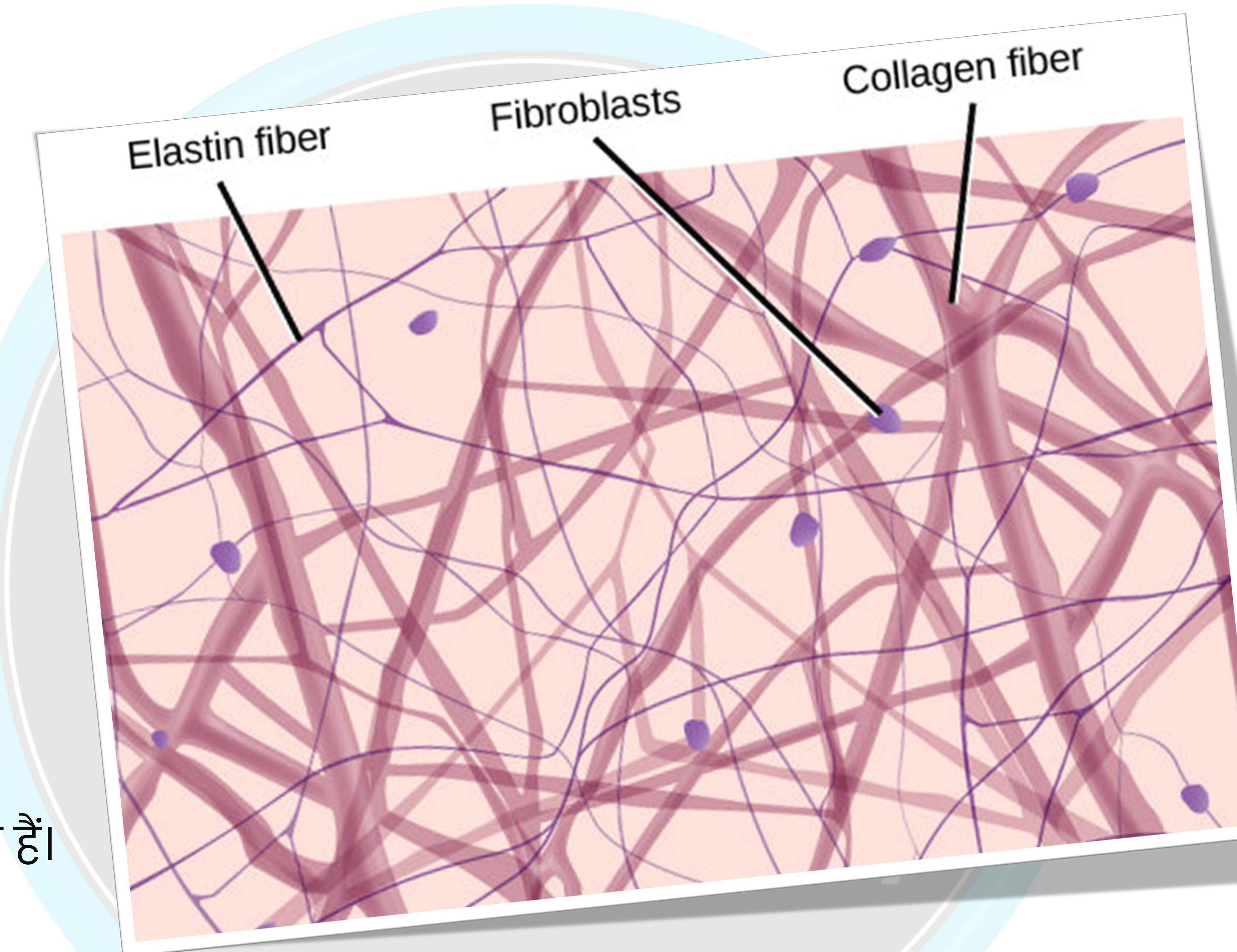
👉 Cells Are Embedded In An Intercellular Matrix

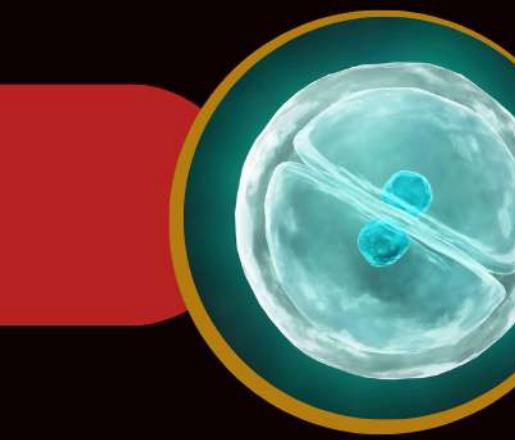
(Solid, Semi-solid, Or Fluid).

ये कोणिकाएँ अंतरकोणिकीय मैट्रिक्स (ठोस, अर्ध-ठोस या द्रव) में पाई जाती हैं।

👉 Matrix May Contain Fibers Like Collagen And Elastin.

मैट्रिक्स में **कोलाजन और इलास्टिन** जैसी रेणो पाए जाते हैं।





Connective Tissue (संयोजी ऊतक)

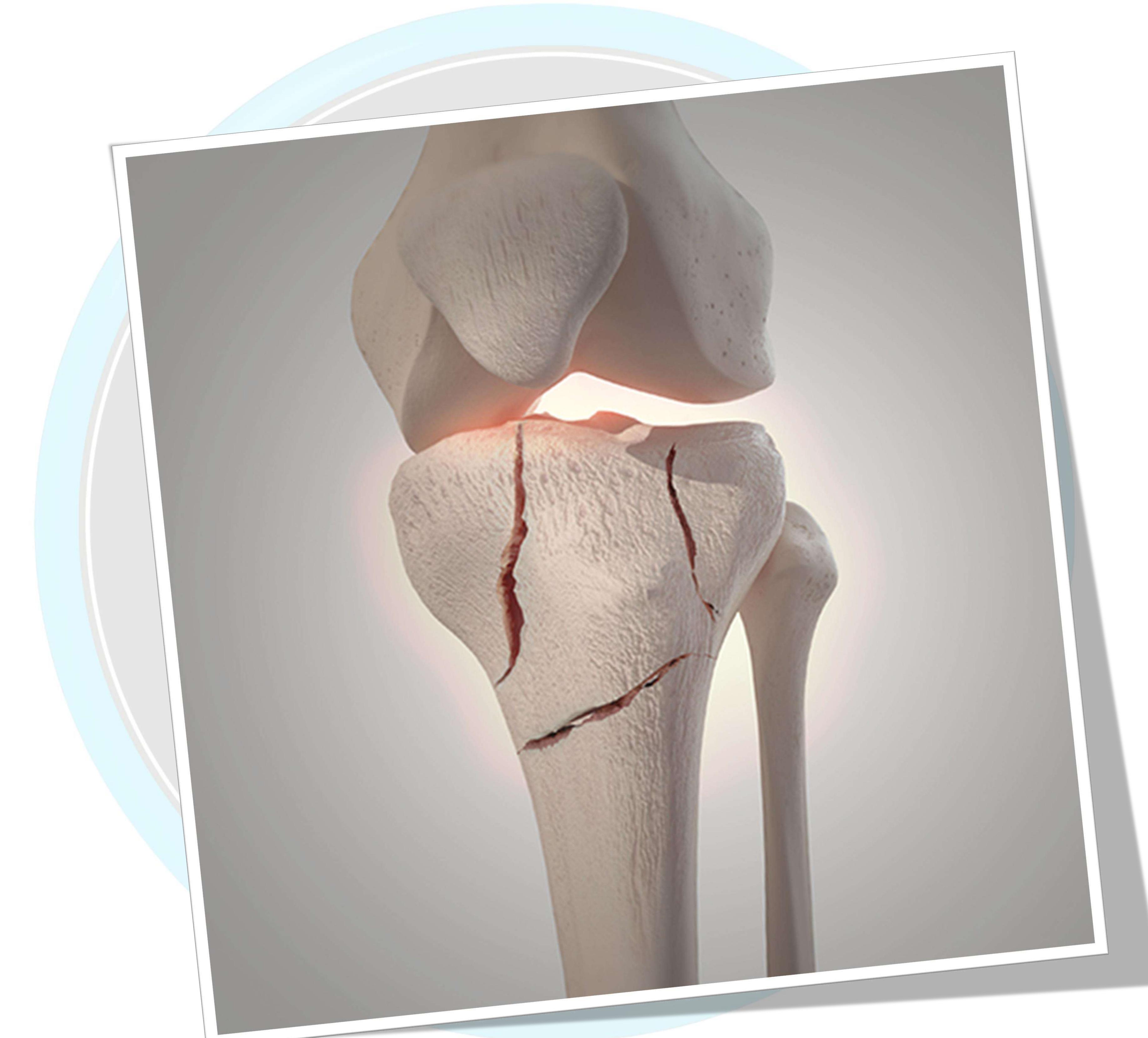
❖ **Regeneration / पुनर्जनन**

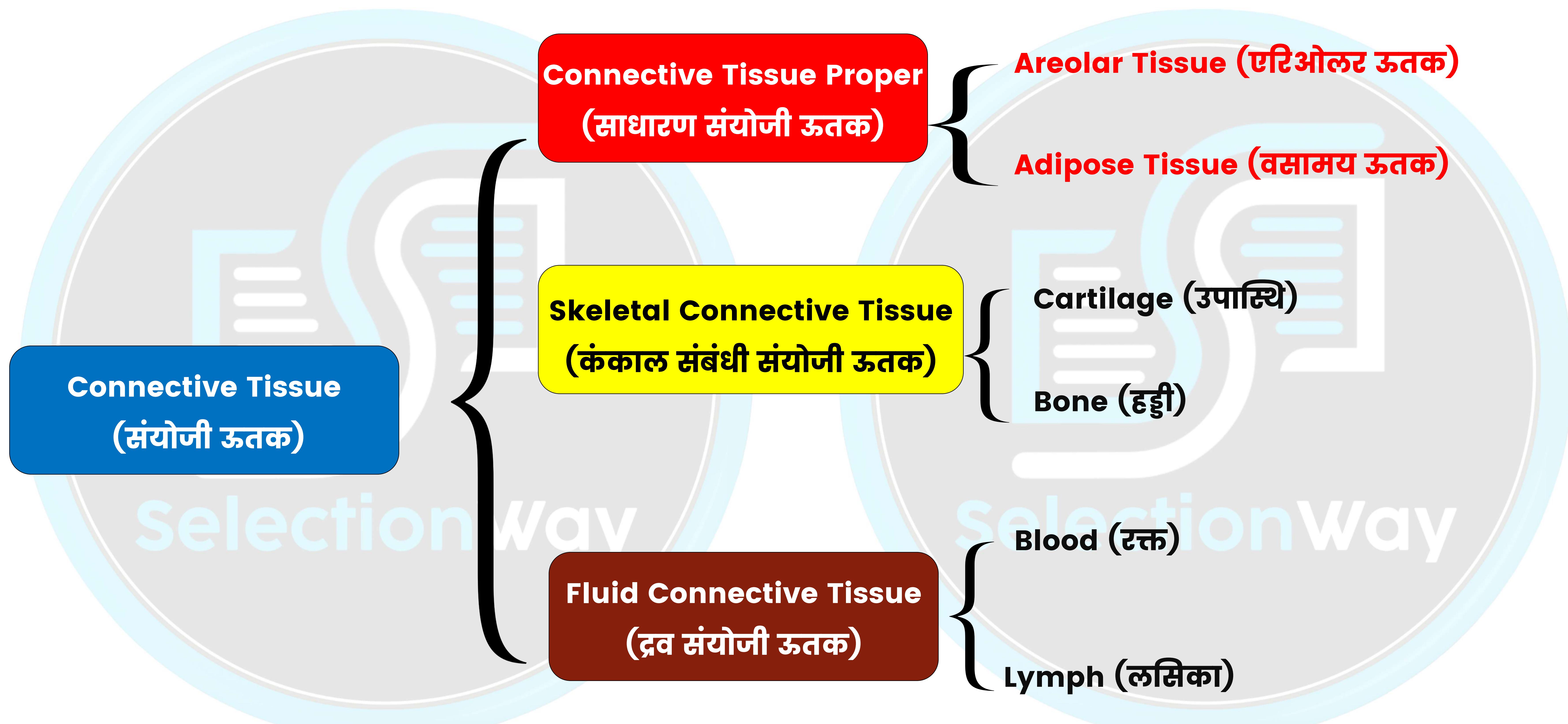
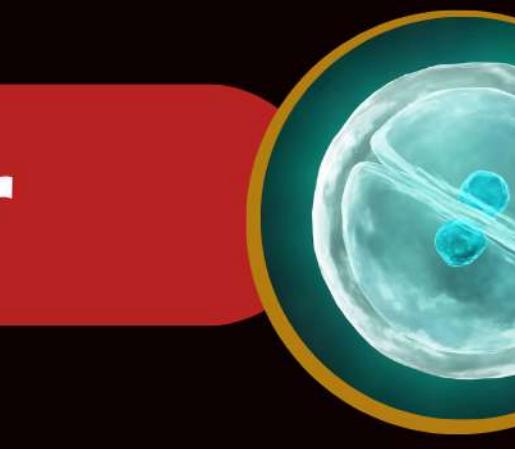
Moderate Regeneration Power, Depending On Type

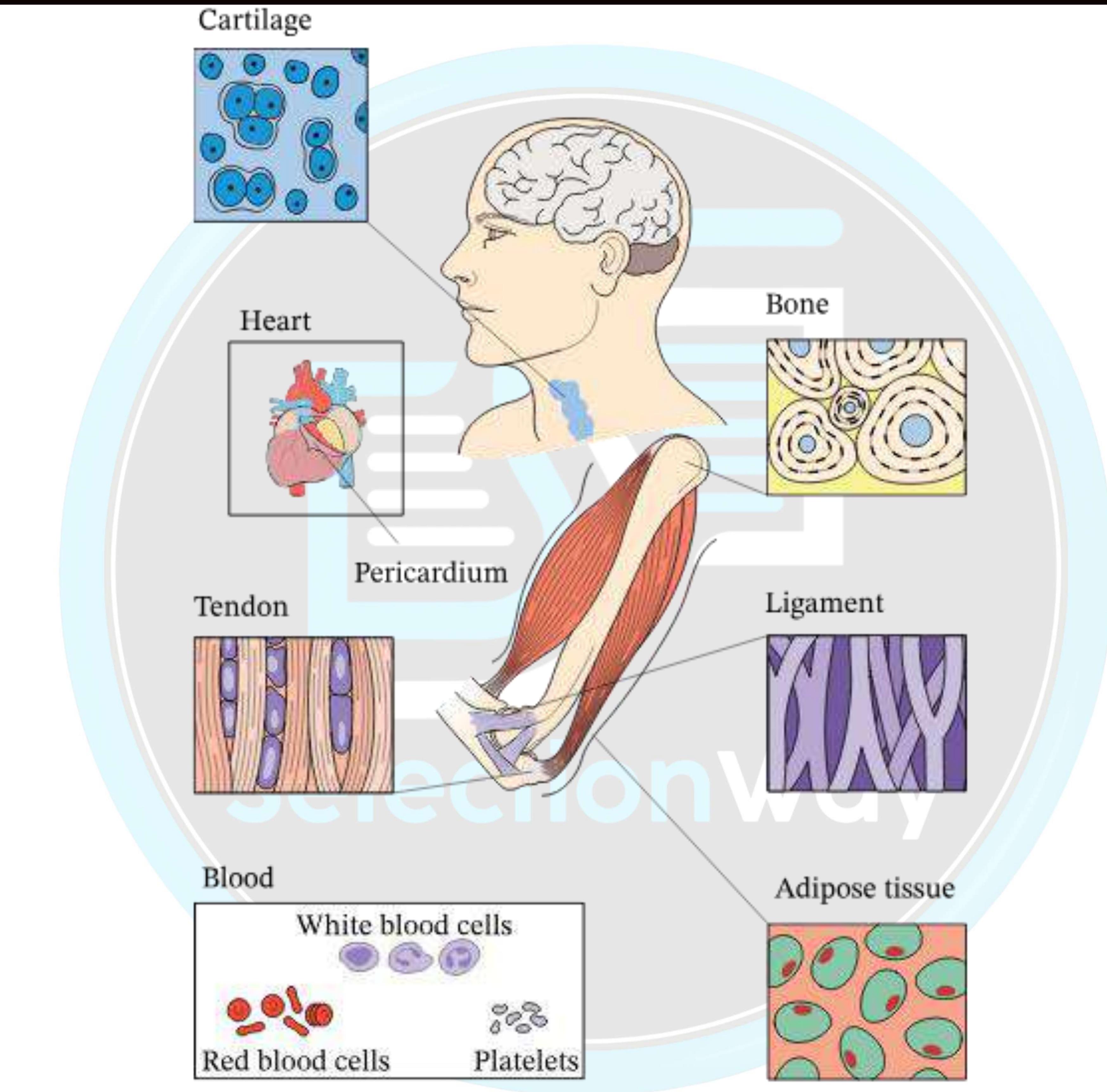
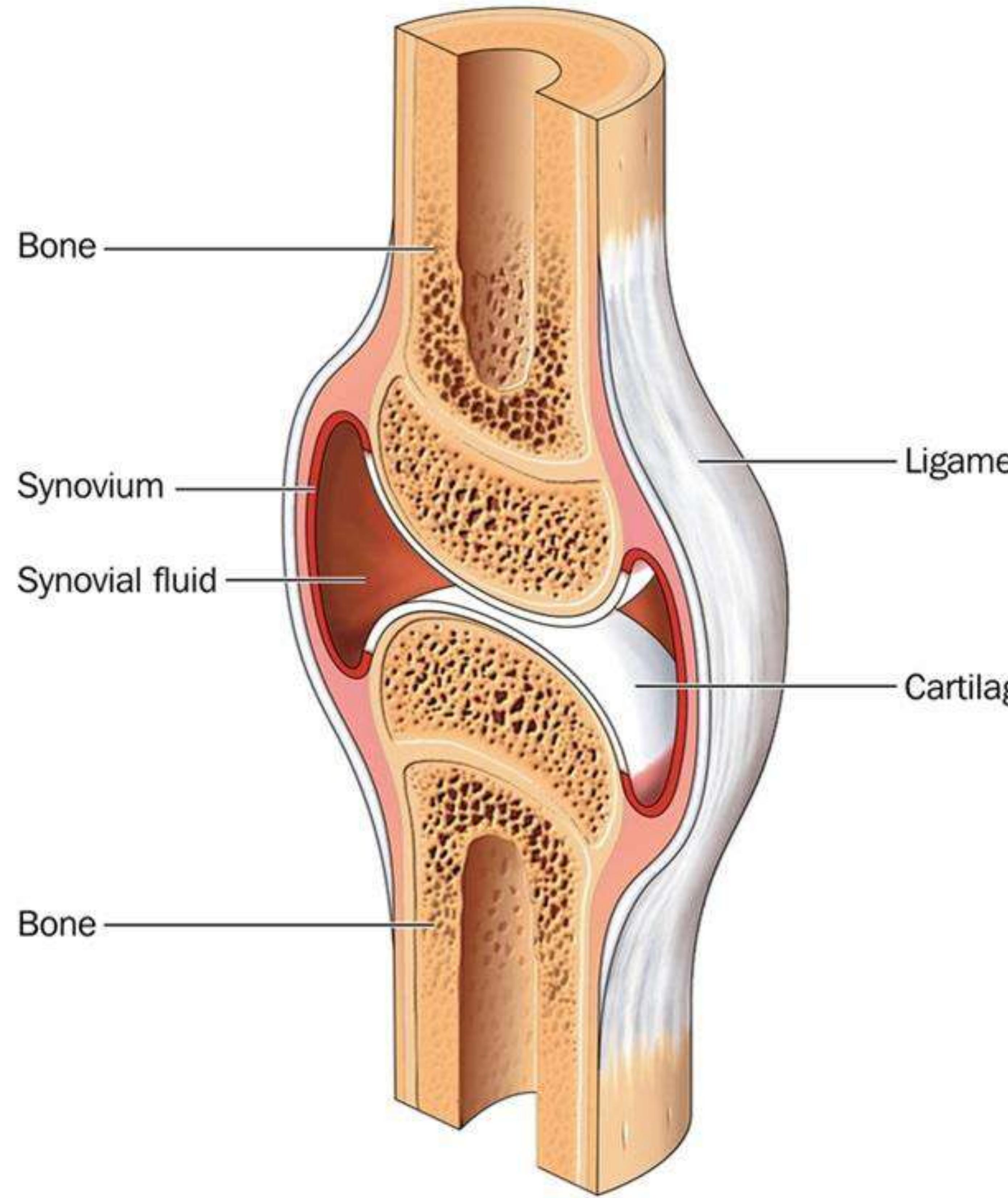
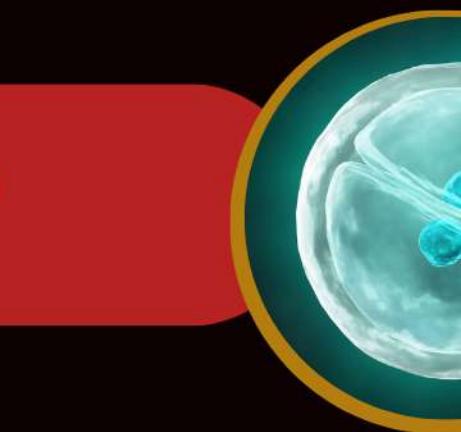
(Bone Regenerates Well, Cartilage Regenerates Slowly).

इसमें पुनर्जनन की मध्यम क्षमता होती है

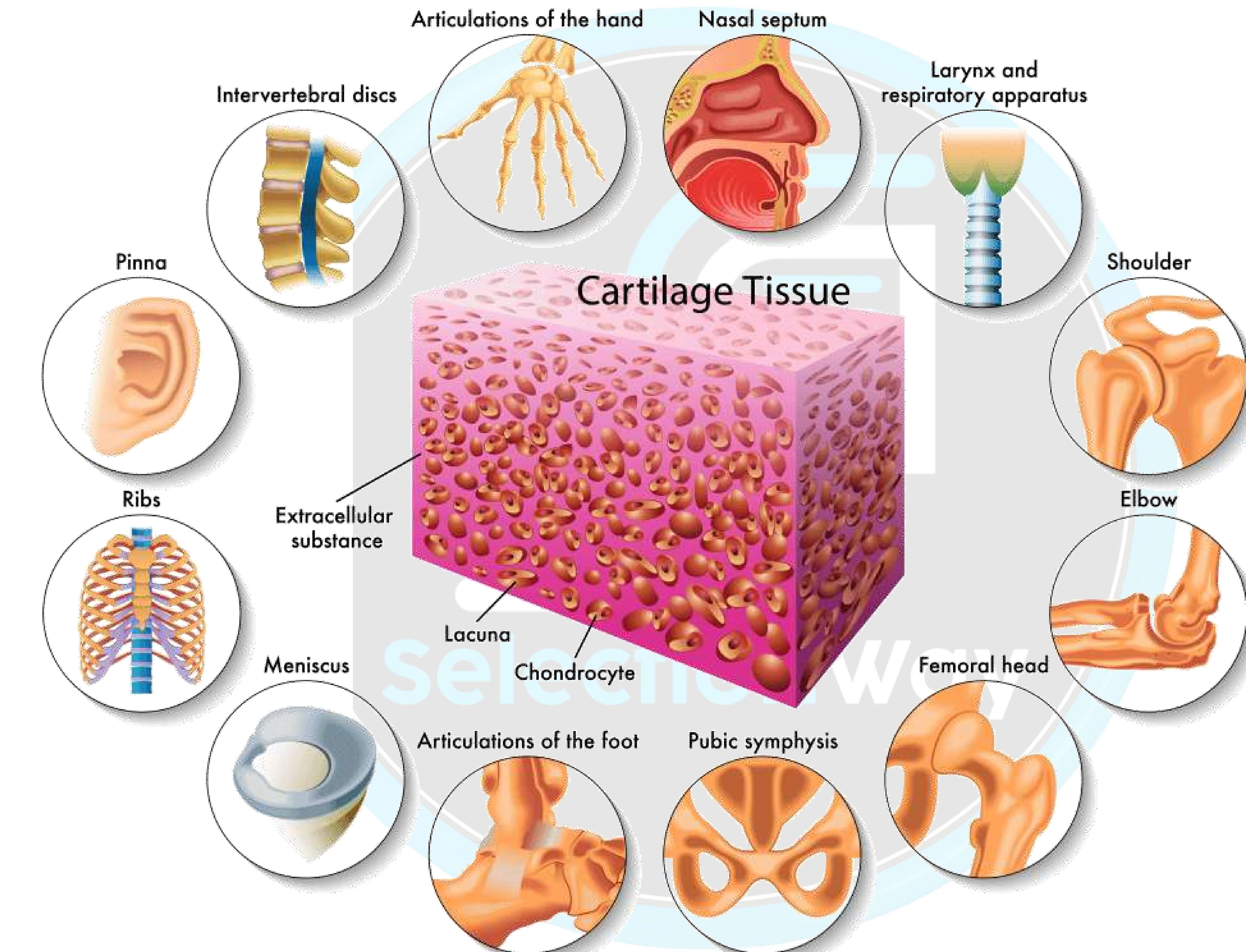
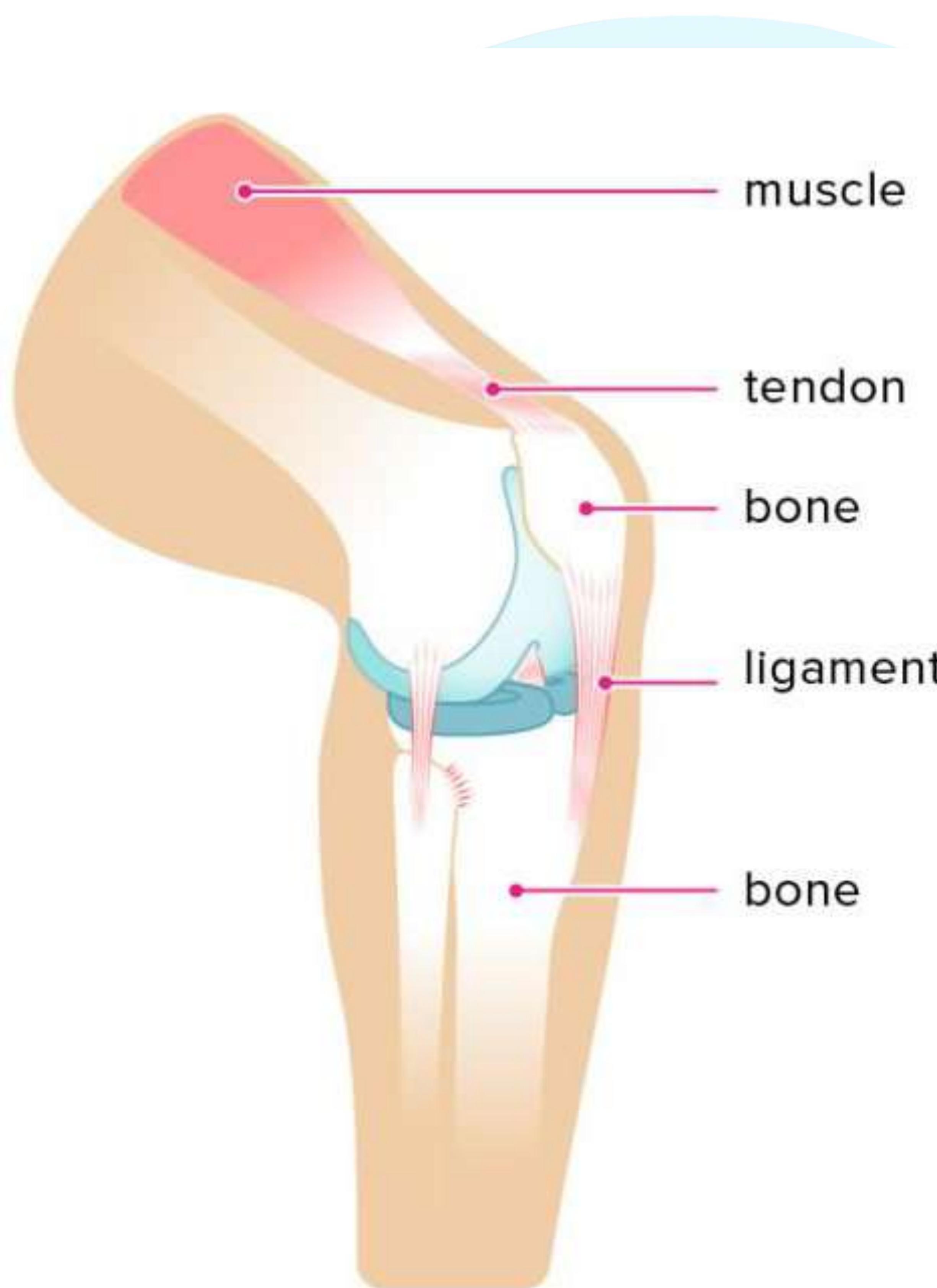
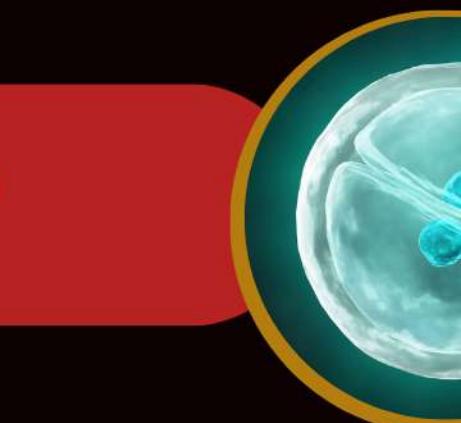
(हड्डियाँ जल्दी पुनः बनती हैं जबकि उपादिय धीरे-धीरे पुनः बनती हैं)।

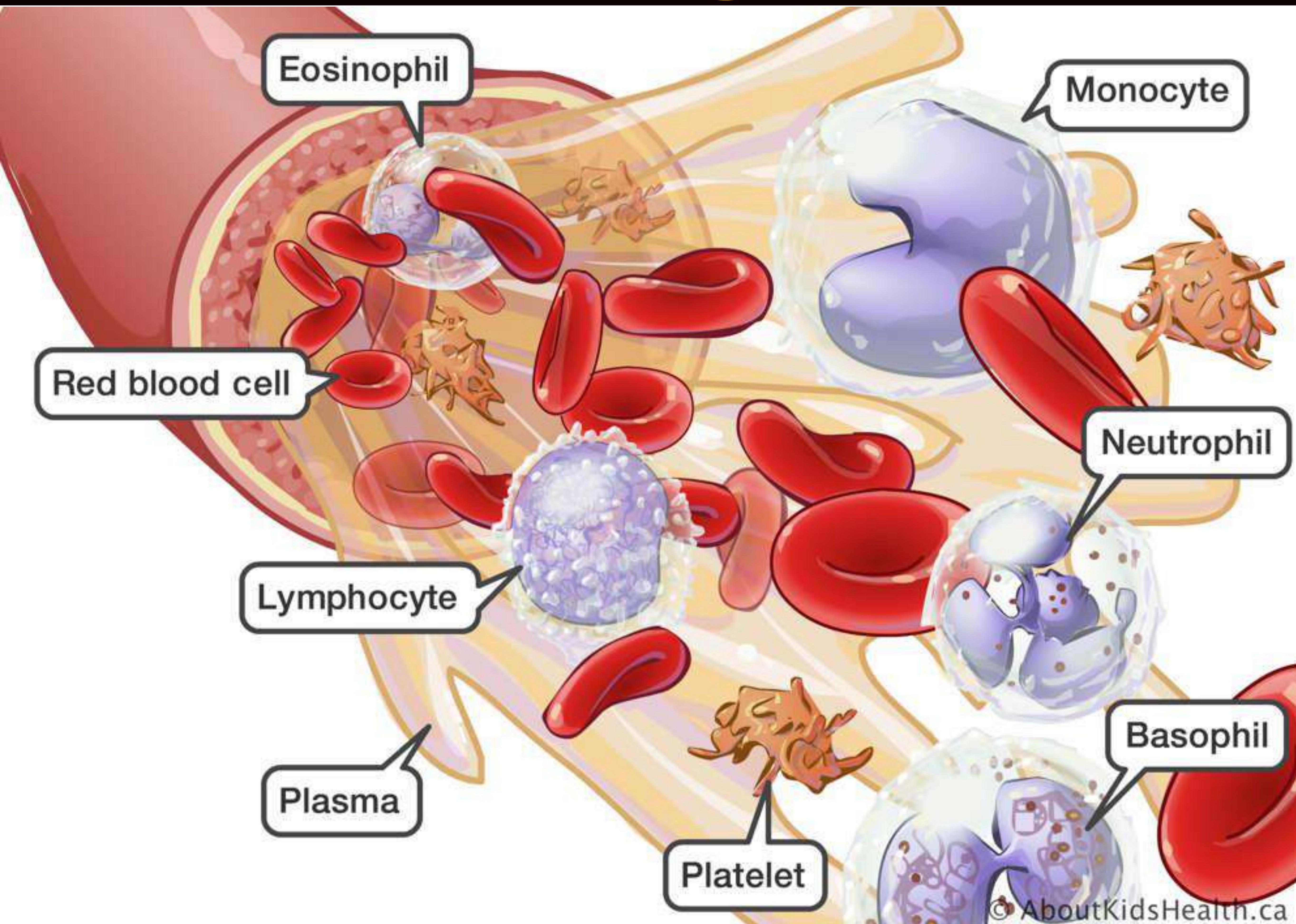
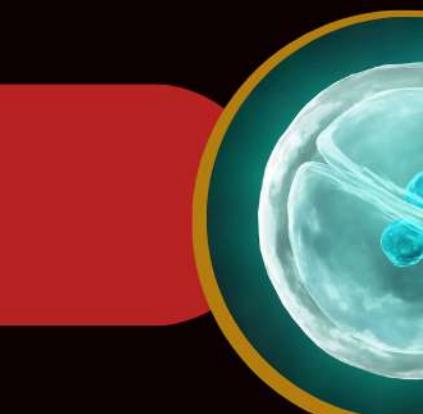




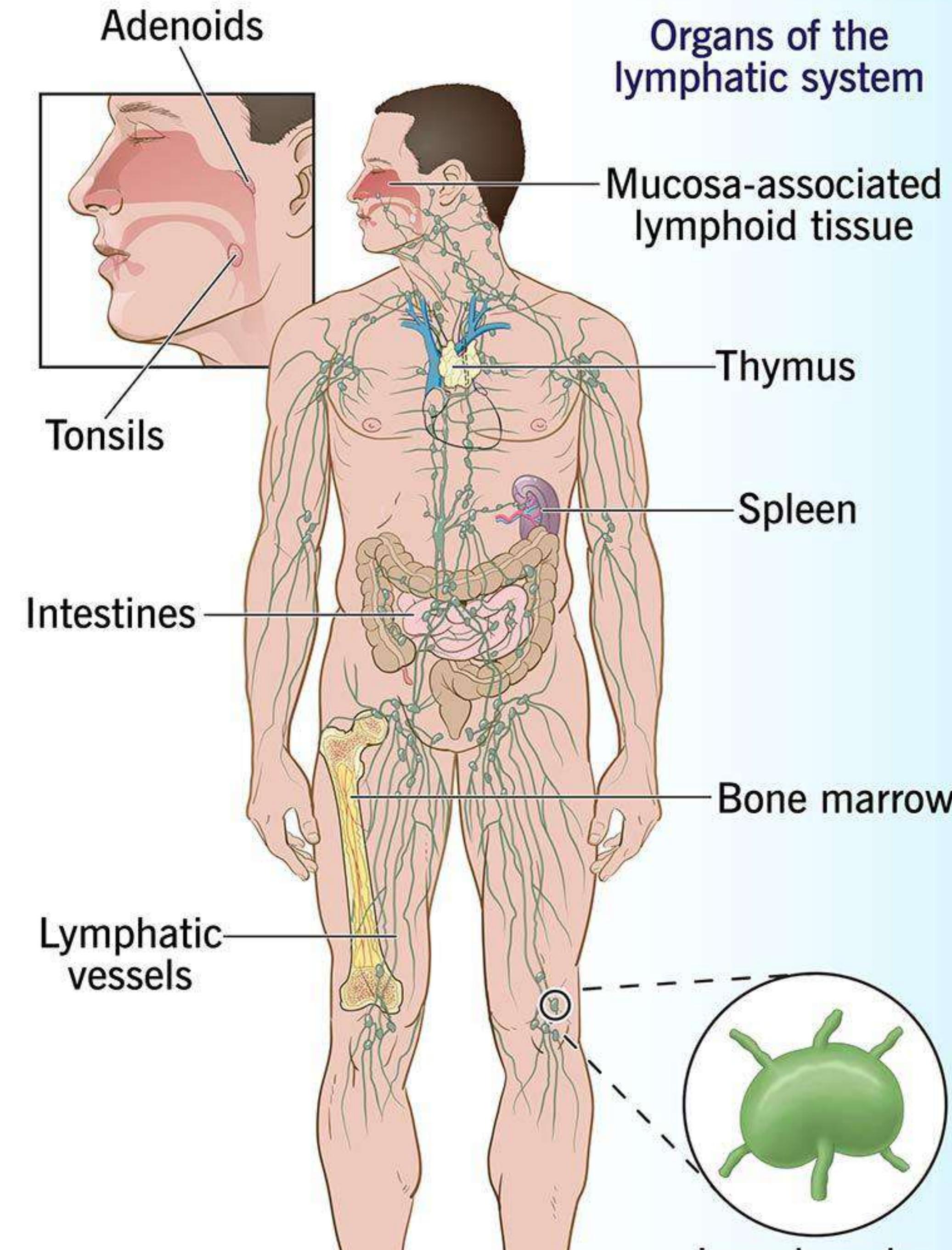


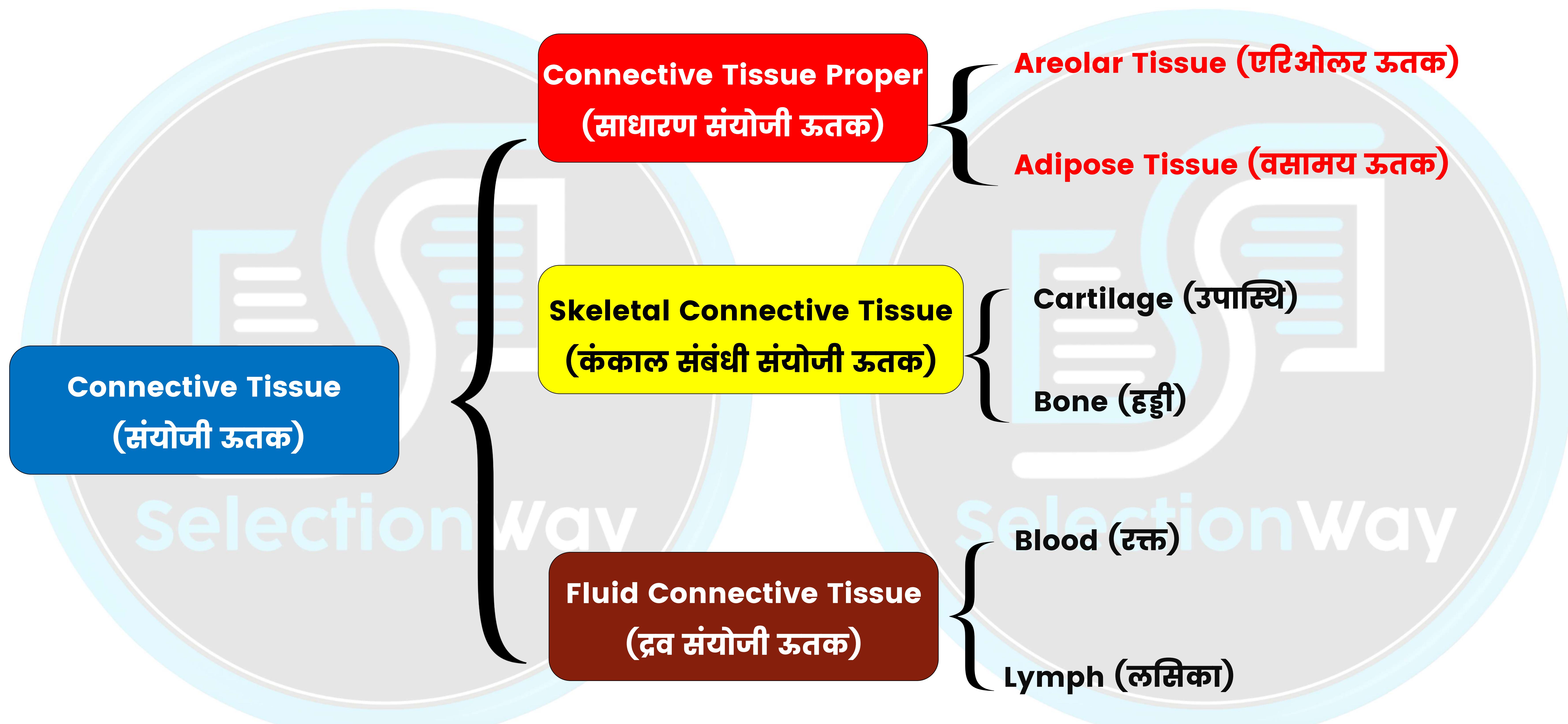
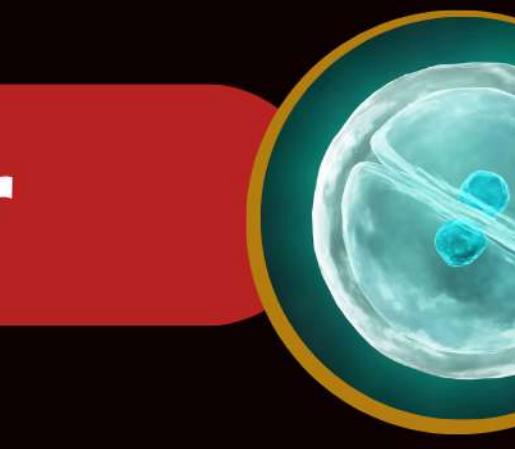


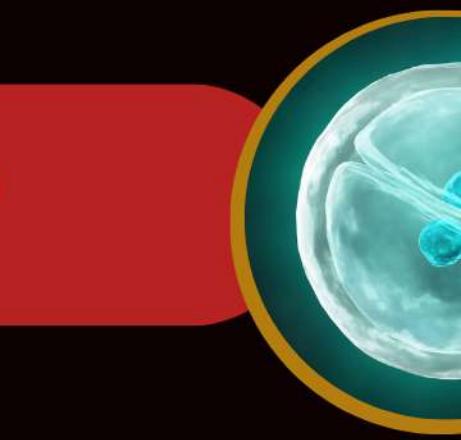




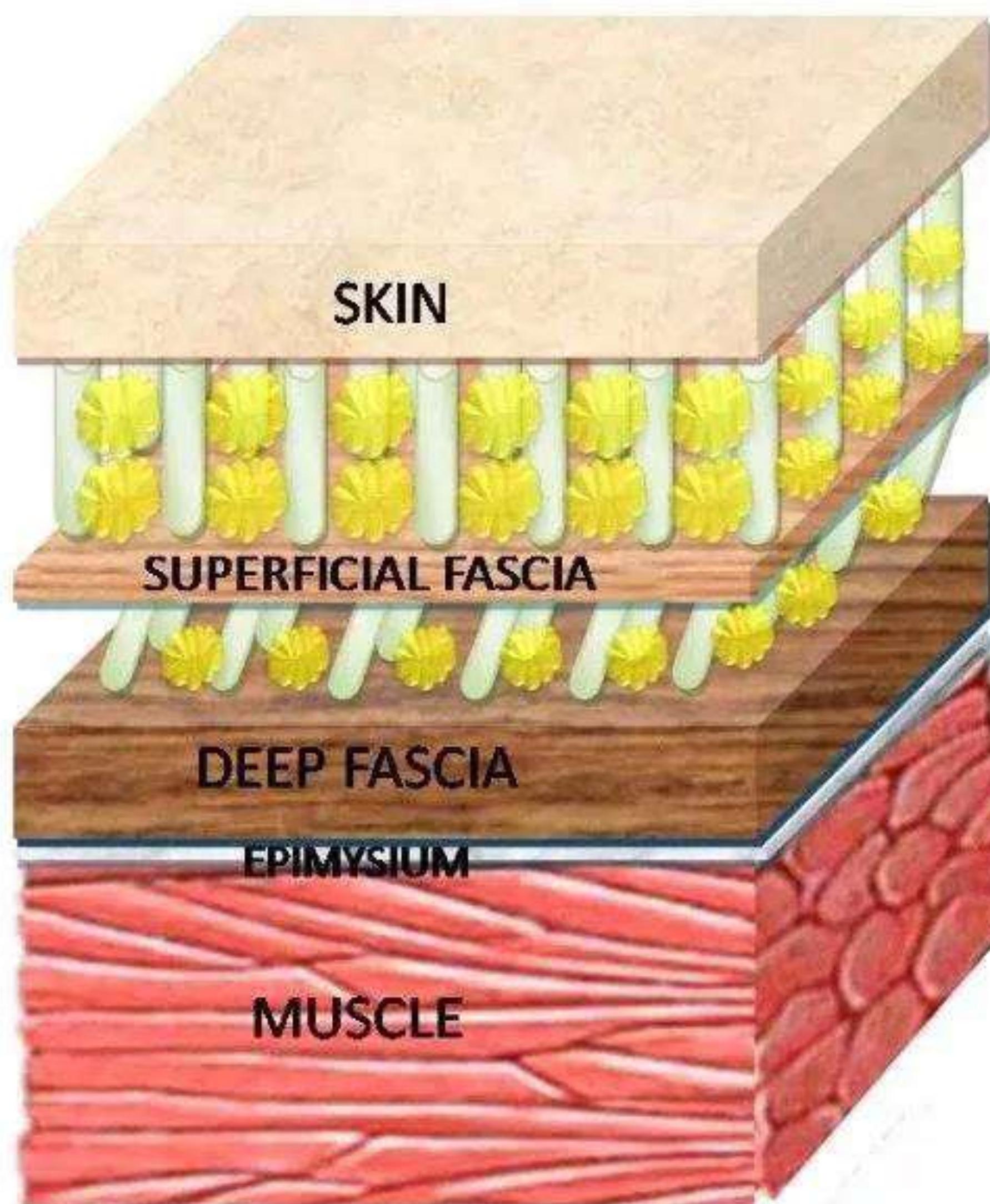
Lymphatic System







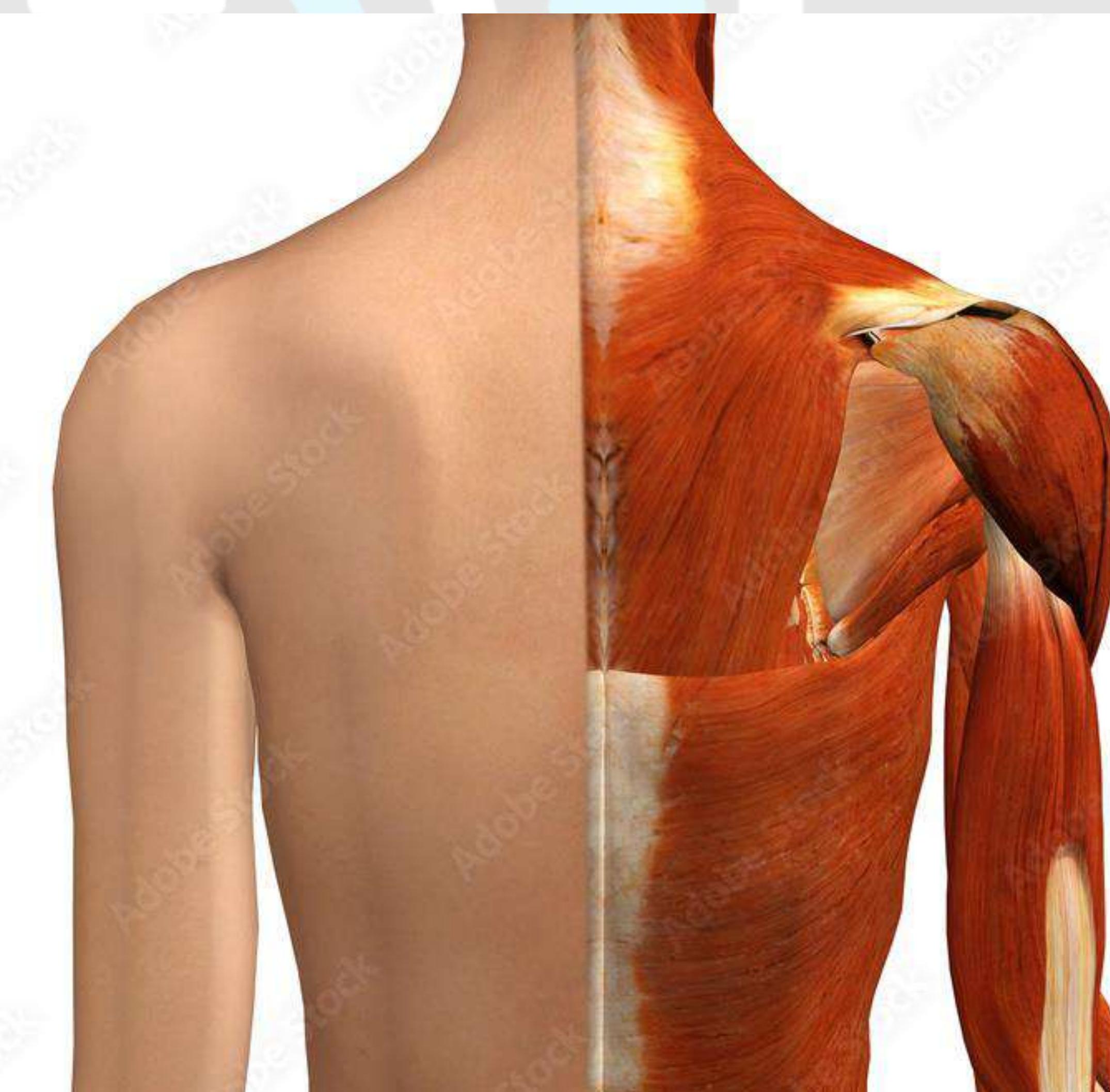
Areolar Tissue (एरिओलर ऊतक)

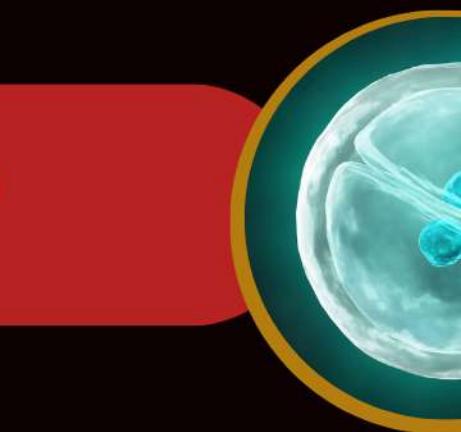


☞ Areolar Tissue Is A Loose Connective Tissue That Fills The Space Inside Organs

And Acts As A Binding Tissue.

☞ एरिओलर ऊतक एक ढीला संयोजी ऊतक है जो अंगों के भीतर की जगह को भरता है और बंधनकारी ऊतक के रूप में कार्य करता है।





Areolar Tissue
(एरिओलर ऊतक)

Location (Where Found) / स्थान (कहाँ पाए जाते हैं)

- Between skin and muscles

त्वचा और मांसपेशियों के बीच

- Around blood vessels and nerves

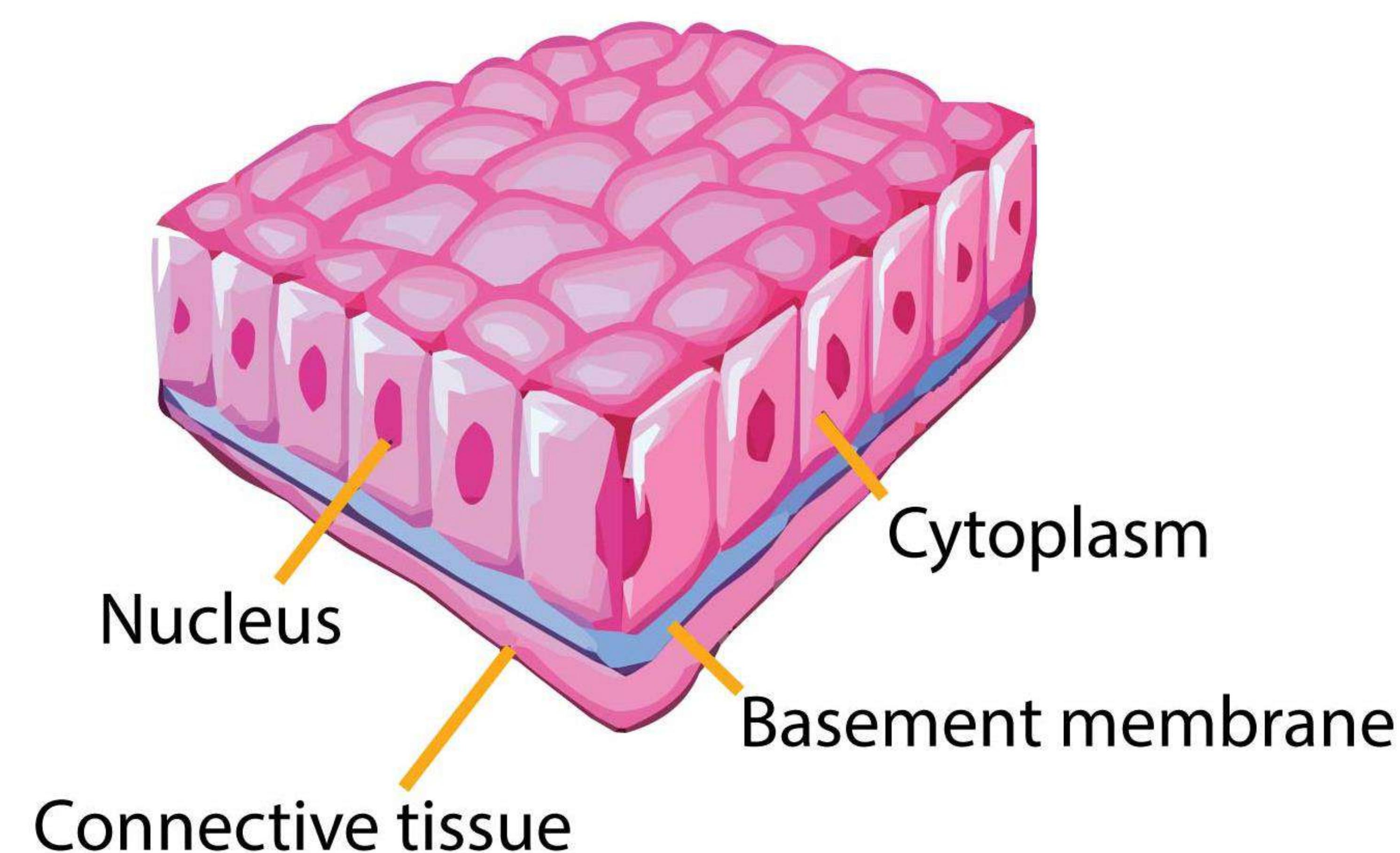
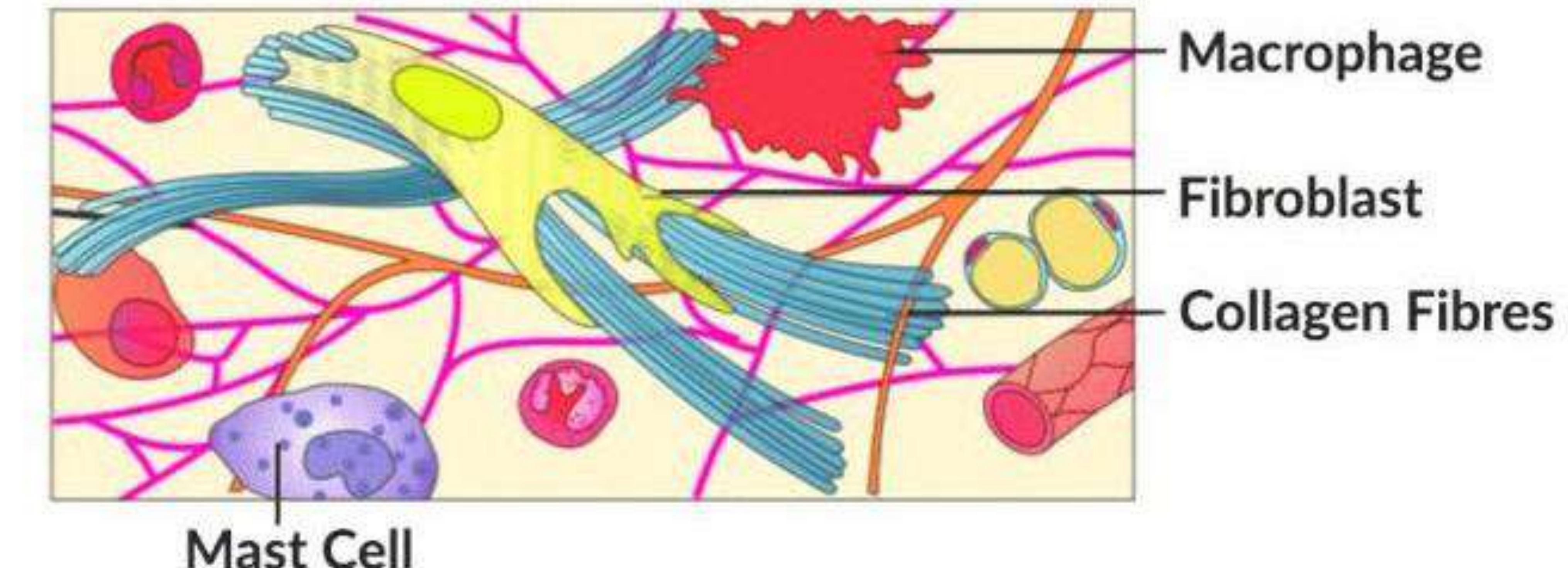
रक्त वाहिकाओं और तंत्रिकाओं के चारों ओर

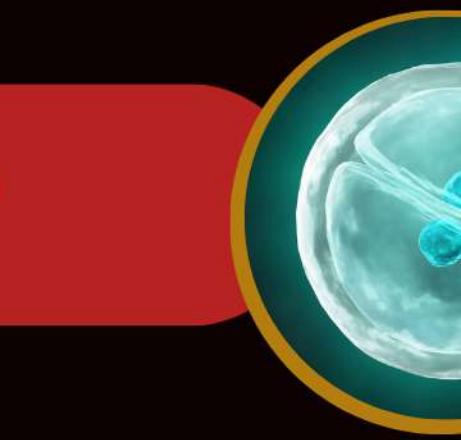
- In bone marrow and mesentery

अस्थि मज्जा और मेसेन्टरी में

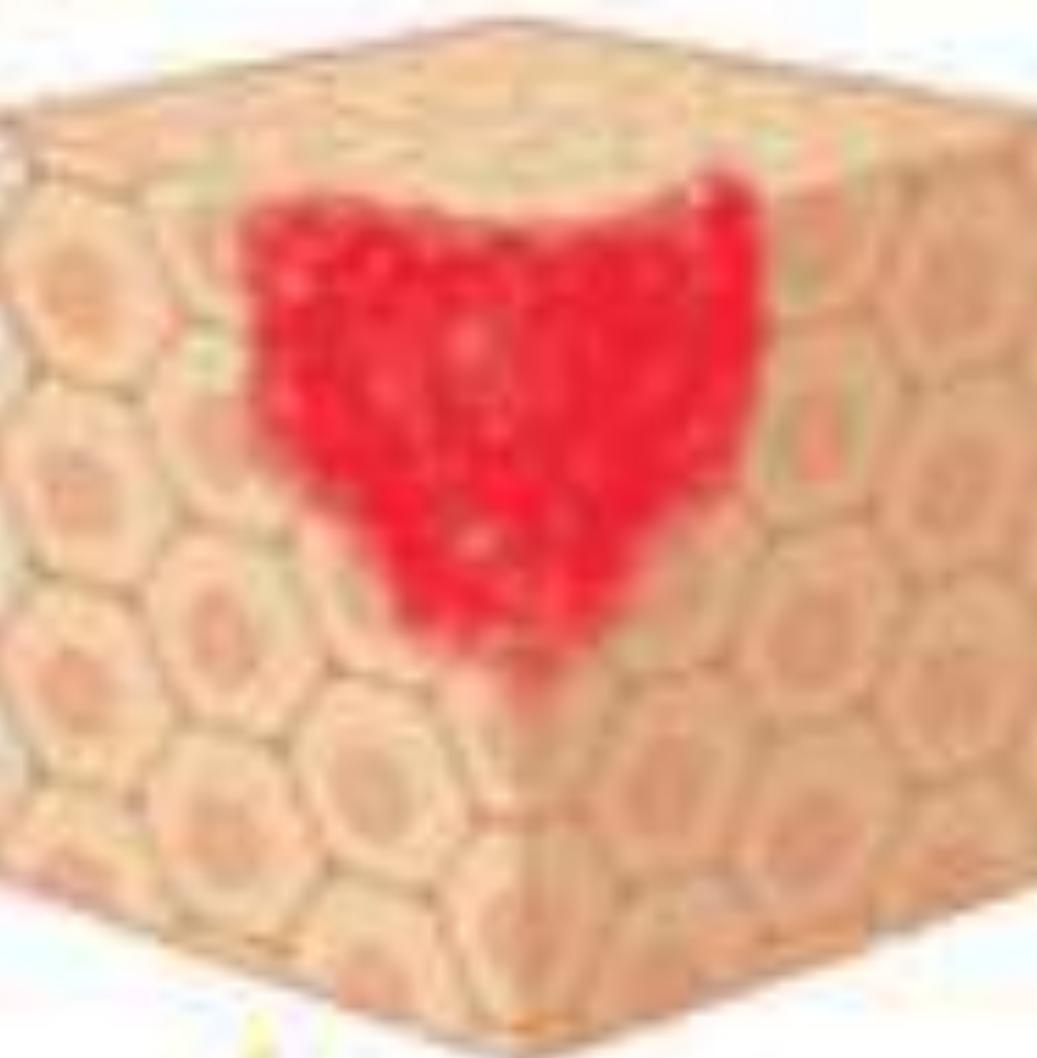
- Under the epithelial tissue

उपकला ऊतक के नीचे





Injury



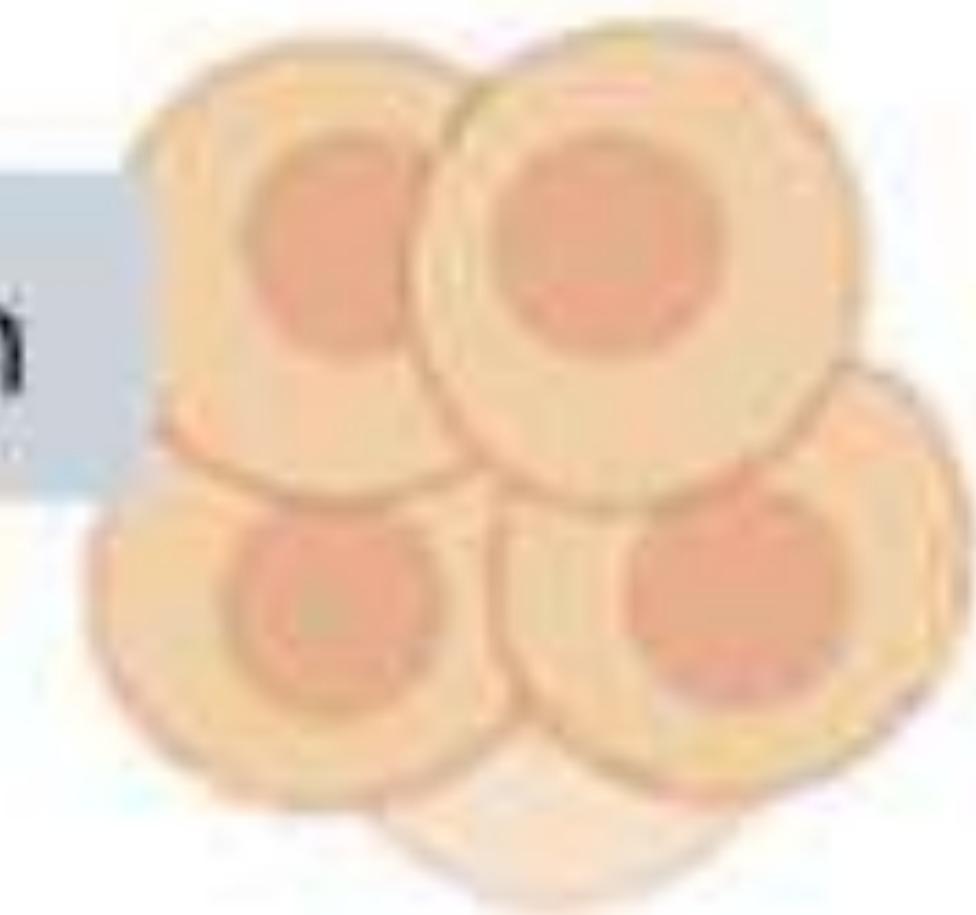
Differentiation



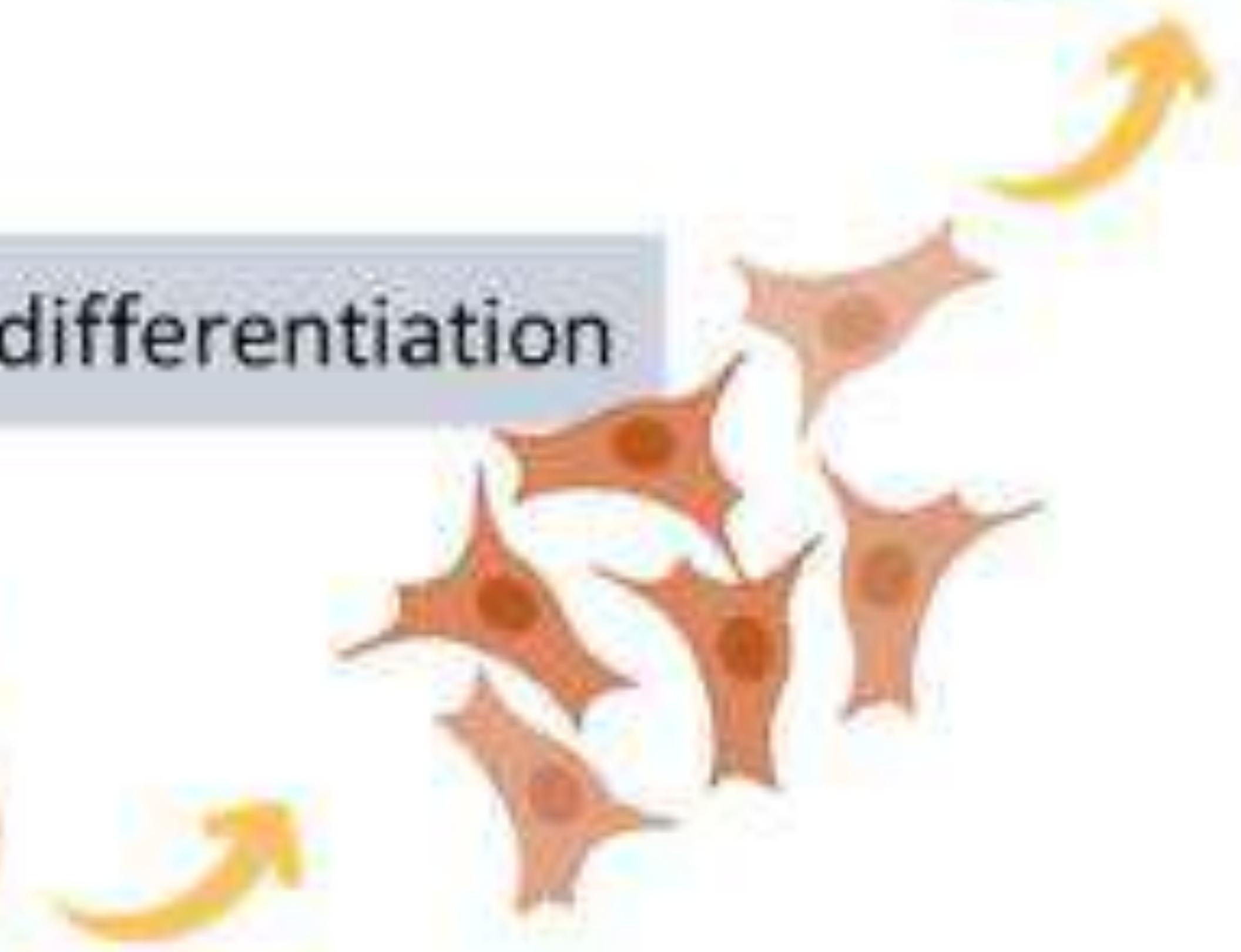
Migration



Proliferation

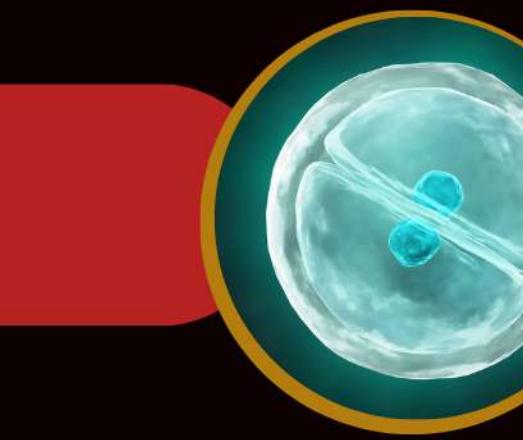


Redifferentiation



Regeneration





Cells Present / उपस्थित कोशिकाएँ

👉 **Fibroblasts** → Secrete Fibers And Ground Substance

फाइब्रोब्लास्ट → टेलों और ग्राउंड सबस्टेंस का निर्माण करते हैं

👉 **Mast Cells** → Secrete Histamine And Play A Role In Inflammation

मास्ट कोशिकाएँ → हिस्टामिन छोड़ती हैं और सूजन में भूमिका निभाती हैं

👉 **Macrophages** → Engulf Foreign Particles (Phagocytosis)

मैक्रोफेज → विदेशी कणों को निगल लेते हैं (फागोसाइटोसिस)

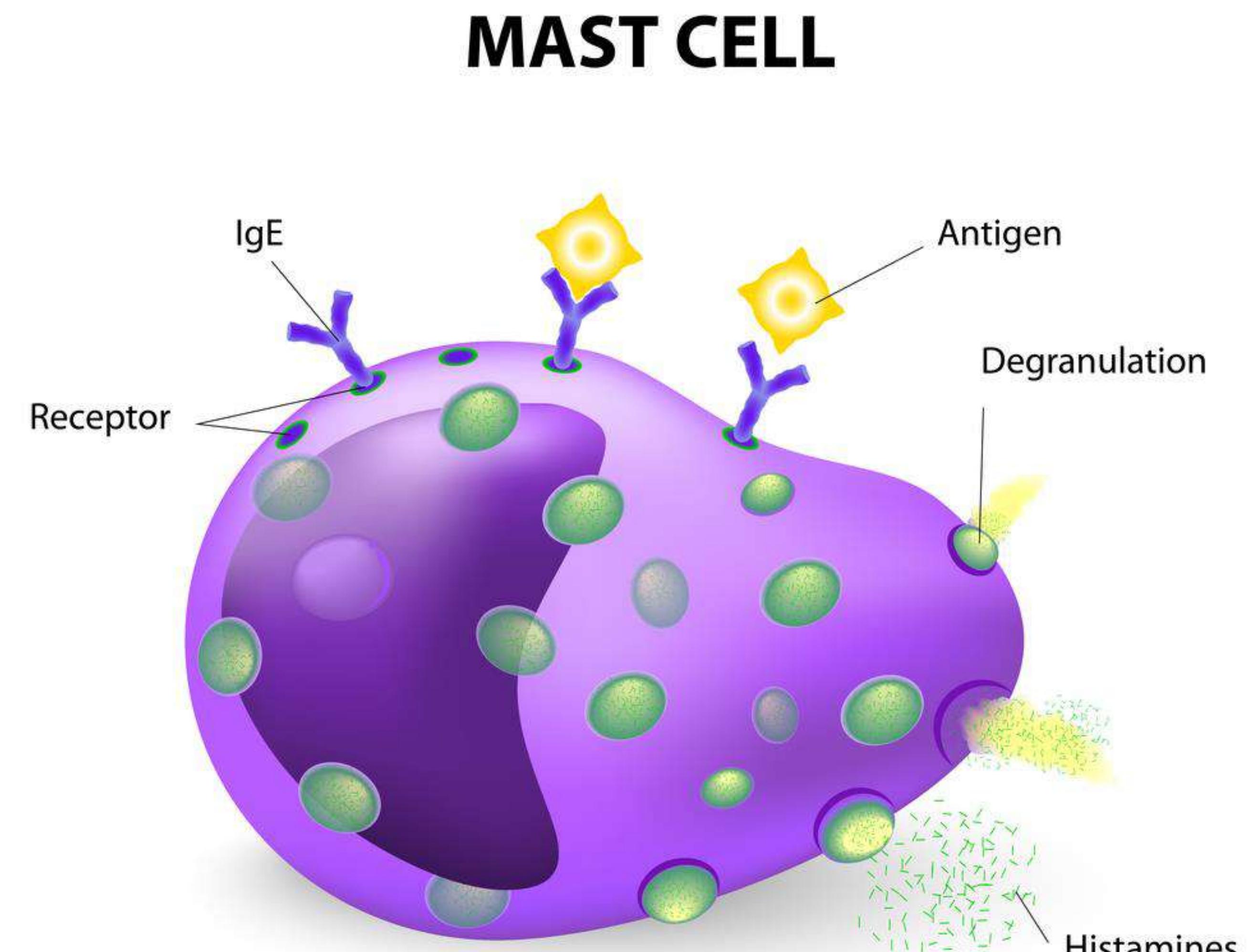
👉 **Fat Cells (Adipocytes)** → Store Fat

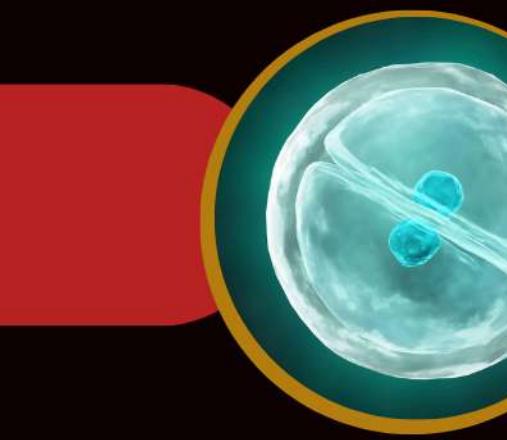
वसा कोशिकाएँ (एडिपोसाइट्स) → वसा का भंडारण करती हैं

👉 **Plasma Cells** → Produce Antibodies

प्लाज्मा कोशिकाएँ → एंटीबॉडी बनाती हैं

Areolar Tissue
(एरिओलर ऊतक)





Areolar Tissue (एरिओलर ऊतक)

Fibers Present / उपस्थित रेशे

👉 **Collagen fibers** → provide strength

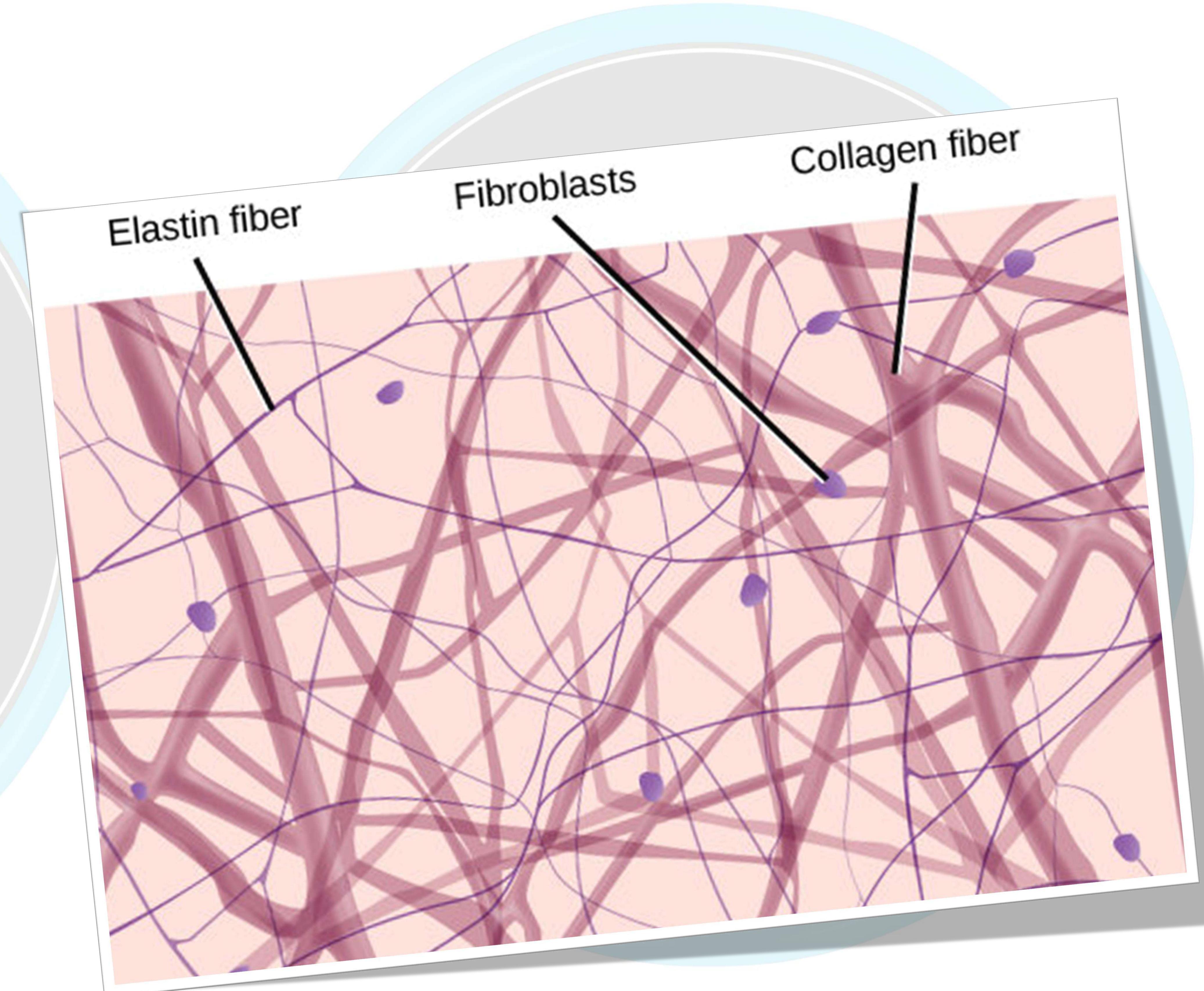
कोलाजन रेशे → मजबूती प्रदान करते हैं

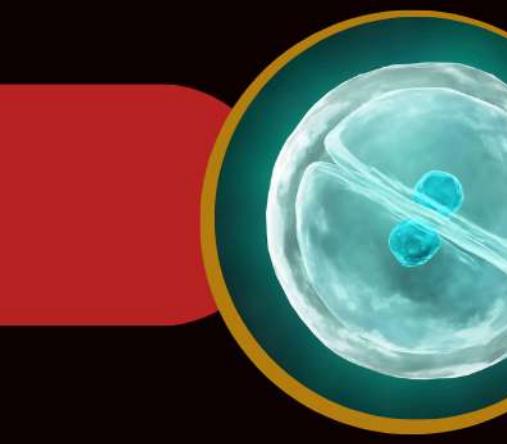
👉 **Elastic fibers** → provide flexibility

इलास्टिक रेशे → लचीलापन प्रदान करते हैं

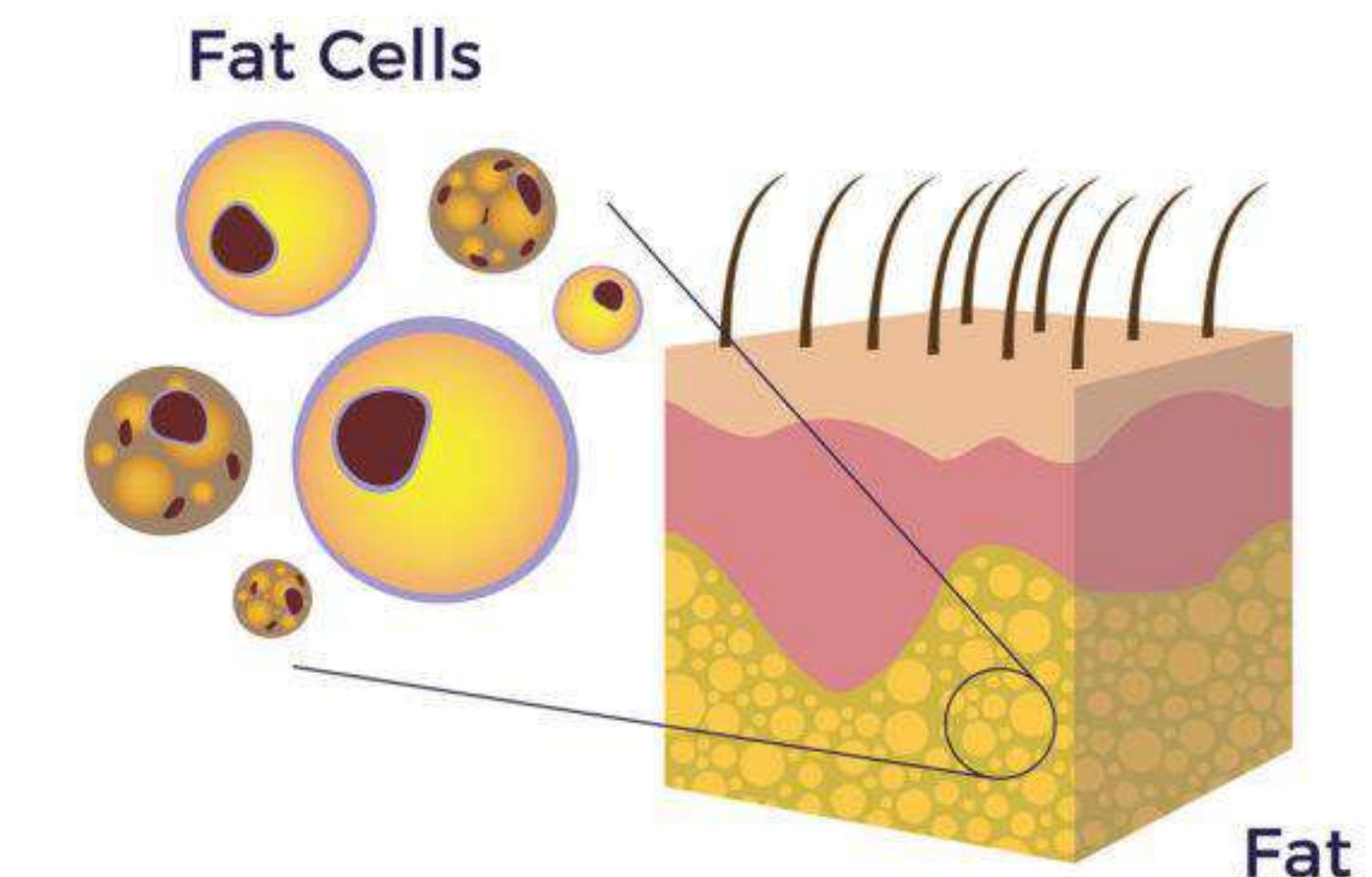
👉 **Reticular fibers** → provide support

रेटिक्युलर रेशे → सहारा प्रदान करते हैं





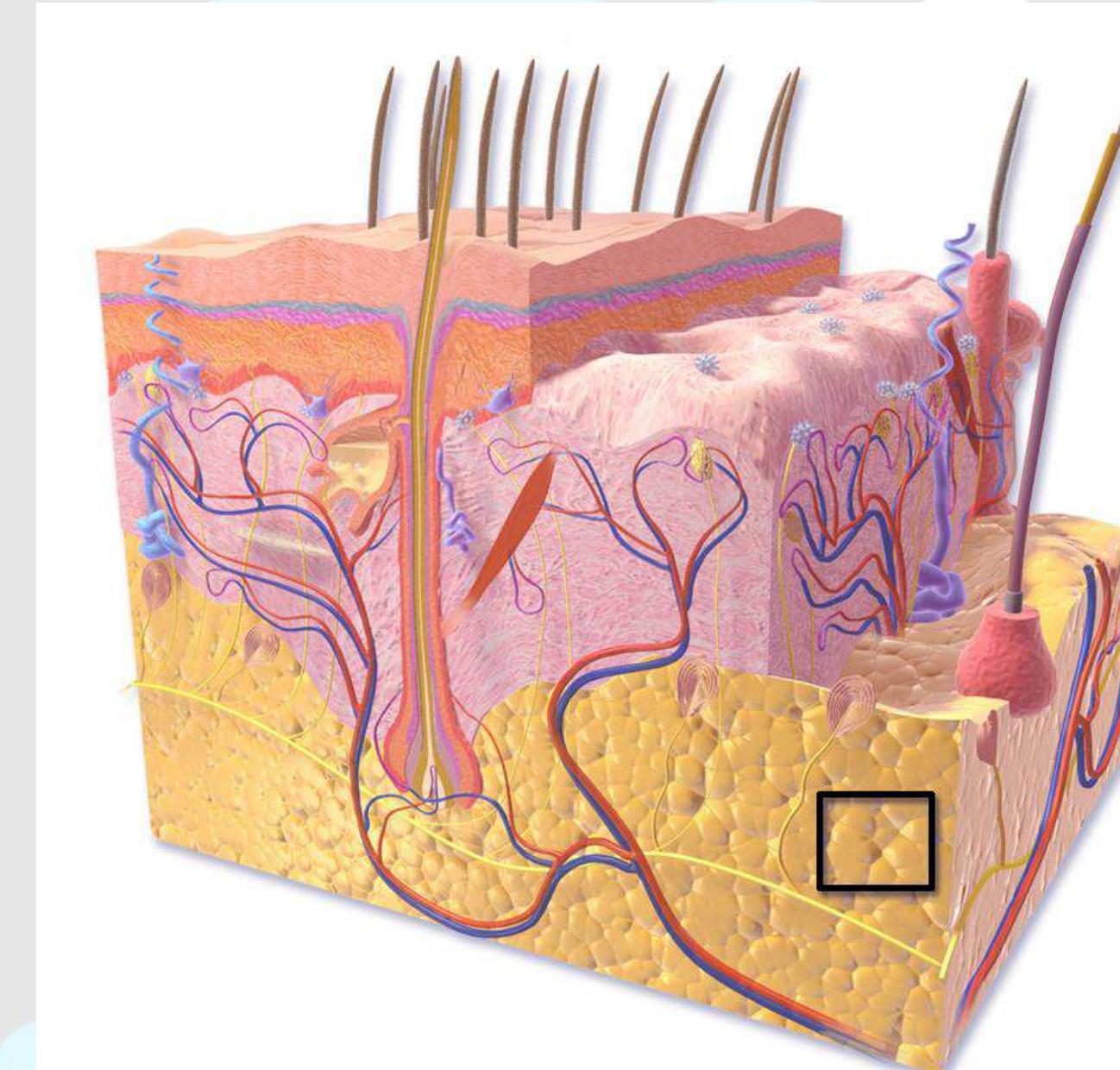
Adipose Tissue (एडिपोज़ ऊतक)



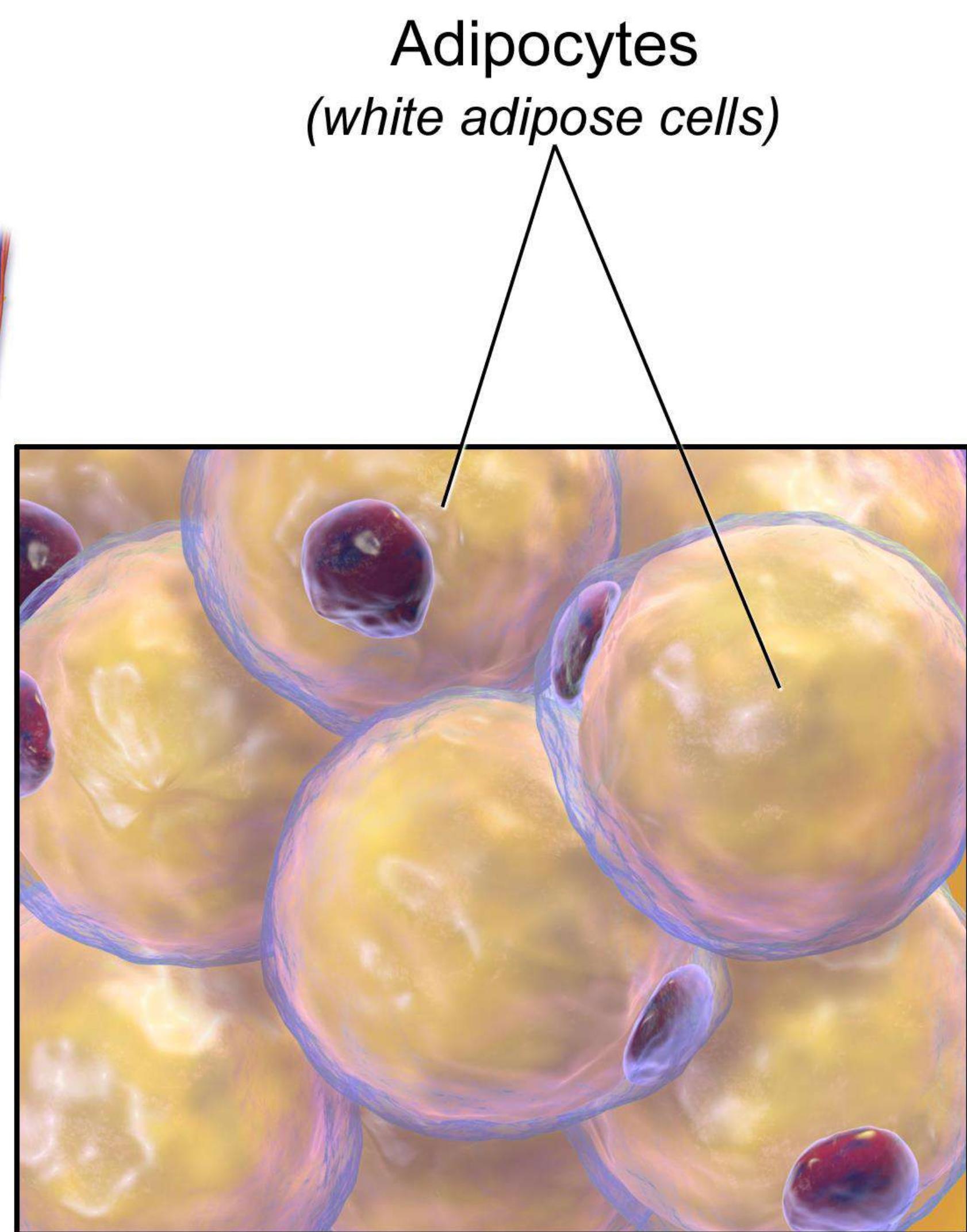
👉 **Adipose Tissue** Is A Type Of Connective Tissue That Stores Fat And Acts As An

Energy Reservoir.

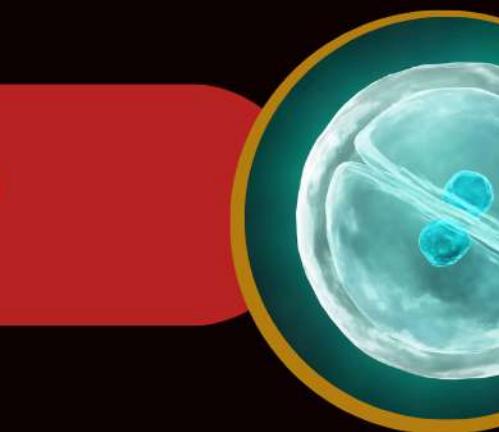
👉 **एडिपोज़ ऊतक** संयोजी ऊतक का एक प्रकार है जो **वसा का भंडारण करता है** और ऊर्जा का **भंडार होता है।**



Adipose Tissue



Adipocytes
(white adipose cells)



Adipose Tissue (एडिपोज़ ऊतक)

👉 Beneath The Skin (Subcutaneous Layer)

त्वचा के नीचे (अधिचर्मीय परत)

👉 Around Kidneys, Heart, And Eyeballs

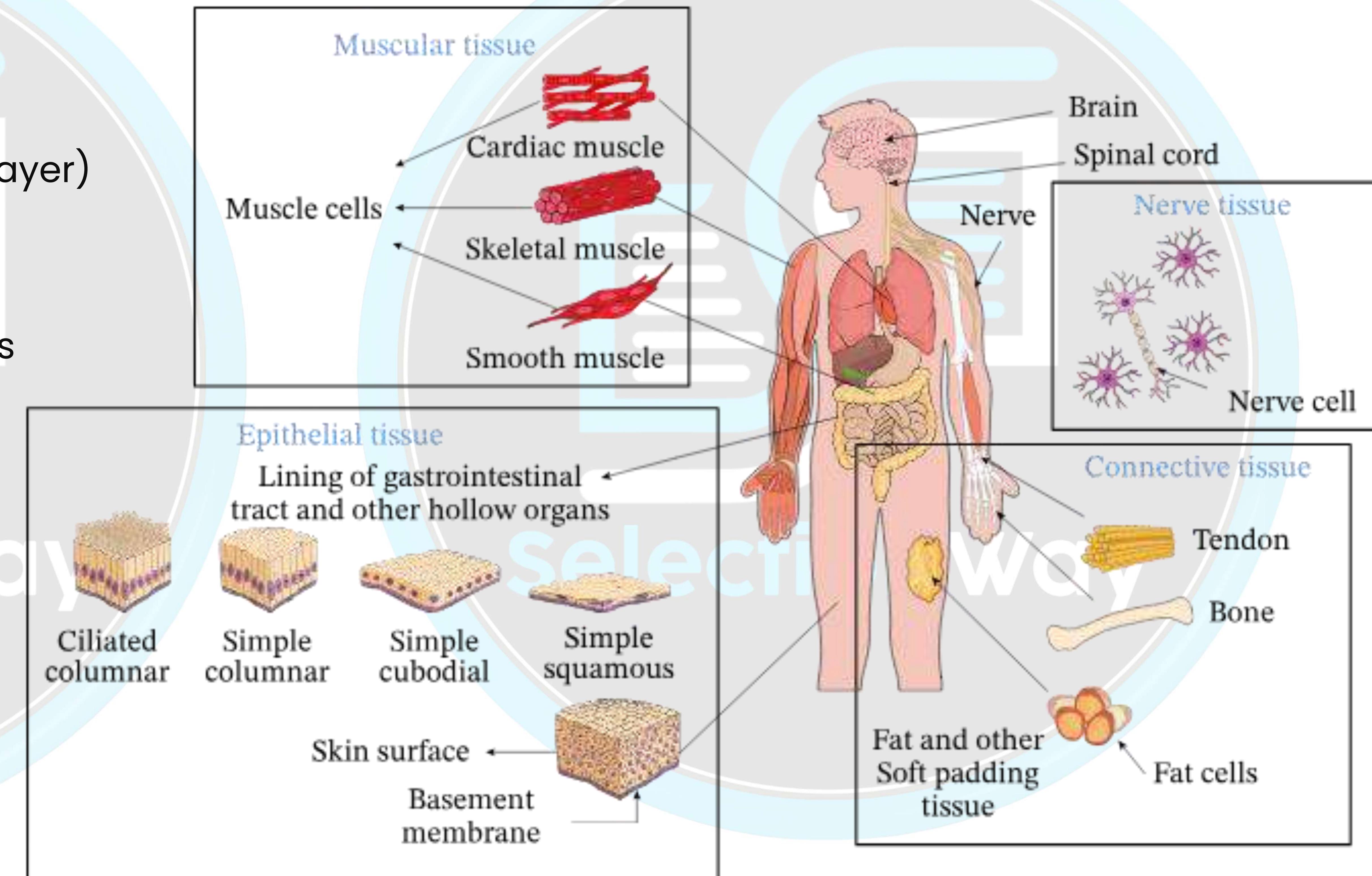
गुदों, हृदय और नेत्रगोलकों के चारों ओर

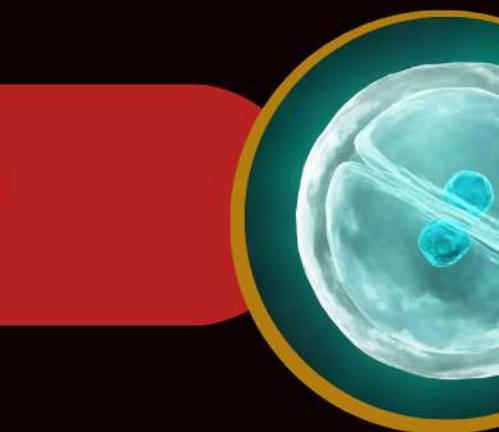
• In Bone Marrow

अस्थि मज्जा में

👉 Around Joints And Abdomen

जोड़ों और पेट के चारों ओर





Adipose Tissue (एडिपोज़ ऊतक)

👉 Beneath The Skin (Subcutaneous Layer)

त्वचा के नीचे (अधिचर्मीय परत)

👉 Around Kidneys, Heart, And Eyeballs

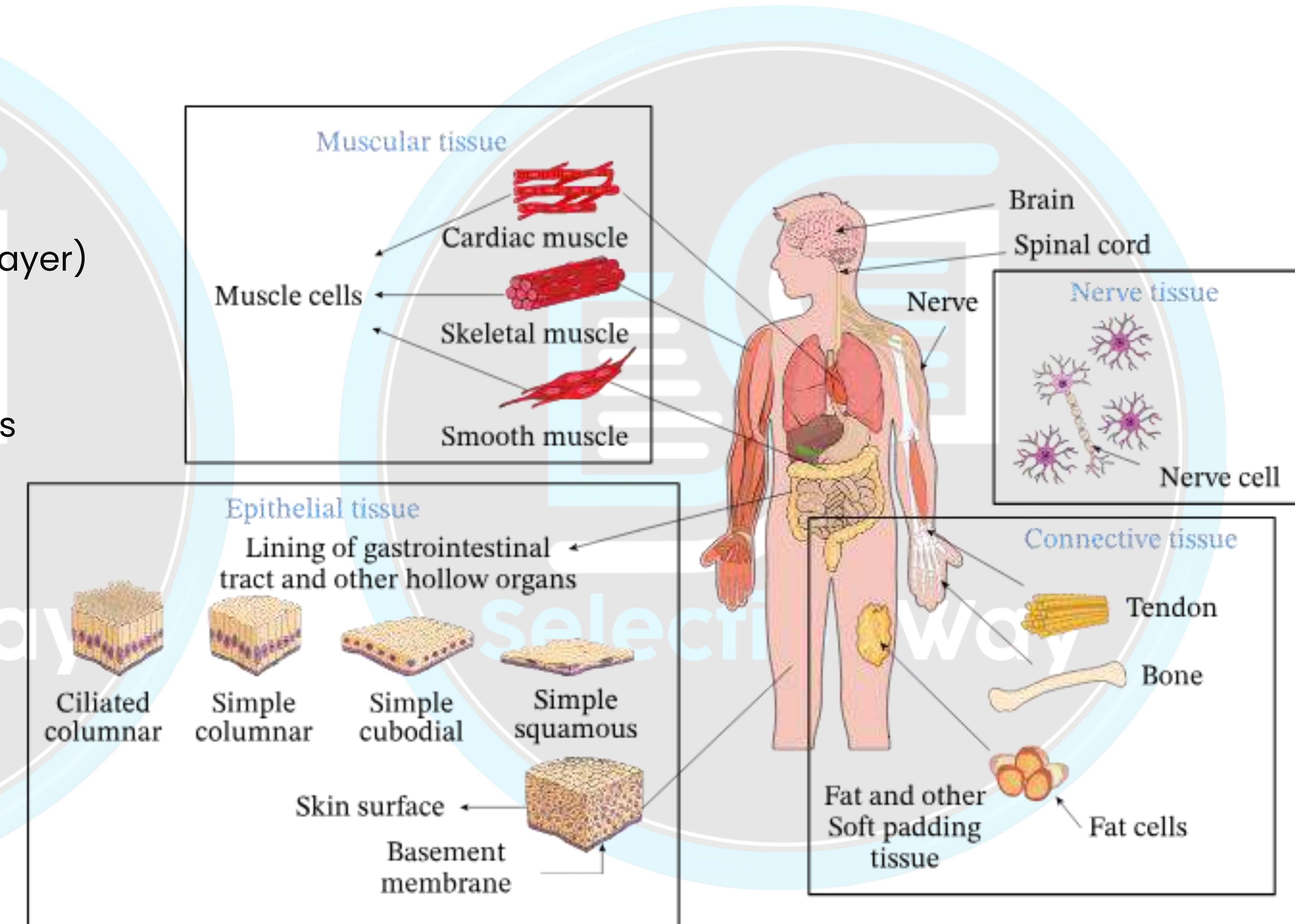
गुदों, हृदय और नेत्रगोलकों के चारों ओर

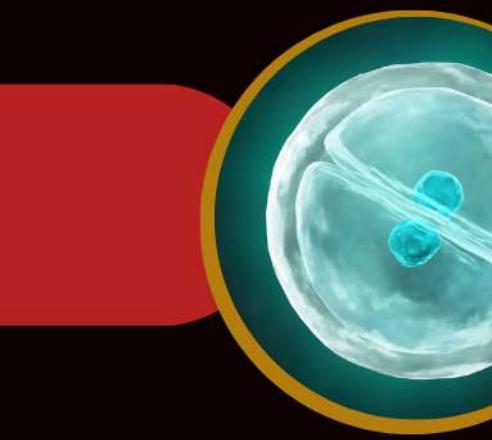
• In Bone Marrow

अस्थि मज्जा में

👉 Around Joints And Abdomen

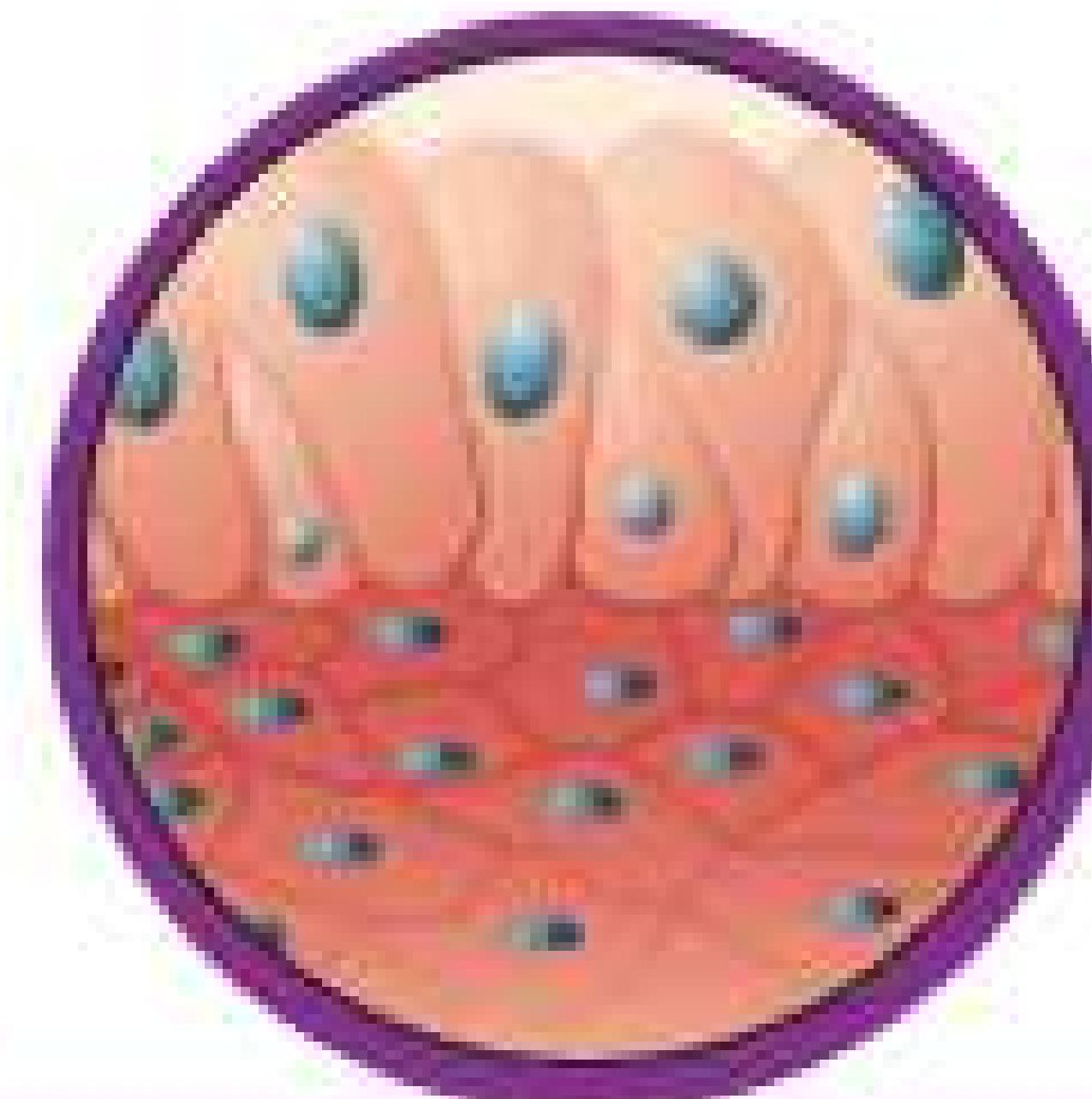
जोड़ों और पेट के चारों ओर





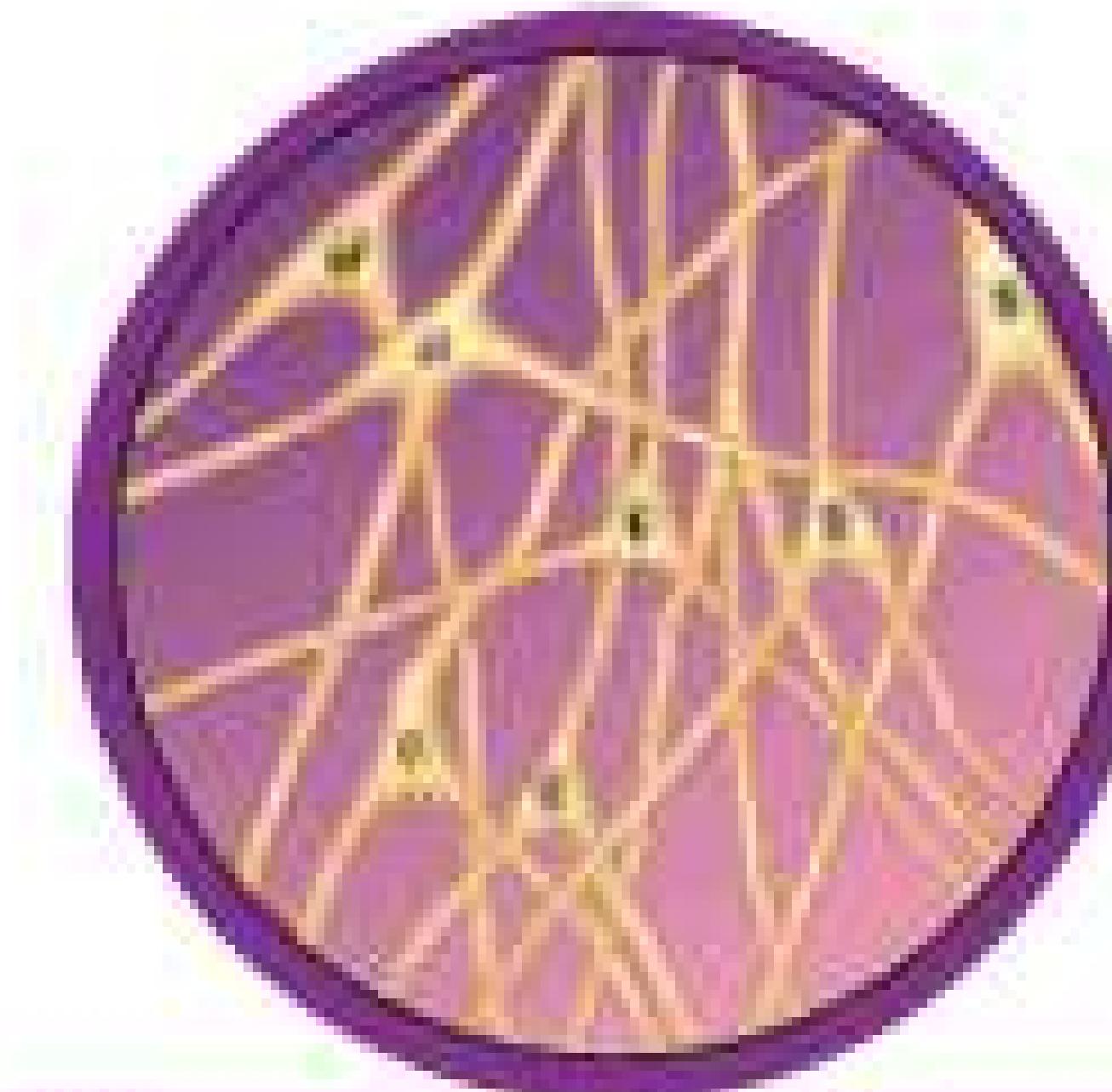
Animal Tissue (जंतु ऊतक)

Epithelial Tissue
(उपकला ऊतक)



Epithelial tissue

Nervous Tissue
(तंत्रिका ऊतक)



Nervous tissue

Muscular Tissue
(मांसपेशी ऊतक)

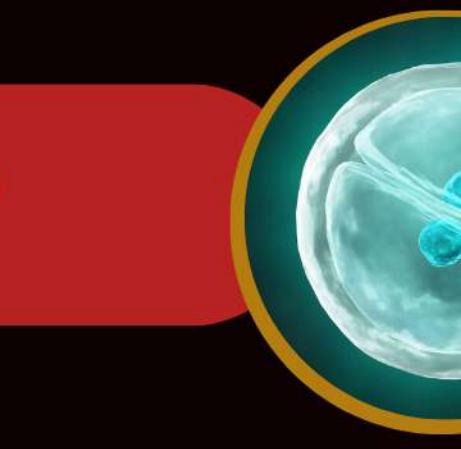


Muscle tissue

Connective Tissue
(संयोजी ऊतक)



Connective tissue



Muscular Tissue (मांसपेशी ऊतक)

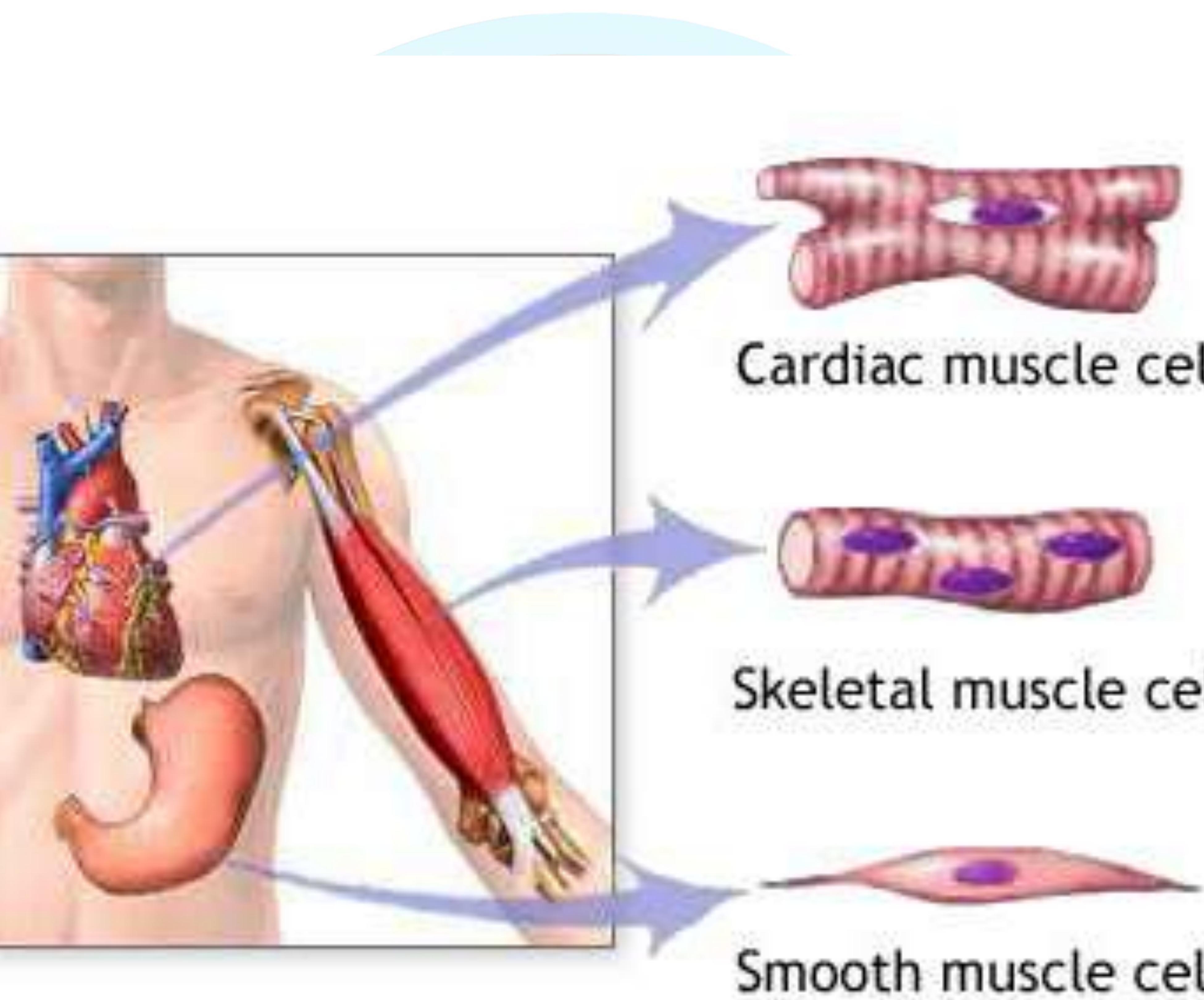
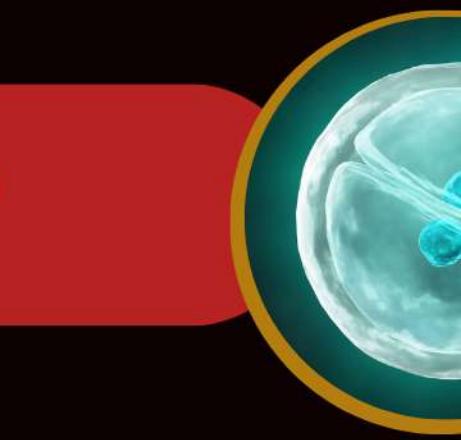


Muscular Tissue Is A Specialized Tissue That Helps In Movement Of Body Parts By

Contraction And Relaxation.

मांसपेशी ऊतक एक विशेष प्रकार का ऊतक है जो संकुचन और प्रसार द्वारा शरीर के अंगों की गति में सहायता करता है।

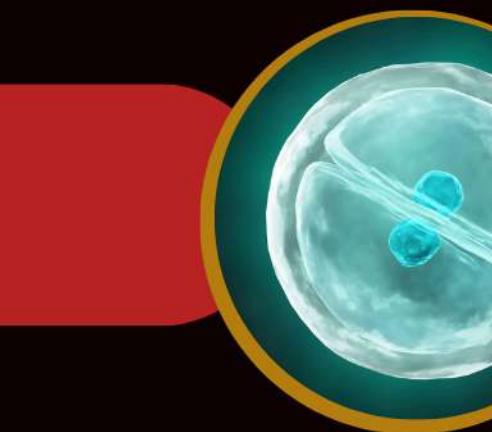
SelectionWay



Types of Muscular Tissue / मांसपेशी ऊतक के प्रकार

- (A) **Skeletal Muscles** (आस्थि-पेशी ऊतक)
- (B) **Smooth Muscles** (मृदु/सपाट मांसपेशी ऊतक)
- (c) **Cardiac Muscles** (हृदय-पेशी ऊतक)

SelectionWay



Skeletal Muscles (अस्थि-पेशी ऊतक)

- 👉 Voluntary in nature (under our control).

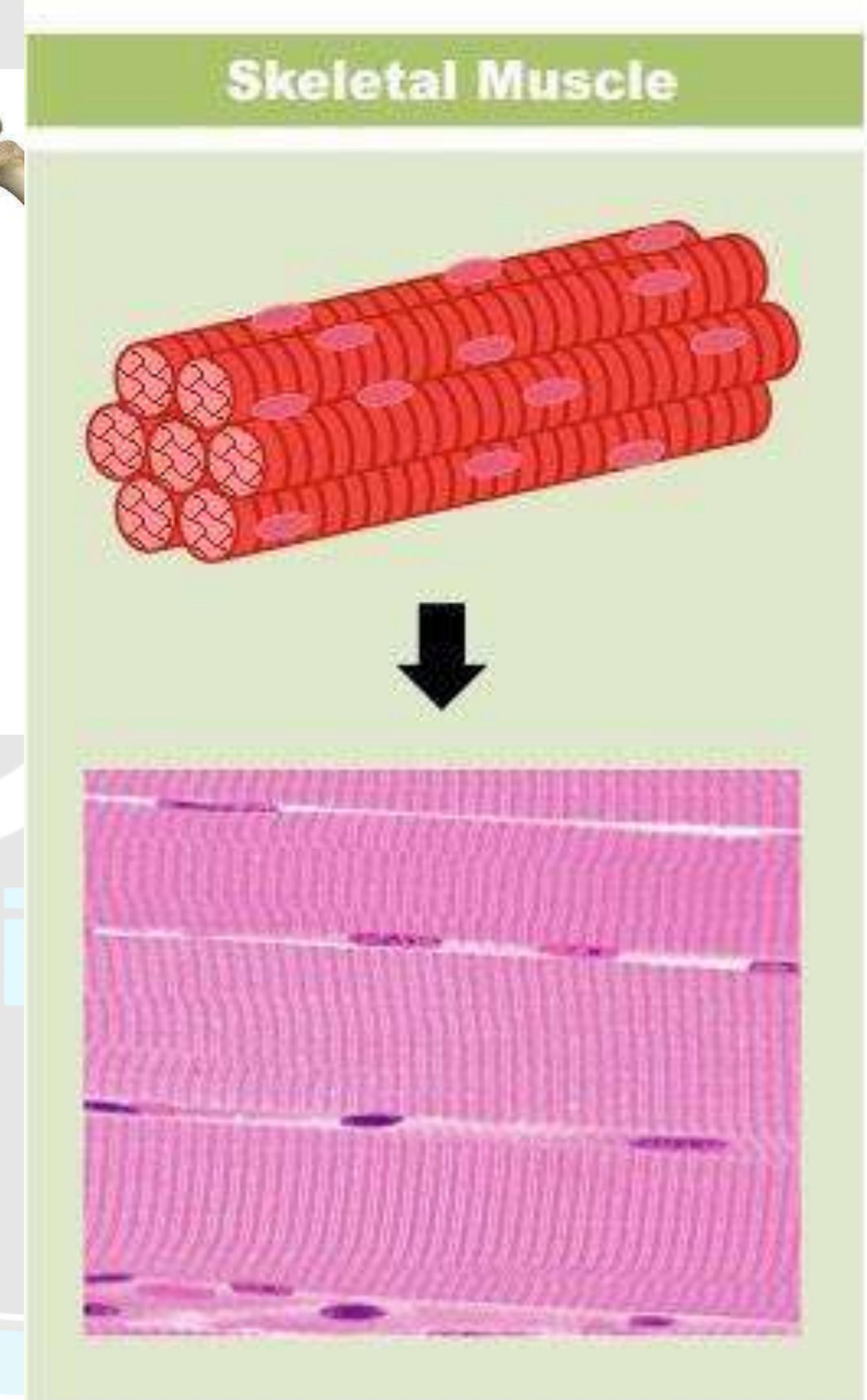
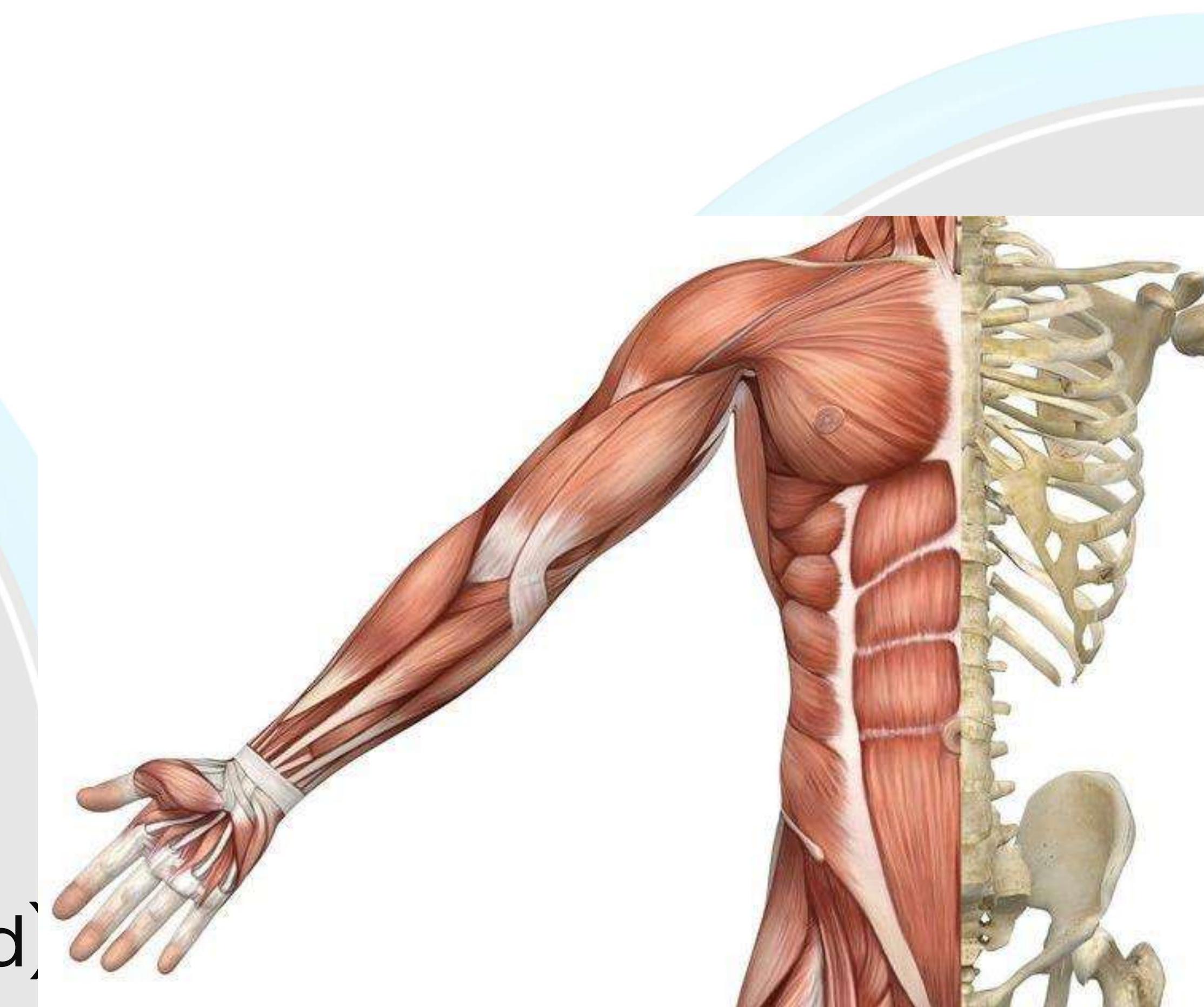
ख्वेच्छा से नियंत्रित (हमारे नियंत्रण में)।

- 👉 Cylindrical, multinucleated, striated (striped)

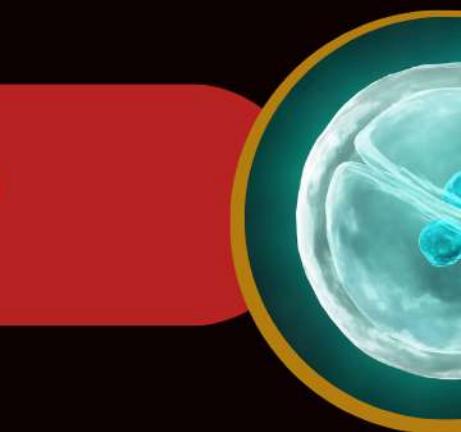
बेलनाकार, बहु-नाभिकीय, रेखांकित।

- 👉 Attached to bones and help in locomotion.

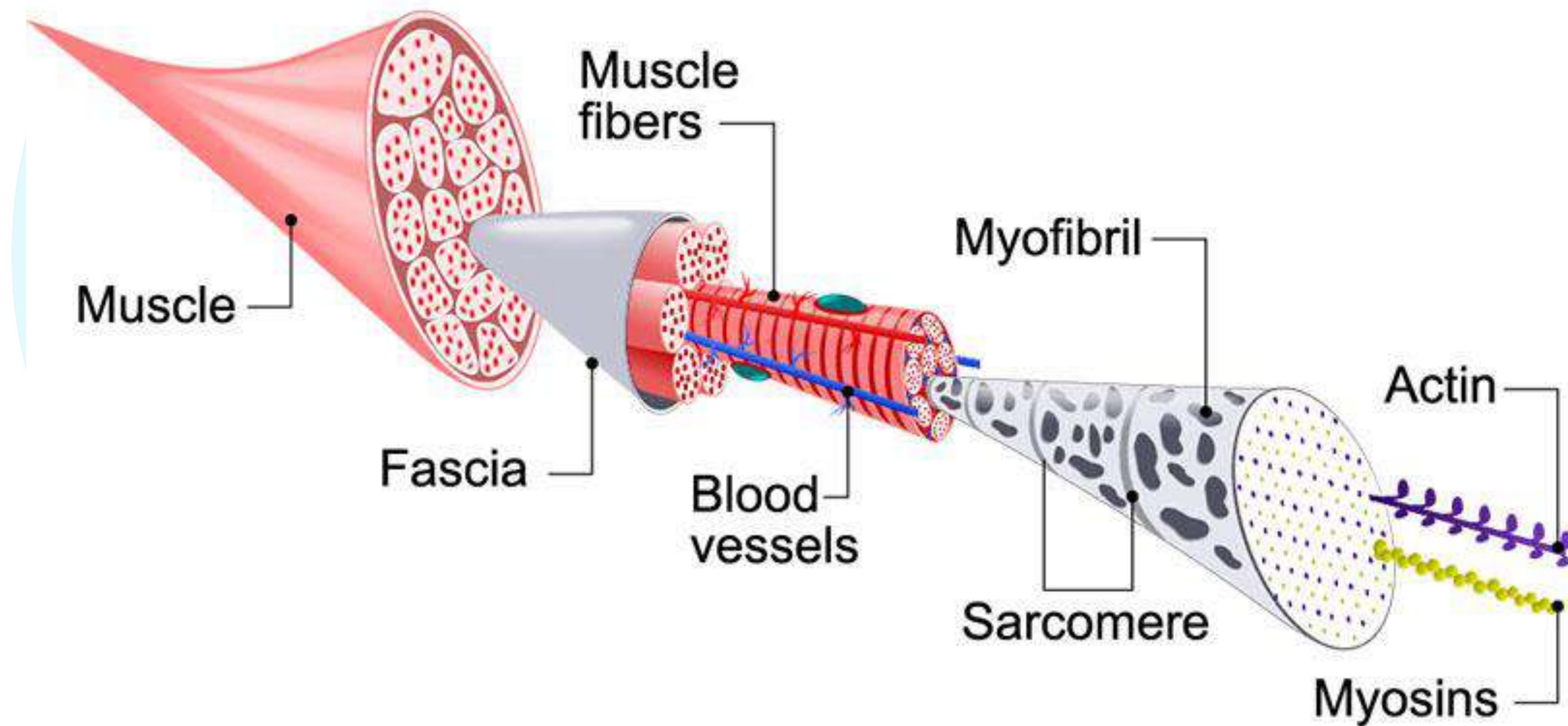
हड्डियों से जुड़ी होती हैं और गमन-आगमन (चलना-फिरना) में मदद करती हैं।

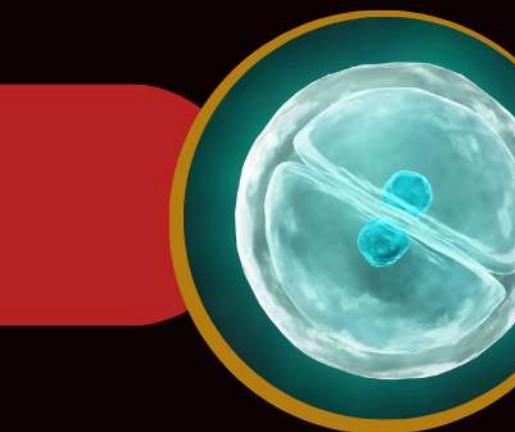






SKELETAL MUSCLE





Smooth Muscles (मृदु/सपाट मांसपेशी ऊतक)

👉 Involuntary in nature (not under our control).

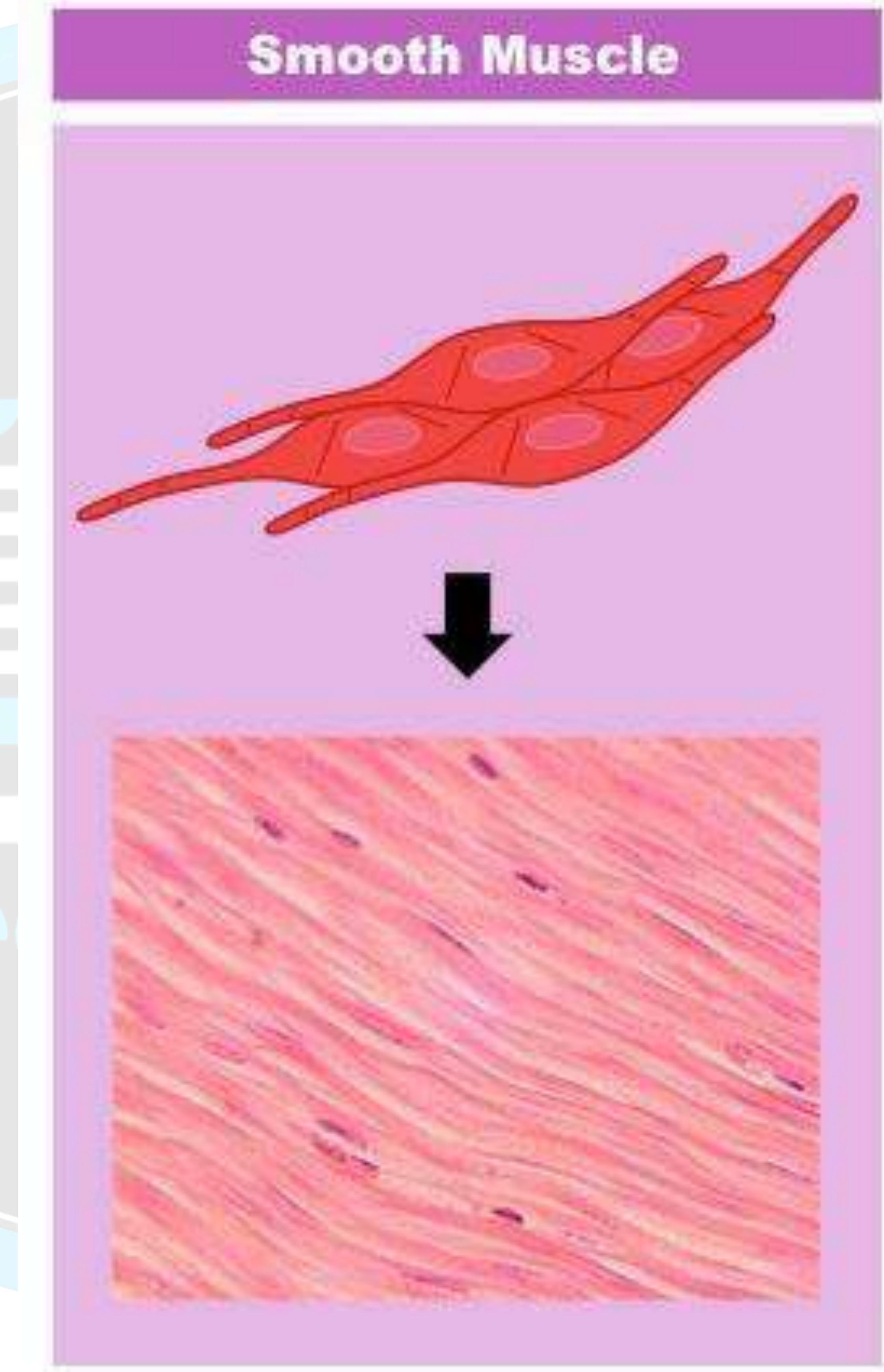
अनैच्छिक (हमारे नियंत्रण में नहीं)।

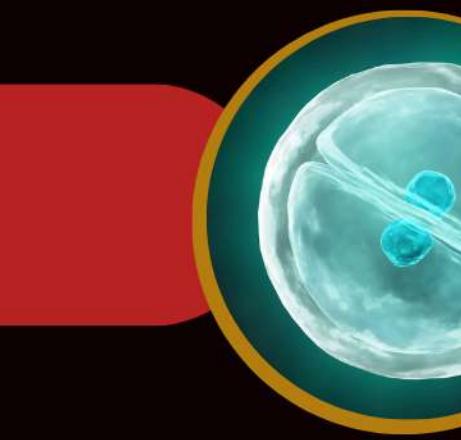
👉 Spindle-shaped, uninucleated, non-striated.

धुरी आकार की, एकल-नामिकीय, अरैखिक।

👉 Found in walls of internal organs (stomach, intestine, blood vessels).

आंतरिक अंगों की दीवारों में पाई जाती हैं (जैसे पेट, आंत, रक्तवाहिकाएँ)।





(Cardiac Muscles (हृदय-पेशी ऊतक)

👉 Involuntary But Rhythmic And Continuous.

अनौच्छिक परंतु लयबद्ध और निरंतर।

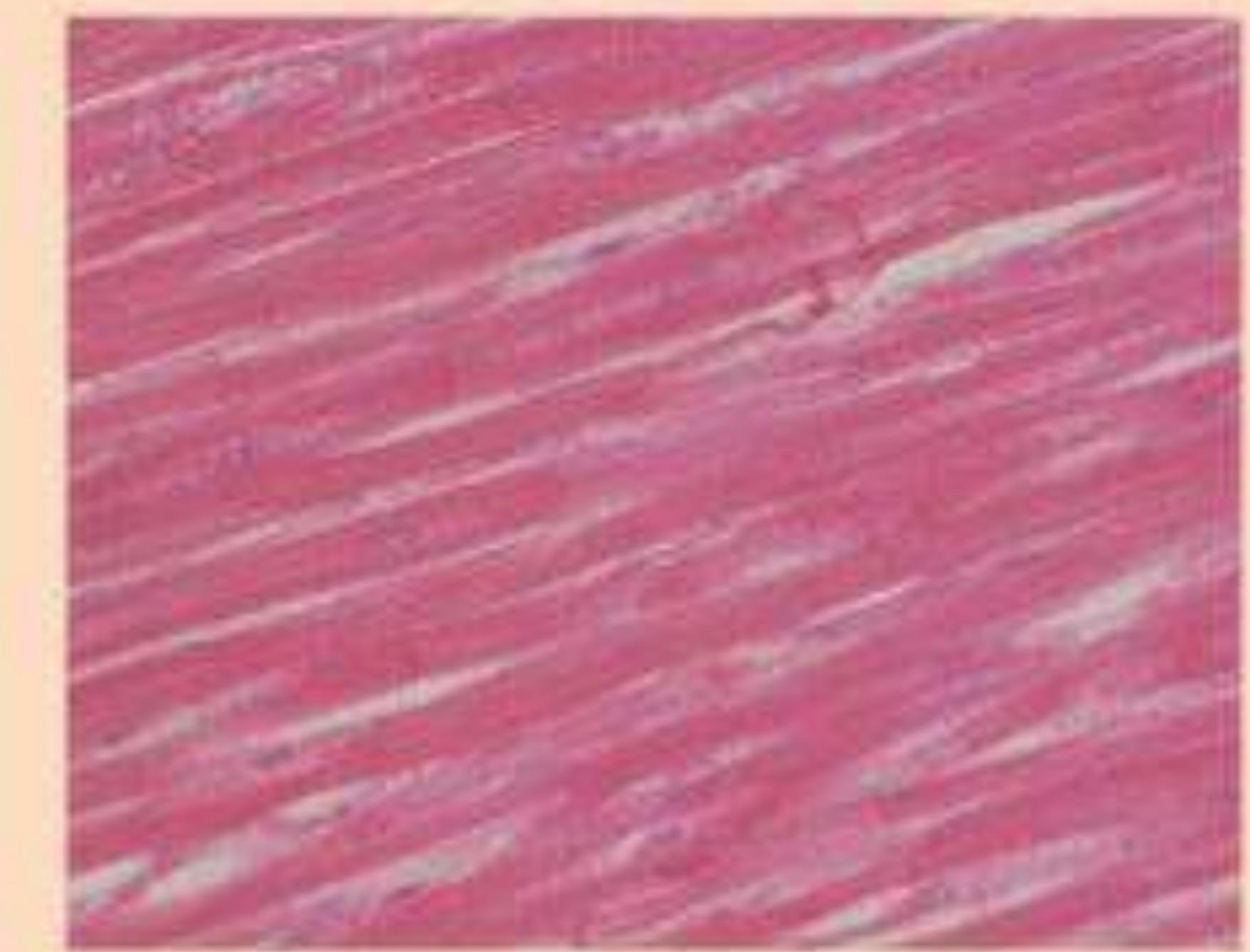
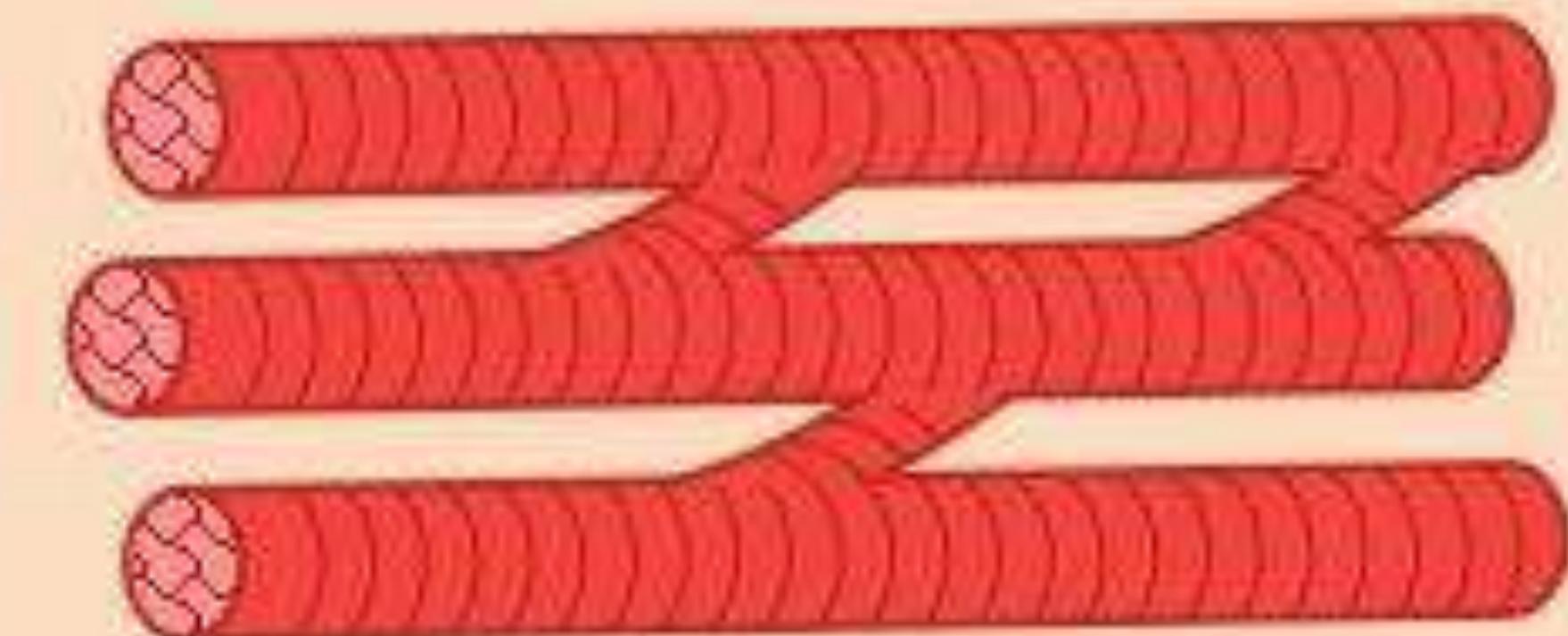
👉 Branched, Uninucleated, Striated.

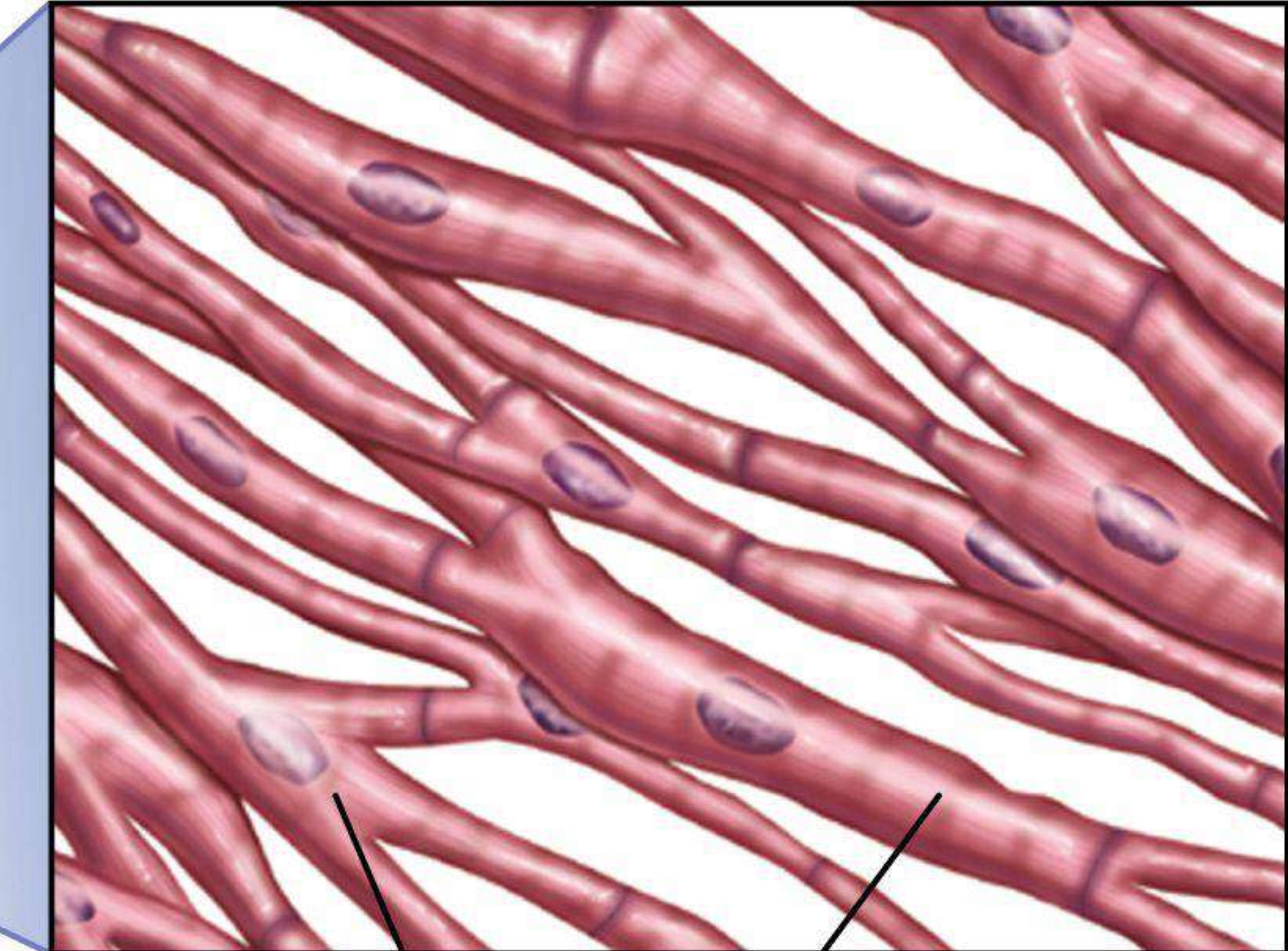
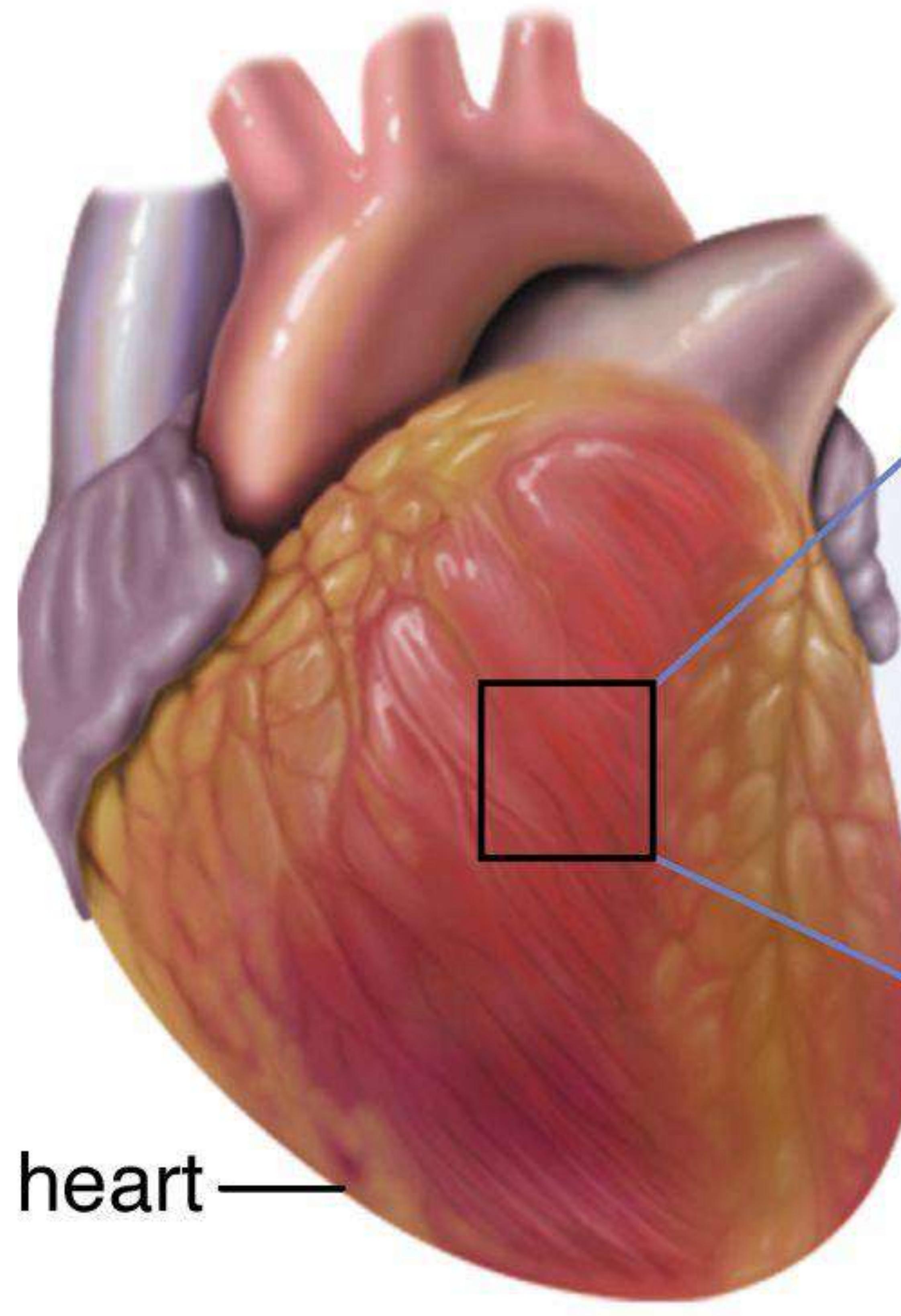
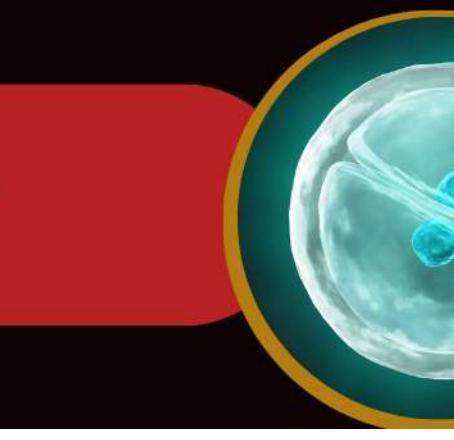
शाखायुक्त, एकल-नाभिकीय, टेक्सांकित।

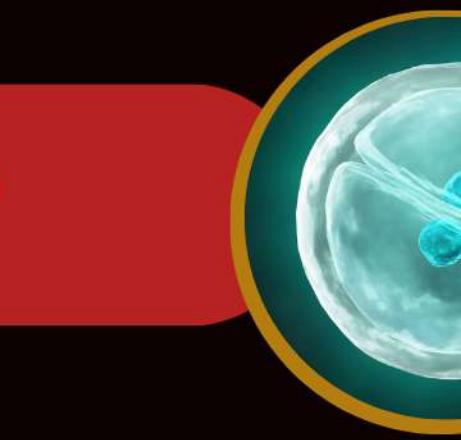
👉 Found Only In The Heart, Responsible For Pumping Blood.

केवल हृदय में पाई जाती हैं और रक्त पंप करने का कार्य करती हैं।

Cardiac Muscle

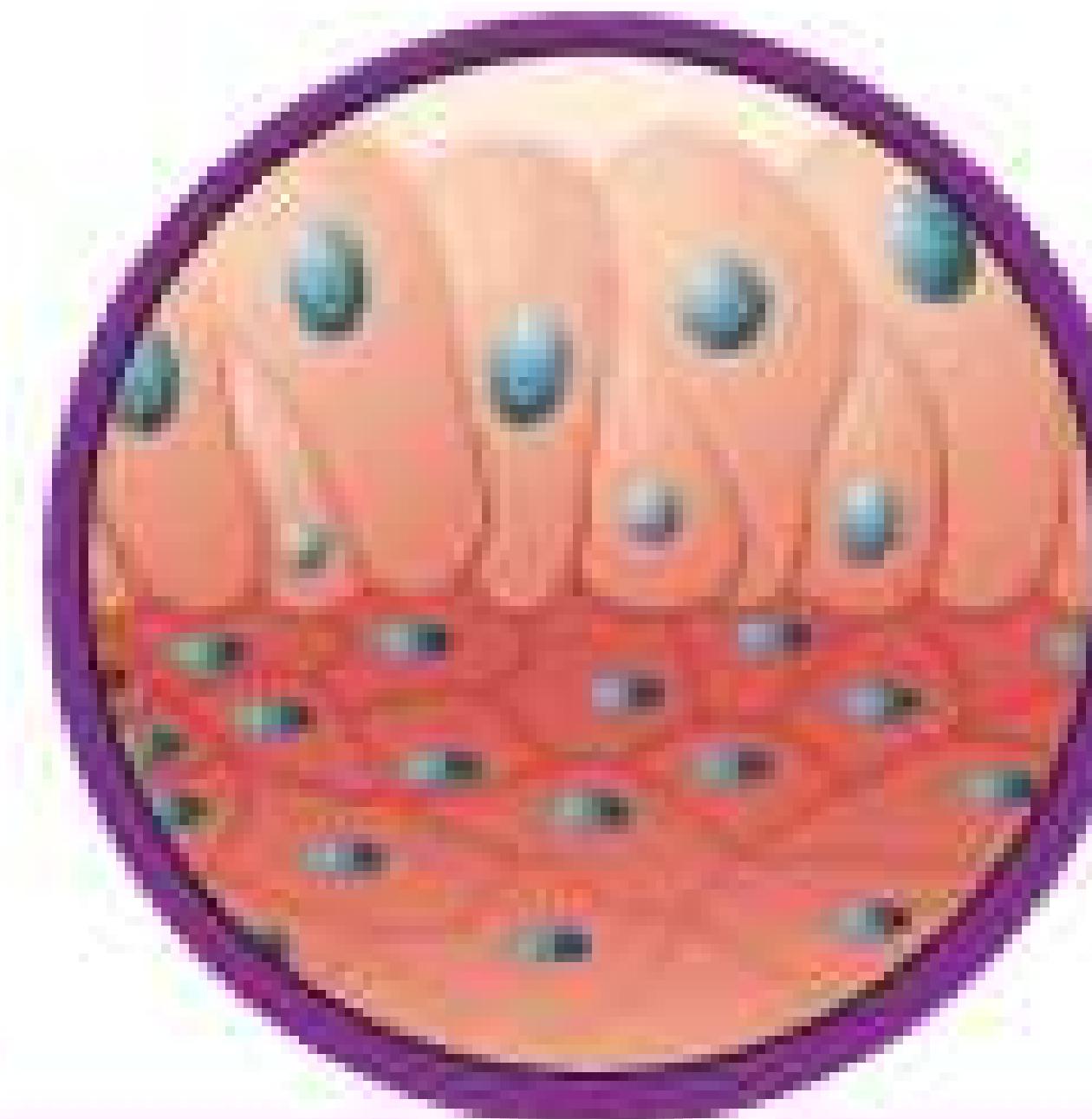






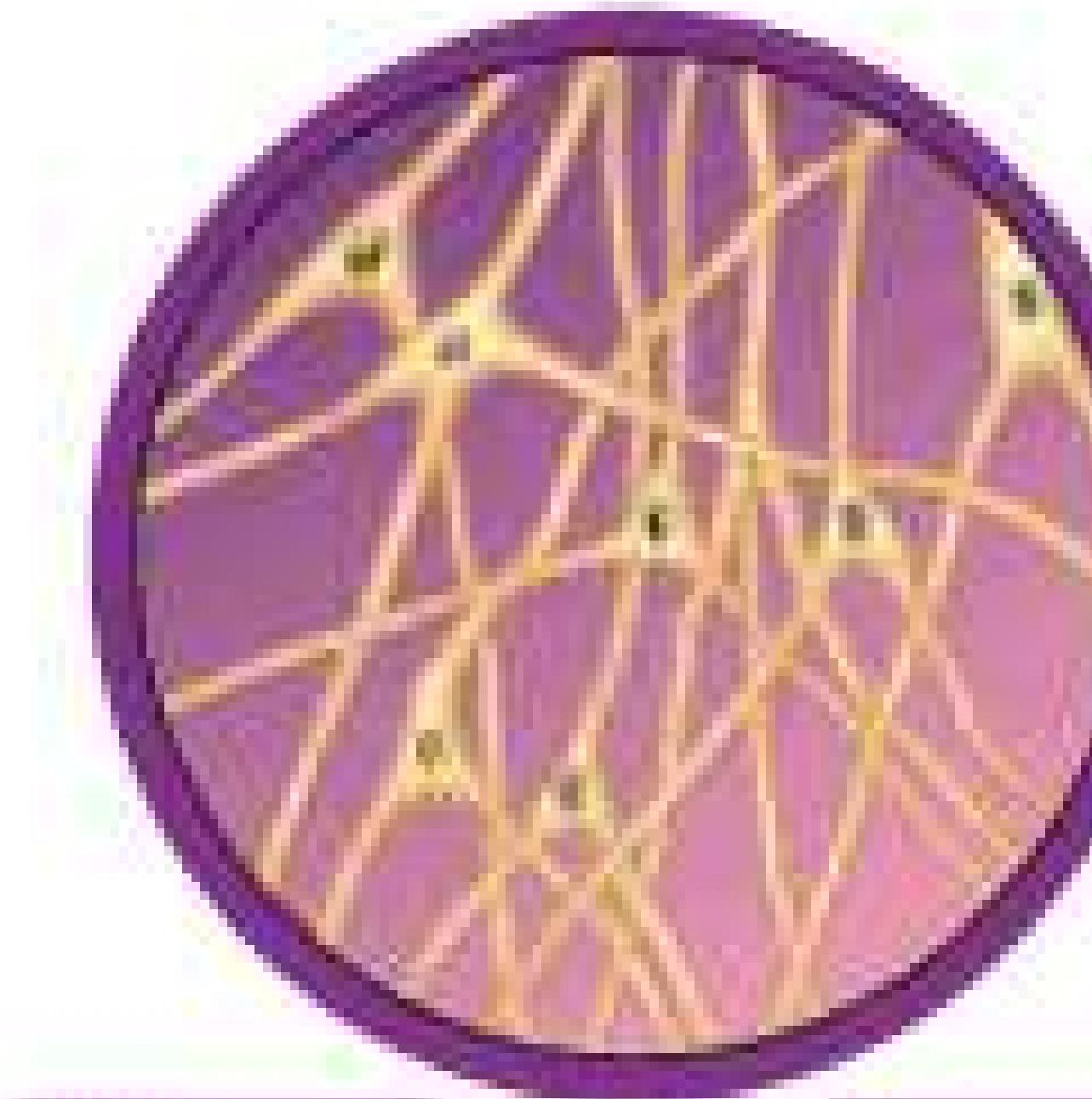
Animal Tissue (जंतु ऊतक)

Epithelial Tissue
(उपकला ऊतक)



Epithelial tissue

Nervous Tissue
(तंत्रिका ऊतक)



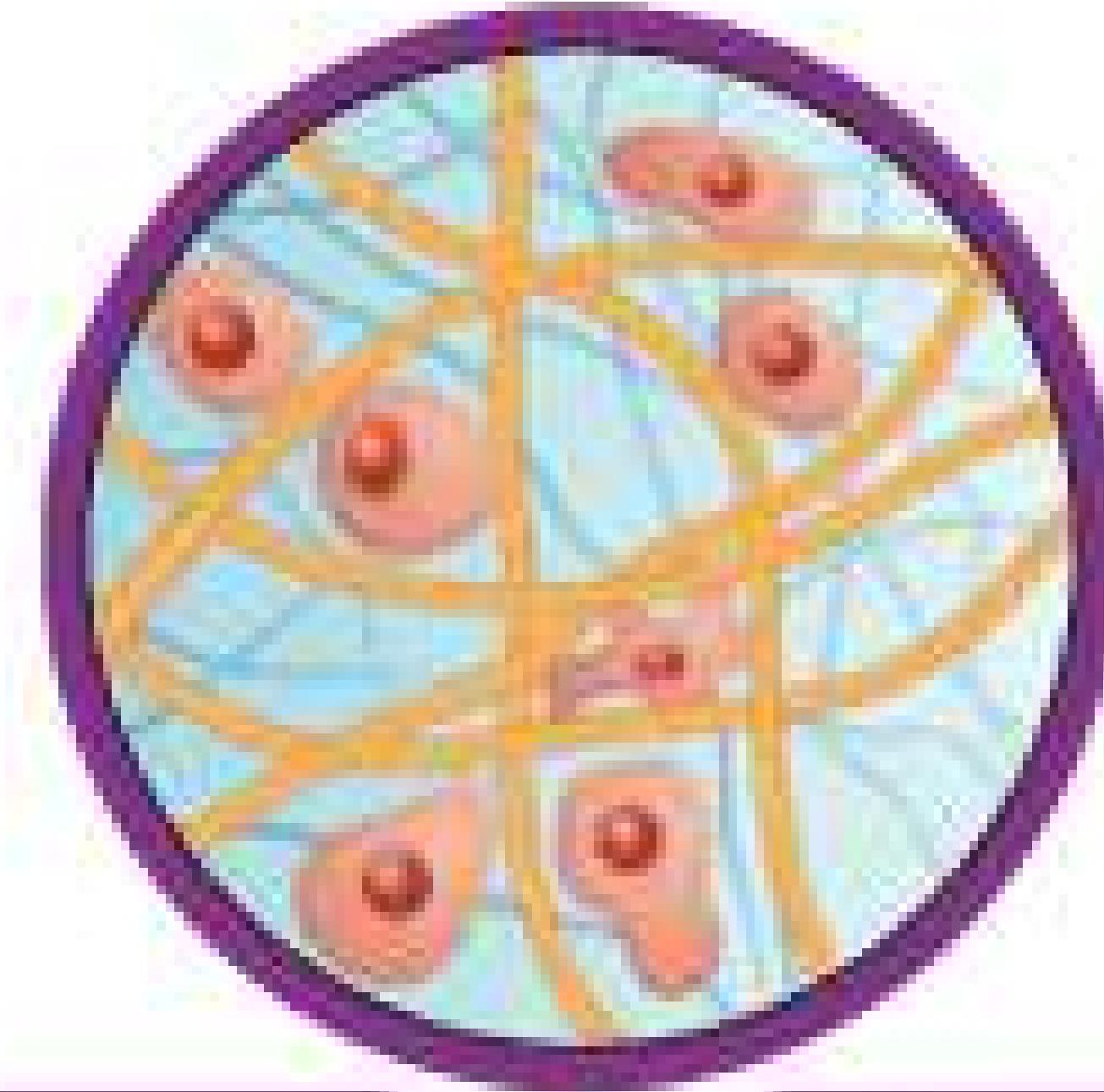
Nervous tissue

Muscular Tissue
(मांसपेशी ऊतक)

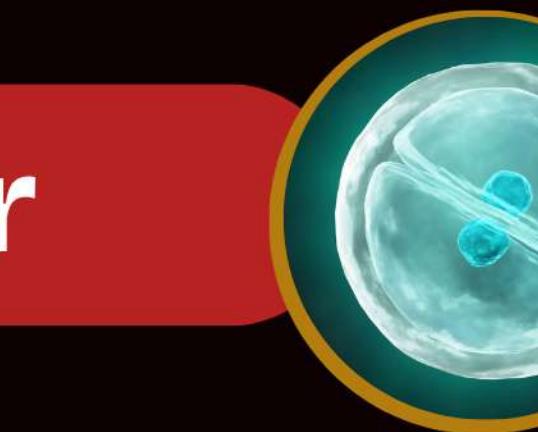


Muscle tissue

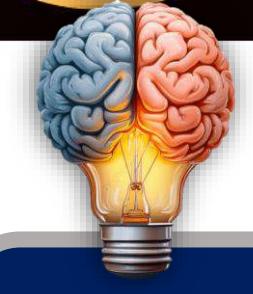
Connective Tissue
(संयोजी ऊतक)



Connective tissue



06

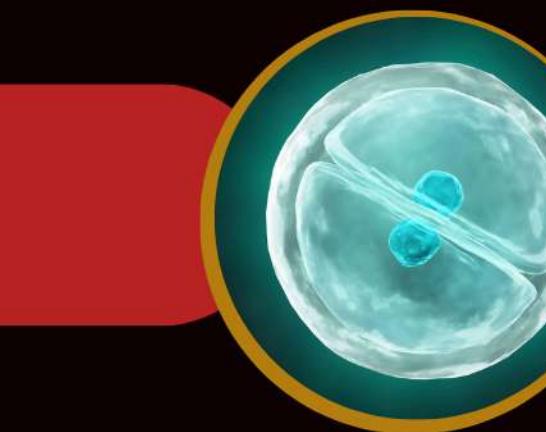


निम्न में से कौन सा मानव शरीर के संचलन के लिए मुख्यतः उत्तरदायी है?

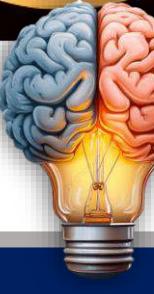
Which Of The Following Is Mainly Responsible For The Movement Of The Human Body?

RRB Group-D-26/09/2022 (Shift-III)

- (A) तंत्रिका और संयोजी उत्तकों का संयोजन / Combination Of Nerve And Connective Tissue
- (B) तंत्रिका और पेशीय उत्तकों का संयोजन / Combination Of Nerve And Muscle Tissue
- (C) तंत्रिका और उपकला उत्तकों का संयोजन / Combination Of Nervous And Epithelial Tissues
- (D) पेशीय और संयोजी उत्तकों का संयोजन / Combination Of Muscle And Connective Tissue



07



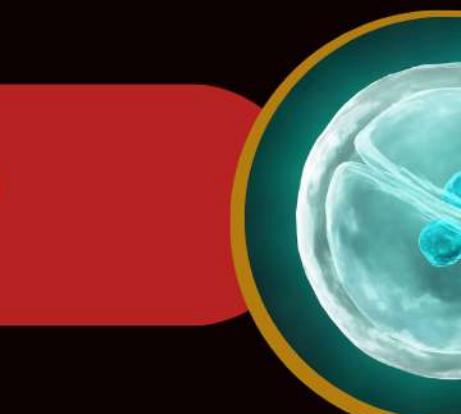
हड्डी निम्न में से किस प्रकार के ऊतकों का उदाहरण है?

Bone Is An Example Of Which Of The Following Types Of Tissues?

RRB Group-D - 02/09/2022 (Shift-III)

- (A) तंत्रिका ऊतक / Nervous Tissue
- (B) संयोजी ऊतक / Connective Tissue
- (C) पेशीय ऊतक / Muscle Tissue
- (D) उपकला ऊतक / Epithelial Tissue





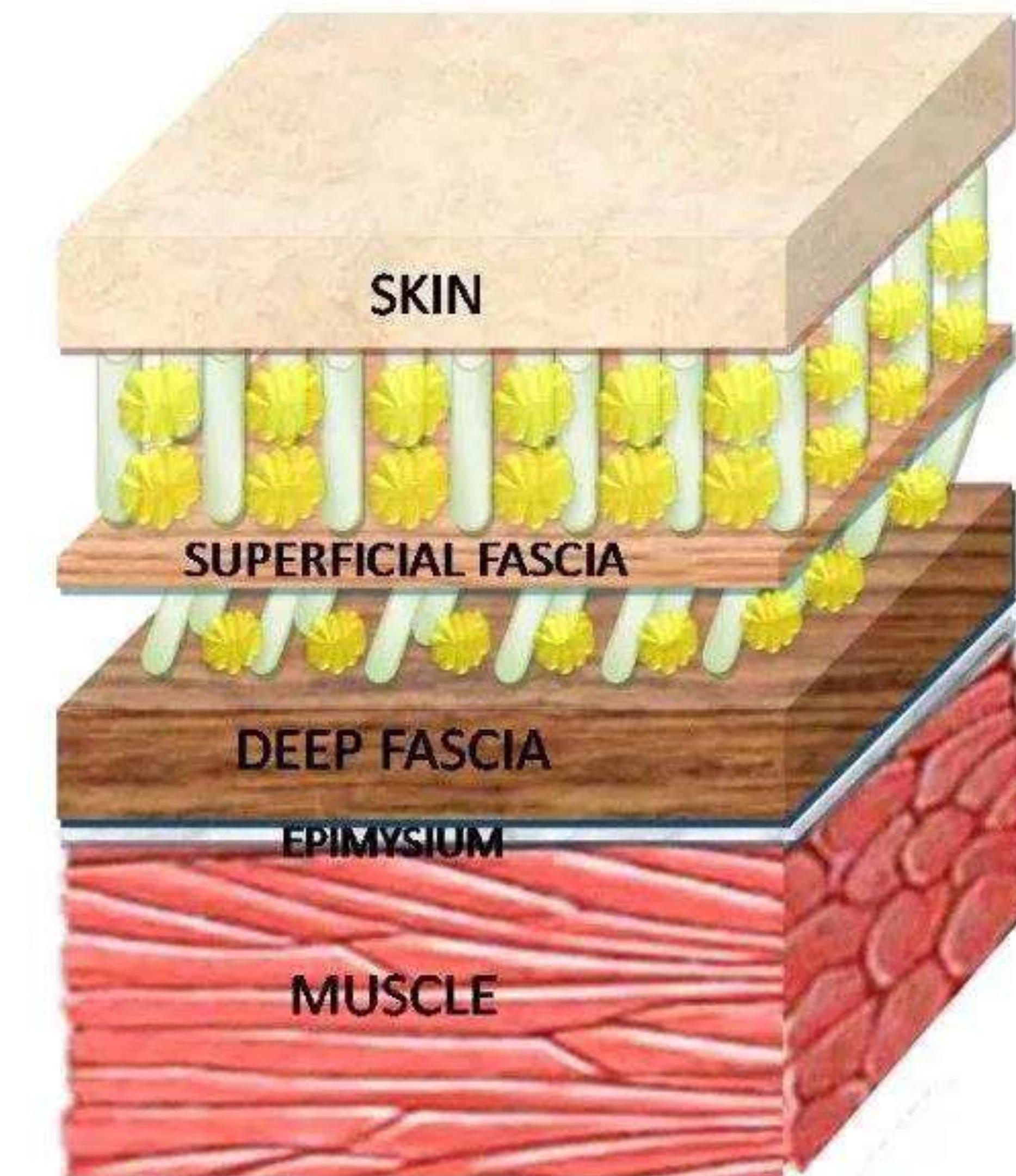
08

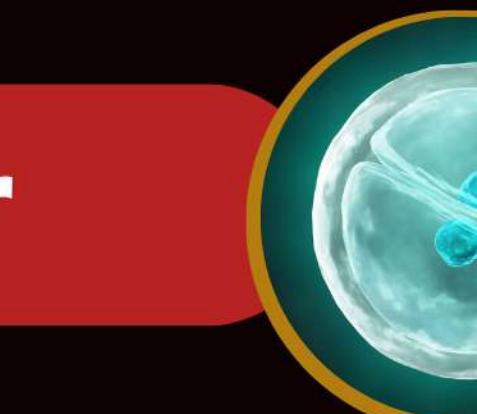
इनमें से कौन सा ऊतक त्वचा के नीचे और आंतरिक अंगों के बीच पाया जाता है?

Which Of These Tissues Is Found Beneath The Skin And Between Internal Organs?

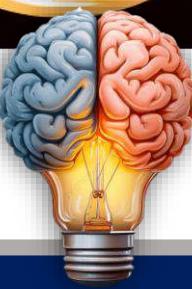
RRB Group-D - 15/09/2022 (Shift-I)

- (A) वसा ऊतक / Adipose Tissue
- (B) पेशीय ऊतक / Muscle Tissue
- (C) तंत्रिका ऊतक / Nervous Tissue
- (D) उपकला ऊतक / Epithelial Tissue





09

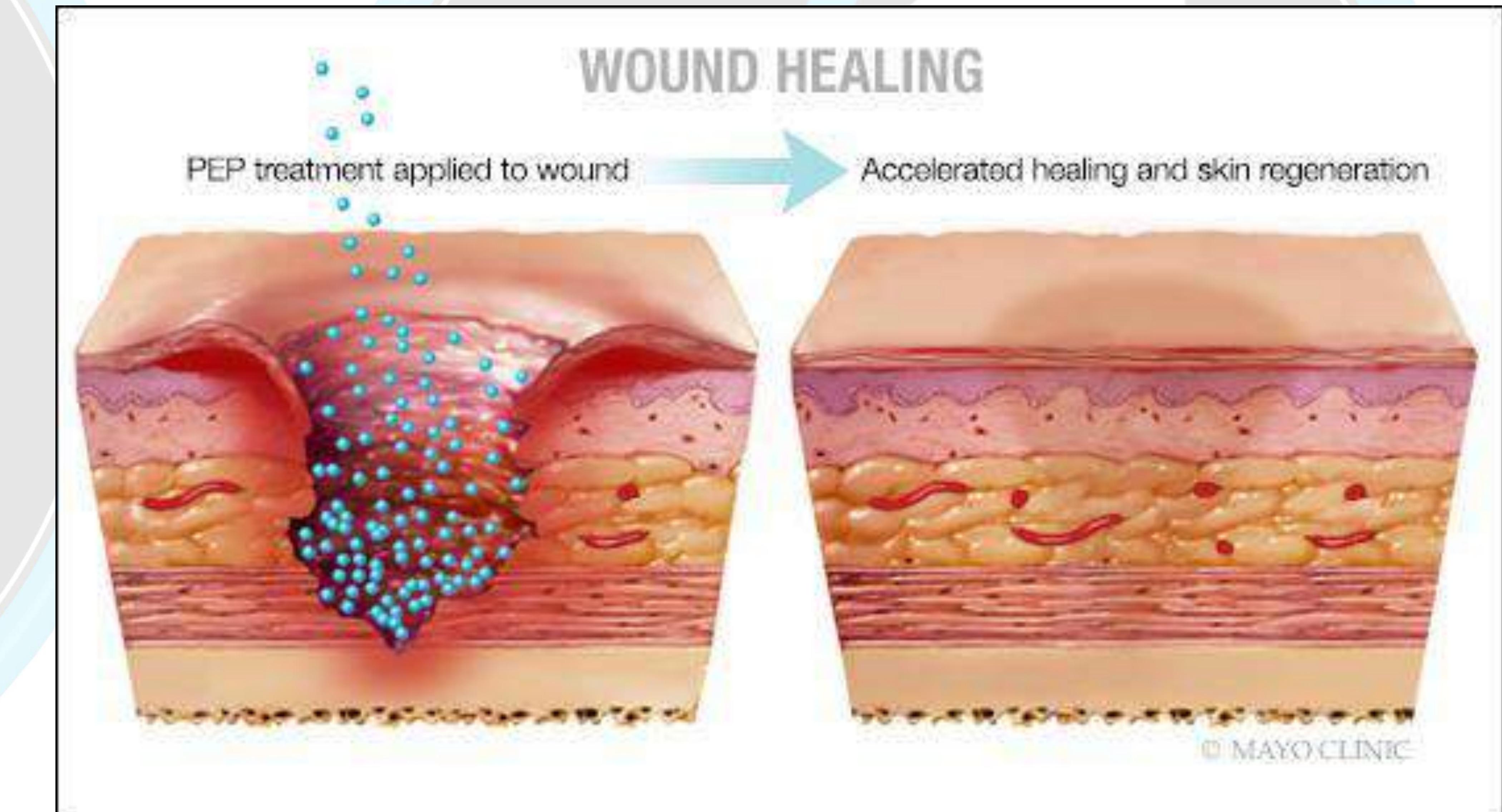


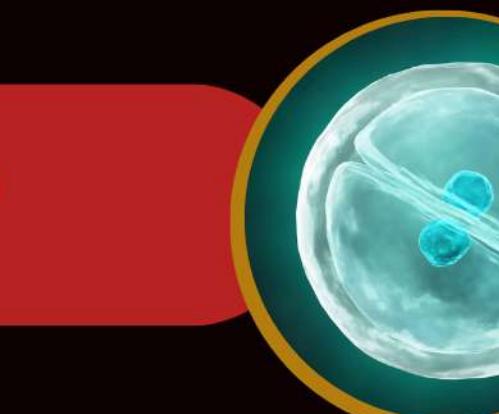
इनमें से कौन सा ऊतक, ऊतक की मरम्मत में मदद करता है?

Which Of The Following Helps In Tissue Repair?

RRB Group-D - 16/09/2022 (Shift-III)

- (A) उपास्थि / Cartilage
- (B) कंडरा / Tendon
- (C) एरियोलर / Areolar
- (D) स्नायु / Muscle





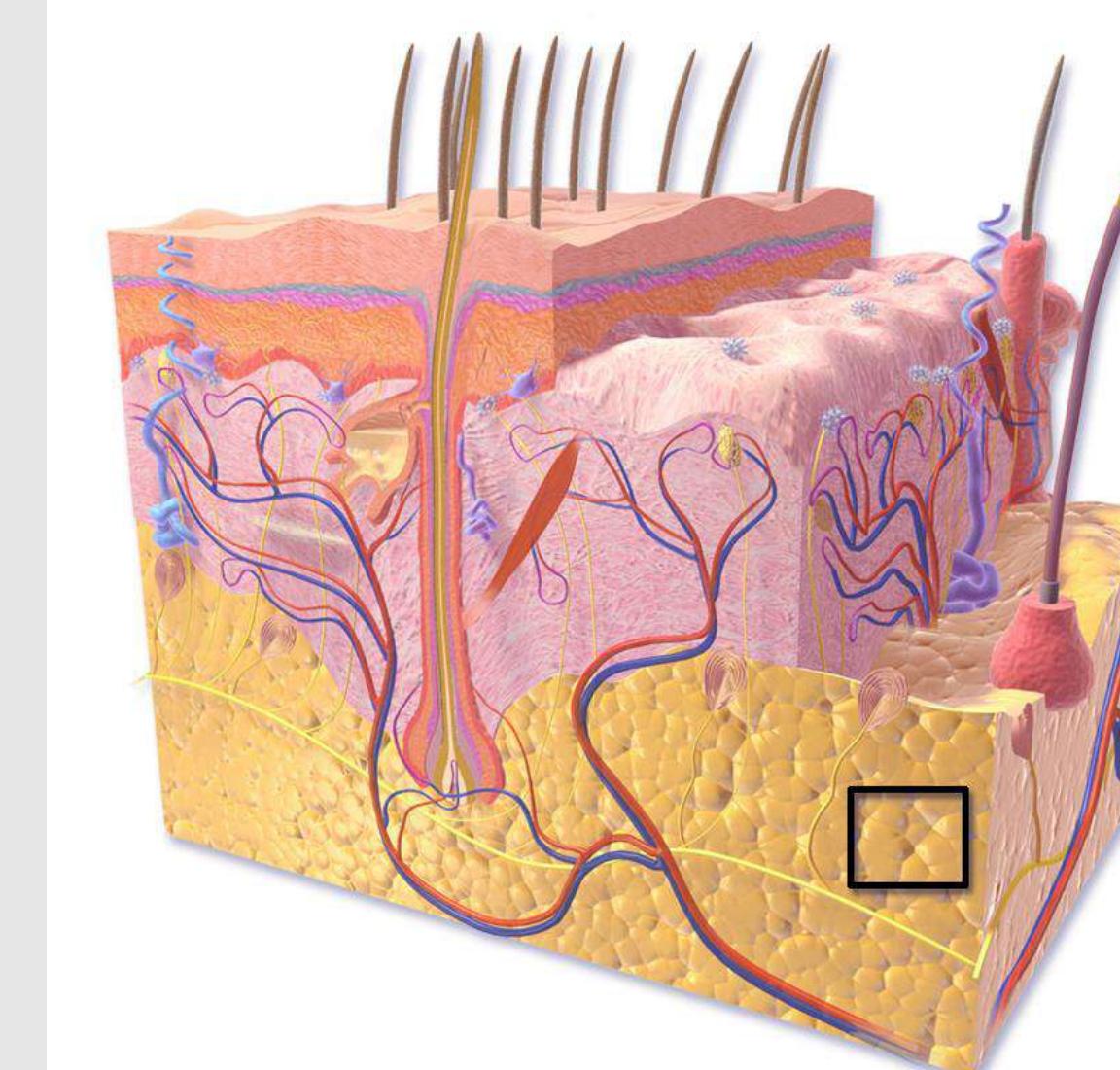
10

हमारे शरीर में वसा-संचायक ऊतक कौन सा है?

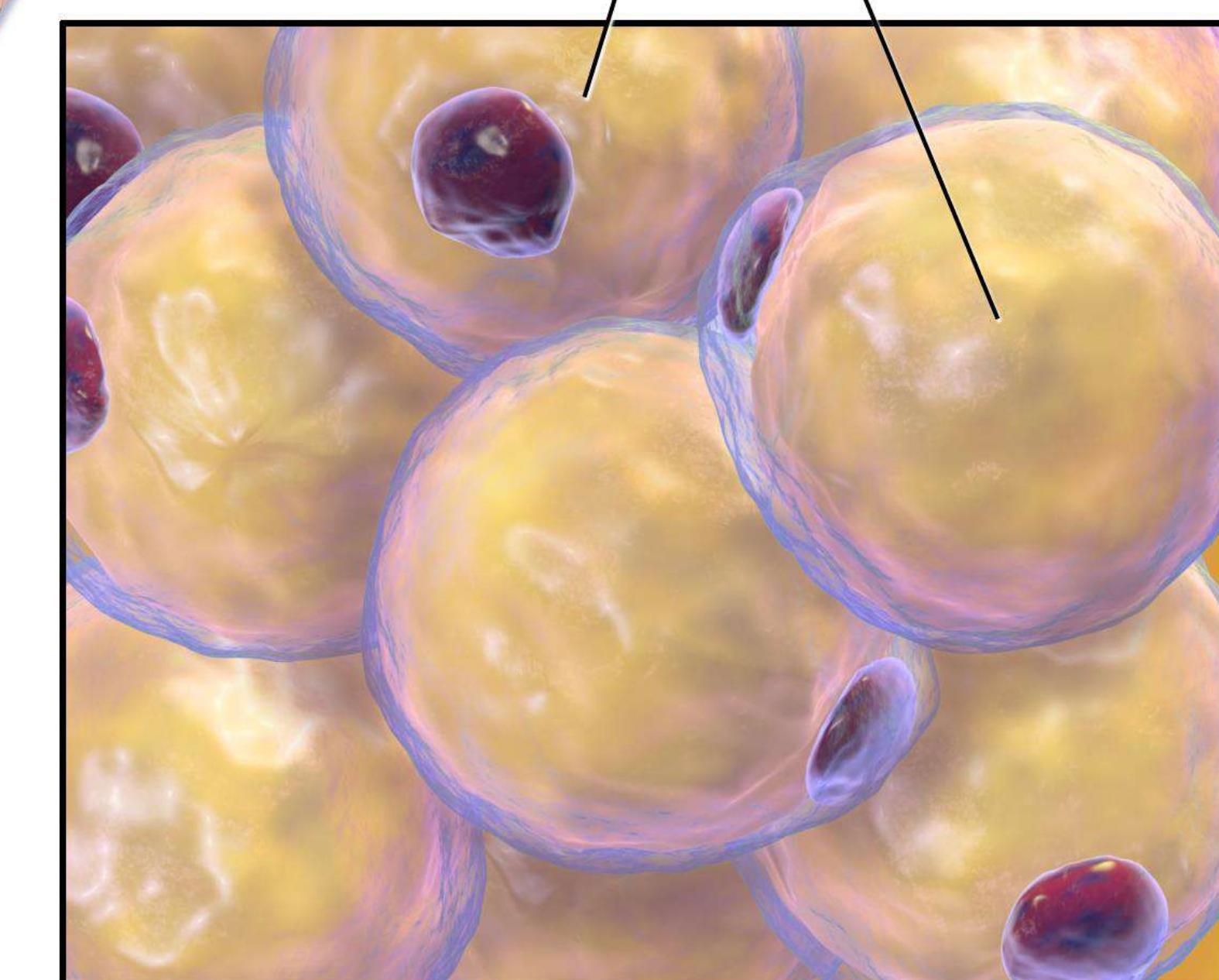
Which Is The Fat-storing Tissue In Our Body?

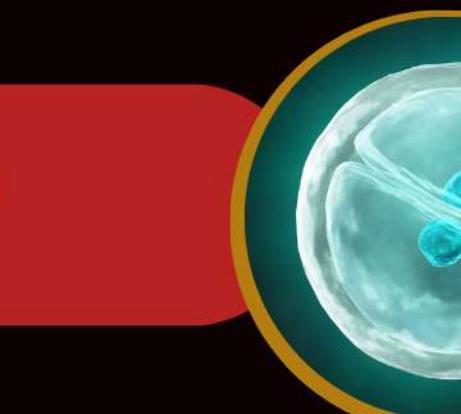
RRB NTPC 04.01.2021 (Shift-II) Stage Ist

- (A) एपिथिलियल ऊतक / Epithelial Tissue
- (B) वस्कुलर ऊतक / Vascular Tissue
- (C) एरिओलर ऊतक / Areolar Tissue
- (D) एडिपोज ऊतक / Adipose Tissue



Adipose Tissue





11

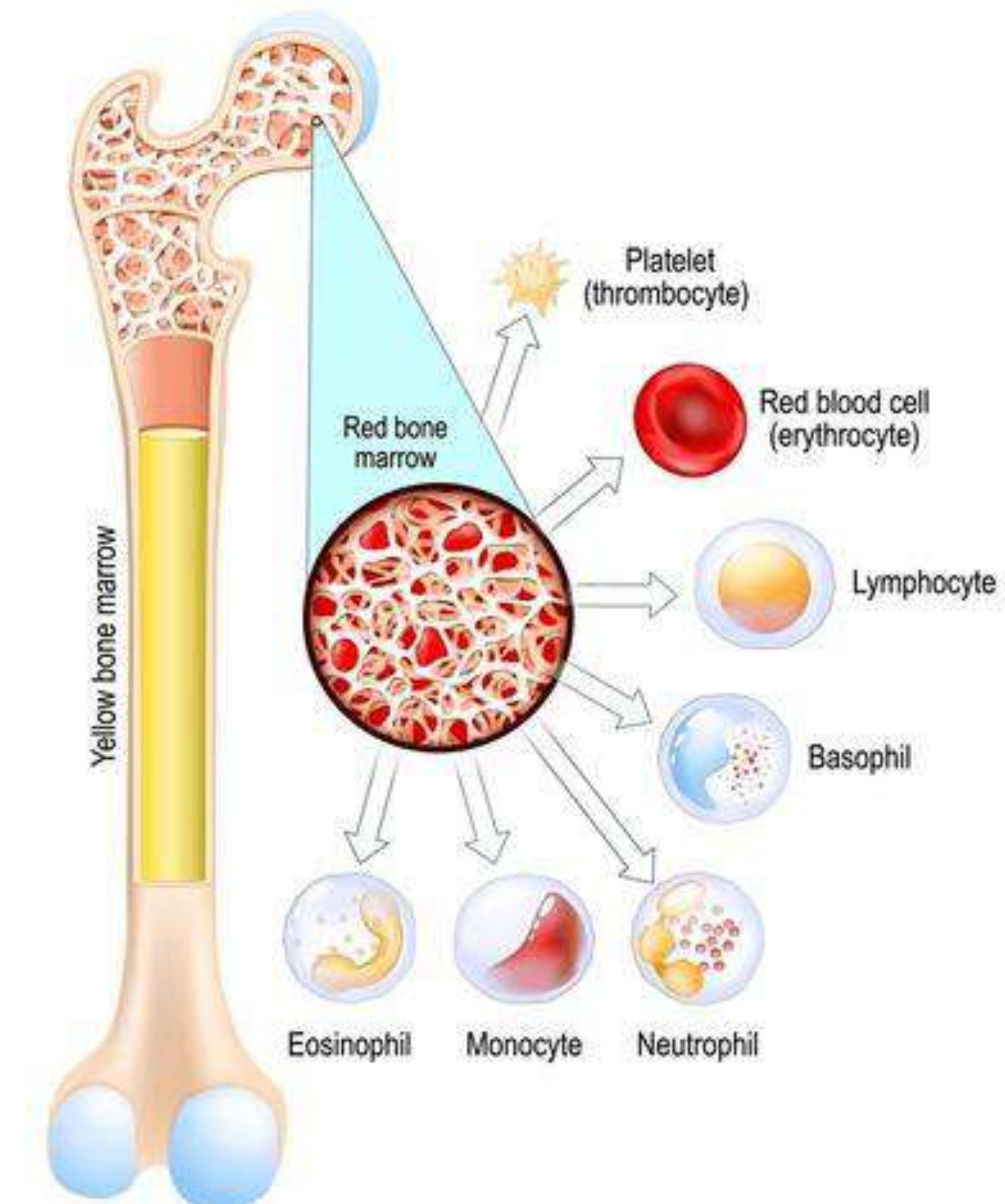
रक्त और हड्डियों _____ के उदाहरण हैं।

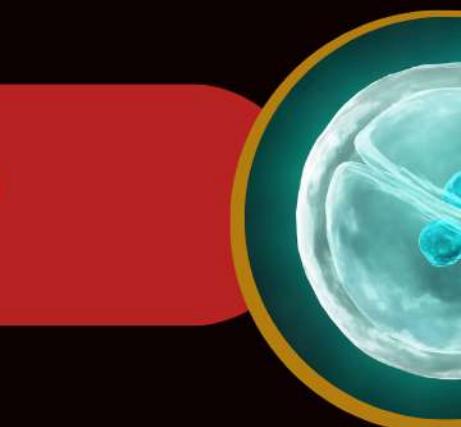
Blood And Bones Are Examples Of _____.

RRB Group-D 03-12-2018 (Shift-II)

- (A) संयोजी ऊतक / Connective Tissue
- (B) मेरिस्टेमेटिक ऊतक / Meristematic Tissue
- (C) एपिथीलियल ऊतक / Epithelial Tissue
- (D) तंत्रिका ऊतक / Nervous Tissue

Bone marrow

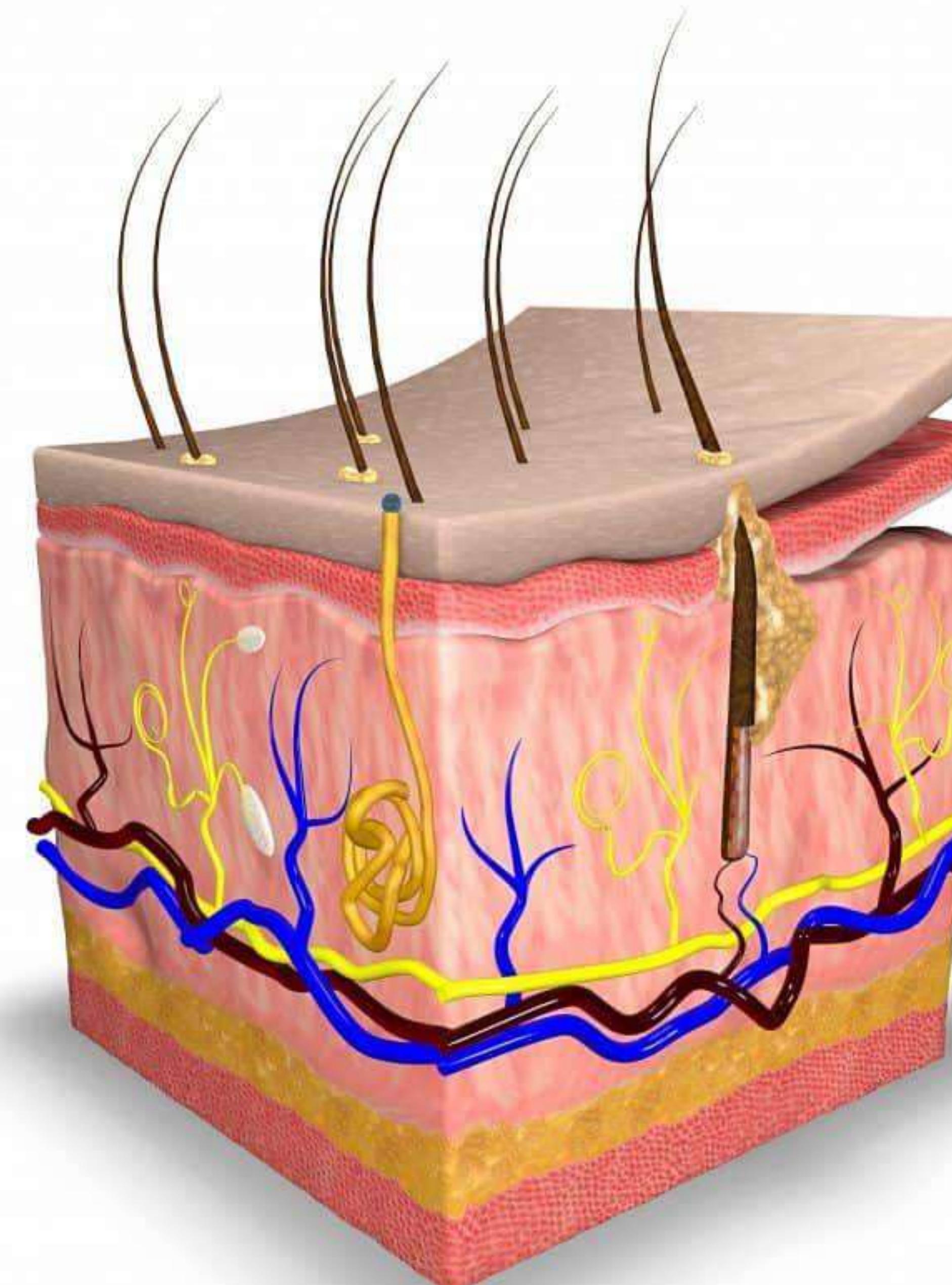


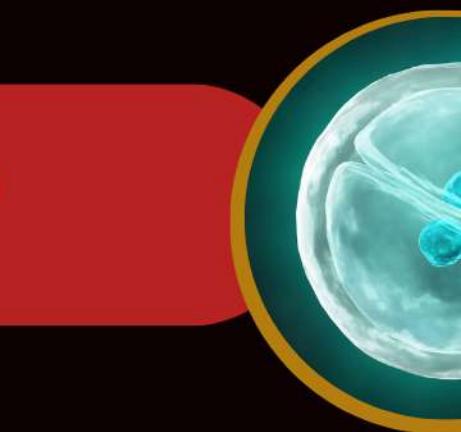


12

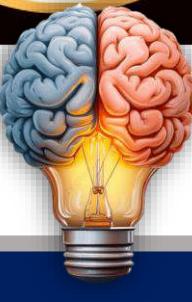
RRB Group-D 08-10-2018 (Shift-III)

- (A) पेट / Stomach
- (B) गुर्दे / Kidney
- (C) त्वचा / Skin
- (D) दिमाग / Brain





13



त्वचा के नीचे और आंतरिक अंगों के बीच

ऊतक बनता है।

Tissue Is Formed Under The Skin And Between The Internal Organs.

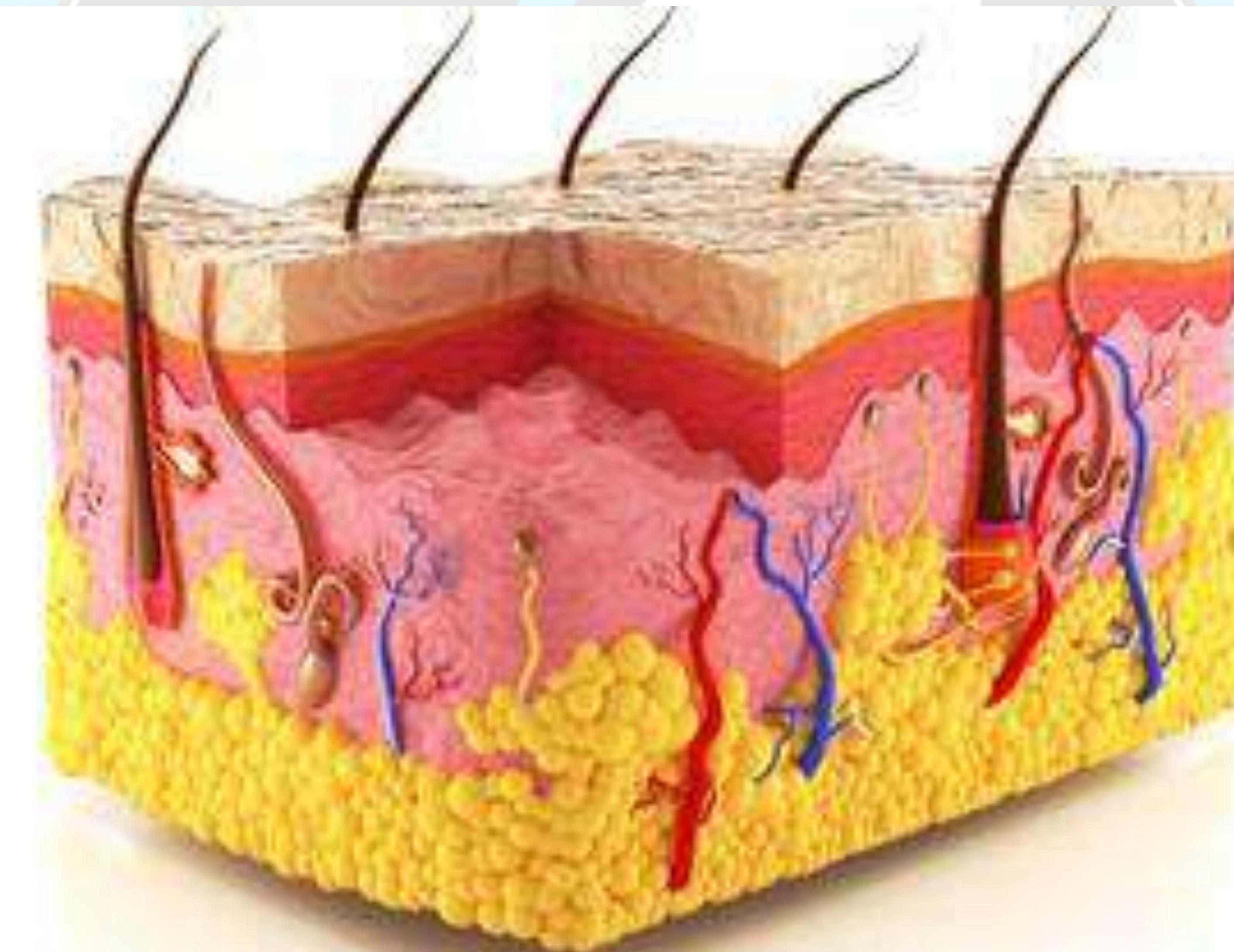
RRB Group-D 27-09-2018 (Shift-I)

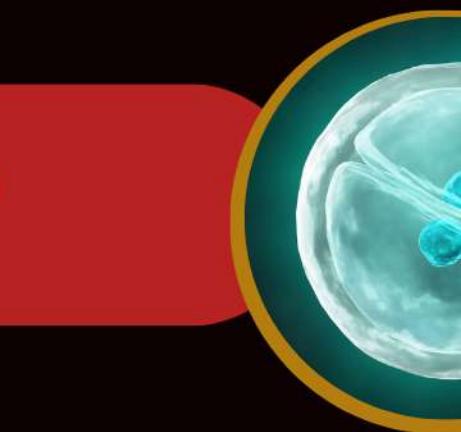
(A) तंत्रिका / Nerve

(B) वसा / Fat

(C) एपिथीलियल / Epithelial

(D) मांसल / Fleshy





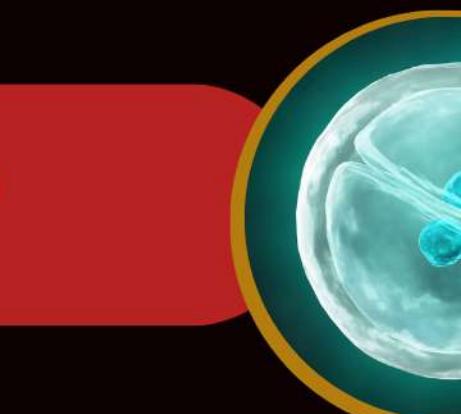
14

निम्न में से क्या एक पशु ऊतक नहीं है?

Which Of The Following Is Not An Animal Tissue?

RRB Group-D 06-12-2018 (Shift-II)

- (A) पेशी ऊतक / Muscle Tissue
- (B) संयोजी ऊतक / Connective Tissue
- (C) उपकला ऊतक / Epithelial Tissue
- (D) ऊपर के सभी / All Of The Above



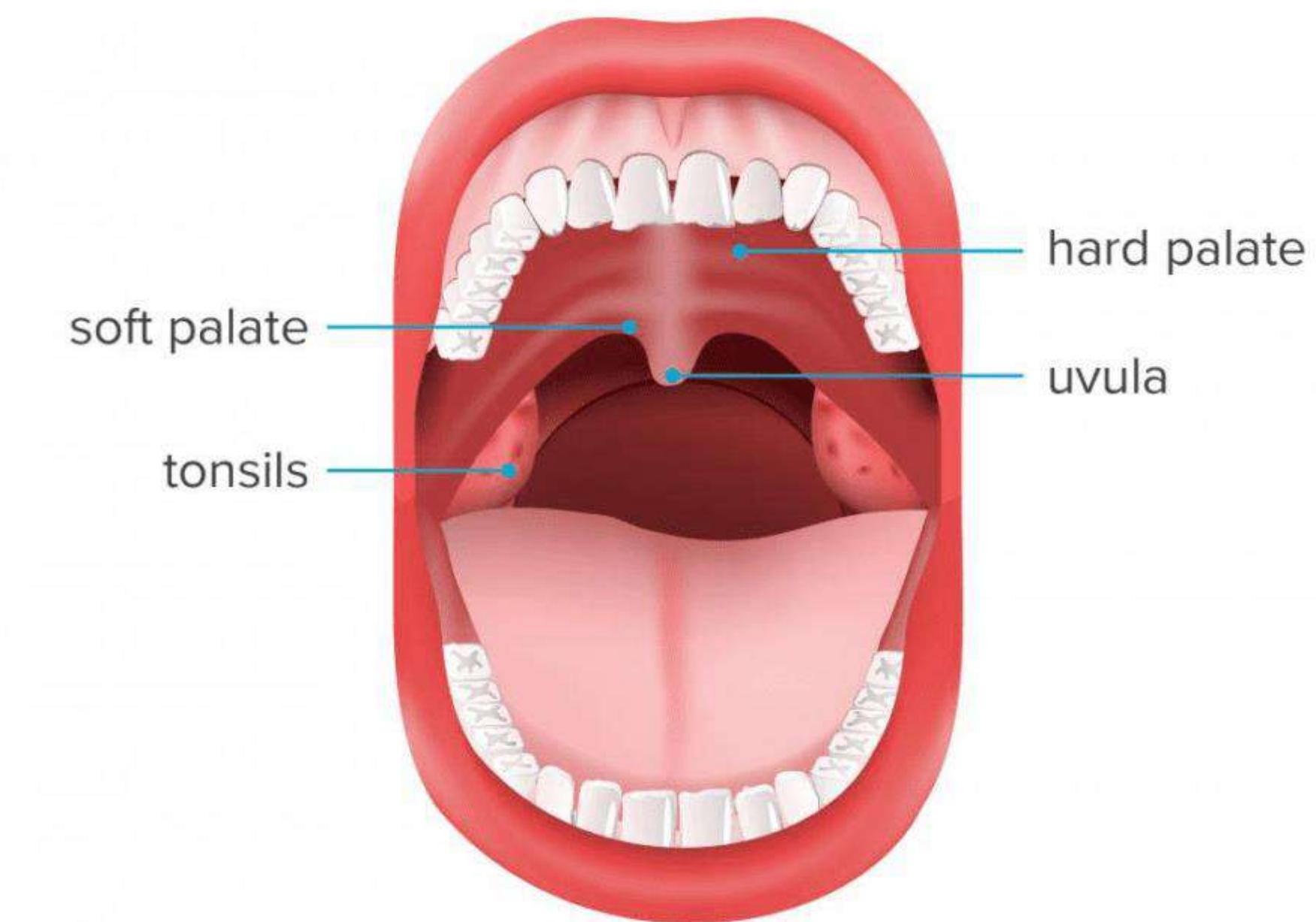
15

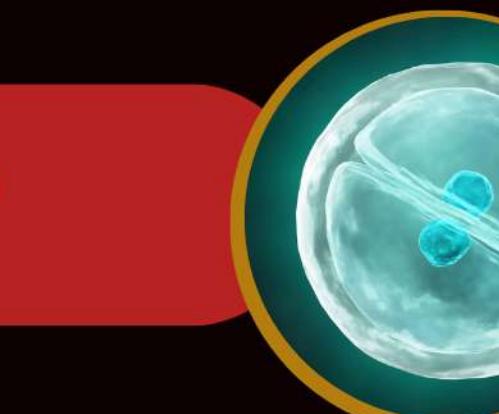
ऊतक हमारे मुँह की आंतरिक अस्तर को बनाता है।

Tissue Makes Up The Inner Lining Of Our Mouth.

RRB Group-D 26-09-2018 (Shift-III)

- (A) सिलीटेड कॉलमर एपीथेलियम / Ciliated Columnar Epithelium
- (B) सरल स्क्वैमस एपीथेलियम / Simple Squamous Epithelium
- (C) स्तरीकृत स्क्वैमस एपीथेलियम / Stratified Squamous Epithelium
- (D) कॉलमर एपीथेलियम / Columnar Epithelium



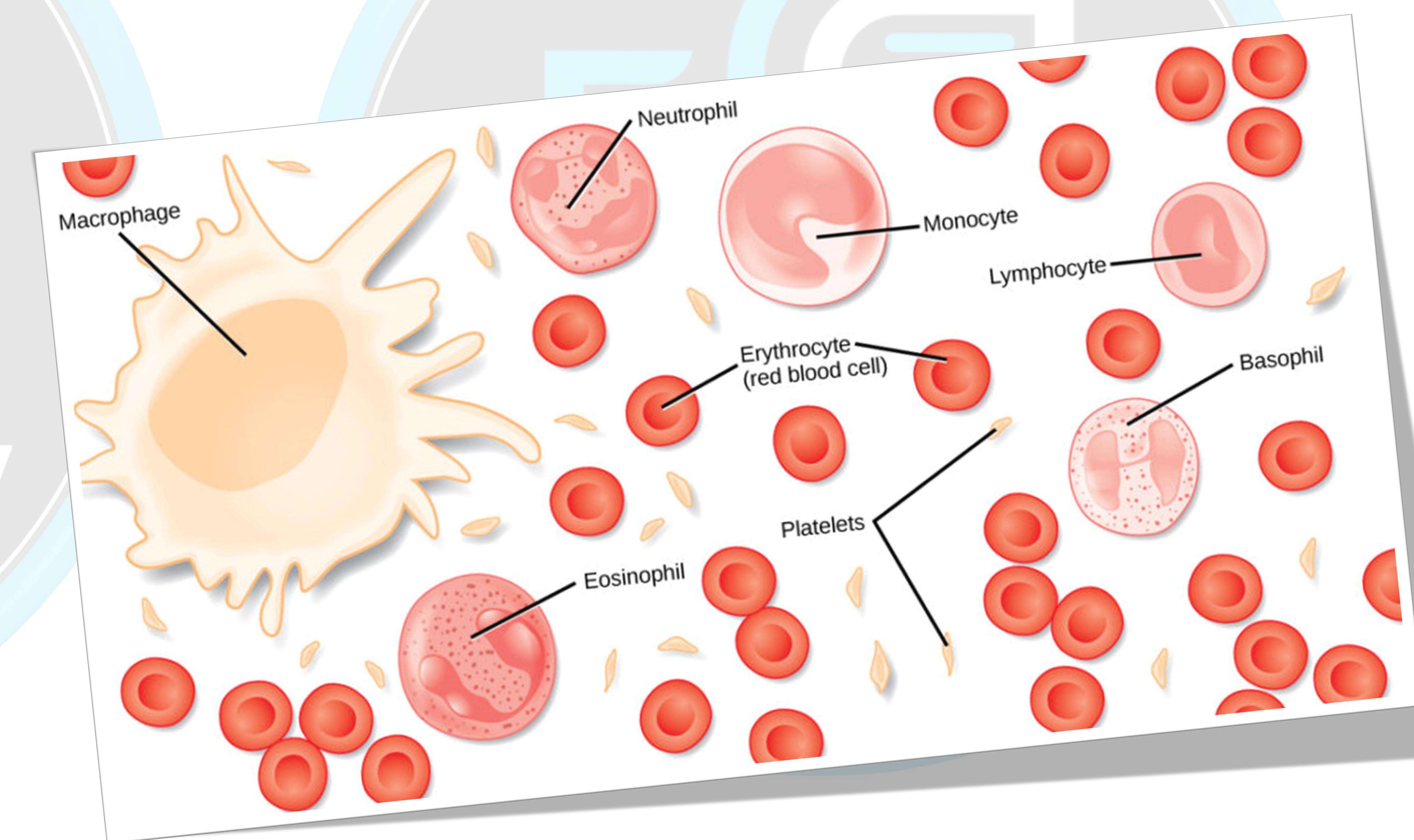


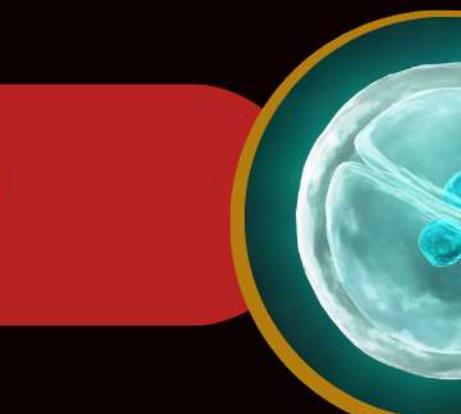
ऊतक में मैट्रिक्स होते हैं और कोशिकाएँ मैट्रिक्स में सन्निहित होती हैं।

Tissue Consists Of Matrix And Cells Are Embedded In The Matrix.

RRB Group-D 27-11-2018 (Shift-III)

- (A) संयोजी / Connective
- (B) तंत्रिका / Nerve
- (C) पेशी / Muscle
- (D) उपकला / Epithelium





17

पेशी ऊतक कितने प्रकार के होते हैं?

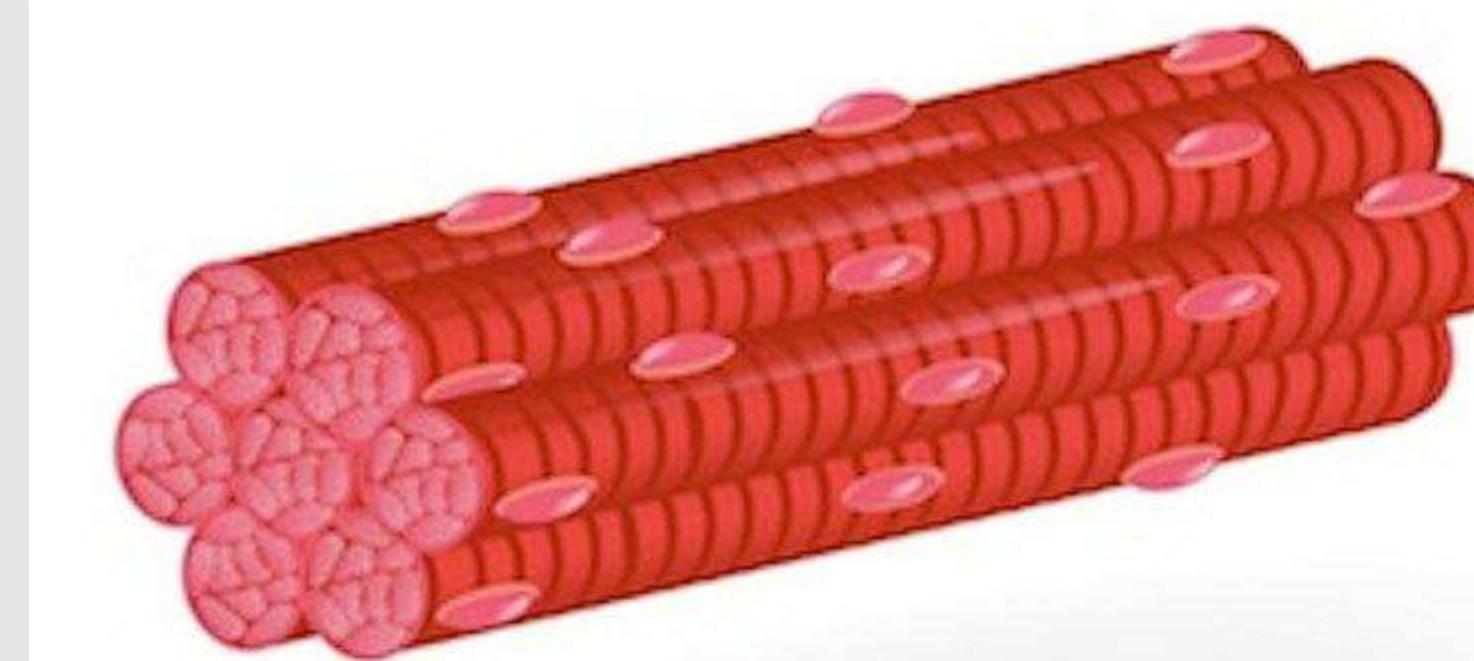
How Many Types Of Muscle Tissue Are There?

RRB Group-D 05-12-2018 (Shift-III)

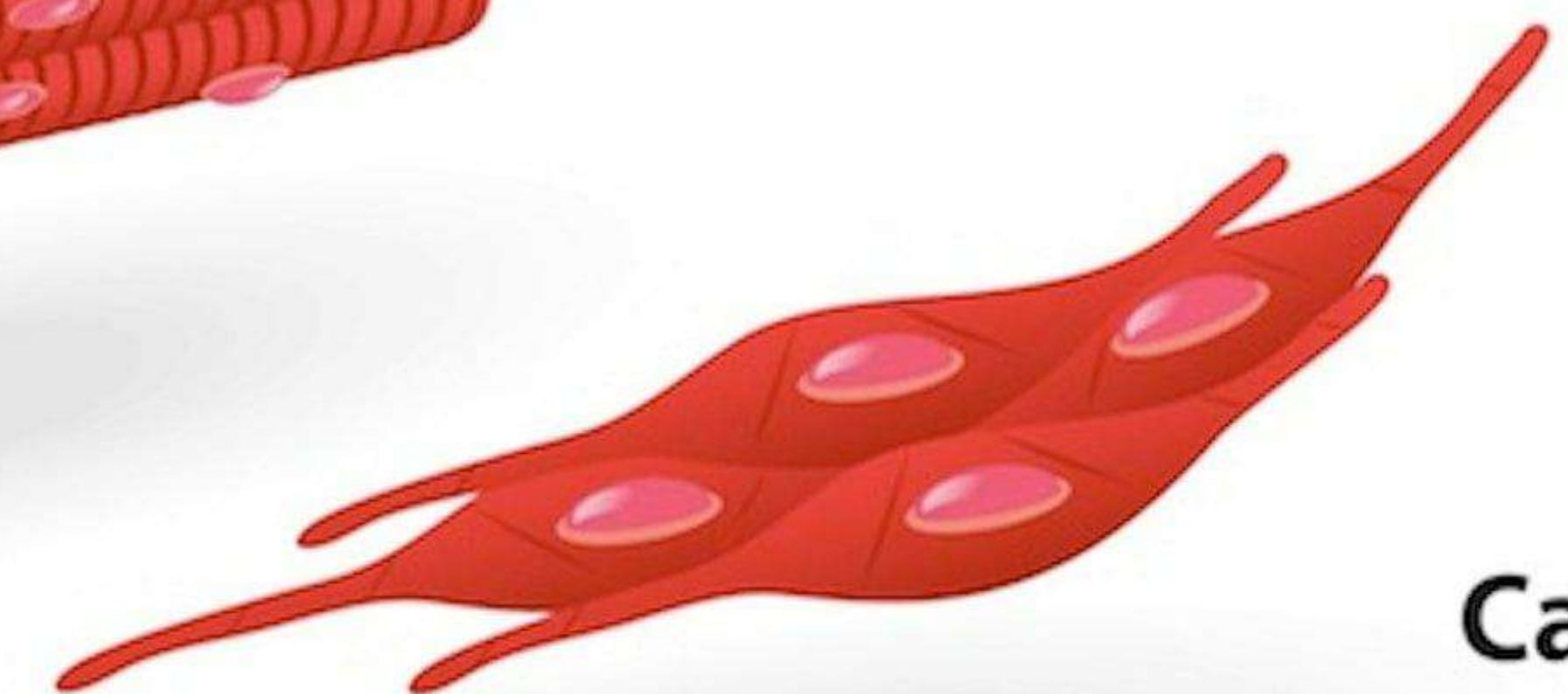
- (A) 2
- (B) 4
- (C) 3
- (D) 5

SelectionWay

Skeletal muscle

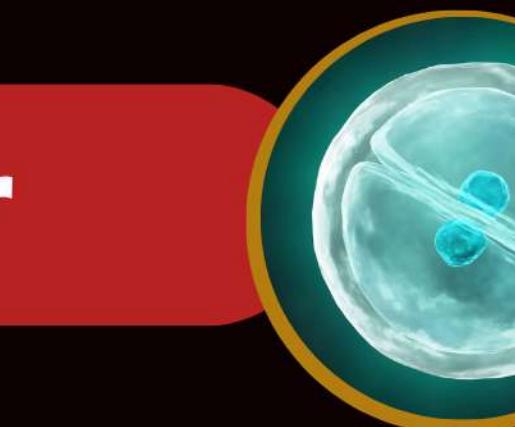


Smooth muscle



Cardiac muscle



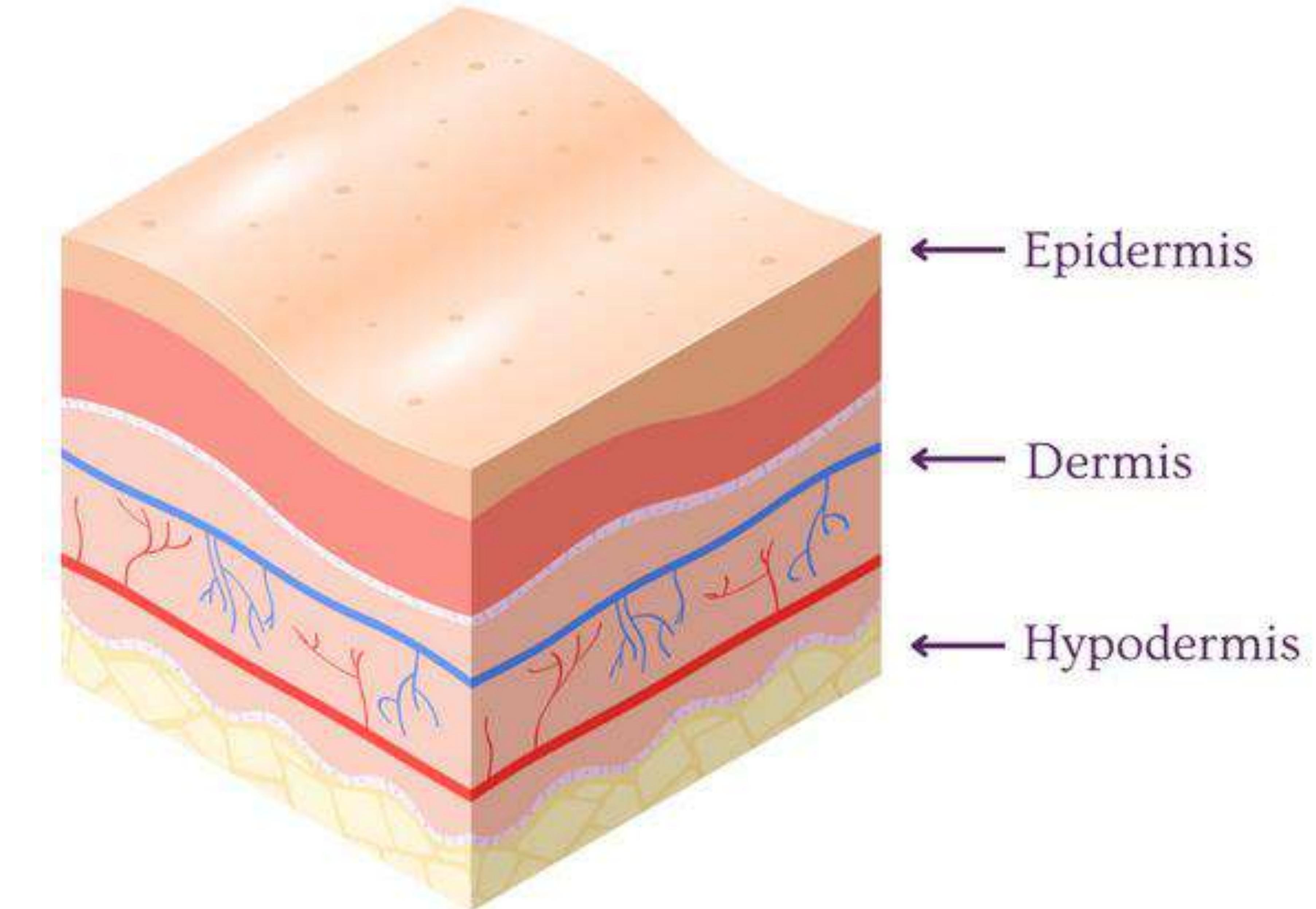


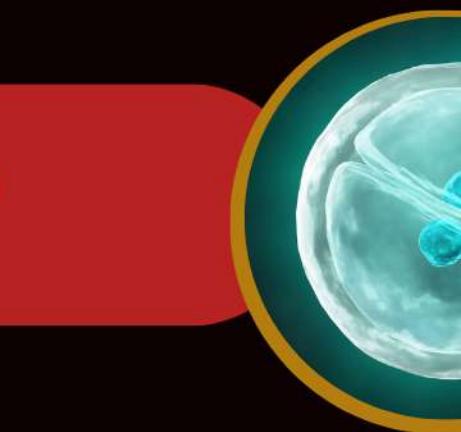
18

मानव शरीर की त्वचा का सबसे बाह्य परत कहलाती है?

RRB NTPC 18.01.2017 (Shift-III) Stage II Ind

- (A) स्क्लेरा / Sclera
- (B) इंडोडर्मिस / Endodermis
- (C) एपीडर्मिस / Epidermis
- (D) हाइपोडर्मिस / Hypodermis





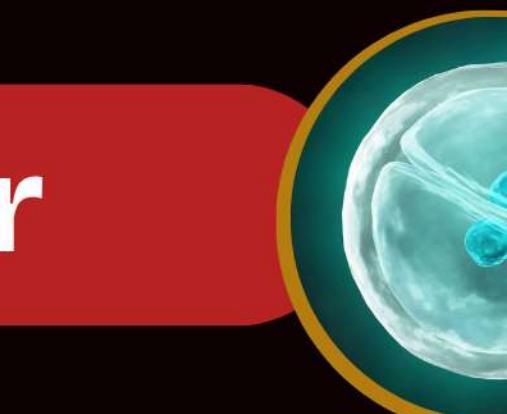
19

निम्नलिखित में से संयोजी ऊतक नहीं है?

Which Of The Following Is Not Connective Tissue?

RRB Group-D 02-11-2018 (Shift-II)

- (A) तंत्रिका कोशिका / Nerve Cell
- (B) उपास्थि / Cartilage
- (C) अस्थि / Bone
- (D) रक्त / Blood



20

हिस्टामिन-स्रावक कोशिकाएँ _____ में पायी जाती हैं।

Histamine-secreting Cells Are Found In _____.

RRB Group-D 16-11-2018 (Shift-II)

- (A) संयोजी ऊतकों / Connective Tissues
- (B) फेफड़ों / Lungs
- (C) तंत्रिका ऊतकों / Nerve Tissues
- (D) पेशी ऊतकों / Muscle Tissues

