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**Human Anatomy (LAB)**

**Topic . No.5**

# **Integumentary System**

**Spring Term**

# **Integumentary System Components**

## **1. Skin**

- a. Epidermis**
- b. Dermis**
- c. Hypodermis**

## **2. accessory organs**

- a. Hair**
- b. Nails**
- c. Glands**

# Functions of the Integumentary system

1. Protection
2. Temperature maintenance
3. Synthesis and storage of nutrients
4. Sensory reception
5. Excretion and secretion

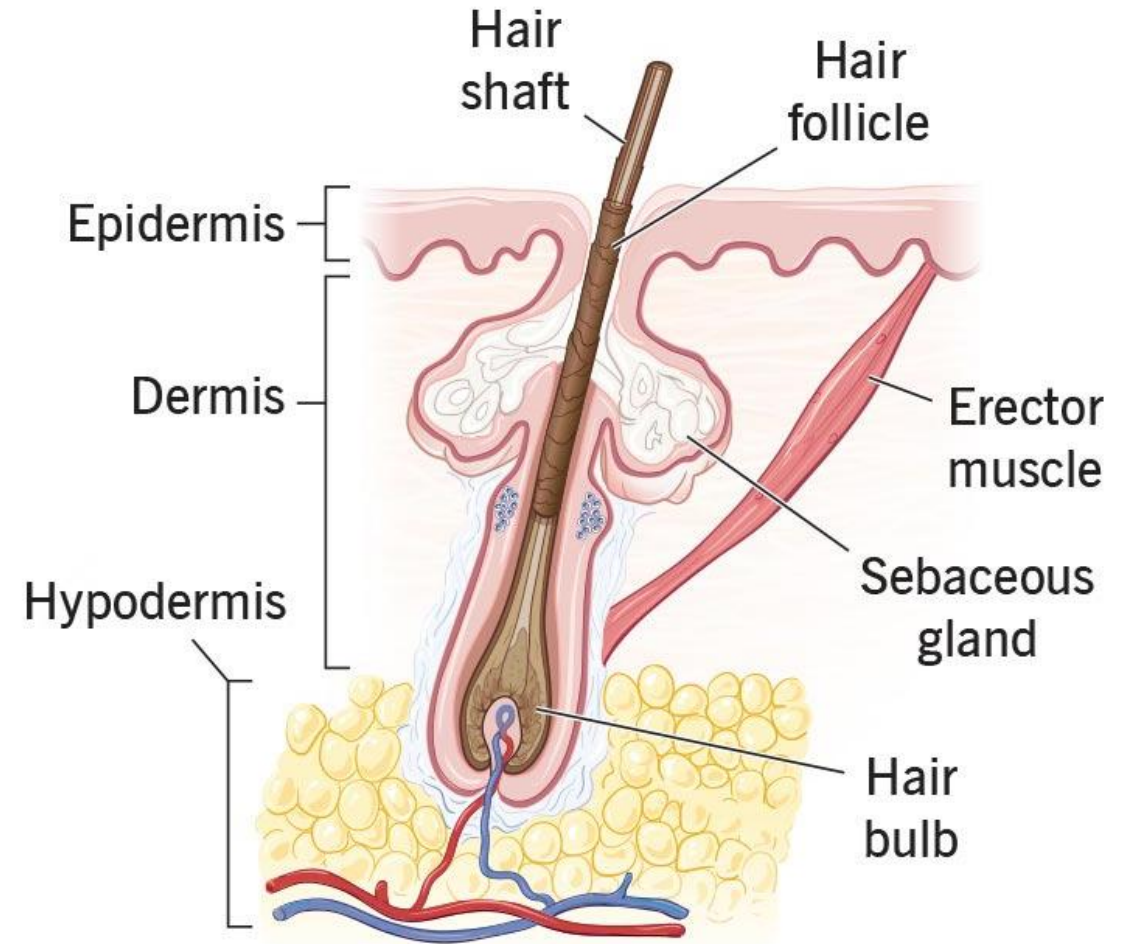
# 1. Skin

The is made up of three layers, the epidermis, dermis, and the hypodermis. It is supplied with blood vessels and nerves

Skin regulates **body temperature**

and **stores water, fat, and**

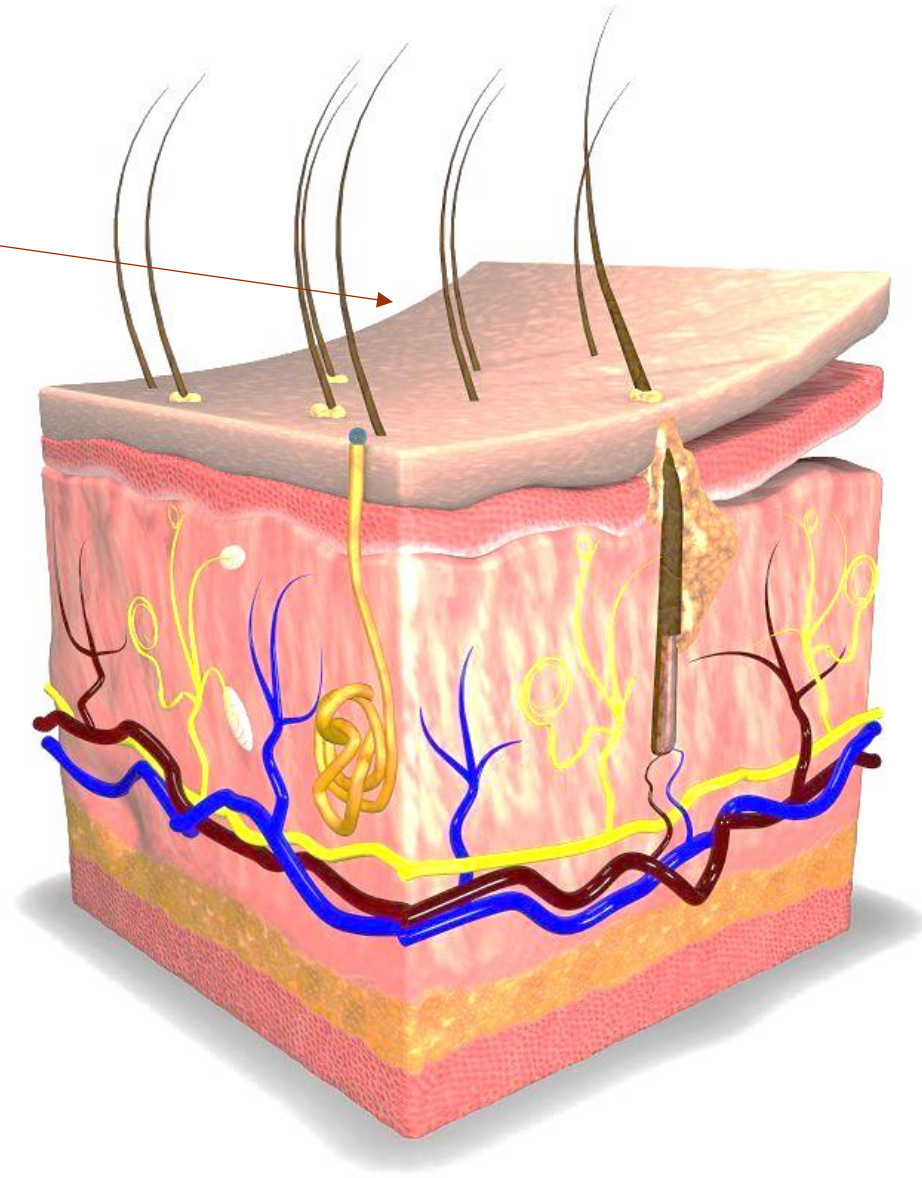
**vitamin D.**



# Skin

## The Epidermis

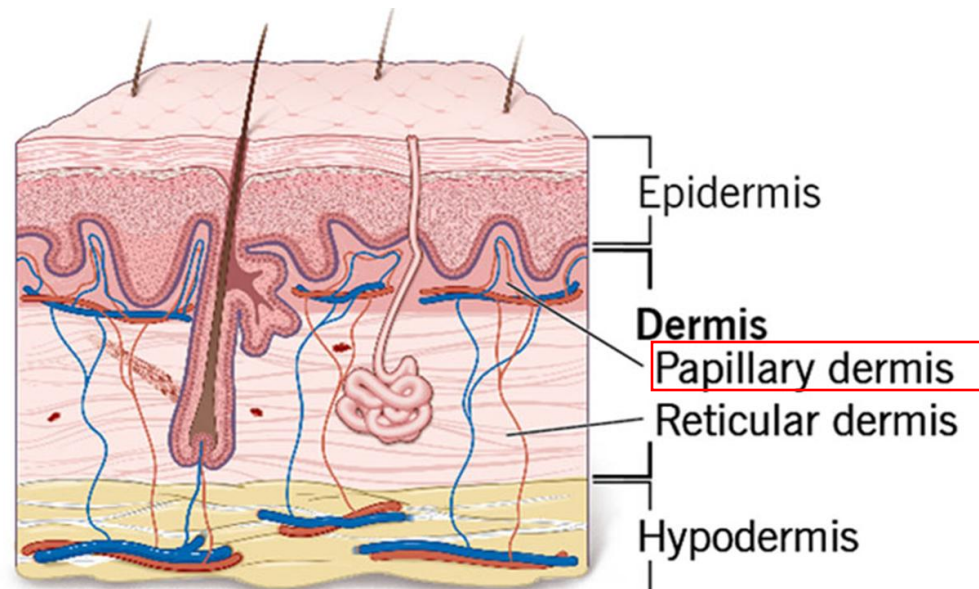
The epidermis, the outermost layer of skin, provides a waterproof barrier and creates our skin tone.



# Skin

The dermis is split into two parts:

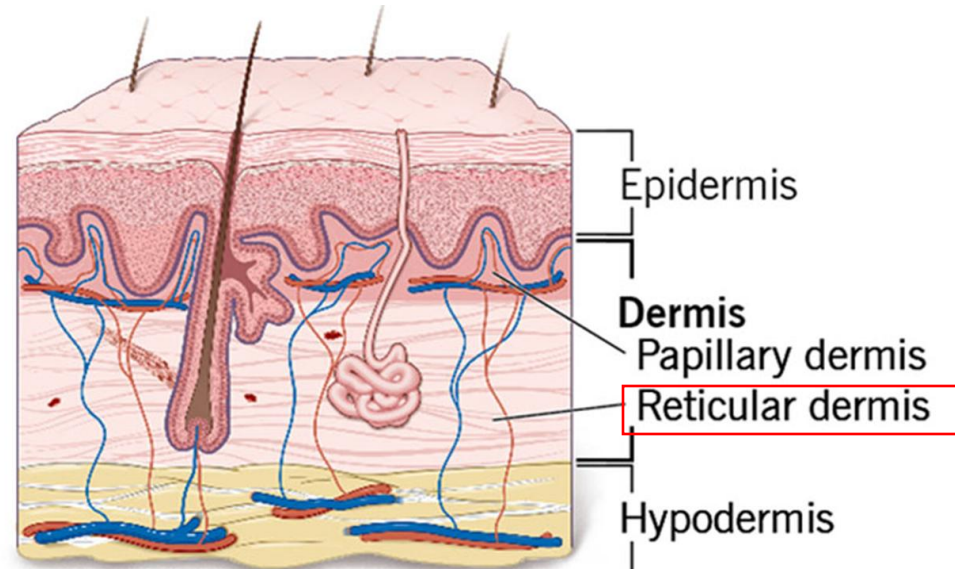
- 1. Papillary dermis:** This is the thin, upper layer that contains capillaries that help regulate skin temperature and provide nutrients to the epidermis.



# Skin

**The dermis is split into two parts:**

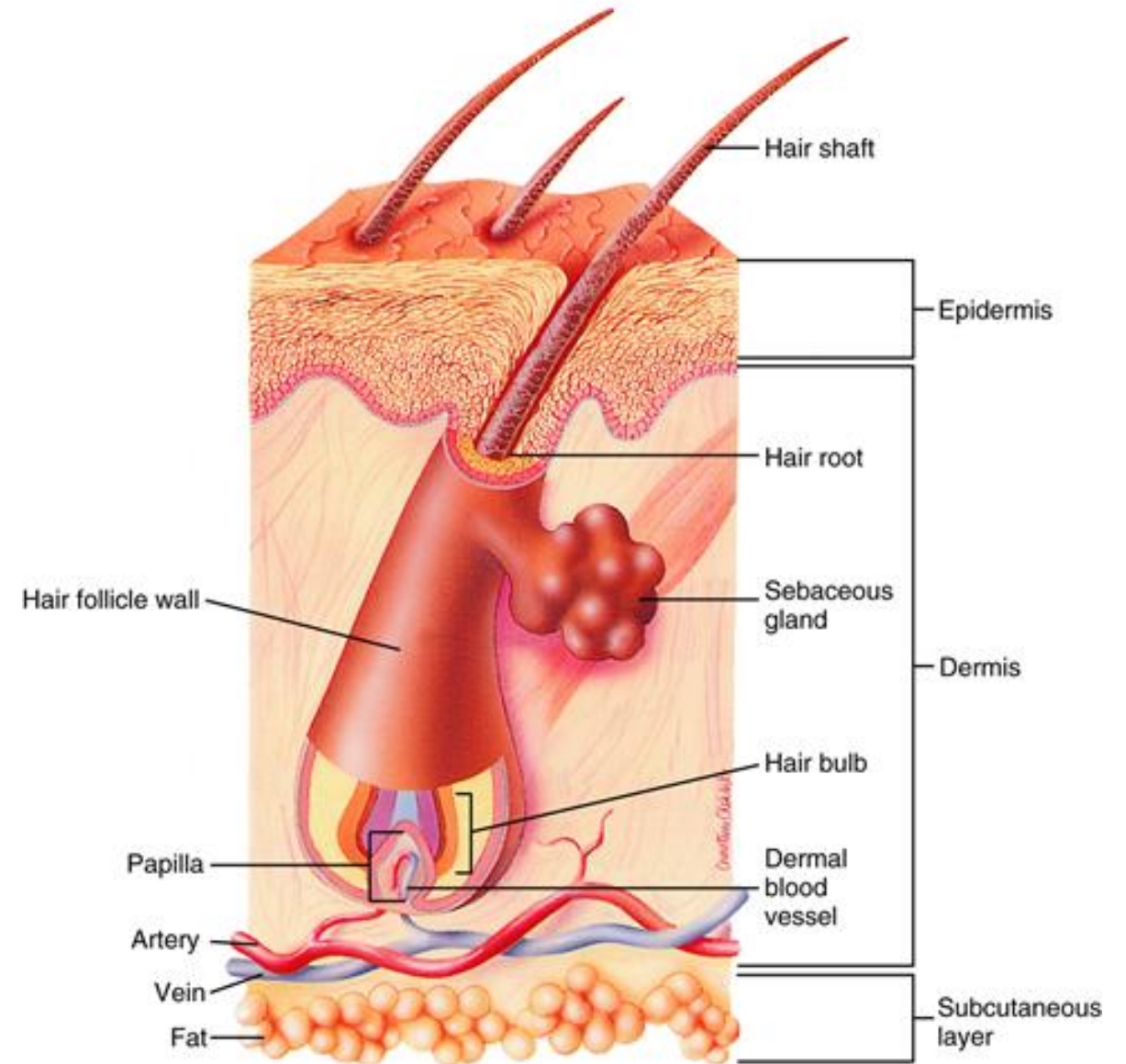
**2. Reticular dermis:** This is the thick, lower layer that contains connective tissues and dense collagen bundles that provide the skin with its overall elasticity and strength.



## 2. accessory organs

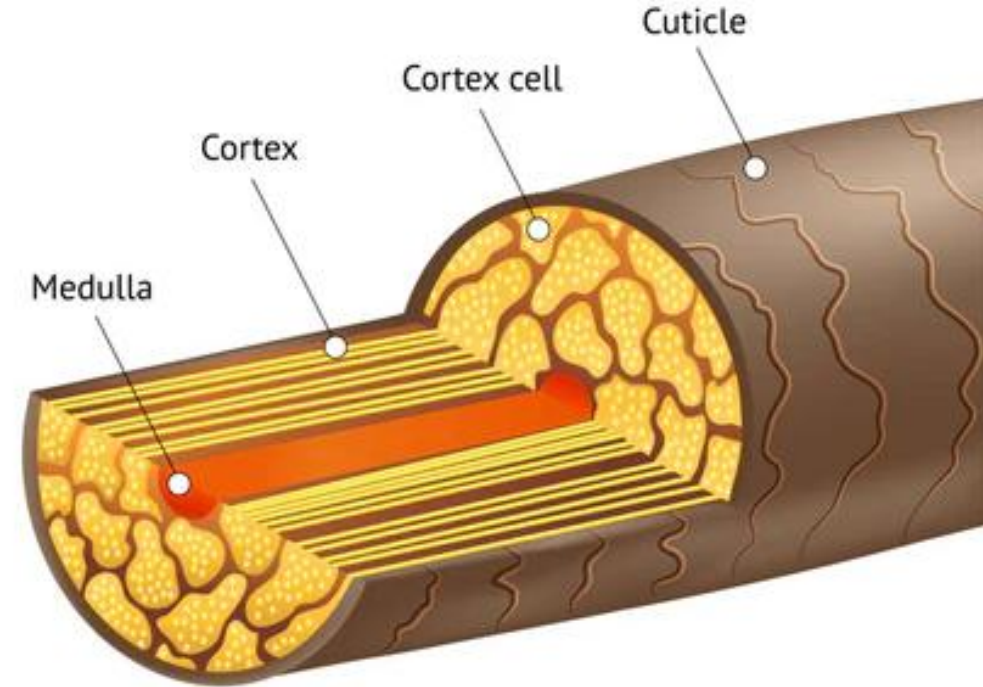
### 1. Hair

Hair is a derivative of the epidermis and consists of two distinct parts: the follicle and the hair shaft.

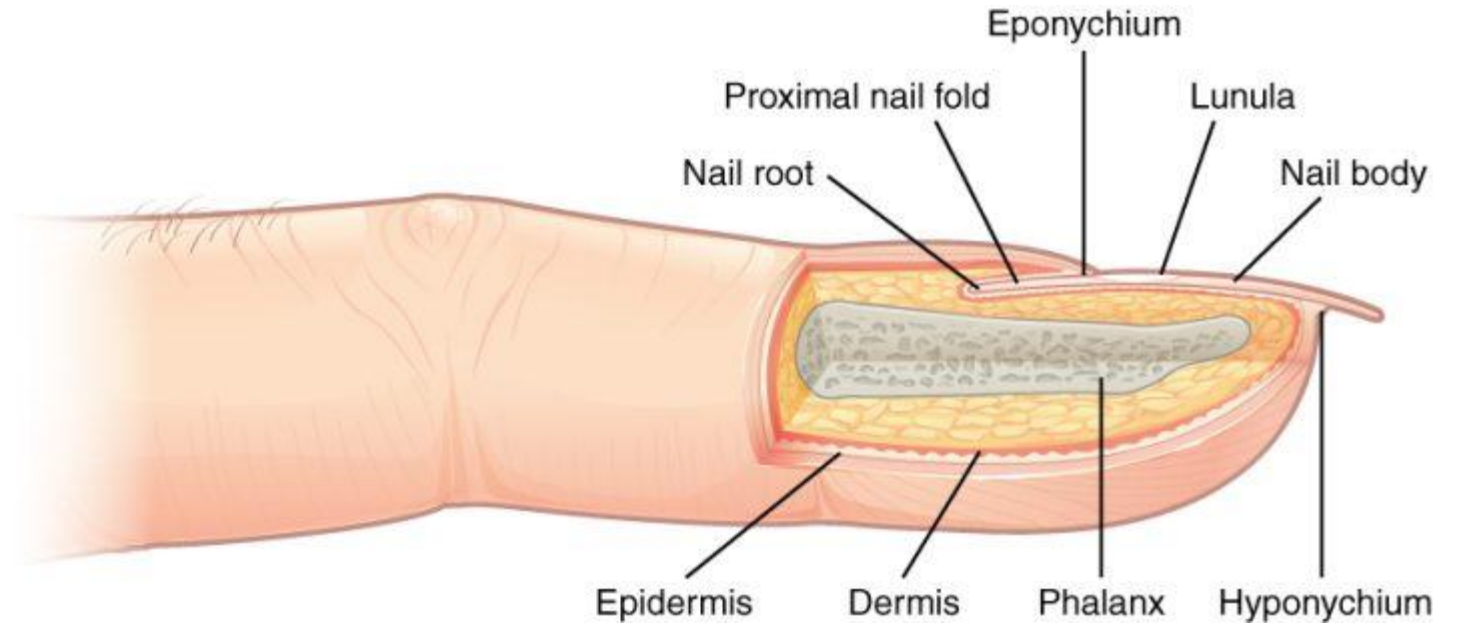


## Hair anatomy

The **hair shaft** consists of a cortex and cuticle cells, and a medulla for some types of hairs.



## 2. Nail



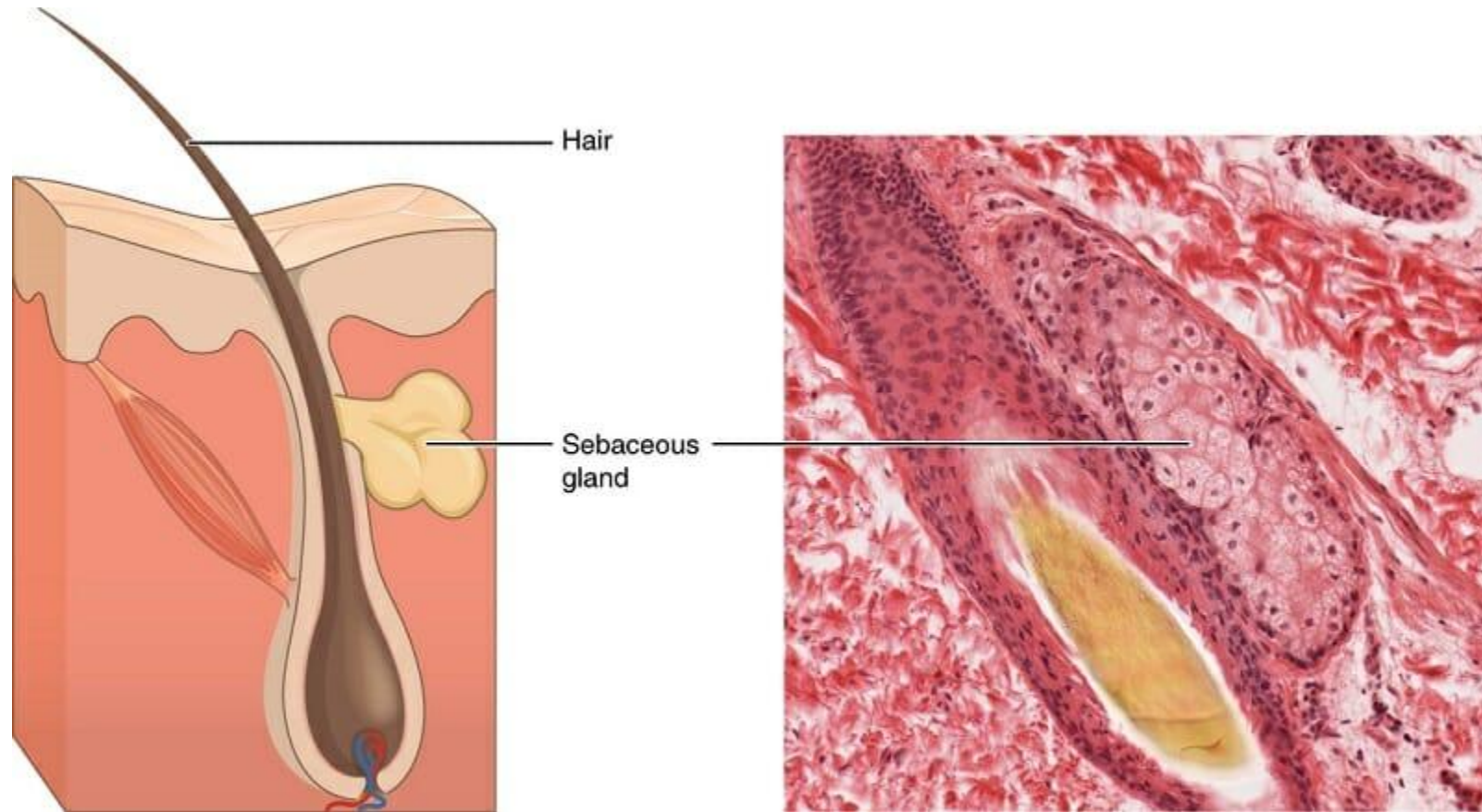
## **2. accessory organs**

### **3. Associated Glands:**

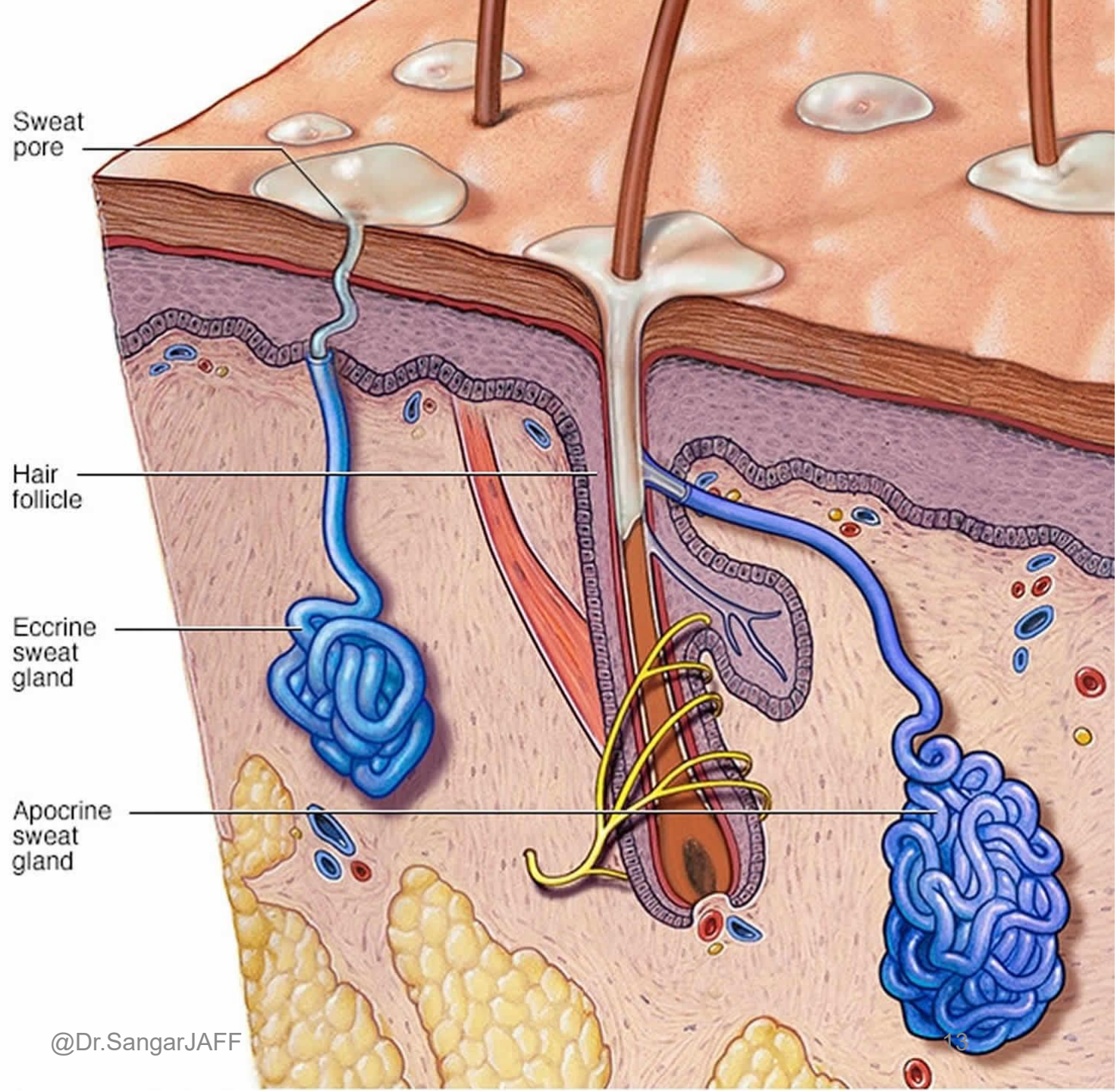
There are four types of exocrine glands within human skin:

- 1. Sebaceous**
- 2. Sudoriferous**
- 3. Ceruminous**
- 4. mammary glands**

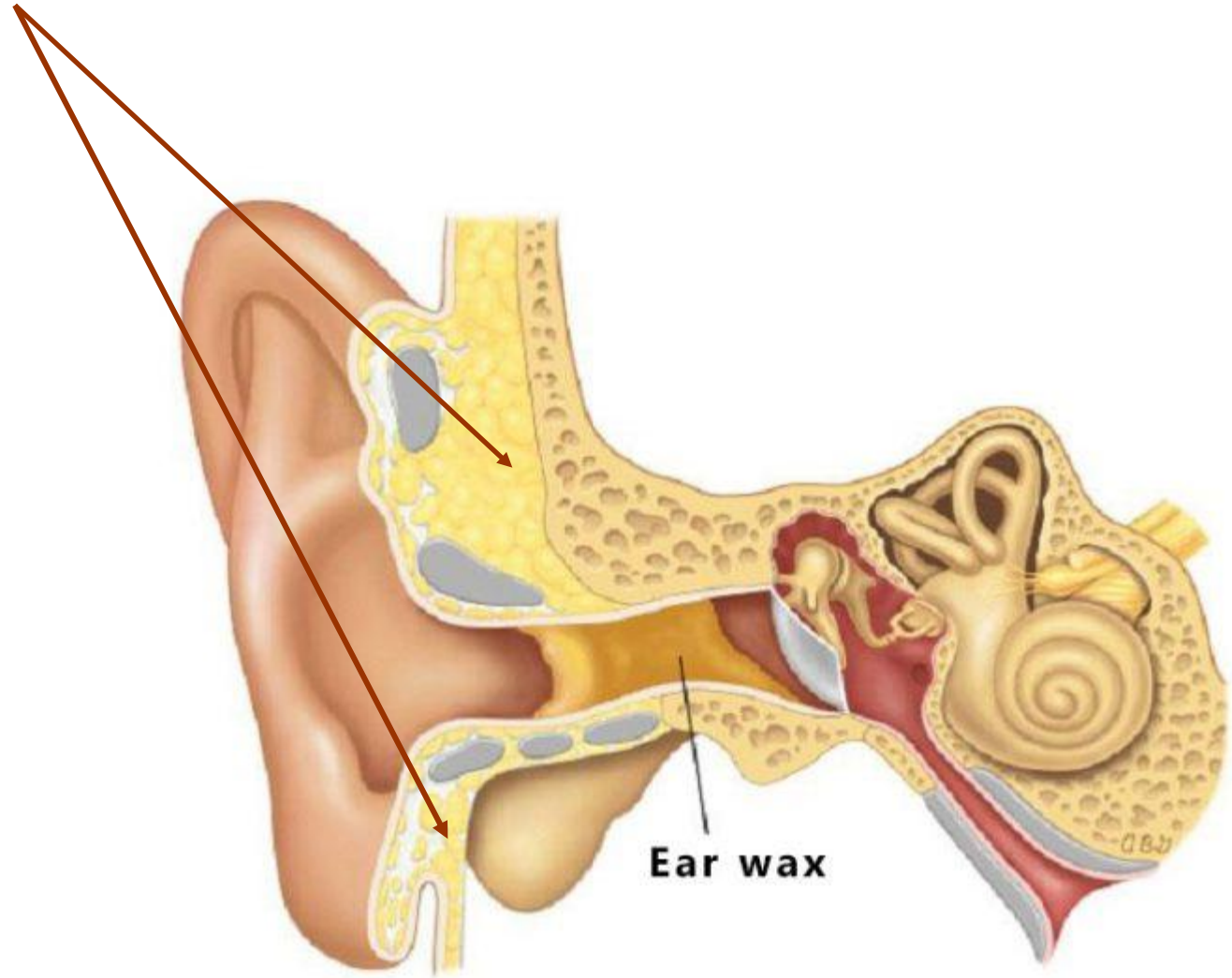
# Sebaceous Glands



# Sweat glands



# Ceruminous glands



# Mammary glands

The mammary gland is a gland located in the breasts of females that is responsible for lactation, or the production of milk.

