

**#MADEEASY**



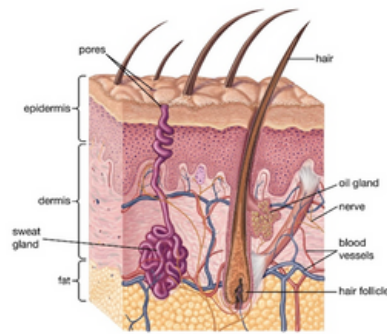
**STRUCTURE OF SWEAT AND  
SEBACEOUS GLANDS**





# STRUCTURE OF SWEAT AND SEBACEOUS GLANDS

## Sweat Glands



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- **Sweat glands are small tubular structures in the skin responsible for producing sweat.**
- **There are two main types of sweat glands:**  
***Eccrine glands***  
***Apocrine glands***



- **Eccrine Sweat Glands**

**Location:**

***Distributed widely across the skin  
Abundant on the palms, soles, and forehead.***

**Structure:**

***Secretory Portion: Coiled tubular structure located in the dermis or hypodermis.***

***Duct: Straight tube that opens directly onto the skin surface.***

***Cells: Composed of secretory cells and myoepithelial cells (contractile cells that help expel sweat).***

**Function:**

***Thermoregulation: Produces a watery sweat that cools the body through evaporation.***

***Excretion: Helps eliminate small amounts of metabolic waste.***

***Example: Like a sprinkler system in a garden, helping to cool and hydrate.***





# STRUCTURE OF SWEAT AND SEBACEOUS GLANDS

- **Apocrine Sweat Glands**

**Location:**

Concentrated in areas with hair follicles such as the armpits, groin, and around the nipples.

**Structure:**

**Secretory Portion:** Larger and located deeper in the dermis or hypodermis.

**Duct:** Opens into hair follicles rather than directly onto the skin surface.

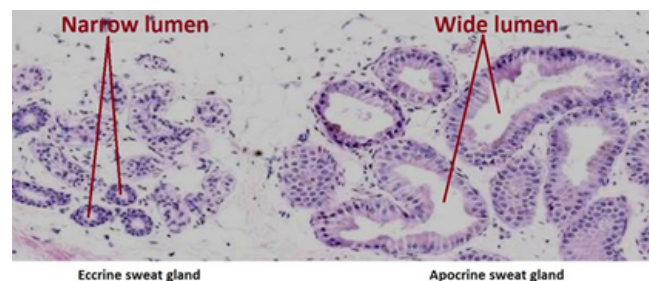
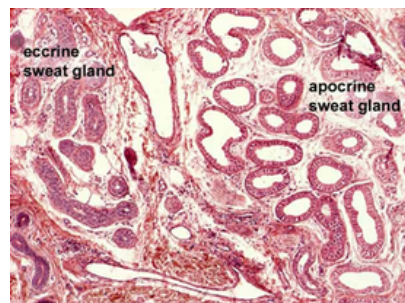
**Cells:** Secretory cells release sweat by pinching off part of the cell.

**Function:**

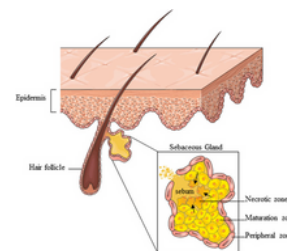
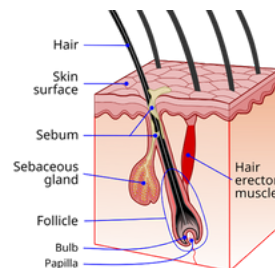
**Scent Production:** Produces a thicker, milky sweat that, when broken down by bacteria on the skin, creates body odour.

**Emotional Sweating:** Active during stress, excitement, and sexual stimulation.

**Example:** Like a perfume bottle, releasing a unique scent.



## Sebaceous Glands





## STRUCTURE OF SWEAT AND SEBACEOUS GLANDS

- **Sebaceous glands are small oil-producing glands in the skin that are typically associated with hair follicles.**
- **Location:**  
*Found throughout the skin except on the palms and soles  
Most numerous on the face and scalp.*
- **Structure:**  
*Secretory Portion: Alveolar (sac-like) structure located in the dermis.  
Duct: Short duct that opens into a hair follicle  
Cells: Sebocytes (cells that produce sebum) that undergo holocrine secretion (entire cell disintegrates to release sebum)*
- **Function:**  
*Lubrication: Produces sebum, an oily substance that lubricates and waterproofs the skin and hair.  
Antibacterial Properties: Sebum has mild antibacterial properties.*
- **Example: Like an oil can, keeping machinery (skin and hair) running smoothly.**

### Summary table

Gland Type	Location	Structure	Function	Simple Example
<b>Eccrine Sweat Glands</b>	Widely distributed: palms, soles, forehead	Coiled tubular structure, duct opens directly onto skin surface	Thermoregulation, excretion	Like a sprinkler system cooling and hydrating a garden
<b>Apocrine Sweat Glands</b>	Armpits, groin, around nipples	Larger, deeper in dermis/hypodermis; duct opens into hair follicles	Scent production, emotional sweating	Like a perfume bottle releasing a unique scent
<b>Sebaceous Glands</b>	Throughout skin: face, scalp	Alveolar structure; duct opens into hair follicle	Lubrication, antibacterial properties	Like an oil can keeping machinery running smoothly

