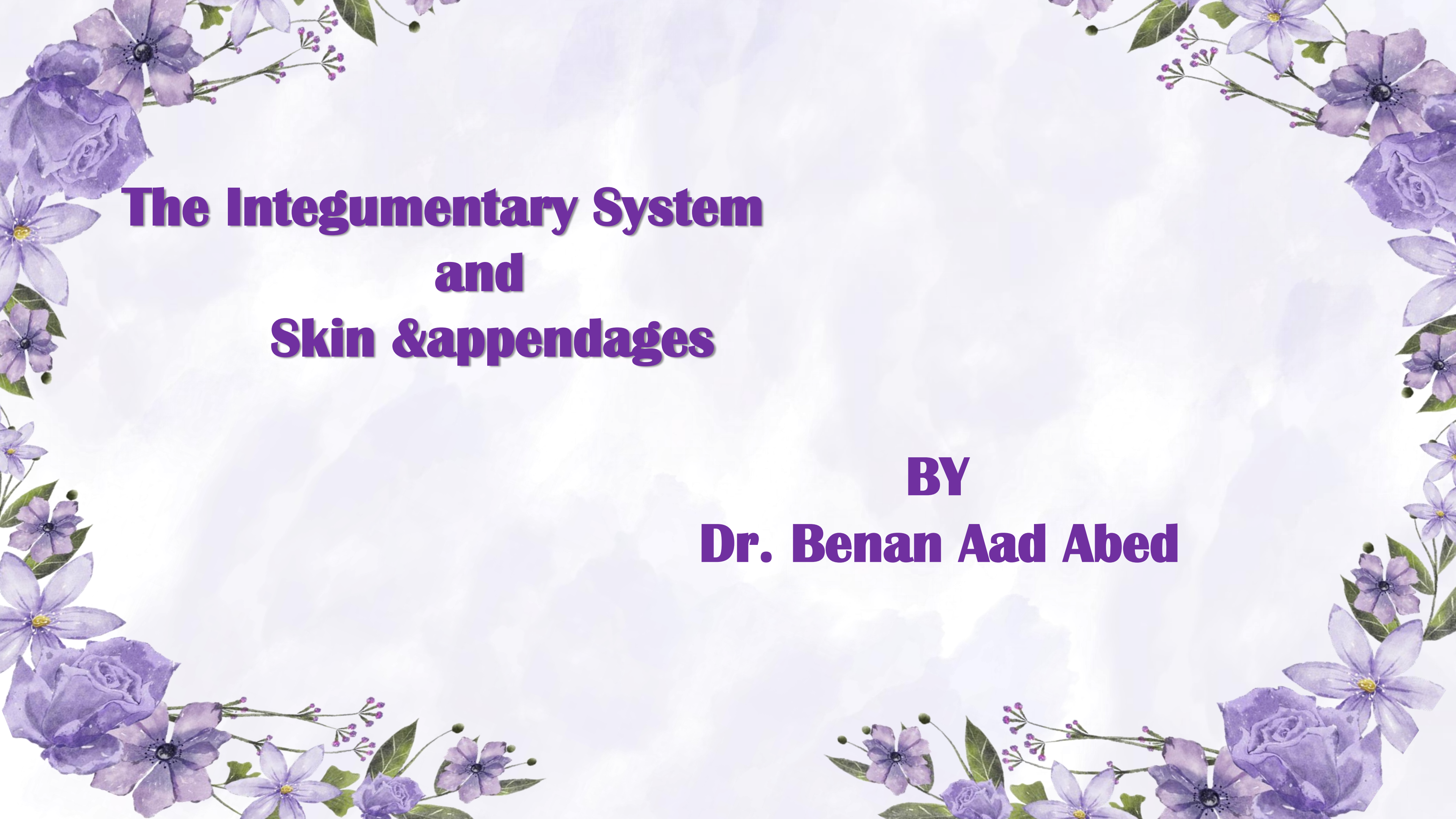
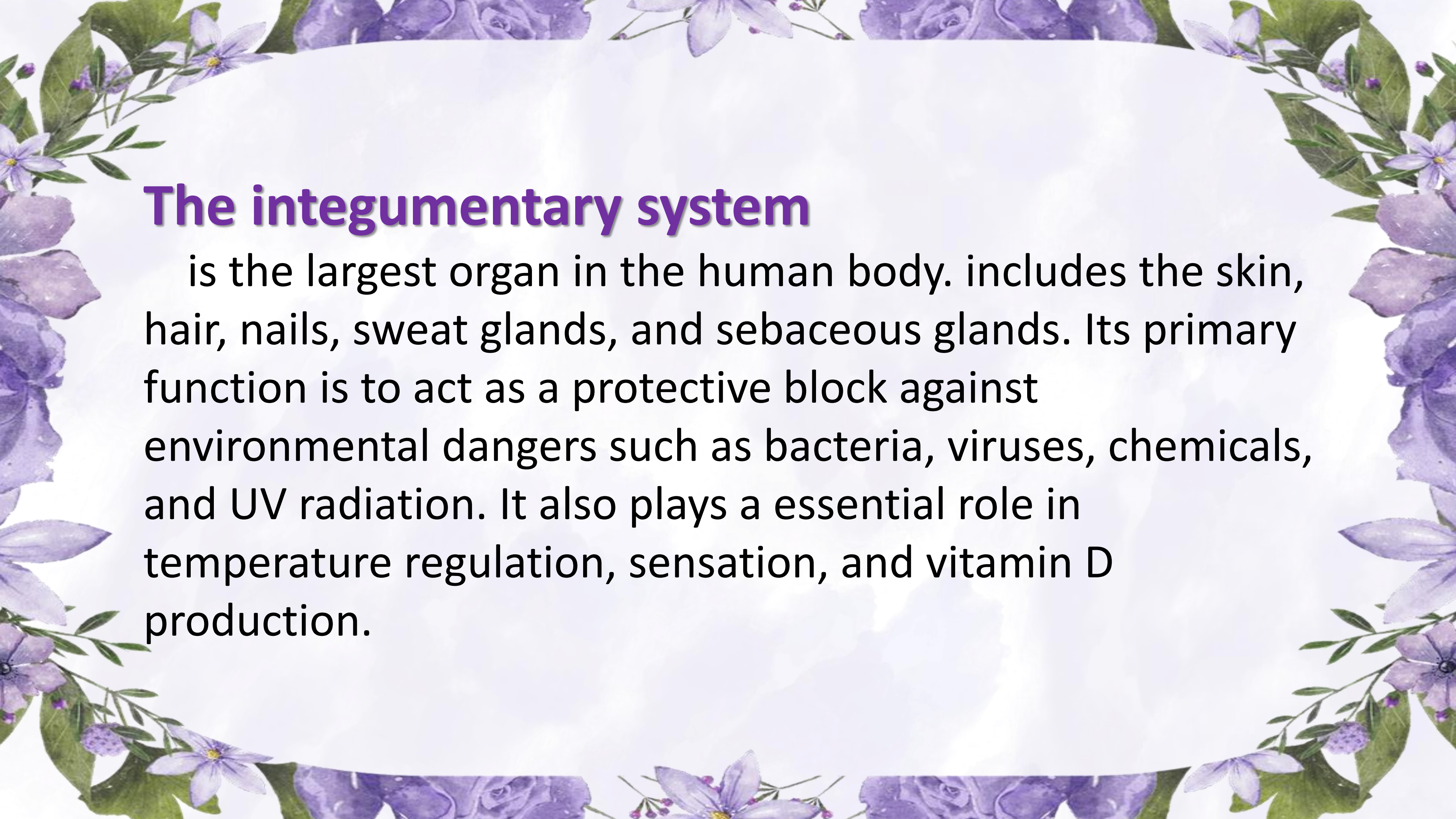




The Integumentary System and Skin & appendages

**BY
Dr. Benan Aad Abed**



The integumentary system

is the largest organ in the human body. includes the skin, hair, nails, sweat glands, and sebaceous glands. Its primary function is to act as a protective block against environmental dangers such as bacteria, viruses, chemicals, and UV radiation. It also plays a essential role in temperature regulation, sensation, and vitamin D production.

Sweat Gland

Muscle

Fat,
Collagen,
Fibroblasts

Hair

Sebaceous
Gland

Epidermis

Sensory Nerve
Ending

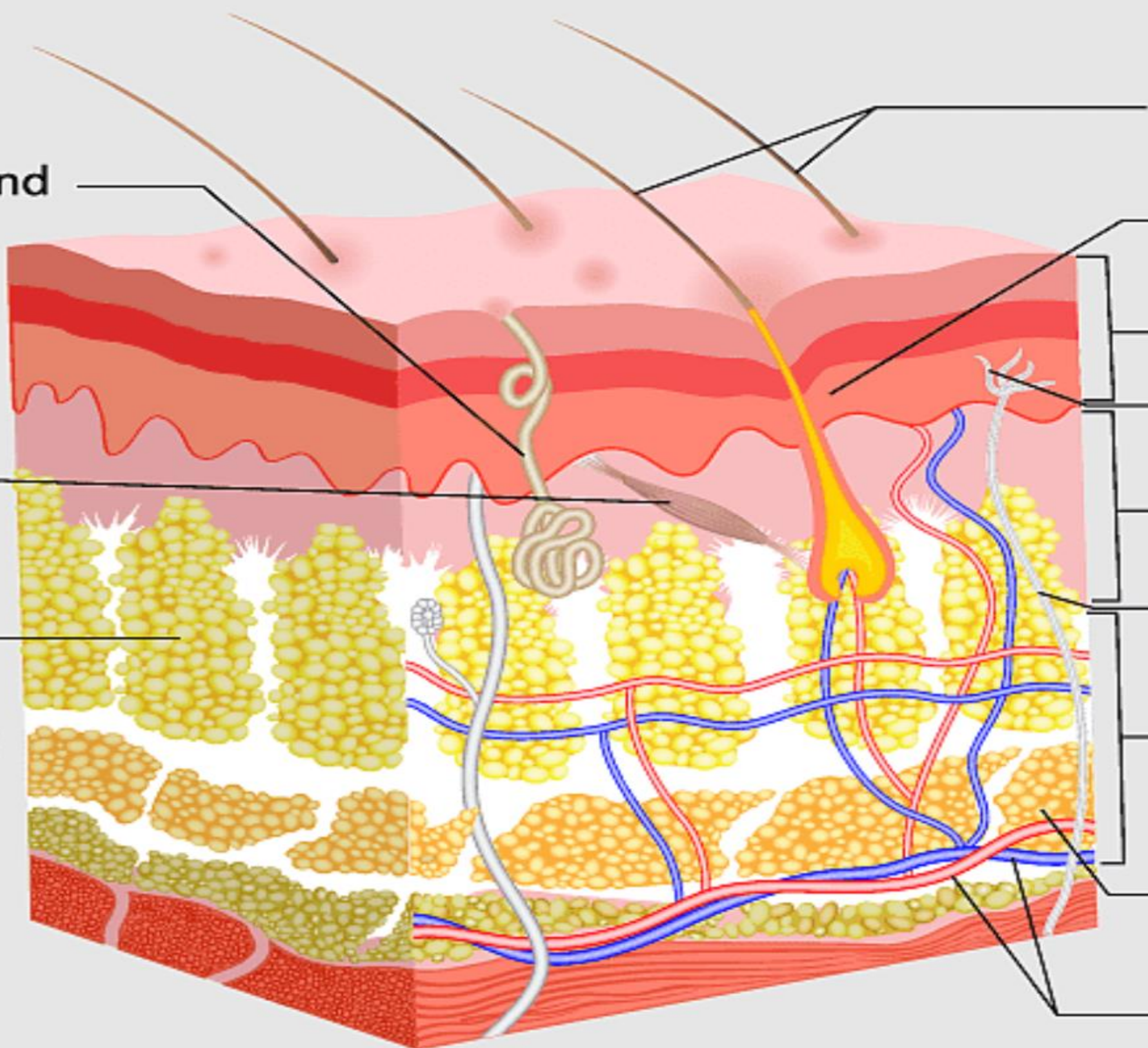
Dermis

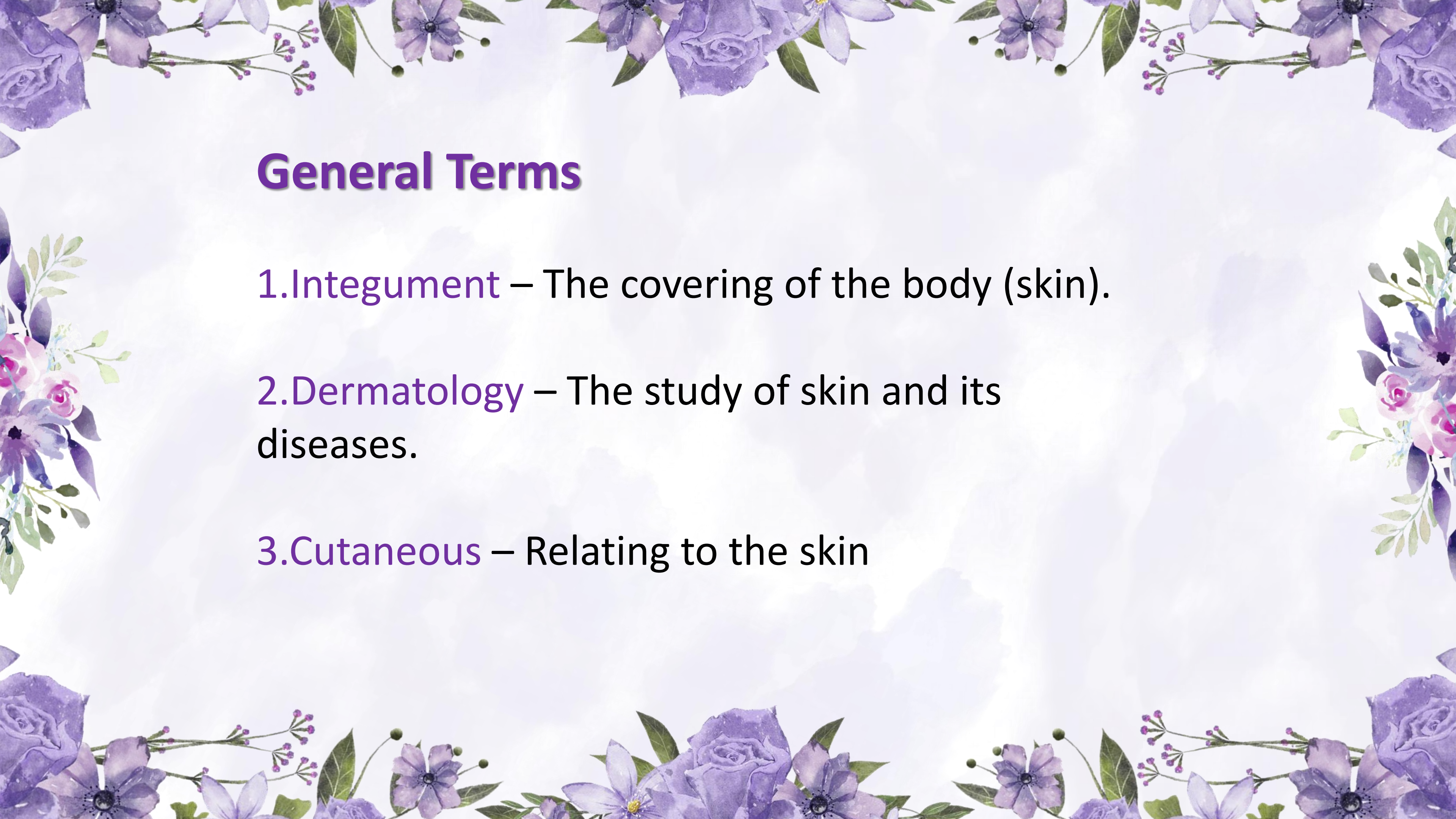
Nerve

Hypodermis

Subcutaneous
Tissue

Blood Vessels





General Terms

1. **Integument** – The covering of the body (skin).

2. **Dermatology** – The study of skin and its diseases.

3. **Cutaneous** – Relating to the skin

Anatomy of the Skin

I. Layers of the Skin

The skin consists of three main layers, each with different functions:

1. Epidermis (Outer Layer)

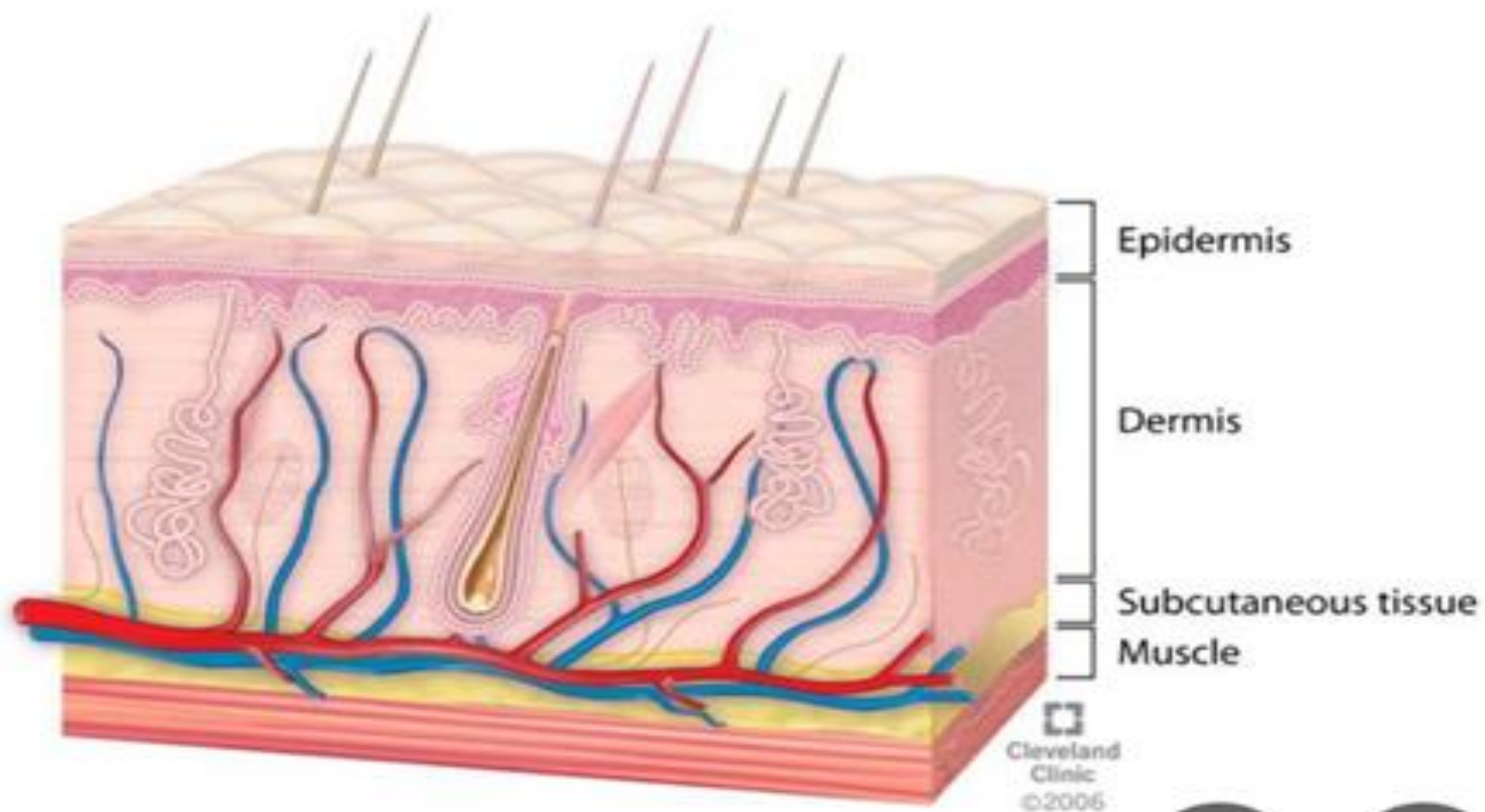
The outermost layer, lacks blood vessels.

- a) keratinocytes
- b) melanocytes

2. Dermis (Middle Layer)

Contains blood vessels, nerves, glands, and hair follicles. providing skin resistance and strength. Contains sensory receptors for touch, pain, temperature, and pressure.







3.Hypodermis (Subcutaneous Layer)

Made of fat (adipose tissue), providing protection and moderating.

Contains large blood vessels.

II.Skin Glands

1. Sweat Glands (Sudoriferous Glands)

a)Eccrine glands

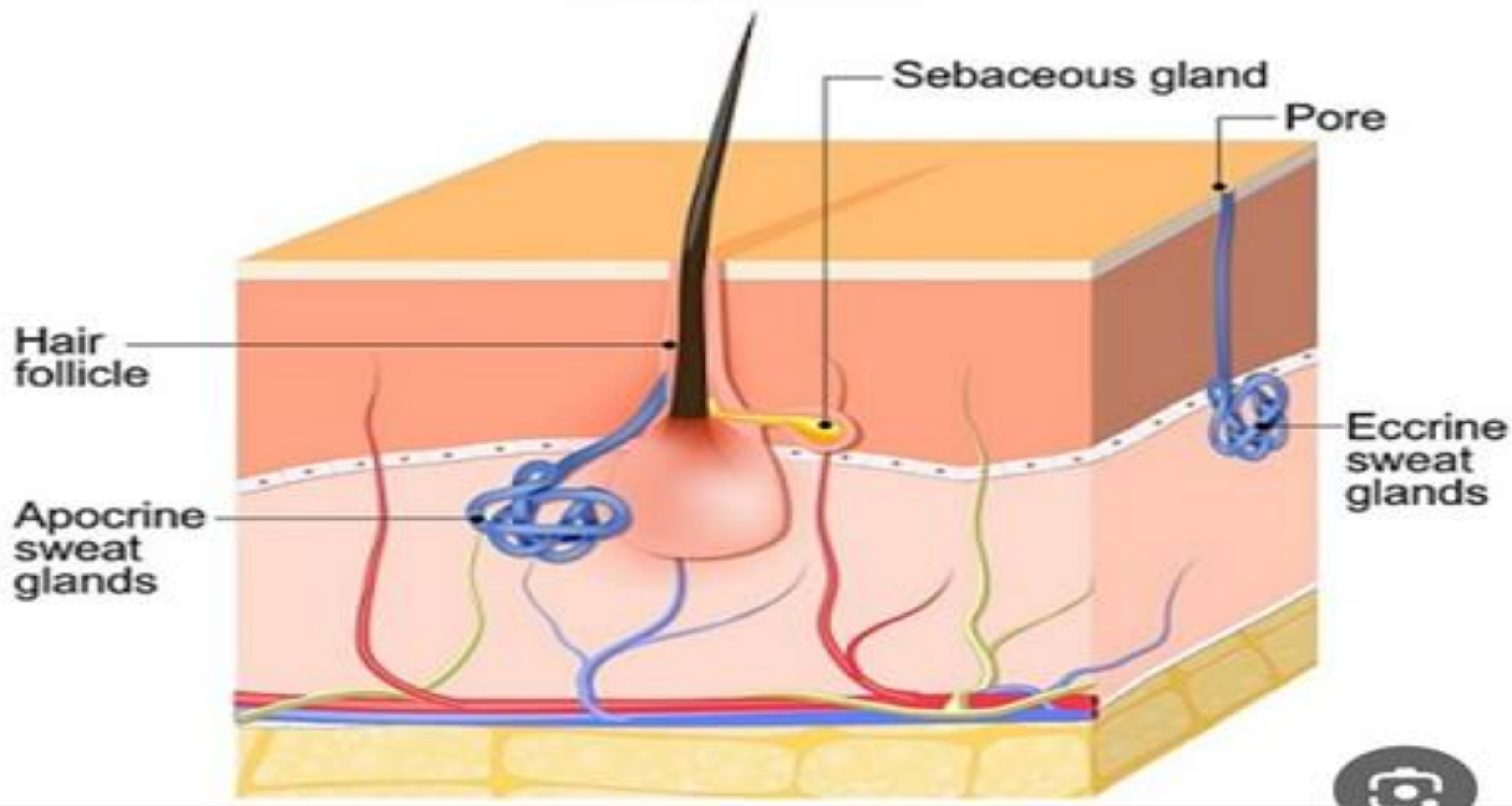
b)Apocrine glands

2. Sebaceous Glands

Oily substance that humidify the skin and hair

Glands of the Skin

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III. Hair & Nails

1. Hair

Grows from hair follicles in the dermis.

Hair parts:

Root – The part inside the skin.

Shaft – The visible part above the skin.

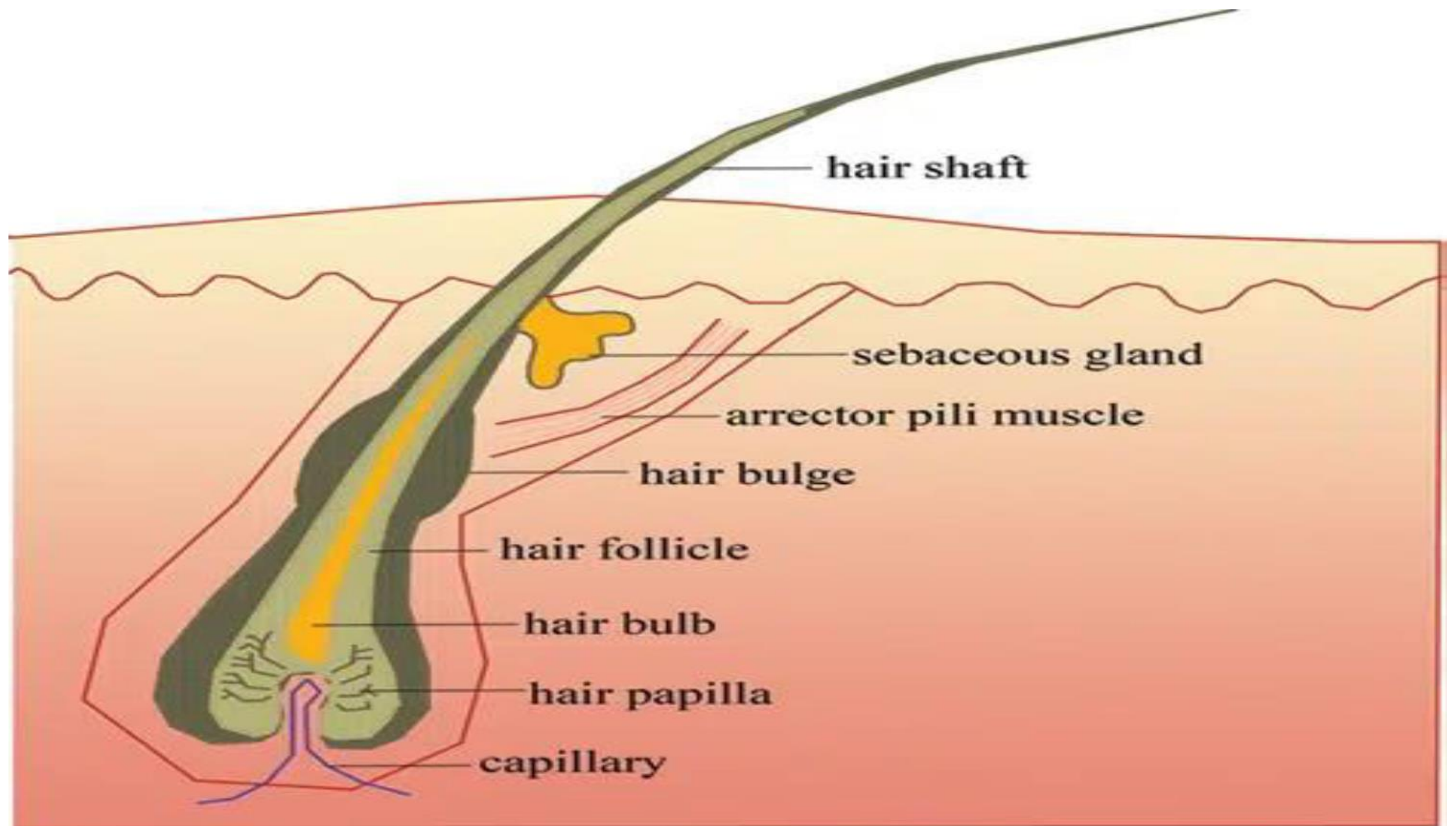
Follicle – The structure from which hair grows.

Hair Disorders:

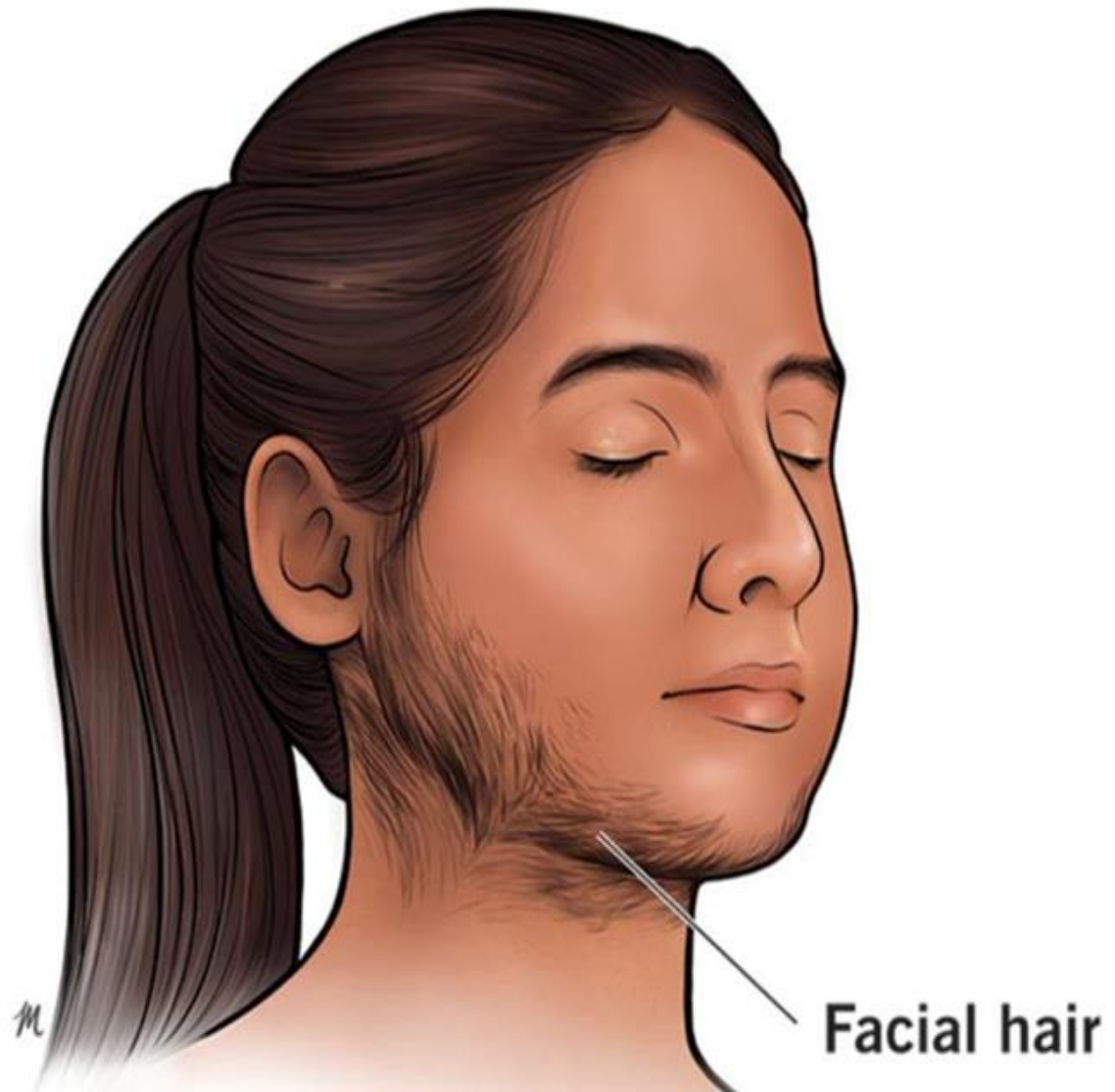
Alopecia – Hair loss.

Hirsutism – Excessive hair growth in women due to hormonal imbalance.





Hirsutism





2. Nails

Made of keratin, protecting the fingertips .

Nail Disorders:

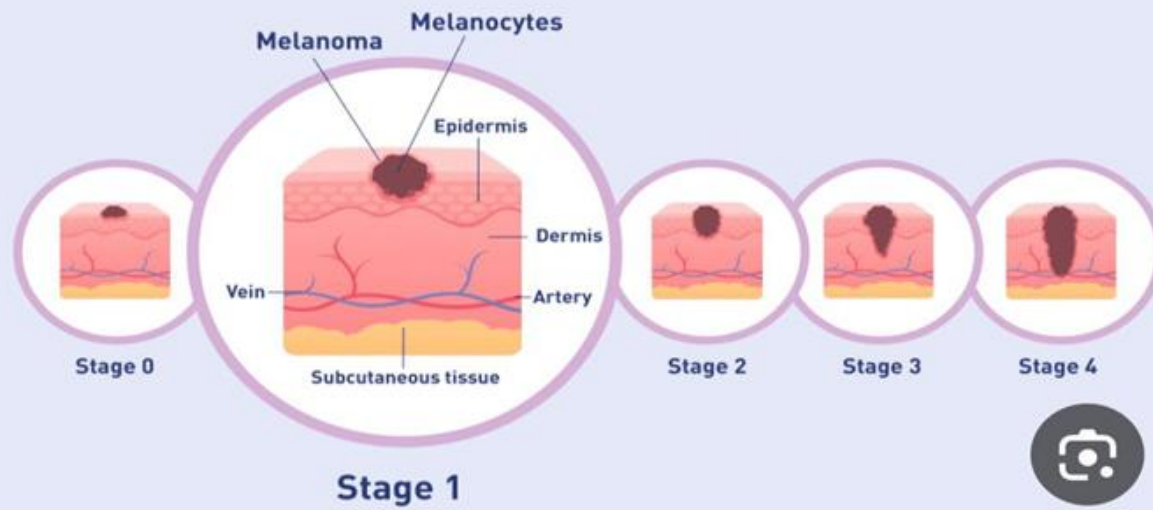
Onychomycosis – Fungal infection of the nails.

Paronychia – Infection around the nail.

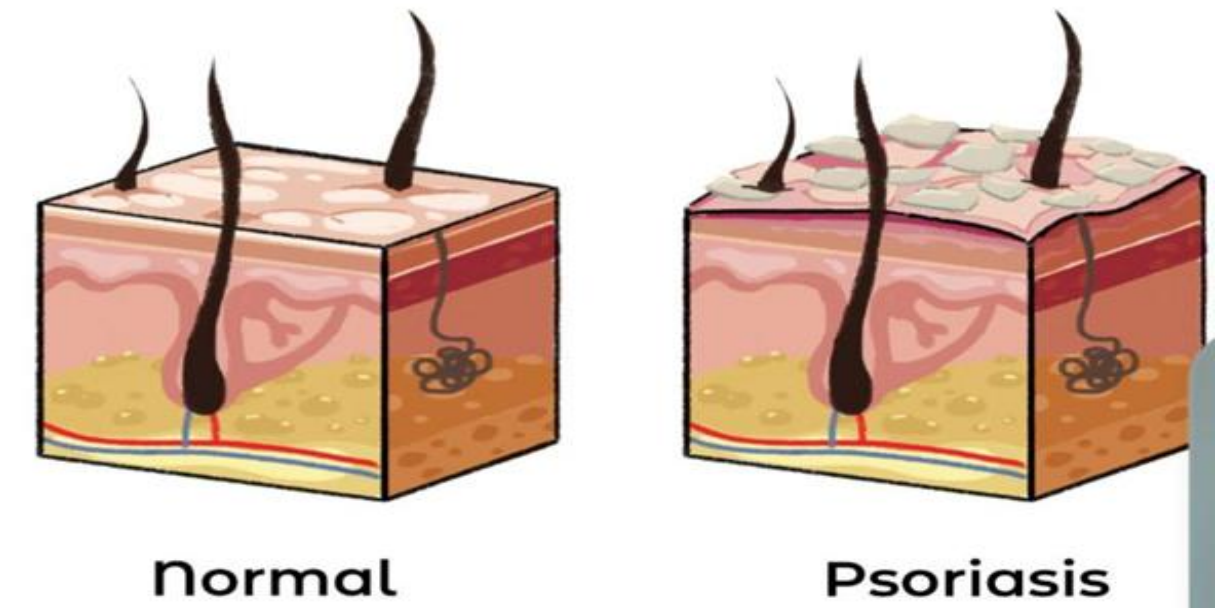
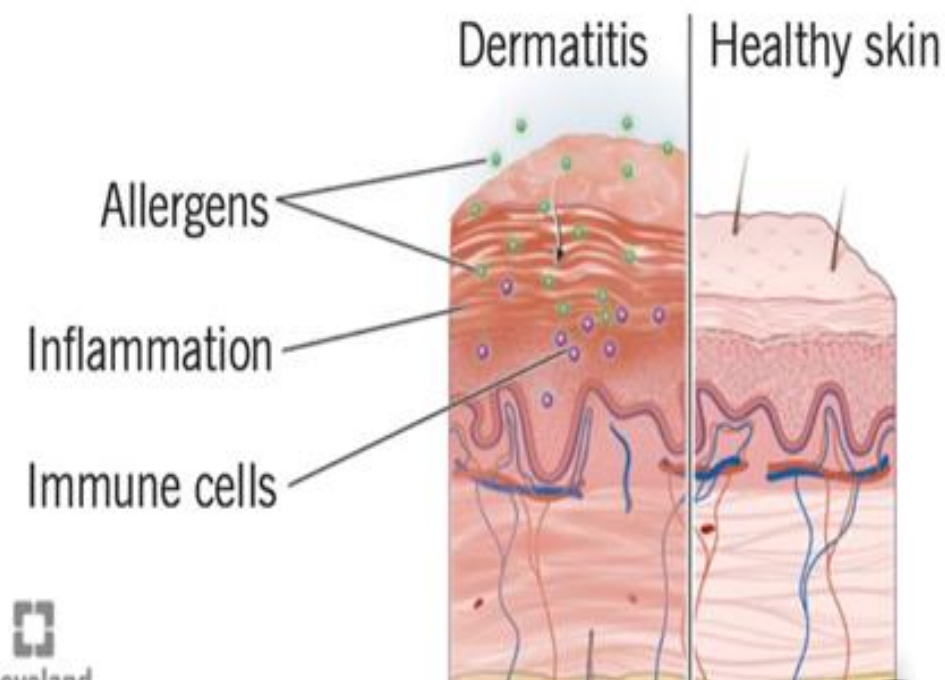
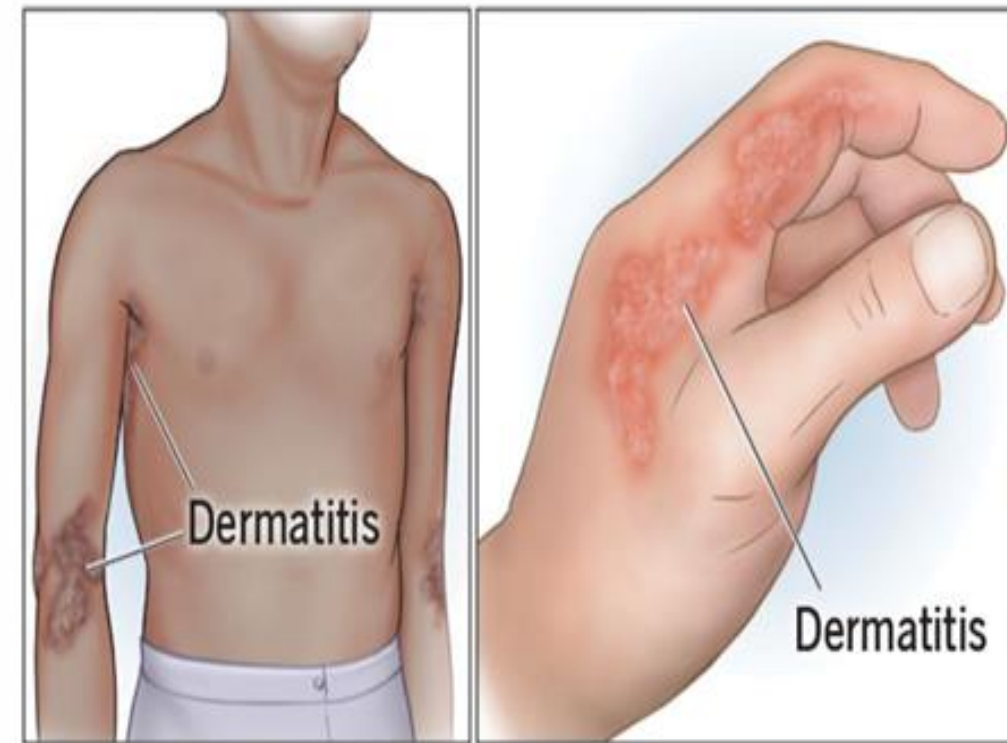
IV. Common Skin Diseases

1. Dermatitis :– Skin inflammation.
2. Eczema – Chronic skin condition.
3. Psoriasis – Autoimmune disorder
4. Melanoma – The most dangerous type of skin cancer
5. Vitiligo – Loss of skin pigment .

Stages of Melanoma



Atopic Dermatitis



The color of eczema rashes or patches on skin



Lighter skin tones:
red, pink



Darker skin tones:
ashen gray,
white, purple,
darker brown

A decorative border of purple flowers and green leaves frames the central text. The border consists of various types of purple flowers, including roses and daisies, with green leaves and small purple buds interspersed. The background is a light, textured purple.

Thank you