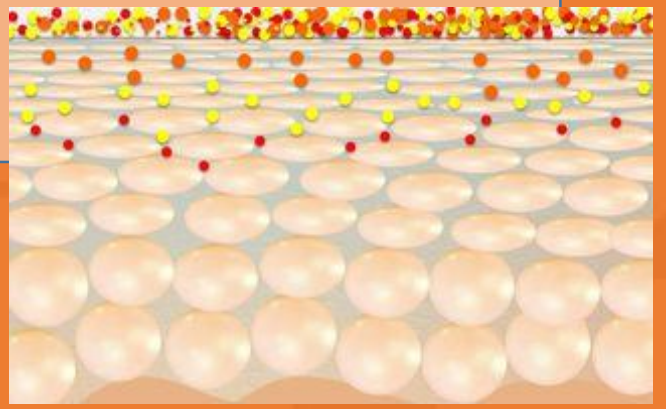
SKIN

The skin has many different **functions** which are:

- Heat regulation
- Absorption
- Sensation
- Secretion
- Protection
- Excretion
- Synthesis of Vitamin D
- Minor functions of the Skin

SKIN

The skin has many different **functions** which are:



ABSORPTION

- Skin is a **waterproof, protective barrier**, but certain substances can be absorbed such as:
  - Fat-soluble substances such as **Vitamins A, D, E** and **K**.
  - **Topical steroids** used to treat skin conditions such as **eczema.**
  - **Drugs used in transdermal patches**, such as **nicotine patches.**
  - Some **toxic chemicals** such as **mercury.**
  - **Essential oils** used in **aromatherapy.**

SKIN

The skin has many different **functions** which are:

Minor functions of the skin:

Immunity — **Langerhans cells** plan an important role in the immune system.

Blood reservoir

- **8-10%** of the body's total blood flow is in the dermis of a resting adult.
  - When **moderate exercise**, dermal capillaries dilate and blood flow to the area increases to help cool the body.
  - **Strenuous exercise**, dermal blood vessels constrict, so that more blood can circulate to the muscles.

Communication — Connects information about **our health** and **our emotions**.

DERMIS

- The **supportive layer beneath the epidermis.**
- It is composed of **connective tissue** that contains both **collagen** and **elastic fibres.**
- It also contains:

FIBROBLAST **Large, flat cells** that synthesize:

Collagen fibres:

- These are **very tough, yet flexible**, fibres are resistant to a pulling force and give and skin its **extensibility (ability to stretch).**
- They **keep skin hydrated binding water.**
- They contain protein **collagen.**

Elastic fibres:

- These are **strong, thin fibres** that give skin its **elasticity** (ability to return to its original shape after stretching).
- They contain protein **elastin.**

SKIN TYPES

NORMAL (BALANCED) SKIN:

- It is a **balanced skin** in which there are **no signs of oily** or **dry areas.**
- It has an **even texture, good elasticity, small pores, feels soft** and **firm to the touch** and is usually **blemish free.**

OILY SKIN:

- It is oil in there because an **overproduction of sebum** by sebaceous glands.
- This can be **caused by hormones (puberty).**
- It has **uneven texture, normal elasticity, large pores, feels thick** and **greasy to touch**, often has blemished such as **comedones, papules, pustules, scars** and it appears sallow **(slightly yellow).**

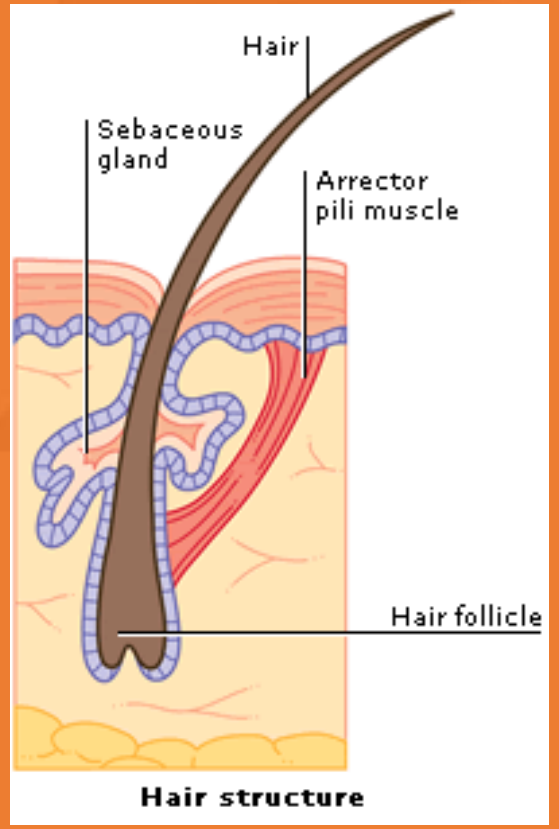
STRUCTURE of the HAIR

- Hairs are **columns of keratinised dead cells.**
- The longitudinal view is made up of two parts:

Hair shaft or **"strand":**

The **superficial end of the hair** that projects from the surface of the skin.

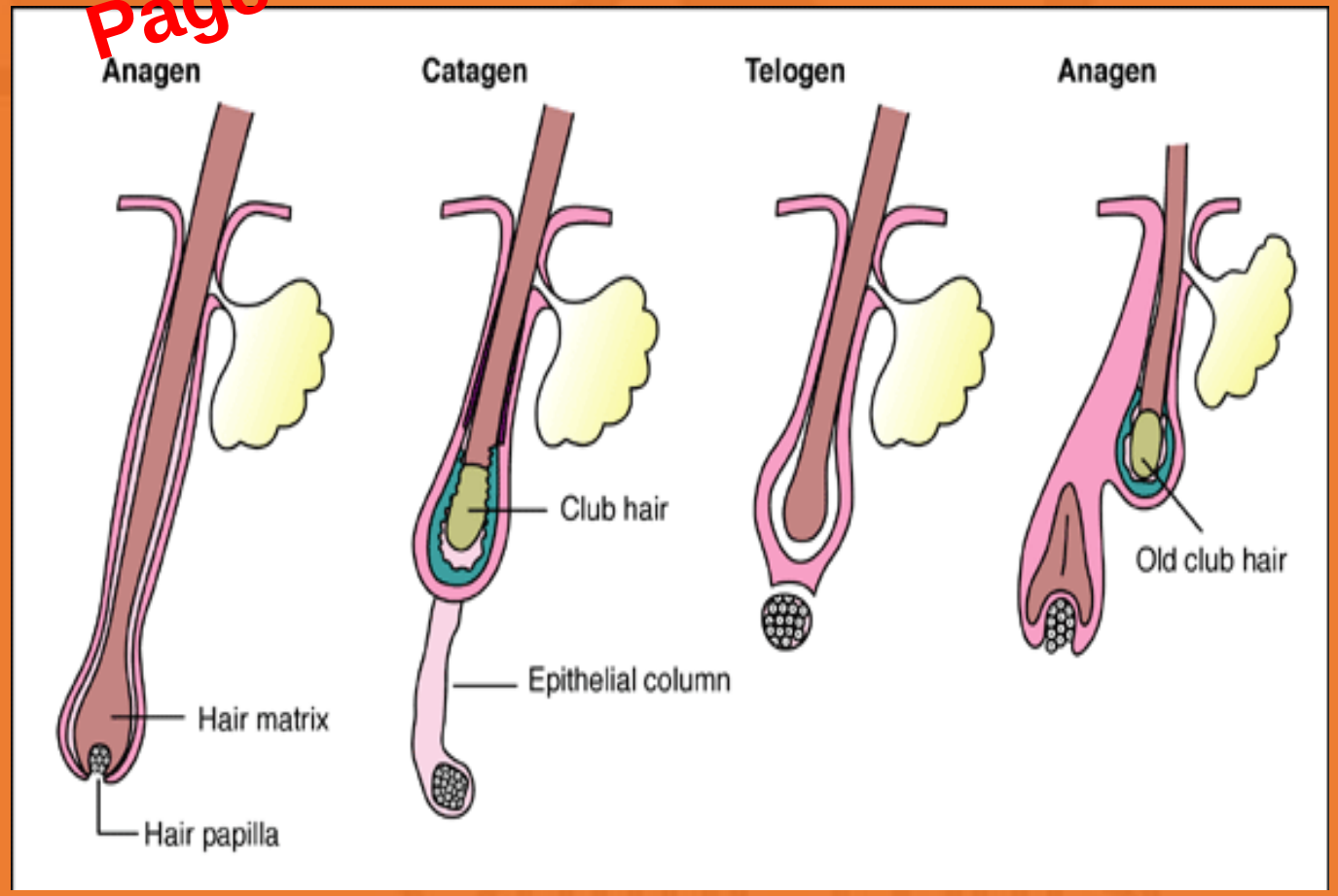
Hair root: **Penetrates into the dermis.**



Hair structure

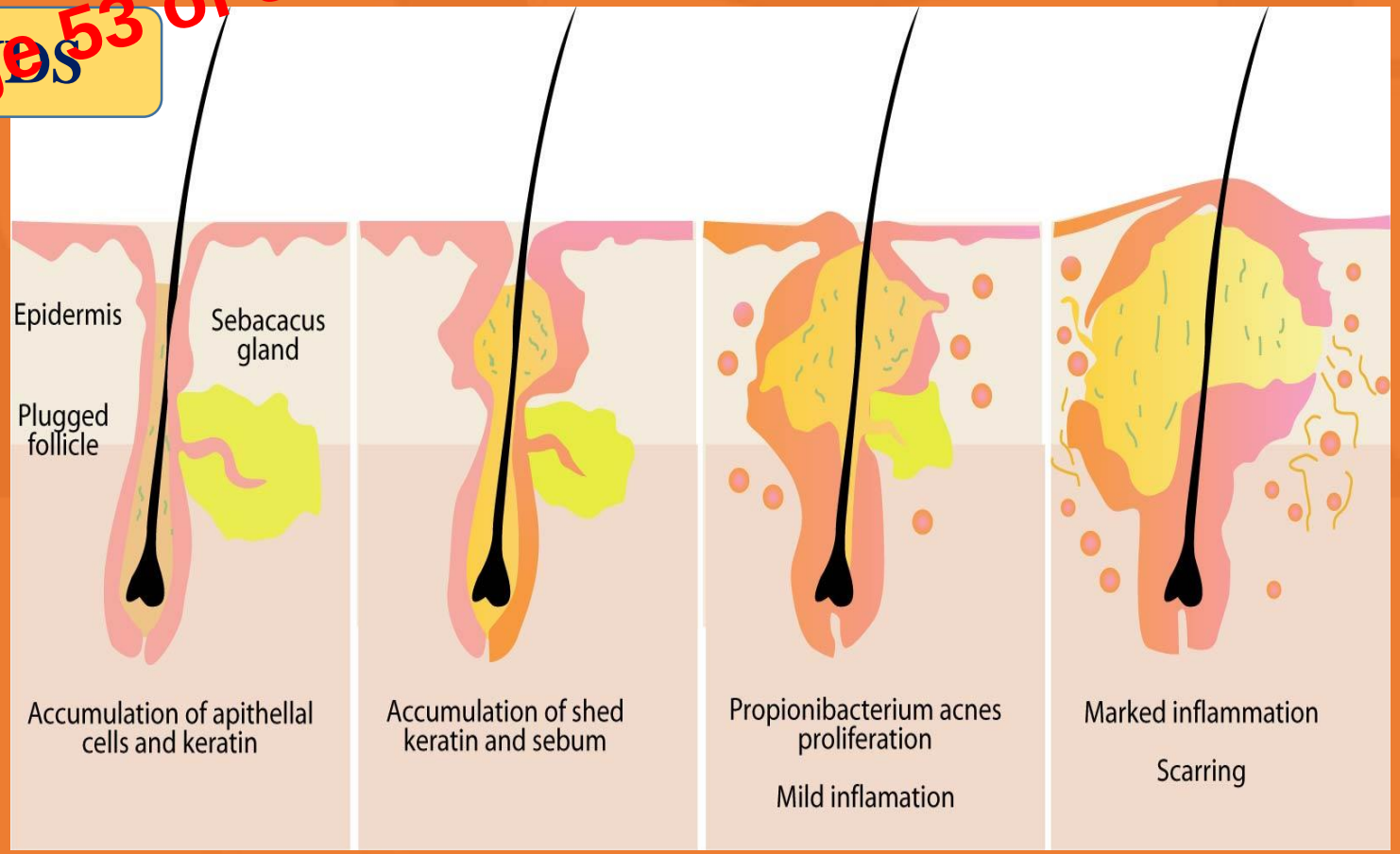
LIFE CYCLE of a HAIR

- The life cycle of a hair includes **growing, transitional** and **resting stages.**



CUTANEOUS GLANDS

SEBACEOUS GLANDS



CUTANEOUS GLANDS

SUDORIFEROUS (SWEAT) GLANDS

	ECCRINE	APOCRINE
EXCRETION	Sweat.	Sweat, fatty acids and proteins..
FUNCTIONS	**Excrete waste** and **help regulate** the **body's temperature** by keeping it cool.	The **functions is not yet known**, but they are activated by **pain, stress** and **sexual foreplay.**