A = Arrector pili muscle (they’re small muscles attached to hair follicles. Contraction of these muscles causes hairs to stand on end = goose bumps)

S = Sebaceous glands

G = Duct

F = Hair follicles

Hair follicles, sebaceous glands and arrector pili muscle = Pilosebaceous unit

Hypodermis

- Not part of the skin but closely associated with the skin (part of subcutaneous tissue)
- Assists skin with protective function
- Stores fat and anchors skin to the underlying tissue (adipose/fatty tissue)

Integumentary injury

- Tearing dermis = stretch marks
- Separation of dermis and epidermis = blister

Skin colour

Melanin

- Secreted from melanocytes
- Made from tyrosine
- Yellow-reddish brown-black pigment – colour difference due to type and amount of melanin produced
**Sebaceous Glands**

- Secrete oil, sebum
- Found everywhere but palms and soles – **no sebaceous glands in THICK skin**
- Usually secreted into hair follicle, sometimes through pore on skin
- Sebum softens and lubricates hair and skin, prevents brittleness, slows water loss and is a bactericidal (kills bacteria)
- Stimulated by hormones androgen
- Cause of acne

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**Hair Follicle**

- Extends from epidermis into dermis (and maybe to hypodermis in the scalp)
- Hair bulb, hair root and hair shaft
- Each hair follicle has an associated sebaceous gland and arrector pili muscle – forms a **Pilosebaceous unit**

**Hair bulb and Arrector Pili**

- Papilla – nipple of dermis with capillaries and nerve endings that protrude into hair bulb = nourish
- Wall – outer connective tissue root sheath and inner epithelia root sheath
- Hair bulb = **growth zone** of hair