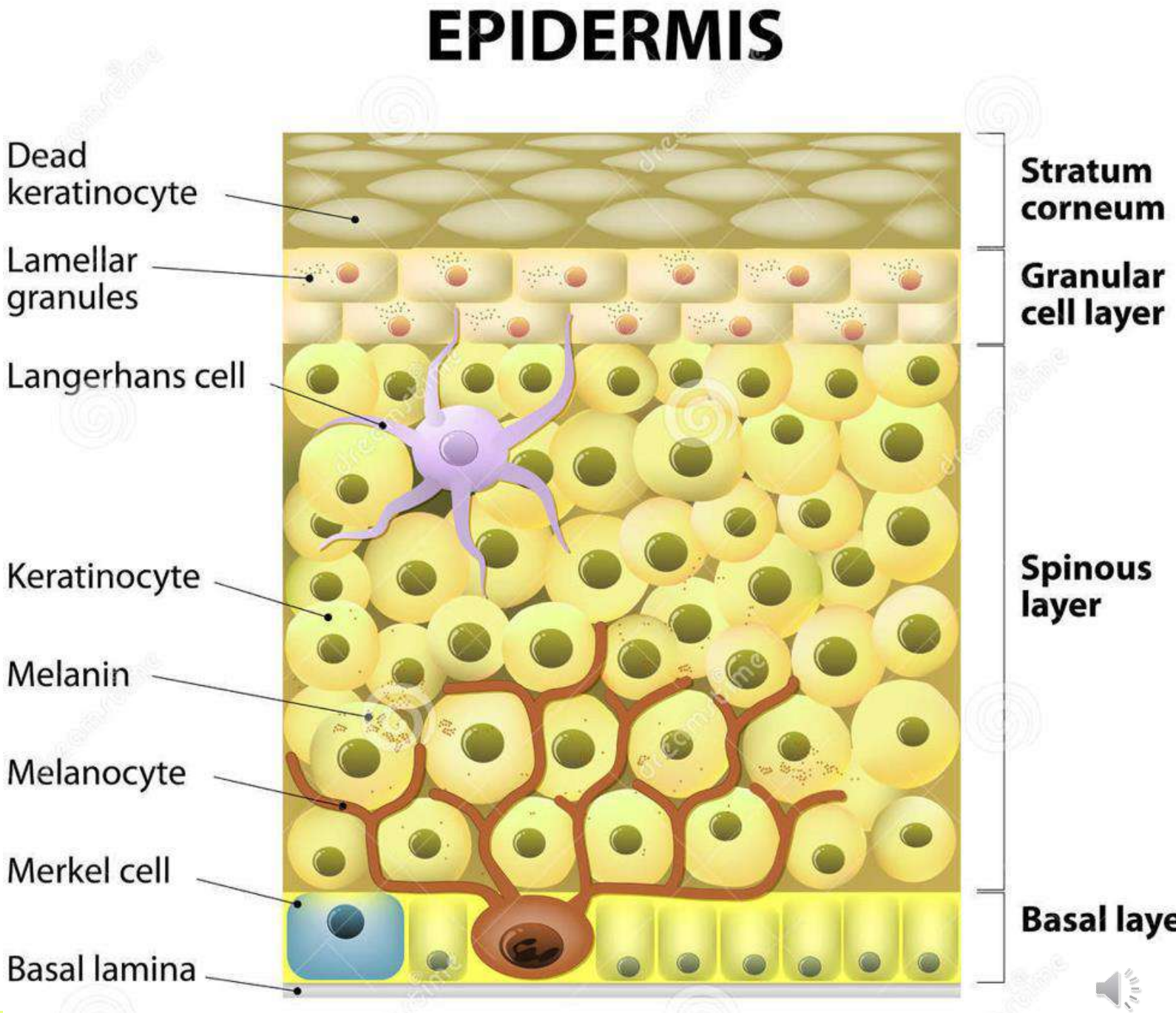


The Skin

- Structure
- Function
- Disorders

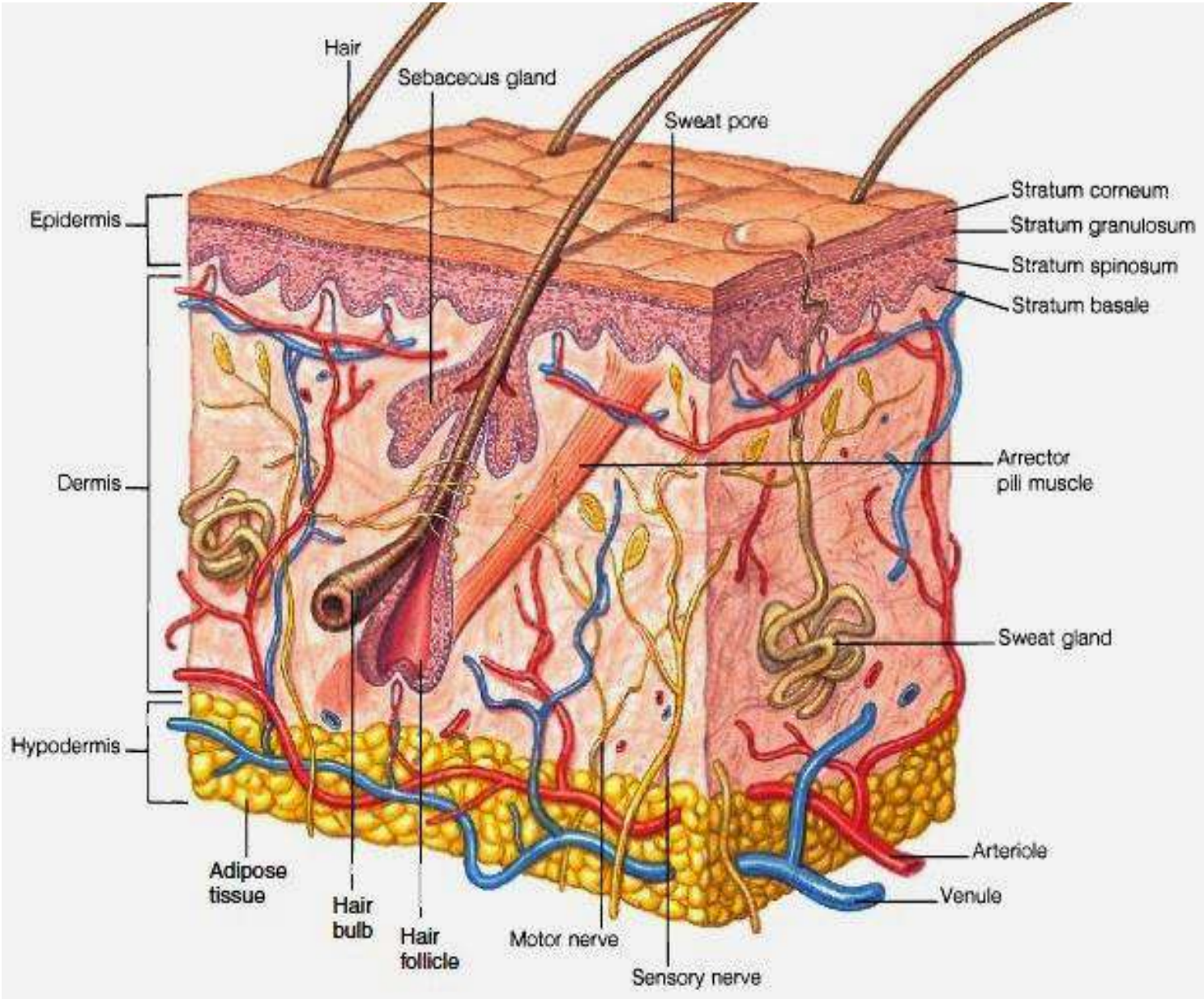


- Most superficial layer
- Stratified keratinised squamous epithelium
- Thickest on palms of hands and soles of feet
- No blood vessels
- Constant shedding and replacement (about 40 day cycle)



Dermis

- Strong collagen and elastic fibres
- Contains blood vessels, sensory nerve endings and sweat glands, hair follicles



Subcutaneous layer

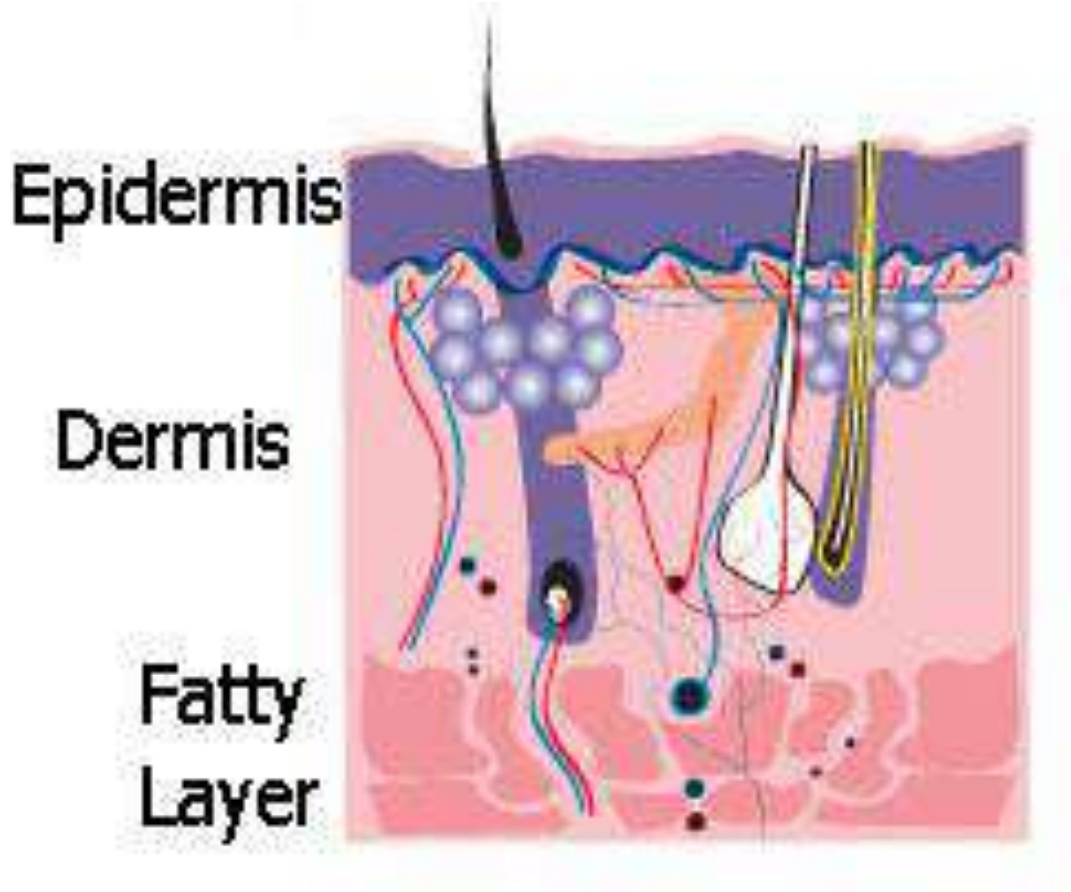
- Adipose (fatty) tissue
- Hypodermis - not part of the skin
- Function:
  - Control body temperature
  - Fat storage
  - Attaching the dermis to muscles and bones

Skin

The biggest organ in the human body

- **Function of the skin**
- **S**ecretion
- Heat regulation
- **A**bsorption
- **P**rotection
- **E**limination
- **S**ensation
- **V**itamin D formation
- **M**elanin formation

(***SHAPESVM)***



Common skin conditions


ECZEMA
PSORIASIS

Acne Rosacea

Causes:

- Heat
- Sun
- Alcohol
- Spicy food

- Not contagious



Acne vulgaris

Causes:

- Hormone imbalance
- Excess oil production
- Bacteria

- Not contagious



Warts

Cause:

- HPV Virus

- Highly contagious



Herpes simplex

- Virus
- Small painful blisters turn to open sores
- Virus stays for life
- Mouth / genitals
- Highly contagious



Herpes zoster



- Varicella zoster virus
  - **Shingles/ chicken pox**
- Highly contagious

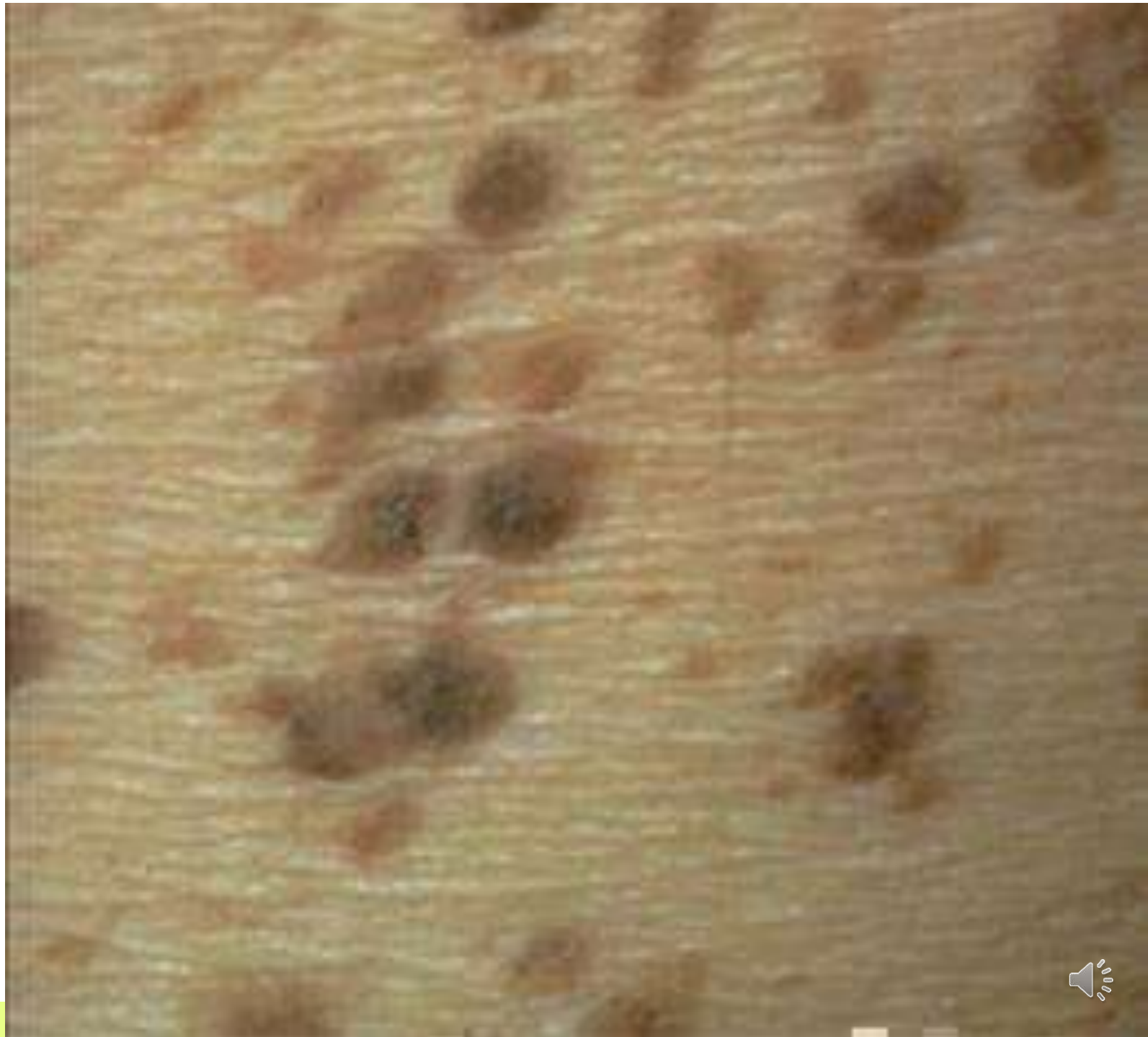
Tinea pedis/ athlete's foot

- Fungal infection
- Flaky, itchy, red
- Highly contagious



Seborrheic keratosis

- One of the most common noncancerous skin growths
- Not contagious



Folliculitis

- Hair follicles become inflamed
- Usually bacterial or fungal infection



Basal cell carcinoma

- Carcinoma – cancer of the epithelial tissue
- Begins in the basal cells (lower part of epidermis)
- Usually develops on sun-exposed parts of the body
- Slow-growing, least dangerous skin cancer



Squamous cell carcinoma

- Second most common form of skin cancer
- Develops in the squamous cells (epidermis)
- Usually not life-threatening, though it can be aggressive
- Untreated squamous cell carcinoma of the skin can grow large or spread to other parts of the body



Melanoma

- Develops from pigment-containing cells, (melanocytes)
- If recognized and treated early, it's almost curable
- It it's not, it can spread and be fatal

Risk factor:

- Fair skin
- History of sunburn
- Family history
- Having many moles
- Weakened immune system

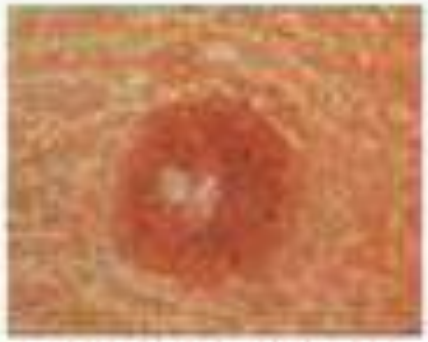
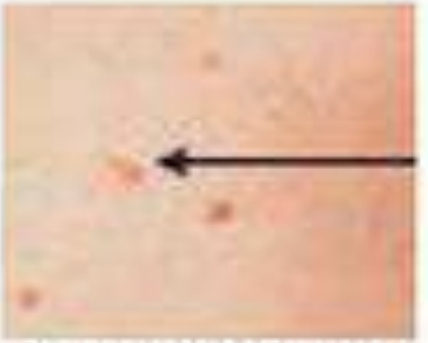
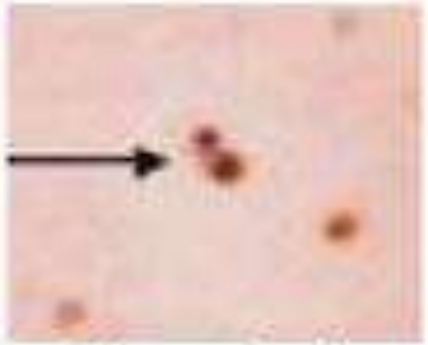


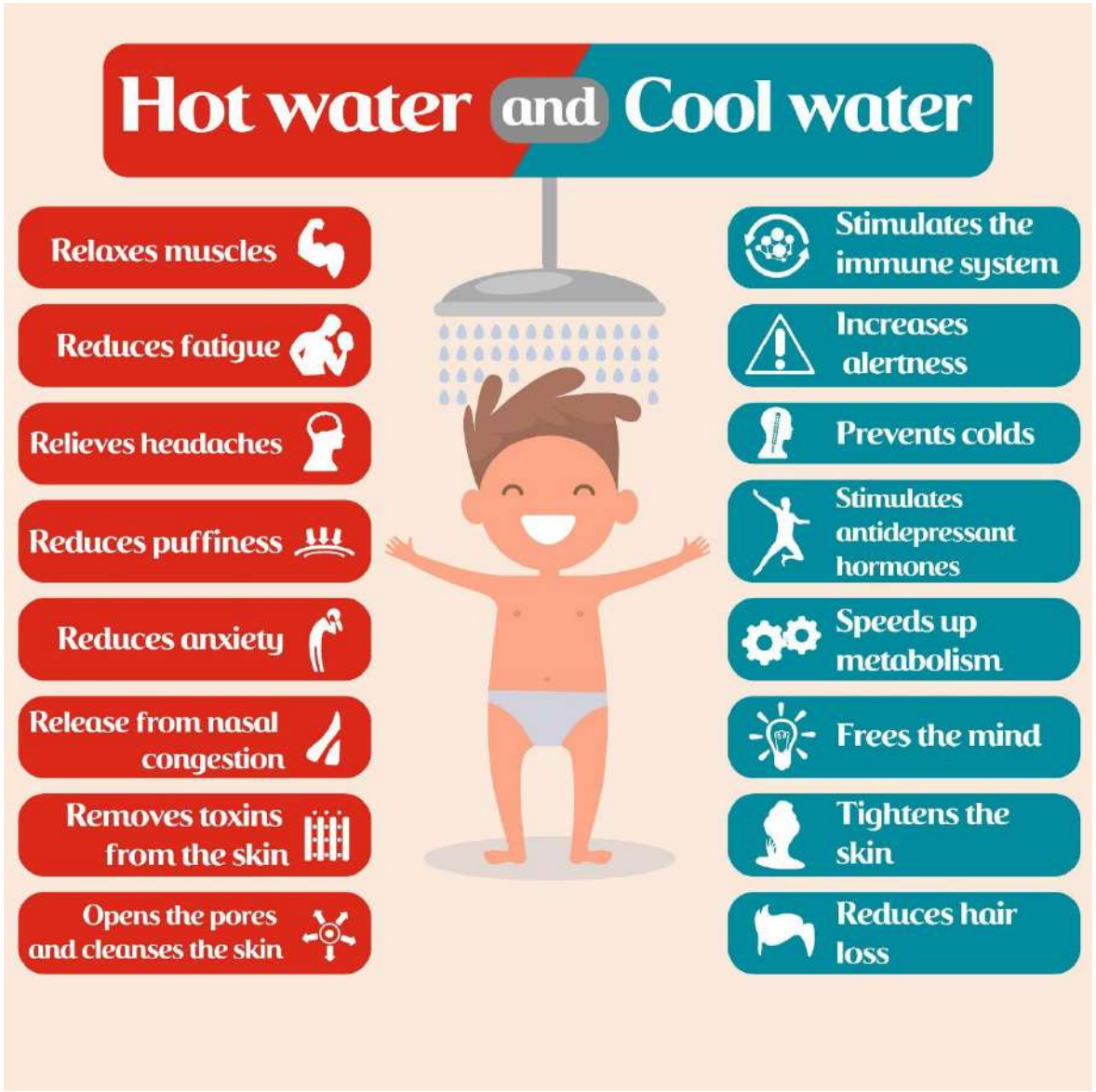


BENIGN



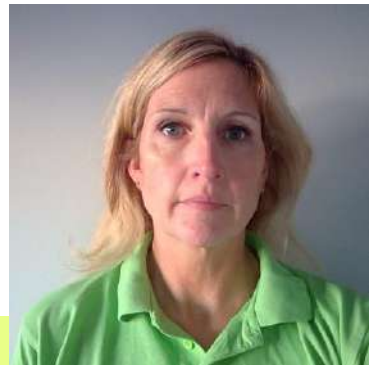
MALIGNANT

	A Asymmetry	B Border	C Color	D Diameter	E Evolving
NORMAL	 Symmetrical	 Borders Are Even	 One Color	 Smaller Than 1/4 Inch	 Ordinary Mole
MELANOMA	 Asymmetrical	 Borders Are Uneven	 Multiple Colors	 Larger Than 1/4 Inch	 Changing in Size, Shape and Color


Hot water and Cool water
Relaxes muscles
Reduces fatigue
Relieves headaches
Reduces puffiness
Reduces anxiety
Release from nasal congestion
Removes toxins from the skin
Opens the pores and cleanses the skin
Stimulates the immune system
Increases alertness
Prevents colds
Stimulates antidepressant hormones
Speeds up metabolism
Frees the mind
Tightens the skin
Reduces hair loss

Skin recap

- Structure
  - Epidermis – 5 layers
  - Dermis – blood, nerves, sweat glands, hair follicles, sebaceous glands, lymphatic capillaries
  - Hypodermis – adipose tissue
- Functions
  - SHAPESVM
- Disorders

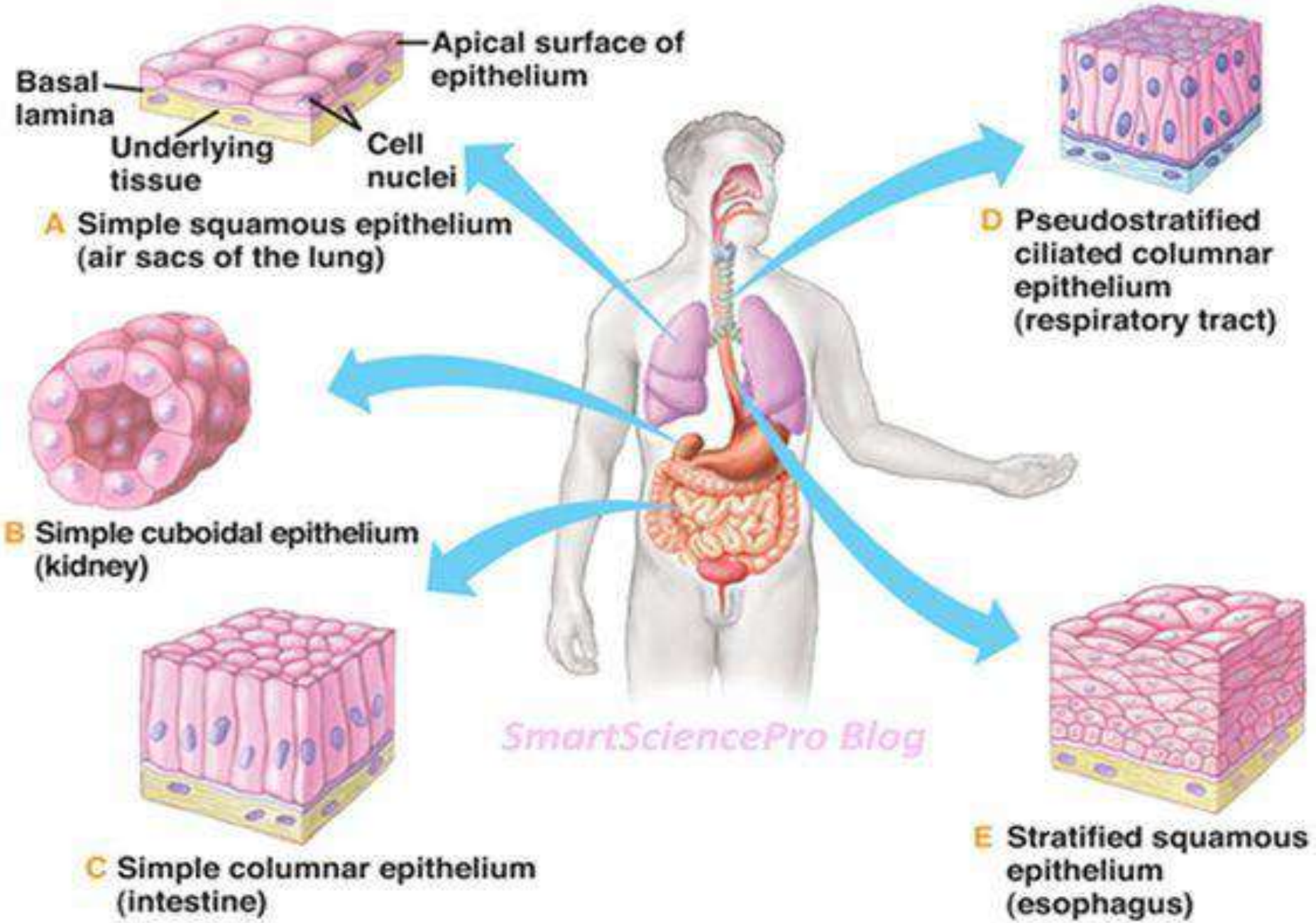




Appendix






Basal lamina
Apical surface of epithelium
Underlying tissue
Cell nuclei
A Simple squamous epithelium (air sacs of the lung)
D Pseudostratified ciliated columnar epithelium (respiratory tract)
B Simple cuboidal epithelium (kidney)
C Simple columnar epithelium (intestine)
E Stratified squamous epithelium (esophagus)
SmartSciencePro Blog

Structure of epidermis

- Stratum corneum-surface: hardened, dead cells
- Stratum lucidium-clear layer: denucleated cells, not completely hard
- Stratum granulosum-granular: layer distinct nucleus, membranes are dying
- Stratum spinosum-prickle cell layer: living membrane are intact
- Stratum germinativum-basal layer: primary site of cell division