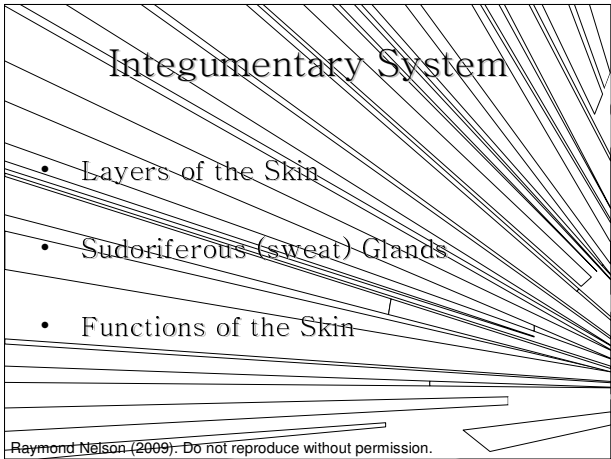


THE INTEGUMENTARY SYSTEM

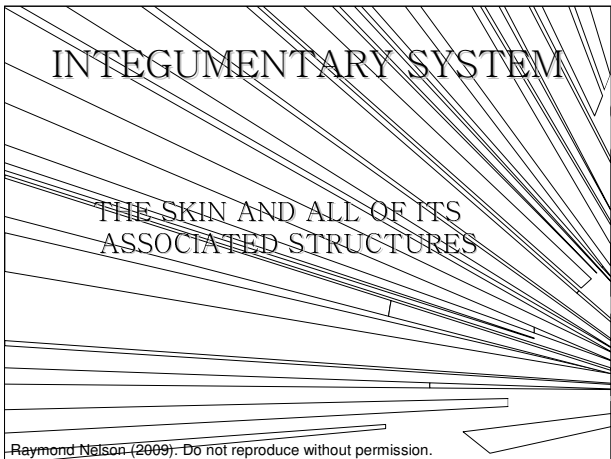
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Integumentary System

- Layers of the Skin
- Sudoriferous (sweat) Glands
- Functions of the Skin

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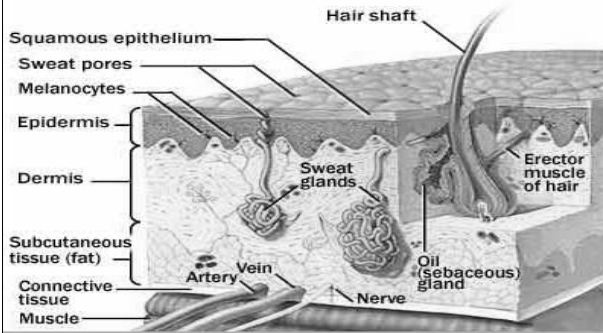


INTEGUMENTARY SYSTEM

THE SKIN AND ALL OF ITS
ASSOCIATED STRUCTURES

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LAYERS OF THE SKIN



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EPIDERMIS

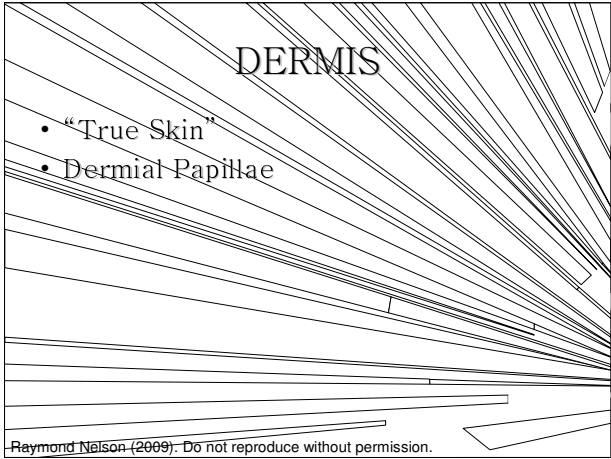
- Outermost portion of the skin
 - Subdivided into Strata
- Stratum Basale/Stratum Germinativum
- Keratin
- Stratum Corneum
- Exfoliation
- Melanin
- Melanocytes

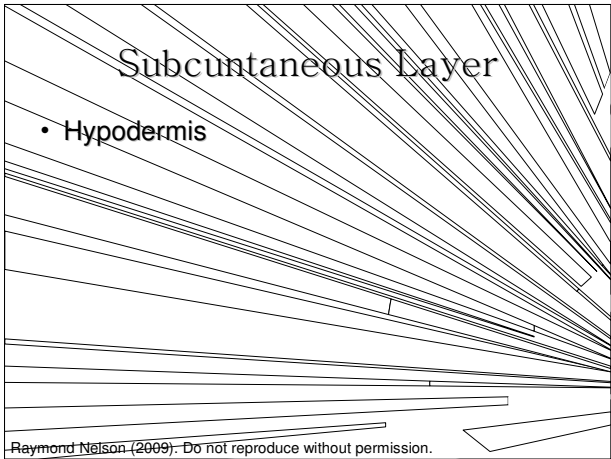
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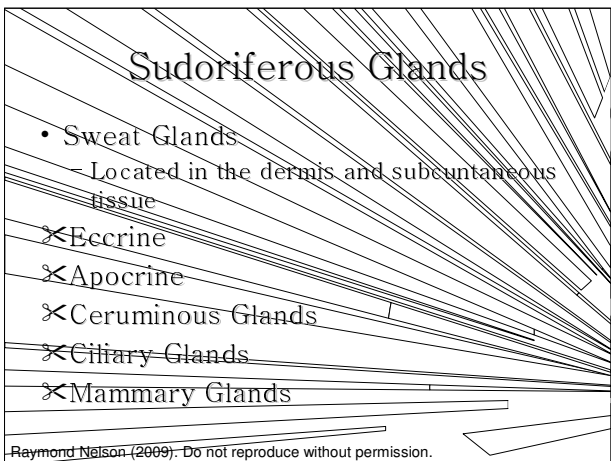
Everything You Ever Wanted to Know About Sweating

- Eccrine glands located throughout the body
 - Denser concentrations in palms and feet
 - Enervated by Acetylcholine
 - Regulated in part by the Hypothalamus
- Apocrine glands located mainly in private areas
 - Cholinergic and hormonal (adrenergic) activation
 - Hair follicles
 - Foster production of bacteria (BO)
 - Thought to play a role in mating for some species
- Three main types of sweating
 - emotional sweating – fear and anxiety stimulate cholinergic activity in the hypothalamus
 - thermoregulatory sweating – hypothalamic acetylcholine signals
 - gustatory sweating – spicy food
- Sweating Disorder
 - Hyperhidrosis (Reynaud's) – excessive sweating (axillary or palmar)
 - Frey's syndrome – facial sweating in response to salivatory stim

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FUNCTIONS OF THE SKIN

- Protects against infection
- Protects against dehydration
- Regulates body temperature
- Collects sensory information

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Regulates Body Temperature

- Vessels in skin constrict in cold weather
- Vessels dilate to cool the body
- Role of the sweat glands

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Collects Sensory Information

- One of the chief sensory organs in the body
- Meissner corpuscle
- Pacinian corpuscle

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OTHER ACTIVITIES OF THE SKIN

- Absorption
- Excretion
- Vitamin D
- The skin does not “breathe”

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