

SUBJECT: SKIN STRUCTURE & GROWTH

LESSON OBJECTIVES:

Upon completion of the lesson, the student will be able to.

- Describe the structure and composition of the skin
- List the functions of the skin.

Inspirational thought for the day: “Disciplining yourself to do what you know is right and important, although difficult, is the high road to pride, self-esteem, and personal satisfaction.” – Brain Tracy

I) ANATOMY OF THE SKIN

- A) Dermatology
- B) Dermatologist
- C) Esthetician

II) Histology of the skin

- A) Skin specifics
 - 1) Protects muscles, bones, nerves
 - 2) Barrier against environment
 - 3) Eyelids have thinnest skin
 - 4) Soles of feet are thickest
 - 5) Continued pressure causes callus
- B) Healthy skin
 - 1) Slightly moist
 - 2) Soft and flexible
 - 3) Smooth and fine-grained texture
 - 4) Possesses a slightly acid reaction
- C) Appendages of the skin
 - 1) Hair
 - 2) Nails
 - 3) Sweat and oil glands
- D) Two divisions
 - 1) Epidermis
 - 2) Dermis
- E) Epidermis
 - 1) Stratum germinativum
 - 2) Stratum spinosum
 - 3) Stratus granulosum
 - 4) Stratus lucidum
 - 5) Stratum corneum
- F) Dermis
 - 1) Papillary layer
 - 2) Reticular layer
 - 3) Subcutaneous tissue
- G) How skin is nourished
- H) Nerves of the skin
 - 1) Motor nerve fibers
 - 2) Sensory nerve fibers
 - 3) Secretory nerve fibers
- I) Sense of touch
 - 1) Touch, pain, heat, cold, pressure

- J) Skin color
 - 1) Melanin
 - (a) Pheomelanin
 - (b) Eumelanin
 - (c) Hereditary
- K) Strength and flexibility of skin
 - 1) Collagen
 - 2) Elastin
- L) Glands of the skin
 - 1) Sudoriferous or sweat glands
 - 2) Sebaceous or oil glands
- M) Functions of the skin
 - 1) Protection
 - 2) Sensation
 - 3) Heat regulation
 - 4) Excretion
 - 5) Secretion
 - 6) Absorption

III) MAINTAINING HEALTH OF SKIN

- A) Vitamins and supplements
 - 1) Aid in healing, softening, and fighting diseases of the skin
 - 2) Taking vitamins internally is best to support healthy skin
- B) Vitamin A
 - 1) Aids in health, function, and repair of skin cells
 - 2) An antioxidant that can help prevent skin cancer
 - 3) Can improve skin's elasticity and thickness
 - 4) Retinoic acid or Retin-A
- C) Vitamin C
 - 1) Needed for proper repair of skin and tissues
 - 2) Speeds up healing process
 - 3) Promotes collagen production
- D) Vitamin D
 - 1) Promotes healthy skin
 - 2) Promotes rapid healing of skin
 - 3) Also supports bone structure
- E) Vitamin E
 - 1) Helps to heal damage to skin's tissues
 - 2) Topically, it can help heal structural damage on skin
- F) Water and the skin
 - 1) Composes 50% to 70% of body's weight
 - 2) Sustains the health of the cells
 - 3) Aids in elimination of toxins and waste
 - 4) Helps regulate body's temperature
 - 5) Aids in proper digestion
- G) Water consumption
- H) Dehydration
 - 1) Slows metabolism
 - 2) Drinking lots of water can stop hunger pangs dieters
 - 3) Lack of water causes fatigue
 - 4) 2% drop in body water can trigger fuzzy memory