

# INTEGUMENTARY SYSTEM FUNCTIONS

PRIMARY FUNCTION	PHYSIOLOGICAL DESCRIPTION
<b>Protection</b>	Acts as a physical, chemical, and biological barrier against UV radiation, pathogens, and mechanical trauma.
<b>Thermoregulation</b>	Regulates body temperature through sweat production (evaporative cooling) and vasodilation/vasoconstriction of dermal vessels.
<b>Sensation</b>	Contains sensory receptors for touch, pressure, pain, and temperature, allowing interaction with the external environment.
<b>Excretion</b>	Eliminates small amounts of metabolic wastes (urea, salts, and water) through perspiration.
<b>Vitamin D Synthesis</b>	Synthesizes Vitamin D precursor molecules when exposed to ultraviolet (UV) radiation.
<b>Water Retention</b>	Lipids in the epidermis prevent dehydration and excess water absorption while submerged.