SKIN AND BODY MEMBRANES: The Integumentary System

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The Integumentary System

- Keeps water and precious molecules in the body
- Pliable and tough

Functions:

Desiccation	Contains a water-resisting glycolipids and keratin (prevents drying out)
Body Heat loss	Activate sweat glands and allow blood to flush into the skin capillary beds (heat radiate from skin surface)
Heat Retention	Not allowing blood to flush into skin capillary beds
Excrete UREA /URIC Acid	Through PERSPIRATION
Synthesizes Vitamin D	Modified molecules in skin converts to Vitamin D by sunlight (Epidermal cells produce cholecalciferol (Vitamin D3)
Body Membranes COVERS the surface. LINES body cavitie FORMS protection sheet organo 396	
TWO MAJOR GROUPS:	

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TWO MAJOR GROUPS:

1. Epithelial Membrane

- Cutaneous Membrane (Skin/Integumentary System)
 - Superficial epidermis
 - Keratinizing STRATIFIED SQUAMOUS EPITHELIUM
 - DERMIS made up of dense (FIBROUS) connective tissues.

• Mucous Membrane

- Composed of Epithelium resting on the loose connective membrane (lamina propia)
- Lines all body cavities that open to the exterior (Respiratory, digestive, urinary and reproductive tract)
- MOIST membranes are "bathed" in secretion
- Adapted to ABSORPTION or SECRETION (Respiratory and Digestive tract)

The mucous membrane contains the

- i. Stratified squamous epithelium MOUTH and ESOPHAGUS
- ii. Simple columnar epithelium DIGESTIVE tract
- Serous Membrane
 - Serosa lines body cavities that are CLOSED to the exterior
 - Composed of layer of SIMPLE SQUAMOUS EPITHELIUM resting over thin layer of AREOLAR Connective tissues

Occurs in pairs

- i. Parietal layer Lines a specific portion of the wall of the ventral body cavity.
- ii. Visceral layer covers the outside of the organ in a cavity.
- Serous fluid