Membranes

Page 1

Membranes

Sheet-like organs that form protective coverings and barriers in the body

• Most membranes contain a layer of epithelial tissue over a layer of dense connective tissue

• The four major types of membranes are cutaneous, mucus, serous, and synovial

Fig 4.4

Mucus membrane (mucosa)

A moist membrane type that forms the inner lining of organs that open to the outside of the body

• Example: The mouth, the nose, the lungs, the digestive organs, and the bladder are all lined with mucus membrane

• Functions as a slippery surface to aid the movement of substances through the organ

 $\sqrt{\rm In}$ some organs, the mucosa also absorbs and secretes materials

• Mucus membranes stay moist because they contain Goblet Cells (cells that secrete a slippery mucus)

Fig 4.4

Membranes

Page 2

Synovial membranes

A membrane type that encloses and lubricates joints

• Joint cavities (the space between the bones of a joint) are filled with synovial fluid (a slippery liquid that lubricates the joint)

• Synovial membranes secrete the synovial fluid and seal it inside the joint cavity

• Synovial membranes are made of dense connective tissue (no epithelial tissue)

Fig 4.4

Serous membrane (serosa)

A fluid-filled membrane type that surrounds many organs

 $\sqrt{\text{Serous fluid}}$ = The fluid that fills the serosa

• Function = To support and cushion the organ while allowing movement of the organ

 $\sqrt{\text{Example: The lungs, heart, and intestines are surrounded by serosas}}$

• One face of the serosa attaches to the organ and one face attaches to the cavity wall

 $\sqrt{Visceral serosa}$ = The face attached to the organ

 $\sqrt{\text{Parietal serosa}}$ = The face attached to the cavity wall Figs 1.17 and 4.4