

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

√ In some organs, the mucosa also absorbs and secretes materials

- Also functions to protect the organ from the substances passing through the organ
- Mucus membranes stay moist because they contain Goblet Cells (cells that secrete a slippery mucus)

Fig 4.4

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

✓ Serous fluid = The fluid that fills the serosa

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

✓ 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

✓ Visceral serosa = The face attached to the organ

✓ Parietal serosa = The face attached to the cavity wall

Figs 1.17 and 4.4