

Tissues

Epithelial Tissue

Epithelial tissue covers the whole surface of the body. It is made up of cells closely packed and ranged in one or more layers. This tissue is specialised to form the covering or lining of all internal and external body surfaces. Epithelial tissue that occurs on surfaces on the interior of the body is known as endothelium. Epithelial cells are packed tightly together, with almost no intercellular spaces and only a small amount of intercellular substance. Epithelial tissue, regardless of the type, is usually separated from the underlying tissue by a thin sheet of connective tissue; basement membrane. The basement membrane provides structural support for the epithelium and also binds it to neighbouring structures.

Squamous Tissue

Squamous tissue is a type of epithelial tissue and is classified as either simple squamous or stratified squamous. Epithelial tissue is the body tissue that lines structures within the body such as glands. It lies on top of connective tissue and is made up of cells that secrete, absorb and transport, depending upon the type of epithelial tissue.

Simple squamous tissue looks like thin, flat circles tightly formed together. It is named simple squamous tissue because it forms in a single layer and can be penetrated. Simple squamous tissue functions include filtration or diffusion and are most often found in capillaries and the pulmonary alveoli which are located in the lungs. This is made easier because the flat cells ease friction and allow fluids to flow back and forth between the membranes.

Stratified squamous epithelial tissue is more comprehensive than simple squamous tissue but does include the same flat, circular cells in its base layer. Subsequent layers of stratified squamous tissue adhere to the base layer to preserve the structure. Though not all layers will look thin and flat because inner layers can actually be different types of tissue, the medical community names tissue based on the outer layer so the entire section will be named stratified squamous tissue.

