

Connective Tissues

■ Main classes

- Connective tissue proper
- Blood – Fluid connective tissue
- Cartilage
- Bone tissue

■ Loose Connective Tissue

- Areolar
- Reticular
- Adipose

■ Dense Connective Tissue

- Regular
- Irregular
- Elastic

Areolar Connective Tissue

■ Function

- Wraps and cushions organs
- Holds and conveys tissue fluid
- Important role in inflammation
- Main battlefield in fight against infection

Adipose Tissue

- Closely packed adipocytes
- Have nucleus pushed to one side by fat droplet Function
- Provides reserve food fuel
- Insulates against heat loss
- Supports and protects organs

Dense Irregular Connective Tissue

■ Location

- Dermis of skin

Dense Regular Connective Tissue

■ Location

- Tendons and ligaments
- Cartilage
- Contains no blood vessels or nerves

Bone Tissue

■ Function

- Supports and protects organs
- Provides levers and attachment site for muscles
- Stores calcium and other minerals
- Stores fat
- Marrow is site for blood cell formation

Blood Tissue

■ Description

- red and white blood cells
in a fluid matrix

■ Function

- transport of respiratory
gases, nutrients, and wastes

■ Location

- within blood vessels

Membranes

■ Cutaneous membrane – skin

■ Mucous membrane

- Lines hollow organs that open to surface of body

■ Serous membrane – slippery membranes

- Simple squamous epithelium lying on areolar connective tissue

■ Synovial membranes – lining joint cavities

- Loose connective (areolar) + simple squamous epithelium
- Secretes fluid (synovial fluid) which lubricates, protects & cushions joint structures