

Cartilage Connective Tissue

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Objective

- Describe the characteristics and functions of cartilage.
- Discuss the structure, function and distribution of hyaline cartilage.
- Discuss the interstitial and appositional growth of cartilage.

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Cartilage

About Cartilage

- Semi rigid connective tissue (flexible & resilient).
- Contains cells scattered throughout abundant matrix of protein fibers.
- Chondroblast produce matrix of cartilage => become chondrocytes & occupy lacunae.

Functions

- Supporting soft tissue (eg. cartilage rings in the trachea).
- Providing a gliding surface at articulations (joints).
- Providing a model for the formation of most bones in the body.

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Cartilage

Types

- **Hyaline**
 - clear as glass
 - found in trachea, larynx, joints, epiphyseal plates & fetal skeleton.
- **Fibrocartilage**
 - extracellular matrix with thick collagen fibers.
 - help resist stretching & compression.
 - shock absorber
- **Elastic**
 - highly branched elastic fibers.
 - found in regions that requires high flexible form of support (ear, external auditory canal, epiglottis).

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