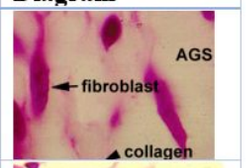
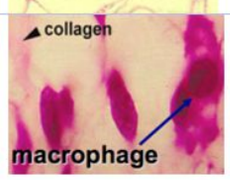
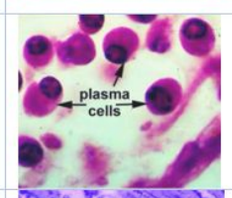
**Connective Tissue:** Connective tissue is found between all tissues of the body - epithelium, muscle and nerves. Composition of the connective tissue dictates its properties and roles in different parts of the body. BDS1 primarily focuses on the different types that occur within the oral mucosa between supportive structures like gingiva versus flexible soft tissues like the tongue and the relationship with functionality.

| CT Cell | Description | Diagram |
|---|---|---|
| **Fibroblast** | ER, mitochondria for synthesis of EC matrix, collagen<br><br>Wound healing |  |
| **Adipocyte** | Storage and insulation |  |
| **Macrophage** | Phagocytosis<br>Antigen presenting cells<br>Cytokine production |  |
| **Plasma cell** | Produce specific antibodies for each antigen encountered |  |
| **Mast cell** | Release chemical mediators heparin and histamine for inflammatory response |  |
| **Leukocytes** | Lymphocyte – Principal immune cell |  |
| | Neutrophil – Accumulate in bacterial inflammation |  |
| | Eosinophil – Accumulate in parasitic and allergic reactions |  |

## Cells

## Components of CT

1. Cells
2. AGS
3. Fibres

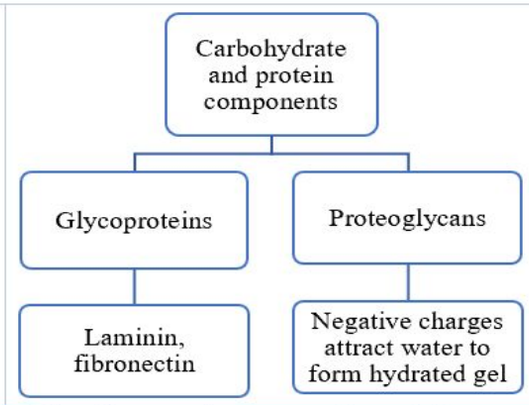
**Classification of CT Cells**

Structural/Storage Cells:
7 – Fibroblasts
9 – Fat Cells

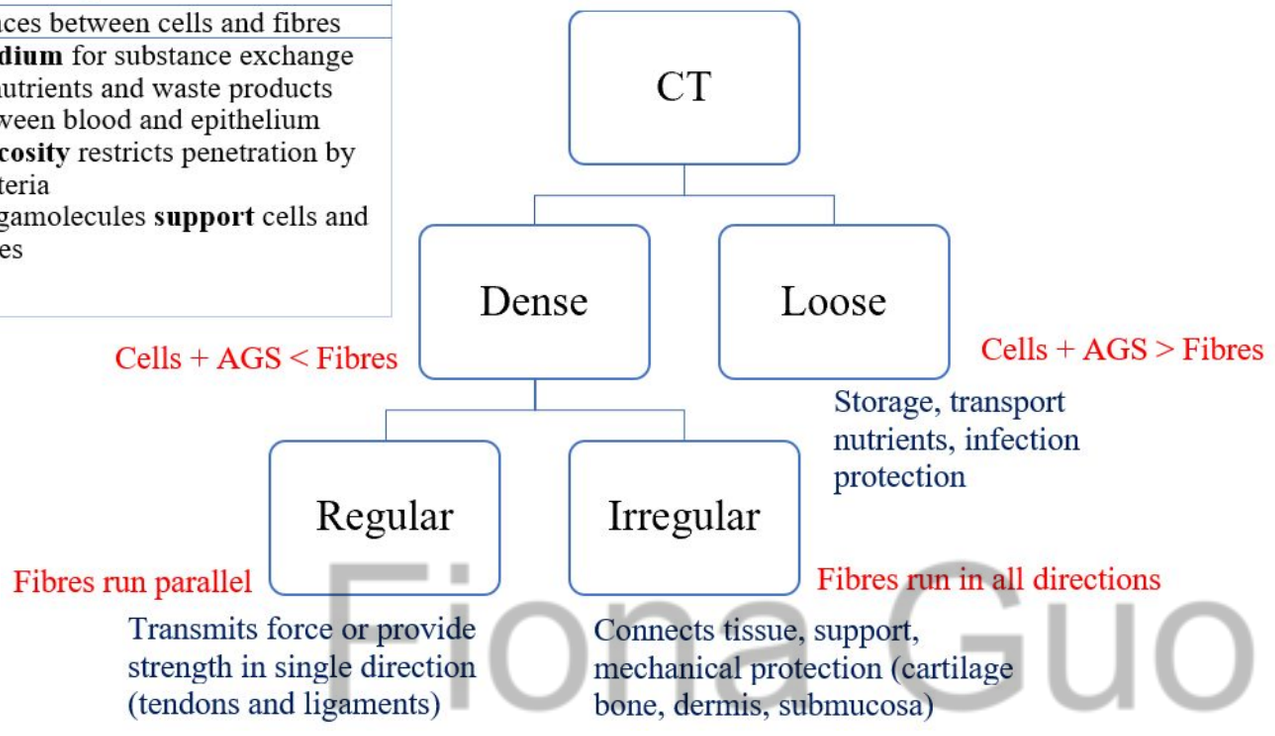
Defence Cells:
8 – Macrophages
10 – Plasma cells
11 – Mast Cells
12 – Leukocytes
13 – Pericytes

Primitive mesenchyme cells not shown


## AGS

| | |
|---|---|
| **Composition** |  |
| **Distribution** | Fills all spaces between cells and fibres |
| **Function** | 1. **Medium** for substance exchange of nutrients and waste products between blood and epithelium<br>2. **Viscosity** restricts penetration by bacteria<br>3. Megamolecules **support** cells and fibres |

## Classification




## Fibres