Forms costal cartilage of the ribs

Thick collagen fibers predominate

Found between vertebrae

Connective Tissue

Some elastic fibers

Major cell type is fibroblast; few elastic fibers

Hyaline

Blood

Maintains pulsatile flow of blood through arteries

Supports the external ear

Walls of large arteries; within the walls of the brachial tubes

Closely packed adipocytes, or fat cells

Transport of respiratory gases, nutrients, wastes, and other substances

Withstands great tensile stress when pulling force is applied in one direction

Within abdomen and in breasts

Primarily irregularly arranged collagen fibers

Marrow inside it is the site for blood cell formation

Supports and protects (by enclosing)

Fibrocartilage

Reticular

Dense Regular

Plays important role in inflammation

Gel-like matrix with all three fiber types

Matrix similar to but less firm than matrix in hyaline cartilage

Found in the dermis of skin

Areolar

Dense

Fibers form a soft internal skeleton that supports other cell types

Primarily parallel collagen fibers

Tendons, most ligaments

Insulates against heat loss and protects organs

Wraps and cushions organs

Elastic

Primarily in embryo

Tensile strength with ability to absorb compressive shock

Allows recoils of tissue following stretching

Contained within blood vessels

Mesenchyme

Covers the ends of long bones in joint cavities

Loose

Network of reticular fibers in a typical loose ground substance

Similar to hyaline cartilage, but more elastic fibers in matrix

Dense regular connective tissue containing high proportion of elastic fibers

Hard calcified matrix containing many collagen fibers

Fibrocartilage

Very well vascularized

Amorphous but firm matrix

Cartilages of the nose, trachea, and larynx

Stores calcium and other minerals and fat

Attaches muscles to bones or to other muscles

Connective Tissue Proper

Supports and reinforces; serves as resilient cushion; resists compressive stress

Dense Irregular

Elastic

Bone

Under the skin; around kidneys and eyeballs

Gives rise to all other connective tissue types.

Cells: fibroblast, macrophages, mast cells, and some white blood cells.

Found in lymphoid organs (lymph nodes, bone marrow, and spleen)

Red and white blood cells in a fluid matrix (plasma)

Adipose

Cartilage

Able to withstand tension exerted in many directions

Provides reserved fuel

Widely distributed under epithelia of body

Major cell type is fibroblast

Provides structural strength

Maintains the shape of a structure while allowing great flexibility