

3rd - Muscular Tissues

A type of animal tissues which is responsible for living organism's movement whether voluntary or involuntary movement. They divide according to the ability of living organisms to control their movement.

Types of muscles:

1- Involuntary muscle (Un-striated muscle or Smooth muscle): -

It consists of bundles of un-striated muscle fibers which are connected with each other by connective tissue as well as it's responsible for Involuntary movement. It exists in blood vessels walls and internal organs like stomach, intestine and rectum.

* Characteristics of un-striated muscle fibers: -

- Spindle cell with sharp sides.
- Uninucleated Cell with a central nucleus.
- Cell Consists of Myofibrils and surrounds by sarcolemma.

2-Voluntary muscles (Striated muscles): -

It consists of cylindrical muscle fibers which are connected with each other by connective tissue. Also, it's responsible for voluntary movement. It exists in muscles attached to skeleton.

* Characteristics of striated muscle fiber: -

- Cylindrical cell.
- Multinucleated cell with a side nucleus.
- Muscles are striated by light and dark stripes.
- Cell consists of Myofibrils and surrounds by sarcolemma.

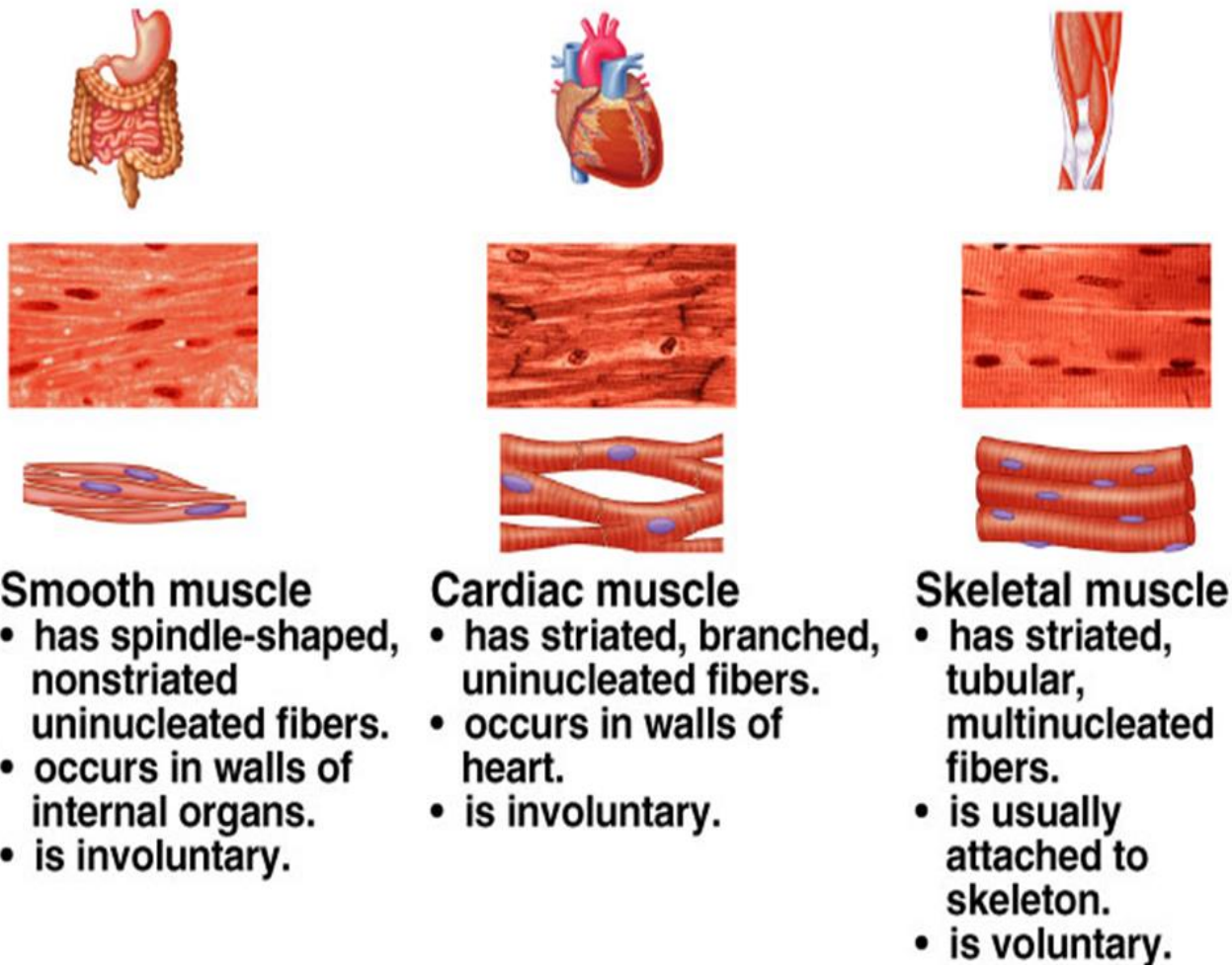
3- Cardiac muscles

It consists of cylindrical muscle fibers which are connected with each other by connective tissue. It exists in heart wall and responsible for heart beats.

*** Characteristics of cardiac muscle fiber: -**

- Cylindrical cell.
- Uninucleated cell with a central nucleus.
- Muscles are striated with light and dark stripes.
- Consists of Myofibrils and surrounds by sarcolemma.
- Striation of cardiac muscles is less clear than striation of voluntary muscles.

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Types of muscles.