



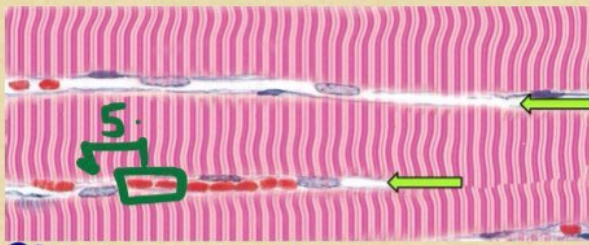
1. *Cross section of skeletal muscle cell.

2. The outlines here are Polyhydral due to the shrinkage during Preparation.

3. Between the orange lines we can see Perimysium surrounds each bundle

4. The Green line → The Endomysium

5. The blue box above indicate the capillary which contain RBCs.



① This is longitudinal section of skeletal muscle cells.

② The nuclei are located peripherally directly under the sarcolemma.

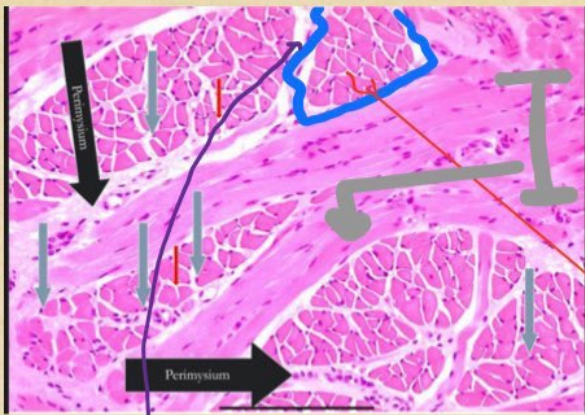
③ The cell is cylindrical in shape because (number 1) ↑

④ The Green Line → The Endomysium
Appear whitish because it's considered as loose type of C.T

⑤ Capillary within Endomysium contain RBCs.

⑥ We don't see sarcolemma under the L.M, because it's thickness more than L.M. Resolution.

⑦ This section is stained so that you will see cells not organelles.



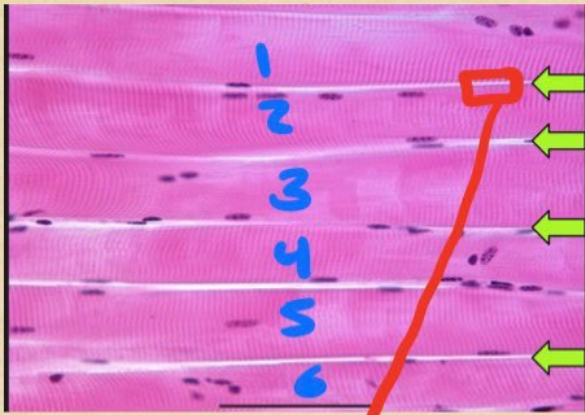
In the blow here you can see Cross Section Throug skeletal muscle cell

* Endomysium

* Perimysium

* In The Gray you can see longitidunal section of skeletal muscle cell.

* The cytoplasm apper Acidophile, because inside Sarcoplasm you can find Actin, myosin and proteins formiy m-line, Z-line Which are stained with eosin.

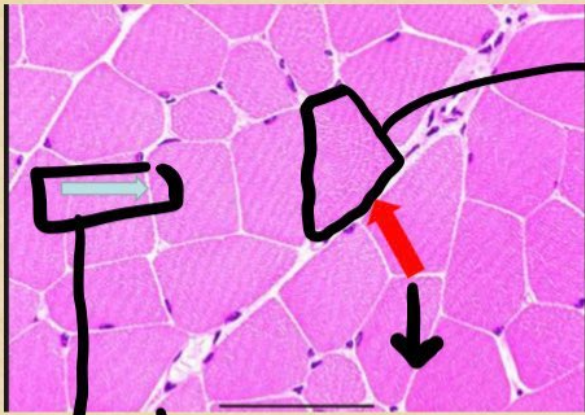


* here you can
see 6 skeletal

muscle fibres

* nuclei are located
Peripherally.

Endomysium

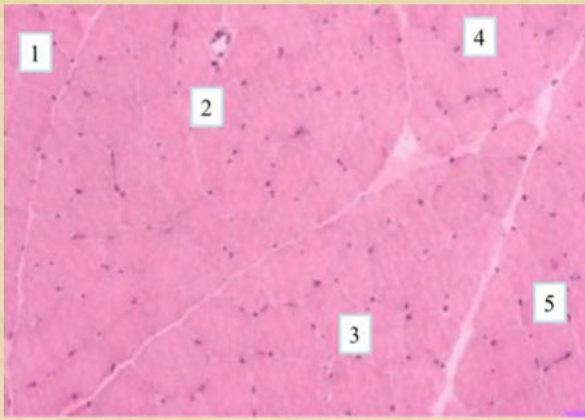


* Polyhedral due
to shrinkage during
histological preparation.

* cross section.

└ endomysium

* The red arrow → perimysium

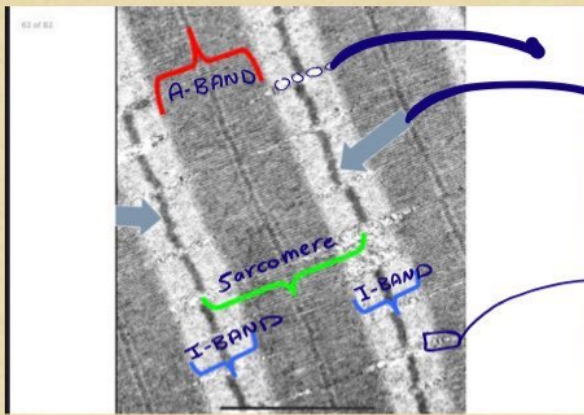


→ Here you can see 5 Fascicles

→ The cross-sectional profiles of skeletal muscle cells

almost appear same in size.

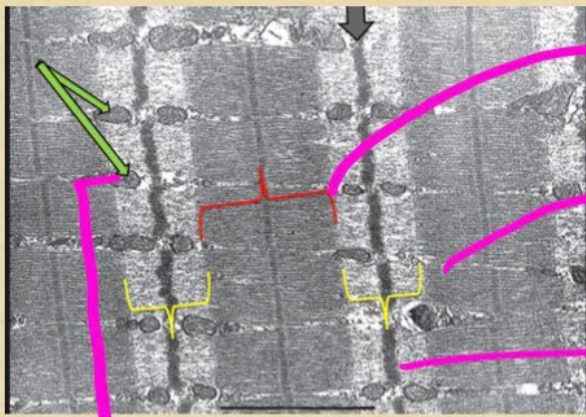
Tubules of sarcolemma



Z-line

T-tubule

The myofibril here are located parallel to each other and above each other in order to make cross-stratations inside skeletal muscle cells



A-BAND

T-BAND

Z-line

mitochondria.

muscle spindle = stretch Rec
= proprio Rec = sensory



Receptor =
intrafused
Receptor

multi-nucleated

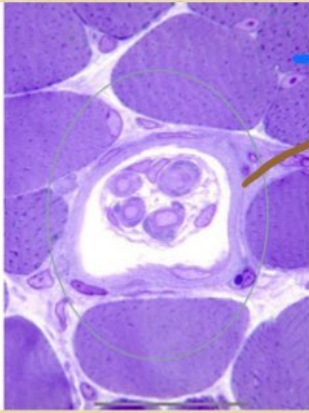
Extrafusal → produce
the contraction.

Thicker Type of Perimysium

Few numbers of skeletal muscle
cells.

* Small in diameter
* centrally located.

Muscle spindle

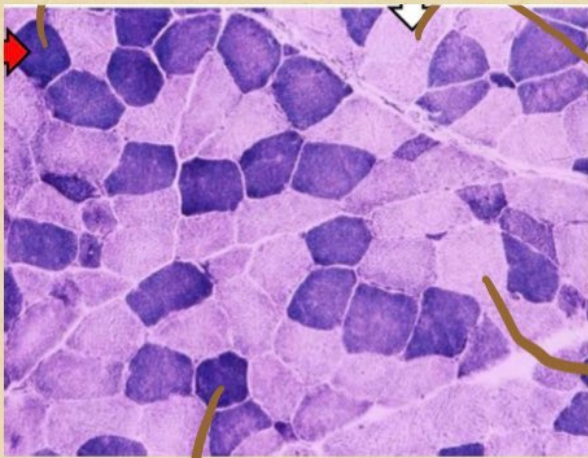


NOT H & E

Papanicolaou

x This stain
for mitochondrial
enzyme





Few mitochondria

Rich in mitochondria.

White fiber

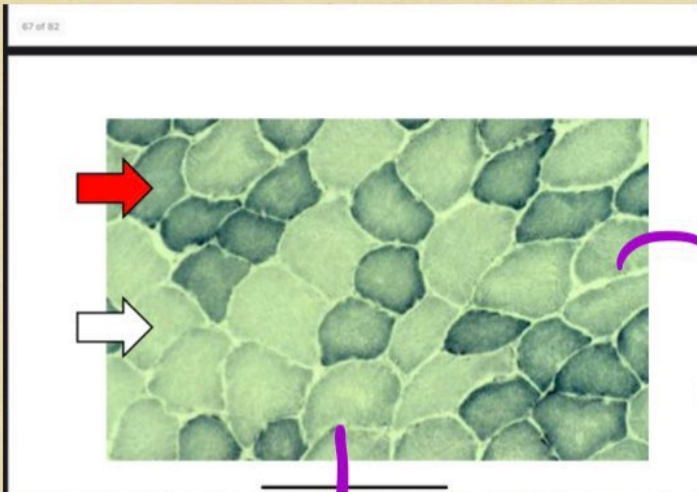
Red fiber

* IF U use PAS Stain or stain specific for glycogen. ∴

The Red fiber → Darkly
 „ White „ → Lightly

* IF U use stain specific for ATP Activity ∴

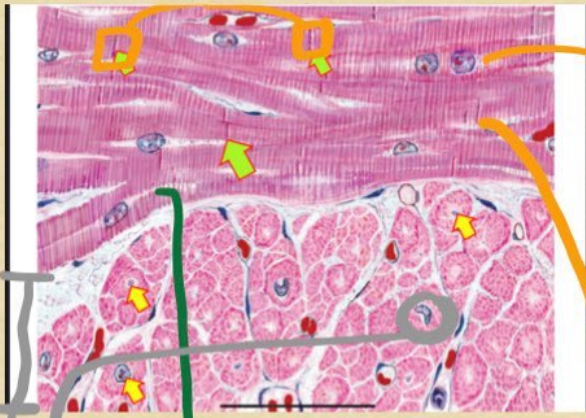
The Red → Darkly
 „ White → Lightly.



Red fiber
Small in
diameter

white fiber (large in diameter)

Intercalated risk



white because the cardiac muscle cell store high amount of lipids and glycogen to produce energy.

Different in size because

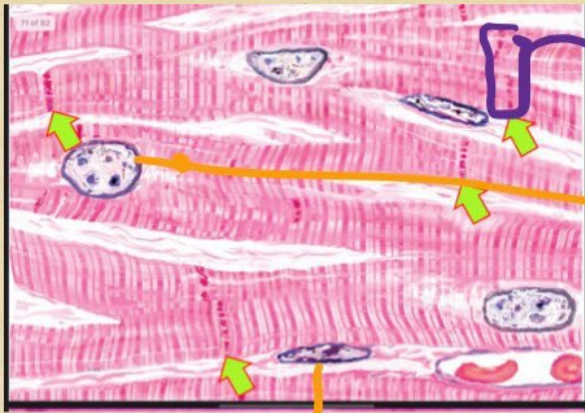
The cardiac muscle cells are branching
 ↳ EPIMYSIUM

CROSS SECTION:-
 most of cells don't contain nuclei

↳ Centrally located nuclei ✱



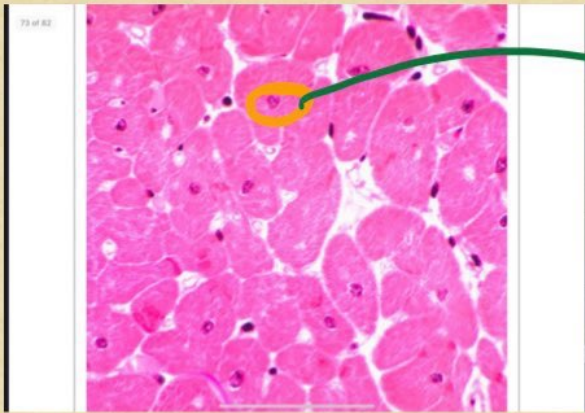
Intercalated
disk.



Intercalated
disk

nucleus here is
Rounded centrally
located.

The nucleus inside Endomysium
is nucleus inside fibroblast.



The nucleus
is centrally
located →
cardiac muscle
cell

Two cardiac muscle cells



Inter-calated disk.

T-Tubule
because it's
located in
area of
Z-line.

mitochondria

Cross striations in cardiac
are less clearly.

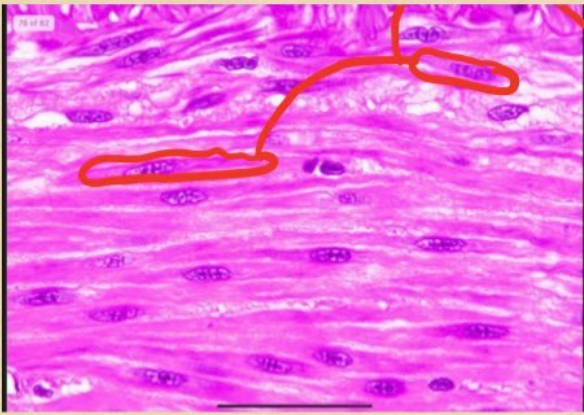


triad

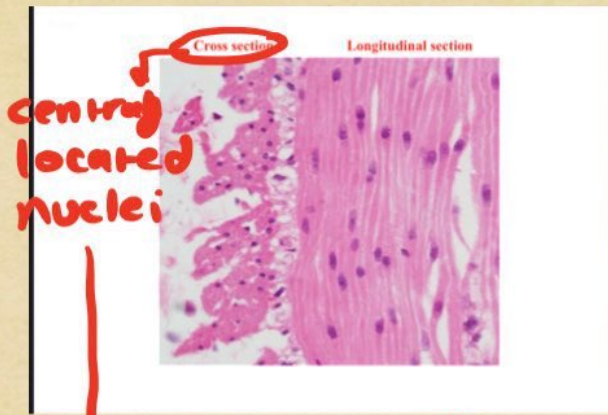
T-Tubule.

Z-line

high and large number
in mitochondria.

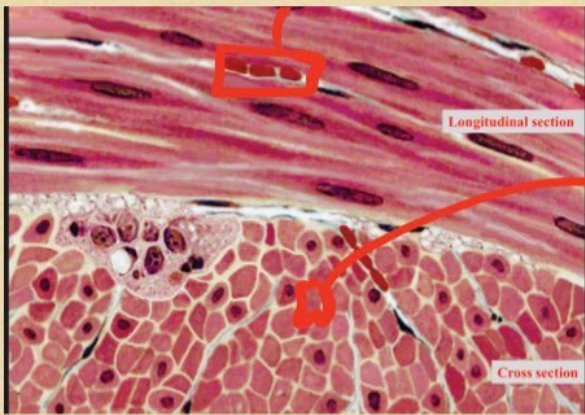


Spindle shaped.



not All of these sections contain nuclei

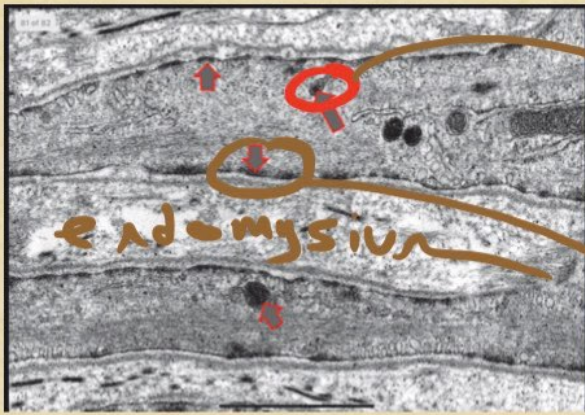
→ Blood vessels.



Longitudinal section

Cross section

Polyhedral



intracytoplasmic
Dense bodies

Supramembranous
Dense bodies