

Differentiate, distinguish, compare and explain what is the main difference between red and white muscle fibers. Comparison and Differences.

## **Difference between Red and White muscle fibers**

1. Red muscle fibers are thin. White muscle fibers are much thicker.
2. Red muscle fiber contains abundant mitochondria, low glycogen content and poorly formed sarcoplasmic reticulum. White muscle fibers are poor in mitochondria and have abundant glycogen granules and well-formed sarcoplasmic reticulum.
3. Red muscle fibres are dark red as they contain abundant pigment myoglobin. White muscle fibre are light in colour as they have very little myoglobin.
4. In Red muscle fibre, myoglobin stores  $O_2$  as oxymyoglobin that releases  $O_2$  for oxidation during muscle contraction. White muscle fibres have little or no store of oxygen. .
5. Red muscle fibres get energy for contraction by aerobic respiration. White muscle fibre get energy for contraction mainly by anaerobic respiration.