

Wednesday 11/08 Worksheet

1. Define the following muscle fiber types to the extent discussed in class. Give a **general** description, we will further discuss these in the next question:

- Type I muscle fiber:
- Type IIa muscle fiber:
- Type IIb muscle fiber:

2. Compare and contrast the three muscle fiber types using the table below:

Characteristic	Slow Twitch Oxidative (Type I)	Fast Twitch Oxidative (Type IIa)	Fast Twitch Glycolytic (Type IIb)
Fiber and Motor Unit Size			
Mitochondria and Capillary Content			
Aerobic Capacity			
Anaerobic Capacity			
Myoglobin Content			
Glycogen Content			
Contractile Speed			
Endurance			
Major locations			
Major functions			

3. Glycogen is a polymer of glucose. Where is glycogen primarily stored in the muscle cell?
4. From the information you have been provided regarding hemoglobin molecules in lecture, what makes myoglobin different from hemoglobin?
5. Using your knowledge regarding myoglobin and hemoglobin molecules, what makes red meat **red**?
6. What is the relationship between fatigue and aerobic specialization?