

• **fast-twitch fibers contain more mitochondria and myoglobin than slow-twitch muscle fibers**

*** This is **false**; (see chart below)

Characteristics of Skeletal Muscle Fibers		
Characteristic	Slow Twitch (Type I)	Fast Twitch (Type II)
Myosin-ATPase activity	Low	High
Speed/Intensity of contraction	Slow/Low	Fast/High
Resistance to fatigue	High	Low
Oxidative capacity	High	Low
Enzymes for anaerobic glycolysis	Low	High
Mitochondria	Many	Few
Sarcoplasmic reticulum	Less extensive	More extensive
Capillaries	Many	Few
Myoglobin content	High	Low
Glycogen content	Low	High



1. **“Fast”** muscles are for rapid, powerful actions (jumping, short distance running) while **“slow”** muscles are for prolonged activity (body posture, running a marathon).
2. **Oxidative capacity** is related to **(1)** the number of capillaries, **(2)** the myoglobin content, **(3)** the number of mitochondria.