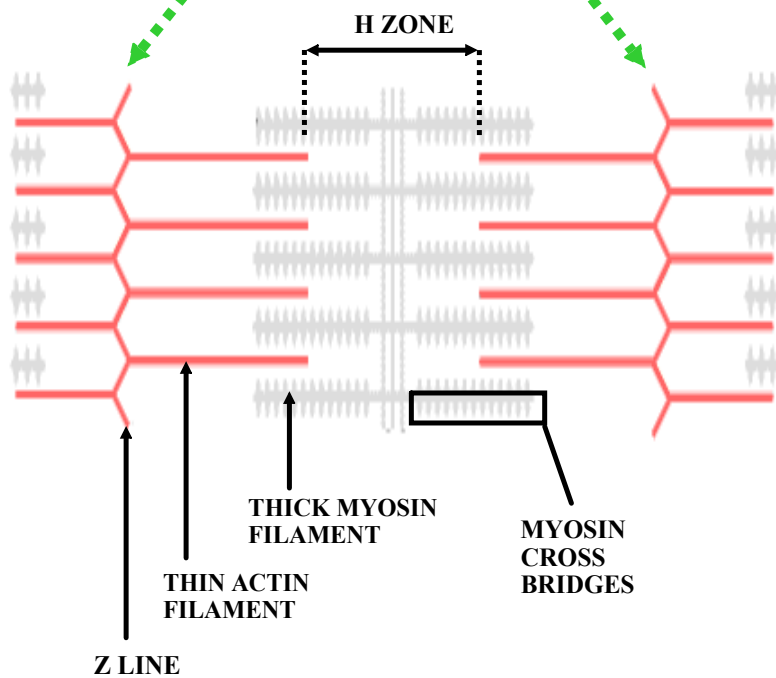
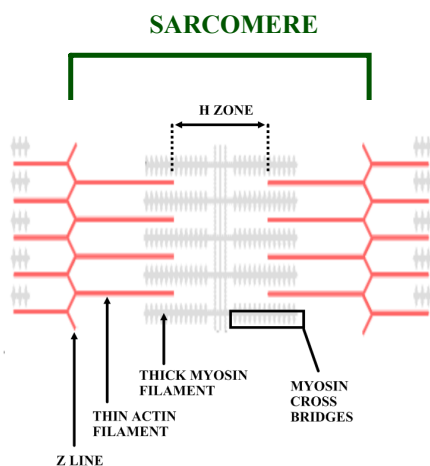


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A functioning muscle unit (sarcomere) contracts through the following sequence of events...



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- 1) An electrical impulse is sent from the brain along nerves to the muscle.
- 2) This triggers the release of calcium within the muscle cells.
- 3) The presence of calcium activates the myosin cross bridges.
- 4) These structures fold, pulling the thin Actin filaments over the thicker Myosin filaments decreasing the H - zone.
- 5) This sliding motion decreases the overall length of the muscle by shortening the the length of individual sarcomeres (z line to z line).
- 6) The result is an overall shortening of the muscle length which creates a pull on the tendon / bone attachments creating movement.

