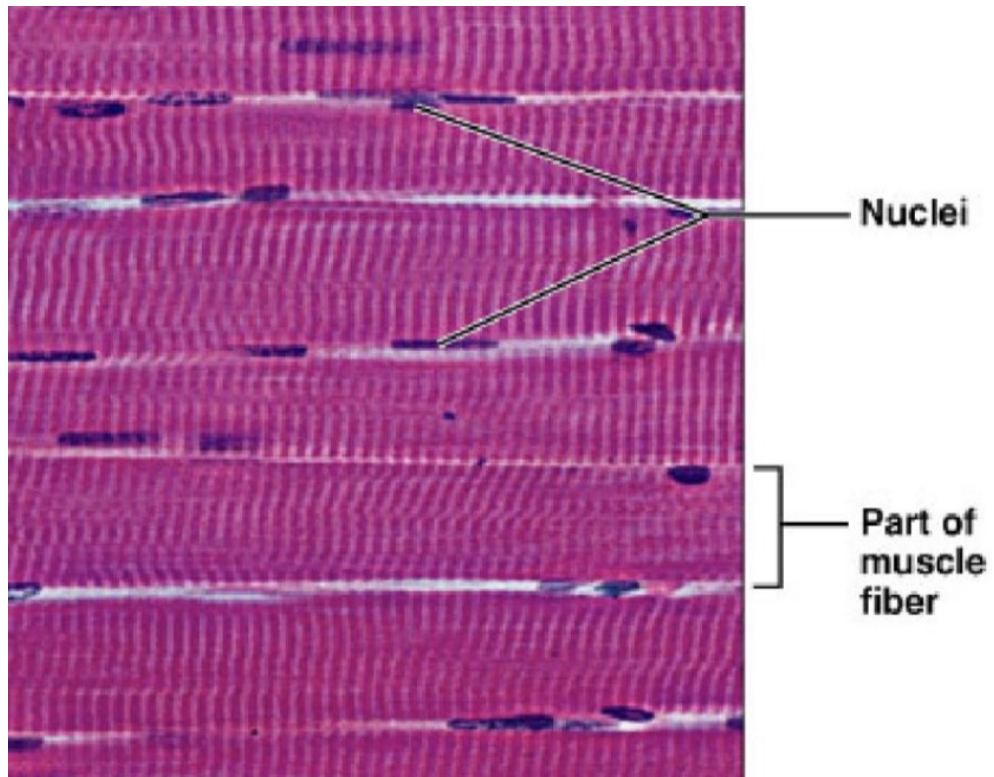


# Svalová tkáň - obrázky

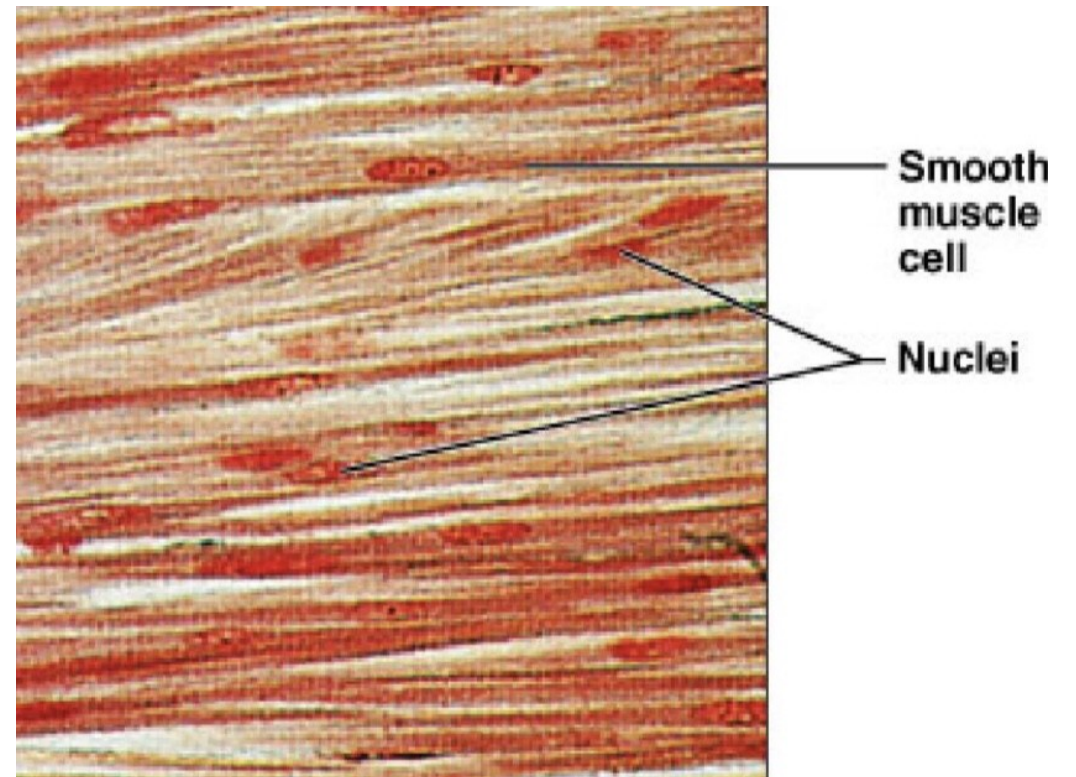
Mgr. Romana Klášterecká, Ph.D.

# Svalová tkáň

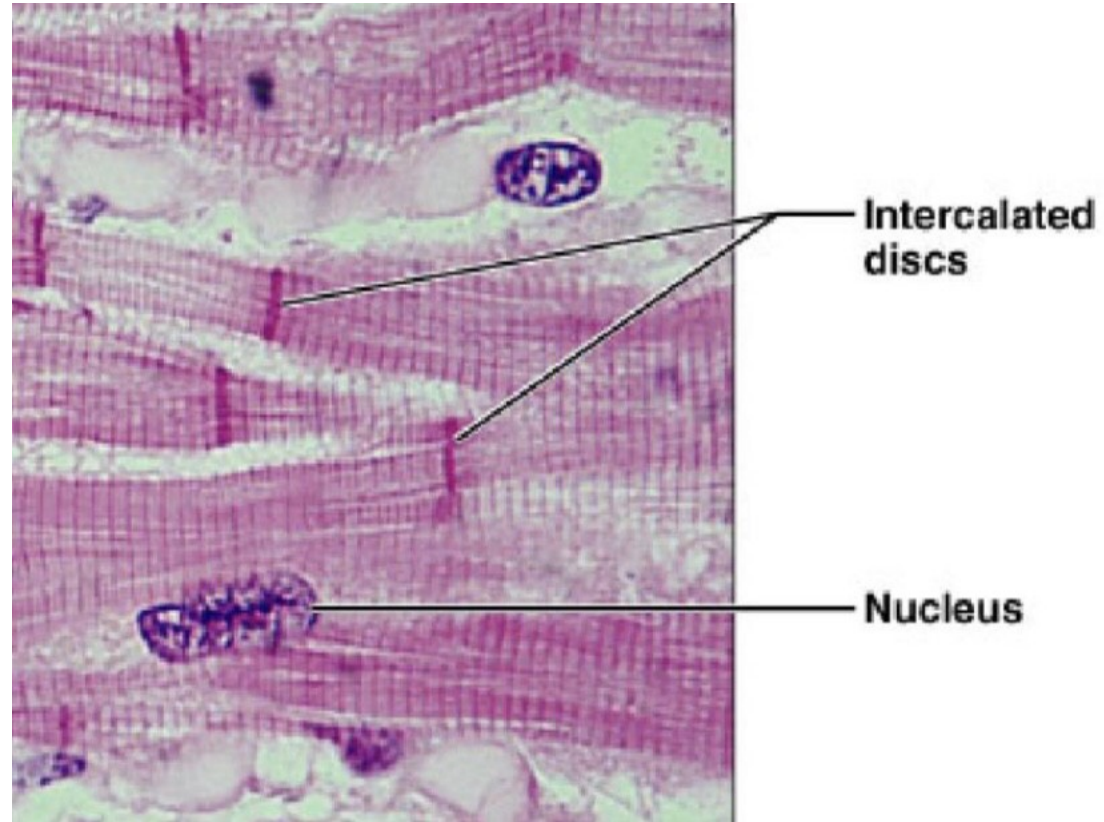
## Kosterní



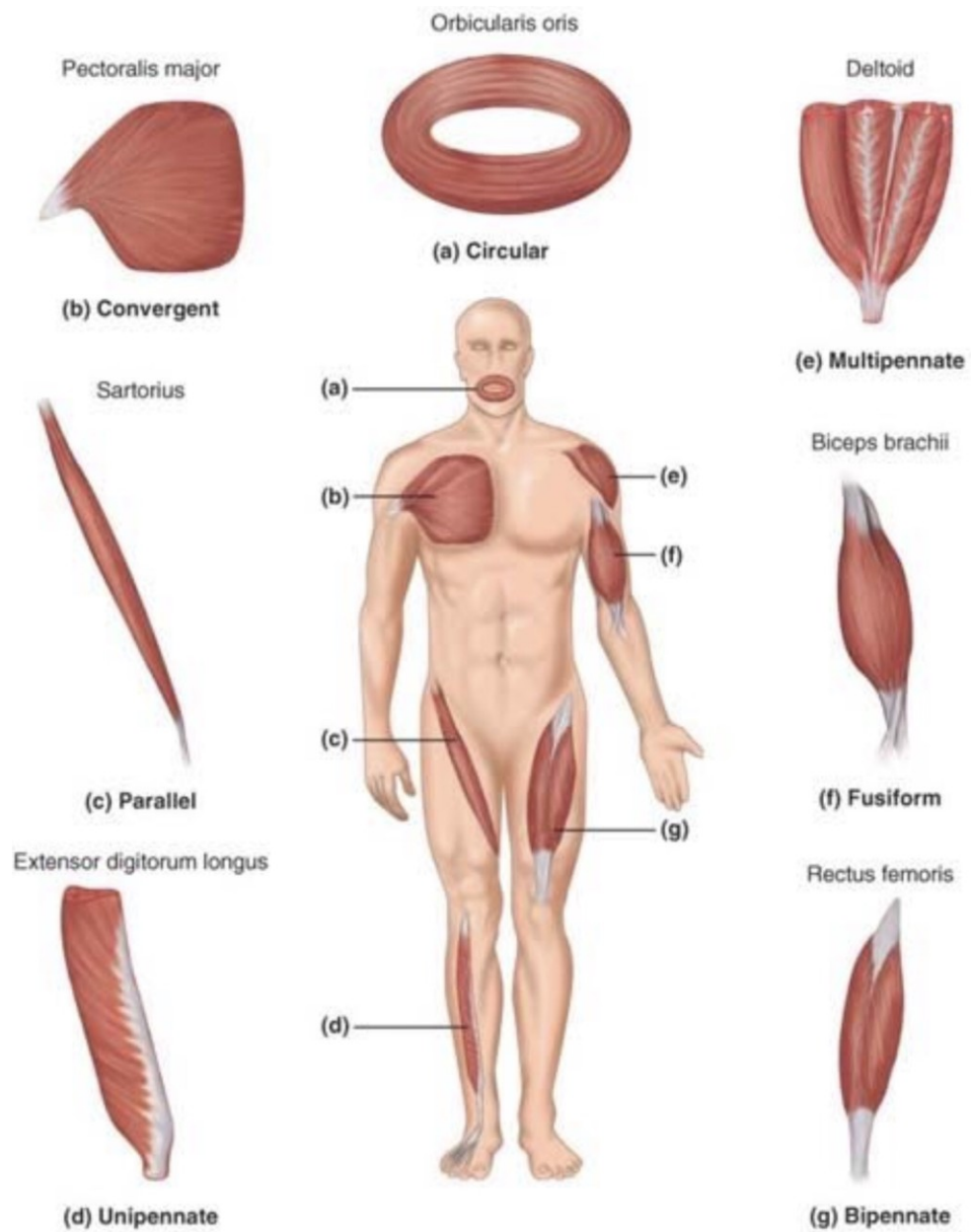
## Hladká



# Svalová tkáň - srdeční



# Tvary svalů

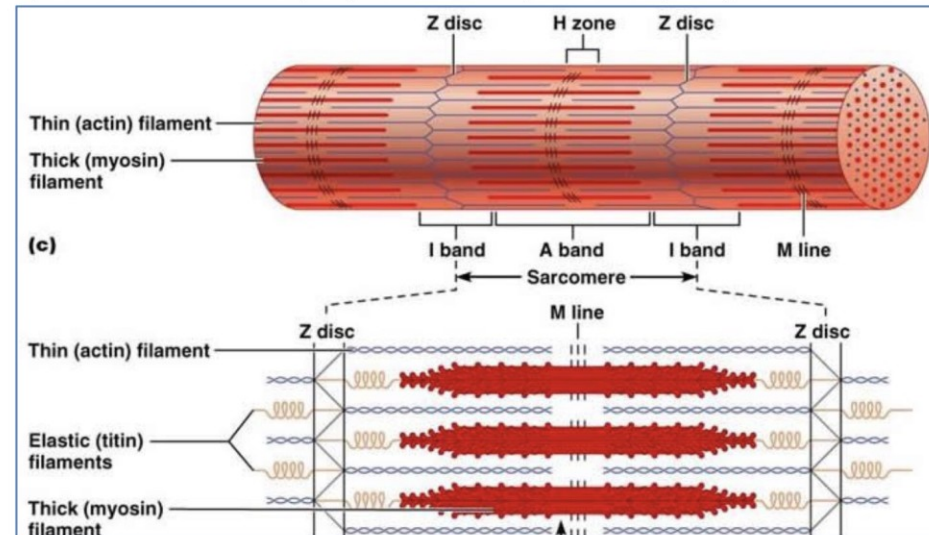


# Organizace svalové tkáně

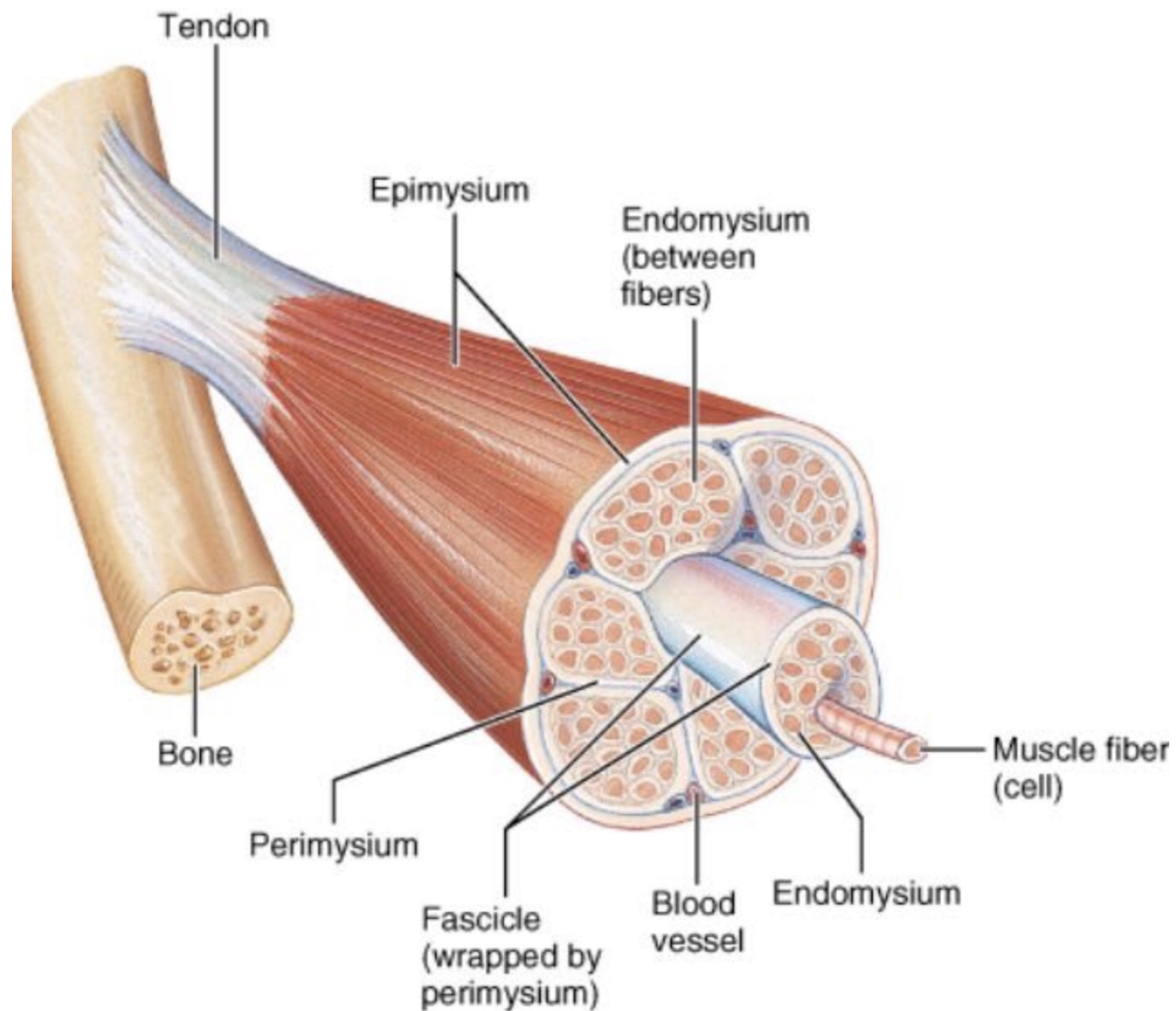
## Organisation of Muscle Tissue:

- **Individual Muscle Fibres**

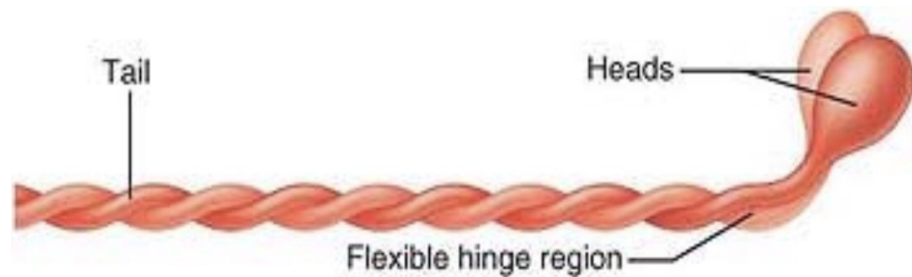
- Each Muscle Fibre Contains many **Myofibrils (a Muscle Cell's Contractile *Organelles*)**.
- Each Myofibril contains many **Myo-Filaments (Actin & Myosin) – Contractile *Proteins***.



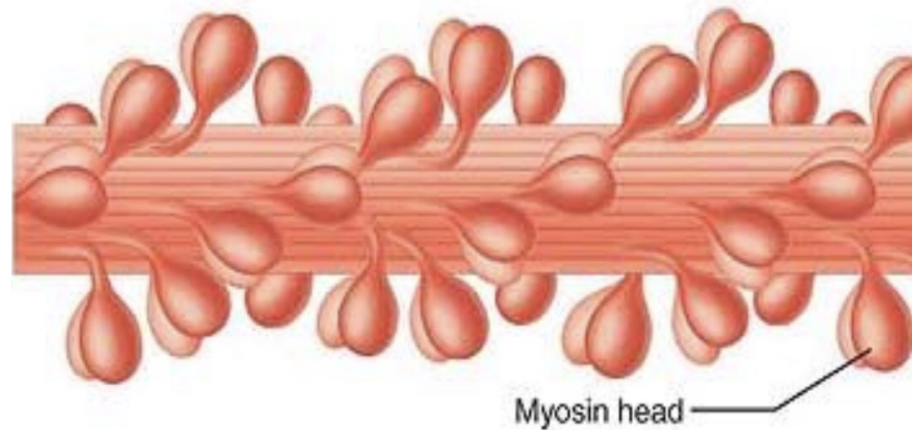
# Složení svalu



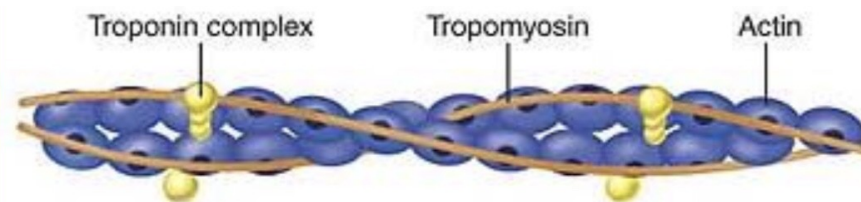
# Molekulární stavba



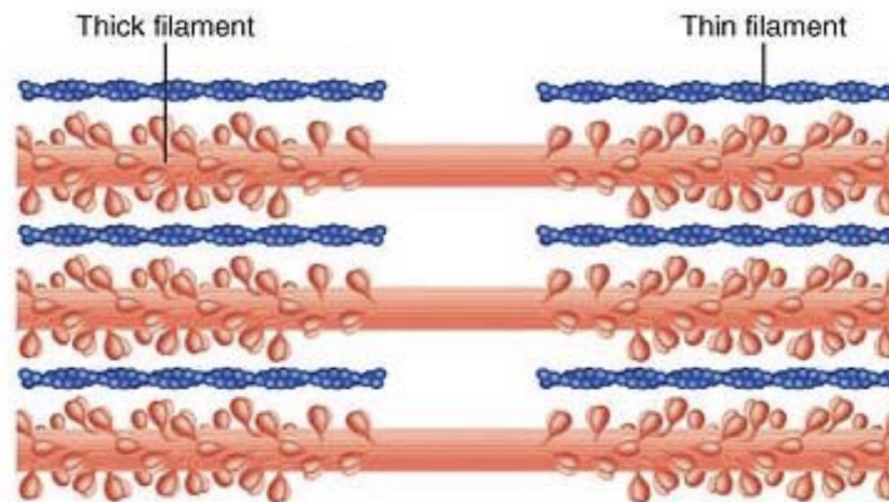
(a) Myosin molecule



(b) Portion of a thick filament

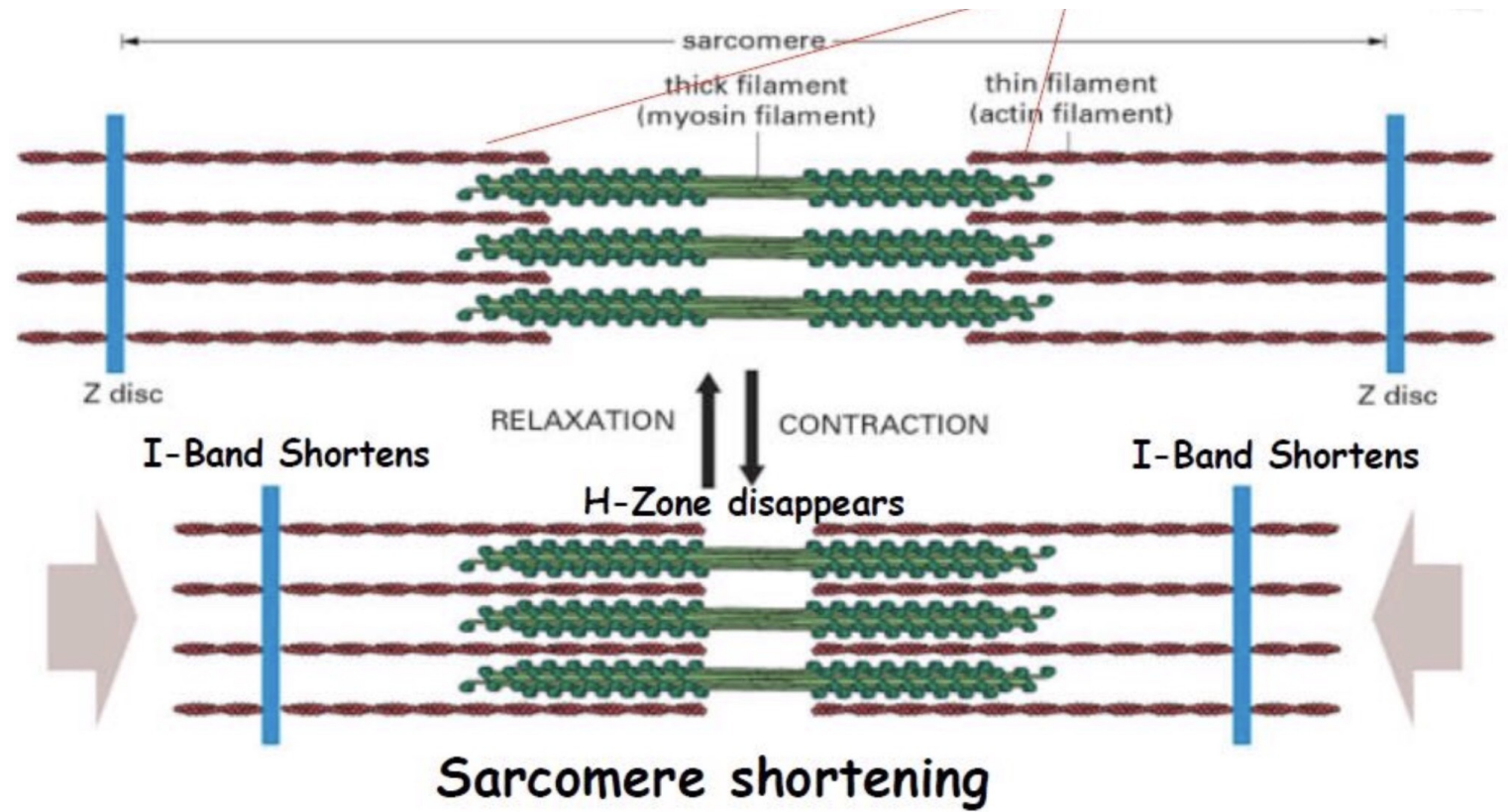


(c) Portion of a thin filament



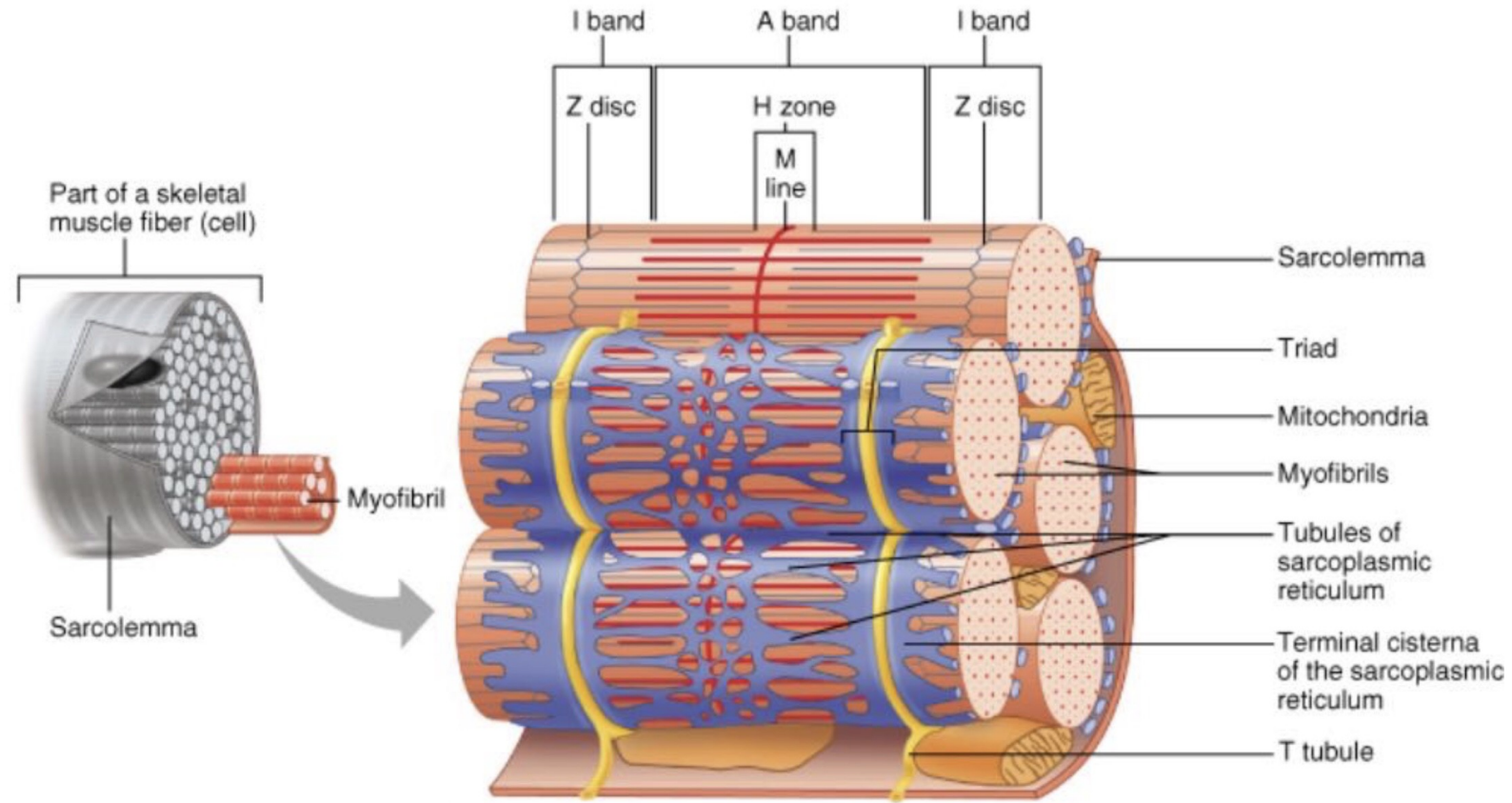
(d) Longitudinal section of filaments within one sarcomere of a myofibril

# Kontrakce svalu

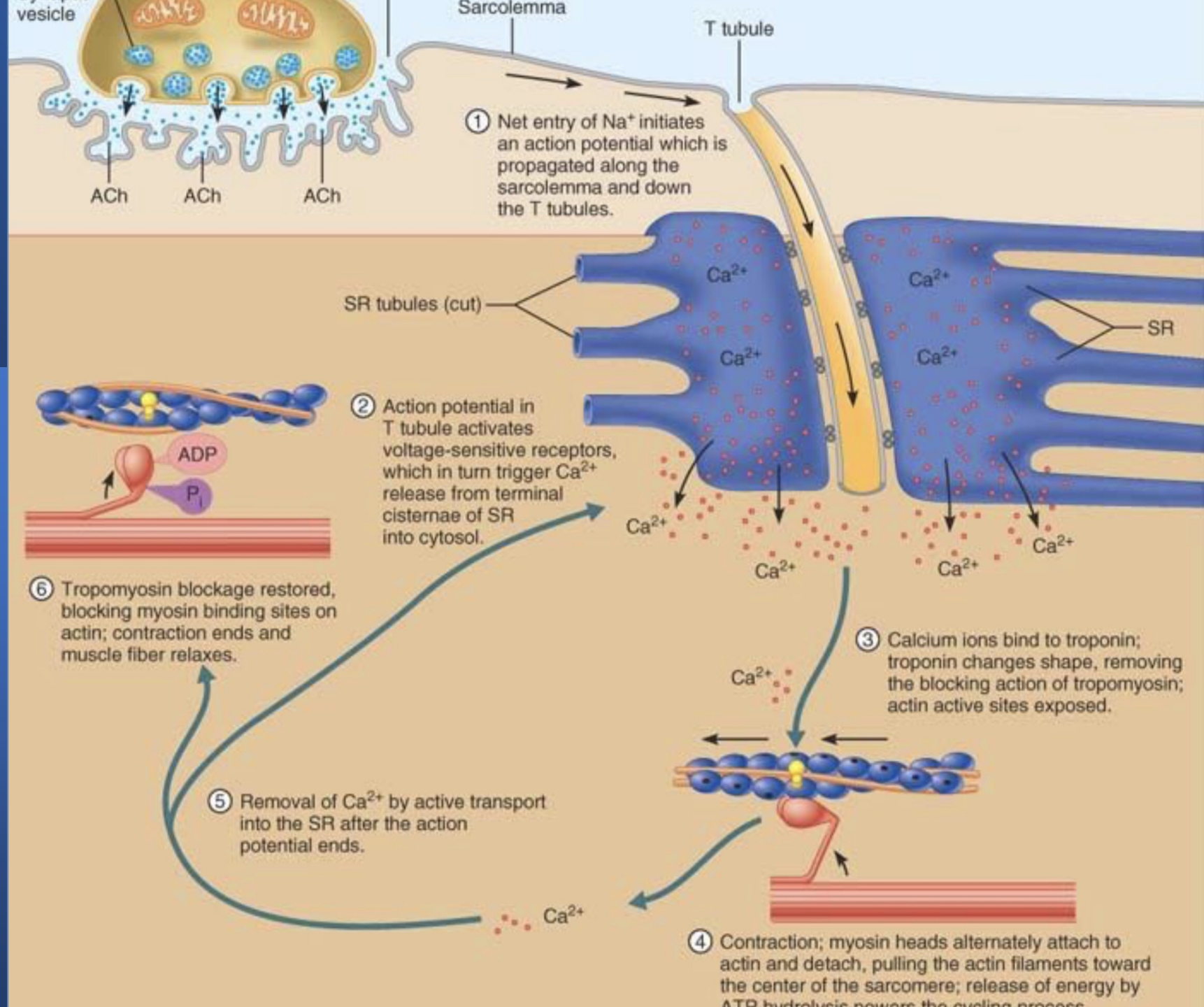




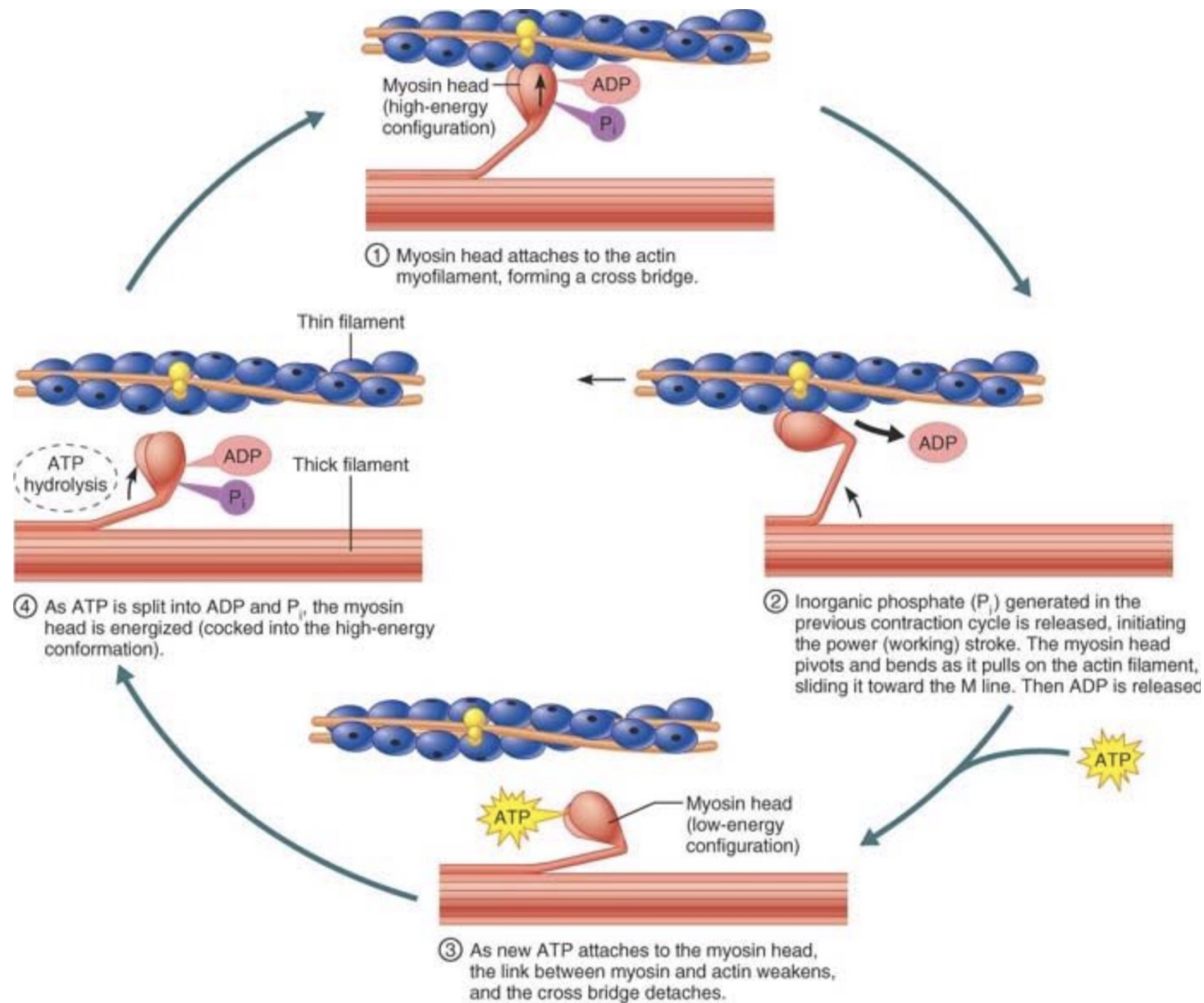
# Svalová tkáň



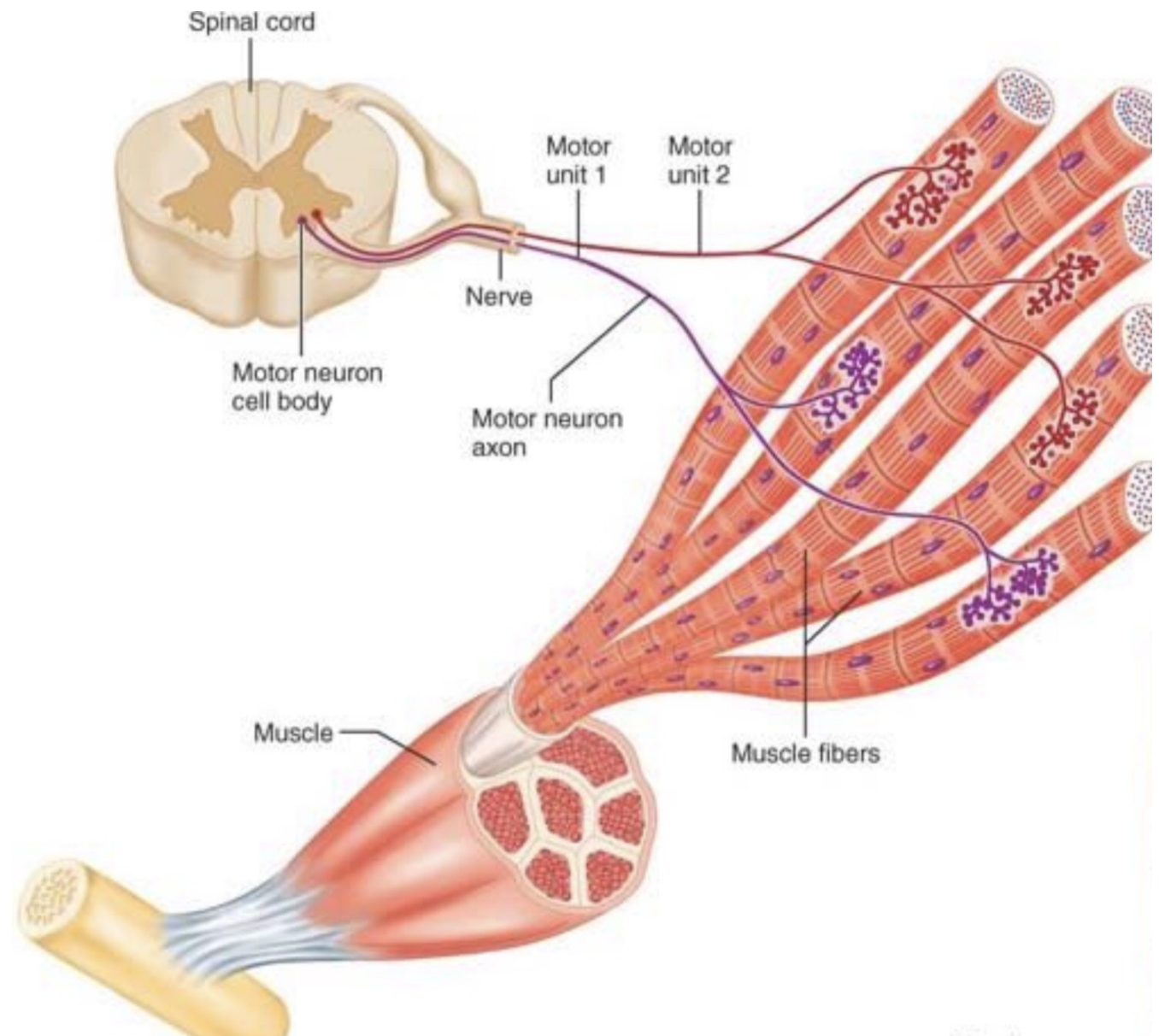
# Fyziologie svalové tkáně



# Fyziologie svalové tkáně

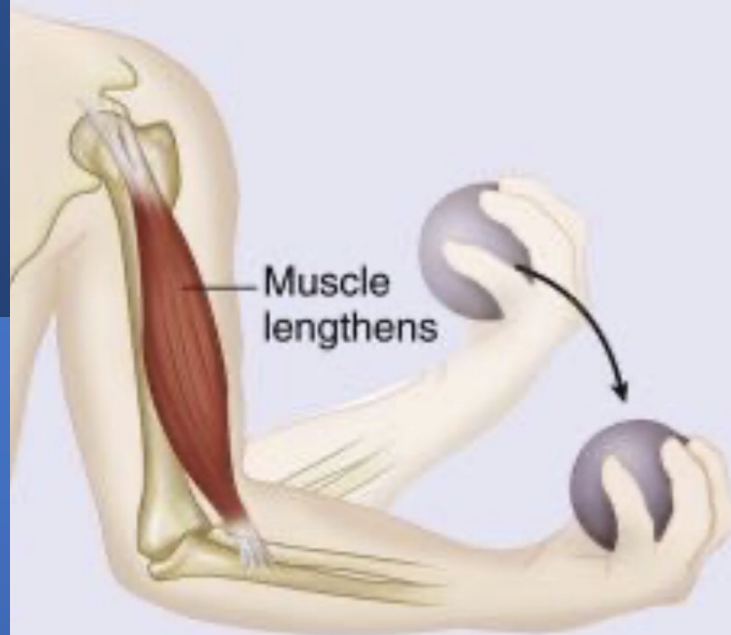


# Motorická jednotka

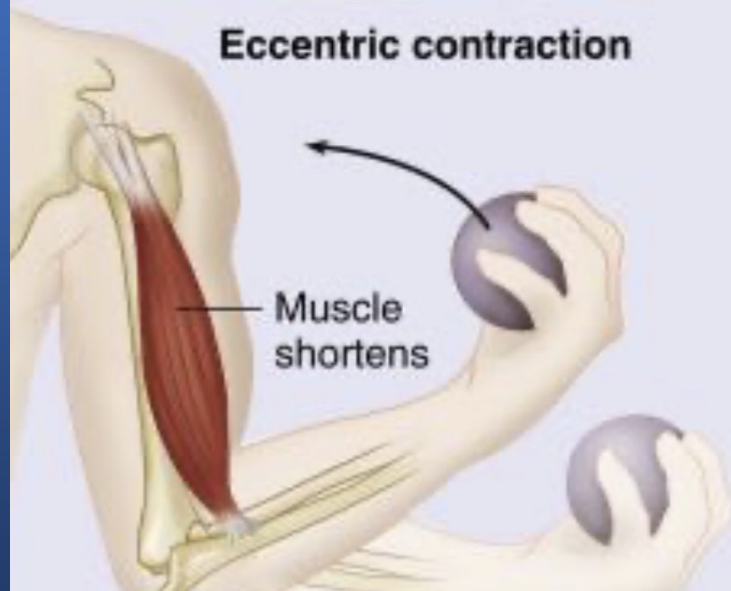


# Biomechanika svalu

**ISOTONIC**  
Same tension; changing length



**Eccentric contraction**



**ISOMETRIC**  
Same length; changing tension

