

# *Introduction Cards*

Last Name, First Name, Nickname, Phone, e-mail

Major/Undeclared/Area of Interest

Academic Status: Fr, So, Jr, Sr, PB, MS, PhD, CEP

Professional Objective: eg, Physical Therapist/TBA?

Hometown, Birthplace

Prior related course work/sports?

High School, Prior Community Colleges/Universities

Family/Special Interests/Hobbies

Something unique about you? or a Secret?

Injuries/Contraindications for Exercise



**ANATOMY**  
**STRUCTURE**  
**WHAT?**  
**WHERE?**

**VS**

**PHYSIOLOGY**

**VS**

**FUNCTION**

**VS**

**HOW?**

**VS**

**WHY?**

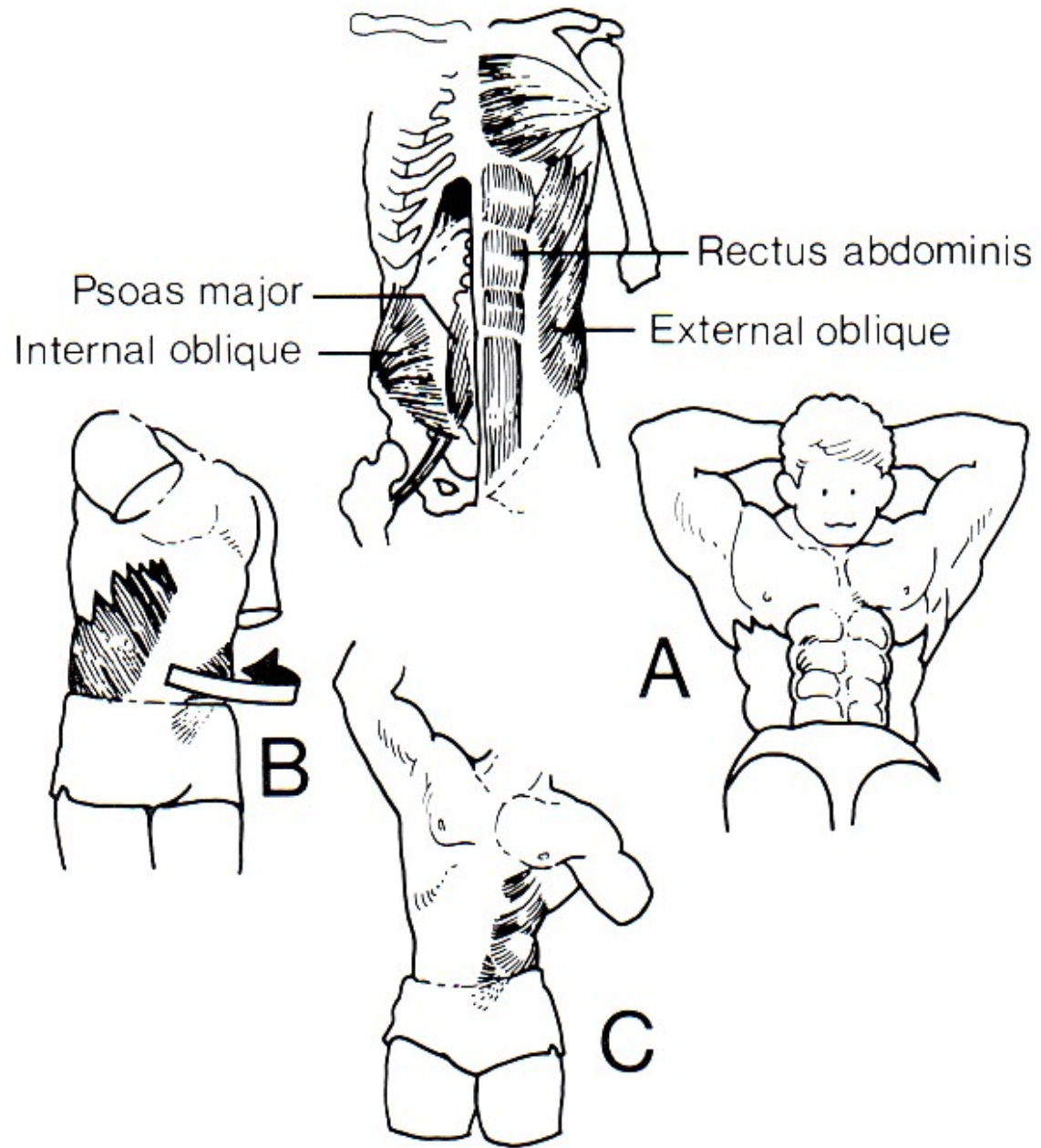


**VS**



***Structure gives rise to function!***  
***Structure determines function!***





# Body Levels of Organization

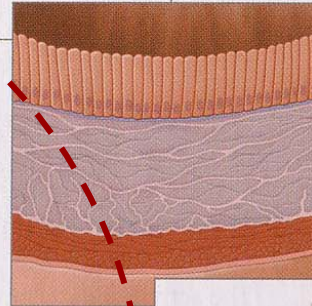
**Entire Organism,  
like you & me!**



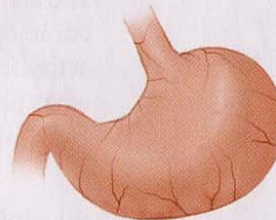
**1. Molecular**



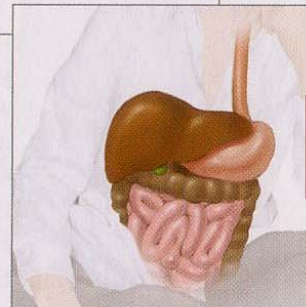
**2. Cellular**



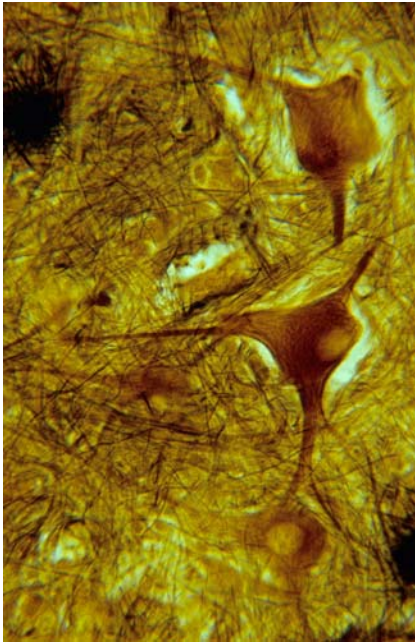
**3. Tissue**



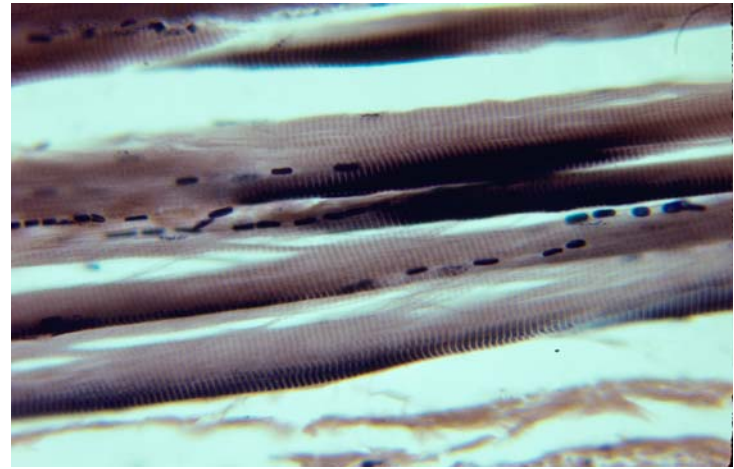
**4. Organ**



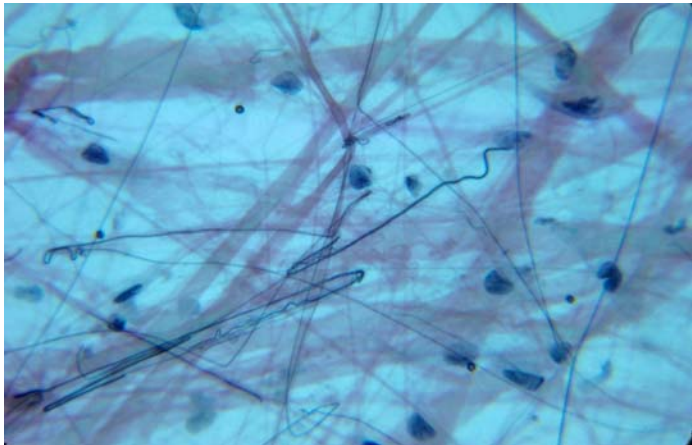
**5. System**



**Nerve conducts**



**Muscle contracts**

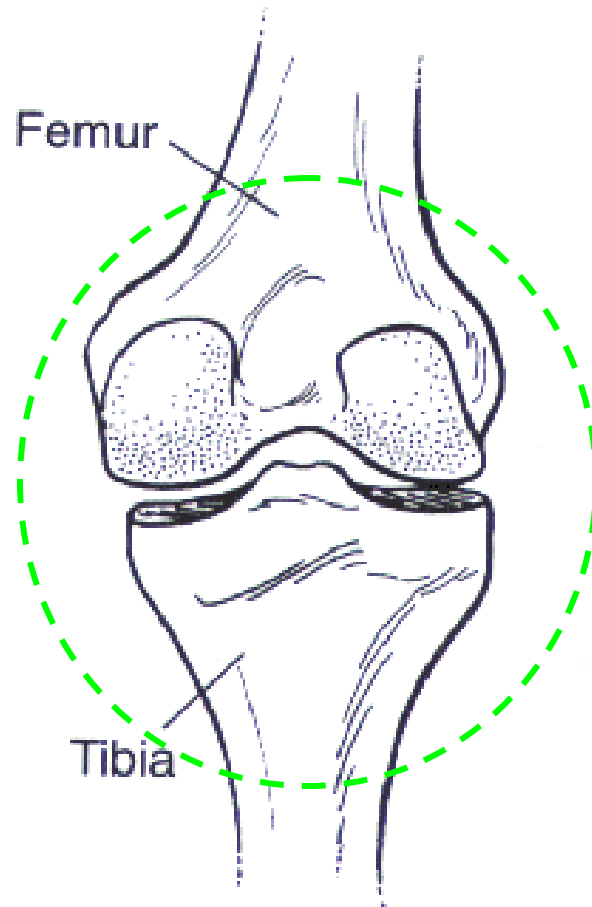


**Connective connects!!**



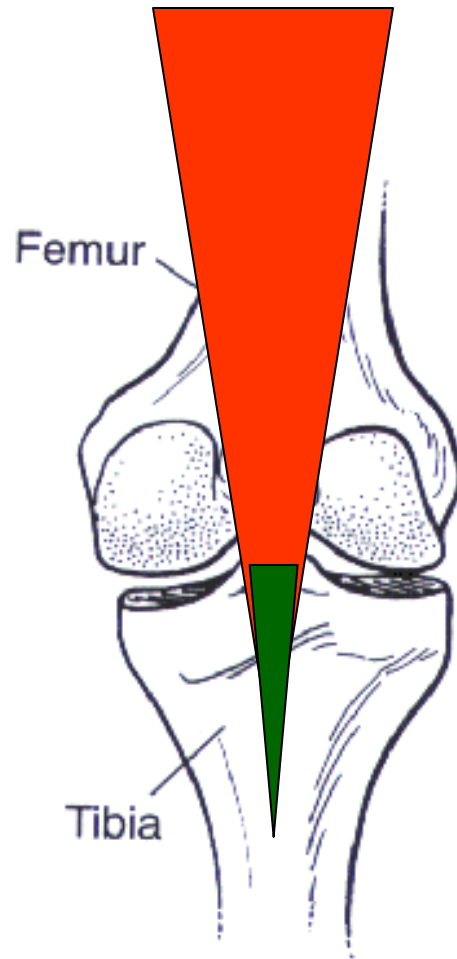
**Epithelial covers**

*Joint.* Simply a Place Where 2 Bones Meet!



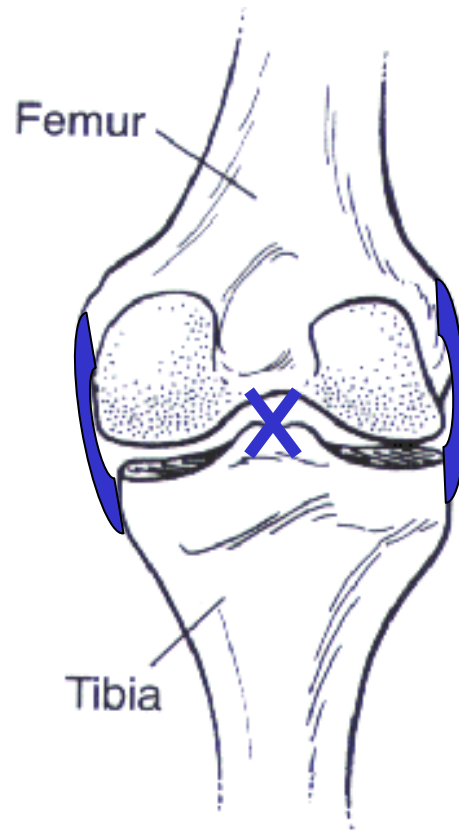


## *Muscles: Cross Joints by Way of Tendons*

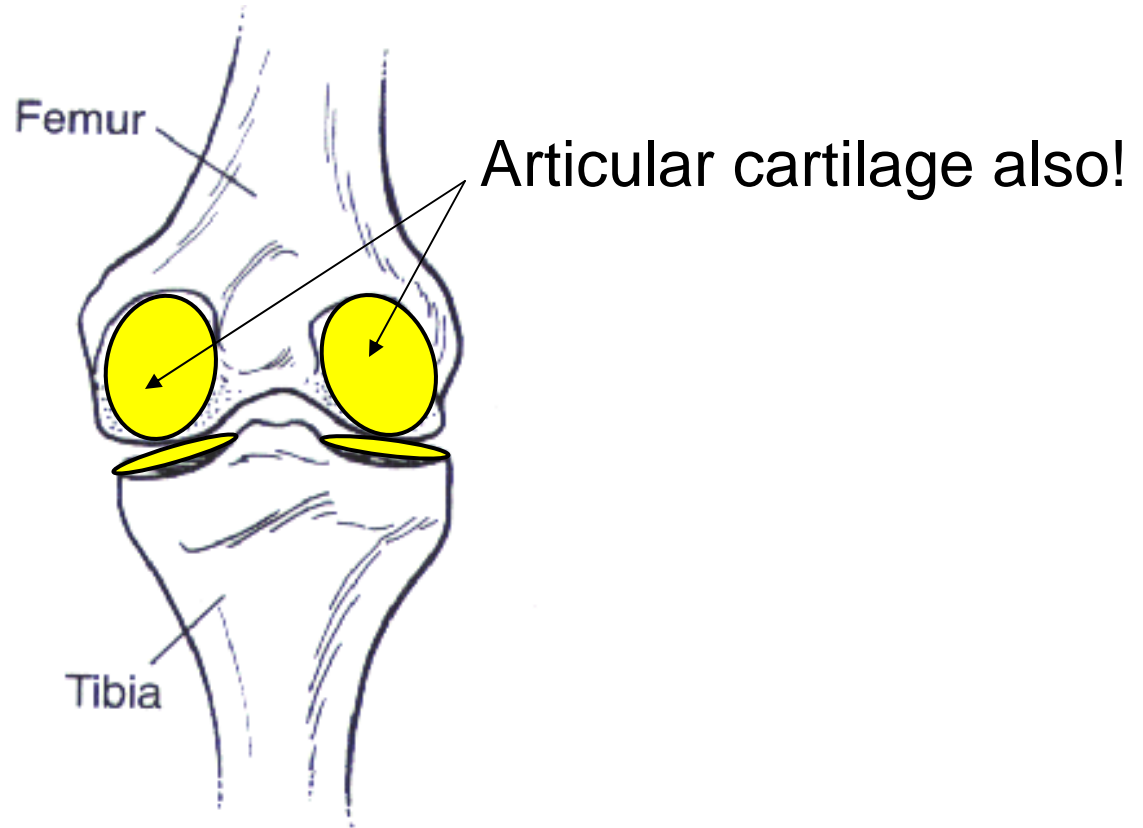


*Tendons: Staple Muscles to Bones!*

# *Ligaments: Connect Bone to Bone!*

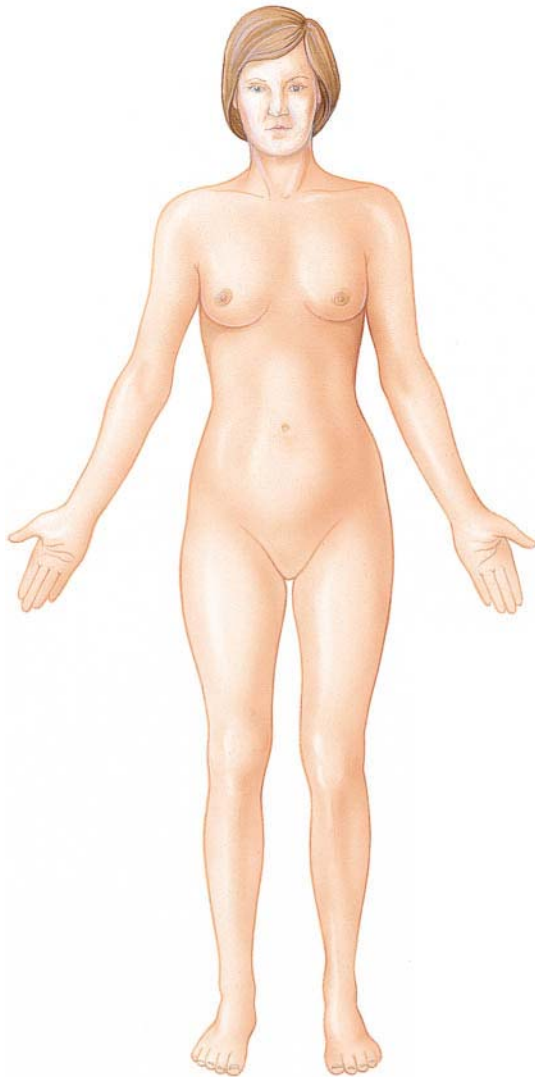


# *Cartilage*: Cushion Between Bones!



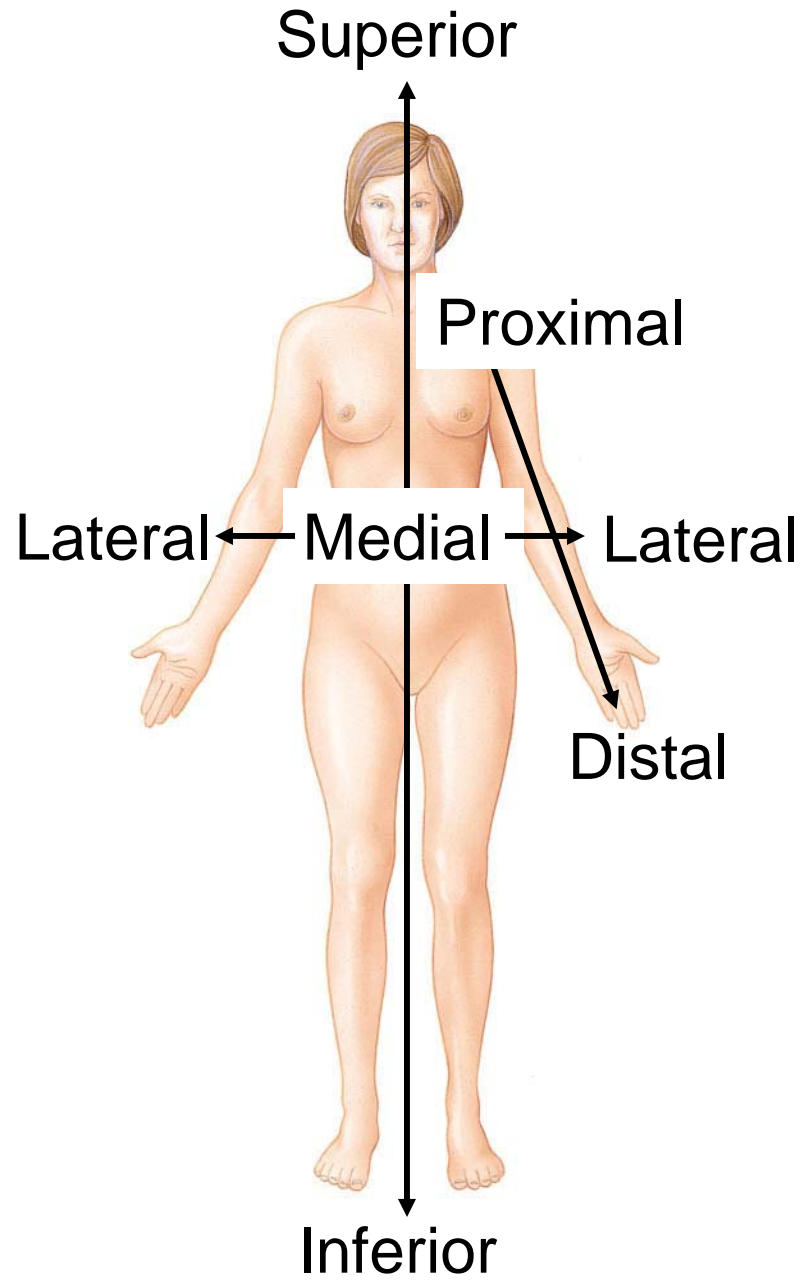
# *Anatomical Position:* Reference for Anatomy

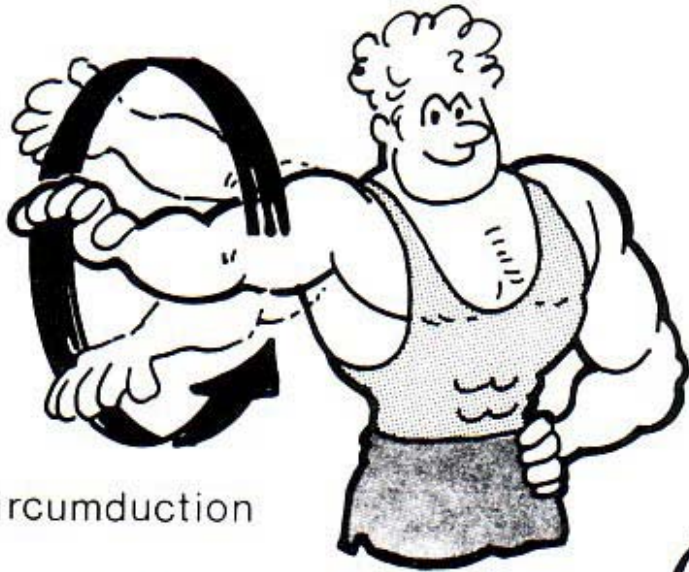
Anterior View



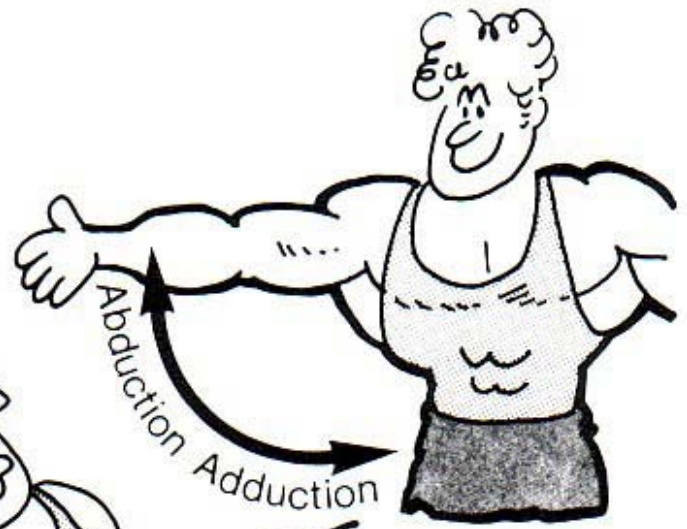
Posterior View







Circumduction



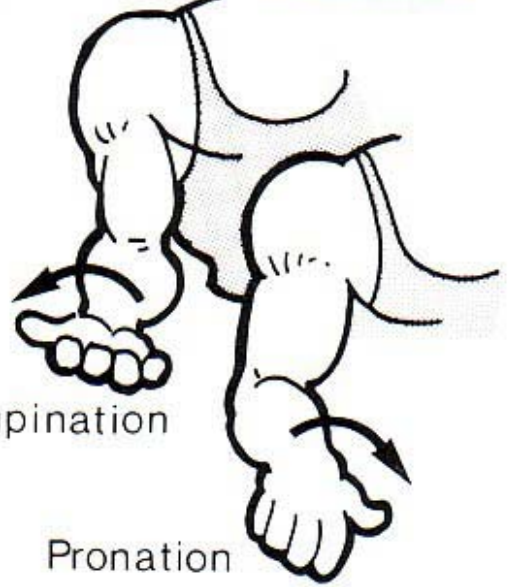
Abduction  
Adduction



Rotation  
(about long axis)

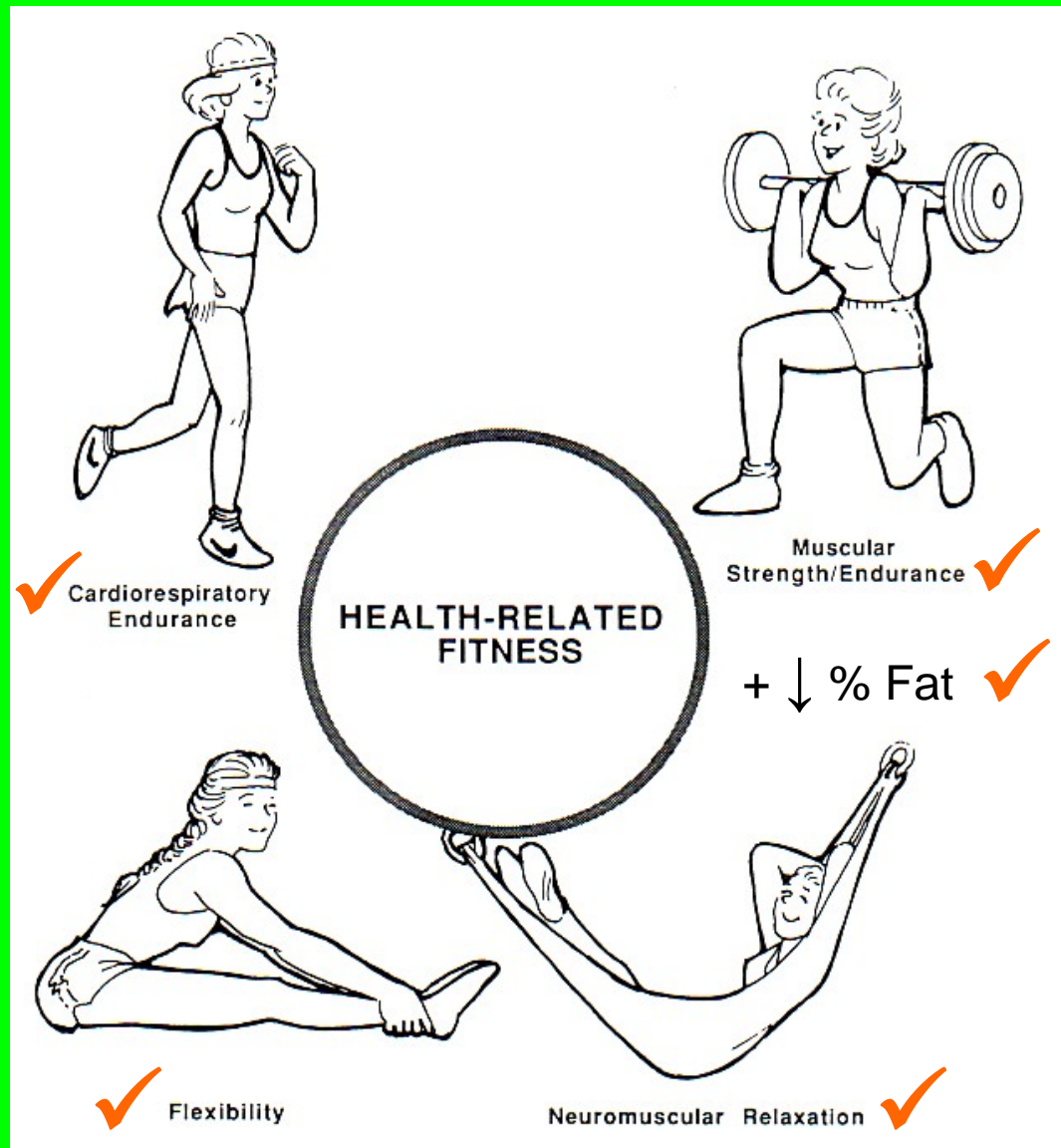


Flexion  
Extension



Supination  
Pronation

# Weight Training is Non-competitive Goal: Improve Life Time Fitness!



**Weight Lifting is Competitive**  
**Goal: Improve Strength for 1-RM!**

**Olympic Lifting**



**Power Lifting**





**Body Building is Competitive**  
***Bridges Gap? Wt Lifting vs Wt Training***  
***Goal: M. Hypertrophy, Balance, Delineation!***

