

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

BI 199 Anatomy, Physiology & Weight Training

<http://blogs.uoregon.edu/bi199/spring-2016/>

✓ I. Information Cards Welcome! Practical application that's fun!...



II. Introduction, Outline, Format & Guidelines

Attendance, participation, lab activities = 30%

Weight training/fitness component = 30%

Thematic poster presentation = 30%

Weight training/nutrition article/media review = 10%

Expectations = The highest possible!!

III. Anatomy vs Physiology Structure vs. Function

IV. Levels of Organization?

V. Tissue Types?

VI. Joints? Where 2 Bones Meet!

Muscles? Tendons? Ligaments? Cartilage?

VII. Anatomical Position & Direction Terms?

VIII. Basic Action Terms?

IX. Weight Training vs Weight Lifting?

X. Alternative Review Exercise Video Evaluation

<http://www.mayoclinic.com/health/squat/MM00743>

<http://www.youtube.com/watch?v=8c8zTrxaXYQ>

Technique, source?:
.edu, .org, .gov vs. .com?

ANATOMY
STRUCTURE
WHAT?
WHERE?

VS

PHYSIOLOGY

VS

FUNCTION

VS

HOW?

VS

WHY?

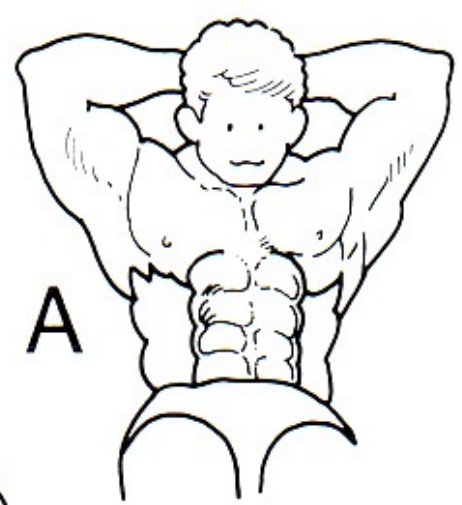
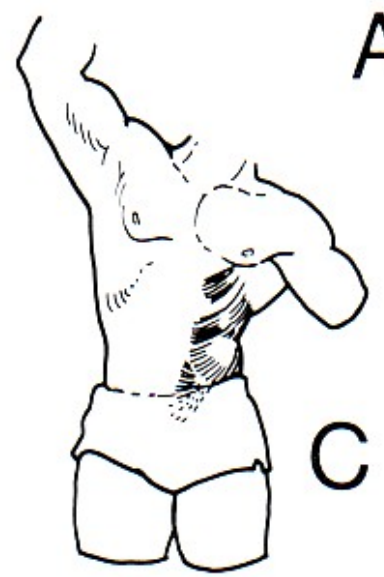
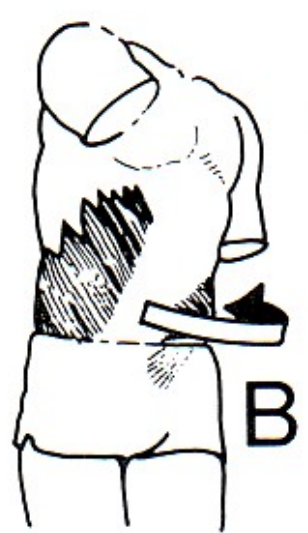
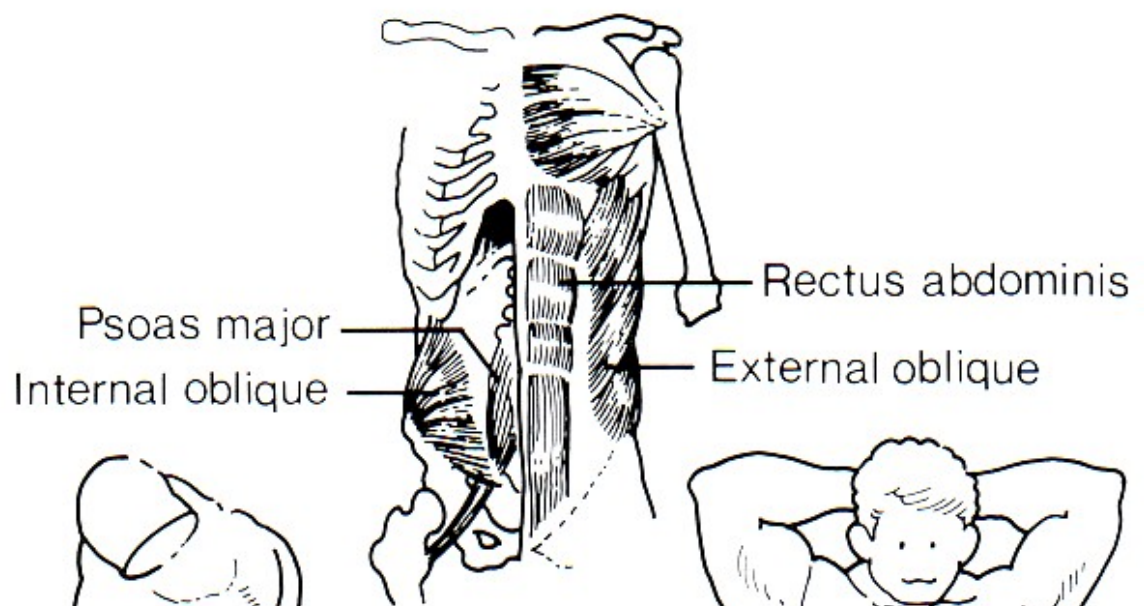


VS



Structure gives rise to function!
Structure determines function!





Body Levels of Organization

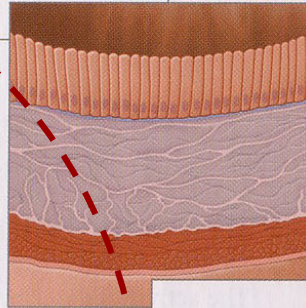
1. Molecular



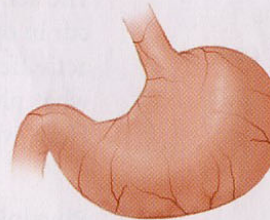
2. Cellular



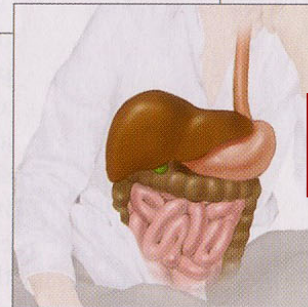
3. Tissue



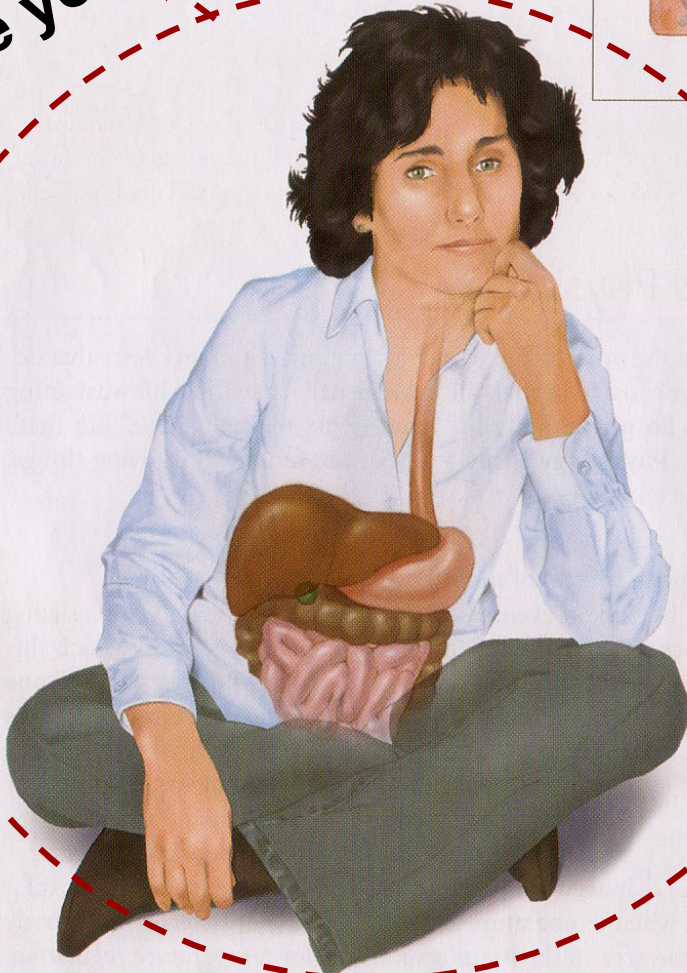
4. Organ

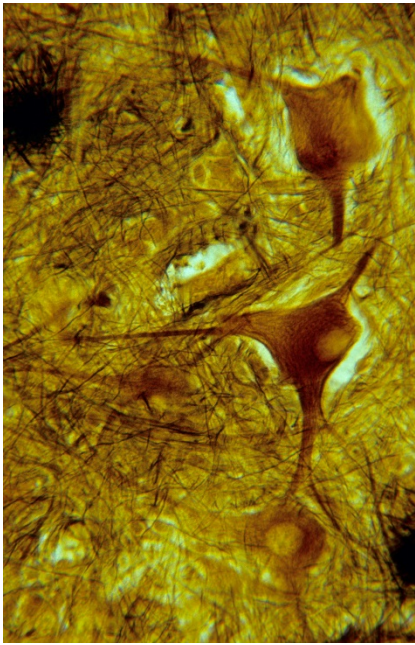


5. System

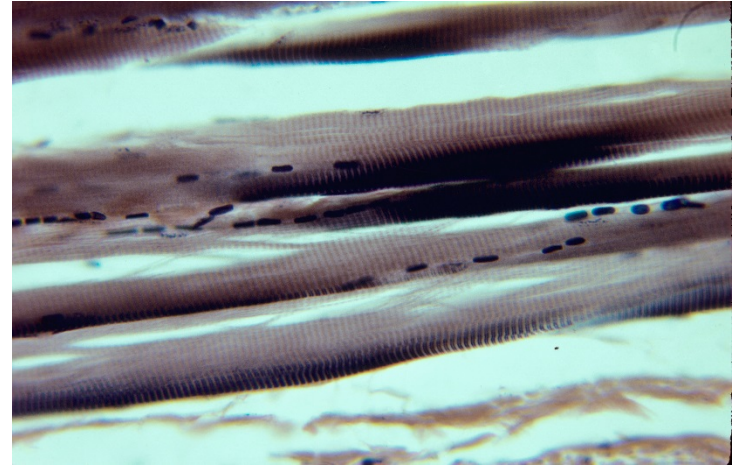


Entire Organism,
like you & me!

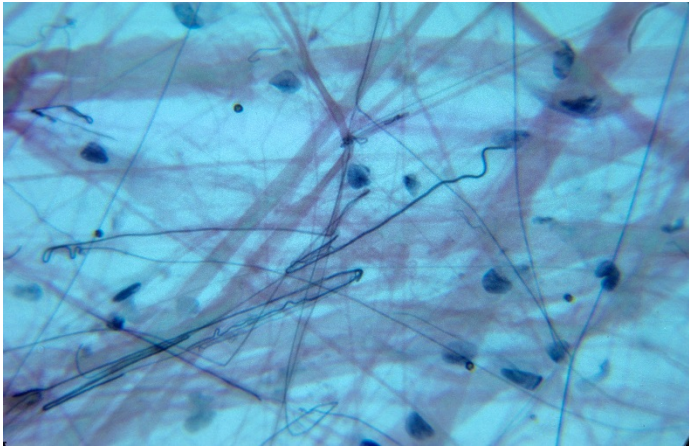




Nerve conducts



Muscle contracts

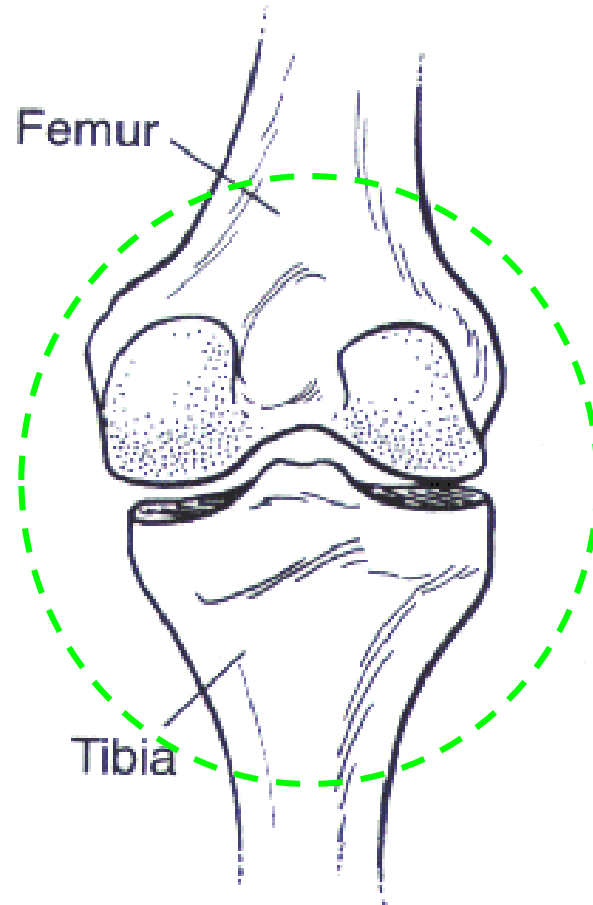


Connective connects!!

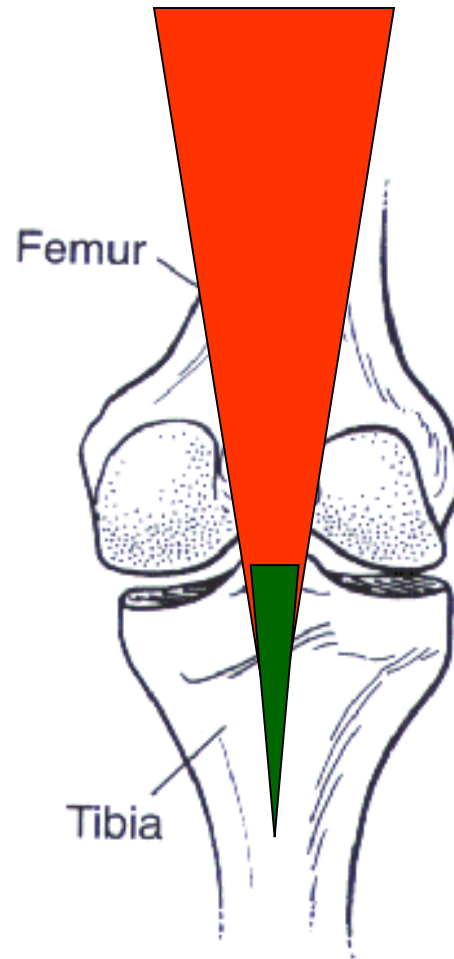


Epithelial covers

Joint. Simply a Place Where 2 Bones Meet!

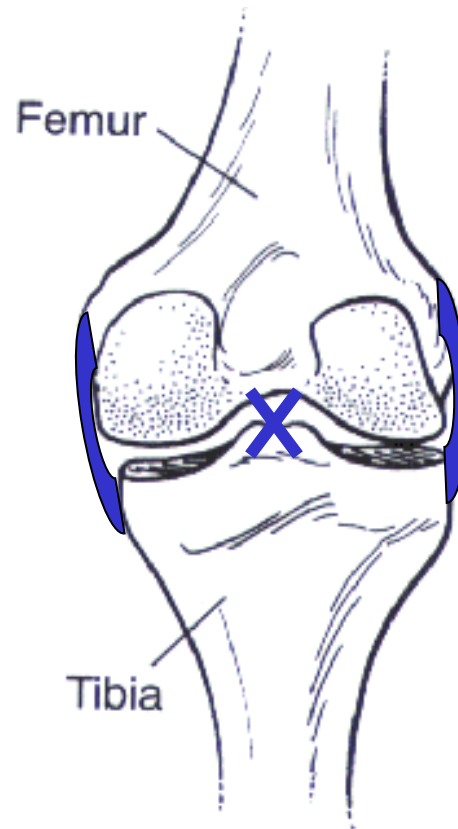


Muscles: Cross Joints by Way of Tendons

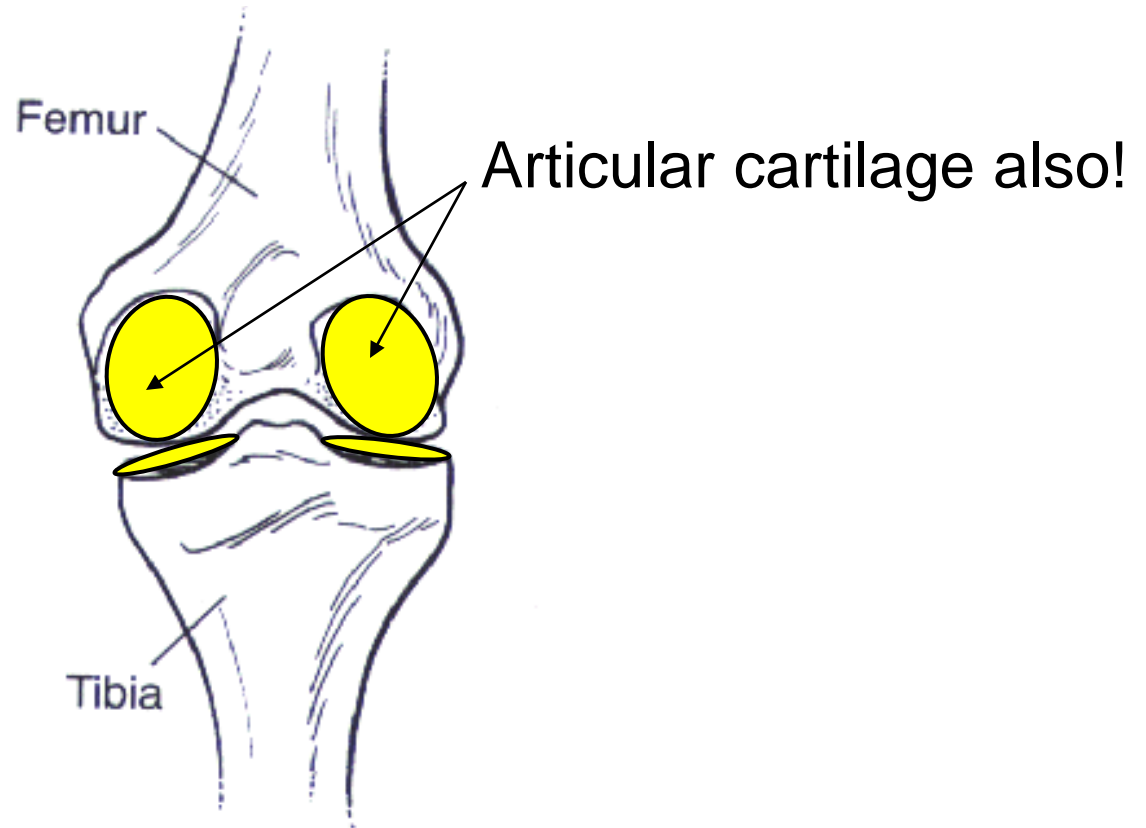


Tendons: Staple Muscles to Bones!

Ligaments: Connect Bone to Bone!

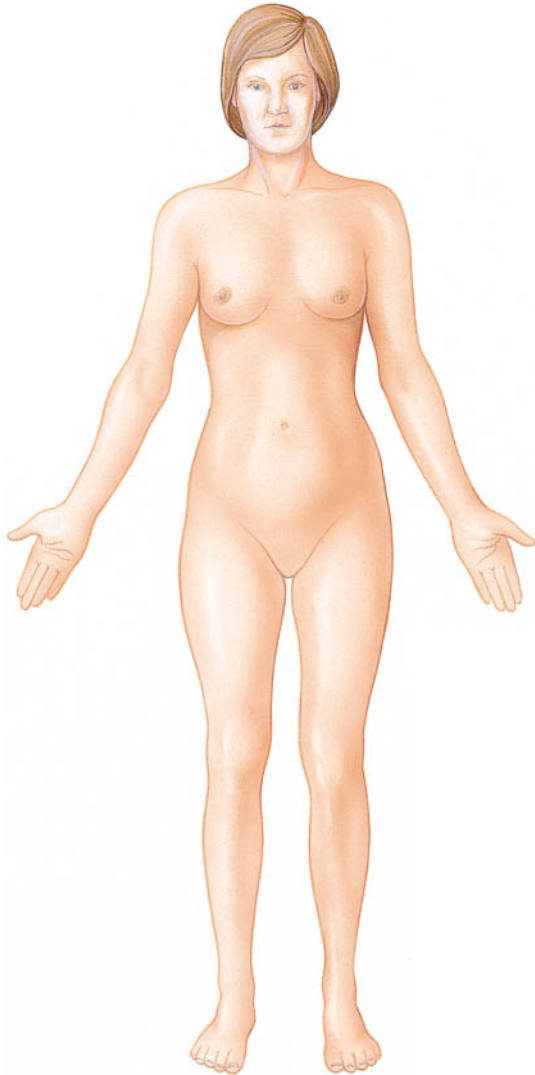


Cartilage: Cushion Between Bones!



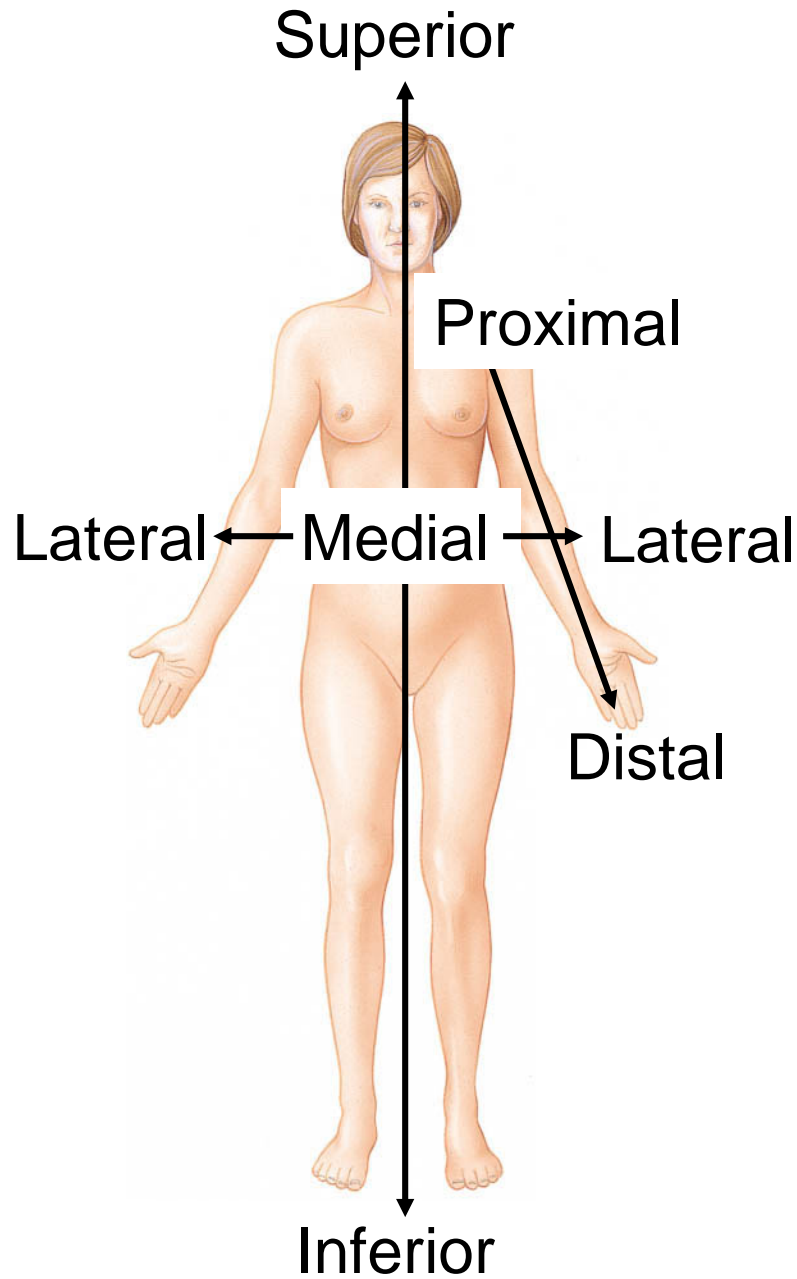
Anatomical Position: Reference for Anatomy

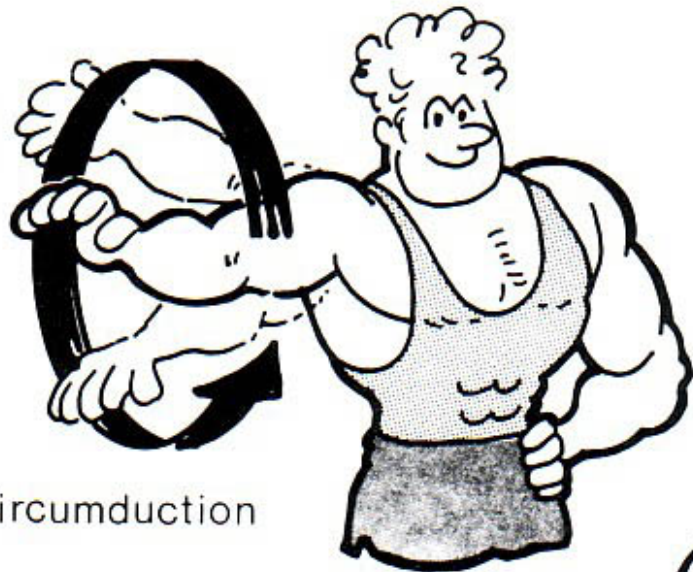
Anterior View



Posterior View







Circumduction



Abduction Adduction



Rotation
(about long axis)



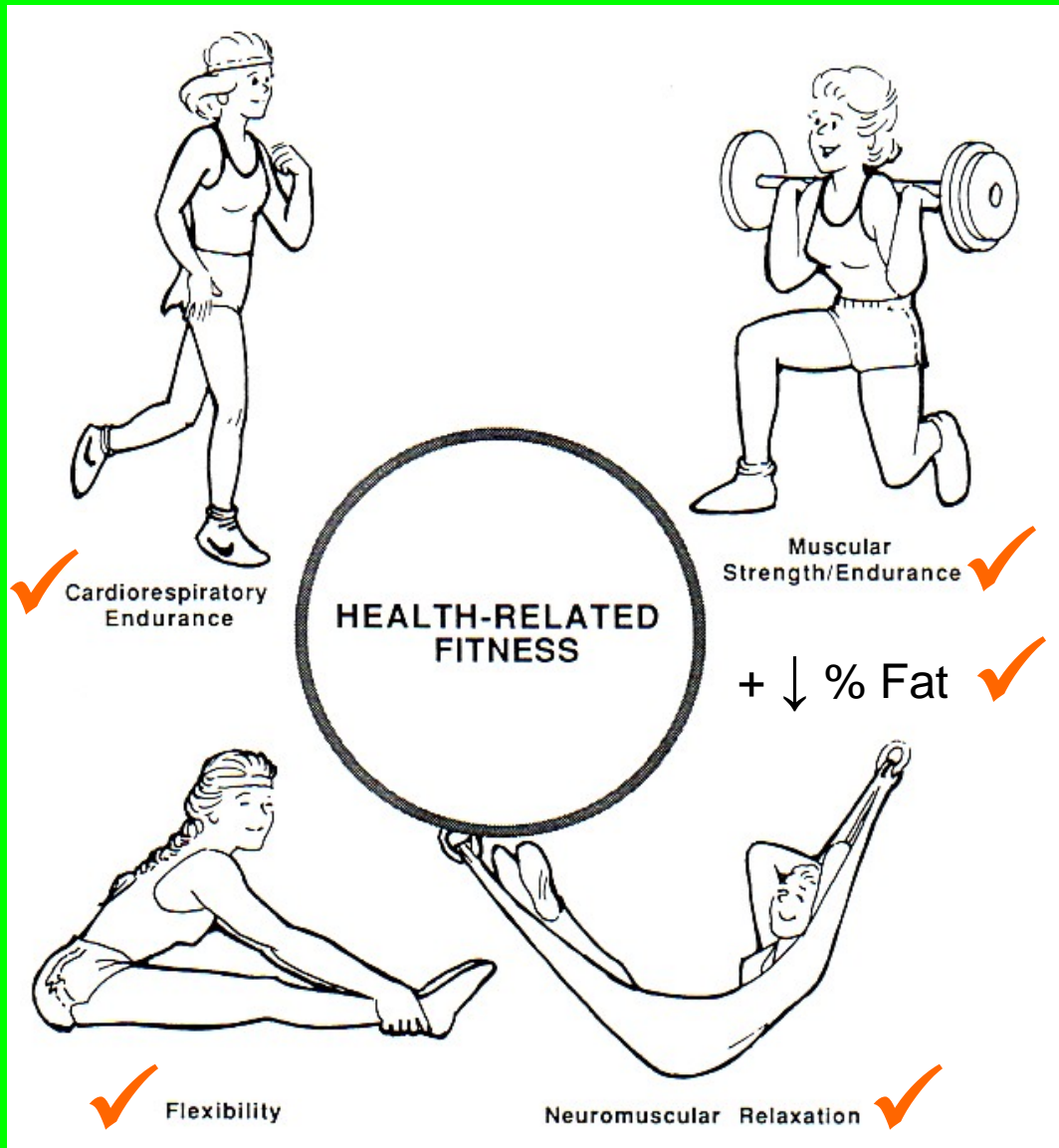
Flexion
Extension



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!



Group Work to Discuss Technique Videos



<http://www.mayoclinic.com/health/squat/MM00743>
<http://www.youtube.com/watch?v=8c8zTrxaXYQ>