

# BI 199 APWT Discussion 7



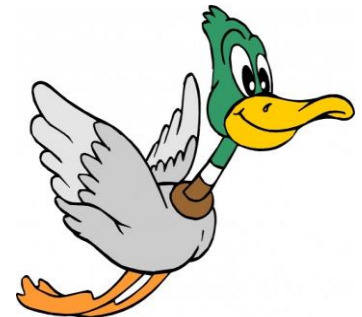
**I. Announcements Topic outline due next Thursday. Future Anatomy Lab visits?**

**II. Anatomy Lab Exploration Review**

- A. Brachioradialis, nickname, grip during curl?**
- B. Patella, nickname, tibia, nickname,...?**
- C. Rectus abdominis & obliques, exercises**
- D. Gluteal & posterior thigh muscles, exercises**
- E. Triceps brachii, exercises, supersetting**
- F. Trapezius & posterior deltoid, exercises**

**III. Getting to Know You + Discussion**

**Any questions for me are open game!**



Can you identify the *brachioradialis* muscle?  
What is its *nickname*? Which *grip* during a *biceps curl* stresses this muscle?



Hitchhiker  
muscle!

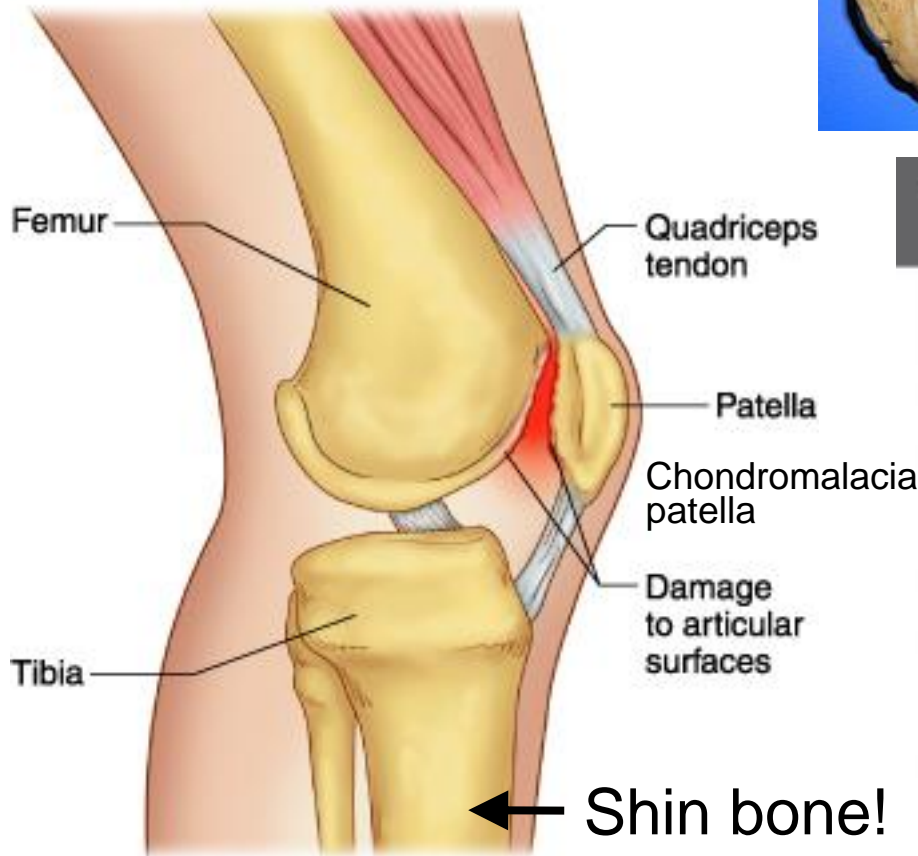


Neutral or hammer grip!!

Is the *patella* visible? What is its *nickname*? Can you find the *tibia*? What is its *nickname*? Where does the *patellar tendon* insert onto the tibia? Is it *patellar tendon* or a *ligament*? Explain briefly.



← Kneecap!



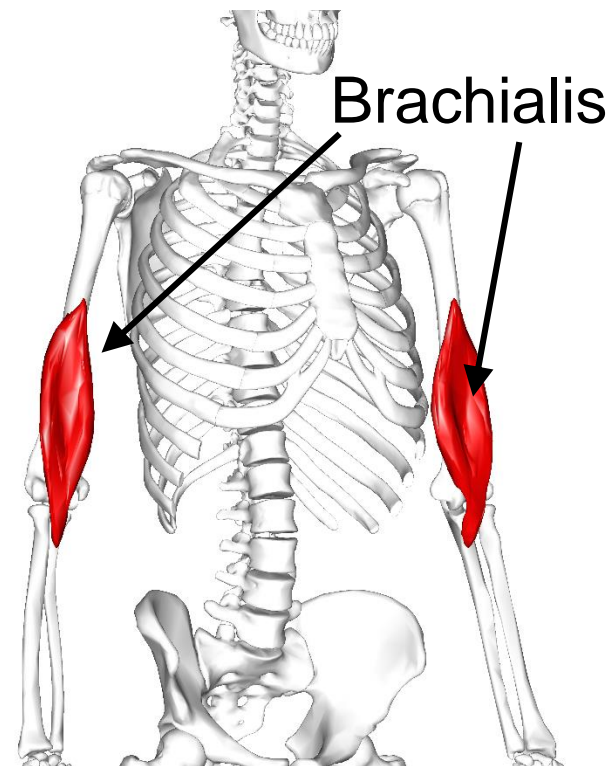
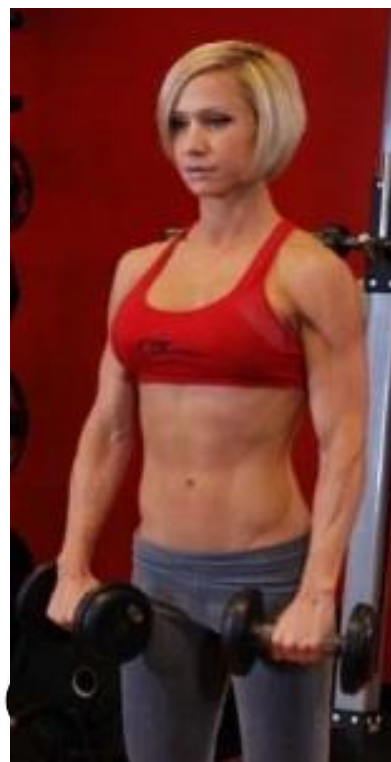
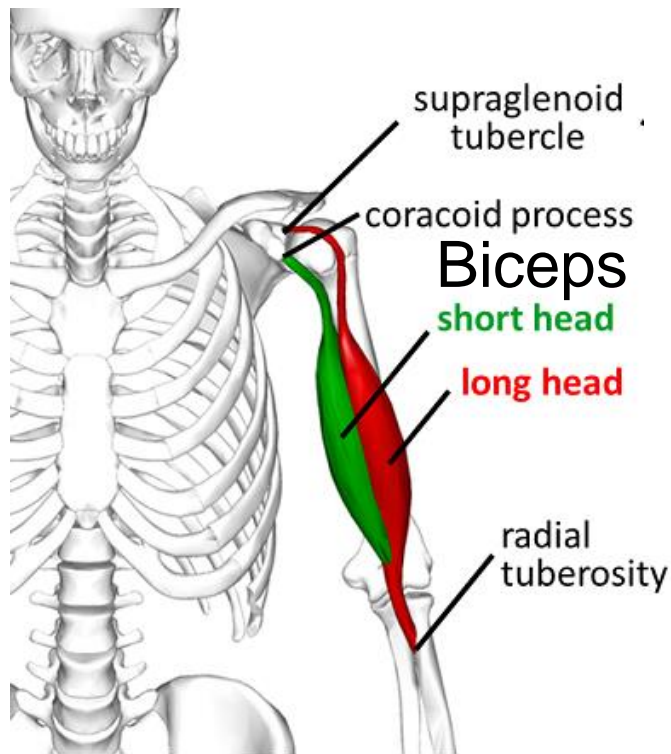
← Shin bone!

## Tibial Tuberosity

Tuberosity refers to round elevation (bump) from the bone



Can you find the *biceps brachii long* and *short* heads? What *two actions* does the biceps brachii do? Where is the *brachialis* compared to the biceps? What *grip* isolates the *brachialis*?

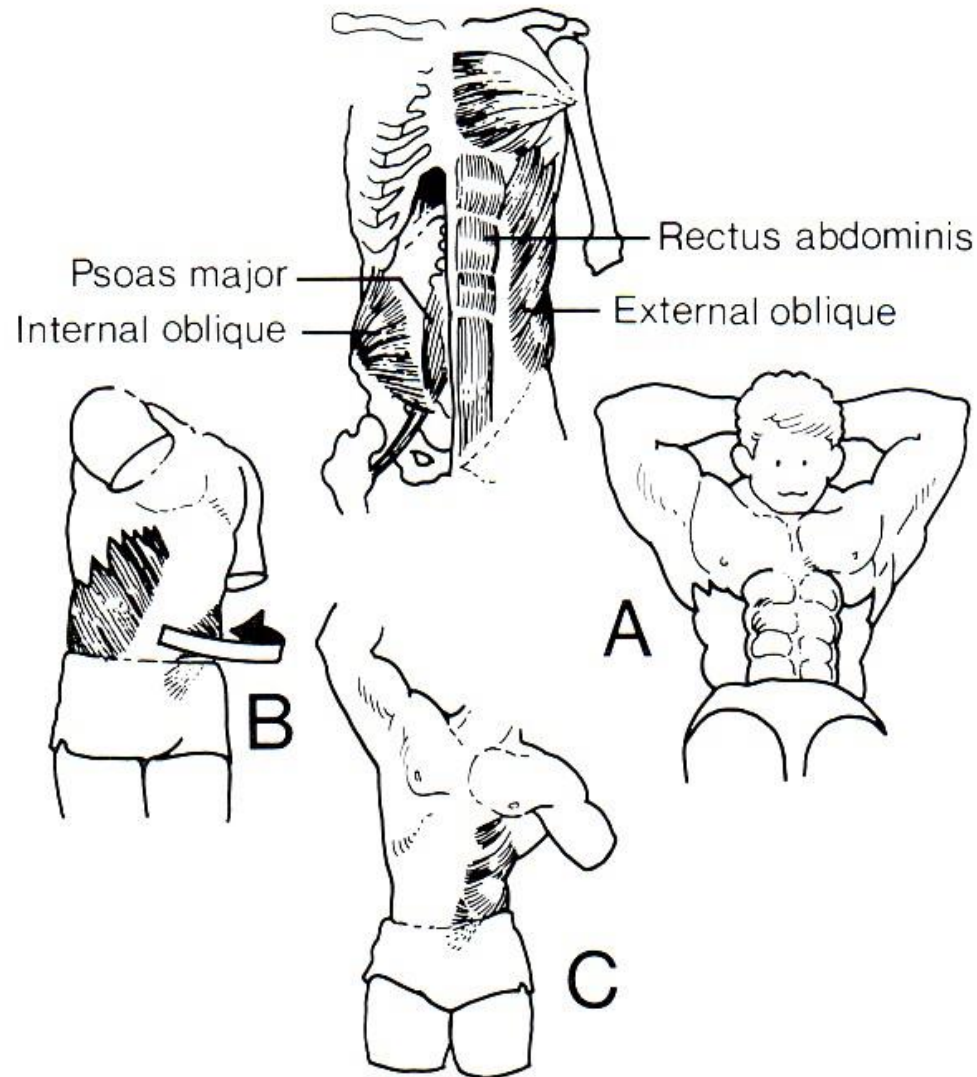


Pronated/Reverse Grip stresses Brachialis!

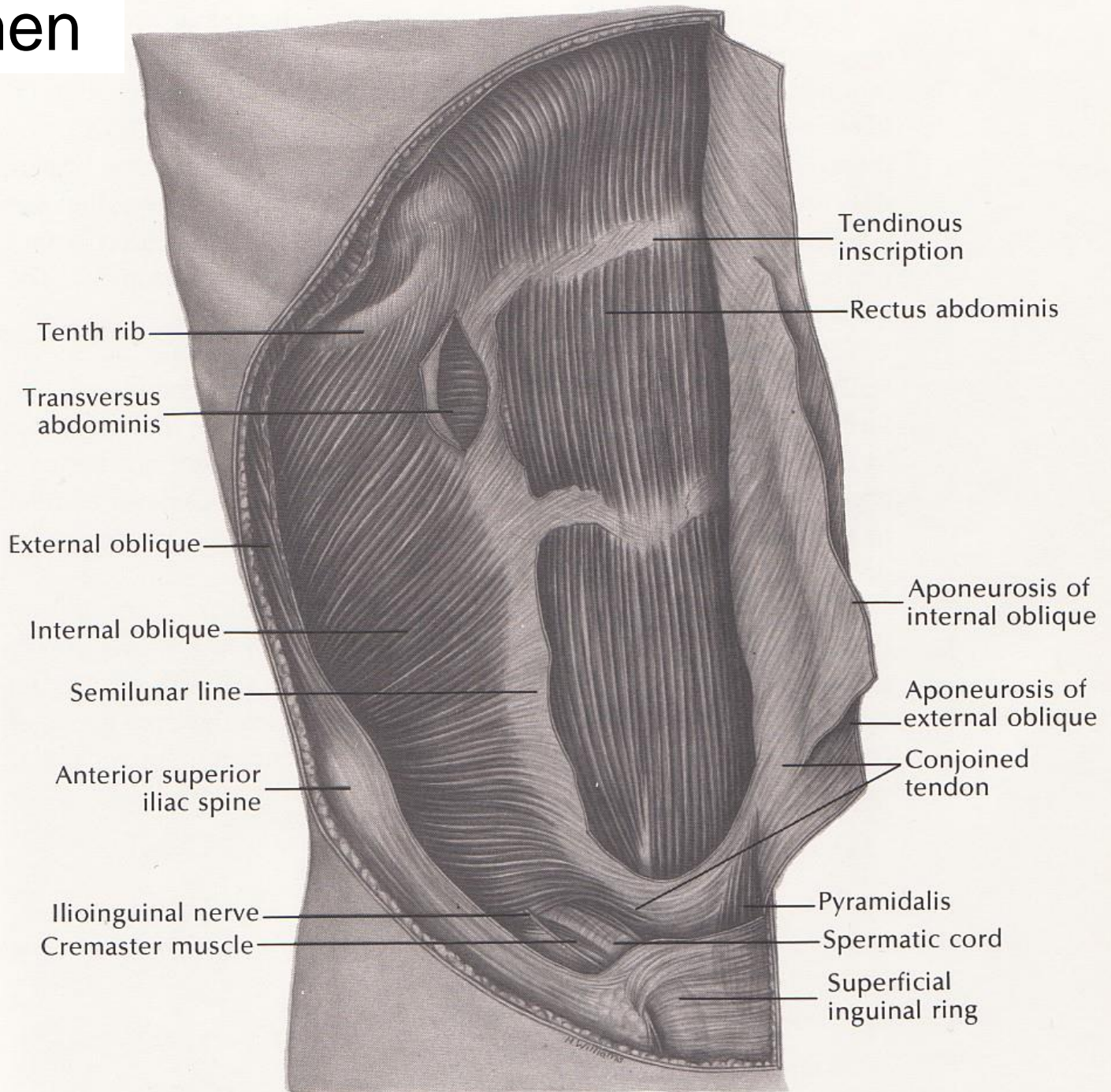
<https://www.youtube.com/watch?v=5QxggbUvkbq>

Supinated/Palms up Grip stresses Biceps Brachii?

Identify the *rectus abdominis*, *external oblique* and *internal oblique* muscles if dissected. What *exercise/s* stress/es the *rectus abdominis*? What movements emphasize *oblique muscles*?

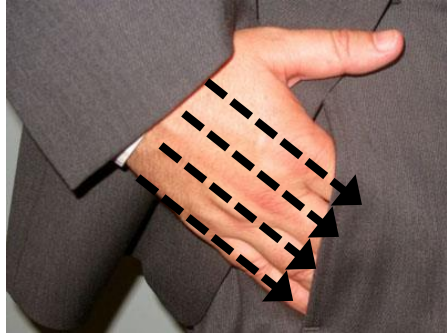


# R Abdomen



# R Lower Abdomen

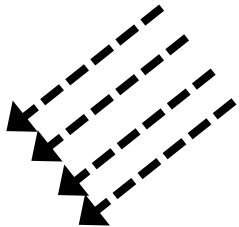
External oblique



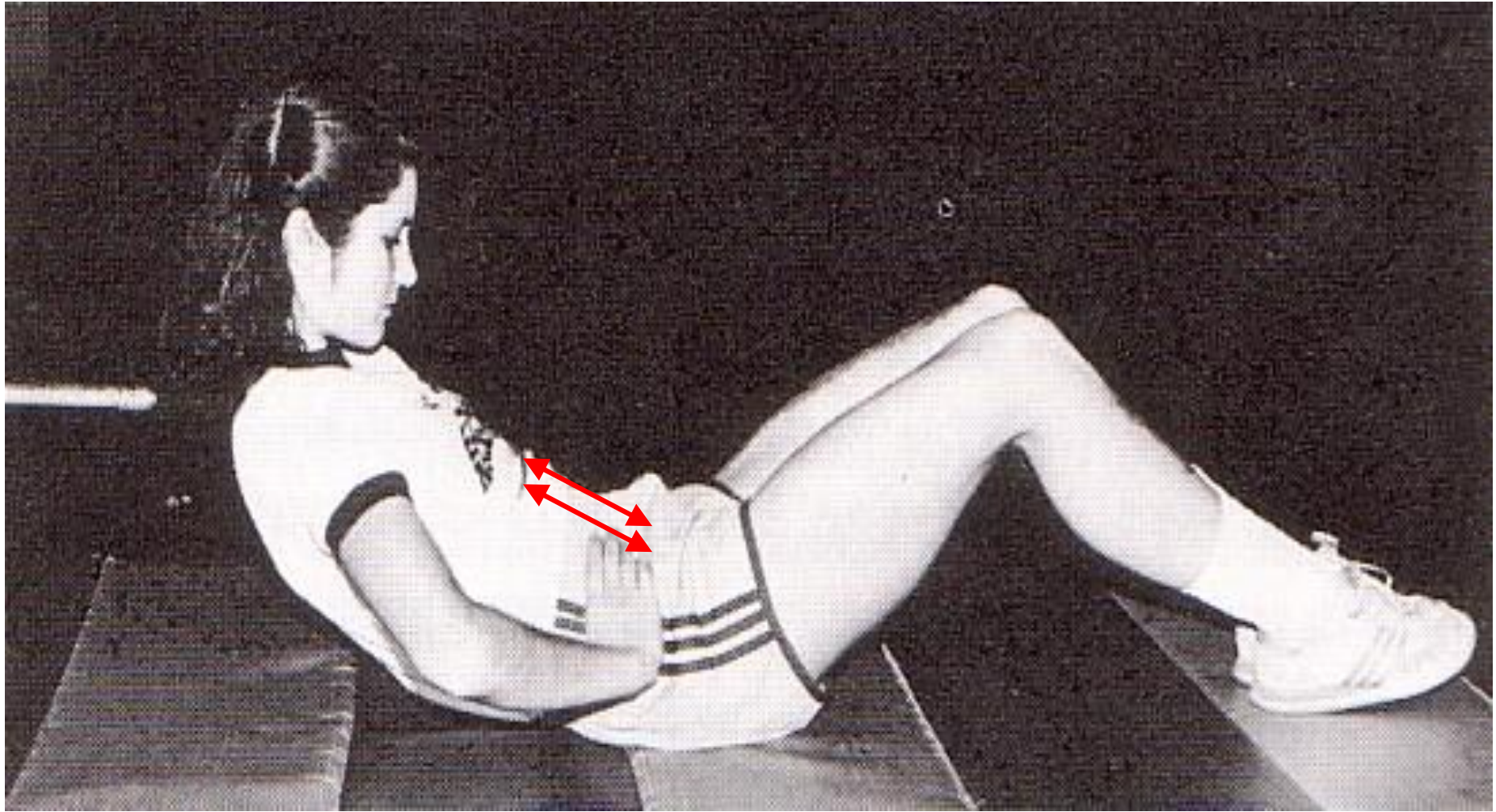
Rectus abdominis



Internal oblique



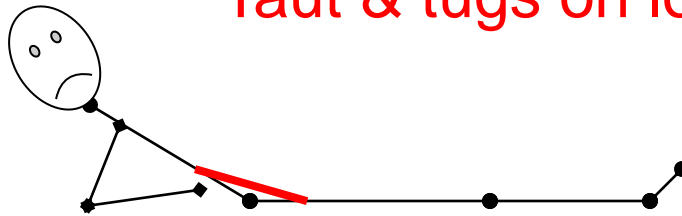
*Trunk flexion activates rectus abdominis muscles*





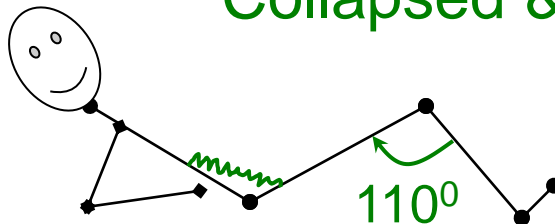
# Iliopsoas with *Knees Straight* vs. *Bent*?

Taut & tugs on lower back!



*Knees Straight*

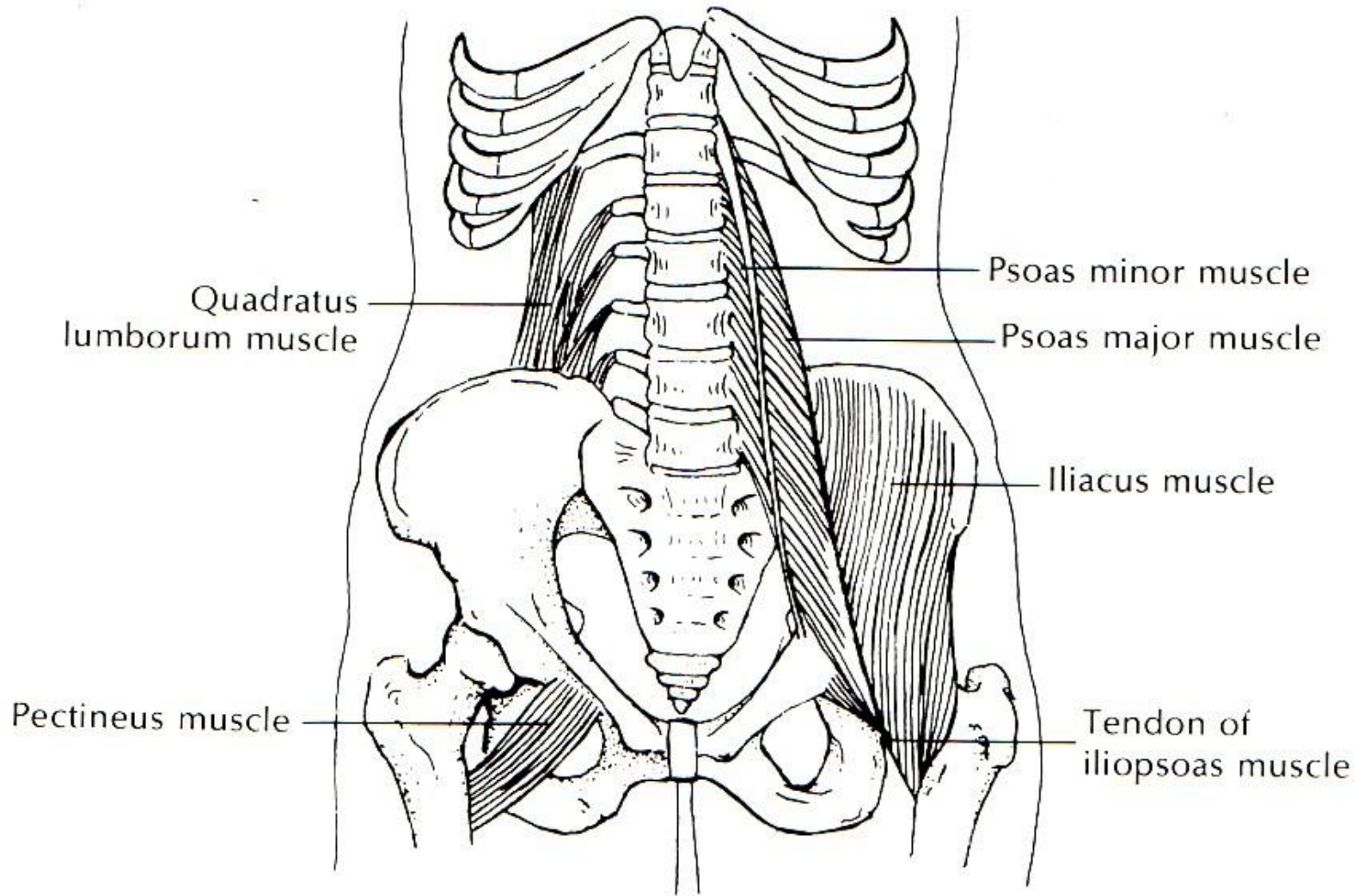
Collapsed & relieves stress!



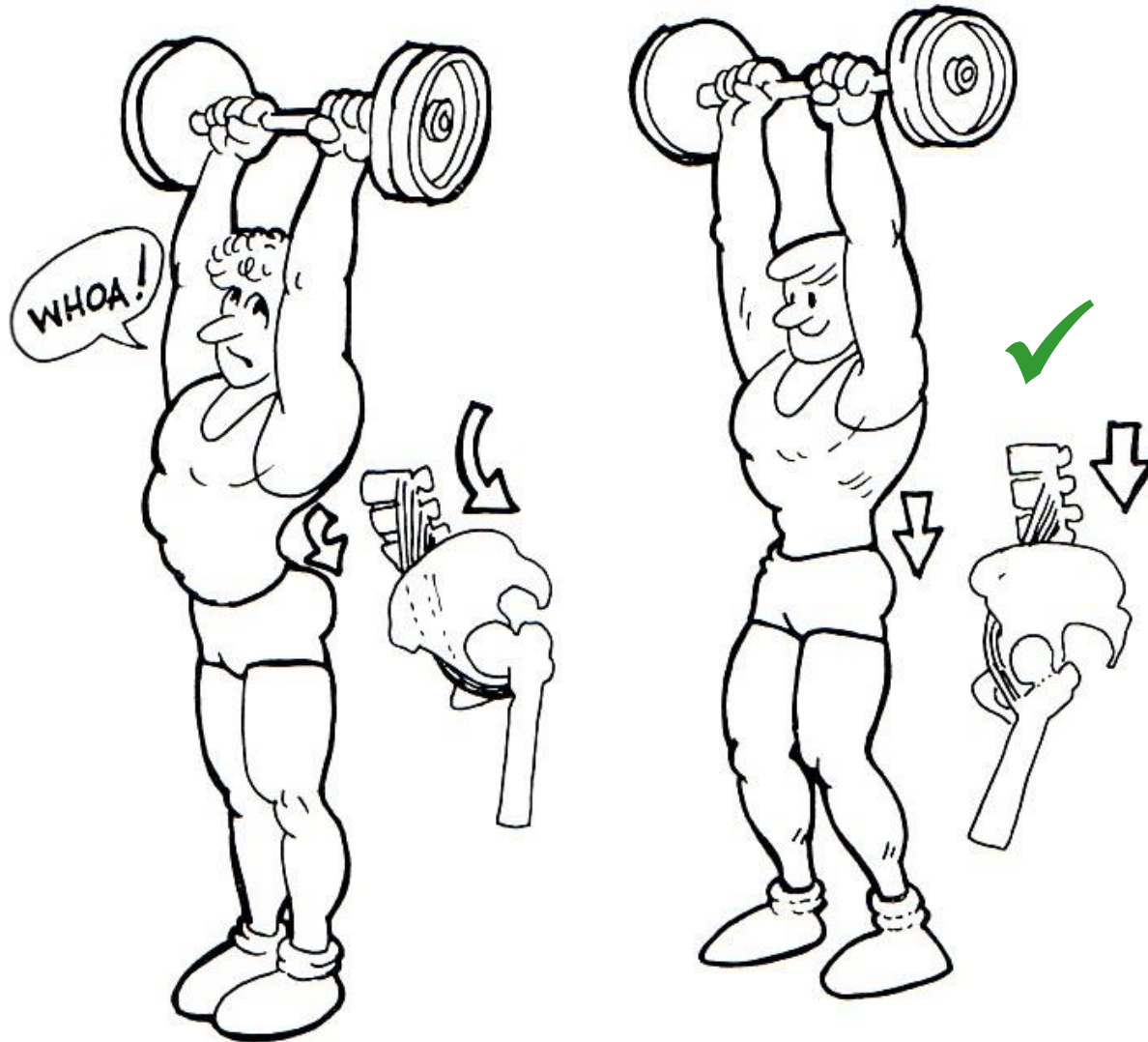
*Knees Bent*

Hip Flexors? *Iliopsoas, rectus femoris, sartorius*  
Feet Anchored vs. *Unanchored*? *Unanchored*

# ↓ Lower back stress by flexing hips & bending knees

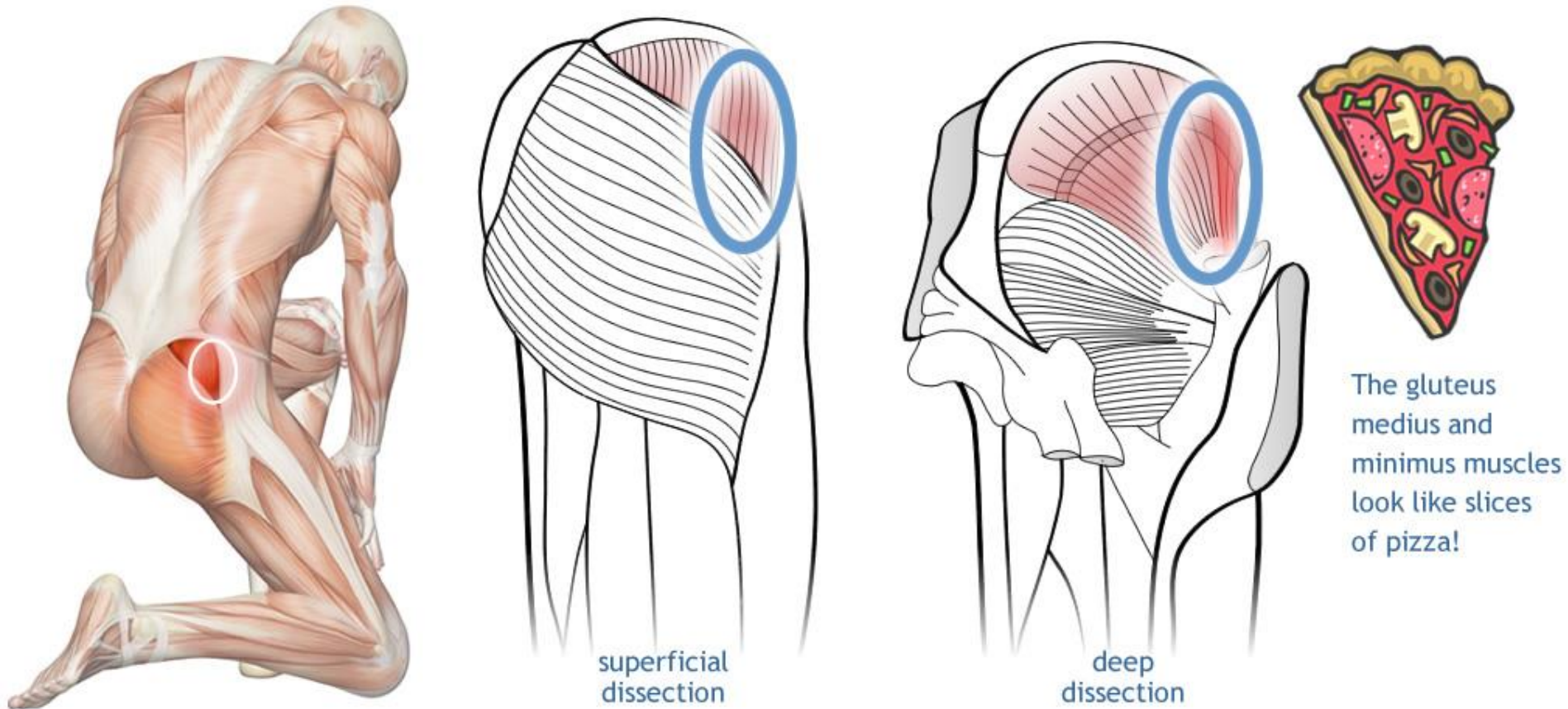


**Contract abdominals, bend knees,  
widen stance to reduce back stress!**



Identify the *gluteal* and *posterior thigh/hamstring* muscles. Is the dissection completed enough to differentiate *gluteus maximus*, *medius* and *minimus* muscles? Can you identify the *biceps femoris*, *semitendinosus* and *semimembranosus* muscles? What *exercise/s* work/s *gluteal and hamstring* muscles, simultaneously?

# Deeper Gluteal Muscles Look Like Pizza Slices!! Superficial to Deep: *Maximus, Medius, Minimus*!



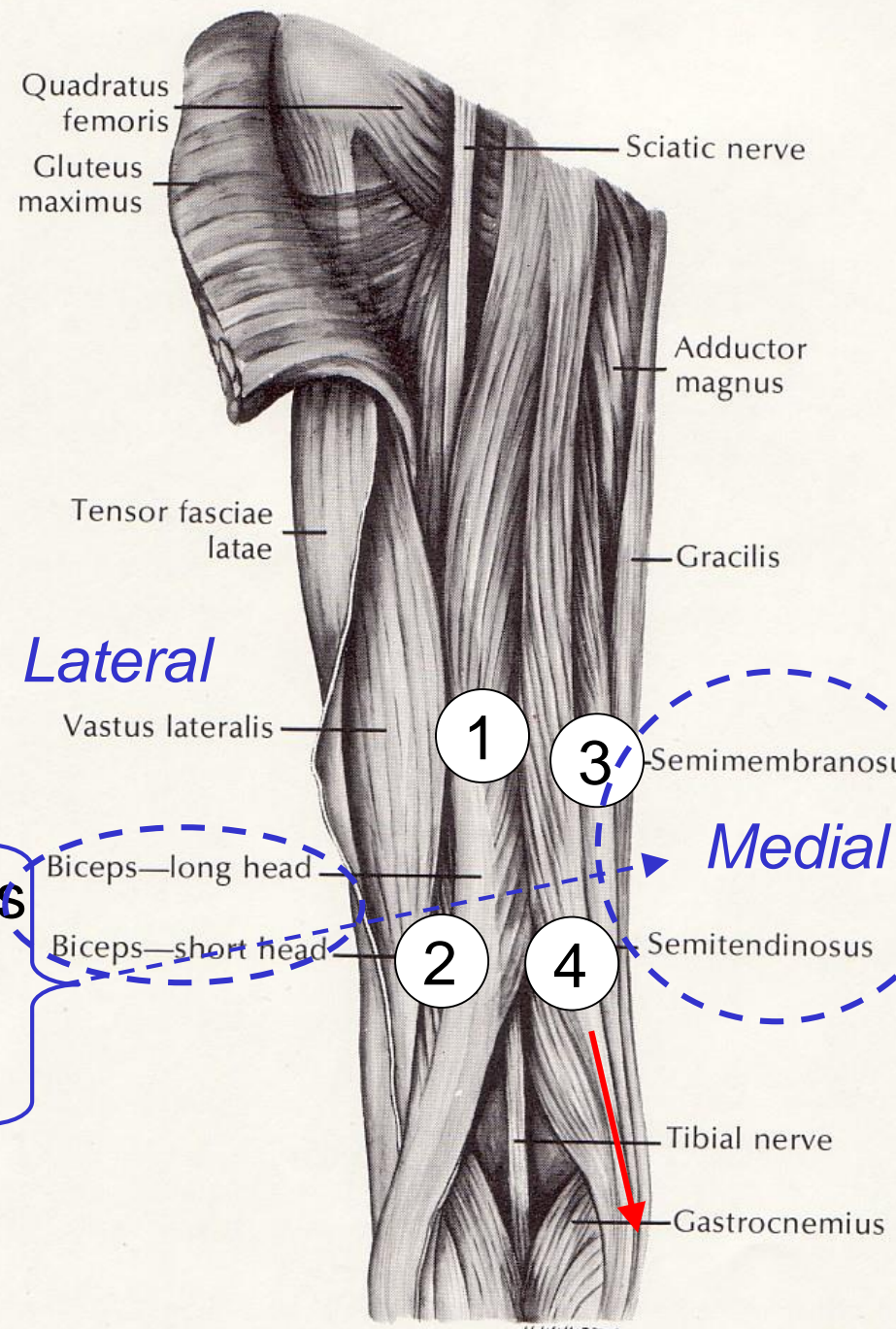
[http://www.anatomyexpert.com/structure\\_detail/5715/](http://www.anatomyexpert.com/structure_detail/5715/)

Image Source: <http://saveyourself.ca/articles/spot-06-gluteus-medius.php>

L thigh posterior

### Hamstring Group

- ① Biceps femoris (long)
- ② Biceps femoris (short)
- ③ Semimembranosus
- ④ Semitendinosus



L thigh  
posterior

Gluteus  
maximus

Vastus lateralis

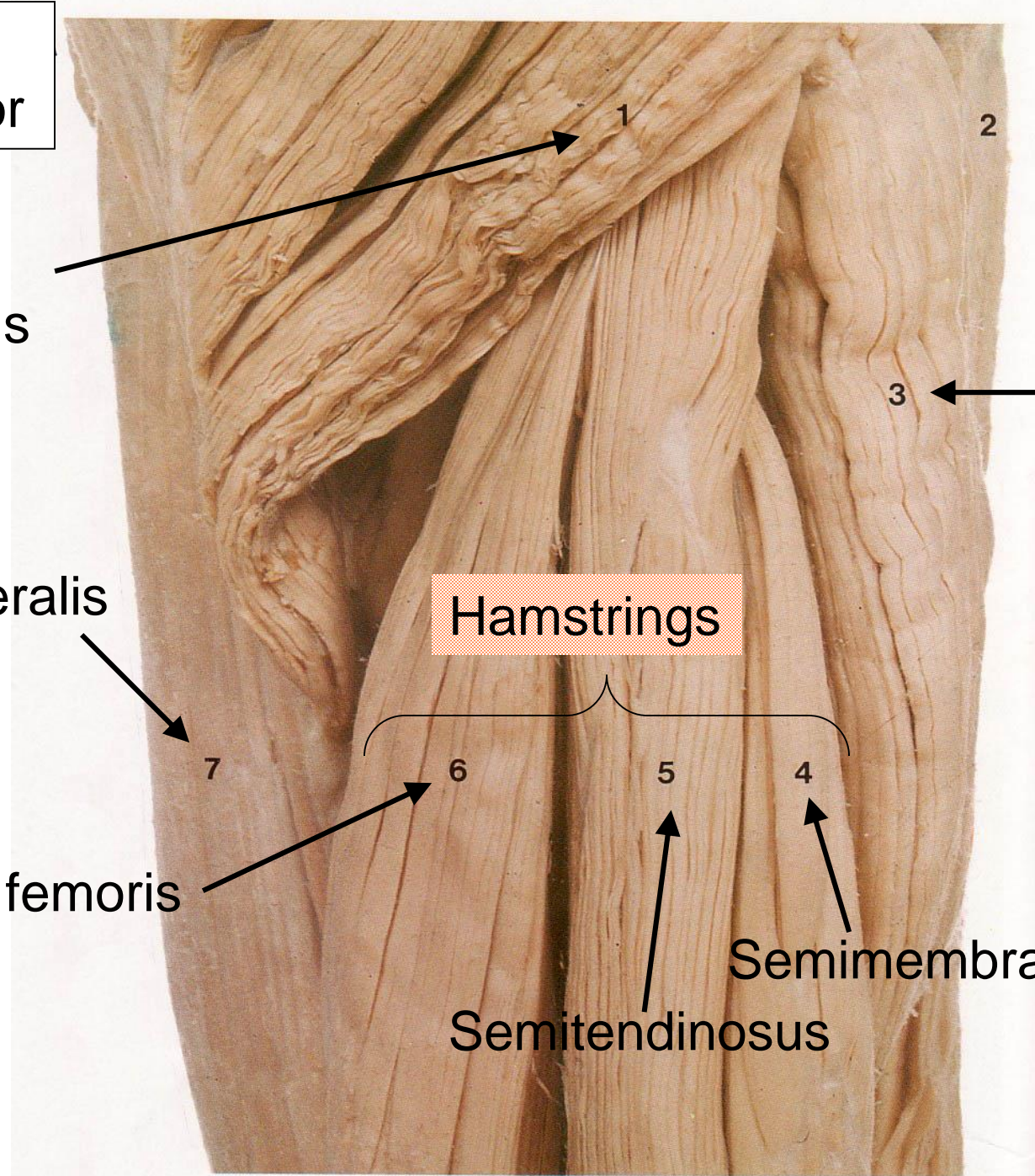
Biceps femoris

Hamstrings

Semitendinosus

Semimembranosus

Adductor  
magnus



What *exercise/s* work/s *gluteal and hamstring* muscles, simultaneously?

Squat

Lunge

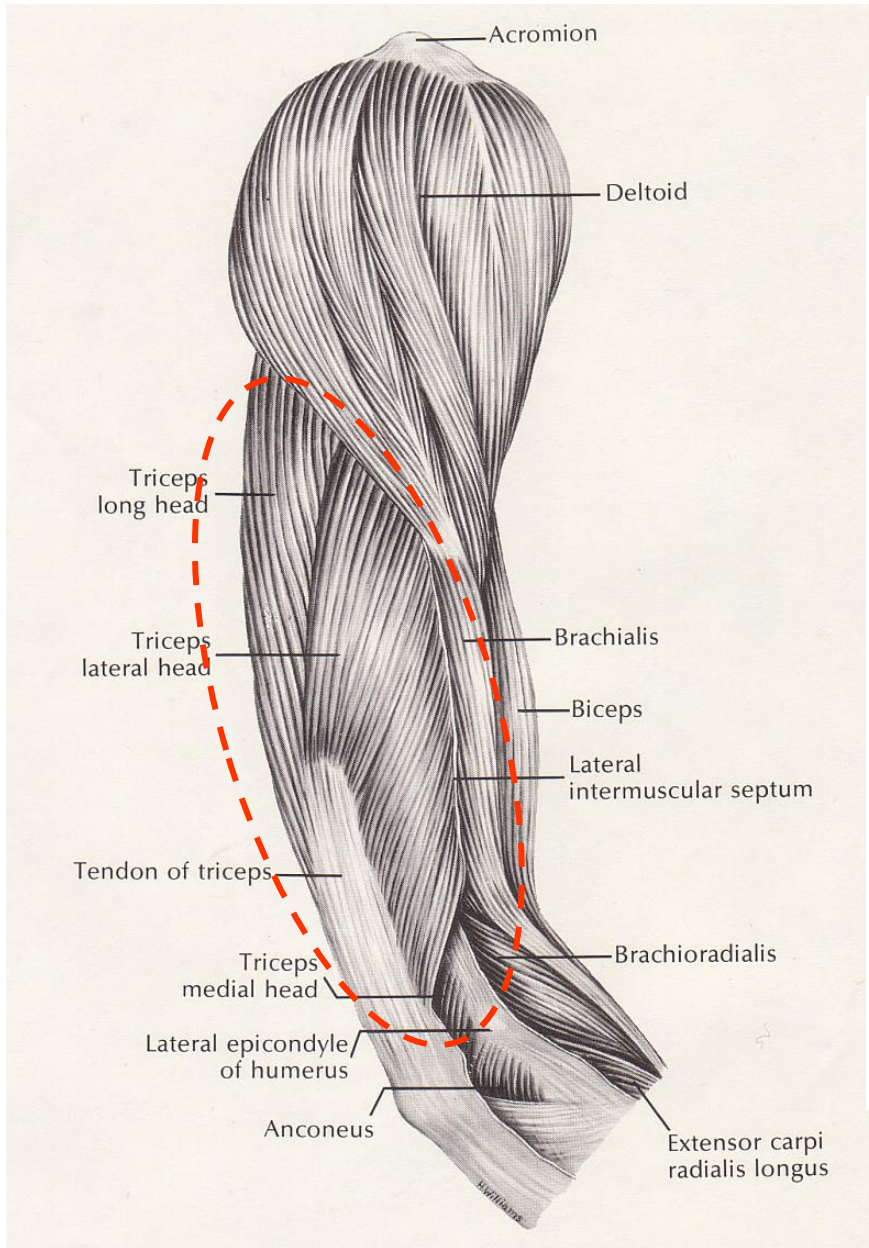


A

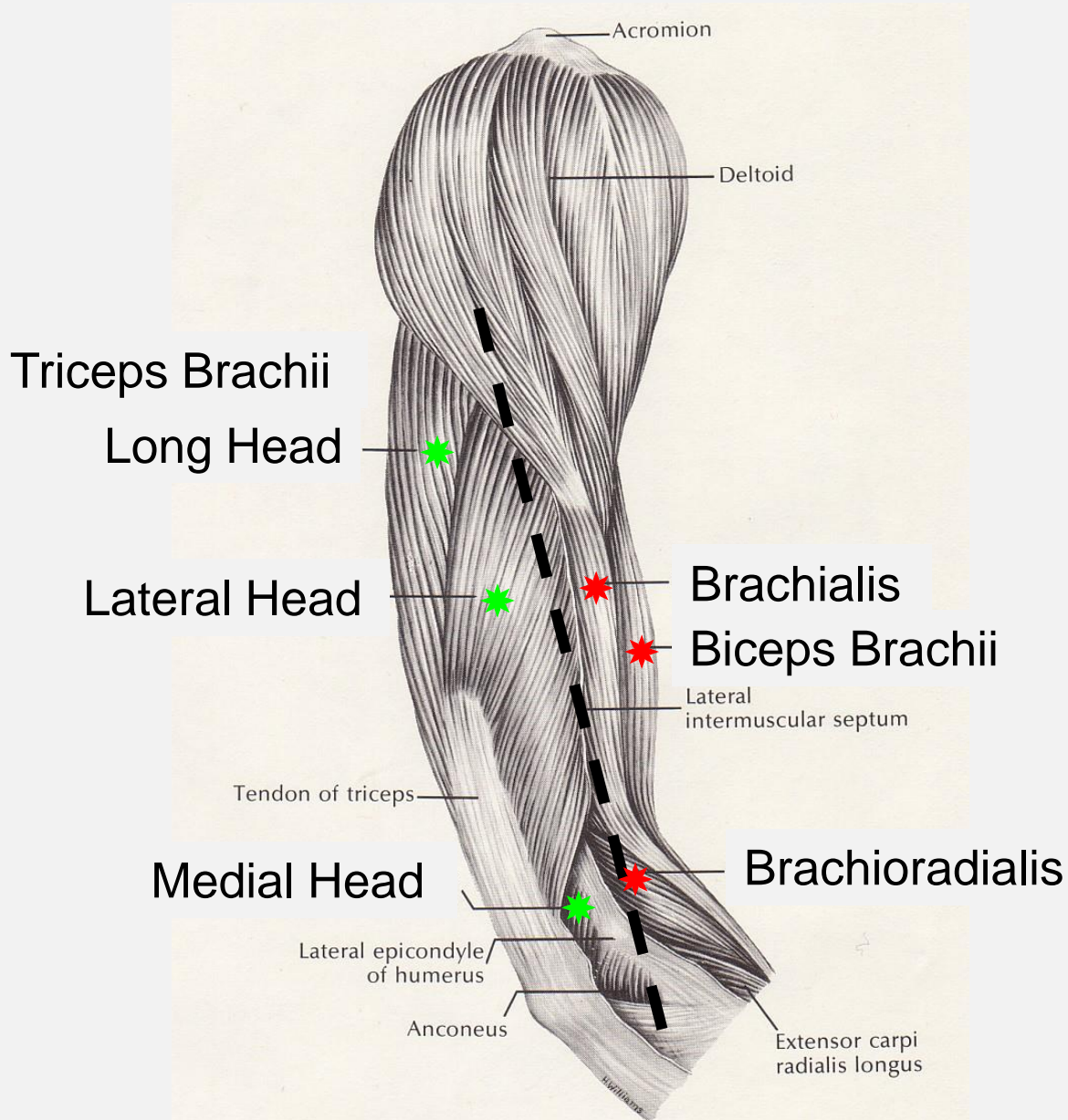
B



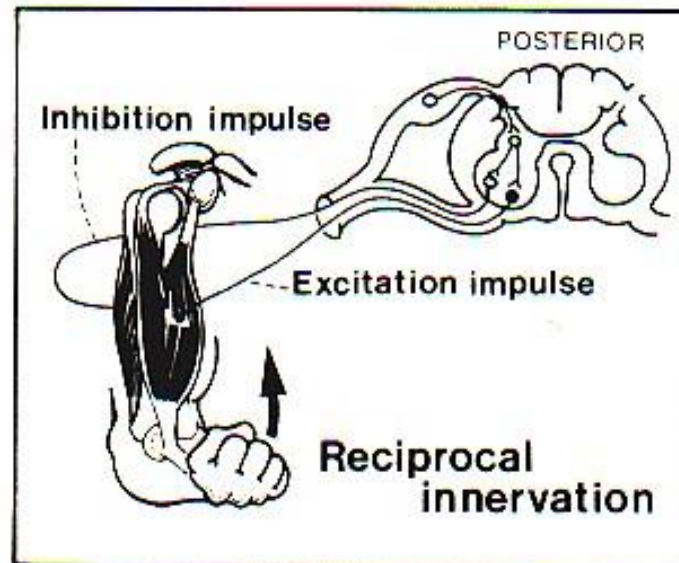
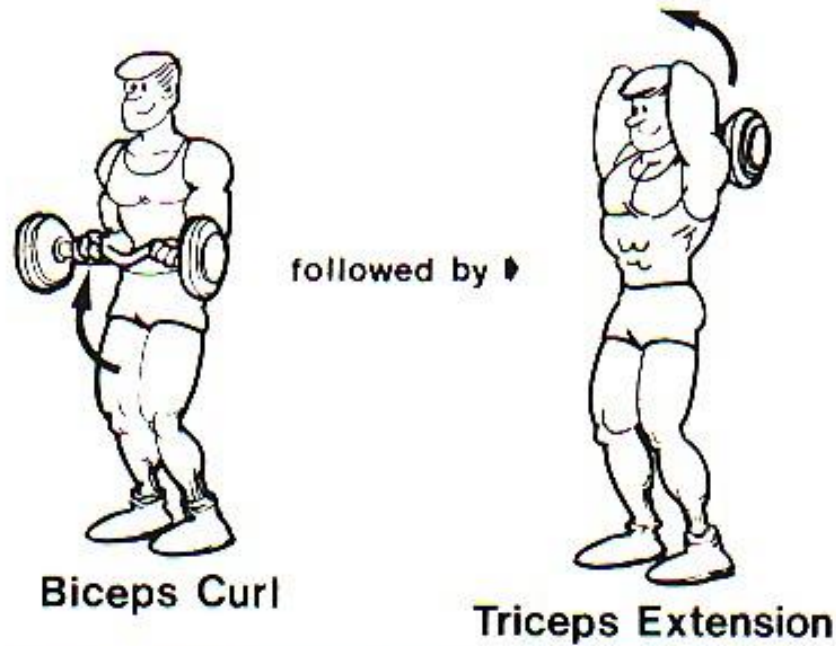
Identify the *triceps brachii*. List all *three heads* below.  
What *exercise/action* works the *posterior arm*?



# Push - Pull



# *Within Same Workout – Superset to Save Time!*



**NB: Antagonistic relaxes while agonistic works.**

Can you identify the *trapezius* and *posterior deltoid* muscles? What are these muscles shaped like, respectively? What *exercises* help isolate these two muscles?

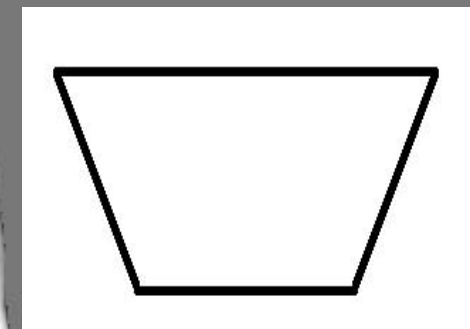
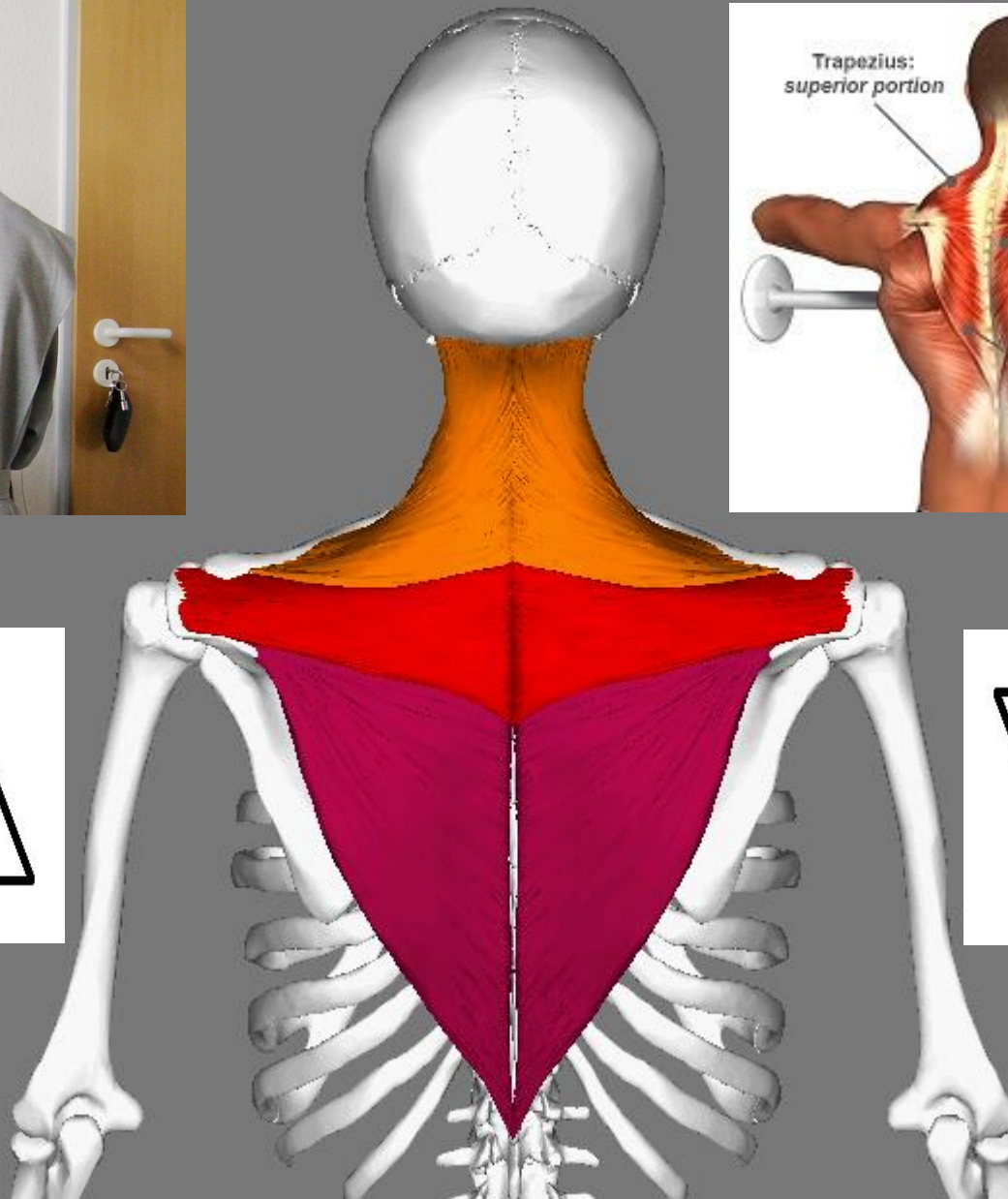
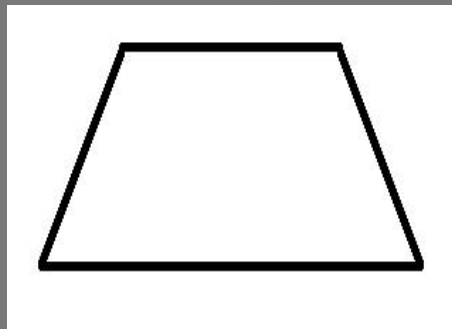
Trapezius

Posterior  
Deltoid

Latissimus  
Dorsi

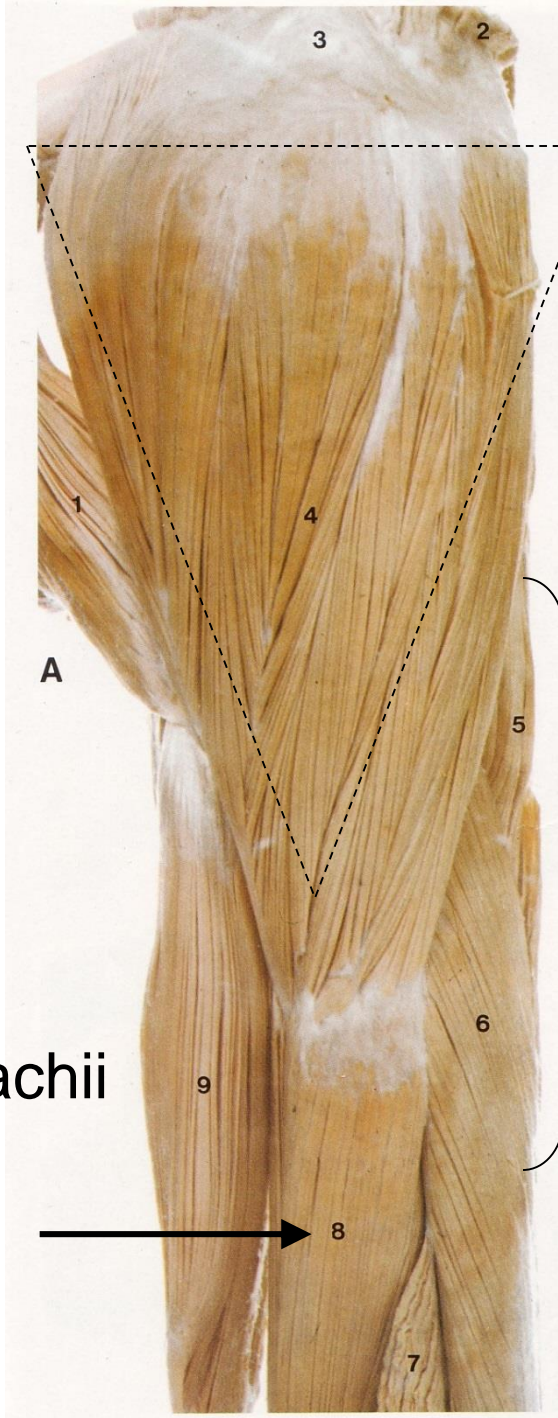


# *Trapezius = Shaped like a Trapezoid*

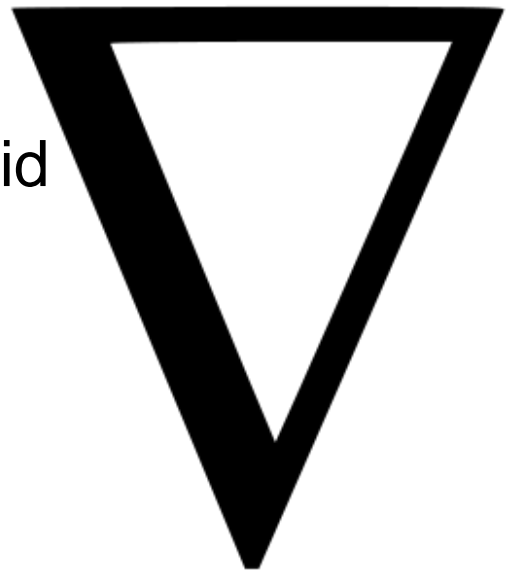


L arm lateral

Pectoralis major



Deltoid



Triceps brachii

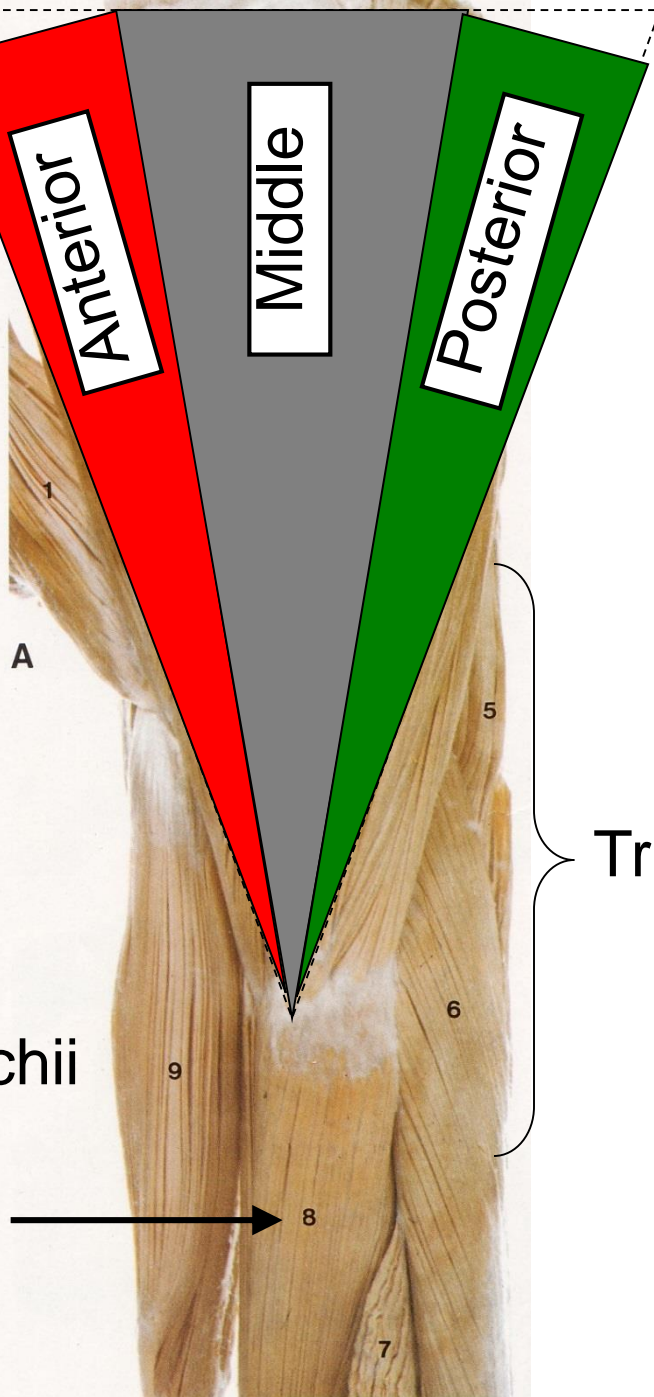
Biceps brachii

Brachialis



L arm lateral

Pectoralis major



Anterior

Middle

Posterior

Deltoid

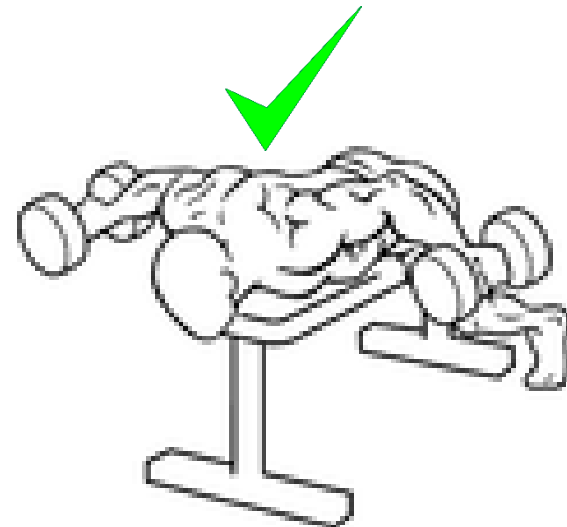
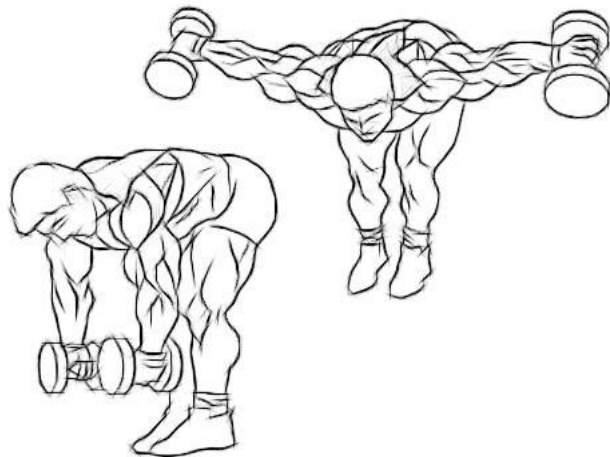
Triceps brachii

Biceps brachii

Brachialis



# Posterior Deltoid Raises





***Time-out for discussion!***

