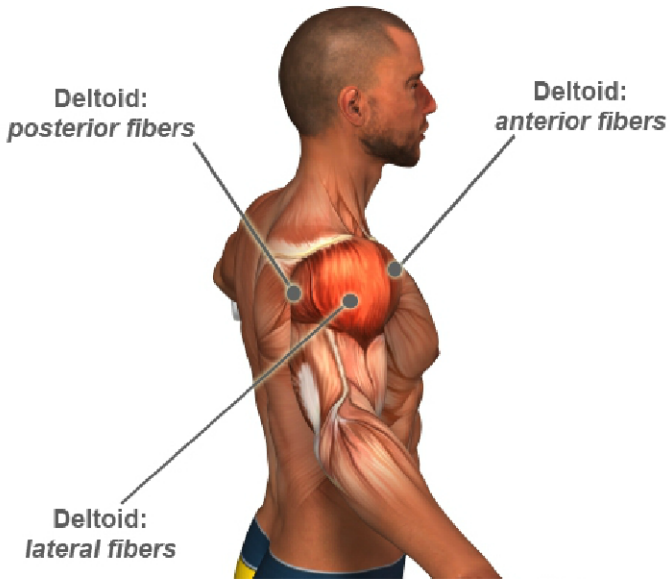
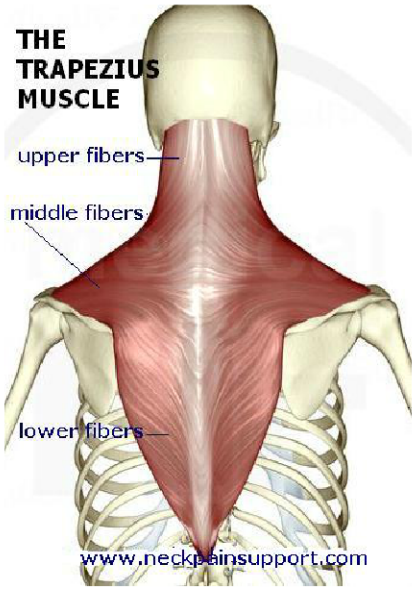
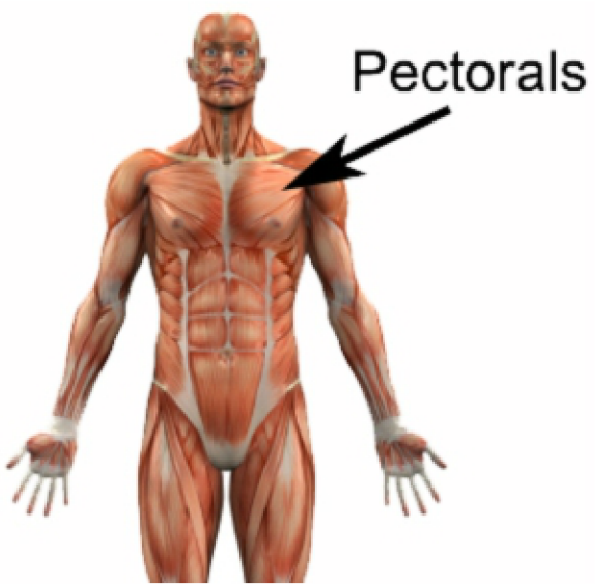


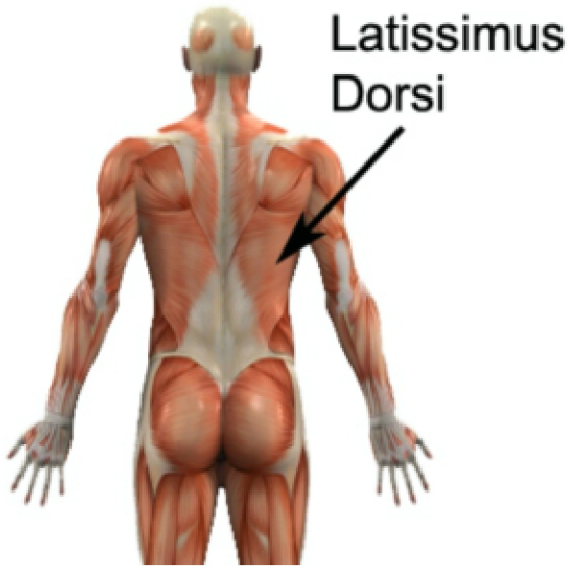


Deltoid

Trapezius

Mod: Trap



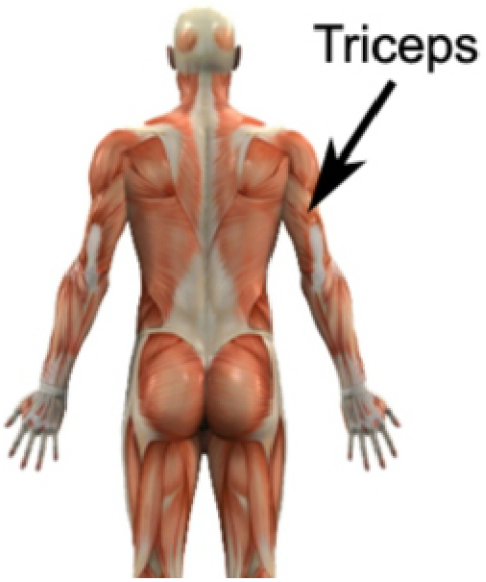


Pectorals

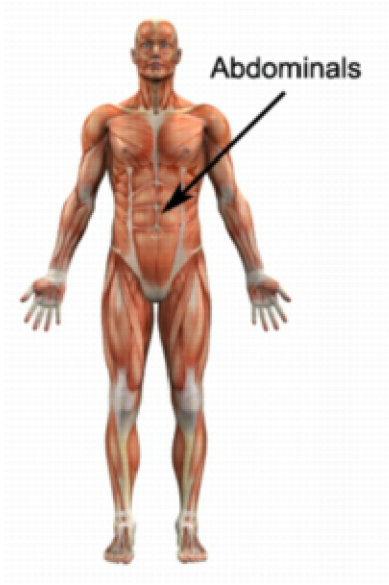
Mod: Pecs

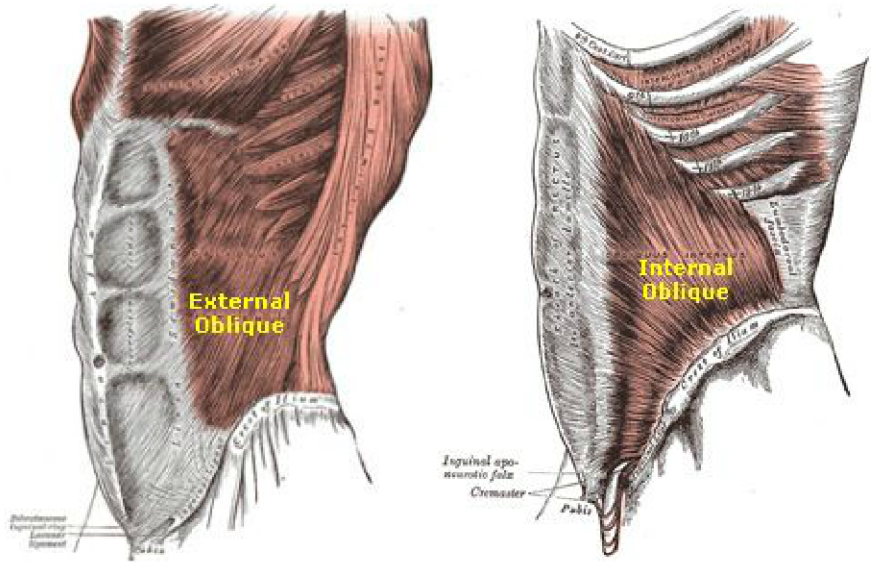
Latissimus Dorsi

Mod: Lat



Bicep Tricep

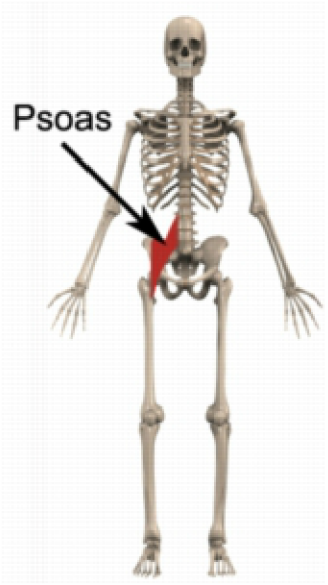




Abdominals

Mod: Abs

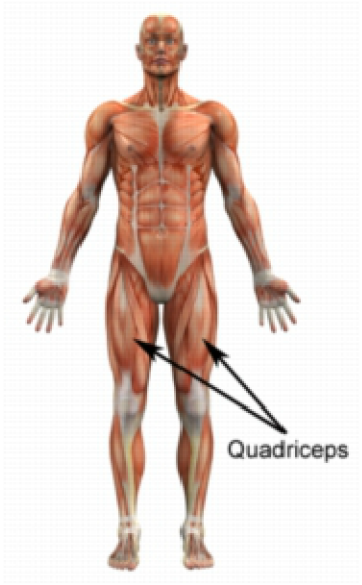
Obliques



Gluteals

Mod: Glutes

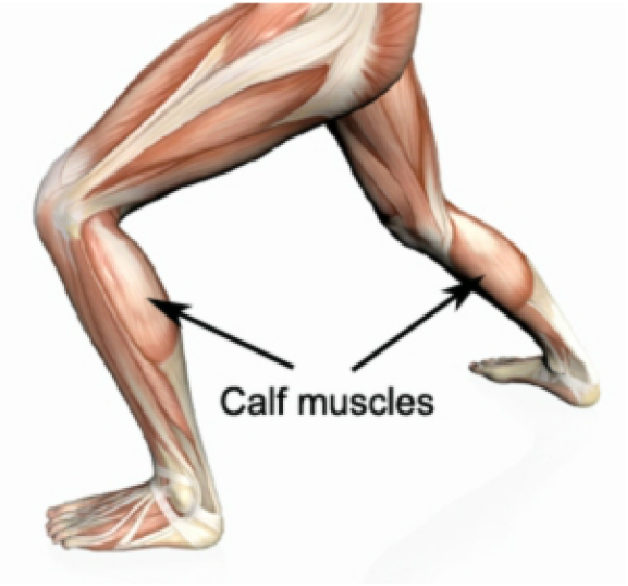
Psoas

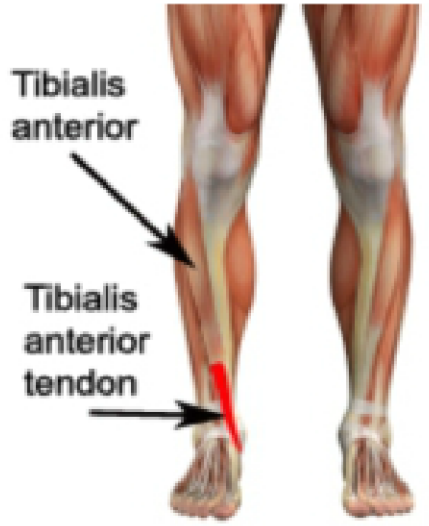


Quadricep

Mod: Quad

Hamstring





Gastrocnemius

Mod: Calf

Tibialis Anterior

Every time our muscles contract they pull on our bones causing more bone material to be layed down strengthening our skeleton

What effect does exercise have on our skeleton?

The body will adapt to a greater than normal stress/load on the body resulting in a gain in overall strength given enough recovery time. In order for a muscle (including the heart) to increase strength, it must be gradually stressed by working against a load greater than it is used to. To increase endurance, muscles must work for a longer period of time than they are used to.

The extra load breaks down the muscles causing microtears. Given enough rest/recovery & proper nutrition, the body heals these microtears with more protein increasing the size and strength of the muscle over time.

Overload Principle

Exercising a certain body part generally develops that part.

The Principle of Specificity implies that, to become better at a particular exercise or skill, you must perform that exercise or skill.

Principle of Specificity

Use it or Lose It!

Your muscles hypertrophy (get larger) with use and atrophy (get smaller) with disuse.

If good stress is removed or decreased there will be a decrease in that particular component of fitness.
A normal amount of exercise will maintain the current fitness level.

Principle of Use /Disuse

They atrophy (wasting away of muscle)

Pectorals - Latissimus Dorsi
Bicep - Tricep
Gluteals - Psoas
Quadricep - Hamstring
Gastrocnemius - Tibialis Anterior

What happens to muscles when they aren't challenged?

Ex. arm in cast, walking on crutches, not being active over extended school

Name working muscle pairs

(one contracts while the other relaxes & vice versa)

- Less Injuries
- Heal faster when injured
- Improved performance when moving
- Better physical appearance
- Increased stamina/endurance
- Daily life demands are easier

Flexion decreases the angle between the bones of the limb at a joint.

Benefits of Strong, Fexible Muscles

Flexion

Extension increases the angle between the bones of the limb at a joint.

Body parts rotating around a fixed axis/center (a.k.a. joints on the human body)

Extension Rotation