MFC Fitness Seminar Series

Thursday, August 22, 2013

Stretching and Flexibility

Why stretch?

- Athletes may want to increase range of motion to better performance during sports and competition.
- Elderly may want to maintain flexibility to retain the ability to perform daily tasks like tying shoes and brushing hair.
- Someone who has experienced an injury may want to return to their pre-injured range of motion, as well as be able to perform activities of daily living.

When should I stretch?

- Perform dynamic stretching before activities that use power and strength like sprinting, power lifting, and sports. It acts as a warm up and prepares fast twitch muscle fibers for explosive motions.
- Avoid static stretching before strength and power activities.
- Perform static stretching after a warm up or workout.
- Self myofacial release can happen both before a workout as a warm up and after a workout as a cool down.
- PNF/Contract-relax should happen after a warm up and can be used independently of a work out. For athletes wanting to increase range of motion; for rehabilitation purposes: to increase range of motion and strength of muscle.

How does stretching work?

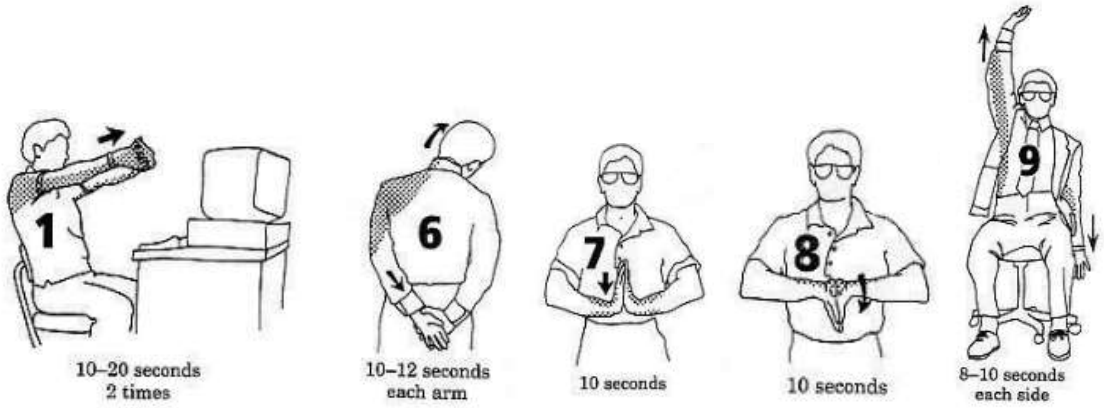
- Receptors in muscles and tendons detect changes in tension or length and the rate of change.
- If the muscle is overstretched it will respond by shortening. If it is overloaded, it will respond by lengthening.
- If a static stretch is done slowly, the receptors can adapt to a longer length without responding with a contraction.

What should I take into consideration when designing my stretching routine?

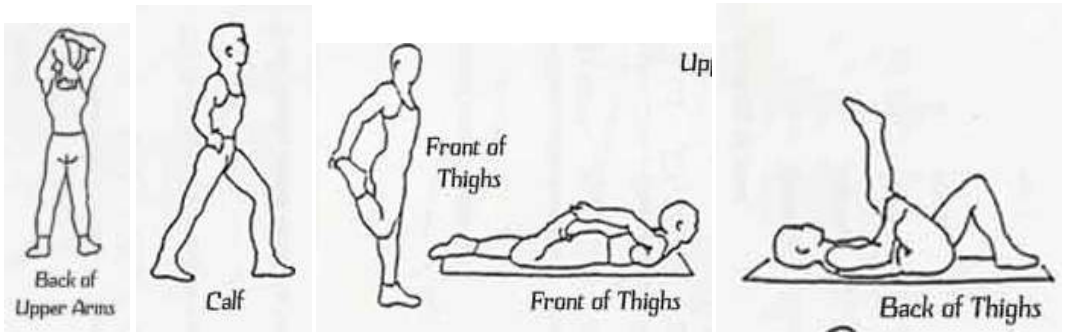
- Do you want to improve your range of motion for performance of athletic or daily activities?
- Do you need a warm up or a cool down? (Use PNF, dynamic, or self myofacial release)
- Do you want to improve strength in addition to flexibility? (Use active-static, PNF, or dynamic)

Foam Rolling (Self Myofacial Release)

Desk Stretches



Static: Passive (20-30 s) and Active (10-15 s)



Dynamic: 8-12 reps, or until maximal range of motion is acheived

PNF (Contract-relax)