Spring 2016 Week 5 Reading: Static vs Dynamic Stretching

When we work out, especially with strength training, it is increasingly important that we take care of our bodies to minimize the risk of injury and also speed up the rate of recovery. So we also wanted to touch on the importance of proper warm-up and cool-down before and after a workout.

Static and Dynamic Stretching
Static stretching involves in-place movements (touching your toes, holding your foot to stretch your quad, etc.) that are held for a period of time, usually 10-20 seconds.
This is different from dynamic stretching, where we warm-up the body gradually with agility-based movements (high knee walk, walking lunges, side shuffle, high skips, etc.)

Warm-Up
Recent research suggests that static stretching cold muscles right before playing a sport or exercising can actually impair performance, such as reducing jumping height, lowering muscular strength and power, and slowing sprint time. It is never a good idea to statically stretch a cold muscle, because cold muscles are more likely to tear/strain when overstretched. Think of stretching out a rubber band after it has been sitting in the freezer, it's a lot more brittle.

So, in order to prevent straining our cold muscles before playing, we do a dynamic warm-up. This way we can heat the body up gradually and safely (avoiding injury), as well as prepare the body to exert maximum effort. Once the body is completely warmed-up, it's okay to do some light static stretching.

Examples of Dynamic Stretches:

High Knee Walk
High Knee Skip
High Knee Run
Butt-Kickers
Straight Leg Skip
Backpedal
Lunge Walk
Side Shuffle
Scissor Kicks

Cool Down
At the end of a workout or once the body is warm, static stretching is great and it can be the safest and most effective form of stretching. The benefits of static stretching include:

increases joint range of motion, corrects muscle imbalances, relieves joint stress, decreases tension of muscles, lengthens muscles, and helps to achieve muscle efficiency.

Injury Treatment

A very important thing to remember is never to stretch a muscle immediately after pulling/straining it! There is a different between being tight and being injured. It's ok to stretch if your muscles are tight and need to loosen up. But if you feel a sudden sharp pain in your muscle, it is probably a strain. Again, don't stretch a strain out right after it happens. A strain is a result of a small tear in your muscle, so stretching it before it heals (1-2 days later) will stretch the tear and make it bigger.

Homework Questions:

1.) Explain the difference between static stretching and dynamic stretching.
2.) When is the best time to do dynamic stretching? Give 2 examples of a dynamic stretch.
3.) Why is it bad to static stretch cold muscles? When is it a good time to static stretch?
4.) Name 2 benefits of static stretching.
5.) Should you stretch a pulled/strained muscle right after it happens? Why or why not?