

## 8047 - Stretching for Flexibility

Flexibility training is often overlooked and forgotten despite its vital role in keeping muscles and joints strong so they are less susceptible to injury. Moreover, spending a few minutes a day doing slow, deliberate stretches can also help you manage stress more effectively giving you a chance to momentarily shut off outside stressors.



### Why Stretch?

Stretching is useful for both injury prevention and injury treatment. If done properly, stretching increases flexibility which **directly translates into reduced risk of injury**. A muscle/tendon group with a greater passive range of motion will be less likely to experience tears when used actively.

Stretching is also thought to improve recovery and may enhance athletic performance. However, the latter has not been fully agreed upon in the medical literature.

**Benefits of Stretching** Of course, a more flexible athlete is a more mobile athlete. It allows enhanced movement around the court or field with greater ease and dexterity. Some other benefits may include an increase in body awareness and a promotion of relaxation in the muscle groups stretched.

### Types of Flexibility and Stretching

1. **Dynamic Flexibility:** the ability to perform dynamic movements within the full range of motion in the joint. Common examples include twisting from side to side, kicking an imaginary ball, arms circles, and walking lunges (without weights). Dynamic flexibility is generally more sport-specific than other forms of mobility.
2. **Static Active Flexibility:** the ability to stretch an antagonist muscle using only the tension in the agonist muscle. An example is holding one leg out in front of you as high as possible. The hamstring (antagonist) is being stretched while the quadriceps and hip flexors (agonists) are holding the leg up.
3. **Static Passive Flexibility:** the ability to hold a stretch using body weight or some other external force. Using the example above, holding your leg out in front of you and resting it on a chair. The quadriceps are not required to hold the extended position.

### When to Stretch

#### Dynamic Stretching

More recently, clinical studies have shown that traditional static stretching exercise may be detrimental to sports involving powerful movements. Instead, dynamic stretches seem to be more effective at reducing muscle stiffness. For this reason, it is recommended to **perform dynamic stretching in your warm up prior to physical activity**.

As a general rule, **dynamic** stretches are used as part of a warm up and **static** stretches are used for increasing range of motion.

#### Static Stretching

Active and passive static stretching is slow and constant and held at an end position for up to 30 seconds. Over time, it may reduce the risk of injury as it increases the safe range through which a joint can be taken without injury occurring to surrounding muscles and ligaments. From an athlete's perspective, regular stretching improves force production, speed and jumping ability.

### Don't Forget!

- Warm your muscles slightly before stretching them. Walk or do some other light aerobic activity beforehand.
- Ease yourself into the stretch, **relax**, and don't push or bounce. You should feel a stretch in the muscle but not pain.
- Exhale as you do the stretch. While you are holding the stretch, inhale deeply.
- Try closing your eyes while stretching. It helps you relax and reduces self-consciousness and the urge to compete.
- Take a moment to enjoy the good, warm feeling that comes after a good stretch.

Resources: <http://www.sport-fitness-advisor.com/>, <http://www.shapefit.com/>, <http://www.webmd.com/>