

To Stretch or Not to Stretch

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Stretching has been promoted for years as a key element of fitness. Trainers and coaches have advocated that stretching prior to activity and/or after activity would prevent injuries.

New evidence suggests that stretching before exercise does not prevent injuries nor does it decrease muscle soreness. Stretching may even cause more problems, say a growing number of researchers. Stretching prior to activity may make the muscle so pliable that it may even cause injuries to occur. One study showed that marathon runners who stretched prior to a race had a higher rate of injuries compared to those who didn't stretch.

One reason is that stretching muscle fibers makes them less stable and less able to withstand jarring. Sports like running and jumping can add these stresses to the body and a more flexible person may have more difficulty withstanding these stresses. Other research indicates that a lengthened muscle takes longer for the brain to tell the muscle to move. There may be a connection between flexibility and athletic performance.

There is more evidence that injuries occur due to muscle weakness and fatigue. Strengthening and conditioning exercises are therefore helpful tools in the prevention of injuries.

On the pro side for stretching, many sports, like gymnastics, figure skating, and rock climbing, are better performed with flexibility.

Not all experts agree that stretching is harmful. Stretching can increase the range of motion of a muscle, which can help in the performance of certain activities. Proper stretching then becomes the major concern.

Stretching increases the range of motion of a muscle. In order to achieve these results, proper stretching is a must. To stretch correctly, we must address the following specifics. How long and how many times should a stretch be performed? Does temperature affect the ability to stretch? Which stretching method is best?

How to properly stretch is based on the individual. Each person has a functioning range. To determine the range best suited for a person, a test should be performed. To perform that test you need to stretch the muscle.

Begin by stretching the muscle until a feeling of tension is felt without pain. Hold the stretch until a feeling of a stress-relaxation sensation occurs and the force being exerted decreases. When this feeling occurs then stretch a little further until the feeling of tension occurs once again. The second part of the stretch should be held until no further increase

takes place. Muscle length can increase over time if the muscle is stretched to a constant length and held.

Research shows that one 15-30 second stretch per muscle group is sufficient for most people. Some people require longer duration stretches or more repetitions. As a person's stretch tolerance increases, the length of time a stretch is held can increase as well.

The long term effects of stretching show that after six weeks if an individual stretches for 30 seconds per muscle each day, they can increase their range of motion much more than those who stretch for only 15 seconds per muscle per day. However, there was no further increase in individuals who stretched each muscle for 60 seconds.

In another study, the same results were reported when a person performed one repetition of a muscle stretch held for 30 seconds compared to a person who performed 3 repetitions of 30-second muscle stretches.

When to stretch? Studies consistently show greater range of motion increases after warm-up activities. When the muscles are warm they are to be more pliable and less likely to strain. Warm-up may consist of light jogging, easy throwing, or skating laps around the arena. Warm-up is best if it's sport specific.

If you want to become more flexible, take a stretching class and do so to enjoy the feeling of the postures involved. There are no studies to prove that stretching on the day of your sport compared to stretching on a different day changes your athletic performance.

From the information I have stated, you can tell that this is a very controversial topic. Therefore, I recommend that a person do what feels good to them and to stay within their physiological limitations. Stretching is a personal practice and should not be performed to compare yourself to others. You may very well overstretch your limits and get injured. Impressing the person next to you in class is not the objective of a stretching practice.

Take home points about stretching include warming up the muscles to increase the effectiveness of the stretch, a 10-30 second hold of position without bouncing, and stretching of the muscle until no additional benefit is achieved. All of these pointers should assist a person to gain flexibility safely.

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