



MONTHLY NEWSLETTER

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Stretching

Over the past couple of months, the idea of stretching before athletic activities to prevent injuries has taken quite a beating from researchers across the world. Many of these experts are now claiming that stretching prior to exercise may have little importance in preventing injuries and reducing muscle soreness. So why do orthopaedic doctors, physical therapists, athletic trainers, and other healthcare professionals still support the idea of stretching? It's because stretching does have many important benefits in helping to prevent and treat musculoskeletal injuries. However, stretching is just one of the key ingredients in deterring injuries. Proper nutrition, strength training, and cardiovascular exercise are also vital to preventing injuries.

First, let's discuss a little about stretching. There are three types of stretching: static, ballistic, and proprioceptive neuromuscular facilitation (PNF). Static stretching involves slow, relaxed stretching where a muscle is held in a stretched position for an extended period of time, generally anywhere between 10-60 seconds. Ballistic stretching is the most aggressive and dangerous form of stretching. This type of stretching uses a repetitive bouncing motion to stretch muscles and tendons rapidly. Beginners should not use this type of stretching because it can result in extreme muscle soreness. PNF stretching involves putting a muscle into a stretched position and then contracting that muscle against a resistance (generally someone else) for 10 seconds. The muscle is then relaxed for 10 seconds and then stretched even further. This contract-relax sequence is usually repeated for at least three times. This technique for stretching defeats the stretch reflex by causing the brain to relax the tension placed upon the muscle so that it can be stretched beyond an individual's normal range.

Stretching is beneficial in that it increases the flexibility of muscles and tendons and helps to improve the range of motion at a given joint. Stretching lengthens and loosens muscles and increases their elasticity, which helps to prevent muscle and tendon injuries. Bone and joint problems can also be prevented with proper stretching. Gentle stretching of muscle injuries can even help to reduce pain and spasms and can help to speed recovery.

Many of the researchers who are questioning the benefits of stretching have now begun to claim that stretching alone will not prevent injuries. To some degree, this argument has merit. Stretching a cold muscle is like trying to bend a piece of uncooked spaghetti without having it break. Before a muscle is stretched it should be warm. A proper warm-up should consist of 5-10 minutes of light activity such as walking, jogging, cycling, or any other type of light activity that causes a mild increase in heart rate and increases circulation to the muscles to be used. Following the warm-up, stretching should be used to further loosen and lengthen the muscles in order to prepare them for the most strenuous part of one's workout. After a workout is an excellent time to stretch because muscles are warm and stretching is a great way to cool down. However, if you are unable to participate in such activities, a warm bath or shower can also help to loosen muscles and prepare them for stretching.

So, should you still continue to stretch? The answer is YES!! Whether you are an Olympic athlete or simply a weekend warrior, stretching is very important in keeping you healthy and injury free.