STRETCHING

Stretching involves a controlled continuous movement to the end range-of-motion of a single joint or multiple joints by either actively contracting the agonist muscles (i.e., active static) or by using external forces such as gravity. Stretching results in increased flexibility, which is defined as the range of motion of a joint or a group of joints that result in pain free arc of motion. The more movement the joint has, the longer time it has to absorb or create a force. This results in decreased loads to our joints over time and helps to maintain their function and reduce wear. This transfers over the time to decreased injuries and improved strength and athletic performance.

Muscles don't shorten permanently as a result of activity. The nervous system sets perceived limits on mobility that feels uncomfortable and may have you feel stiff the next day after a bout of exercise. This is the body's way of protecting it from further stress after an intense workout or activity.

There are different approaches to stretching depending on when during your workout you will be performing stretches. Light stretching or dynamic stretching before walk or jog can serve as a great warm up to exercise by improving circulation. Long stretches and static holds should be saved for the end of your routine to serve as an ideal cool down that improves flexibility over time.

1. ACTIVE STRETCHING refers to any time an opposing muscle group contracts to increase the stretch. For example, to stretch the hamstring, you may straighten your leg with the quadriceps to release tension in the hamstring and allow for stretch.

2. PASSIVE STRETCHING refers to any time an outside force is applied to muscles to change range of motion. You allow the weight of your body and gravity to increase the stretch of the muscles.

3. DYNAMIC STRETCHING allows movement through the full range of motion with controlled action. Many athletes use dynamic stretches to warm up before performing to enable them to jump higher, run faster and perform at their peak.

4. STATIC STRETCHING refers to holding a stretch for a desired time period. Most static stretches are held for a minimum of 8-10 seconds and maximally 2 minutes. This is the most common form of stretching that is considered safe and effective.

https://paulogentil.com/pdf/The Effectiveness of 3 Stretching Techniques on Hamstring Flexibility Using Consistent Stretching Parameters.pdf

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