

By the Stretching Institute
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Stretching for Injury Rehabilitation

Speed Up Your Recovery with the Right Type of Stretching

Choosing the right type of stretching during your rehabilitation program will have a tremendous effect on the speed of your recovery, while choosing the wrong type could lead to further injury and a very slow recovery.

So what type of stretching is best for which phase of the recovery process?

The recovery process of a soft tissue injury can be broken down into a number of phases and it's important that the right type of stretching be employed for each phase.

The First 72 Hours

Without a doubt, the most effective, initial treatment for soft tissue injury is the R.I.C.E.R. regime. This involves the application of **(R)** rest, **(I)** ice, **(C)** compression, **(E)** elevation and obtaining a **(R)** referral for appropriate medical treatment.

Where the R.I.C.E.R. regime has been used immediately after the occurrence of an injury, it has been shown to significantly reduce recovery time. R.I.C.E.R. forms the first, and perhaps most important stage of injury rehabilitation, providing the early base for the complete recovery of injury.

However, during this phase of the rehabilitation process **NO STRETCHING** should be used at all! This is not the time to start stretching. Concentrate on the R.I.C.E.R. regime and avoid all stretching or any activity that puts stress on the injured area. Stretching during this early stage of the rehabilitation process will only cause more damage to the injured tissues. **Avoid stretching during the first 72 hours.**

The Next 10 to 14 Days

After the first 72 hours most of the initial swelling will have subsided and you can start with some gentle active rehabilitation techniques.

The most effective treatment at this stage is the use of heat and massage, but including **light, gentle static and passive stretching exercises** after your heat and massage treatment will help to dramatically speed up the recovery process. So what is static and passive stretching?

- Static stretching is performed by placing the body into a position whereby the muscle (or group of muscles) to be stretched is under tension. Both the opposing muscle group and the muscles to be stretched are relaxed. Then slowly and

cautiously the body is moved to increase the tension of the stretched muscle group. At this point the position is held or maintained to allow the muscles to lengthen.

- Passive stretching is very similar to static stretching; however another person or apparatus is used to help further stretch the muscles. Due to the greater force applied to the muscles, this form of stretching is slightly more hazardous. Therefore it is very important that any apparatus used is both solid and stable. When using a partner it is imperative that no jerky or bouncing force is applied to the stretched muscle. So, choose your partner carefully, they must be responsible for your safety while stretching.

The important point to remember during this phase of the rehabilitation process is **light, gentle stretching**. Never, never, never do any activity that hurts injured area. Of course you may feel some discomfort, but never push yourself to the point where you're feeling pain. Be very careful with any activity you do. Pain is the warning sign; don't ignore it.

The Next 2 to 5 Weeks

The aim of this phase of your rehabilitation will be to regain all the fitness components that were lost as a result of the injury. Regaining your flexibility, strength, power, muscular endurance, balance, and co-ordination will be the primary focus.

Without this phase of the rehabilitation, there is no hope of completely and permanently making a full recovery from your injury. A quote from a great book called "Sporting injuries" by Peter Dornan & Richard Dunn will help to reinforce the value of this phase of the rehabilitation process.

*"The injury symptoms will permanently disappear **only after** the patient has undergone a very specific exercise program, deliberately designed to stretch and strengthen and regain all parameters of fitness of the damaged structure or structures. Further, it is suggested that when a specific stretching program is followed, thus more permanently reorganizing the scar fibers and allowing the circulation to become normal, the painful symptoms will disappear permanently."*

So what type of stretching is best to use during this phase? Stick with the static and passive stretching exercises described above, but also include PNF Stretching.

- PNF stretching, or Proprioceptive Neuromuscular Facilitation, is a more advanced form of flexibility training that involves both the stretching and contraction of the muscle group being targeted. PNF stretching was originally developed as a form of rehabilitation and to that effect it is very effective. It is also excellent for targeting specific muscle groups, and as well as increasing flexibility, (and range of movement) it also improves muscular strength.

Looking Long Term

Once you're over your injury and have started to regain the fitness components that were lost during the injury process, it's time to focus on making the injured area stronger and

more flexible than it was before the injury occurred. To do this, the best types of stretches to use are dynamic and active stretching exercises.

- Dynamic stretching uses a controlled, soft bounce or swinging motion to move a particular body part to the limit of its range of movement. The force of the bounce or swing is gradually increased but should never become radical or uncontrolled.
- Active stretching is performed without any aid or assistance from an external force. This form of stretching involves using only the strength of your opposing muscles to generate a stretch within the targeted muscle group. The contraction of the opposing muscles helps to relax the stretched muscles. A classic example of an active stretch is one where an individual raises one leg straight out in front as high as possible and then maintains that position without any assistance from a partner or object.

Stretching is one of the most under-utilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating sprain and strain injury. Don't make the mistake of thinking that something as simple as stretching won't be effective.