

Proper Stretching

Tight Muscles. First we need to understand why a muscle is tight.

Muscles can be short and tight for many reasons:

1. physiologically the muscle is in a partially contracted state from posture or overuse
2. neurologically the muscle is in an “on” state or excited overly contracted state
3. [adhesions](#) have formed in and around the joint and/or muscle causing restriction
4. decreased blood flow, which means less oxygen and nutrients ([electrolytes](#)) that allow for proper [muscular function](#)

There are many stretching techniques. All stretching methods can be effective, but there are a couple tricks that can make your stretching even more beneficial. Let's take a look.

Classic Stretching. What we learned in high school was just stretch the tight muscle. This is relatively ineffective because the tight muscle is still attempting to contract or is in a partially contracted state. You will still gain some flexibility but this is the least effective method.

Try This. Sit on the floor and with your feet out in front of you and knees open and extended try and touch your toes. This is your baseline study. Now take a big breathe in (2-5 seconds) and then blow it out and try to touch your toes again. You will likely notice a big difference. Lesson: muscles love oxygen, this is why when you go for a hike you breathe harder as your muscles are simply demanding more oxygen!

Another Trick. [Proprioceptive Neuromuscular Facilitation Stretching](#) (What is that?)

Try This. Sit on the floor and with your feet out in front of you and knees open and extended contract all of your posterior muscles, that is your [calves](#), [hamstrings](#) and [gluts](#) (butt muscles), effectively your toes will be pointing away, ([plantar flexion](#)). Contract these muscles for 5-10 seconds, then relax for 1-2 seconds, while you take a slow deep breath, (2-5 seconds). Now stretch again and try and touch your toes. Again you will likely notice a marked difference.

This technique is called “**Contract-Relax-Passive Stretch**” and should be used for all stretches.

Here is the protocol for all muscles:

Contract muscle to be stretched for 5-10 seconds.

Relax it for 1-2 seconds, while taking a slow deep breath for 2-5 seconds.

Passively stretch the muscle & hold the stretch for 15-30 seconds or less based on your tolerance/comfort.

Repeat 3-5x or less based on your tolerance/comfort or need.

Allow 30-60 seconds of rest between repetitions.

In the next blog we will discuss bad stretches and what to avoid, until then stay loose!