

## Ross' Precision Health & Fitness Newsletter Issue #8 – 3/1/2007 – Flexibility and Stretching

I hope last month's information about fats has encouraged you to limit your consumption of hydrogenated oils and trans-fats. Super Bowl weekend was actually a good test to see how serious you are about limiting these bad fats from your nutritional program. If you were able to avoid unhealthy snack food or even made a conscious effort to eat chips, crackers, etc. made without hydrogenated oils, then congratulations.

Taking action and doing the things you know are important for your health and fitness is one of the most important attributes for anyone wanting to achieve long-term success. Many people have an idea about what they should do, but fail to take action and ultimately never come close to reaching their goals or achieving the many benefits offered by improved health and fitness.

A prime example of people not doing something they know is beneficial can be found in stretching. It is common knowledge that stretching is important for muscles and joints, but many people do not stretch at all and almost everyone would benefit from additional stretching. I have touched on stretching in previous newsletters and I have some additional information on my website, but stretching is still worth discussing even more due the beneficial effects it has on the body.

Many of you already know first hand how much better stretching makes your muscles and joints feel, but even then it can be difficult to get yourself to stretch as much as you should. Many of my clients have made statements such as, "I never realized how important stretching is" or "stretching is one of the most beneficial parts of my exercise routine." It is important to remember these thoughts and keep stretching a part of your everyday routine. Now on to the article:

### Featured Article Flexibility: How Stretching Improves Quality Of Life

I assume that you already know stretching is important for maintaining and improving flexibility (range of motion) and helping to keep muscles functioning and feeling well. For this reason, I will try to avoid spending too much time on basic information you already know and instead focus on discussing why stretching is so important and how it will improve your quality of life.

I will however provide some basic stretching recommendations just in case you do not currently stretch and want to get started. My hope is this information will encourage you to make stretching part of your everyday routine or at least serve as a reminder to stretch during the times that will benefit you most. But first, I want to discuss why not stretching can be harmful to you.

Maintaining sufficient flexibility is important for preventing muscle stiffness, tightness, pain, and injuries. When muscles are not stretched on a regular basis, they will become tighter, shorter, and ultimately decrease in range of motion (flexibility). When muscles are kept in these

shortened positions for extended periods of time, they will require additional stretching before they can return to their original length.

For example, it is common for people sit for many hours every day and during this time, the hip flexor muscles are kept in a shortened position. If these muscles are not stretched with some level of frequency, they will end up staying in a partially shortened position. If this happens over a long period of time, you will actually lose parts of your muscle, called sarcomeres, which are responsible for the contraction of the muscle.

When this occurs, the muscle will maintain a shortened position and will essentially be unable to return to their original/optimal length. Lost sarcomeres can be regained, but it requires intensive stretching, generally accompanied with strengthening, before the muscle will be able to return to its original resting length.

This may not sound too bad, but when a muscle is kept in a shortened position, it has drastic effects on the body. The most common symptoms are increased soreness, stiffness, and pain. Short muscles are not as effective as normal length muscles and they often become overworked and develop knots. When your muscles are chronically tight or overworked, you can experience pain any time the muscle contracts. Eventually, this may become so bad that the muscles stays contracted, it will become difficult to relax, and you will feel almost constant pain.

To make matters worse, your body will try to compensate for the overworked muscle activating other muscles to do the work that the fatigued muscle is unable to perform. This leads to additional overuse of the muscles trying to help out. You have probably experienced this if you ever sprained your ankle. Initially your good leg will work harder to give the injured ankle a rest, but after a while your good leg may start to hurt due to overuse.

Going back to the sitting example, when your hip flexors become too tight, they can cause weakness in your glutes and low back, excess rotation in your pelvis, and a change in the curve of your spine. Eventually this causes the low back muscles to become overworked and may even result in spinal problems, such as degeneration or slipped discs. Put simply, sitting for many hours without stretching is one of the main causes of lower back pain.

This is just one common example of how tight muscles cause everyday pain, but there are many others. The good news is that many instances of muscle and joint pain can be improved, completely relieved, or avoided altogether by a good stretching routine. Unfortunately most people do not realize the importance of stretching until they already develop significant muscle problems and then it becomes much more difficult to correct the problem.

If you want to add stretching to you daily routine, there are many different types to choose from, such as dynamic, ballistic, and PNF. For the purpose of this article I will only discuss static stretching, because it is the most commonly used form of stretching and is considered very safe and effective for increasing flexibility in people of all ages and ability levels. You are probably familiar with this type of stretching, which involves maintaining a position for a certain amount of time with minimal movement and no bouncing.

When performing static stretches the goal is to feel a moderately strong stretch, but you should never push to the point of pain. Overstretching a muscle can result in injury instead of improvement. Static stretches are generally held around 20 or 30 seconds and performed 1 to 3 times per muscle. Usually a muscle will stretch more the 2<sup>nd</sup> and 3<sup>rd</sup> time (without additional discomfort) than during the initial stretch.

Of course muscles that are excessively tight or need to be lengthened will have to be stretched more than healthy muscles needing to retain their current level of flexibility. Healthy muscles probably only need to be stretched once per day, while tight muscles should be stretched at least 2 or 3 times every day.

If you exercise, which hopefully you do, the most important time to perform static stretching is after your workout. Exercising is incredibly good for you, but it can cause muscles to become very tight and if they are not stretched they will remain in a shortened position. This will likely cause unnecessary stiffness, soreness, delays in recovery, decreased flexibility, or even muscle imbalances.

Stretching after exercise is also beneficial, because your muscles will be warmed up. This allows the muscle to be more pliable (loose) and you will be able to stretch further without discomfort. It is a good idea to do something to warm up your muscles before any stretching and you should avoid stretching a cold (not warmed up) muscle whenever possible. However, you do not have to be physically active before stretching; even a hot bath or shower will significantly improve the quality of your stretches and decrease the chances of overstretching or injury.

As for the stretches themselves, I am not going to recommend specific stretches, because everyone has different needs and a stretch that works great for one person may not work at all for someone else. The most important thing when stretching is always to feel a quality stretch without any pain or excessive discomfort; otherwise find a different stretch.

However, if you need help getting started or want stretches for particular muscles, visit my website, at <http://precisionhealth-fitness.com/stretching.aspx>. Most of these are basic stretches that can be performed with minimal equipment. Plus there are pictures and descriptions explaining how to perform them properly. If you do not have a current stretching routine, this is a good place to start.

You should also experiment while stretching to see if you can increase the effectiveness of each stretch. Small changes in body position will alter the muscles (or part of a muscle) that are emphasized during the stretch. Try to find the position that causes the greatest stretch or isolates the tightest part of your muscle and hold that position for the duration of the stretch.

You will also improve the quality of your stretches by relaxing the muscles that are being stretched as much as possible. If you tighten your muscles or resist the stretch, you will be defeating the purpose of stretching. Deep breathing is very useful for releasing tension in your muscles, creating a greater range of motion, and improving the way the feeling/comfort of your stretches.

Now it is up to you to apply this information and start your own stretching routine if you do not have one already. You are probably familiar with the expression “an ounce of prevention is worth a pound of cure” and this statement is certainly true when it comes to stretching. Incorporating stretching into your daily routine will help improve any current muscle and joint problems, as well as stop future problems before they start.

#### WRAP UP:

That’s it for the March edition. I know some of you are well aware of the benefits of stretching and are good about stretching consistently, so if nothing else I hope this serves as a reminder and motivator to keep stretching, even when you don’t feel like it. In any case, next month’s newsletter will be a little different and it won’t even have a featured article. So until then, take care and have a great month,

Ross