Discover the 7 stretching secrets that 90% of people aren't using to maximize your athletic performance and reduce your chances of sports injury.

Plus...

- Safe guard yourself against inappropriate stretches.
- Learn which type of stretching to use, and when to use it.
- **O** Discover how to use stretching to speed up your recovery.
- Learn advanced stretching techniques to minimize sports injury and take your athletic ability to the next level.



Stretching Tips!

Publisher : The Stretching Institute™

Address : 47-47 36th Street, Suite # 3208

Long Island City NY 11101

United States

Telephone : +1 877 580 7771

Website : www.TheStretchingInstitute.com

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Warning: The information presented in this publication is intended as an educational resource and is not intended as a substitute for proper medical advice. Please consult your physician, physical therapist or sports coach before performing any of the exercises described in this publication, particularly if you are pregnant, elderly or have any chronic or recurring muscle or joint pain. Discontinue any exercise that causes you pain or severe discomfort and consult a medical expert immediately.

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Welcome to Stretching Tips! And thank you for downloading our free report where you'll get all the answers to your questions about how to use stretching for maximum performance and injury reduction.

The following pages are filled with tips, tricks and tactics to help

you stretch properly so you get the most out of your time spent stretching.

And once you've had a chance to look through the following information don't forget to grab your copy of our I hour MP3 audio presentation called Stretching Secrets Exposed, where I take you beyond the basics and discuss little known stretching secrets that will revolutionize the way you think about stretching and flexibility.



Download the MP3 Now.

Now if this report has been given to you by a friend or family member make sure you <u>visit our web site and get on our newsletter list</u>. We'll keep you up-to-date on all the latest studies and research findings.

Learn and enjoy.

Yours in sport

Founder & CEO

TheStretchingInstitute.com

ISRAD WALKER



now Your Limits Welcome to the first installment of your Stretching Tips! eCourse. In this lesson we will focus on the very first step in

any workout program:

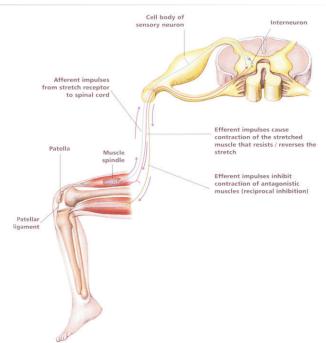
Knowing Your Limits.

Your workout should be a pleasurable part of your day, whether it's the first thing in the morning or the last thing in the evening. Although you might experience some soreness during or after a workout, it should not be the type of pain that interferes with the way you function. The same goes for stretching. If you stretch properly before and after a session in the gym, you will decrease your chances of serious injury and avoid soreness and pain.

This is where knowing your limits come into play. Stretching is not an activity meant to cause pain: Its whole purpose is to avoid pain. When you stretch, you might feel a little discomfort or mild tension as you work out some of the stiffness, but if you feel any pain beyond that, you have gone too far. Here's why:

When you stretch the muscles and tendons to the point of pain, the

body employs a defense mechanism called the stretch reflex. This is the body's safety measure to prevent serious damage from occurring to the muscles and tendons. The stretch reflex protects the muscles and tendons by contracting them, thereby preventing them from being stretched beyond their limits.



The diagram above shows how nerve impulses triggered by the stretch reflex travel between the spinal colum and the muscles.

beyond this fail-safe point, you run the risk damaging muscle tissues, tendons or ligaments.

What to Avoid When Stretching

If you try to force your body

Many people have never learnt how to stretch properly. Maybe you have done this yourself: You watch other people stretching in the gym and try to imitate what you see. But who is to say that the person you are watching is doing it right? Here are some of the most common mistakes made while stretching:

* Bouncing. Many people have the mistaken impression that they should bounce to get a good stretch. Bouncing will not help you and

could do more damage as you try to push too far beyond the stretch reflex. Every move you make should be smooth and gentle. Lean into the stretch gradually, push to the point of mild tension and hold for a few seconds. Each time you will be able to go a little further, but do not force it.

- * Not Holding the Stretch Long Enough. If you do not hold the stretch long enough, you may fall into the habit of bouncing or rushing through your stretch workout. Hold your stretch position for at least 15 to 20 seconds before moving back to your original position.
- * Stretching Too Hard. Stretching takes patience and finesse. Each move needs to be fluid and gentle. Do not throw your body into a stretch or try to rush through your stretching routine. Take your time and relax.
- * Forgetting Form and Function. Think about your sport or activity. Which muscles will you be using? A stretching routine for a marathon run will be very different from a routine for an hour of lifting weights. Pay attention to the muscles you will need to use in your program and make sure your form for each stretch is attained properly. Consider the range of motion you will be putting that

particular muscle through. The whole point of stretching is getting your muscles accustomed to moving through a specific range of motion, so if the muscle is not used to going that far, you may end up with an injury.

So, to avoid the stretch reflex and potential damage to your muscles and joints, avoid pain. Never push yourself beyond what is comfortable. Only stretch to the point where you can feel tension in your muscles. This way, you will avoid injury and get the maximum benefits from your stretching.

Stretching is one of the most underutilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating soft tissue injuries. Do not make the mistake of thinking that something as simple as stretching will not be effective. Take your time with your stretching routine, and later on you will be grateful you did.

For more information about how to stretch properly and how to identify good stretches and bad stretches, take a look at our popular article titled; Good Stretch? Bad Stretch? And How to Decide for Yourself.



on't Stretch an Injury If you've neglected to incorporate st

If you've neglected to incorporate stretching into your workout routine and have sustained an injury because of it, now is not the time to start stretching. That is like shutting the barn door after the cows have already left. Once you've healed the muscle strain, ligament sprain or other soft tissue injury, you can start stretching, but definitely not while you're injured.

The moment you realize you've injured yourself, you'll need to take some steps to secure a full recovery later on. One of the most effective methods of treatment is R.I.C.E.R. (Rest, Ice, Compression, Elevation and Referral). Let's look at each step in detail:

R (Rest): It is important that the injured area be kept as still as possible. This will help to slow down blood flow to that area of the body and prevent any further damage.

I (lce): This is by far the most important part. The application of ice will have the greatest effect on reducing bleeding, swelling and pain. Apply ice as soon as possible after the injury has occurred.

How do you apply ice? Crushed ice in a plastic bag is usually best,

although blocks of ice, commercial cold packs and bags of frozen peas all do fine. In a pinch, even cold water from a tap is better than nothing at all.

When using ice, be careful not to apply it directly to the skin. This can cause "ice burns" and skin damage. Wrapping the ice in a damp towel generally provides the best protection for the skin.

How long? How often? This is the point where few people agree.

Here are some figures to use as a rough guide. The most common recommendation is to apply ice for 20 minutes every 2 hours for the first 48 to 72 hours.

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 an injury.

These figures are a good starting

point, but remember; they're only to be used as a guide. Take into account as well that some people are more sensitive to cold than others. Also be aware that children and elderly people have a lower tolerance to ice and cold. Finally, people with circulatory problems are also more

sensitive to ice. Remember to keep these things in mind when treating yourself or someone else with ice.

Use your own judgment when applying ice. For some people, 20 minutes is way too much. For others, especially well-conditioned athletes, the ice can stay on for much longer. The individual should make the decision as to how long the ice should be applied.

C (Compression): Compression actually achieves two things. First, it helps to reduce both the bleeding and swelling around the injured area, and secondly, it provides support for the injury. Use a wide, firm, elastic compression bandage to cover the entire area.

E (Elevation): Simply raise the injured area above the level of the heart at all possible times. This will further help to reduce the bleeding and swelling.

R (referral): If the injury is severe enough, it is important that you consult a professional physical therapist or a qualified sports doctor for an accurate diagnosis. He or she will be able to tell you the full extent of the injury.

Whenever the R.I.C.E.R. regimen 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 an injury.

Remember, don't stretch an injury in the initial stages of the recovery process. Stick with the R.I.C.E.R. regimen for at least the first 48 to 72 hours.

For more information about how to properly treat a soft tissue injury, take a look at our comprehensive sports injury articles titled;

- * Pulled Muscles, Scar Tissue and Re-Injury
- * Active Rehabilitation



tretching and the Warm-Up

Have you ever tried to use an old, dried-up rubber band? You stretch it, but it has no elasticity, so it cracks and eventually snaps when pulled too far. Your muscles react in the same way. Failing to warm up before exercising is like trying to use that old rubber band. Cold muscles are stiff and lack flexibility, so pushing them too far by jumping into exercise without a thorough warm-up, could cause a serious injury.

What Does a Warm-Up Do?

Warming up prior to exercise does several beneficial things for your body. However, the primary benefit is that it allows your body and mind to get ready for the work ahead. When you go through a warm-up routine, you are literally pre-heating your body, like pre-heating an oven. You are raising your core and muscle temperature by promoting blood flow through the muscles, making them loose and supple.

What Is the Correct Way to Warm Up?

A good warm-up does two things: It raises your heart rate and increases your respiratory rate, which increases blood flow and increases the

amount of oxygen and nutrients delivered to the working muscles.

Remember, when you are working out, each step builds on the previous one. You warm up your body to prepare it for stretching, you stretch to prepare for the actual physical activity, you cool down to return your heart rate and breathing to normal, and finally, you do a last set of stretches to ease away the soreness and let your body know the workout is over.

Your Warm-Up Routine

A good warm-up routine is as simple as 5 to 10 minutes of aerobic exercise. In most cases, it is best to warm up with a similar type of exercise you intend to do in the main part of your workout. Start at a leisurely pace with gentle exercise for 2 or 3 minutes and then accelerate to a more brisk pace for another couple of minutes. Your breathing should be deeper, but not to the point where you are totally out of breath. You should feel warm; maybe even break a light sweat.

Now you are ready for stretching. Stretch each major muscle group and then focus on the muscle groups used in your particular activity.

Of course, the time you add for your warm-up, stretching, and cool-

down at the end of the session all add to the overall time spent working out. Count on a full 20 or 30 minutes in addition to the time you spend on the main part of the training.

Despite the extra time, your warm-up routine is worth it. Taking the time to prepare your body for the strenuous activity ahead will enhance your performance, whether it means running that extra mile or lifting one or two more sets of extra weight. You will increase the blood flow to hungry muscles and tendons, and you will greatly increase your range of motion. The muscles' reaction time gets a boost and the soreness associated with recovery soon becomes a thing of the past.

For a more detailed review of how to warm-up properly and how to incorporate stretching into your warm-up, take a look at our comprehensive article; Stretching and the Warm-Up.



tretch Before and After Exercise

By now, you know stretching is a vital part of any work-out routine. You have learned why stretching is important as well as how to warm-up properly and avoid injury while stretching. Hopefully, you are incorporating stretching into your routine on a regular basis.

One frequently-asked question is, "Should I stretch before or after I exercise?"

The answer is: Both. This is not an either/or option; stretching both before and after physical activity is a must. And no cheating; please. Stretching after exercise to get a jump on your next session without stretching beforehand will not do you any good either, and here is why:

The purpose of stretching before exercise is to help prevent injury. Stretching does this by lengthening the muscles and tendons, which in turn increases your range of movement. This helps you move freely without restriction or injury occurring. However, the reason why you stretch after exercise is very different.

Why Stretch After Exercise?

Stretching after you exercise is necessary for a very different reason.

Any strenuous activity, particularly weightlifting, causes a small amount of damage to the muscle and associated soft tissues. These small rips and tears are what force the muscles to grow when they begin the process of repairing themselves. Stronger tissue replaces the damaged tissue, which often causes soreness up to 48 hours after exercising. This is called delayed onset muscle soreness or DOMS. You might not feel sore immediately following a workout, but think how many times you or someone else has said, "I'll pay for this later."

Stretching after your exercise routine helps release the tension and prevents the muscles from becoming tight. Right after your workout, your muscles are warm

Stretching and cooling down after a workout are two very different things.

and elastic. The post-workout stretching session affords you a second chance to increase your flexibility and range of motion, particularly around your joints. Regardless of the type of activity, you should stretch all major muscle groups.

Is Stretching Considered Cooling Down?

No, stretching and cooling down after a workout are two very different things. Some experts say you should cool down first and then stretch, and others say that stretching can be incorporated as part of the cooldown process.

The purpose of cooling down is to help your heart rate return to normal. Your heart, lungs and blood flow all worked hard to get you through the exercise, and without a sufficient cooling-down period, you may feel sick or dizzy. You might want to take a leisurely five-minute walk on a treadmill to relax your body and then do your stretching. Your muscles will still be warm and you will still reap the benefits of a post-workout stretch.

For a more detailed review of how to cool-down properly and how to incorporate stretching into your cool-down, take a look at our comprehensive article; <u>Stretching and the Cool Down</u>.



he Major Muscle Groups

By now, you understand the important role stretching plays in a well-rounded exercise or training routine. You have learned how to avoid injury by combining a warm-up with stretching to prime your body for the rigors of training. You now know how to do it and, more importantly, you know why you should do it.

Although stretching specific muscle groups for your particular activity is important, you cannot neglect all of the major muscle groups. Just

because your particular sport may place a lot of emphasis on the legs, for example, does not mean that you can neglect the muscles of your upper body in your

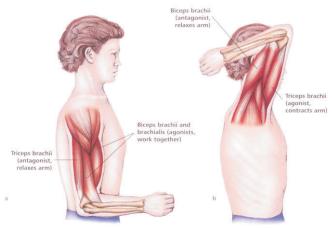
All of your muscle groups come into play when you exercise, whether you realize it or not.

stretching routine. That is like the case of a bodybuilder who does nothing but focus on the development of his legs. Doing so throws the whole body out of balance, and once again you risk serious injury.

All of your muscle groups come into play when you exercise, whether you realize it or not. When you run, your upper body lends stability

and balance to your movements, and when climbing or weightlifting, your legs are as important to proper form as your arms.

Opposites Work Together



The diagram above shows how the Biceps brachii in the front of the arm is opposed by the Triceps in the back of the arm.

Every muscle (agonist) in the body

has an opposing muscle (antagonist) that acts against it. For example, the muscles in the front of the legs, (the quadriceps) are opposed by the muscles in the back of the legs, (the hamstrings). These two groups of muscles provide a resistance to each other to balance the body. If one of these groups of muscles becomes stronger or more flexible than the opposing group, it is likely to lead to imbalances that can result in injury or postural problems.

Hamstring tears are common injuries in most running sports. They often arise from strong quadriceps and weak, inflexible hamstrings. This imbalance puts a great deal of pressure on the hamstrings and usually results in a muscle tear. The same applies to the arms; biceps at the front versus triceps at the back.

Some of the major muscle groups that work to balance your body and provide good posture are:

- * Chest and upper back
- * Biceps and triceps
- * Abdominals and lower back
- * Quadriceps and hamstrings (upper legs)
- * Calves and shins (lower legs)

As always, thoroughly warm up and stretch only to the point of tension. Do not force yourself to go past the stretch reflex and avoid bouncing. Remember to hold each stretch for at least 15 to 20 seconds before moving on to the next stretch.



e Aware of Your Posture

To excel in any sport and reap its maximum benefits, you need to have a solid foundation built on perfect form. Many people take posture for granted, and like breathing, they rarely consider it when exercising. The same is true when it comes to stretching. You have already learned so much, and now you need to refine your stretching technique. Bad posture and incorrect technique can cause imbalances in the muscles, which in turn lead to injury.

Check Yourself Before You Wreck Yourself

Many of the major muscle groups are exactly that; groups. Each group



The picture above shows the difference between good posture and bad posture. Note the athlete on the left; feet upright and back relatively straight. The athlete on the right is at a greater risk of causing a muscular imbalance that may lead to injury.

comprises several smaller groups that connect to other groups. If your form is incorrect, you may impact more than one body part. Like an avalanche set in motion by the smallest ball of snow,

your whole body can be thrown off balance by sloppy or incorrect posture.

For example, let us consider stretching the hamstrings (the long muscles at the back of the upper legs). Proper form for this stretch means keeping your feet pointing straight forward or, if you are on the floor, keeping your feet and toes pointing straight up. When your feet point off at different angles, you put undue stress on other areas of the legs.

Fact and Fiction

One of the most common misconceptions about stretching is that it cannot cause injury or be done incorrectly. Wrong! Poor posture or technique will cause serious injuries, and neglecting

One of the most common misconceptions about stretching is that it cannot cause injury or be done incorrectly. Wrong!

proper form in any aspect of your regimen could seriously set back your training. Take your time when you stretch, move gently and treat your muscles with care. If you feel pain, then stop. You should be as serious about your stretching as you are about the sport or activity you

pursue.

No matter what sport or physical activity you take part in, stretching should be an important part of that routine. Do not underestimate the power and benefits that stretching offers. If you take the time to stretch properly, you will not only increase and enhance your performance but also avoid serious injury later on.



Breathing and Stretching
Breathing during any form of exercise is often taken for granted. We breathe all the time and often underestimate how much the way we breathe helps during our exercise routines. Many people make the mistake of unconsciously holding their breath when doing a strenuous activity. This in turn causes unwanted tension in the muscles, making the activity that much harder. Stretching is no exception.

Why Breathe?

Breathing properly promotes blood flow and increases the delivery of oxygen and nutrients to your muscles. Breathing slowly and easily also helps to relax your muscles, which makes stretching easier and more beneficial. When your body is relaxed, your stretching becomes easier. Stretching is then safe, and when you are stretching safely, you are gaining the most benefits from your stretching routine.

Learning to Breathe

If you have not been breathing properly during stretching or other physical activities, it might seem a little awkward at first. Once you

learn how to breathe properly, the process becomes second nature. The whole trick to breathing properly, is knowing when to breathe in (inhale) and when to breathe out (exhale).

The easiest way to remember how to breathe during a stretch is to exhale as you are moving into the stretch and inhale as you return to your original position. For example, try doing a simple leg stretch. Sit on the floor with your legs straight out in front of you and try to reach

It's not very easy, is it? Now, try the stretch again as you exhale. You will find that as you release the air from your lungs, you can stretch a lot farther.

Many people make the mistake of unconsciously holding their breath when doing a strenuous activity.

Exhaling occurs whenever you are moving weight. Sometimes it is away from your body (as with leg presses or push-ups) and sometimes it is towards your body (as with bicep curls or lateral pull-downs). This is the same during a stretch; your body is the weight that you are moving. When you move into the stretch, you are moving the weight of your body, so you should breathe out. As your muscles return to their

original positions, you should breathe in.

If you get confused in the beginning, that is all right. The important thing to remember is to breathe no matter what. Holding your breath will not help you at all, and you will find yourself tiring faster. For your body to get the maximum results, you have to consciously make an effort to do everything you can to increase internal performance.

Thanks for your interest in our free publication, Stretching Tips! I hope you've gained some valuable tips, tricks and tactics to help you get more out of your time spent stretching.

Please feel free to send a copy of Stretching Tips! to your friends and family members, and encourage them to visit our site at...

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If we can assist you in the future with any stretching, flexibility or sports injury concerns, please just ask. And if you have any difficulties locating the information you require or you have a question that you need help with, please contact us here.

Yours in sport

Founder & CEO

TheStretchingInstitute.com

BRAD WALKER