



Fifteen Minutes of Stretching Helps Improve Flexibility

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✓ Fact Checked

STORY AT-A-GLANCE

- > In just 15 minutes a day you may improve your flexibility and enjoy greater balance, an improved ability to perform daily living tasks and less pain in your shoulders and lower back
- > The technique you use matters, as doing static stretches as shown in the video just before a workout may reduce your muscle strength; instead these stretches may be used at a time outside of your fitness routine or while at work to “work out the kinks”
- > It’s helpful to finish your workout with a foam roller as it also helps improve flexibility, mimics myofascial release treatments and improves blood flow to the area worked; research shows it reduces arterial stiffness, improves balance and increases flexibility

Flexibility is likely the most overlooked part of a workout routine. Most people gravitate first to cardiovascular or aerobic work and then strengthening, adding stretching to cool down or warm up without recognizing how it also helps stabilize their muscles and core to increase strength, balance and coordination. This 15-minute video demonstration shows you how simple stretches yield big rewards.

In fact, flexibility is one of the foundational pillars to your exercise routine. Whether you're a professional athlete or someone just seeking to improve your fitness level, stretching and mobility work is an important component.

Improving your flexibility allows greater joint mobility and helps reduce your day-to-day pain. With age, muscles naturally lose strength and size, becoming less supple. This loss

of flexibility and elasticity may increase joint tightness and your risk of injury.

However, whether you're an avid exerciser or not, making stretching a part of your weekly routine will help prevent injuries and improve your ability to perform daily tasks. Spending all day at a desk may lead to neck and shoulder problems and tight hip muscles,¹ which contributes to pain and discomfort.

Your Stretching Technique Matters

If you've been stretching for a while, it's likely you've been using static stretching involving holding a muscle in a stretch position for up to 60 seconds. However, there's more than one way to stretch your muscles, including dynamic, functional and active isolated stretching (AIS).

Although static stretching had been the gold standard for decades, current research demonstrates prolonged static stretching actually reduces blood flow in the tissue and creates a localized ischemia and lactic acid buildup, which is exactly what you'll want to avoid before working out.²

Additionally, using a static stretch as a warmup reduces muscle strength, temporarily reducing the amount of force the muscles are able to produce.³ Conversely, **active isolated stretching** (AIS), does not trigger this type of damage.

AIS was developed by Aaron Mattes, who has worked for over 40 years with clients, including Olympic and professional athletes, helping them to achieve enormous professional success using this technique.⁴

AIS may be used to warm up before exercise and rehab from any injuries. After prolonged periods of inactivity, your muscles and joints lose flexibility, strength and general stamina. This process uses a number of specialized repetitive stretches performed in a specific order to target myofascial injury and restrictions.

This allows your muscles and facial tissue to elongate without triggering your body's protective mechanism, which inhibits overstretching. In many instances, the process of

using AIS begins with the assistance of a trained therapist to help you build a personalized program.

AIS uses gentle pressure, holding each stretch for just two seconds to work with your body's natural physiological makeup to improve circulation and increase elasticity.

Avoid Ballistic Stretching

On the other hand, ballistic stretching, which you've likely seen others doing, involves a bobbing motion and is often erratic and uncontrolled. It is contraindicated as it potentially is injurious and increases your risk of muscle tears.⁵

While doing all the stretches demonstrated in the video above may take up to 15 minutes, you may consider multitasking and doing them at a variety of times during the day.

For instance, consider stretching your neck, shoulders, legs and toes as you're listening to a video or audio program, at work, or even while watching television with the family. Or, consider beginning and ending the day doing several stretches in bed.

Benefits to Being Flexible

In the U.S., 31 million adults⁶ suffer from lower back pain, which may be effectively healed using specific stretches. You'll find more in my previous article, "[Functional Training](#)," including a stretching routine designed to help prevent or heal your lower back.

The benefits of stretching and improving flexibility go well beyond improved athletic performance. Flexibility also helps protect mobility and independence as you age.⁷ The elderly have a fear of loss of independence,⁸ which may be alleviated and the loss prevented through flexibility and balance exercises.⁹

When muscles shorten and become tight, it places a strain on the joint and increases the risk of muscle damage. For instance, walking in high heels all day shortens your calf muscles and makes it difficult to walk barefoot. When suddenly called on for strenuous activity, such as playing tennis, it may easily be injured from being overstretched.

In one study,¹⁰ researchers found flexibility, and the ability to sit and rise from the floor, was a predictor of all-cause mortality. Flexibility also helps release muscle tension and soreness and may help you increase mental relaxation.¹¹

While flexibility is primarily related to your genetics, gender, body shape and level of physical activity, it's important to remember the benefits you receive from flexibility training build over time. In other words, there's a cumulative effect from stretching, so you must remain committed to the process.

While stretching used to be recommended to warm up your muscles before exercise, researchers now know this may increase the damage to your muscles and joints. It is important to first get blood flowing to the area to make the tissue more pliable.¹² This may be done using a slow warmup of the same motions you'll be using and your workout.

In other words, if you're planning to use the **rowing machine**, row slowly for five minutes before your workout. If you're going to be running, jog slowly for five minutes with exaggerated leg motions. If you are incorporating stretching during the day, get up and walk around for a few minutes before stretching cold muscles.

Don't Push Too Hard While Stretching

Your body has physical limitations and when pushed too far, you'll cause microtears in the muscle without improving your flexibility. Additionally, some muscles in your body require less tensile force than others before you hit the end of the natural range of motion of your joint.

One muscle in the body with functional limitation is the tibialis anterior, the muscle running along the meaty part of your shin. This muscle lifts the foot as you dorsiflex and elongates during plantar flexion, while pointing your toes like a ballerina. Each of these motions is limited by how far the ankle joint will go, which is in turn limited by your ankle bones.

In maximum plantar flexion, as you're pointing your toe as much as possible, this muscle is mildly elongated but not subjected to strong tensile force. Other muscles with the

functional limitations include the masseter and temporalis attached to your jaw, thoracic paraspinal muscles attached to your spine in the thoracic region and the gluteal muscles blocked by the limits of hip flexion.¹³

It's also possible to overstretch muscles. When pushed beyond normal limits, overstretching may trigger instability within the joint and create microtears in the tendons and ligaments.¹⁴ This commonly happens when a muscle or tendon and ligament is overstretched during an injury.

An overstretched or torn muscle is called a strain and a damaged ligament is a sprain. Since these are interdependent, injuries to joints such as the ankle, neck and wrist may result in a strain and sprain, which is why these terms are sometimes used interchangeably, but they refer to different injuries.¹⁵

Try These Stretches at Home

The flexibility exercises demonstrated in the video above are a great way to start your day. The entire routine takes approximately 15 minutes from start to finish and works your body from head to toe. Below are descriptions of some of the stretches affecting tight muscles for those who work behind a desk all day, and which may be done at the office to help alleviate muscle tension and stress.

- **Neck and shoulder — Sitting** at a desk all day, shoulders hunched and neck flexed forward, increases the tension in your neck muscles and reduces flexibility in your shoulders. Consider doing this exercise sitting on the floor behind your desk.

Sit cross-legged on the floor, back straight and hip centered. Extend your left arm out to the side with your fingertips touching the floor. Take your right arm over your head touching your left ear and gently stretch your neck to the right. Hold this for approximately 30 seconds and then switch sides.

- **Hip swivel** — While sitting on the floor, place your hands behind you for support. With your knees bent and your feet planted on the floor, allow your knees to drop to one side and hold for one to two seconds. Pull them up to 90 degrees and then let

them drop to the other side. Do 10 repetitions on each side. This helps stretch your hips to full internal and external rotation, which become tight as you sit.

- **Leg tuck up** — Lie on your back. Bring your knees to your chest and grasp your knees with your hands. Squeeze your knees in; you may rock back and forth a little if you'd like to help open up your lower back.
- **Cross body pull** — While on your back, spread your feet a little wider than your hips. Cross your right leg over your left knee with your right ankle on your left knee. Using both hands, pull your right knee up toward your left shoulder. This helps to stretch your gluteal muscles and your lower back. Repeat on the other side.
- **Squat to pike** — While sitting, move forward until your feet are on the floor and you're in a **squat position**. You may have to lean forward to have your hands on the floor to balance. Keep your chest as close to your legs as possible and extend your knees without fully straightening them, while keeping your hands on the floor.

You'll end up in a "touch your toes" position (pike) and feel the stretch in your hamstrings. Hold this for two to three seconds and then return to the squat position. You may not be able to squat very low or get into a pike position with your knees nearly straight, but the objective is to attain flexibility over time.

Finish With a Foam Roller

Whether you're doing your stretches at the office or at home, a foam roller is a great way to end your flexibility routine. This is an inexpensive tool that looks like a large log made out of foam. It takes very little space to store, is lightweight and offers a number of benefits.

Therapists often use foam rollers to mimic myofascial release treatments, typically used to help reduce muscle immobility and pain. In many instances, the simplest activities may offer profound benefits, such as **pushups** and squats. Foam rollers are also simple, but have scientifically proven benefits including the following:

- One study found using a foam roller on your hamstrings may lead to statistically significant increases in range of motion after just five to 10 seconds.¹⁶
- Another found using a foam roller reduces arterial stiffness and improves vascular endothelial function.¹⁷
- Older women who used foam rollers for balance training showed improvements in dynamic balance after just five weeks.¹⁸

Discover more about the foam roller and a variety of ways you to use one at home to improve your flexibility and reduce muscle tightness after a workout in my previous article, "**[Exercises At Home: 10 Ways to Use a Foam Roller.](#)**"

A foam roller is a unique and effective method of stretching hard to reach places and finishing your workout. However, there are common mistakes that may result in injury, which you may avoid when you know what not to do. Find these in my previous article, "**[5 Foam Rolling Mistakes to Avoid.](#)**"