

THE IMPORTANCE OF STRETCHING **EXERCISES**

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Stretching has many benefits including increased flexibility and range of motion, improved sports performance, injury prevention, preventing muscle soreness, improving posture and stress relief. Many of my patients come with extreme muscle cramps or bruises or simple muscle sores following an intense workout or a workout after a prolonged period of time which they are not accustomed to. In this modern day and era, most people are so busy that they really don't spend even half an hour on their health. Then one fine day some gym offer come up and they join in all vigour and enthusiasm. After a sudden change in the physical activity level the body is usually unable to cope up with the new activity level and as compensation the body goes into spasm, stiffness and rebound lethargy. And then all your annual gym membership goes idle after a month.

Here are a few benefits of stretching.

1. Injury Prevention

Being flexible can help to prevent injuries. This can include acute injuries, such as a hamstring strain and overuse injuries such as IT band syndrome or plantar fasciitis. Stretching has been used in the warm-up process for many years. It is thought that having flexible muscles can prevent acute injuries by gently stretching the muscle through its range before exercise. Dynamic (active) stretches are now recommended for warm-ups, over the traditional static stretch.

2. Preventing DOMS

Delayed Onset Muscle Soreness (DOMS) occurs 24-48 hours after exercise. It is thought to be due to microscopic tears in the muscle. Stretching before and after training is thought to minimise this damage.

3. Improving Posture

In many cases of poor posture which has developed over time, muscle imbalances are to blame. A good example is the chest muscles becoming shortened in people who slouch over a computer for long periods. Stretching these muscles can help to improve posture.

4. Improving sporting performance

Many sports obviously require high levels of flexibility, for example athletics and gymnastics. But even athletes in sports such as Rugby, where flexibility is not immediately thought of as a key component, can improve their performance by becoming more flexible. In order to have healthy muscles, they must be flexible. This will help to prevent injuries as already discussed, but it will also allow you to develop strength through the full range of motion at the joint. This gives an advantage over someone who has a limited range.

5. Stress relief

Muscle tightness is often associated with stress - we tend to tighten up when stressed. For example the neck muscles. Stretching relaxes these muscles and you at the same time!

6. You'll be bright-eyed and raring to go—even at 3 PM.

If you're totally spent by midafternoon, a stretch break will invigorate you in less time than it would take for a barista to whip up your usual mocha venti skim latte. Just a few minutes of stretching increases blood flow through your entire body. Basically, it wakes you up and helps you feel less sluggish.

7. You'll move around more easily and with less pain.

Regular stretching can relieve stiff muscles and creaky joints, but to reap those benefits, it's important to stretch the correct way. Focus on mobility by doing range-of-motion exercises and soft tissue work with foam rollers." Range-of-motion exercises include shoulder shrugs, wrist bends, and knee lifts—anything that keeps your muscles and joints moving through (you guessed it!) their full range of motion.

8. You'll make the most of your sweat session.

Unless you're a yogi or a barre aficionado, flexibility may not seem like a huge priority. But regular stretching can help you achieve better form in just about any workout: For something like a squat, it means you could get a deeper squat. Your knees and hip flexors will bend farther. In short you'll get more out of the workout."

9. You'll lower your blood sugar

Exercise is well known for helping keep glucose levels in check, and it turns out that benefit might kick in even before you lace up your sneakers: A 2011 study of adults who had type 2 diabetes or were prediabetic found that those who stretched for 40 minutes after drinking a sugary beverage had lower blood sugar levels than those who did "mock stretching"—in other words, assumed the same positions but didn't actually stretch their muscles.

10. You'll stress less.

Are your shoulders practically touching your ears? Is your back in knots? Stretching can help tame tension both physically and mentally, as it relieves tight muscles while tricking you into feeling more relaxed. (Try this 60-second fix for a sore neck.) Just don't overdo it, especially if you're wound pretty tight: "Stretching should never be forced," Drass says. "You should be able to relax into a stretch. If you're in pain, you're doing it wrong."

11. Increased flexibility and range of motion

This is the most obvious benefit of regular stretching and usually the reason that people start a stretching programme. However, reasons for stretching usually go much deeper than this. For example, why do you want to increase your flexibility? Is it to improve your sporting performance, posture, or prevent injury?

How to Stretch

Stretch your shoulders.

- Place the back of one hand in the small of your back.
- With your opposite hand, grab your elbow, gently pull forward, and hold.
- Repeat with the opposite side.

Stretch your triceps.

- Reach up with one arm.
- Bend your elbow and put your forearm down behind your head and between your shoulder blades.
- With your opposite arm, reach up and grab your raised elbow.
- Pull your elbow toward your head.
- Repeat with other arm.

Stretch your biceps.

- Put your arms straight out to your sides with your thumbs facing up.
- Rotate your arms so that your thumbs face straight back, then rotate them forward until your thumbs are facing straight down.

Stretch your wrists.

- Hold one arm out in front of you with your elbow bent (and close to your body) and palm facing up.
- With your opposite hand, grab your fingertips and slowly pull them all the way down until that hand is now facing the floor.
- Continue to pull on your fingertips, now in an upward direction since your palm is facing down.
- Repeat with other hand.

Stretch your quadriceps.

- Stand up and pull one leg behind you (flamingo position).
- Once holding onto your foot, continue to apply upward pressure.
- Repeat with other leg.

Stretch your calves.

- Place one leg in front of the other (split stance) with your hands on your hips.
- Lean slightly forward as you begin to straighten your back leg, ideally bringing your back foot all the way flat against the floor.
- Repeat with other leg.

Stretch your hamstrings.

- Sit on the floor with both feet out in front of you.
- Reach out with both arms, ideally grabbing onto your toes and holding.

- **Stretch your hips.**
- Lie flat on the ground with your knees bent and feet flat on the floor.
- Get into a figure four position by placing one ankle on your opposite knee.
- Reach through and around your knee, clasp, pull it toward you, and hold.
- Repeat with opposite side.

- **Stretch your groin.**
- Sit on the floor.
- Press the soles of your feet together (butterfly position).
- Pull your feet as close to your body as possible.
- Put your hands on your ankles to where your elbows are lined up with your knees.
- Push against your elbows trying to close your legs. (This contracts your groin muscles to help you get a deeper stretch.)
- Push your knees down.

- **Stretch your upper back.**
- Reach both hands behind you and then up over your head (as if to perform a butterfly stroke in swimming).
- Continue to swing your arms over your head and out in front of you.
- Try to keep both arms parallel to the floor as you are holding the stretch.
- To maintain balance, sit back slightly with your knees partially bent.

- **Stretch your neck.**
- Incline your head forward, but do not roll your head from side to side-this is dangerous. Instead, stretch your neck to the left, right, forward and back, but always return to center first!
- Tilt your head with ear toward shoulder, incline your head backward and roll your head from left to right, then right to left in a 30 degree motion.
- Be sure that while your head is tilted back, you keep your jaw relaxed and even let your mouth fall open just a bit.

- **Stretch your jaw.**
- Incline your head back, rest your chin on your palm, and pull your jaw open.
- Say "Ah!" (you can mime it).
- Grab your chin with your thumb, index and middle fingers.
- Stretch it left to right. This exercise will help if you have been hit to the jaw (e.g., knocked-out in boxing).

When to stretch??

Never stretch before you warm up. The only reason it feels good to stretch even when you're cold is because your body sends out natural painkillers. To protect your tissues, you need to raise your cardiac pulse in order to fill them with blood. The only way to do this is by working out.

- Swimming is the safest way to raise your cardiac pulse. Water reduces shocks to the body because it reduces the felt effect of gravity on your body.
- Jumping rope can also be effective, but it may damage your tibia's periosteums, which is the membrane enveloping your bones (except at junctions) that allows the blood to flow from your heart to your muscles connected by the tendon.

Swimming pools are sometimes inaccessible, so an efficient and safe way to raise cardiac pulse would be by cycling (except if you have knee problems).

Stretching before your workout will put your Central Nervous System (CNS) to sleep to increase your range of motion. It will result with less gain than improvement on the muscle part. The CNS naturally provides resistance by stimulating antagonists muscles when you flex a muscle to prevent it from being too stretched and tear your conjunctive tissues. **Never stretch prior to workout, and always do it after.**

Stretching will ensure you have an optimal circulation of body fluids throughout your system and an adequate flexibility which will prevent your connective tissues to pop when you contract your muscle.

