



WHY AND HOW TO STRETCH

EBOOK



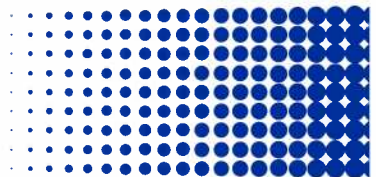


WHY AND HOW TO STRETCH

Throughout your training process, you should aim to develop as many physical properties and functions as possible and also, open up windows for recovery, where you engage in activities that can help your muscles reach a peak state of rejuvenation.

There are many ways in which you can help the body recover better, but when it comes to the muscles themselves, stretching is perhaps one of the most useful practices.

In this short guide, we'll give you insight on all the why's and how's of stretching, to help you implement it in your regular routine.



THE FASCIA

By definition, the fascia is a connective tissue that surrounds muscles, veins and nerves.

This tissue is built out of dense collagen fibers that run parallel to the direction at which the given tissue tenses.

The fascia connects bodily structures and also allows them to move smoothly and just like many other structures in the body, it can get tight.

Especially during prolonged, intense workouts, it is highly likely that the muscles and their fascia will get tense.

That tension in turn leads to muscle aches, stiffness and thus, a decreased athletic ability.

For this reason, implementing recovery practices like deep tissue massages & stretching, is essential to sustained long-term performance.

TYPES OF STRETCHING

In the past decades, stretching has gained a lot of traction in the fitness world, which is the reason why many gyms and fitness centers offer a wide variety of group training practices that aim to improve your flexibility, mobility, coordination and balance.



All of these physical qualities are often ignored and overshadowed by development of strength and muscle size.

Now, if you've acknowledged that heavy lifting requires proper recovery afterwards, there are 3 main types of stretching you can do:

- ➔ **Static Stretching**
- ➔ **Dynamic Stretching**
- ➔ **Ballistic Stretching**

All of these types of stretching are based on the same biomechanical principles, so let's have a look at each one of them.



STATIC STRETCHING

This first type of stretching is without a doubt one of the better known ones, which most people practice when they try to stretch.

Static stretching allows you to improve the muscle's flexibility, to an extent where you go beyond its current capabilities.

The way to practice this type of stretching is quite simple - You start off in a comfortable position and gradually apply a stretch on the given muscle group.

Once you reach the end of your currently possible range of motion, you hold the position for up to 20 seconds.

After the ~20 second static stretch, you go back to the initial position slowly, rest a bit and repeat the same thing - Gradual stretch, hold, return to the initial position slowly.

The gradual stretch should be well-controlled and must not lead to sharp pains, but rather, a nice, relaxing feeling of the worked musculature.



If any pain is present, this is more than likely a sign of poor stretch execution or going way beyond your current flexibility.

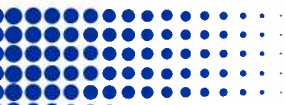
MENTAL NOTES & APPLICATION

Before engaging in static stretching, you should know that doing it with no warm up whatsoever may turn out to be unsafe.

For this reason, static stretching can be well-applied after intense weighted workouts, or cardio workouts.

This is perhaps the easiest type of stretching as it is not demanding and does not require any specific equipment.

The only requirement is for you to focus on the execution and find the limits of the stretched muscle group.



DYNAMIC STRETCHING

Second to static, dynamic stretching involves controlled, dynamic motions that gradually apply more and more force to the joint and its muscles.

This type of stretching also highly involves the contraction of the opposing muscle group, as that helps the one that's being stretched relax further.

And so, if we take the most common, bent-over hamstring stretch, your quadriceps would be flexed at the bottom of it, while the hamstrings are stretched fully.

The more you contract the quads in that position, the further your hamstring will stretch.

Dynamic stretching is generally safe, because the stretched muscle group works with its opposing one, meaning that it is far less likely to overstretch and cause injury.



MENTAL NOTES & APPLICATION

Just like the first type, dynamic stretching is relatively easy to do as it does not require any equipment or a partner.

Nevertheless, the speed of each motion and stretch should be controlled, as you may otherwise overstretch and cause trauma.

Dynamic stretching is used in a variety of training disciplines but when it comes to weight training, it can be used both before and after a workout.

Before a workout, dynamic stretching can help you activate certain muscle groups and after a workout, it can help you relax them.



BALLISTIC STRETCHING

Last but not least, we have ballistic stretching which involves a more dynamic, quicker movement during the stretching phase.

This allows you to stretch each muscle group way beyond its current capabilities and then return to the initial position.

Now, unlike the first two, this type of stretching does not affect flexibility as much, but it helps the worked muscle group contract stronger.



MENTAL NOTES & APPLICATION

Due to the nature of this type of stretching, higher risk is involved because a greater speed/inertial force is required during each movement.

For this reason, the speed/pace of each bounce/stretch should be carefully dosed and controlled, in order to avoid injury.

In terms of application, ballistic stretching should mostly be utilized by professional athletes, rather than regular gym trainees.

The latter should mostly focus on static & dynamic stretching, depending on the goal.



A woman is shown from the waist down, performing a dynamic stretch. She is wearing a light blue sports bra, dark blue leggings with a black stripe, and white sneakers. Her right leg is raised and bent at the knee, with her foot near her left knee. The background is a plain grey wall. A large red semi-transparent rectangle is overlaid on the left side of the image, containing white text.

DYNAMIC VS BALLISTIC STRETCHING

Now, reading the definitions of all 3, you may ask yourself “Well, aren’t dynamic & ballistic stretching the same thing?”.

And well, while both involve dynamic movements, there is quite a difference between them.

In essence, dynamic stretching requires you to stretch using coordinated movements with a predetermined range of motion, while ballistic stretching goes more towards less coordinated movements that involve a higher amount of momentum and force.

For this reason, static and dynamic stretching are the best options when it comes to improving flexibility, as those are reliable and safe practices.

WHEN SHOULD YOU STRETCH?

As we have mentioned previously, during a stretch, your muscles achieve a higher state of relaxation.

What this means for you is that static stretching should be done in the hours/days after a workout.

Doing static stretches before a workout may prevent you from properly activating your muscle fibers and thus, increasing the risk of poor performance and injury.

On the other hand however, dynamic stretching can be done before a workout, as it can help you activate the working muscle groups and achieve better performance.

This would of course, involve a stretch of the muscle group, followed by the opposite movement where you flex the muscle groups.

For instance, if you do a bent over hamstring stretch, you'd bend over, stretch the hamstrings, and then come up with a hip extension, where you flex the glutes.

THIS is the only way you should stretch & activate before a workout.

And then again, remember that even if you're stretching dynamically, you shouldn't start off on a completely cold musculature, as that may lead to injury.



UPPER BODY STRETCHING EXERCISES

Alright, now that you know the basics of stretching, what it does and when it is appropriate to do it, let's have a look at some actual stretching exercises for the upper body.

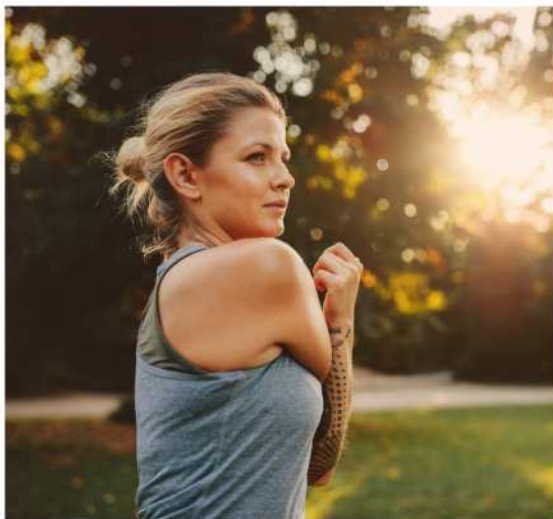
Chest Stretch

The chest is one of the bigger muscle groups on your upper body so if it is tight, odds are that your pushing strength may be reduced.

Here's a chest stretch you can easily do, with no equipment whatsoever:

1. Stand against a vertical bar/pillar
2. Lift your right arm up so that it forms a 90-degree angle
3. Place your forearm against the bar/pillar
4. Turn your body away from the bar/pillar
5. When you feel a stretch in your chest, hold it for ~20 seconds

Release slowly and repeat on the opposite side



BACK STRETCH

Your back is made up of a variety of different muscle groups which are likely to get tighter over time, causing discomfort during a variety of upper and lower body movements.

Here's one of the best dynamic back stretches you can use to release your back musculature:

1. Rack a bar at shoulder height
2. Grab it with an overhand grip with both hands, at shoulder width
3. Place your feet close to one another
4. Pull back and bend over slightly
5. Pause for a couple of seconds at the peak of the stretch
6. Come back up to the initial position, initiating the pull with your back
7. Repeat



TRICEPS STRETCH

Your triceps are always engaged in pushing movements, in synergy with the chest and the shoulders, so if you want optimal pushing strength, do try this triceps stretch!

1. Stand up straight and keep the torso in a good position (avoid hunching!)
2. Lift your right arm overhead, then curl it at the elbow, so that your forearm is behind your head
3. With your left arm, hold the right elbow and pull it towards the left arm
4. At this point, you should feel a stretch in your triceps - Hold this for up to 15-20 seconds
5. Release, then repeat on the other side

BICEPS STRETCH

Since the arms are used a lot both during exercise and during daylife, tight biceps are very common even among people who don't really exercise.



Here's a simple stretch for the biceps to help you release any tension and bring back the mind-muscle connection:

Since the arms are used a lot both during exercise and during daily life, tight biceps are very common, even among people who don't really exercise.

Here's a simple stretch for the biceps to help you release any tension and bring back the mind-muscle connection:

1. Stand up straight
2. Lift your arms laterally until they are parallel to the ground
3. Have your palms turned up so that they face the ceiling
4. From this position, rotate your wrists so that the palms face the floor, then lift your fingers up (wrist extension)
5. Hold the position for a couple of seconds until you get a deep stretch, then release slowly





LOWER BODY STRETCHING EXERCISES

As we mentioned, the arms are involved in a variety of exercises and daily chores, but the same applies even more to the legs, because, well, they hold our body weight for most of the day when you're on feet!

Here are the best lower body stretches to keep your legs fresh and relaxed.



BENT OVER HAMSTRING STRETCH

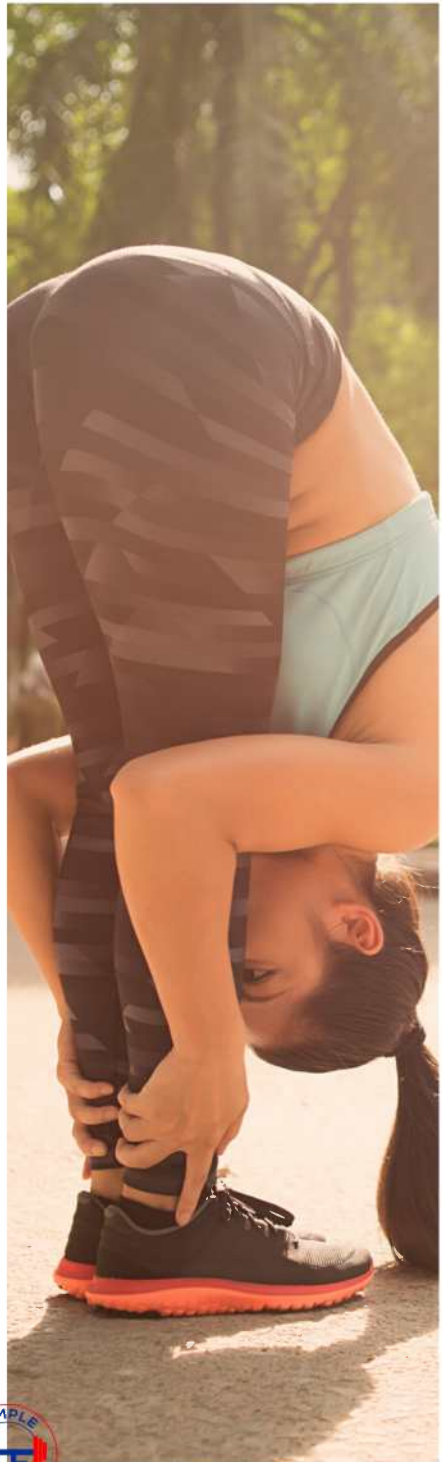
When it comes to flexibility, the bent over hamstring stretch seems to be the benchmark and is an exercise most people do.

However, most people do this exercise wrong and place extra tension on their spine, which increases the risk of injury.

Here's how you can do this to achieve the best effects possible:

1. Stand up with your feet together (heel to heel)
2. Keep your knees just slightly out of lockout
3. Keep your back and spine straight, then bend over and go down slowly
4. At this point, you should feel a stretch in your hamstrings and calves
5. When you reach the end of your currently possible range of motion, try and carefully bounce down further
6. Alternatively, you can hold a static stretch position and then, release slowly

NOTE: You can do this in the beginning of your lower body workouts to activate the legs and glutes - Bend over, stretch the hammies shortly, then come back up and flex the glutes. Repeat.



QUADRICEPS STRETCH

Tight quads may lead to unpleasant hip tightness which will in turn carry on to most of your daily activities, causing general discomfort.

If you feel like your quadriceps are tight and not well recovered from your weighted workouts, do try out this stretch.



1. Stand with your back against a wall
2. Curl your left leg up, flex the ankle (toes pointing forward) and place the toes on the wall
3. At this point, you should feel a strong stretch in the quads
4. Either hold this position or push slightly further to get a deeper stretch

CALF STRETCH

The calves are a commonly ignored muscle group, whether it comes to training or recovery.

Give this calf stretch a shot if your calves are feeling tight

- Stand against a step or a ledge
- Place the toes of your right leg on the edge of the step
- Bring your body forward to stretch the calves
- Hold the stretch at its peak for up to 20 seconds
- Release slowly



CONCLUSION

Whether you're training for strength and mass or just general health, keeping your musculature fresh and recovered is essential.

Static & dynamic stretching are two practices that can help you release any stiffness and keep the muscles rejuvenated and working optimally.

Just like heavy training however, stretching too can be dangerous if done incorrectly, so our final advice would be to pay specific attention to each stretch and the feeling of it.

Activate the muscles before a workout.

Help them relax after the workout by stretching.

Rest.

Repeat!

