

Stretching and Flexibility - Working Toward the Splits

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[Working Toward the Splits](#)

- [Normal Ranges of Joint Motion](#): (next chapter)
- [References on Stretching](#): (previous chapter)

The following stretching routine is tailored specifically to the purpose of achieving the ability to perform both front splits and side splits. It consists of the following exercises:

1. lower back stretches
2. lying buttock stretch
3. groin & inner-thigh stretch
4. seated calf stretch
5. seated hamstring stretch
6. seated inner-thigh stretch
7. psoas stretch
8. quadricep stretch
9. lying 'v' stretch

Don't forget to warm-up your body before performing any of these exercises. See section [General Warm-Up](#).

Warning: This stretching routine contains exercises that, depending on your physical condition, may be hazardous to your health. Consult with your doctor before attempting any of these exercises. It is also important that you use great caution when performing these exercises since improper performance could result in injury.

Perform these stretches at your own risk! I cannot be held responsible for any injury which may result from you performing any of these exercises! See section [Disclaimer](#).

The details on how to perform each of the stretches are discussed in the following sections. Each section describes how to perform a passive stretch, and an isometric stretch, for a particular muscle group. On a given day, you should either perform only the passive stretches, or perform only the PNF stretches, in the order given (see section [Types of Stretching](#)). If you perform the PNF stretches, don't forget to rest 20 seconds after each PNF stretch, and don't perform the same PNF stretch more than once per day (see section [PNF Stretching](#)). The isometric stretches described do not require the assistance of a partner, but you may certainly use a partner if you so desire. The order in which these exercises are performed is important because the entire routine attempts to employ the principle of synergism by stretching a muscle fully before using that muscle as a "supporting muscle" in another stretch (see section [Exercise Order](#)).

As with all stretches, you should *not* stretch to the point of intense pain! A tolerable amount of discomfort should be more than sufficient. You do *not* want to pull (or tear) your muscles, or be very sore the next day.

- [lower back stretches](#)
- [lying buttock stretch](#)
- [groin and inner-thigh stretch](#)
- [seated leg stretches](#)
- [psoas stretch](#)
- [quadri-cep stretch](#)
- [lying V stretch](#)

[lower back stretches](#)

- [lying buttock stretch](#): (next section)
- [Working Toward the Splits](#): (beginning of chapter)

These stretches work mostly the lower back, but also make some demands on your abdominals, and your external obliques (sides).

Lying down with your back on the floor, straighten one leg, while bending the knee of the other leg, and try to bring the thigh of your bent leg as close as possible to your chest. Hold it there for 10-15 seconds. Then cross your bent leg over your straight leg and try to touch your knee to the floor (while trying to keep both shoulders on the ground). Repeat this same procedure with the other leg. Then, bend both knees and bring both thighs up against your chest (keeping your back on the floor). Hold that for 10-15 seconds. Then, put both feet on the ground but keep the knees bent. While trying to keep both shoulders on the ground, roll your legs over to one side and try to get your knees to touch the floor beside you. Hold for about 10-15 seconds and then do the same thing on the other side. Now repeat the same stretch, but this time begin with your feet off the floor so that your leg is bent at the knee at about a 90 degree angle.

As for isometric stretches for the back, I don't recommend them.

[lying buttock stretch](#)

- [groin and inner-thigh stretch](#): (next section)
- [lower back stretches](#): (previous section)
- [Working Toward the Splits](#): (beginning of chapter)

This mainly stretches your buttocks (gluteal muscles) but also makes some demands on your groin and

upper inner-thigh area. You must be very careful *not* to apply any stress to the knee joint when performing this stretch. Otherwise, serious injury (such as the tearing of cartilage) may occur.

Lie on your back again with both knees bent and in the air and with your feet on the floor. Take your right foot in your left hand (with your hand wrapping under your foot so that the fingertips are on its outside edge) and hold your leg (with your knee bent) in the air about 1-3 feet above your left breast (relax, we haven't started to stretch the buttocks just yet). The leg you are holding should be in much the same position as it is when you start your groin stretch in the next exercise, only now it is in the air because you are on your back (see section [groin and inner-thigh stretch](#)). Exhale and slowly pull your foot over to the side and up (toward your head) as if you were trying to touch your outstretched leg about 12 inches to the outside of your left shoulder. You should feel a good stretch in your buttocks about now. If you feel any stress at all on your knee then stop at once. You are probably pulling "up" too much and not enough to the side. You may wish to use your free hand to support your knee in some way. Hold this stretch for about 20 seconds (and stop if you feel any stress in the knee joint). Now repeat this same stretch with the other leg (using the other hand). Remember that the leg you are *not* holding should have the sole of its foot on the floor with the knee bent and in the air.

To make an isometric stretch out of this, when you are performing the passive stretch (above) and feel the stretch in your buttocks, continue trying to pull your foot to the outside of your shoulder while at the same time resisting with your leg so that it pushes against your hand. No actual leg motion should take place, just the resistance. Stop immediately if you feel any undue stress to your knee.

[groin and inner-thigh stretch](#)

- [seated leg stretches](#): (next section)
- [lying buttock stretch](#): (previous section)
- [Working Toward the Splits](#): (beginning of chapter)

This mainly stretches your groin and upper inner-thigh area, but also makes some demands on your lower back. It is often called the *butterfly stretch* or *frog stretch* because of the shape that your legs make when you perform it.

Sit down with your back straight up (don't slouch, you may want to put your back against a wall) and bend your legs, putting the soles of your feet together. Try to get your heels as close to your groin as is *comfortably* possible. Now that you are in the proper position, you are ready to stretch. For the passive stretch, push your knees to the floor as far as you can (you may use your hands to assist but do *not* resist with the knees) and then hold them there. *This can be hard on the knees so please be careful*. Once you have attained this position, keep your knees where they are, and then exhale as you bend over, trying to get your chest as close to the floor as possible. Hold this stretch for about 20 seconds.

The isometric stretch is almost identical to the passive stretch, but before you bend over, place your hands on your ankles and your elbows in the crooks of your knees. As you bend over, use your elbows to "force" your knees closer to the floor while at the same time pushing "up" (away from the floor) with your thighs to resist against your arms. Once again, please be careful since this can place considerable strain on the knees.

[seated leg stretches](#)

- [psoas stretch](#): (next section)

- [groin and inner-thigh stretch](#): (previous section)
- [Working Toward the Splits](#): (beginning of chapter)

These include three different stretches performed for the calves, hamstrings, and inner-thighs, but they are all performed in very similar positions and I do all three stretches (in the order given) for one leg before performing them for the other leg. You will need an apparatus for this stretch: a bench, or a firm bed or couch (or you could use two chairs with your butt on one chair and the heel of your foot on the other) that is at least 12 inches off the ground (but not so high that you can't sit on it with out your knees bent and the sole of your foot solidly on the floor). The bench should be long enough to accommodate the full length of your leg. Sit on the bench and have your leg comfortably extended out in front of you (your heel should still be on the bench) and the other leg hanging out to the side with the leg bent and the foot flat on the ground.

- [seated calf stretch](#)
- [seated hamstring stretch](#)
- [seated inner-thigh stretch](#)

[seated calf stretch](#)

- [seated hamstring stretch](#): (next subsection)
- [seated leg stretches](#): (beginning of section)

With your leg extended directly in front of you, face your leg and bend it slightly. Place your hands around the ball of your foot and gently pull back so that you force yourself to flex your foot as much as possible. Hold this stretch for about 20 seconds (don't forget to breathe).

Now for the isometric stretch: in this same position, use your hands to try and force the ball (and toes) of your foot even further back toward you while at the same time using your calf muscles to try and straighten your foot and leg. You should be resisting enough with your hands so that no actual foot (or leg) motion takes place.

[seated hamstring stretch](#)

- [seated inner-thigh stretch](#): (next subsection)
- [seated calf stretch](#): (previous subsection)
- [seated leg stretches](#): (beginning of section)

Now that our calf is stretched, we can get a more effective hamstring stretch (since inflexibility in the calf can be a limiting factor in this hamstring stretch). Still sitting on the bench in the same position, straighten your leg out while trying to hold onto your outstretched leg with both hands on either side as close as possible to your heel. Starting up with your back straight, slowly exhale and try to bring your chest to the knee of your outstretched leg. You should feel a "hefty" stretch in your hamstring and even a considerable stretch in your calf (even though you just stretched it). Hold this stretch for about 20 seconds.

Now for the isometric stretch: when you have gotten your chest as close as you can to your knee, try and put both hands under the bench by your heel (or both hands on opposite sides of your heel). Now grab on tight with your hands and try to physically push your heel (keeping your leg straight) downward "through" the bench, the bench will provide the necessary resistance, and should prevent any leg motion from occurring.

[seated inner-thigh stretch](#)

- [seated hamstring stretch](#): (previous subsection)
- [seated leg stretches](#): (beginning of section)

You should still be sitting on the bench with your outstretched leg in front of you. Now turn on the bench so that your leg is outstretched to your side, and you are facing the leg that is bent. You may perform this next stretch with either your toe pointing up toward the ceiling or with the inside edge of your foot flat on the bench with your toe pointing forward (but flexed), or you may try this stretch both ways since you will stretch some slightly different (but many of the same) muscles either way. I prefer to keep my toe pointed towards the ceiling because I personally feel that the other way applies too much stress to my knee, but you can do whatever feels comfortable to you.

Note: If you are using two chairs instead of a bench, the first thing you need to do is to make sure that one of the chairs supports your outstretched leg somewhere between the knee and the hip. If the support is being provided below the knee and you try to perform this stretch, there is a good chance that you will injure ligaments and/or cartilage.

Place your hands underneath the bench directly under you (or you may keep one hand under the portion of the bench that is below the knee of your outstretched leg) and pull yourself down and forward (keeping your back straight) as if you were trying to touch your chest to the floor. You should be able to feel the stretch in your inner-thigh. Hold this for about 20 seconds.

For the isometric stretch, do the same thing you did with the hamstring stretch: keep both hands underneath you as before and try to force your foot downward "through" the bench.

[psoas stretch](#)

- [quadricep stretch](#): (next section)
- [seated leg stretches](#): (previous section)
- [Working Toward the Splits](#): (beginning of chapter)

This stretch is sometimes called the *runner's start* because the position you are in resembles that of a sprinter at the starting block. It mainly stretches the psoas muscle located just above the top of the thigh.

Crouch down on the floor with both hands and knees on the ground. Put one leg forward with your foot on the floor so that your front leg is bent at the knee at about a 90 degree angle. Now extend your rear leg in back of you so that it is almost completely straight (with just an ever so slight bend) and so that the weight of your rear leg is on the ball of your rear foot with the foot in a forced arch position. Now we are in the position to stretch (notice that your rear leg should be in pretty much the same position that it would assume if you were performing a front split).

Keeping your back straight and in line with your rear thigh, exhale and slowly try to bring your chest down to the floor (you shouldn't need to bend much further than the line your front knee is on). You should feel the stretch primarily in the upper thigh of your rear leg but you should also feel some stretch in your front hamstring as well. Hold this position for at least 15 seconds. If you wish to also stretch your rear quadricep from this position, you can shift your weight back so that your rear leg makes a right angle with your knee pointing toward the floor (but don't let it touch the floor). Now, without bending your rear leg any further, try to force your rear knee straight down to the floor.

Now repeat the same stretch(es) with your other leg in front.

For an isometric stretch, you can do this same stretch in front of a wall and instead of putting your hands on the floor, put them in front of you against the wall and then push against the wall with the ball of your foot (without decreasing the "stretch" in your psoas).

[quadricep stretch](#)

- [lying V stretch](#): (next section)
- [psoas stretch](#): (previous section)
- [Working Toward the Splits](#): (beginning of chapter)

For this stretch you will need one (or two) pillows or soft cushions to place between your knee and the floor. You must be very careful when performing this stretch because it can be hard on the knees. Please be advised to take it easy (and not overdo) while performing this exercise. If you have problems with your knees, you may be better off *not* performing this stretch at all.

Put the pillow under your rear knee and let your knee rest on the floor. Lift up your rear foot and grab onto your foot with the opposite hand (grab the instep if possible, but if you can only reach the heel, that is okay). If you have trouble grabbing your foot, then you may need to sit (or shift) back onto your rear leg so that you can grab it, and then shift forward into the starting position (with your hand now holding your foot). Now, exhale and very gently, but steadily, pull your foot toward its buttock (butt-cheek) and lean toward your front foot (you may also wish to twist your waist and trunk towards the foot you are holding). You should feel a tremendous stretch in the quadricep (top right thigh) of the foot that you are pulling. If you begin to feel stress in your knee, then discontinue the exercise (but let your foot down slowly -- not all at once). Hold this stretch for about 15 seconds. When you are finished, shift your weight slowly back onto your rear leg and let your foot down while you are still holding onto it. Do not just let go and let your foot snap back to the ground -- this is bad for your knee.

Now for the isometric stretch: Get into the same position as for the passive quadricep stretch, but as you lean forward and pull on your foot, resist with the leg you are holding by trying to push your instep back down to the ground and out of the grip of your hand (but no actual movement should take place).

Now do the same stretch with your other leg in front.

Stop the stretch immediately if you feel pain or discomfort in your knee.

[lying 'v' stretch](#)

- [quadricep stretch](#): (previous section)
- [Working Toward the Splits](#): (beginning of chapter)

This stretch is very good for working toward a side (chinese) split (see section [The Side Split](#)). This exercise should be performed *after* you have stretched each of these areas individually with prior stretches (like the ones mentioned above).

Start by lying down with your back flat on the ground and your legs straight together in the air at a 90 degree angle. Try to have your legs turned out so that your knees are facing the side walls more than they are facing your head. Slowly bring your legs down to the sides, keeping your legs straight and turned out.

When you reach the point where you cannot bring them down any further into this "lying" side split position, leave them there.

Now for the stretch: With your feet both flexed or both pointed (your choice) use your arms to reach in and grab your legs. Each arm should grab the leg on the same side. Try to get a hold of the leg between the ankle and the knee (right at the beginning portion of the calf that is closest to the ankle is almost perfect). Now, exhale and use your arms to gently but steadily force your legs down further and wider (keeping the legs straight) getting closer to the lying side-split position (where, ideally, your kneecaps would be "kissing" the floor). Hold this position and keep applying steady pressure with your arms for about 20 seconds.

For the isometric stretch, you do the same thing as the passive stretch except that, as you use your arms to force your legs wider, use your inner and outer thigh muscles to try and force your legs back up together and straight (like a scissors closing), but apply enough resistance with your arms so that no motion takes place (this can be tough since your legs are usually stronger than your arms). You may find that you get a much better stretch if you use a partner (rather than your own arms) to apply the necessary resistance.

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