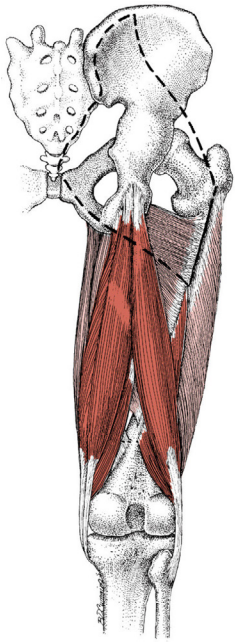
Strengthen Your Hamstrings

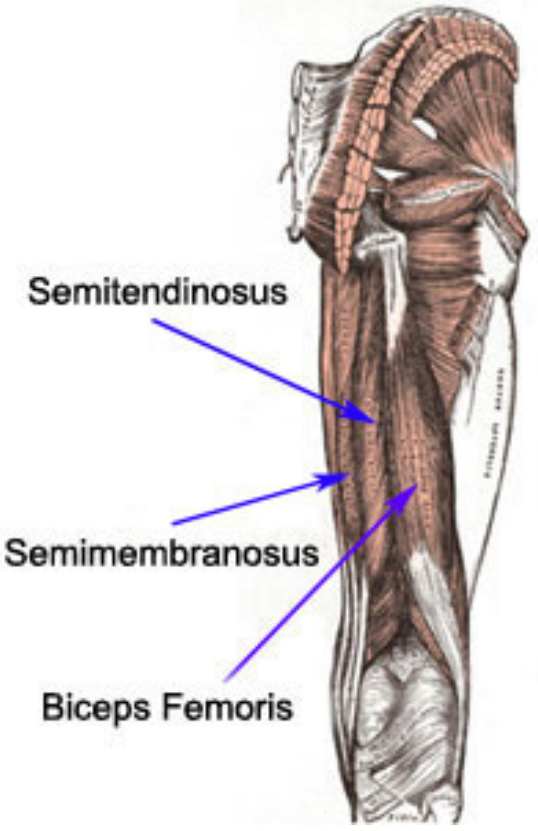
And Your Gluteus Maximus While You Are at It



by Jonathan FitzGordon

Strengthen Your Hamstrings

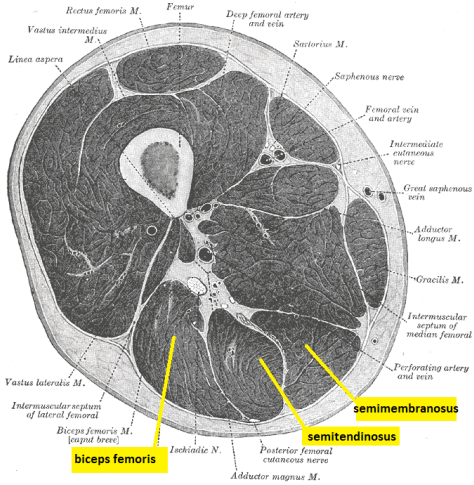
And Your Gluteus Maximus While You Are at It

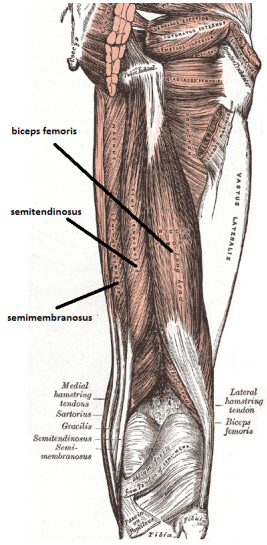


By Jonathan FitzGordon

WHAT ARE THE HAMSTRINGS?

Along the back of the leg behind the thigh there are three muscles known as the hamstrings. These muscles have a lot to do with how flexible we are. The three muscles, semitendinosus, semimembranosus, and biceps femoris (which has two heads) flex the knee and extend the hip joint (except for one head of the biceps femoris). The hamstrings also cross and act upon the joints of both the hip and the knee.

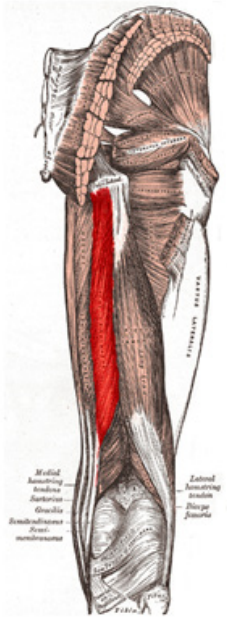




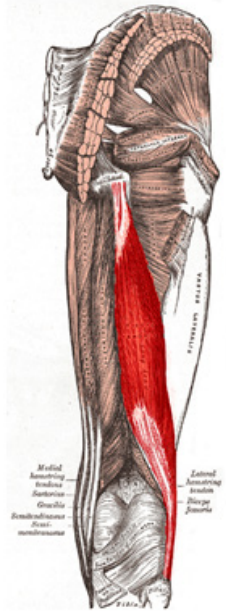
We are looking at three muscles with four attachments. They all insert on the tibia and fibula of the lower leg, crossing and essentially shaking hands with the muscles of the calf, as they pass each other on the way to insert on the femur (thigh bone). They all originate on the

ischial tuberosity, or the sitting bone, of the pelvis. But one of the heads of the biceps femoris originates on the femur bone itself.

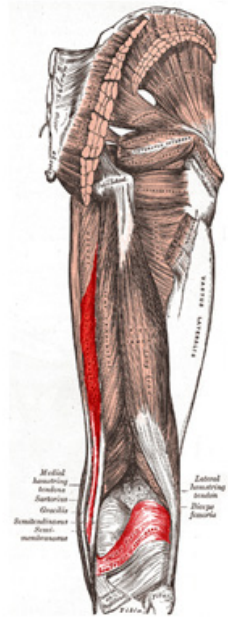
The hamstrings bring the heel towards the butt and extend the leg backwards when walking or running. Semitendinosus and semimembranosus extend the hip when the trunk is fixed; they also flex the knee and rotate the lower leg in when the knee is bent. The long head of the biceps femoris extends the hip when we begin to walk. Both heads flex the knee and rotate the lower leg out when the knee is bent.



semitendinosus



biceps femoris



semimembranosus

The hamstrings are essential to many of our daily activities, including walking, running, and jumping. Their opposing muscle is the quadriceps and together

they determine a good measure of our grace and flexibility.

Tight hamstrings are a problem for far too many people. Tight muscles in general limit joint rotation and range of motion. If you have tight hamstring's it will be difficult to bend forward from a standing and sitting position among other possible issues. Tight hamstrings make it especially hard to align the pelvis correctly because they pull the pelvis down towards a tucked position.

Poor posture is the main reason I see for hamstring tightness, though our tendency towards a sedentary lifestyle doesn't help. An active existence that includes a lot of manual work—bending, squatting, and lifting with correct alignment can keep our hamstrings and body in decent shape, but those types of actions have disappeared from so many of our lives.

Another key issue is misaligned quadriceps muscles. If the quadriceps muscle is out of alignment because of forward leaning thighs, they are likely overstretched in relation to the tight hamstring.

In addition to being overstretched, they are also overworked, asked to bear a lot of the weight of the upper body. Standing with the thighs and pelvis leaning forward also puts a lot of strain on the iliofemoral ligament (a very important ligament) connecting the leg to the hip.

Rotating the pelvis to neutral and moving the thighs directly under the hips will improve the relationship of the quadriceps and the hamstrings giving both the opportunity to find their proper length and tone.

WHY DO WE HAVE TIGHT HAMSTRINGS?

Everything always returns to posture.

Most people think that tight hamstrings are tight in an up and down way—in other words, I bend forward and the hamstring tries to lengthen but there is no give. This is in fact what occurs, but I think it is happening for a slightly counter-intuitive reason. The length of the hamstrings is determined by the geographic relationship between the hamstrings and the femur bone—this is what controls its ability to stretch up and down.

Consider that the hamstrings attach on the pelvis and the shin without really touching the thigh (with the exception of the short head of the biceps femoris). What this means to me is the spatial relationship of the hamstrings to a bone they don't touch determines their tightness.

If we stand with the pelvis tucked under, or the thighs leaning forward, two things happen.

- The sit bones move closer to the knee which shortens the resting length of the hamstring.
- Tucking the pelvis forces the thigh bones forward, as the hamstrings stay where they are increasing their distance from the femur bone.

To correct this, move the thighs back and align the pelvis in a neutral position so the femur bone can move back in space closer to the hamstring. Over time the tight hamstrings will shift closer to the bone and have a better chance of lengthening.

This might not be easy at first due to the shortened resting length of the hamstrings but perseverance will pay off.

While our posture is why so many people have tight hamstrings, our posture is also why people often find it difficult to change the nature of their tight hamstrings through traditional exercise.

It is important to note that there are plenty of people who are too loose in their musculature and their poor posture will not make their hamstrings tighter. Those kinds of people, of whom I am one, have their own problems to deal with.

Many people seem to have their concepts of exercise backwards. They think that they exercise to make their posture and movement patterns better. At least I used

to think that. When I started teaching yoga I thought people came to class to change their patterns and habits.

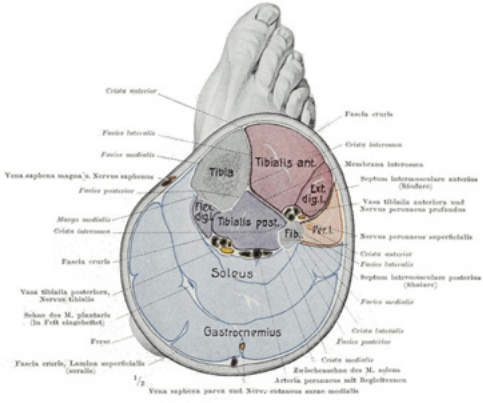
Instead, I soon realized that most people come to class to reinforce their movement and posture patterns. This was a revelation for me as I began to realize just how much we tend to stick to the same set of patterns in everything we do.

Which is all well and good if you happen to have been blessed with good patterns.

THE HAMSTRINGS AND THE CALVES

Some people are loose, some people are tight, and some people are in between. Those who are tight tend to be tight in the back of the body from head to heel. The hamstrings are deservedly the focus of a lot of attention, but I have found that the calves don't often get their due when it comes to being inflexible. The hamstrings and the calves basically shake hands as they cross paths on either side of the knee. The gastrocnemius muscle (half of the calf) has two heads that attach on either side of the femur bone. The three hamstring muscles have four heads between them that connect, two on each side, on both the tibia and the fibula.

Gastrocnemius



cross-section

soleus

The hamstrings bend (flex) the knee and straighten (extend) the hip. The calf muscles are responsible for plantarflexion—moving your foot and toes downward while lifting your heel up. This movement is essential for walking, running, and biking because it accomplishes the all-important push off through the inner foot.

The hamstrings and the calves are joined together by fascia, the connective tissue enveloping the entire body. Too many people focus on working and stretching the hamstrings, without paying attention to the calves, which are connected to the hamstrings. And some calves are ridiculously tight.

The body needs to be worked on in balance, so to open tight hamstrings we need to address all of the muscles of the legs and pelvis (and the back), most specifically the calves and quadriceps (and we should add the glutes and tensor fasciae latae).

While the upcoming exercises focus on the hamstrings—muscles don't work in isolation. They always work together in a chain so the work you undertake will strengthen the hamstrings and gluteus maximus and also other surrounding muscles.

THE HAMSTRINGS AND GLUTEUS MAXIMUS

The gluteus maximus is a uniquely human muscle, and we are a tight assed species who need to learn to relax our butts. We are meant to have a butt—a nice round bubble of a butt. If you have pets, take a look at their backside and notice that they don't have a caboose quite like ours.

Chronically gripping and tightening is the default function of the gluteus maximus. In the next few paragraphs, I'll lay out how this ridiculously important muscle is supposed to function. But bear in mind that precious few people actually use their butt as it is meant to be used.

The big gluteus maximus was born when, along with the hamstrings, it extended down to pull the spine up on top of the pelvis, bringing us upright to stand. It grew in size and strength when it became a player on the team of muscles asked to help stabilize the trunk over the pelvis in upright posture.

All three gluteal muscles –minimus, medius, and maximus— exist in four legged animals, and gluteus medius and minimus function similarly in humans and other quadrupeds. These muscles serve to assist in internal and external rotation. The largest of the gluteals, gluteus maximus, took on a very different role when we came upright to stand.

The gluteus maximus is attached at the ilium of the pelvis, as well as the bottom of the back of the sacrum, and the side of the coccyx (tailbone). It is also tied into the thoracolumbar fascia which connects it to the erector spinea and sacrotuberous ligament. The lower portion of the gluteus maximus has two heads, connecting into the IT Band and onto the femur bone.

The gluteus maximus has a number of functions. Acting on the leg it extends the thigh at the hip just as the hamstrings do; in connection with the IT Band, it tenses the fascia lata and stabilizes the leg and shin when standing. The upper half of the muscle abducts and internally rotates the hip joints while the lower half adducts and externally rotates the leg.

But far and away, the most important thing that our gluteus maximus needs to do is stop working overtime. If you tuck your pelvis or your thighs sink forward, I can guarantee you that your butt muscles will be activated, and working more than they should, as long as you are standing walking and running. Sitting is a whole other story.

Depending on where you are at this moment, you should stand up and feel what your gluteus maximus is doing when standing with what you consider good posture.

Check in with the gluteus maximus and see if it is working. Then take your thighs back a little or stick your butt out to let it go or shut it off. Return to your original position and check out the difference if you feel one.

If this resonates with you, spend the next week noticing what your gluteus maximus, our glorious, uniquely human butt is doing. If it is working overtime try to give it a rest.

RECIPROCAL INHIBITION

Most muscles in the body act in pairs, working together to make moving and doing possible. When one muscle contracts or shortens, the opposing muscle relaxes or lengthens. This is the concept known as reciprocal inhibition.

Make a muscle with your bicep as you are sitting at your desk and touch that bicep with the other hand. You should feel that it has hardened or engaged slightly. Touch the triceps, its opposite muscle, and it will be relaxed. Now pick up something on your desk and ideally you feel the same thing magnified. The bicep

probably gets a little harder and the triceps relaxes more.

In the legs the quadriceps are responsible for extending or straightening the knee. The quadriceps engage or shorten to accomplish this, and in response the hamstrings stretch to allow the knee to extend.

This switches when the knee bends and the heel reaches backwards towards the butt. The hamstrings engage or shorten when the knee bends and the quadriceps stretch.

This deep primal reflex is essential to human movement and is limited, sometimes severely by muscle imbalances in the body. Let's say that my hamstrings (the muscle at the back of the thigh) are tight and my quadriceps (the muscle at the front of the thigh), for the sake of this discussion, are weak. From a standing position I lift my knee up off of the ground and attempt to extend my leg straight. This action requires a shortening of the quadriceps and an extension of the hamstring. But if the quadriceps lack the tone to shorten, there will be no corresponding call for the hamstring to lengthen.

Pulled muscles and cramps are the result of a "misfiring" of reciprocal inhibition. Two muscles simultaneously contract at the same time, rather than with the natural give and take of flexion and extension, and the stronger muscle usually dominates resulting in a cramp or injury to the weaker muscle.

Reciprocal inhibition is a deep reflex that you can't control, but you can develop your body into a vessel that allows the machine to work more closely to its design. When thinking about or deciding to strengthen what might be weak hamstrings, it is important to understand their relationship to the quadriceps and other surrounding muscles.

You can assume that the need for more strength in one muscle group will require an investigation and understanding of what is going on with your other muscles—and then an action plan to bring the body into a highly functional balance.

TEST THE LENGTH OF YOUR HAMSTRING

Testing the relative length of your hamstring muscles is a good idea. While some people are loose and some are tight—the ideal is to be in between. We exercise to bring balanced tone to all of our opposing muscle groups, and there are many reasons why muscle groups would be out of balance. The quality of our muscle tone and posture comes from a wide range of circumstances— genetics, imitation, illness, and injury can all play a part in determining our state of being.

There is an ideal length and tone for every muscle. If the object of our exercising is to create a balanced body, the first question is just how imbalanced are you?

Let's do a simple test to check the tightness of your hamstring muscles.

Lay flat on your back with your legs extended straight out. Have a belt handy.

Feel how much of the body is flat on the floor. Believe it or not, everything should be flat to the floor except the lower back and the neck.

1. Use a belt around the right foot if you need it. Lift the right leg off the floor keeping it totally straight. How high can it go before the knee bends?
2. A leg with long hamstrings will stay straight at least until a ninety degree angle.
3. Find the place where your leg can be completely straight. Everyone is different. Your leg might be straight at a 45 degree angle to the floor instead of 90.

4. At whatever angle you find your leg, there should be a stretch of the hamstrings. The stretch should be in the middle of the muscle, not at the back of the knee or the base of the pelvis.

This is a great stretch for anyone but if raising your straight leg up to ninety degrees isn't happening you should add this pose to any stretching routine.

Stretching tight hamstrings is fundamental to changing the position of the pelvis. But don't forget that the quadriceps muscle on the other side of the leg needs an equal amount of work.

TEST THE STRENGTH OF YOUR HAMSTRINGS

Here are two ways to test the strength of your hamstrings. These simple tests require two people.
Test #1

- The person being tested sits on a table or something that allows the knees to bend and the feet to hand towards the floor.
- Extend the right leg out straight and with your partner gently holding the ankle around the achilles tendon don't let him/her push your leg down.
- With your partner switching his hand to the front of the ankle try to straighten the leg against similar resistance.
- In both cases your partner should not be able to stop you from accomplishing your goal.

Test #2

1. The person being tested is lying on a table (or the floor) in a prone position with the legs extended straight out.
2. The person helping puts one hand lightly on the right thigh just above the knee and then provides light resistance as the testee draws the heel towards the pelvis.
3. Working in the opposite direction the helper puts his hand behind the prone person's heel and tries to push the foot down towards the other foot while receiving resistance from the bent leg.

Pay close attention to which side is stronger as it is likely to be noticeable. If this is in fact the case, you need to take this into consideration as you try to build a balanced body.

EXERCISES

REVERSE LUNGE

1. Stand at the front of your mat.
2. Take a step backward with your left foot, lowering down and touching the left knee lightly to the floor (if it makes it that far) while applying as little pressure to the knee as possible.
3. Make sure the right knee stays positioned directly over the ankle.
4. Return to standing by pressing through your inner foot, and bringing your left leg forward.
5. Switch legs, stepping back with the right leg.
6. Start with a set of 5. Build to a set of 10.

EXTENDED SIDE ANGLE VARIATION

1. Stand with your feet about 4 feet apart.
2. Turn your left foot in slightly to the right and your right foot turned out to 90 degrees. Align the right heel with the left heel.

3. Bend the right knee until the shin and foot form a right angle. It would be ideal to get the right thigh parallel to the floor but the ability to do that likely depends on stepping the back foot further away.

4. Place the right hand on the floor, or on a block, on the outside of the right ankle and extend the left arm in line with your ear reaching forward, ideally creating a straight line from the left heel to the left fingertips.

5. Take the groins back, trying to line up the outer hip (greater trochanter) with the ankle bone. Then do your best to bring your trunk in line with the leg (without letting the left thigh move forward).

6. Stick your butt out slightly taking the thighs back, set your core and try to keep your trunk from moving when you extend the right arm along the right ear, bringing it parallel to the left.

TRIANGLE VARIATION

1. Stand with your feet three and a half to four feet apart.

2. Point your right foot and turn your left foot in slightly. Align the right heel with the left heel. If you want to make it a little easier, step the left foot one or two inches to the right, which will make taking the thighs back easier.

3. Keeping both legs straight, take the thighs back and extend your trunk to the right, keeping it in line with the right leg as best you can. Make sure to bend from the hip and not the waist.

4. Place your right hand on the floor or on a block alongside the right ankle.

5. Extend the left arm over the ear toward the front of your mat.

6. Move the legs back and engage the core as you extend the right arm alongside the left side trying to prevent the trunk from lifting or moving at all.

7. Once you are there, see if you can rotate the trunk open slightly with no movement in the legs.

8. Do on both sides.

LOW LUNGE ARM EXTENSIONS PART 1

1. From Downward Dog or Hands and Knees step your right foot forward and keep the left leg straight with the knee off of the ground. Your fingertips should be on the floor or on a block.

2. Square your hips as best you can and lift your fingers just one inch off the floor. Feel what happens to your hips when the hands no longer provide support.

LOW LUNGE ARM EXTENSIONS PART 2

1. From Downward Dog or Hands & Knees step your right foot forward and keep the left leg straight with the knee off the ground. Your fingertips should be on the floor or on a block.
2. Square your hips as best you can and lift your fingers just one inch off of the floor. Feel what happens to your hips when the hands no longer provide support.
3. If that goes well and you feel stable extend the arms forward alongside the ears.
4. Ideally the trunk doesn't elevate or sit on the front thigh.
5. You can increase the difficulty by raising the arms higher without lifting the front of the ribcage and also by drawing the wrists closer together, bringing the arms towards parallel.

LOW LUNGE ARM EXTENSIONS PART 3

1. From Downward Dog or Hands & Knees step your right foot forward and keep the left leg straight with the knee off of the ground. Your fingertips should be on the floor or on a block.
2. Square your hips as best you can and lift your fingers just one inch off the floor. Feel what happens to your hips when the hands no longer provide support.
3. If that goes well and you feel stable extend the arms forward alongside the ears.
4. Ideally the trunk doesn't elevate or sit on the front thigh.
5. You can increase the difficulty by raising the arms higher without lifting the front of the ribcage and by drawing the wrists closer together, bringing the arms towards parallel.
6. If you want to move on from here, straighten the front leg about halfway. This should engage the hamstrings, gluteus maximus, and assorted spinal muscles depending on where you need the work.

WARRIOR THREE W/ BLOCKS

1. Stand at the front of the mat with two blocks standing up about a foot from your feet.
2. Establish the height that you can lower down and touch the blocks while maintaining a flat back. If you can touch the floor without blocks you don't need them.
3. Come to your flat back position with the hands under the shoulders and the ankles directly under the hips.
4. Extend the right leg up behind you. Ideally the heel comes to the height of the sit bone without lifting the right hip up to make it happen.
5. Do both Sides.

WARRIOR THREE W/ BLOCKS AND BENDING KNEE

1. Stand at the front of the mat with two blocks standing up about a foot from your feet.
2. Establish the height that you can lower down and touch the blocks while maintaining a flat back. If you can touch the floor without blocks you don't need them.
3. Come to your flat back position with the hands under the shoulders and the ankles directly under the hips.
4. Extend the right leg up behind you. Ideally the heel comes to the height of the sit bone without lifting the right hip up to make it happen.
5. Keeping your hands on the blocks or the floor bend and straighten the knee three times tracking the kneecap in line with the ankle.
6. Do both sides.

WARRIOR THREE

1. Stand at the front of the mat with two blocks standing up about a foot from your feet.

2. Establish the height that you can lower down and touch the blocks while maintaining a flat back. If you can touch the floor without blocks you don't need them.

3. Come to your flat back position with the hands under the shoulders and the ankles directly under the hips.

4. Extend the right leg up behind you. Ideally the heel comes to the height of the sit bone without lifting the right hip up to make it happen.

5. From here you can take the hands a couple of inches away from the blocks; you can extend the arms forward; or you can interlace your fingers behind your back (my favorite).

6. Do both sides.

WARRIOR THREE WITH BENDING KNEE

1. Stand at the front of the mat with two blocks standing up about a foot from your feet.
2. Establish the height that you can lower down and touch the blocks while maintaining a flat back. If you can touch the floor without blocks you don't need them.
3. Come to your flat back position with the hands under the shoulders and the ankles directly under the hips.
4. Extend the right leg up behind you. Ideally the heel comes to the height of the sit bone without lifting the right hip up to make it happen.
5. From here you can take the hands a couple of inches away from the blocks; you can extend the arms forward; or you can interlace your fingers behind your back (my favorite).
6. Bend the left knee and straighten the leg three times tracking the kneecap in line with the ankle.
7. Do both sides.

BIRD DOGS

1. Start on your hand and knees. Align the knees directly under the hips with the thighs relatively parallel. The wrists should be under the shoulders and the creases in the wrists should be parallel to the front of the mat.
2. Extend your right arm alongside your right ear with the right palm facing left.
3. Extend your left leg back keeping the pelvis and trunk as solid as possible.
4. Lift the left leg as high up behind you as possible keeping the left hip turned towards the floor.
5. Do both sides.

BIRD DOGS WITH CURL VARIATION

6. Start on your hand and knees. Align the knees directly under the hips with the thighs relatively parallel. The wrists should be under the shoulders, and the creases in the wrists should be parallel to the front of the mat.
7. Extend your right arm alongside your right ear with the right palm facing left.
8. Extend your left leg back keeping the pelvis and trunk as solid as possible.
9. Lift the left leg as high up behind you as possible keeping the left hip turned towards the floor.
10. Bend the left heel towards your sit bones as far as it will go. Take the left foot in the right hand and both pull the foot towards you and maintain resistance at the same time.
11. Do a set of 10 on both sides.

ONE LEG FORWARD SQUAT

1. Stand with your feet shoulder-width apart.
2. Bend the left leg behind you bringing the left shin parallel to the floor and keeping the left ankle aligned with the knee.
3. Slowly lower your body forward reaching for the floor with the right hand.
4. Keep your back straight, and your standing knee pointed in the same direction as your foot.
5. Descend as far as you can.
6. Pause.
7. Slowly push up from your inner foot, extending your leg.
8. Straighten your leg.
9. Repeat on the other leg.

OPPOSITE ELBOWS FORWARD BEND

1. Come to a forward bend with the legs straight or the knees bent depending on the position of the pelvis (the pelvis should be able to rotate enough for the spine to be able to hang towards the ground).
2. A straight leg means creating a right angle with the foot and shin. If you want to go deeper lift the hips up without moving the calves backwards.
3. Take hold of your left elbow with your right hand and right elbow with the left hand.
4. Holding the elbows draw the arms over the ears without moving the spine or legs.
5. To go deeper move the trunk towards a flat back without changing the legs. The key is maintaining the position of the legs as you change the trunk.
6. If this is going well you can come all the way up to stand keeping the thighs back, the ribs down and the hands holding opposite elbows pulling the arms away from the ribs.

BRIDGE

1. Lie on your back with the knees bent and the feet flat on the floor.
2. Put a block between the inner thighs—not too close to the pelvis or the knees.
3. Ground yourself through the whole foot with extra attention to the inner foot and lift the hips up off the floor.
4. Squeeze the inner thighs into the block and stick your butt out a little bit. This should activate the inner thighs, pelvic floor, and lower abdomen.
5. Without moving your feet try to pull your feet in the direction of the sit bones (this is an isometric contraction where the muscles engage without a corresponding movement of bones).
6. When this pose is done well, the hamstrings and gluteus maximus are active in a good way extending down to the feet. When this pose is done poorly, the gluteus maximus grips, and the inner thighs and pelvic floor are taken out of the equation.
7. Lift up and lower down 10x keeping maximum contact between the block and inner thighs. Keeping the feet grounded and the inner thighs active should help you feel the good work of the hamstrings and gluteus maximus.

ONE LEG BRIDGE EXTENSIONS

1. Lie on your back with your butt as close to the front of the mat as possible with the knees bent. Put a block between the inner thighs.
2. Make sure that your feet are parallel and you are particularly grounded into the inner foot.
3. Lift one foot and straighten that leg as much as you can to get the sole of the flexed foot parallel to the ceiling.
4. Lift up into a one-leg bridge.
5. Stay grounded through the inner foot, keeping the knee of the foot on the floor in line with the ankle.
6. Do a set of 10 on each side.

BRIDGE W/ EXTENDED LEG

1. Lie on your back with the knees bent and the feet flat on the floor.
2. Ground yourself through the whole foot with extra attention to the inner foot and lift the hips up off the floor.
3. Extend your right shin keeping the thighs in line.
4. Replace the right foot and extend the left shin.
5. Do it again without lowering down in between.
6. Build up to a set of five

TWO LEG WALL BRIDGE

1. Lie on your back with your feet on the wall and your pelvis far enough away that your shins can be parallel to the floor.

2. The feet should be parallel and pressing into the wall evenly through both feet.

3. Lift the hips slowly into a bridge. Don’t go too high and don’t tuck your pelvis on your way up.

4. Do a set of ten.

ONE LEG WALL BRIDGE

1. Lie on your back with your feet on the wall and your pelvis far enough away that your shins can be parallel to the floor.
2. The feet should be parallel and pressing into the wall evenly through both feet.
3. Stretch one leg up so that the flexed foot is parallel to the ceiling.
4. Lift up pelvis into bridge with the leg pointing straight up. Try your best to keep the sole of the foot parallel to the ceiling though this will get easier with time.
5. You can bring your arms into a cactus position to make the work a little harder.
6. Do a set of ten on each side.

BRIDGE ON A BLANKET VARIATION 1

1. Set up a blanket on the floor in front of your mat so that it can slide along the floor.
2. Lie on your back with your butt as close to the front of the mat as possible with your knees bent and feet on the blanket. Put a block between the inner thighs.
3. Make sure that your feet are parallel and you are particularly grounded into the inner foot.
4. Lift your hips into a bridge.
5. Work your feet isometrically so the gluteus maximus and hamstrings engage correctly in the direction of the heels.
6. Hold this position for one minute to start, working up to 3 or even 5 minutes,focusing on using the muscles correctly (i.e. not overusing gluteus maximus which leads to an unwanted external rotation).

BRIDGE ON A BLANKET VARIATION 2

1. Set up a blanket on the floor in front of your mat so that it can slide along the floor.
2. Lie on your back with your butt as close to the front of the mat as possible with your knees bent and feet on the blanket. Put a block between the inner thighs.
3. Make sure that your feet are parallel and you are particularly grounded into the inner foot.
4. Lift your hips into a low bridge, just a few inches off the floor.
5. Slowly, if you can, push your feet and the blanket forward about 18 to 24 inches.
6. Try to pull the feet back just three inches.
7. Push the blanket forward and pull it back three inches in each direction 3-5 times.
8. Over time you can increase the height of the bridge. The higher the hips the harder the action.

BRIDGE ON A BLANKET VARIATION 3

1. Set up a blanket on the floor in front of your mat so that it can slide along the floor.
2. Lie on your back with your butt as close to the front of the mat as possible with your knees bent and feet on the blanket. Put a block between the inner thighs.
3. Make sure that your feet are parallel and you are particularly grounded into the inner foot.
4. Lift your hips into a full bridge (the higher you lift, the harder this will be for weak hamstrings).
5. Slowly, if you can, push your feet and the blanket forward just 3 inches.
6. Try to pull the feet back the same three inches.
7. Push the blanket forward and pull it back three inches in each direction 3-5 times.
8. Over time you can increase the height of the bridge. The higher the hips the harder the action.

PURVOTANASANA

1. Sit in Dandasana (Staff Pose) with your hands six to twelve inches behind your hips and your fingers pointing forward.
2. Point your feet, keeping the big toes together, and even trying to squeeze the ankles together.
3. Press into the inner feet and hands, and lift your hips while trying to create a straight line from the toes to the crown of the head.
4. Keep the groins deep and avoid tucking the pelvis or gripping the gluteal muscles.
5. Do you best to lengthen the back of the neck.
6. Hold for five breaths.
7. A much more advanced variation would be to come into the pose and then lift one leg straight up as high as you can.

LOCUST POSE

1. Lie on your stomach with your arms alongside your trunk, and your forehead resting on the floor. Point your feet.
2. Do your best to lift your legs off of the floor.
3. Keep your feet pointed and your legs parallel.
4. Keep your abdominal muscles engaged so the muscles of the lower back lengthen instead of shorten.
5. Lengthen the back of the neck as you extend the whole back of the body and strengthen the hamstrings as you lift your legs off the floor.
6. Placing a rolled up blanket under the tops of the thighs makes this easier.

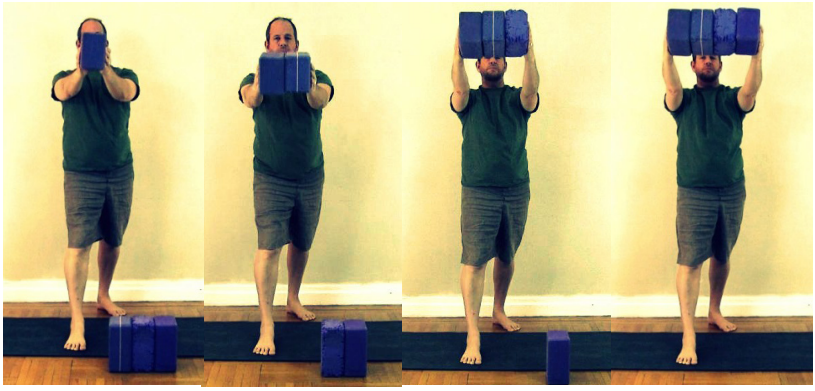
LOCUST VARIATION—KNEES OUT

1. Lie on your stomach with your arms in a comfortable position and your forehead resting on the floor.
2. Bend your knees wide out to the sides and try to elevate your legs, keeping your trunk on the floor.
3. You can do this one leg at a time or both.
4. A blanket under the tops of the thighs helps with this exercise as well.

SQUATTING WITH ECCENTRIC AND CONCENTRIC CONTRACTIONS

1. Stand with your feet about mat width apart.
2. Trying to keep your spine as vertical as possible lower down and back towards a squatting position. You don't have to get all the way down.
3. You want to tone the muscles of the pelvic floor (levatorani) on the way down and the way back up.

STRAIGHT LEG BLOCK LIFT



1. Stand with the feet together with a block standing up in front of you with three additional blocks nearby (this exercise is usually done with weights).

2. Step one foot back 2 to 2 ½ feet. Place the back foot on the floor keeping it as parallel as possible.

3. With both legs straight and the torso facing forward bend over as far as you can while maintaining a flat back.

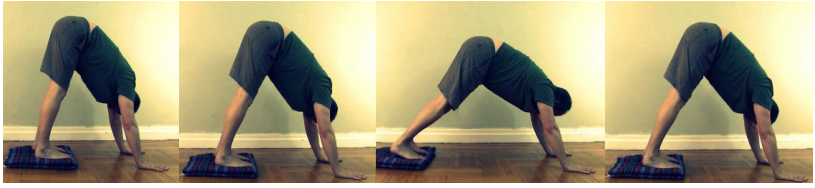
4. If you can reach the block pick it up maintaining a flat back and straight legs.

5. If you can't reach the block try to measure how far you can bend over; then using a chair or other appropriate surface to equal that height, then lift the block.

6. Once you establish the pose, you can add weight to the object that you are lifting to make it more intense.

7. Maintaining a flat back is needed to get the most work out of the hamstrings.

FROM FORWARD BEND TO DOWN DOG ON A BLANKET



1. Start in a forward bend with your hands on the floor and your feet on a blanket. Alternately you can use blocks for your hands.
2. Do your best to keep your spine in a downward dog alignment resisting the urge to move the spine forward towards plank.
3. Slide the legs back an inch at a time and stop.
4. Go back until you can't stop of sliding backwards and try to hold.
5. Then slide yourself as far forward as you can back to the forward bend.
6. Repeat 3-5 times.

Strengthen Your Hamstrings

And Your Gluteus Maximus While You Are at It

By Jonathan FitzGordon