

Hamstrings Home Care Exercises

The hamstring group of muscles consist of three muscles and cross the hip and knee joints.

Semitendinosus

Semimembranosus

Biceps femoris.

The biceps femoris is the largest muscle that includes both a long head and a short head. The short head of the biceps femoris does not cross the hip joint. The semitendinosus is located at the medial (inner) part of the hamstring and the semimembranosus is the most medial of the hamstring muscles.



The muscles attach to the ischial tuberosity on the hip, commonly known as the sitting bone. The hamstring tendons also flank the space behind the knee.

They are located at the backs of the legs. The hamstrings originate at the sitting bones, (Ischial). The Biceps Femoris inserts into the head of the fibula, Semimembranosus and Semitendinosus attaches on to the medial surface of the Tibia.

The hamstrings form a major part of our posterior chain and its strength is directly linked to our life-functionality! Weak hamstrings can lead to a many issues, for example, poor posture, knee pain, and lower back discomfort, to name but a few! Long periods of sitting may affect how they function and lead to tightness.

Working on developing the strength of the hamstring impacts on personal biomechanics (which allows comfortable in movement) and prevent injury.

They are responsible for walking, running, jumping, and many other physical activities. The hamstrings flex the knee joint and extend the thigh backward to propel movement.

The hamstring and quadriceps muscles form an antagonistic muscle pair.

That is for the hamstrings to flex the knee; the quadriceps lengthens to allow the movement. The hamstrings are the agonist and the quadriceps are the antagonist.

For the quadriceps to extend the knee, the hamstrings lengthen to allow the movement. The quadriceps are the agonist and the hamstrings are now the antagonist.

Injuries to these muscles are quite common, strengthening and stretching exercises can help prevent injury from occurring.

Strengthening Exercises

Hamstring exercises can be beneficial for anyone. It is important to balance the development of the quadriceps that adequately strengthens and conditioning of the hamstrings.

Walking, running, and climbing and descending stairs provide functional fitness of the hamstring muscle group.

Rehabilitation exercises are employed to strengthen the hamstrings. These exercises involve knee flexion and hip extension.

Basic bridges:

The benefits of a hip bridge are twofold; they target multiple muscle groups simultaneously to build strength as well as stretching muscle.

1. Lay on your back with your knees bent and feet flat on the floor.
2. Lift your hips.
3. When your hips reach the top, press into your toes to lift your heels off the ground.
4. Hold for a count of 5
5. Lower your hips back down to the ground.
6. Repeat 10 to 12 reps.



Single-leg bridges:

The single leg bridge exercise is a great way to strengthen the glutes and hamstrings, they don't require equipment, this exercise can be practised at home.

Lie on your back with your hands by your sides, knees bent, and feet flat on the floor (under your knees). Lift one foot, extending the leg fully so it is roughly 45 degrees to the floor. This is the starting position.

1. Raise your hips, tightening your abdominals and buttock muscles to support the lift, until your shoulders and knees are in a straight line. Squeeze your core at the same time, as if trying to pull your belly button back toward your spine.
2. Hold this position for a count of 5.
3. Lower the hips to the floor slowly and with control, keeping the leg extended, to return to the starting position.



4. Repeat on the same leg for the desired number of reps.

Once completed perform this exercise with the other leg to avoid muscle imbalance.

Reverse Lunges:

They take the hamstrings through the motion of flexion and extension via bending the knee, as in the leg curl. Unlike the standard forward lunge, reverse lunges work the hamstrings much harder given that the driving force of the movement comes from your back leg.

This exercise allows control and stability.

1. Begin standing upright with your feet together.
2. Step into a wide stance backward step, starting with your weaker leg.
3. Lower yourself down into a lunge by bending both of your knees - make sure your torso stays upright (that you don't collapse through the chest)
4. Maintain your weight in the heel of your front foot and keep your knee behind your toes.
5. Return to starting position.
6. Then step backwards into your next reverse lunge on the opposite leg.



Walking lunges:

1. Stand straight with your feet shoulder width apart and place your hands on your hips. This is the start position.

Keeping your hands on your hips at all times, using your oblique to keep your balance.

2. Step forward with either leg in a long stride. Keep your other foot in place behind you.
3. Bend your knees as you do this so your body is lowered towards the ground.

Keep your back straight throughout the movement.

4. Continue down until your front knee is just above the ground.

Your front leg should be bent 90 degrees at the knee

5. Hold for a count of 10.
6. Push down through your front heel and extend both knees to return to the start position.



7. Pause then repeat with your other leg.

When you have lunged with both legs that is one repetition.

8. Repeat.

Stretching and flexibility routine.

Hamstring flexibility is important to prevent injury. Tight hamstrings limit range of motion when extending the hip and flexing the knee and cramp may be felt at the back of the knee.

Seated Stretch

1. Sit on an exercise mat with both legs stretched out in front of you and feel your sitting bones making contact with the floor.
2. Bend one knee to slide the foot in toward the opposite knee, placing your foot flat on the floor.
3. Hinge at your hips and reach your hands toward the toes of the straightened leg. If there is a lot of tightness, you can bend that knee slightly.
4. Hold the stretch for 15-30 seconds.
5. Switch sides.



Supine Stretch

1. Lie on your back on an exercise mat with your knees bent and place your feet on the floor about hips-distance apart.
2. Lift one leg toward the ceiling, maintaining a neutral spine.
3. Reach behind the back of the thigh and gently tug the leg in closer.
Optional: Allow the knee to bend slightly to increase the range of motion.
4. Hold for 15-30 seconds.
5. Lower the leg
6. Then switch sides.



Standing Stretch

1. Start standing tall and upright with your feet about hips-distance apart.
2. Take a natural step forward with your heel and keep the toes lifted.
3. Place your hands on your hips as you sit back slightly and hinge forward.
4. Allow your spine to naturally round forward as you reach for the lifted toes.
5. Let your knees soften as you reach your seat back a little more and drop your chin toward your chest.
6. Hold for 15-30 seconds.
7. Bring your hands back to your hips to stand back up and step the feet back together.
8. Switch sides.

