Training Zone

Stretching Sequences for Hips and Hamstrings

By Miranda Esmonde-White

RUNNING REQUIRES both a powerful takeoff and a controlled landing, placing a lot of stress on the hip region. During a run, these leg and hip movements are repeated thousands of times, placing a massive demand on the bones and muscles. For a runner to remain free of pain and injuries, the hip region needs careful post- and pre-running training.

Deep hip, hamstring, groin and quad stretches can help prevent injuries and pain – and more importantly make you a better runner. If one part of a joint is tighter than the other it will influence the range of motion of the entire joint. If your hamstrings are tighter than your groin, or your quadriceps are tighter than your psoas, the tightest muscle group will limit the range of motion of the more flexible muscles. For runners, it's important to increase flexibility in the entire hip region, while devoting special attention to the oft-injured hamstrings.

The following is a six-to-eight-minute sequence of exercises that will begin to rebalance and increase the flexibility of the hip region. These exercises have been designed with the aid of a sports physiotherapist and are extremely effective and give rapid results if done correctly.

This sequence should be followed in its entirety. There are four key target groups: hamstrings (underneath the thigh), groin (inside the leg), quadriceps (front of the leg) and psoas (front of thigh or hip flexors), and the gluteus maximus and IT band (hips or outside of leg). It's important to follow the sequence and the execution. To target the hamstring, make sure that the hips are turned to face the foot. It's not important how high your leg is on the chair or barre, as long as the hamstrings are engaged. Try to straighten your leg when doing the hamstring stretch, but if the hamstrings are too tight, don't worry about it. Targeting of the hamstrings is more important and not the straightening of the knee.

This sequence to rebalance the hips, hamstrings, quads and groin should take three to four minutes per leg. Any faster and the muscles will not properly be rebalanced and stretched.

The Sequence

The following exercises should flow smoothly into each other with relatively constant motion between each, and only short periods of holding. Complete all sequences on one leg before changing legs.



Hip Stretch

Put a leg on the chair and bend both knees (supporting leg and leg on the chair). Push bum back. Place hand on thigh above the knee. In order to fully engage all the hip muscles, slowly move your hips around while pushing down on the knee. The constant movement will make the exercise feel like a hip massage. Feel this in the hips and groin. Time: 30 seconds

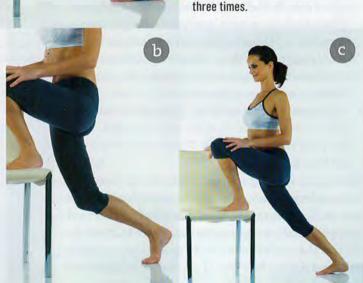


Psoas Sequence

Each exercise flows into the next.

- a. With the leg still on the chair, turn your hips to face the chair and turn both feet parallel to the chair. Feel this in the psoas and quad.
 - Time: 5 seconds
- b. Raise the back heel, bend the standing leg, shift your weight toward the chair, tucking under at the same time (deep pelvic tilt). Feel it in the psoas. Time: 5 seconds
- c. Lock the pelvic tilt and slowly straighten the knee while pressing the heel into the floor. Note: With the pelvic tilt in place, you will have trouble putting the heel on the floor and this is OK. Feel it in the psoas. Take 5 seconds in the movement and hold the end position.

Repeat sequence a, b and c







Quad Stretch

Using the same leg that was on the chair, grab the foot and pull towards your bum. Tuck under (deep pelvic tilt) and bend the leg you are standing on. Modification: If you can't grab your foot, make a sling with a towel and use it to pull the foot towards your bum. Feel it in the quadriceps.

Time: Hold for 20 seconds

Hamstring Stretch

Reposition the same leg on the chair and try to straighten the knee but don't force. Bend your supporting leg and push your bum back.

- above your shoulders and reach over your foot. Switch from one arm to the next in a constant reaching motion. Reach 6 times, 3 seconds each arm. Feel it in the back and hamstrings.
- a Keeping your back straight and up, raise one arm b. Round your back and reach forward to hold the chair with both hands. Pull forward with both arms. Feel it in the hamstrings. Time: 8 seconds

Repeat a and b three times.

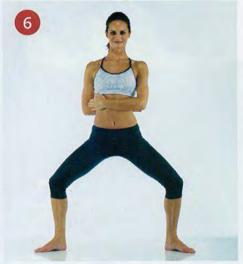


Groin Stretch

Keeping your leg on the chair, shift your position so that you can target your groin. Make sure that you push your bum back, keeping the spine straight and standing leg bent. Feel this in the long muscle of the groin. Time: 20 seconds

Repeat stretches 1 to 5 on the other leg.

After this deep stretch, it's important to fire up the muscles in order to solidify the effect of the stretches. A deep plie (tai-chi style) held for between 1 and 2 minutes will empower and protect the muscles that you just worked.



Plié

Keep your back straight - no leaning forward (stand against a wall if needed) - and spread your feet apart in a wide stance. Make sure you turn your legs out while maintaining a clean alignment of the knees and feet. This exercise will stretch and strengthen the quadriceps, groin, gluteus group and hamstrings. Time: 1 to 2 minutes. Note: Your muscles might quiver during this exercise. IR

Miranda Esmonde-White is a former dancer with the National Ballet of Canada and creator of the Essentrics workout: www.essentrics.com.