

Exercises to Prevent Shin Splints in Runners

This *general exercise guide* is intended to help you maintain adequate lumbar and lower extremity range of motion and strength. Focusing on mobility as well as pelvic, lumbar, and lower extremity strength on a regular basis can help you prevent and self-treat shin splints. These exercises should be used in conjunction with the prevention and treatment strategies outlined in **How to Prevent and Self-Treat Shin Splints**. (Be sure to download the .pdf files for the **Ankle Resistance Exercises** as well as the **Lower Extremity Mobilizations Using a Foam Roll**.) These exercises should also be utilized in conjunction with maintaining a generally healthy lifestyle, including a cross training program.

Press-ups

Perform press-ups before and after running or exercise as part of a thorough warm up and cool down. I also recommend performing press-ups frequently throughout the day as needed for LBP prevention. Lie on your stomach and perform 10 to 20 press-ups. Move slow and easy, but work your way up to full motion.

Perform 2 sets of 10-20 repetitions, 5-10 times a day.



Pigeon Stretch

Keep your front leg with the knee at 90 degrees and straight out in front with your back leg straight behind you. Lean forward as far as you can until you feel a stretch in your buttock. Do not twist your body.

Hold for 30 seconds, and 3 repetitions per side.



Calf Stretch – Gastrocnemius

While standing and leaning against a wall or counter, place one foot back behind you and bend the front knee until a gentle stretch is felt on the back of the lower leg. Maintain a good upright posture.

Your back knee should be straight the entire time with your heel on the ground.

Hold for 30 seconds, and 3 repetitions per side.



Calf Stretch – Soleus

While standing and leaning against a wall or counter, place one foot back behind you and bend the front knee until a gentle stretch is felt on the back of the lower leg. Maintain a good upright posture.

Your back knee should be bent the entire time with your heel on the ground.

Hold for 30 seconds, and 3 repetitions per side.



Hip Flexor Stretch

Stand with good posture with your back leg straight. Keep your back heel on the ground with your toes pointed straight ahead. Flex your front knee until you feel a stretch in the front of your hip. You will also likely feel a stretch in the back of your calf. You should feel a mild to moderate stretching sensation and no increase in pain.

Hold for 30 seconds, and repeat 3 times on each side.



Hamstring Stretch in Doorway

Find a doorway and place one leg on the frame and stretch the opposite leg through the doorway. Try to keep your back with a neutral arch. As your hamstring relaxes, slowly move closer to the wall or doorframe.

Hold for at least 1 minute per side and preferably 2 repetitions per side.



Strengthening Exercises

The exercises below are listed from easy to difficult. The exercises should be performed along with the other stretches indicated in the **Ankle Resistance Exercises** and **Lower Extremity Mobilizations Using a Foam Roll**. The goal is to strengthen the lower extremity muscles by focusing on the core stabilization muscles, lumbar extensor muscles, and the glute medius muscle.

Superman Exercise - Starting Position

Lay on the ground with your arms stretched out in a “V” position. Support your head with a small rolled up towel to maintain a neutral spine, and keep your chin slightly tucked.

You can lay on the floor or a bed. If you are on a bed, you may need a pillow under your stomach for extra support and comfort.



Superman Exercise - Arms and Legs (Same Time)

Raise your arms and legs. Be sure to keep your abdominal muscles active. Don't over arch your back. Raise your legs up 4-6 inches if you can. As your head elevates, be sure to keep your chin slightly tucked and in a neutral position. Keep your shoulder blades back and down.

Perform 1 set of 5 repetitions. Hold each repetition for 30 seconds, 1-2 times a day.



Bridge Exercise - Starting Position

Lay on your back with your knees bent to prepare for the bridge exercise.



Bridge Exercise

Keep your pelvis level as you lift your hips/pelvis and buttocks into the air. Pause, and then return back down to the ground. Do not let your pelvis wobble as you move up and down. As your strength improves, place a weight on your pelvis.

Perform 2 sets of 10 repetitions, 1-2 times a day.



Bridge Exercise with an Exercise Band

Place an exercise band around your thighs above your knees. Keep your pelvis level as you lift your hips/pelvis and buttocks into the air. Pause, return back down to the ground. Don't let your pelvis wobble as you move up and down. Hold your knees 4-6 inches apart.

Perform 2 sets of 10 repetitions once a day.



Ball Extension - Starting Position

Position your feet against a wall to assist you with your balance. Your legs stay straight. Keep your chin down in a neutral position and your hands crossed behind your head. You can cross your arms over your chest to make it easier. For more of a challenge, stretch both of your arms into the "V" position (as shown in the superman exercise).



Ball Extension

From your starting position, slowly raise your upper body until you have a slight arch in your back. Keep the movement pain free.

Perform 2 sets of 15-20 repetitions, 1-2 times a day.



Plank Exercise

Keep your chin tucked so you are looking straight to the ground. Your thighs, buttocks, stomach, and back muscles should all be engaged. Your elbows should be directly under your shoulders. Keep your body straight, do not tilt.

Perform 2 sets of 30-60 seconds once a day.



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