# 10 Minutes a Day Low Back Pain Prevention Guide

This general exercise guide is intended to help you maintain adequate lower extremity and lumbar range of motion. It will help you specifically target and strengthen the muscles of the inner core as part of your low back pain prevention strategy. Focusing on mobility and lumbar strength on a regular basis has been proven to help prevent episodes of low back pain. These exercises should be used in conjunction with the prevention and treatment strategies outlined in **Low Back Pain (LBP) during Exercise**. These exercises should also be utilized in conjunction with maintaining a healthy lifestyle, including regular exercise.

### **Press-ups**

Immediately start with press-ups upon injuring your back. Perform frequently throughout the day as long as the pain does not peripheralize (spread down the buttock and into the leg and/or foot). Lie on your stomach and perform 10 to 20 press-ups. Move slow and easy, but work your way up to full motion. If your symptoms improve, then continue to perform regularly and prior to or after any activity.

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



### **Standing Back Extension**

After prolonged sitting, stand up, and perform standing back extensions. I encourage performing at least 10 repetitions each time you stand. You can lean your buttock against a counter top and extend backward for an additional stretch.

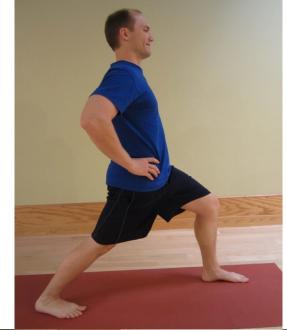
Perform at least 10 repetitions, multiple times a day.



### **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.



### **Figure 4 Stretch for the Piriformis Muscle**

Cross one leg over the other into a figure 4 position. The first method is to push your leg away from your head (as shown). The second method is to hold the opposite leg (while maintaining the figure 4 position) and pull your bent leg toward your chest until you feel a stretch in your buttock area.

Hold for 30 seconds, and 3 repetitions per side.



## **Core Strengthening Exercises – Lumbar Extensors**

The exercises below are listed from easy to difficult. If you experience a repeat bout of pain, start over with your progression. I recommend starting with the superman and bridge exercises. The exercises should be performed as part of a prevention program in combination with press-ups as well as the leg and pelvic stretches. As you progress, you may increase to an additional set of 10 repetitions (for a total of 30 repetitions).

### **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.



### **Ball 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.

Perform 2 sets of 10 repetitions, 1-2 times 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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