

## Back Exercises

Muscular stretching can be a very important part of the healing process for tightened muscles of the back. It is essential to lengthen any shortened muscular tissue of the back to help prevent further pulling on the already shortened fibers. Muscular strengthening exercises will be important once the back irritation has subsided. Back strengthening exercises help to build stability to weak tissue. It is important to note that irritated muscles can become further damaged with strengthening exercises that are premature to the healing of the area. The exercises below are general exercises to increase flexibility and can help to stabilize the back. However, it should be noted that for most of these exercises, you should not feel the stretch in the back itself. For example, the back of the legs have a group of muscles called the hamstrings. These muscles originate in the lower pelvis and insert into the leg. When the hamstrings are tight, the back itself can be tightened due to the pulling on the pelvis. Therefore, stretching the hamstrings will not only loosen the leg muscles up but they will take the strain off the back.

Each picture below depicts the exercise being performed properly. The arrows are the direction the body will need to move towards to get the correct angles. The red circles indicate the area of which you should feel the stretch.

### **Warning:**

\*The following back exercises should never be performed if they cause irritation to your back or any other condition while they are being performed! As each back condition is different, always consult your doctor before performing any of these exercises to determine what exercises, if any, are right for your particular condition. If you have any discomfort after performing any of these exercises, discontinue and immediately and consult a doctor to properly assess your situation.\*

## ● Sit-ups



Sit-up exercises should be done very precisely to avoid any traction to the spine. Place your knees up on a chair, with your legs and hips at a 90 degree angle. Support your neck but don't pull on it as you raise your upper chest, no more than 30 degrees. Look straight up with your eyes to keep from pulling forward on the head. Do 3 sets of 12 reps, or to your individual tolerance. It is important to concentrate on feeling the strain in your abdominal muscles and not your neck or back. Any pain you feel with this exercise should only be a local muscle exercising sensation to the abdominal area, without aggravating your condition.

## ● Hamstring Stretch



Sitting on the ground, with one leg straight and the other one comfortably bent in front of your body, bend at the waist and lean forward, keeping your back as straight as possible. Reach with your arms towards the foot until a stretch is felt under your thigh. Hold each stretch for a minimum of 30 seconds, any less than 15 seconds and the muscle will not conform to the new increase in length. Do 3 reps, 3-6 times a day. Any pain you feel with this exercise should only be a local stretching sensation to the back of your thigh area, without aggravating your condition.

## ● **Back Flexion Stretch**



While lying on your back, pull both knees to your chest while simultaneously flexing your head forward until you reach a comfortable stretch in a balled-up position. Do 8-12 repetitions this way holding each one for 8-10 seconds at a time. You should feel no pain with this exercise, as the stretch is designed to relieve tension on the back.

## ● **Exercise Ball**



Exercise balls have been around for awhile, but are gaining in popularity with health practitioners due to the many benefits derived from it's use. Just simply sitting on the ball requires use of postural muscles. Therefore, a person can sit on an exercise ball while they are performing normal tasks such as using the computer and reading, all the while strengthening their spine. Simply bouncing up and down on the ball will help increase proprioceptive input to the spine. Proprioception is what helps keep your muscles coordinated and thereby promotes spinal stability. Current research demonstrates that increasing proprioceptive input can help reduce the likelihood of injuring an area. We highly recommend the Exerflex ball package (depicted below), as it is the only adjustable exercise ball on the market, and therefore a perfect fit for everybody.

## ● Gluteus Stretch



Lying down on your back, bend your right knee, and place your left leg over the right leg, resting the outside of the left ankle slightly above the right knee. Place your right hand around the outside of your right thigh and place the left hand around the inside of your right thigh. Lock the two hands together. Now pull forward towards your chest to achieve a stretch in the left gluteus portion of your buttocks. Do the exact opposite to achieve a stretch of the right gluteus portion of the buttocks. Hold each stretch for a minimum of 30 seconds, any less than 15 seconds and the muscle will not conform to the new increase in length. Do 3 reps, 3-6 times a day. Any pain you feel with this exercise should only be a local stretching sensation to the back of your thigh and buttocks area, without aggravating your condition.

## ● Piriformis Stretch



Lying down on your back, bend your right leg and pull up your right knee towards your opposite chest with your left hand. You should feel the stretch in the Piriformis portion of the right buttocks. Do the exact opposite to achieve a stretch of the left Piriformis portion of the buttocks. Hold each stretch for a minimum of 30 seconds, any less than 15 seconds and the muscle will not conform to the new increase in length. Do 3 reps, 3-6 times a day. Any pain you feel with this exercise should only be a local stretching sensation to the back of your thigh and buttocks area, without aggravating your condition.

## ● **Back Extension McKenzie Exercise**



While lying on your stomach, push up your chest only with both hands simultaneously while keeping your pelvis flat against the floor. Push your back up until you reach a comfortable stretch in the extended position. Do 8-12 repetitions while holding each one for 8-10 seconds at a time. This is the same type of exercise developed by McKenzie to allow the discs of the spine to shift away from the nerve roots. However, this exercise also puts your spine in more extension and can exacerbate conditions like Facet Syndrome and Spondylolisthesis, where the spine is easily compressed in extension. Therefore this exercise should not be performed unless in these types of conditions unless expressly recommended by your doctor. You should feel no pain with this exercise, only a pulling up of the spine as the back goes into extension

## ● **Calf Stretch**



Start with stretching the right Gastrocnemius portion of the right calf area. While standing, place your right leg in front of you and your left foot directly behind you. Place the toes of your right forefoot up against a door or other flat wall surface, keeping your heel down to the floor. Lean your upper body forward to place a

stretch on the back of the calf. Do the exact opposite to achieve a stretch of the left calf area. Hold each stretch for a minimum of 30 seconds. Any less than 15 seconds and the muscle will not conform to the new increase in length. Do 3 reps, 3-6 times a day. Any pain you feel with this exercise should only be a local stretching sensation to the calf area of the leg, without aggravating your condition.

### ● Psoas Stretch



Start with stretching the right Psoas muscle. While standing, place your right leg in front of you and your left foot directly behind you as far as you can comfortably stretch it. Shift your lower body forward, while simultaneously pushing your upper body backwards with your arms. Do the exact opposite to achieve a stretch of the right Psoas portion of your front upper thigh area. Hold each stretch for a minimum of 30 seconds. Any less than 15 seconds and the muscle will not conform to the new increase in length. Do 3 reps, 3-6 times a day. Any pain you feel with this exercise should only be a local stretching sensation to the Psoas area of the upper thigh, without aggravating your condition.

### ● Quadriceps Stretch



Start with stretching the left Quadriceps muscle. While standing hold a solid surface for support and bend back your left leg. Grab your left ankle and pull that foot to your left buttocks while simultaneously pulling your left thigh backwards while keeping your

back straight. Pulling your thigh backwards is a very important part of this stretch, as it will place the stretch in the mid-thigh instead of overloading the pressure on the knee. Do the exact opposite to achieve a stretch of the right Psoas portion of your front upper thigh area. Hold each stretch for a minimum of 30 seconds. Any less than 15 seconds and the muscle will not conform to the new increase in length. Do 3 reps, 3-6 times a day. Any pain you feel with this exercise should only be a local stretching sensation to the Quadriceps muscle area of the upper thigh, without aggravating your condition.