

Spinal Strengthening Exercises

Our mission is not only to help you relieve the pain, but to prevent it from coming back. One of the best ways to prevent reoccurrence of back and spinal pain is to strengthen the spine for future use.

The goal for strengthening the spine is not necessarily to increase the power of the muscles in the spine, but the endurance. We want to stabilize the spine so it is able to withstand a full day's worth of activity. Back pain and re-injury generally occur when the back muscles become fatigued and are no longer able to protect the spine as they are designed to do. As we discuss these exercises and how to complete them, remember that we are aiming for *endurance*. You will see that many of our strengthening exercises require you to hold the position as long as possible, rather than just giving a set amount of time or number of reps. That is what will allow us to increase endurance rather than just strength and power.

The following exercises are listed in order of difficulty. Start with the ones you can do first, then progress to the more challenging exercises. If aches or pains arise as you start to do these exercises, please give us a call to discuss possible modifications. If you are unable to complete the more challenging exercises, work on increasing the length of time for the ones you are able to complete as you progress.

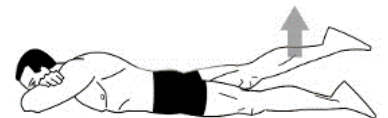
These exercises are to be completed once every 2-3 days, however, there is no harm in doing them more often. The exercises are broken up into 4 categories based on the position you are in when you complete them. It is recommended that you do one exercise from each of the 4 categories. You will complete one exercise while on your stomach, knees, back, and "miscellaneous". Have fun working these into your routine; we look forward to the future results they will bring!

Below is a breakdown of the exercises shown in the video with a brief description of where to start and how to increase them over time:

The following exercises are in the "Lying on Stomach" Category:

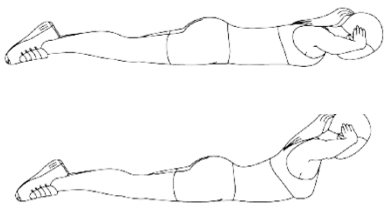
One Leg Extension Exercise

Lie face down on the floor or bed. You may choose to have a pillow under your lower abdomen for comfort and support. Lift one leg off the floor at a time and hold as long as possible, then lower and rest. Switch and repeat with each leg. Do each exercise 3 times per leg to start.



Progression: As you complete this exercise, you should be able to begin holding it longer and longer per each sustained hold. After about two months, you can increase the number of holds from 3 to 5 per leg.

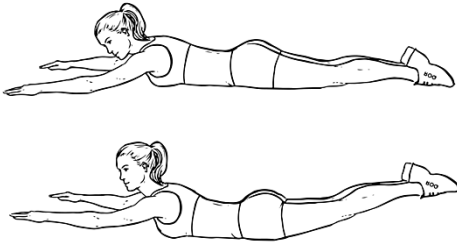
Trunk Extension Exercise



Lie face down on the floor or bed. You may choose to have a pillow under your lower abdomen for comfort and support. Place your hands behind your back and lift your chest up off the surface while extending your head and shoulders backwards. Hold this position for as long as possible, then lower and rest. Repeat 3 times to start.

Progression: As you complete this exercise, you should be able to start holding it longer and longer per each sustained hold. After about two months you can increase the number of holds from 3 to 5.

Superman Extension Exercise



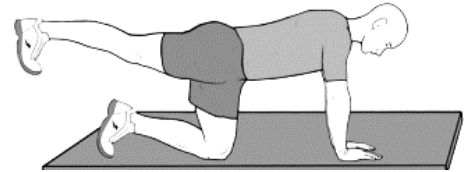
Lie face down on the floor or bed. You may choose to have a pillow under your lower abdomen for comfort and support. Reach your hands out in front of you. Using your back muscles, raise your arms, head, and chest up off the surface while at the same time raising your legs up off the surface so that only your abdomen and pelvis are touching the surface. Hold this position for as long as possible, then lower and rest. Repeat the exercise 3 times to start.

Progression: As you complete this exercise, you should be able to start holding it longer and longer per each sustained hold. After about two months you can increase the number of holds from 3 to 5.

The following exercises are in the “While Kneeling” Category:

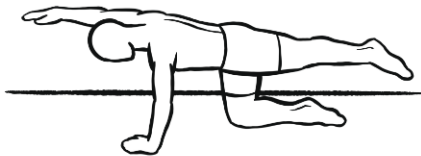
Kneeling Leg Extension (Knees)

Kneel down on to your hands and knees keeping the back as straight as possible. Extend one leg up and back as far as you can without twisting your body or losing your balance. Hold this position as long as possible, then lower and rest. Switch and use the other leg. Repeat the exercise on each side 3 times to start.



Progression: As you complete this exercise, you should be able to start holding it longer and longer per each sustained hold. After about two months you can increase the number of holds from 3 to 5 per each leg.

Cross Crawl Exercise (Knees)



Kneel down onto your hands and knees keeping the back as straight as possible. Extend one leg up and back as far as you can while at the same time raising the hand on the opposite side without twisting your body or losing your balance. Hold this position as long as possible, then lower and rest. Switch and use the other leg and opposite arm. Repeat the exercise on each side 3 times to start.

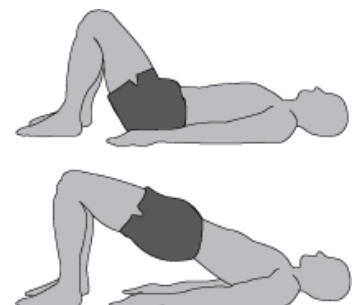
Progression: As you complete this exercise you should be able to start holding it longer and longer per each sustained hold. After about two months you can increase the number of holds from 3 to 5 per each side.

The following exercises are in the “Lying on Back” Category:

Pelvic Lift Exercise

Lie on your back with your knees bent and your hands down by your side. Slowly lift your hips up off the floor while contracting your core muscles. Aim to lift up so that your abdomen is in line with your thighs and knees. Hold this position for as long as possible, then lower and rest. Repeat the exercise 3 times to start.

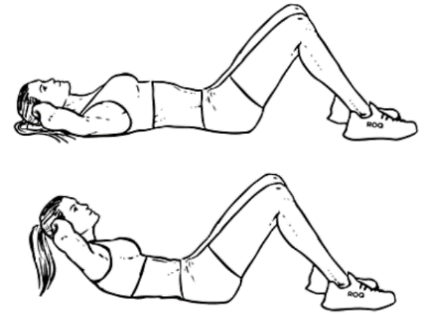
Progression: As you complete this exercise, you should be able to start holding it longer and longer per each sustained hold. After about two months you can increase the number of holds from 3 to 5.



Crunches

Lie on your back with your knees bent and your hands held lightly behind your head. Slowly bring your head and shoulders up off the ground as you tighten your abdominal muscles. Keep your chin slightly tucked while doing this exercise. Hold this position for 5 seconds, then relax. Repeat 10 times.

Progression: As you complete this exercise, you should be able to start holding it longer and longer per crunch. Increase the hold time until you get to a 15-20 second hold. After about two months you can increase the number of holds from 10 to 15.



Twisting Crunches



Lie on your back with your knees bent and your hands held lightly behind your head. Slowly bring your head and shoulders up off the ground as you tighten your abdominal muscles, then twist to bring one shoulder towards the opposite knee. Keep your chin slightly tucked while doing this exercise. Hold this position for as 5 seconds then relax. Repeat 10 times on each side.

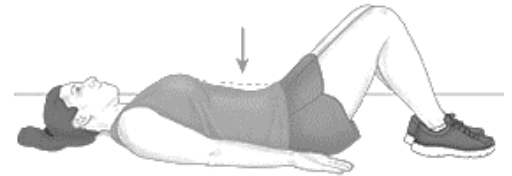
Progression: As you complete this exercise you should be able to start holding it longer and longer per each crunch. Increase the hold time until you get to a 15-20 second hold. After about two months you can increase the number of holds from 10 to 15.

The following exercises are in the “Miscellaneous” Category:

Transverse Abdominal Contractions

This exercise can be completed sitting or standing. This exercise is a little different and requires some practice but is great for targeting the inner-most abdominal muscles that frequently are not activated. While still maintaining your breathing, bring in stomach towards your back. Imagine you are trying to suck in your belly button to your spine. Hold this position for as long as possible while continuing to breathe normally, then relax. Repeat this exercise 3 times.

Progression: As you complete this exercise you should be able to start holding it longer and longer per each sustained hold. After about two months you can increase the number of holds from 3 to 5.



Planks

Get into a position on your forearms and toes. If you need to do forearms and knees initially you can, but the goal is to progress to being on the forearms and toes. In order to maintain this position, you will need to tighten your core and back muscles. Hold this position for as long as possible then lower and rest. Repeat the exercise 3 times to start.

Progression: As you complete this exercise you should be able to start holding it longer and longer per each sustained hold. After about two months you can increase the number of holds from 3 to 5.

