



It is very common that people decrease or stop physical activity when they have back or neck pain. It is generally believed that if we rest when we are injured, symptoms will improve. However, the truth is that decreasing activity is the worst thing you can do. We need strength in our core and our legs to take the stress off our spine and maintain good balance and safety during daily tasks. One way to improve the overall outcome of your spine surgery is to exercise. Exercise can help to prepare your body for an optimal recovery. Exercise will not only help to improve your general health, but it will allow you to get stronger and improve your endurance before surgery. It can also play a role in reducing back pain.

Some exercises we recommend you do to prepare for your spine surgery are:

1. Diaphragmatic Breathing: This type of breathing will improve the strength of your breathing muscle (diaphragm) and decrease your body's demand for oxygen. If you practice this type of breathing, you will require less effort to breathe, which will improve your tolerance to daily activities. This type of breathing is also beneficial for calming your nervous system and to help control pain. Please see the handout on diaphragmatic breathing in your packet. There are also many YouTube videos that can help if you experience any difficulties.

2. Walking: A walking program before surgery can significantly improve your chances of a quick recovery from spine surgery. Walking helps to improve cardiovascular health, endurance to activity, and lower extremity (leg) strength. This will greatly reduce stress on your spine when performing activities after surgery, such as getting in and out of bed or a chair, standing in the shower, and dressing. Please begin a walking program today if you are not already doing so.

3. Sit to Stand/ Chair Squats: It may sound simple, but practicing getting out of a chair or squatting in front of a chair (more advanced) can help to greatly improve your leg strength and balance before spine surgery.



4. Abdominal Engagement: Learning how to tense up your abdominals during activities will greatly help to reduce the strain on your back when doing things such as lifting, bending, and reaching. When tightened, your abdominal muscles will naturally pull in toward your spine. You can achieve this by breathing out with pursed lips (like you're blowing a feather across a table). You can also tighten your stomach as if someone were to punch you in the gut. It is healthy to maintain slight engagement in your abdominal muscles when sitting up straight, standing, and before you engage in daily activities such as sit to stand, lifting, bending and reaching.

5. Ankle Pumps: After spine surgery, it is likely you will be spending some time in a hospital bed or your own bed. The first few days after surgery are when you have the greatest risk for blood clots to form in your legs. Ankle pumps are a great way to improve circulation in your legs so that your blood moves easily back to your heart. Start doing these throughout the day now and continue to practice them the day after surgery until you are up and moving around as you were before surgery.

