

DYNAMIC LUMBAR STABILIZATION EXERCISES:

The above 'Levels of Rehabilitative exercises, with the exception of the Gym Ball hyper-extension exercises, are all classified as 'Dynamic Stabilization Exercises' (DSE). The theory of this style of rehabilitative exercise is to achieve strengthening of the Core Muscle Stabilizers of the spine (transversus abdominus & multifidus) while keeping the patient in a 'Neutral Spine' position. In other words, we are going to get that back strong again without putting undue stress and strain on the injured disc, facets and ligaments.

DSE exercises are geared toward the chronically disabled and post-surgical patients, whom could never tolerate the out-dated Extension exercises of McKenzie, nor the Flexion exercises of Williams, which puts unnecessary motion forces into an already damaged and inflamed disc and/or facet joints.

After any serious injury to the back the Core Muscle Stabilizers of the spine become rapidly weakened and even atrophied. By three month the weakness and atrophy will be even more debilitating and apparent and easily show-up on MRI scans. Surgery also has been known to destroy the strength of the core stabilizers; it has been reported that the trunk muscles suffer a 30% decrease in strength after discectomy surgery! So, we have some work to do, in order to get our strength back following surgery.

It is imperative that we get and keep our "Core Stabilizers" as strong as possible. Why is this important, you may ask? Because our damaged disc needs help!

As we know, the lumbar disc is responsible to 'carry' the weight of the body or carry the 'axial load' of the body. If the disc is damaged and inflamed, it doesn't want to carry anything because this downward pressure HURTS in the same way it hurts to walk on a sprained ankle.

The only way to take some of this irritating pressure (axial load) off the disc and facets is by making the Core Stabilizers stronger. You see, the Core Stabilizers also help carry the 'axial load' of the body and will assist the disc in its weight bearing duties, as well as protect the disc from other directional forces. So, strengthening the Core Stabilizers will reduce mechanical irritation upon the disc and facets, lessen your pain, and allow you more 'up-time' (time spent standing, walking, sitting).

WILL THESE EXERCISES REALLY HELP MY PAIN?

Yes! Exercise therapy for chronic lower back pain is recommended by several well respected guidelines. In fact there are increasing numbers of high quality randomized controlled studies which demonstrate that 'Core Stabilizing exercise' have a profoundly positive and long-term effect on both decreasing lower back pain and improving over-all patient function.

FREQUENCY:

I have my patients perform these exercises three times per week. The exercises towards the top of the pages are easier and should be done first. Once mastered you may add new ones into your routine. Initially your sessions should only be about 10 minutes long. As you get stronger, your sessions should get longer and longer, up to about 60 minutes. Spend about half the exercise period doing the face-up exercises (which strengthen the transversus abdominus muscle) and the other half doing the face down exercises (which strengthens the multifidi muscles). I also have my patients walk for 10 to 45 minutes on the days they are not exercising.

A final word of warning: disc injuries that involve nerve root damage (radiculopathy) are often very difficult to rehabilitate. They can't be 'pushed' or 'rushed'. You must take things very slow. Find a routine of exercise that works and stick with it. **DON'T ADD TOO MANY NEW EXERCISES AT ONCE.** If you do, you'll never know which one hurt you and you'll have to throw them all out! Only add one new exercise per week.