BASIC Multifidus Activation

The Multifidus is a group of muscles that extend nearly the entire length of the spine. The Multifidus muscles help to take pressure off the vertebral discs so that our body weight can be well distributed along the spine. Studies have shown that the Multifidus muscles get activated before any action is carried out thus protecting our spine from injury. In recent years, many studies have been carried out to identify the relationship between back pain and Multifidus. One such study was published in 2002 in the European Spine Journal. The results showed that low back pain subjects, especially those with chronic pain, displayed significantly smaller Multifidus muscle activity as compared to healthy subjects during the coordination exercises, indicating that over the long term, back pain patients have a reduced ability to voluntarily recruit the Multifidus muscles in order to maintain a neutral spine position. Also, with strength exercises, subjects with chronic low back pain had significantly lower Multifidus muscle activity as compared to healthy subjects. Possible explanations for this finding could be due to pain, pain avoidance and deconditioning leading to reduced Multifidus activity. Hence, as you can imagine, when Multifidus function is poor, one will be more susceptible to back injuries. The following exercise will help you re-learn how to turn this muscle group ON and OFF

INSTRUCTIONS:

REPS: __________ / Hold for 5 sec

SETS: __________

FREQUENCY: __________ times per day

_________ days a week

POINTS TO KEEP IN MIND

1. Lie on your back with your knees bent and feet flat.
2. Think of tilting your tailbone (sacrum) forward as if you are going to arch your back -- but don't actually move. This is an isometric contraction, meaning no movement should actually occur
3. Allow the lower Multifidus to swell on either side of the vertebrae.
4. Hold the contraction and continue to breath normally.
5. Hold the contraction for 5-10 seconds.
6. Stop and adjust if you feel pain or tension.
7. When preformed correctly, this exercise PATTERS the Multifidus muscle group to fire correctly.
8. Once you are able to contract the muscle while lying down, practice doing it while standing and sitting.