

Multifidus

Step 1: Isolation of Multifidus

Lie on your side with your spine in a neutral posture, (gentle curve anterior in your lumbar spine).

Palpate the multifidus you are trying to isolate, (find the spine bone and then fall off into the gutter just sideways from the bone). If you have a multifidus deficit it will feel like a hole or soft spot compared to the opposite side.

Imagine a guy wire running from the inner part of your thigh, up into your groin, through your pelvis, to the finger palpating the multifidus.

Breathe in and on the breath out contract the multifidus with your image or connect the leg firmly along the guy wire (think about drawing the thigh into the pelvis). No actual movement of the hip, pelvis or spine should occur.

The contraction of the multifidus should feel like a slow, firm, 'swelling' under your fingers much like air filling up a balloon. You should not feel a rapid contraction. Hold the contraction without becoming rigid, and continue to breathe.



Step 2: Strengthen/Train co-activation of the Core

Once you can isolate the multifidus, practice this isolation in many different positions – i.e. sitting, standing, bending over etc. Once you can turn the muscle on easily you can progress to the following exercises. Each progression below begins with a good core contraction (which includes transversus abdominis) and this connection should be held throughout the movement.

Remember to MOVE WITH YOUR BREATH - Exert with exhalation, breathe in to rest or hold.

In side lying

1. While maintaining your connection to multifidus, keep your ankles together and lift your top knee (only as high as you can control multifidus), by focusing on turning your inner thigh outwards. Return your knee.
2. While maintaining your connection to multifidus, keep your ankles together, lift your top knee (as in #2), and then lift your ankle. Return your ankle and then your knee.
3. While maintaining your connection to multifidus, keep your ankles together, lift your top knee, then your ankle, then extend your leg, then flex your leg, return your ankle and finally your knee.

With all these exercises maintain the leg lift for 3-5 seconds, build to 10 reps before moving on.

Step 3: Incorporate into Other Activities

The final step is to remember to use the core during regular life activities. Each time you get out of the chair, lift, bend or reach, this local stabilizing system should be working at a low level. The goal is to teach the body to resume its normal stabilization strategy of connecting to the core BEFORE movement begins.