

EXERCISE 1.1 Finding the Neutral Spine Position

Lie on your back with your knees and hips bent and your feet resting comfortably on the floor. This is known as the "hook lying" position (figure 1).

Slowly rock your pelvis backward as if you were pressing the small of your back against the floor (unless your health care provider has instructed you to avoid this movement) (figure 2).

Now slowly rock your pelvis forward as if you were pressing your rear end against the floor while lifting your abdomen (unless your health care provider has instructed you to avoid this movement) (figure 3). Be sure to keep the movements slow and controlled. Explore the entire range of movement in both directions. If you are currently in pain, identify those points in the range of movement in which the pain is increased, decreased or eliminated.

To identify the neutral spine position, repeat the previous movement by rocking your pelvis as if you were pressing your rear end against the floor while lifting your abdomen (figure 3). Then back away from this position to a point at which your spine is resting comfortably. This is the neutral spine position. All of the following exercises should be done in the neutral spine position.

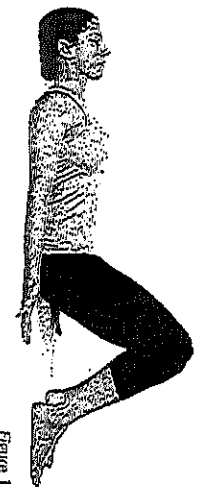


Figure 1

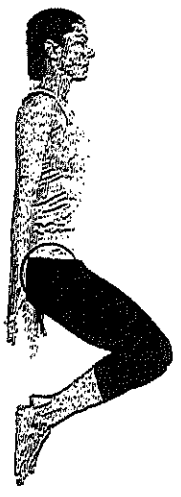


Figure 2



Figure 3

****When rocking your pelvis make sure the movement is coming from the pelvis and trunk muscles, not pushing through your heels and using hamstring and butt muscles.****

EXERCISE 1.2 Co-contraction Maneuver

Lie on your back in the hook lying position and establish the neutral spine position (figure 1).

Co-contraction maneuver means to gently pull your belly button straight back toward your spine (figure 2). Be sure not to raise your chest while you are doing this. This may be difficult at first, but remain as relaxed as possible and you will find that this makes it easier.

It is important not to "suck in your gut" (figure 3) but rather to gently pull your belly button backward. If you have difficulty doing this from the hook lying position, try doing it on your hands and knees.

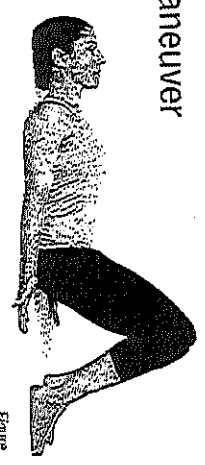


Figure 1

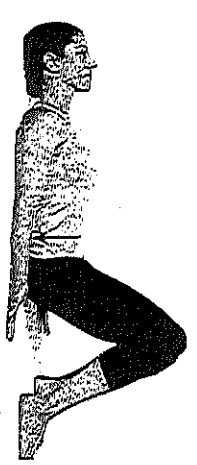


Figure 2

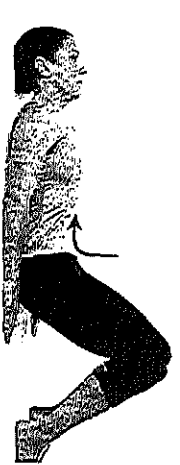


Figure 3 Incorrect movement

EXERCISE 1.3 Co-contraction Maneuver: Quadruped Position

From the hands and knees position establish the neutral spine position. Be sure to keep a normal curve in your lower back (figure 1). To perform the co-contraction maneuver, gently pull your belly button straight back toward your spine (figure 1). Keep your head aligned with the rest of your body. Avoid letting your chin poke out toward the floor. This may be difficult at first, but remain as relaxed as possible and you will find that this makes it easier.

If you are still not sure if you are correctly performing the co-contraction maneuver in the quadruped position, a "trick" that can be applied is to co-contrast indirectly by activating the pelvic floor muscles.

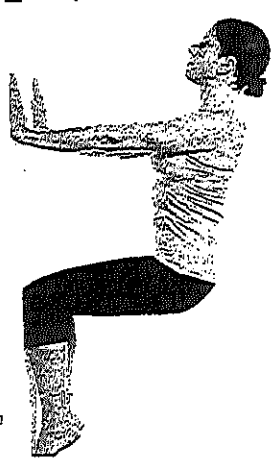


Figure 1