

Lumbar Stabilization Hooklying Position

2a. Abdominal Bracing

Lie on back with knees bent and feet flat.
Find neutral lumbar spine position, (reference activity 1a).
Tighten abdominal muscles. Do not allow pelvis or low back to change position. Hold for 10 seconds.
Count with easy breathing and no strain.



2b. Alternating Arm Raise

Find neutral lumbar spine. Brace abdominals.
Bring arm over head, then alternate with opposite arm.
Each arm should be raised five times.
Progress to 10 times.



2c. Bent Knee Raise with Opposite Arm Raise

Find neutral lumbar spine. Brace abdominals.
Raise (R) knee and bend hip to 90°. Raise (L) arm overhead.
Hold position while counting out loud for 10 seconds.
Return arm to side and foot to floor.
Repeat with right arm and left leg.
Progress to performing 10 times each side.



2d. Straight Leg Lowering with Opposite Lower Extremity Support

Assume 2c position.
Straighten (R) knee and lower leg so that (R) heel is 6" above floor.
Counting out loud, hold position for 10 seconds.
Bend knee, return foot to floor. Return arm to side.
Repeat with left leg and right arm.
Progress to performing 10 times each side.



2e. Straight Leg Lowering without Lower Extremity Support

This is the most advanced portion of the lumbar stabilization exercise.

Find neutral lumbar spine and brace abdominals.

Raise right knee and bend hip to 90°.

Raise left knee and bend hip to 90°.

Bring left arm over head.

Straighten right knee lowering (R) leg so that the heel is approximately six inches above the floor.

Hold position for 10 seconds.

Return by bending right knee and hip to 90° of hip flex and bringing (L) arm back to your side.

Alternate by raising (R) arm overhead and straightening (L) knee.

Perform exercise with special attention to maintaining pelvis in neutral lumbar spin.

When neutral lumbar spine cannot be maintained, foot should be placed on floor and exercise stopped.

The goal is to be able to ultimately perform 10 times with each leg.

