

## RECOVERY

# Low Back Surgery Exercise Guide

Regular exercise to restore the strength of your back and a gradual return to everyday activities are important for your full recovery after low back surgery. Your orthopaedic surgeon and physical therapist may recommend that you exercise for 10 to 30 minutes, 1 to 3 times a day during your early recovery. They may suggest some of the exercises shown below.

This guide is designed to help you better understand your exercise and activity program, supervised by your physical therapist and/or orthopaedic surgeon. To ensure your safe recovery, be sure to check with your therapist or orthopaedic surgeon before performing any of the exercises shown.

## Initial Exercise Program

### ***Aerobic Exercises***

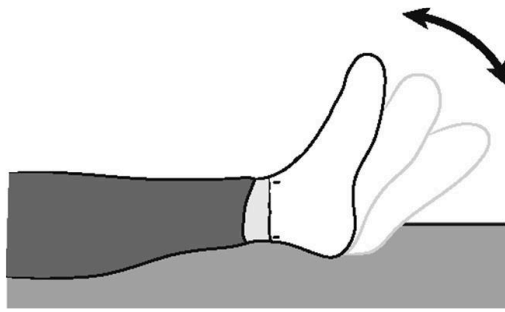
To protect your low back during aerobic exercise, maintain your spine in a neutral position while stabilizing with your abdominal muscles.

1. Stationary bike for 20 to 30 minutes.
2. Treadmill for 20 to 30 minutes.

## Early Exercise Program

### ***Ankle Pumps***

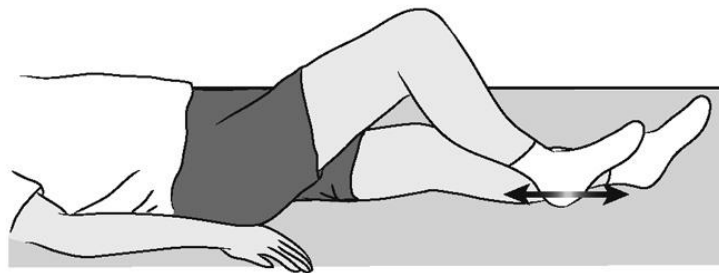
- Lie on your back.
- Move ankles up and down.
- Repeat 10 times.



Ankle pumps

## ***Heel Slides***

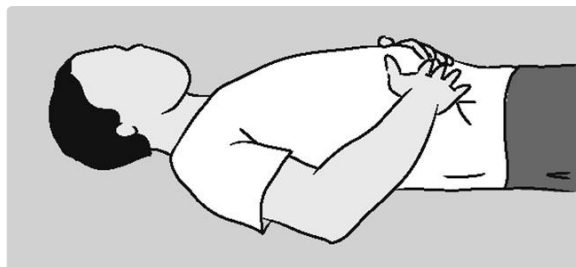
- Lie on your back.
- Slowly bend and straighten knee.
- Repeat 10 times.



Heel slides

## ***Abdominal Contraction***

- Lie on your back with knees bent and hands resting below ribs.
- Tighten abdominal muscles to squeeze ribs down toward back.
- Be sure not to hold your breath.
- Hold 5 seconds, then relax.
- Repeat 10 times.

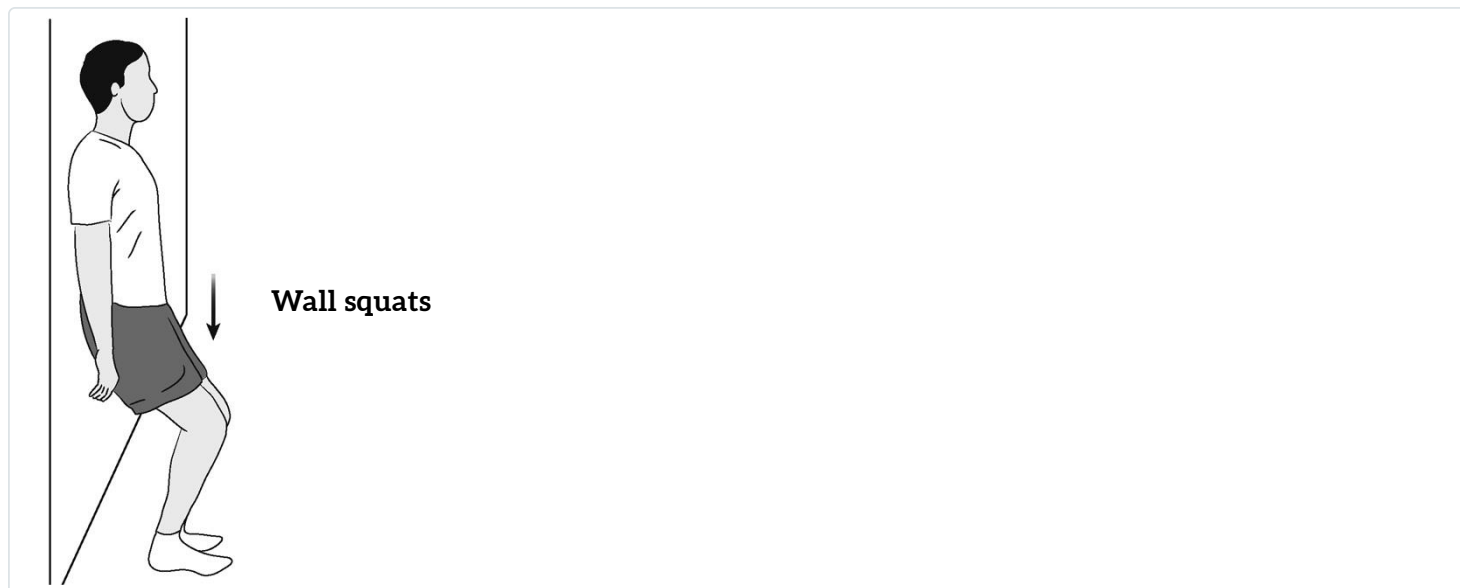


Abdominal contraction

## ***Wall Squats (please check with your surgeon before attempting)***

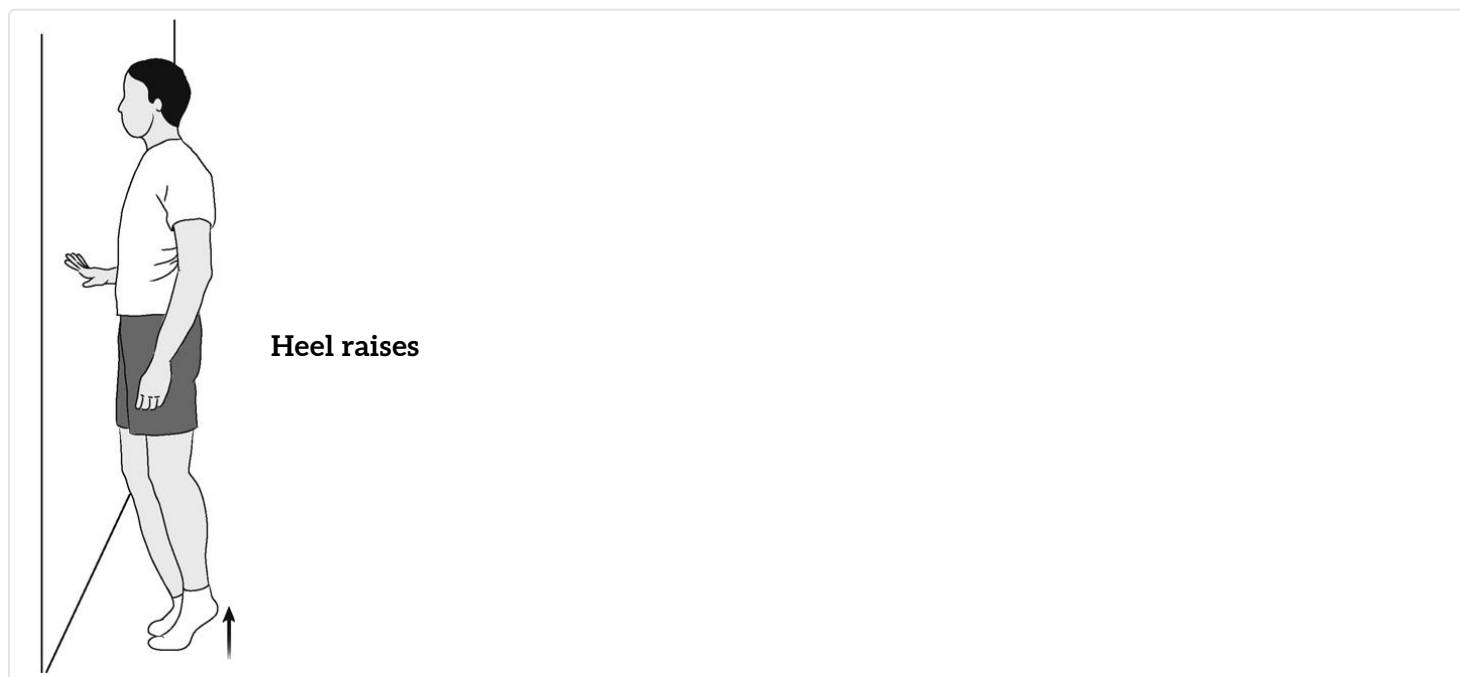
- Stand with your back leaning against wall.
- Walk feet 12 inches in front of body.
- Keep abdominal muscles tight while slowly bending both knees to 45°.
- Hold 5 seconds.
- Slowly return to upright position.

- Repeat 10 times.



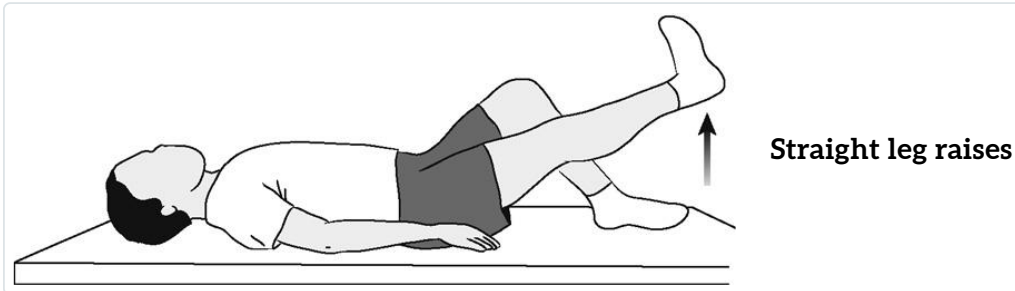
### ***Heel Raises (please check with your surgeon before attempting)***

- Stand with your weight evenly distributed on both feet.
- Hold onto the wall or a sturdy chair for stability.
- Slowly raise your heels off the floor.
- Hold 5 seconds.
- Slowly lower your heels to the floor.
- Repeat 10 times.



## ***Straight Leg Raises***

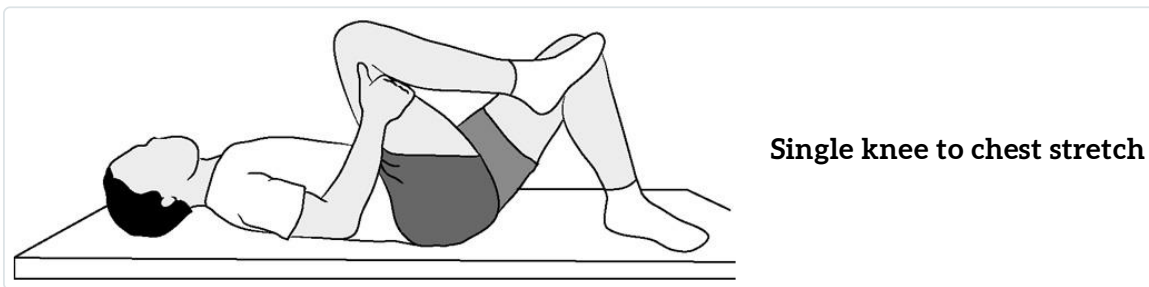
- Lie on your back with one leg straight and one knee bent.
- Tighten abdominal muscles to stabilize your low back.
- Slowly lift leg straight up about 6 to 12 inches and hold for 1 to 5 seconds.
- Lower leg slowly.
- Repeat 10 times.



## **Intermediate Exercise Program**

### ***Single Knee to Chest Stretch***

- Lie on your back with both knees bent.
- Hold thigh behind knee and bring one knee up to chest.
- Hold 20 seconds, then relax.
- Repeat 5 times on each side.



### ***Hamstring Stretch***

- Lie on your back with legs bent.
- Hold one thigh behind knee.
- Slowly straighten knee until a stretch is felt in back of thigh.
- Hold 20 seconds, then relax.
- Repeat 5 times on each side.

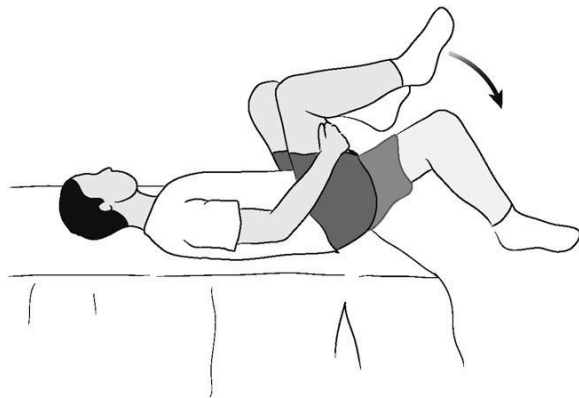


**Hamstring stretch**

## **Advanced Exercise Program (usually done under the guidance of a therapist)**

### ***Hip Flexor Stretch***

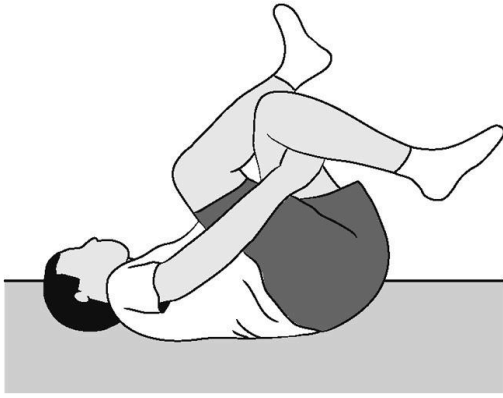
- Lie on your back near edge of bed, holding knees to chest.
- Slowly lower one leg down, keeping knee bent, until a stretch is felt across top of the hip/thigh.
- Hold 20 seconds, then relax.
- Repeat 5 times on each side.



**Hip flexor stretch**

### ***Piriformis Stretch***

- Lie on your back with both knees bent.
- Cross one leg on top of the other.
- Pull your opposite knee to your chest until a stretch is felt in the buttock/hip area.
- Hold 20 seconds, then relax.
- Repeat 5 times on each side.



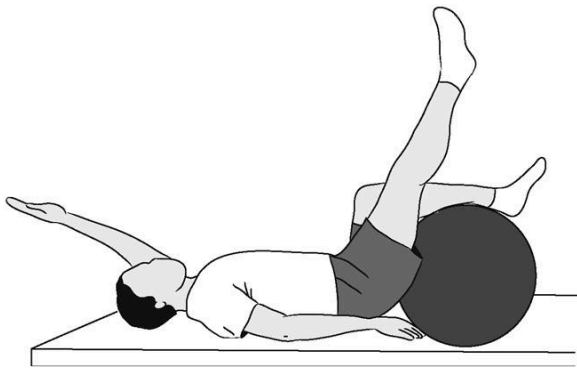
**Piriformis stretch**

## ***Lumbar Stabilization Exercises with Swiss Ball***

Abdominal muscles must remain contracted during these exercises (see "Abdominal Contraction" above). Perform each exercise for 60 seconds. The farther the ball is from your body, the harder the exercise.

### **Lying on Floor**

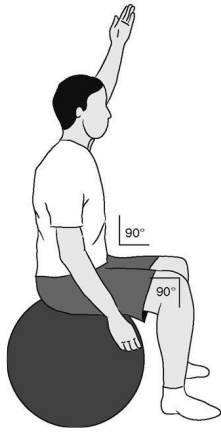
- Lie on your back with knees bent and calves resting on ball.
- Slowly raise arm over your head and lower arm, alternating right and left sides.
- Slowly straighten one knee and relax, alternating right and left sides.
- Slowly straighten one knee and raise opposite arm over your head. Alternate opposite arms and legs.
- Slowly "walk" ball forward and backward with legs.



**Lumbar stabilization exercise with Swiss ball, lying on floor**

### **Sitting on Ball**

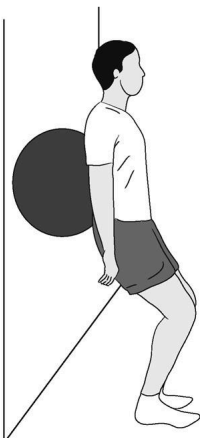
- Sit on ball with hips and knees bent 90° and feet resting on floor.
- Slowly raise arm over your head and lower arm, alternating right and left sides.
- Slowly raise and lower heel, alternating right and left sides.
- Slowly raise one heel and raise opposite arm over your head. Alternate opposite arm and heel.
- Marching: Slowly raise one foot 2 inches from floor, alternating right and left sides.



**Lumbar stabilization exercise with Swiss ball, sitting on ball**

## Standing

- Stand with ball between your low back and wall.
- Slowly bend knees 45° to 90°. Hold 5 seconds. Straighten knees.
- Slowly bend knees 45° to 90° while raising both arms over head.

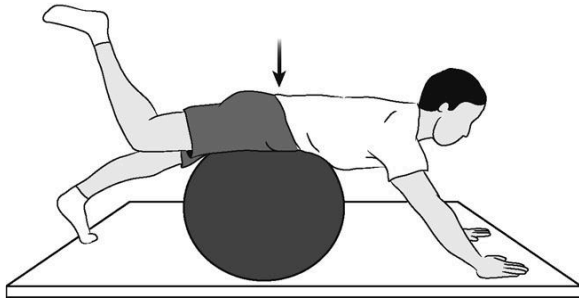


**Lumbar stabilization exercise with Swiss ball, standing**

## Lying on Ball

- Lie on your stomach over ball
- Slowly raise alternate arms over head.
- Slowly raise alternate legs 2 to 4 inches from floor.
- Combine 1 and 2, alternating opposite arms and legs.
- Bend one knee. Slowly lift this leg up, alternating right and left legs.

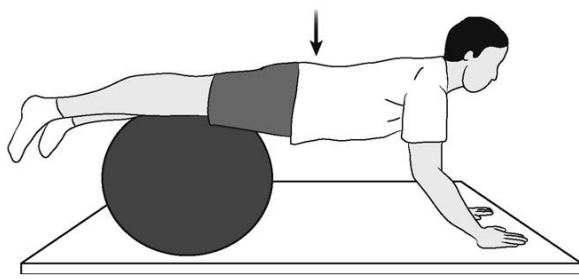
**NOTE:** Be careful not to arch your low back.



**Lumbar stabilization exercise with Swiss ball, lying on ball**

## Lying on Ball

- Lie on your stomach over ball.
- "Walk" hands out in front of ball until ball is under legs. Reverse to starting position.
- "Walk" hands out in front of ball until ball is under legs, then slowly raise alternating arms over head.
- "Walk" hands out in front of ball and slowly perform push-ups.



**Lumbar stabilization exercise with Swiss ball, lying on ball**

## Last Reviewed

January 2022

## Contributed and/or Updated by

[Daniel K. Park, MD](#)

## Peer-Reviewed by

[Thomas Ward Throckmorton, MD, FAAOS](#)

[Stuart J. Fischer, MD](#)

AAOS does not endorse any treatments, procedures, products, or physicians referenced herein. This information is provided as an educational service and is not intended to serve as medical advice. Anyone seeking specific orthopaedic advice or assistance should consult his or her orthopaedic surgeon, or locate one in your area through the AAOS [Find an Orthopaedist](#) program on this website.