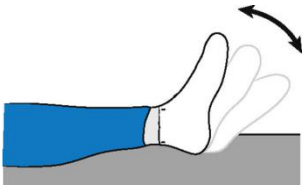




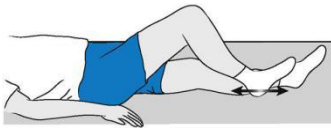
## LOW BACK EXERCISES

### 1. Ankle Pumps



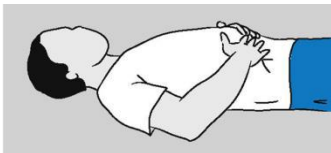
- Lie on your back.
- Move ankles up and down.
- Repeat 10 times.

### 2. Heel Slides



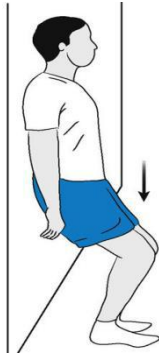
- Lie on your back.
- Slowly bend and straighten knee.
- Repeat 10 times.

### 3. Abdominal Contraction



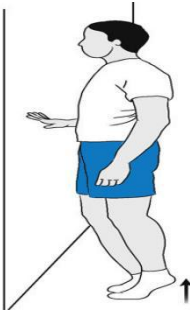
- Lie on your back with hands resting below ribs and knees bent.
- Tighten abdominal muscles to squeeze ribs inwards.
- Do not hold your breath.
- Hold 5 seconds.
- Relax and repeat 10 times.

#### 4. Wall Squats



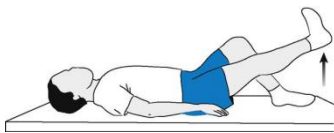
- Stand with your back leaning against the wall.
- Position your feet 12 inches in front of body.
- Keep abdominal muscles tight while slowly bending both knees to 45°
- Hold 5 seconds
- Gradually return to upright position, and repeat 10 times

#### 5. Heel Raises



- Stand distributing your weight equally on both feet.
- Slowly raise your heels off the floor and hold for 5 seconds.
  - Then slowly lower your heels to the floor.
  - Repeat 10 times.
  -

#### 6. Straight Leg Raises



- Lie on your back with right leg straight and left knee bent.
- Tighten your abdominal muscles to stabilize your low back.
- Slowly lift the right leg straight up, to 12 inches and hold for 5 seconds.
- Gradually lower leg.
- Repeat 10 times.

## Intermediate Exercise Program

### 7. Single Knee to Chest Stretch



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

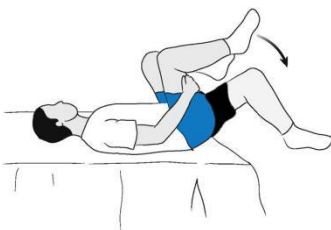
### 8. Hamstring Stretch



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

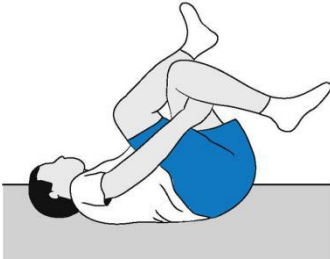
## Advanced Exercise Program

### 9. Hip Flexor Stretch



- Lie on your back on edge of the 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, relax.
- Repeat 5 times on each side.

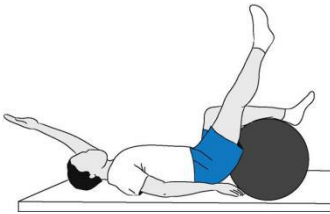
## 10. Piriformis Stretch



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

## Lumbar Stabilization Exercises with Swiss Ball

### 11. Lying on the floor



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

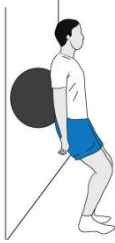
### 12. Sitting on the Ball



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

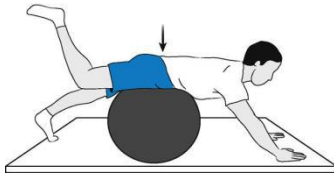


### 13. Standing



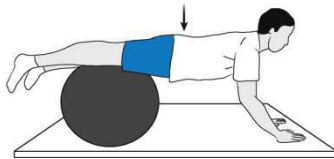
- Stand with ball between your low back and wall.
- Slowly bend knees 45° to 90°. Hold 5 seconds. Straighten knees.
- Slowly bend knees 45° to 90° while raising both arms over the head.

#### a) Lying on the Ball



- Lie on your stomach over the ball
- Slowly raise alternate arms over head.
- Slowly raise alternate legs 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.

#### b) Lying on the Ball



- Lie on your stomach over ball.
- "Walk" hands out in front of ball until ball is under legs. Reverse to starting position.
- Again "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 gradually do push-ups.