# **Bronson Joint Replacement Program**

# **Knee Replacement Exercises**

## **Exercise Program**

These exercises can also be done before your surgery. The more you do them before surgery, the better your body will remember how to do them after surgery.

You should complete approximately 5-10 minutes of exercise per hour followed by rest for the remainder of the hour. You will need to rotate which exercises you do. Try to complete 5-10 repetitions of each exercise, at least three times per day. Our goal is for you to exercise frequently throughout the day for short amounts of time.

### **Exercise Video**

You can watch a video of these exercises.

Follow the link below or use your phone to capture the QR code to the right.

https://www.bronsonhealth.com/services/orthopedics-sports-medicine/education/knee-replacement-surgery/



# **Supine Exercises** (on your back)

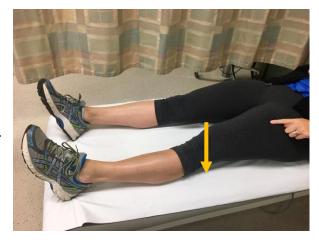


# 1. Ankle Pumps

Lie on your back with your leg straight. Gently bend and straighten your ankle. Be sure to move through your full range of motion (go as far as you can).

# 2. Quadriceps Set (Quad Set)

Lie on your back with both legs extended straight. Straighten your leg by tightening the muscles on top of your leg and pushing the knee flat towards the table. Use your finger to push on the muscle. If it is not tight to the touch, re-tighten the muscle until it feels tight to the touch. Hold 5-10 seconds, and then relax leg.







## 3. Straight Leg Raises

Lie on your back with your operative leg straight and your non-operative leg bent. Tighten the muscles on the front of the thigh then lift the leg about 6 inches from the bed and hold for a few seconds. Slowly lower the leg back down to the mat. Be sure to keep the knee straight throughout the exercise.

## 4. Short Arc Quads (SAQ)

Lie on your back with your operative knee bent over a bolster or towel roll. Slowly straighten your knee by tightening the muscles on the front of your thigh. Be sure to keep the knee resting on the bolster throughout the exercise.

**Please Note:** Do not let your foot drop down to the bed. Control the leg by lowering it slowly.



### 5. Passive Knee Extension

Put folded blanket or towel under the ankle of your operative leg so that gravity will act to straighten your knee. Try to relax in this position for 2 minutes then add 1 minute every day up to 20 minutes maximum.



# **Sitting Knee Thrusts**

- 1. Sit on the edge of the chair and slide the foot on your new knee back until you feel a gentle stretch on your knee.
- 2. Plant your foot on the floor and scoot your hips forward to stretch a little more.
- 3. Hold the stretch as you count out loud to 5.
- 4. Scoot your hips back to release the stretch.
- 5. Slide your foot forward to fully release the stretch.





# 7. Standing Knee Thrusts (Lunges)

Put operative foot onto a stable step and push your thigh forward and hold for 5 seconds. Keep head and shoulders in line over hips. Use walker for support.



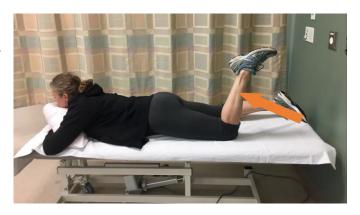
Hold the walker. With operated knee slightly bent, gently pull knee back straight. Tighten your thigh and buttocks and hold for 5 seconds.



# **Prone Exercises** (on your stomach)

### 9. Prone Knee Flexion

Lie on your stomach and bend your operative knee back as far as able against gravity.





### 10. Prone Knee Extension

Lie on your stomach and push your toes into the bed and straighten your knee off the bed. Hold for 5 seconds.



### 11. Riding Bike

Start date: begin the day after your surgery.

**Mounting the Bike:** Approach the same side of the bike as your operative leg (example if your right leg is your operative leg, approach the right side of the bike). Turn your back to the bike and stool while holding your walker or crutches. Step backward onto the stool with your non-operative leg first and reach one hand for the seat and one hand for the handles. Boost yourself onto the seat and slowly turn forward, bringing your non-operative leg through first. *Follow these instructions only if your physical therapist instructed you on this method*.

Use no tension. Start by rocking back and forth with the seat in the high position so that the knee is straight when the pedal is at its lowest point.

Progress from rocking to full revolutions. As it gets easier to ride with improved knee range of motion, gradually keep lowering the seat height so that the knee bends more to complete a revolution.

Ride for 5 minutes duration for 3 times per day. Increase to 4-6 times each day while at home.

Step 1: Step 2: Step 3:



Step 4:



Step 5:



Step 6:







### **Alternative Method for Mounting the Bike:**

Stand facing the side of the bike with your new operative leg facing the handlebars and the non-operative leg facing the seat. Step through the bike with the non-operative leg. Then place the non-operative foot on the pedal and stand-up to place the buttocks on the seat and the operative foot on the other pedal while the pedal is at the bottom of the arc.

### If you have any questions, call:

