Guidelines for Knee Rehabilitation

Full recovery from your total knee replacement surgery is going to take months. This information will help you understand your recovery and care at home. The exercises included will help you be an active partner in your care and recovery.

Using ice

Use ice to help reduce pain and swelling. It is best to use ice after exercise or if you have been very active. Use ice cubes, gel ice packs, or a device that pumps cold water through a sleeve that wraps around your joint, called Game Ready or Ice Man.

- Be sure to use a layer of fabric between your skin and the ice pack, gel ice pack, or Game Ready sleeve to protect your skin. Gel ice packs are much cooler than ice or the Game Ready, and they can quickly hurt your skin if applied directly on your skin.
- The Game Ready can be used around the clock for the first 3 days after surgery. Use it after that as needed as you recover. The temperature can be adjusted, so keep it as cold as you are able to tolerate for the best results.
- If you are using ice packs or gel ice packs instead of the Game Ready, use the packs for 20 to 30 minutes every hour.
- Check your skin often for signs of redness or swelling.
- Tell your doctor or physical therapist if you have:
  - Increased pain
  - Numbness or tingling
  - Redness that does not go away

Protect your new knee joint

Your new knee has limited strength and range of motion right after surgery. By following these guidelines, you can help your knee heal well and return to your normal activity level.

Walking

- Your physical therapist will teach you to use a walker or crutches when you walk until your knee heals. Your therapist and your doctor will tell you how much weight you can safely put on your new knee. The length of time you will use a walker or crutches will be set by your doctor.
- Your balance might be unsteady for a while. To help you stay steady:
  - Use handrails on steps.
  - Wear low-heeled or flat shoes that are firmly secured to your feet.
  - Avoid wet or waxed floors.
- Do not kneel on your new knee. Talk to your doctor or therapist about when you can kneel on a padded surface.
- Do not walk without your walker or crutches until your doctor or therapist tells you it is allowed. You may feel you can do without the aids, but healing is occurring and it takes time. Using the walker or crutches protects the healing joint.
- Walk on level ground or go outdoors if weather permits or choose a large indoor area like a shopping mall.

**Sitting**
- Use a firm, sturdy chair with armrests. Use a cushion or a pillow to raise you up, if needed.
- Avoid sitting longer than 30 minutes at a time. Get up often, walk and change your position.
- During long car trips, stop every 30 minutes to get out of the car and move around. These breaks are important to prevent stiffness and swelling, which could cause blood clots to form.

**Range of Motion**
You need to be able to bend and fully straighten your knee after replacement surgery to be able to make a full recovery.

- **Bending**
  - Your goal is to be able to bend your knee at 90 degrees or more by 2 weeks after surgery, unless your doctor or physical therapist has set a different goal for you.
  - Do not use force to bend your knee for the first 2 weeks.

- **Straightening**
  - Your goal is to be able to fully straighten your leg joint as soon as possible after knee replacement. You will need to be able to do this to avoid limping.
  - Never use a pillow under your knee when you rest. Your leg needs to be flat on the bed to prevent your knee from getting stuck in a bent position.

- **Knee Immobilizer**
  - You may be instructed to wear a special knee brace called a knee immobilizer. How often you wear this and for how long will be set by your doctor.
  - If you are wearing the brace, take it off now and then to inspect your skin for signs of redness or swelling.

**Exercises**
Getting back your strength and motion after knee replacement depends on you. Sticking to your exercise program will speed up your return to your normal activities.

Do not wait until your therapist appointment to continue these exercises at home.

- **Exercise 3 times each day. Do 10 to 15 repetitions of each exercise.** Slowly increase how often you do the exercises as your knee becomes stronger.
• You may need someone to help you with these exercises at first. Have a family member come to the hospital to work with you and your therapist to learn how to help you when you go home.
• Place a plastic trash bag or a piece of cardboard under your operative leg to reduce friction, if that is helpful to you.
• Do all exercises slowly and with smooth motion.
• If a lot of swelling occurs, slow down to let the swelling go down.
• These exercises can also be done on your other leg.
• Remember to ice after exercise or heavy activity.

Quad Sets
1. Sit or lie on a flat surface.
2. Tighten the muscle on the top or front of your thigh and flatten your knee onto the bed. To get the idea, have someone place a hand under your knee. Push your knee into the person’s hand.
3. Hold for a slow count of 5 and then relax.

Quad setting and stretching
1. Place the 3 pound coffee can or blanket roll under your heel and tighten the top or front of your upper leg.
2. Push down at your knee.
3. Hold tight for a slow count of 5 and then relax.

Short arc quads (blanket roll)
1. Place a blanket roll or 3 pound coffee can under the knee of your surgery leg.
2. Rest your thigh on the roll or can and lift your heel off the bed. Straighten your knee as much as you can.
3. Pause and then lower your heel down to the starting position.
**Leg to side (hip abduction and adduction)**

1. Lie down on your back with your legs straight.
2. Keep your toes pointed toward the ceiling.
3. Slide your surgery leg out to the side (like opening a pair of scissors).
4. Bring the leg back to the starting position.

**Straight leg raises**

1. Lie on your back with your surgery leg straight. Bend your good leg at the knee.
2. Lift your heel slowly off the bed. Raise your leg about 12 to 24 inches.
3. Slowly lower your leg to the bed, keeping your knee straight.

**Knee extension**

1. Sit on a chair or the side of a bed.
2. Lift your foot and straighten your knee.
3. Lower your foot back to the starting position.
Foot slide
1. Sit in chair and place your foot of the surgery leg on a plastic bag on the floor.
2. Slide your foot back on the plastic, bending your knee as much as you can.
3. Hold for a slow count of 5, then slide your foot forward gently.
4. Repeat and continue this exercise for 5 minutes.

Passive knee extension
1. Sitting on the edge of a chair or sofa, rest your heel on the edge of a coffee table or chair seat.
2. Keep your toes pointed toward the ceiling.
3. Allow gravity to straighten your knee.
4. Hold the position for 30 minutes, 1 to 2 times each day.