Exercise Before and After Total Knee Replacement Surgery

Exercises to strengthen your knee

Doing these exercises before surgery will strengthen your muscles, so your recovery after surgery will be smoother and faster. After surgery, you will need to do these exercises to regain your knee’s flexibility and strength. It is up to you to do them regularly every day to give yourself the best chance of regaining good use of your knee.

- Do the strengthening exercises at least 2 times every day (page 2, exercises 1 through 4).
- For flexibility, do the bending and straightening exercises 5 times every day. This means doing them every 2 to 3 hours (pages 3 and 4, exercises 1 through 7).
- Before, during, and after the bending exercises, you may want to use a cold pack on your knee to reduce any pain.

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC clinic staff are also available to help.

Call the Exercise Training Center: 206-598-2888

Other: ____________________________________________

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Exercise 1 of 4
HIP FLEXION
1. Lie on back
2. Bend your knee and slide heel up toward body as shown
3. Hold a few seconds, slowly relax
4. _____ repetitions, _____ times per day

Exercise 2 of 4
HIP EXTENSION
1. Lie on belly with your knee bent and pillow positioned as shown
2. Raise thigh off floor as you lift foot toward ceiling
3. Hold 3 seconds, slowly relax
4. _____ repetitions, _____ times per day

Exercise 3 of 4
HIP ABDUCTION
1. Lie on side with your operated leg on top
2. Bend lower leg slightly
3. Raise top leg straight up, without letting it come forward
4. Hold 3 seconds, slowly relax
5. _____ repetitions, _____ times per day

Exercise 4 of 4
PLANTAR FLEXION – TOE RAISES
1. Stand with feet 12 inches apart; Hold onto kitchen counter or something solid for support
2. Raise up slowly onto your toes as high as you can
3. Hold 3 seconds
4. _____ repetitions, _____ times per day
Exercise 1 of 7
KNEE FLEXION
1. Sit on chair and cross legs at ankles
2. Push back leg with front leg until stretch is felt;
   Hold ______ seconds. Relax
3. Repeat ______ times, ______ times per day

Exercise 2 of 7
KNEE FLEXION
1. Sit in a chair with your operated foot close to the base of the chair
2. Scoot forward toward the edge of the chair as far as you can to bend
   your operated knee so that you feel a stretch
3. Hold 10-30 seconds
4. 3-5 repetitions, 5 times per day

Goal: At least 90 degrees of bending

Exercise 3 of 7
KNEE EXTENSION
1. Sit with your operated leg propped as shown
2. Relax, letting the leg straighten
3. Hold 30 seconds to 5 minutes
4. 2-3 repetitions, 5 times per day

Goal: As straight as possible

Exercise 4 of 7
QUAD SETS/EXTENSION
1. Sit or lie on your back with operated leg straight
2. Tighten the muscle on top of your thigh and move your kneecap as
   shown
3. Hold 5-10 seconds
4. 10 repetitions, 5-10 times per day
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Exercise 5 of 7
SHORT ARC QUAD/EXTENSION

1. Lie on your back with towel roll under your operated knee
2. Raise heel off floor until knee is straight
3. Hold 5 seconds and slowly lower
4. 10 repetitions, 2-5 times per day

Exercise 6 of 7
STRAIGHT LEG RAISE

1. Lie on back with operated knee straight and the other knee bent as shown
2. Keep the leg completely straight, then raise it 12 inches
3. Hold 2-5 seconds and slowly lower
4. 10-20 repetitions, 2-5 times per day

Exercise 7 of 7
HAMSTRING/FLEXION

1. Stand holding onto solid object as shown
2. Slowly bend your operated knee
3. Hold 2-5 seconds and slowly lower
4. 10 repetitions, 2-5 times per day

Goal: Bend knee on its own as much as possible