



# Exercise Before and After Total Knee Replacement Surgery

*Exercises to strengthen your knee*

**Your total knee replacement surgery and physical therapy work together to help you regain the use of your knee.**

**This handout describes exercises your physical therapist will teach you.**

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. Doing these exercises every day will give you the best chance of regaining good use of your knee.

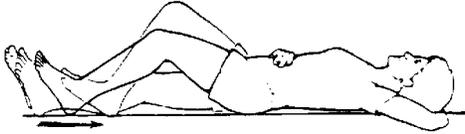
- Do the **strengthening exercises** at least 2 times every day (page 2, exercises 1 through 4).
- For flexibility, do the **bending and straightening exercises** 5 times every day. This means doing them every 2 to 3 hours (pages 3 and 4, exercises 1 through 7).
- Before, during, and after the bending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

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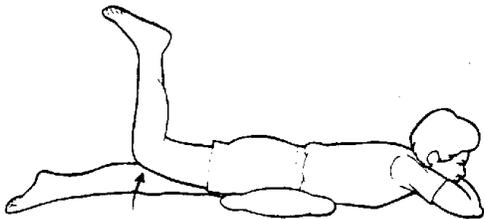
Exercise 1 of 4

**Hip Flexion**

1. Lie on your back.
2. Bend your knee and slide your heel up toward your body, as shown.
3. Hold for a few seconds, then slowly relax.
4. Repeat \_\_\_\_\_ times, \_\_\_\_\_ times a day.

Exercise 2 of 4

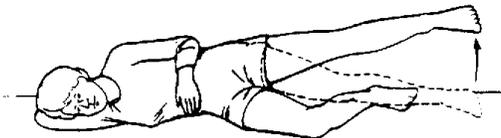
**Hip Extension**



1. Lie on your belly with your knee bent and a pillow placed as shown.
2. Raise your thigh off the floor as you lift your foot toward the ceiling.
3. Hold for 3 seconds, then slowly relax.
4. Repeat \_\_\_\_\_ times, \_\_\_\_\_ times a day.

Exercise 3 of 4

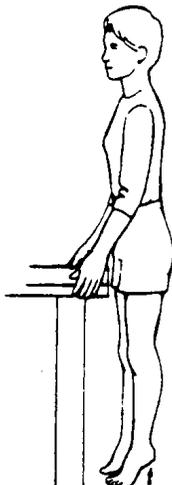
**Hip Abduction**



1. Lie on your side with your operated leg on top.
2. Bend your lower leg slightly.
3. Raise your top leg straight up, without letting it come forward.
4. Hold for 3 seconds, then slowly relax.
5. Repeat \_\_\_\_\_ times, \_\_\_\_\_ times a day.

Exercise 4 of 4

**Plantar Flexion – Toe Raises**



1. Stand with your feet 12 inches apart. Hold onto a kitchen counter or something solid for support.
2. Raise up slowly onto your toes as high as you can.
3. Hold for 3 seconds.
4. Repeat \_\_\_\_\_ times, \_\_\_\_\_ times a day.

## Exercise 1 of 7

**Knee Flexion**

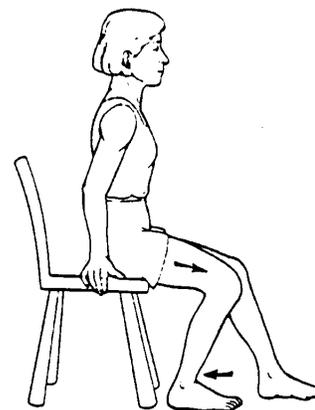
1. Sit on a chair and cross your legs at your ankles.
2. Push your back leg with your front leg until you feel a stretch.
3. Hold for \_\_\_\_\_seconds, then relax.
4. Repeat \_\_\_\_\_ times, \_\_\_\_\_times a day.



## Exercise 2 of 7

**Knee Flexion**

1. Sit in a chair with your operated leg close to the base of the chair.
2. Scoot forward toward the edge of the chair as far as you can so that your operated knee bends and you feel a stretch.
3. Hold for 10 to 30 seconds.
4. Repeat 3 to 5 times, 5 times a day.



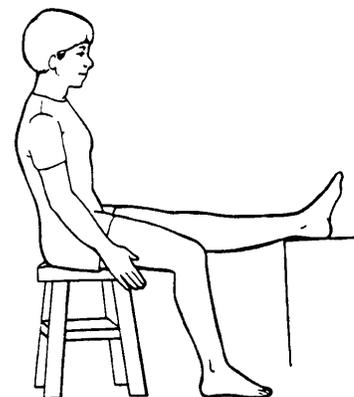
**Goal:** Bending your knee 90 degrees or more,

## Exercise 3 of 7

**Knee Extension**

1. Sit with your operated leg propped up, as shown.
2. Relax, letting your leg straighten.
3. Hold for 30 seconds to 5 minutes.
4. Repeat 2 to 3 times, 5 times a day.

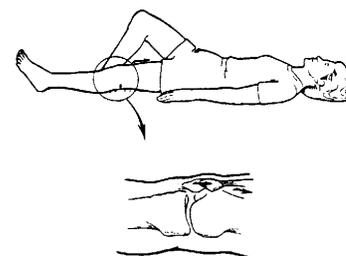
**Goal:** Getting your leg as straight as possible.



## Exercise 4 of 7

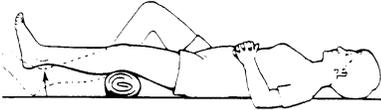
**Quad Sets/Extension**

1. Sit down or lie on your back, with your operated leg straight.
2. Tighten the muscle on top of your thigh and move your kneecap, as shown.
3. Hold for 5 to 10 seconds.
4. Repeat 10 times, 5 to 10 times a day.



Exercise 5 of 7

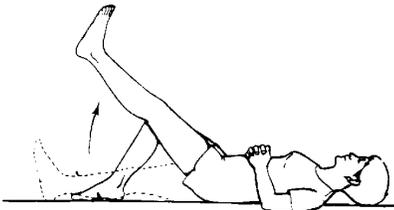
**Short Arc Quad/Extension**



1. Lie on your back with rolled-up towel under your operated knee.
2. Raise your heel off the floor until your knee is straight.
3. Hold for 5 seconds, then slowly lower.
4. Repeat 10 times, 2 to 5 times a day.

Exercise 6 of 7

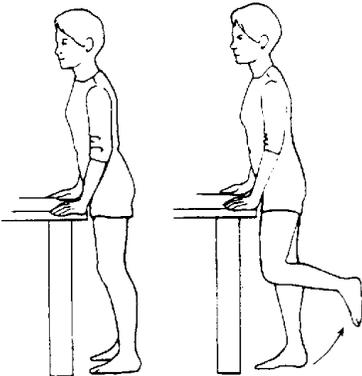
**Straight Leg Raise**



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

**Goal:** Bend your knee on its own as much as possible.

**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.

Exercise Training Center: 206-598-2888 Other: \_\_\_\_\_

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