

# Acute Knee Pain – tips and exercises

You often lose strength and motion in your knee when it is painful and swollen. This can happen after injury or overuse. The exercises and tips listed below will help you decrease pain and swelling, increase range of motion, improve strength and help you return to your normal activities as soon as possible.

## How to reduce pain and swelling

**Rest:** Avoid painful activities to give your knee time to heal. Limit your walking and other standing activities when your knee is painful or swollen. Use a cane or crutches to decrease the stress on your knee. It is best to use the cane on the opposite side of your painful knee. Use supportive shoes when you are standing or walking.

**Ice & Elevation:** Place a cold pack on your knee with a thin towel between your skin and the cold pack to prevent a rash or burn. Use ice 15-20 minutes, 2-4 times per day as long as your knee is warm, painful or swollen. Elevate your knee above the level of your heart to help with the pain and swelling.

**Compression:** If your knee is swollen, using a knee brace or wrap may help with the pain and swelling and provide support to your knee. Apply the elastic wrap loosely from your calf to right above your knee. You should be able to easily put two fingers under the wrap.

## Range of Motion Exercises

It is important to begin moving your knee and ankle to prevent stiffness reduce swelling and increase circulation. Start by bringing your toes and foot towards your shin and then point your foot away 10-20 times every hour.



**Heel slides:** From a lying position, bend your knee as far as comfortable by sliding your heel towards your buttock. You can use a towel or belt behind your knee to help. Do 10-20 repetitions, 3-4 times per day. Alternate position: This can be done in a sitting position as well.



**Knee Straightening:** *Do this exercise if you cannot completely straighten your knee.*

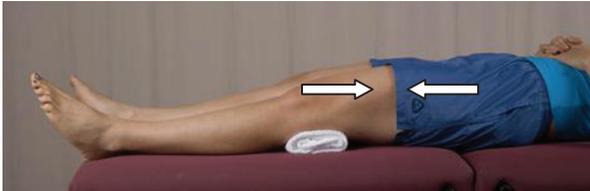
Place a large enough towel roll under your ankle so that your calf clears the bed. Allow your knee to straighten. Maintain this position for 2-10 minutes every 2 hours.



## Strengthening Exercises

Start strengthening exercises as soon as possible to help you return to your normal activities

**Quadriceps set:** Place a small towel roll under your knee. Straighten your knee by tightening your thigh muscles. Press the back of your knee into the towel and hold for 5-10 seconds. Repeat 10-20 times, 3-4 times per day. This may also be done sitting.



**Short Arc Knee Extension:** Lie on your back with a towel roll under your knee. Tighten your thigh muscles and lift your heel off the ground. Keep your knee on the towel roll as you hold your leg as straight as possible for 5 seconds. Do 10-20 repetitions 3-4 times per day.



*Consult with your physical therapist or doctor if you experience an increase in your symptoms with recommended exercises, or if you develop new symptoms of numbness, tingling, or a spread of the pain. This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor. If you have questions or need more information about your medication, please speak to your pharmacist. Kaiser Permanente does not endorse the medications or products mentioned. Any trade names listed are for easy identification only.*

**Straight Leg Raising:** A. Lie on your back with your affected leg straight and your other leg bent. Tighten your thigh muscles then lift your leg no higher than the other knee. Keep your knee fully straight while you lift and lower your leg. Keep your thigh muscles tight while you lower your leg. Do 60 repetitions each day, 10-20 at a time.



## Aerobic Exercise:

Performing aerobic exercises like riding a stationary bike, walking or swimming will help with your recovery. Begin with 5 minutes, progress to 20 minutes, as able.

## Stationary Bike

Adjust the bike so your knee is slightly bent at the bottom of the revolution. The full revolution of the pedal should be comfortable to get around. Begin with 5 minutes, progress up to 20 minutes as able.

Resistance should be very light so that the wheel doesn't spin freely.

