



ROMTech

The Modern Technology of Rehabilitation



KNEE REPLACEMENT POST-OP EXERCISE BOOK

Your Recovery at Home

Wound Care: You will have stitches or staples running along your wound or a suture beneath your skin on the front of your knee. The stitches or staples will be removed several weeks after surgery. A suture beneath your skin will not require removal.

Avoid soaking the wound in water until the wound has thoroughly sealed and dried. A bandage may be placed over the wound to prevent irritation from clothing or support stockings.

Diet: Some loss of appetite is common for several weeks after surgery. A balanced diet, often with an iron supplement, is important to promote proper tissue healing and restore muscle strength.

Activity: Exercise is a critical component of home care, particularly during the first few weeks after surgery. You should be able to resume most normal activities of daily living within three to six weeks following surgery. Some pain with activity and at night is common for several weeks after surgery.

If you Experience ANY of the following please call your Surgeon's office Immediately

- Increased Redness, Swelling or Tenderness around your Knee
- Increased or Discolored drainage from your surgical site
- Increased Swelling, Pain, Redness or Tightness to the Calf of your leg
- Increased or worsening Fever, or general feeling of being unwell

This booklet will guide you in your rehab journey after total knee replacement. ROMTech is dedicated to serving your rehabilitation needs and we encourage you to call us at 888-374-0855 if you have any questions or concerns about your rehab process.

Included in this Booklet:

- Suggested Daily Rehab Schedule
- Examples and Instructions for All Recommended Exercises

ROMTech recommends the following schedule for optimal rehabilitation.

Morning (7AM-10AM)	Lunchtime (10AM-1PM)	Afternoon (1PM-3PM)	Afternoon 2 (3PM-6PM)	Evening (6PM-8PM)
ROMTech Therapy Session <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.	ROMTech Therapy Session <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.	ROMTech Therapy Session <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.	ROMTech Therapy Session <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.	ROMTech Therapy Session <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.
Walking <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.	Walking REST HERE	Walking <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.	Walking REST HERE	Walking <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.
Ice and Elevate <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.	Ice and Elevate <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.	Ice and Elevate <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.	Ice and Elevate <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.	Ice and Elevate <input type="checkbox"/> Yes, it's done! <input type="checkbox"/> No, Not this time.

Daily Reminders.

- 1. ROMTech Therapy Sessions** – ROMTech therapy sessions are to be completed 4 – 5 times per day.
- 2. Walking** – Walking should be performed often and at your own level of comfort. There is no required amount of time or distance you should be walking each day. The amount you will be able to walk immediately after surgery will be different than 2, 4 or 6 weeks down the road.. When performed properly, walking can be a great way to help your new knee recover! Please refer to the section on “walking” below for specific instructions.
- 3. Ice and Elevate** – Resting with ice and elevation is a vital component to your recovery. It should be done frequently and anytime you not walking around or performing therapy sessions. Please refer to the section on “Icing and Elevating” below for specific instructions. Icing and elevating with a straight knee position will be key

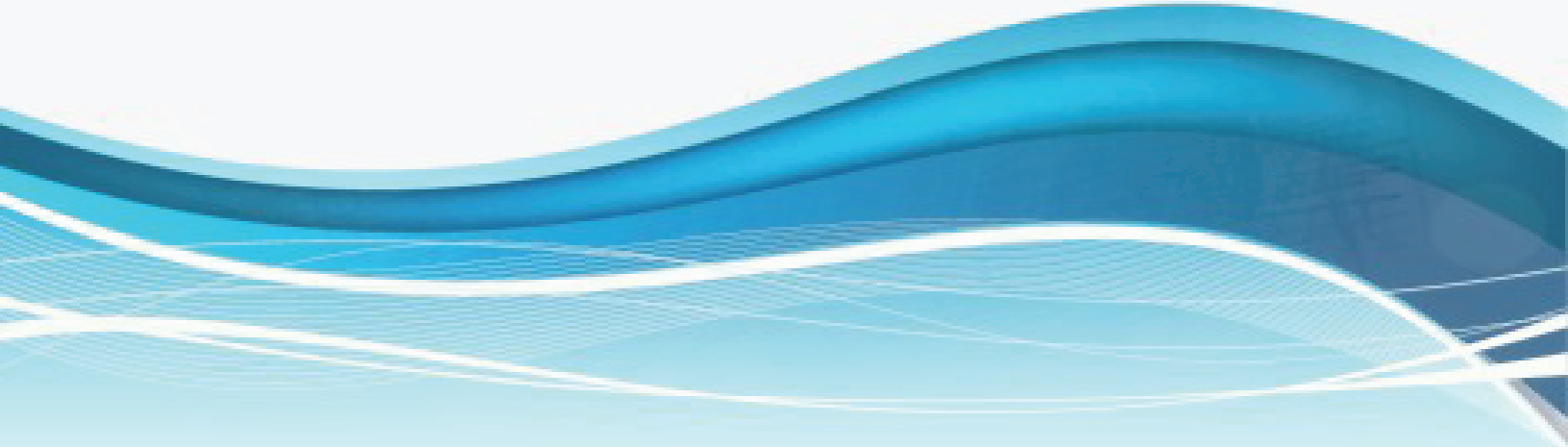
UNDERSTANDING YOUR PAIN

There are several things that contribute to pain and management. Up to now, you have likely been experiencing “arthritic pain”, which is often described as a dull aching pain. This pain should cease with surgery. Post operatively, you will be experiencing pain for a different reason– this is “surgical pain”. This will improve with time.

How to Reduce Pain and Swelling

- ▶ Apply ice for 10-15 minutes to the operated knee, especially after exercise. You can use ice as needed every 1-2 hours.
- ▶ Do not apply heat to your incision area. Talk to your physician before using any heat.

PAIN MEDICATION

- ▶ Pain medication should be taken as prescribed by your surgeon.
 - ▶ It is important that your pain is controlled so that you can complete your therapy sessions each day.
 - ▶ Take your pain medication 30-45 minutes before your therapy sessions.
- 

SWELLING CONTROL

- ▶ You can help control/reduce the swelling in your knee by elevating the leg above the level of your heart, for 20 minutes, 2-3 times per day.
- ▶ Elevate your entire leg by placing pillows underneath the entire operated leg, not just under the knee.



WALKING

Soon after surgery you will begin to walk short distances in your room. It is important to know your 'weight bearing status' when you begin to walk. This means how much pressure you can put on your operated leg.

Weight Bearing As Tolerated:

Stand up straight as you can. You are allowed to put as much weight as you feel comfortable with on your operated leg.

Partial Weight Bearing:

You are allowed to put a maximum of 50% of your body weight through the operated leg.

How much should I be standing/walking?

Start with walking short distances. Gradually increase your walking inside your home, within your tolerance. Prolonged standing can also increase your pain. An increase in knee pain and swelling, or an increase in night pain may indicate you have been doing too much.

If your Knee is feeling more Stiff, Sore or Swollen:

▶ **Are you doing enough exercises?**

If your knee is becoming stiffer you should increase the frequency of exercises you are doing. You should be completing all therapy sessions each day as well as the exercises listed here in between sessions. It is normal to have some pain while doing the exercises.

▶ **Are you taking your pain medication as prescribed?**

▶ **Are you icing your knee frequently?**

You should ice your knee for 10-15 minutes, especially after the exercises. You can ice every 1-2 hours.

▶ **Have you been elevating your leg above the heart level?**

Ensure you are laying down with your entire operated leg elevated for 20 minutes, 2-3 times per day.

▶ **Doing too much other activity?**

Often a sudden increase in activity is the reason for an increase in knee swelling and stiffness. Take more rest breaks.

▶ **Staying in one position?**

Be sure to change positions regularly as staying in one position for too long can increase your stiffness.

SIT TO STAND

When rising from a seated position you must place the foot of your operated leg ahead of the other foot. Put most of the weight through your arms and non-operated leg as you push up into a standing position.



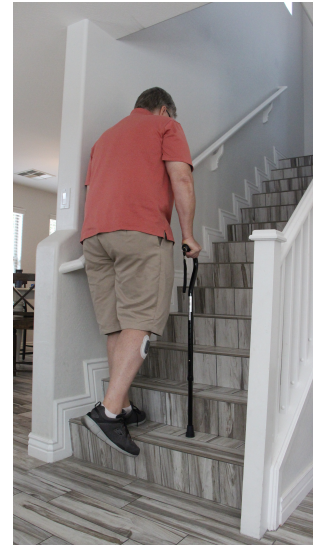
Walking with your walker:

Sequence: 1. Walker 2. Operated Leg 3. Non-operated leg

Keep your head up. Advance the walker about an arm's length away. Step halfway into the walker with your operated leg, followed by your non-operated leg. Stand up tall and straight. Wear good supportive footwear with non-slip soles whenever possible.

STAIRS

1. Hold the handrail with one hand and a cane or crutch in the other.
2. Step your non-operated leg up first. Then bring your operated leg and the cane or crutch up onto the step



GOING DOWN

1. Hold the handrail with one hand and a cane or crutch in the other.
2. Step down with your operated leg, along with your cane or crutch. Then step down with your non- operated leg.



POST OP KNEE EXERCISES

Seated Knee Straightening/ Bending

1. Sit in a chair or on your bed with good posture.
2. Pull the toes up and straighten your knee.
3. Hold for a count of five then slowly lower your foot and bend your knee as far back as you can.
4. Alternate with the other leg.
5. Start with 10 repetitions. Gradually progress to 30 repetitions on each leg, 2 times per day.



Knee Squeezes

1. Lie on your back with your legs straight. You can place a small roll under your knees.
2. Pull your toes up, push the backs of your knees down tightening your thigh muscles. Gently squeeze your buttock muscles as well.
3. Hold for a count of 5, then relax.
4. Start with 10 repetitions. Gradually progress to 30 repetitions, 2 times per day



Knee Bending

1. Lie on your back.
2. Keep your toes pointed towards the ceiling as you slide the heel of your operated leg towards your buttocks.
3. Hold for five seconds then slowly slide your foot back to the starting position.
4. You may use a strap around your foot to help your knee bend further.
5. Alternate with the other leg.
6. Start with 10 repetitions. Gradually progress to 30 repetitions on each leg, 2 times per day.



Knee Bending



Knee Straightening

Knee Straightening

1. Lie on your back with a roll under your knees. The roll should be about 6-8 inches in diameter – a coffee can works well.
2. Pull your toes up and lift your heel off the bed, straightening your operated knee. Keep the back of your knee on the roll.
3. Hold for a count of 5, then slowly lower the foot.
4. Alternate with the other leg.
5. Start with 10 repetitions. Gradually progress to 30 repetitions, 2 times per day

Straight Leg Raise

1. Lie on your back with your operated leg straight and your other knee bent.
2. Pull your toes up, tighten your thigh muscle and lift the operated leg off the bed, keeping the leg straight. Lift the leg 4-6 inches off the bed.
3. Hold for a count of 5, then slowly lower the leg.
4. Start with 10 repetitions. Gradually progress to 30 repetitions, 2 times per day.



Straight Leg Raise



Knee Stretch

Knee Stretch

1. Lie on your back with a roll under your ankles. The roll should be big enough so that the back of your calf does not touch the bed.
2. Keep your knee and foot pointed towards the ceiling.
3. Let the back of your knee relax, helping to straighten the knee.
4. Hold this position for 5 minutes. Do this twice a day

Chair Squat

1. Stand in front of a chair
2. Lower into a squat by bending at the hip. Do not let your knees come over your toes
3. Lower down until your buttocks just touch the chair then return to the starting position.
4. Do _____ sets of _____ repetitions



SEATED EXERCISES

Seated Foot Slides

1. Sit in a chair with good posture
2. Slide the foot of the operated leg back underneath the chair, bending the knee.
3. Do not let your hip come off the seat of the chair.
4. You may place a towel or garbage bag under your foot to help it slide easier.
5. Do _____ sets of _____ repetitions



Seated Foot Slides with Overpressure

1. Sit in a chair with good posture.
2. Slide the foot of the operated leg back underneath the chair, bending the knee.
3. Apply overpressure to the movement by placing the foot of the non-operated leg over the ankle of the operated leg.
4. Hold for a count of 10 then return to the starting position.
5. Do _____ sets of _____ repetitions



Resisted Knee Flexion

1. Sit in a chair with good posture.
2. Attach a resistance band to the ankle of your operated leg and to something solid in front of you, such as a table leg.
3. Starting with the knee of the operated leg straight, bend your knee pulling your foot underneath the chair.
4. Hold for a count of 5, then return to the starting position.
5. Do _____ sets of _____ repetitions



Resisted Seated Knee Extension

1. Sit in a chair with good posture.
2. Attach a resistance band to the ankle of your operated leg and to the leg of the chair. You can also use an ankle weight.
3. Slowly straighten the knee. Hold for a count of 5 then return to the starting position.
4. Do _____ sets of _____ repetitions



Seated Hamstring Stretch

1. Sit on the edge of a chair with good posture.
2. Put your operated leg out in front of you, keeping the knee as straight as possible.
3. Lean forward from the hips, keeping your chest up until you feel a stretch in the back of the operated leg.
4. Hold for _____ seconds. Repeat _____ times.



Prone Knee Bend

1. Lie on your stomach. You can place a folded towel under your operated knee for comfort.
2. Bend the knee of the operated leg, bringing your heel towards your buttocks.
3. Hold for a count of 5 then return to the starting position.
4. You may also use the non-operated leg to apply overpressure to increase the knee bending.
5. Do _____ sets of _____ repetitions



Prone Knee Bend



Prone Knee Straightening

Prone Knee Straightening

1. Lie on your stomach with your feet hanging over the edge of the bed.
2. Place a folded towel under your operated knee.
3. Put a weight on your ankle, or use your other foot to put downwards pressure on the ankle of the operated leg.
4. Hold for _____ minutes. Repeat _____ times.

Bridge

1. Lay on your back with your knees bent and your arms at your sides.
2. Tighten your abdominal muscles then lift your hips off the floor by squeezing your thigh and buttock muscles.
3. Hold the bridge for a count of 5 then slowly lower your hips.
4. Do ____ sets of ____ repetitions.



Bridge



Sidelying Hip Abduction

Sidelying Hip Abduction

1. Lay on your non-operated side with the bottom knee bent for support.
2. Keeping your toes pointed forward, lift the top leg.
3. Keep your pelvis rolled slightly forward – do not let your hips roll back.
4. Hold the leg lift for a count of 5, then slowly lower the top leg to the starting position.
5. Do ____ sets of _____ repetition.

RESUMING AN ACTIVE LIFESTYLE

Activities allowed during the first 6 weeks after surgery:

- Walking with your walking aid – gradually increase your distance
- Swimming – your incision must be well-healed before you swim to avoid infection. No whip kick
- Stationary Cycling – do not start cycling until you have talked to your physiotherapist. You may use your ROMTech PortableConnect during this time.

Activities allowed at 6-8 weeks after surgery:

- Golfing – start at the driving range
- Gardening – raised garden beds and long handled tools recommended to avoid excessive knee bending
- Kneeling – use a pillow or knee pads for comfort
- Driving – discuss with your surgeon when you can begin driving

Activities allowed at approximately 12 weeks after surgery

- Cycling on a regular bike – raise the seat to prevent excessive knee bending
- Gentle dancing
- Low impact aerobics

Discuss higher impact/risk activities, such as skiing, skating and tennis, with your surgeon.

High impact activities such as jogging, basketball or racquetball should never be done following your surgery, unless specifically approved by your surgeon.

General Fitness

You can return to the activities you used to do before your surgery, following the guidelines above.

Remember to start slowly as you will have been less active since your surgery. Start with a few minutes of activity and gradually progress.

Low impact activities are best, such as swimming, biking and walking. Talk to your surgeon or physiotherapist about any specific questions you have.



NOTES

[illegible]



ROMTech

The Modern Technology of Rehabilitation