



From day one.

Total Knee Replacement Patient Information Notebook

You will be using this notebook during your hospital stay for rehabilitation.

Please bring it to the hospital with you.

Name _____

Phone number _____

Surgeon's name _____

Surgeon's phonenumber _____

Surgery Date _____



From day one.

**Total Knee
Replacement**

**Patient Information
Notebook**

1. Program Goals

2. Physical Therapy

3. Prevent Constipation

4. Discharge Instructions



From day one.

Total Joint Program Goals

1. You will be able to do all of your exercises.
2. You will be able to walk at least 200 feet with a walker or crutches.
3. You will be able to climb up and down stairs.
4. You will be able to do most of your own self-care (toileting, grooming, and dressing).
5. You will be able to get in and out of bed or a chair without assistance.
6. Your pain will be controlled with oral medicine.
7. You will be able to take food and fluids without nausea and vomiting.
8. Your medical condition will be stable.

You will be going home as soon as these goals have been met.



Mobility Matters

Your choice to have a total joint replacement indicates that you are concerned about mobility. Following your surgery, movement will benefit you in many ways:

- **Improved circulation:** Walking helps to decrease your chance of developing blood clots by improving blood circulation throughout your body. You will be on blood thinner medication following surgery which will also help with this. Increased circulation will also help minimize swelling after surgery.
- **Clear your lungs:** Your lungs are more efficient when you are upright and you will be able to take deeper breaths and clear your lungs. This may increase the level of oxygen in your system and help you feel more alert.
- **Increase muscle strength:** When the doctor was replacing your joint, the muscles needed to be held to the side. Walking allows the muscles to strengthen in their normal alignment and will also prevent the joint from feeling stiff.
- **Prevent constipation:** The motility in your gut may be decreased by the pain medications and the decrease in activity following surgery. Walking will help increase the motility in your intestines and help prevent constipation.

Now that you know why you should walk, let's talk about how it will happen in the hospital. The nurses and pharmacist will work closely with you to help control your pain so that you will be able to participate in therapy. The physical therapist will teach you exercises to strengthen your muscles and coach you on how to normalize your walking pattern. The nurses and nursing assistants will help you walk to a chair, the bathroom, in the hallway and back to bed. You will be using a walker or crutches as the therapist assesses your needs. Please do not get up unassisted until the therapist tells you it's safe to do so.

When you return home, please continue the program that the physical therapist reviewed with you, doing your exercises each day and getting up to walk every other hour. You will find that the pain and swelling will gradually decrease and you will soon be walking without an assistive device. With dedicated rehab, you will be back to enjoying your daily walks and recreational activities again. That is the biggest reason that mobility matters.



My Responsibilities before Surgery

Check these items off the list once they are completed.

- Have a caregiver available to:
 - Drive you home after surgery
 - Pick up your prescriptions
 - Help with grocery shopping
 - Observe at least one physical therapy session if your therapist deems it necessary.
- Have a rail on stairs, especially if those stairs are to get into the house.
- Clear stairs and pathways of clutter.
- Remove throw rugs.
- Remove telephone and electrical cords from walk areas.
- Make plans for someone to care for your pets, including feeding and watering, so that you don't have to bend down.
- Place slip proof mats or strips in the bath or shower.
- Determine the need for grab bars (not towel bars) in the bathroom for added support.
- Make sure bath rugs are slip resistant and absorb water.
- Store items that you use frequently within easy reach.
- Bring this book with you to the hospital. You will need it during your physical therapy sessions.



My Responsibilities in the Hospital

- Do not bring valuables or home meds with you to the hospital.
- If you have a walker or crutches, bring them to the hospital along with this book for use after surgery.
- Community Medical Center is a non-smoking facility, including the campus around the hospital. Your physician can order nicotine patches for you.
- Physical therapy is an important part of your recovery. Your physical therapy sessions are scheduled beginning on the day of surgery or the next morning. Please give the physical therapist your undivided attention (take phone calls outside of therapy times). Please ask your caregiver to attend at least one physical therapy session near the end of your hospital stay.
- Occupational therapy may be ordered to assist you with activities of daily living, such as bathing or dressing.
- Please do not get out of bed without assistance until approved to do so by a physical therapist.
- You may wear pajamas, loose fitting shorts, sweats or pants.
- Pain control is a team effort. Nurses will try to get you pain medication within an hour prior to your physical therapy start time. If the nurse isn't getting this to you within this time, please call to request it.
- Use your incentive spirometer 10 times every hour while awake.

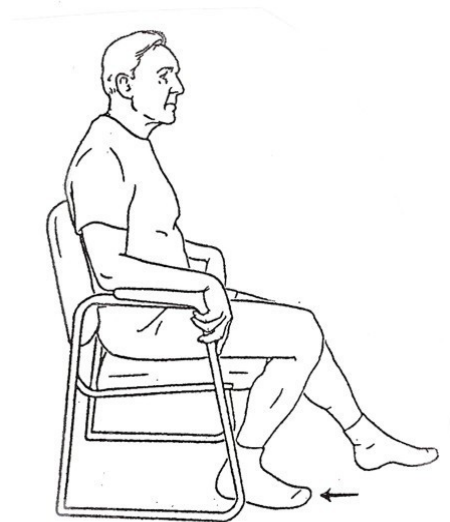
**Pump Your
Ankles
Up and Down
20 or More
Times Every
Hour**

SEATED KNEE STRETCHES

Walk every other hour and then do these stretches.

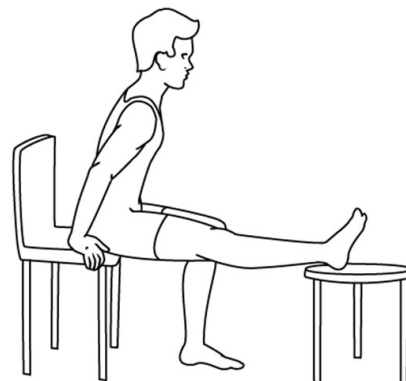
KNEE FLEXION STRETCH

Keeping your feet on the floor, slide foot of operated leg back, bending knee. Leaving your foot there, slide your buttocks forward until you feel a stretch in your knee. Hold 30 seconds. Repeat 3 times.



KNEE EXTENSION STRETCH

Place the foot of your operated leg on a chair in front of you. Straighten knee and attempt to keep it straight. Lean forward, leading with your belly button and keeping your back straight. Hold 90 seconds. Do 1 time.



Total Knee Bed Exercises

Guidelines:

Do each exercise 5-15 times, 2-3 times a day.

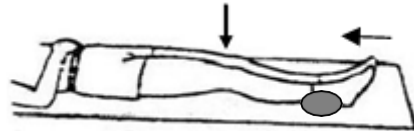
Do not hold your breath while doing the exercises. Count out loud.

I. Lie on your back in bed.

1. **Gluteal Sets:** Squeeze buttocks together.
Hold 5 counts.



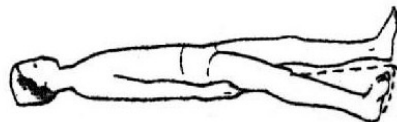
2. **Quad Sets:** Place towel roll under heels. Pull toes towards nose. Press knee down toward bed, tightening muscles on front of thigh.
Hold 5 counts.



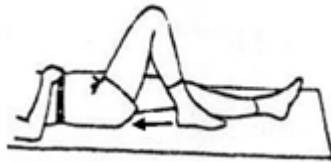
3. **Terminal Knee Extension:** Place towel roll under thigh. Lift foot, straightening knee. Do not raise thigh off roll. *You may use a 3 pound coffee can wrapped with a towel, or 3-4 towels rolled together.



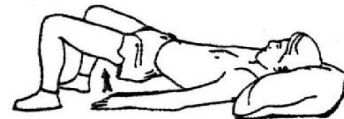
4. **Hip Abduction:** Slide leg out to side. Keep toes pointed up and knee straight. Slide leg back to starting position.



5. **Heel Slides:** Slide heel towards buttocks, return to straightened position.



6. **Bridges:** Bend knees and place feet flat on bed. Lift buttocks up off the bed.



7. **Straight Leg Raise:** Bend one knee and place foot flat on bed. Straighten other leg and slowly raise and lower, keeping knee straight and toes pointed up.



8. **Ankle Pumps:** Move foot back and forth. Keep knee straight.



II. Sitting on the edge of the bed:

1. **Knee Flexion and Extension:** Straighten and bend knee.

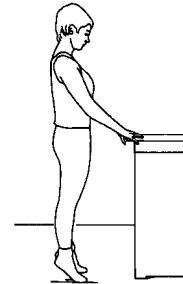


Total Knee Standing Exercises

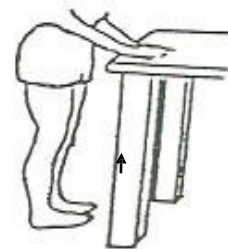
Exercise Guidelines: Stand at a counter, table or firm surface that is sturdy enough to help you keep your balance.

Do each exercise 5-15 times, 2-3 times/day. Do not hold your breath while doing the exercises. Count out loud.

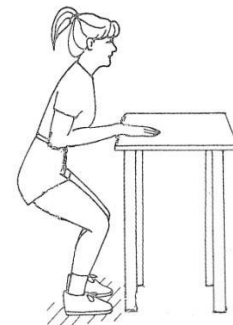
1. Heel Raises: Keep your hips and knees straight. Lift your heels off the floor, and do not sway your trunk.


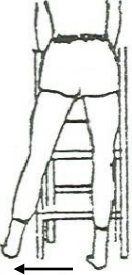
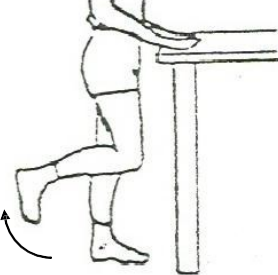




2. Toe Raises: Keep your hips and knees straight. Lift your toes off the floor, and do not sway your trunk. You may choose to alternate raising toes one foot at a time.



3. Shallow Knee Bends: Stand with your feet shoulder width apart. Bend your knees so that you squat down just like you were going to sit in a chair. Make sure your knees don't go in front of your toes. Your heels should remain on the floor. Rise slowly back to a standing position.



<p>4. Backward Lifts: Keep your knee straight while slowly lifting your leg backward.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lift right leg only <input type="checkbox"/> Lift left leg only <input type="checkbox"/> Alternate legs 	
<p>5. Side Lifts: Keep your knee straight and your foot facing forward. Slowly lift your leg out to the side.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lift right leg only <input type="checkbox"/> Lift left leg only <input type="checkbox"/> Alternate legs 	
<p>6. Knee Curls: Keep your hip straight and bend your knee, bringing your heel towards your buttocks.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lift right leg only <input type="checkbox"/> Lift left leg only <input type="checkbox"/> Alternate legs 	
<p>7. March in Place: Turn sideways to the counter. March in place by raising your knee.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lift right leg only <input type="checkbox"/> Lift left leg only <input type="checkbox"/> Alternate legs 	
<p>8. Forward Lifts: Stand sideways to the counter. Keep your knee straight while slowly kicking the leg forward.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lift right leg only <input type="checkbox"/> Lift left leg only <input type="checkbox"/> Alternate legs 	

Positioning for Edema Control (and to promote knee extension after TKAs)



Not good because this position allows increased edema in the knee and ankle.



Bottom pillow is lengthwise, top pillow widthwise, so leg doesn't roll off and heel is able to "float". Ankle is higher than knee, knee higher than hip. Lie with the head of bed flat for 30 minutes at a time, as tolerated.

Using a Walker on Stairs

From day one.

Going Up Stairs:

Turn the walker sideways so that the opening is towards your body.

Hold the highest walker handle with one hand and the rail in the other hand.

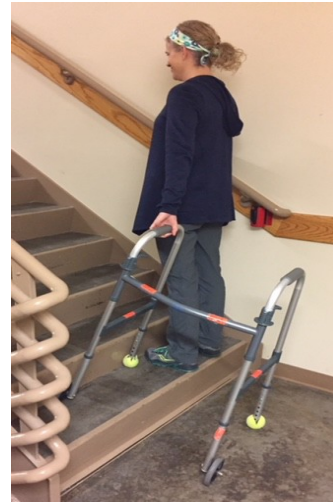
Put two legs of the walker on the first step.

Step up with your good leg.

Lift your sore/weak leg to the same step.

Repeat, going up each step starting with the walker, strong leg, then weak leg.

Remember: Up with the good leg first.



Going Down Stairs:

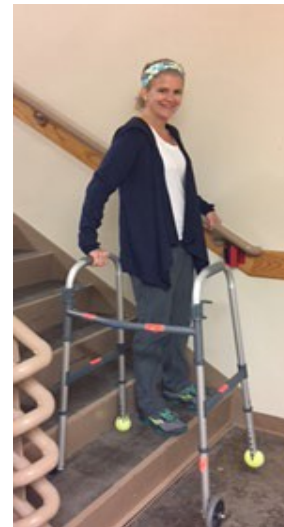
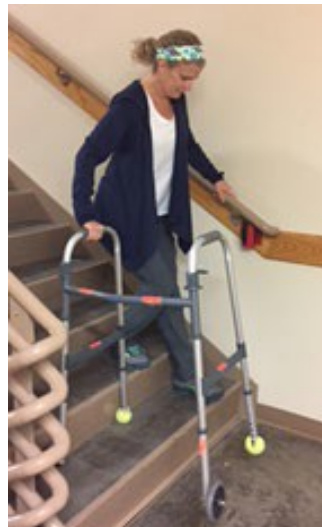
Turn the walker sideways so the opening is towards your body.

Hold the highest walker handle with one hand and the rail in the other hand.

Lower two legs of the walker onto the step below you. The other two legs will be in the air. Step down with your weak/sore leg. Step down with your strong/good leg.

Repeat, going down each step starting with the walker, weak leg, then strong leg.

Remember: Down with the sore/weak leg first.



CAR TRANSFERS

Be sure the car is parked several feet away from the curb and on a level surface to ensure that you are on the same level as the car for the transfer. Position the front seat as far as possible from the dashboard and semi-reclined if possible. It is recommended that you use the front passenger seat when riding in the vehicle.

STEP 1



Back up to the car until you feel the car with the back of your legs.

STEP 2



Lower yourself to the seat, holding on to a stable surface. Slide your bottom back on the seat as far as you can.

STEP 3



Bring your legs into the car one at a time.

If your destination is more than one hour away, plan on stopping approximately every hour and getting out of the car to take a 5-10 minute walk.

Activity Guidelines for Home Following Knee Surgery

Exercise / Activity Frequency

- Stay active! Early mobility reduces the chance of complications following surgery and promotes better outcomes.
- Walk every other hour during the day. Start with at least 3 minute walks and increase your time as tolerated, working on a normal walking pattern.
- Do your seated knee stretches every other hour during the day.
- Do your bed exercises 2-3 times per day.
- Do your standing exercises 2-3 times per day.
- Start with 5-10 repetitions of each exercise and gradually increase them until you can do 10-15 repetitions of each.

Swelling Management & Rest Breaks

- It's normal to have fluctuations in swelling in your operative leg. An increase in swelling is likely due to too much time sitting or standing during the day.
- Your pain will likely decrease as your swelling decreases.
- You can help control swelling by elevating your leg, using ice, and doing ankle pumps frequently.
 - Apply cold packs for at least 30 minutes, then off for at least 30 minutes before reapplying.
 - Repeat as frequently as needed to control swelling and pain.
- Vary your position throughout the day, so that your new joint does not get too stiff and sore from being in one position for too long.
- While sitting during the first 2 weeks, it is best to sit with your operated leg propped up and your knee extended.
- Whenever you are not active, lie flat with your leg straight and elevated above your heart. Do not put a pillow under your knee, so your knee is bent. Instead, elevate your whole calf on one or more pillows.

- Sleeping in a recliner at night is not recommended due to your operative site being below heart level.
- If you have persistent or increasing swelling that does not resolve with icing and elevation, or is accompanied by an increase in redness, fever, or a change in wound drainage; call your doctor.

Using Your Walker, Crutches or Cane

- Use an assistive device for at least 2 weeks after surgery.
- You will not damage your knee replacement by putting weight on the leg. You may place as much weight on the operated leg as your pain, strength, and balance will allow.
- You should use your walker or crutches until you can put full weight on your surgical leg and walk without a limp.
- When progressing to use of a cane or single crutch, use it on the opposite side of your surgical leg.
- Don't rush this process. Make sure you have a nice fluid walking pattern. Watch yourself walk in a full-length mirror or have someone watch you to ensure that you are not limping.



Example: Daily Activity Flow Sheet Following Knee Surgery

Date: Tuesday, April 5th						
Time	Ankle Pumps hourly	Bed Exercises 2-3 times each day	Standing Exercises 2-3 times each day	Walking every other hour	Knee Stretches every other hour	Rest, Ice and Elevate between exercise sessions
08:00 am	√	X10		3 minutes	√	
	√					√
10:00 am	√			3 minutes	√	
	√					√
12:00 pm	√		X10	4 minutes	√	
	√					√
2:00 pm	√			3 minutes	√	
	√					√
4:00 pm	√	X10		5 minutes	√	
	√					√
6:00 pm	√			3 minutes	√	
	√					√
8:00 pm	√		X10	3 minutes	√	

Bowel Movement: √

Time/Pain Medication: 07:00 am med name (2 tabs), 11:00 am med name (2 tabs)
3:00 pm med name (1 tab) 7:30 pm med name (2 tabs) 11:30pm med name (1 tab)

Constipation caused by narcotic pain medications (opioids)

Narcotic pain medicines (morphine, hydrocodone, oxycodone, hydromorphone, codeine) cause constipation in most people. These medicines slow down the movement of the stool through the intestine. If you have hard stools, have difficulty passing bowel movements or your bowel movements become infrequent, then you have constipation.

Not drinking enough fluids or not having enough fiber in your diet may contribute to constipation. Poor bowel habits, not getting enough exercise, and certain medicines and diseases also may cause constipation.

Constipation can be treated with lifestyle changes, diet changes, and certain medicines.

While you are taking narcotics, you will most likely need to take a laxative or a stool softener on a regular schedule to avoid constipation. Check with your doctor about over-the-counter products.

You can buy the following medicines for constipation without a prescription:

- Stool softeners (docusate (Colace®, Dok-Q-Lax®)) make the stool softer and easier to pass. People taking narcotics often need to take a laxative as well.
- Laxatives help empty the bowel. Follow the directions on the label.
 - Senna (Senokot®, Senokot-S®)
 - Bisacodyl (Dulcolax®) caplets or suppositories
 - Miralax
 - Milk of Magnesia

Other things that help prevent constipation:

- Constipation is usually improved by drinking more water and other liquids. You should drink at least six to eight (8-ounce) cups of water each day, unless your caregiver tells you otherwise. Other healthy liquids should be consumed in addition to this amount. Certain juices, such as prune juice may also decrease constipation. Fluids help your body process fiber without discomfort.
- Fiber is the part of fruits, vegetables, and grains that is not broken down by your body. A high fiber diet will add bulk and softness to your bowel movements. Your diet should include fresh fruits and vegetables, whole grain bread products, cereals with fiber, and beans. Fiber should be added into your diet slowly over time. Ask your caregiver for more information about a diet high in fiber.
- Exercising and walking can also help. When you are able to, walking, swimming, and riding a bicycle are all good exercises to do. When you exercise, you will also need to increase how much fluid you drink.

CONTACT YOUR DOCTOR OR CAREGIVER IF:

- Your constipation is getting worse.
- You have fever and abdominal pain with the constipation.
- You have bright red blood in your bowel movements.
- You are vomiting.



HIGH FIBER DIET

Postoperative narcotics and anesthesia can occasionally lead to stomach upset and constipation. Narcotics can cause the natural functions of the digestive system to slow, leading to constipation. If you are on postoperative narcotics, a diet rich in fiber will help keep your digestive system working and prevent constipation issues.

Tips for Adding Fiber to Your Diet

- Slowly increase the amount of fiber you eat to 25 to 35 grams per day. Start 1-2 weeks prior to surgery. Read food labels or use the chart below to check fiber content of foods.
- Drink plenty of fluids. Set a goal of at least 8 cups per day. You may need to drink even more if you are eating higher amounts of fiber. Fluid helps your body process fiber without discomfort.
- Eat whole grain breads and cereals. Look for choices with 100% whole wheat, rye, oats, or bran as the first or second ingredient.
- Have brown or wild rice instead of white rice or potatoes.
- Enjoy a variety of grains. Good choices include barley, oats, farro, kamut, and quinoa.
- Bake with whole wheat flour. You can use it to replace some white or all-purpose flour in recipes.
- Enjoy baked beans more often. Add dried beans and peas to casseroles or soups.
- Choose fresh fruit and vegetables instead of juices.
- Eat fruits and vegetables with peels or skins on.
- Compare food labels of similar foods to find higher-fiber choices.
- If you are taking calcium or iron supplements check with your doctor. You may be able to take smaller amounts several times a day, as fiber can bind with calcium and iron, reducing the amount available to your body.

Foods with at Least 4 g Fiber per Serving

Food Group	Choose
Grains	⅓ – ½ cup high-fiber cereals. Check labels and choose products with 4 or more grams (g) of dietary fiber per serving
Dried beans and peas	½ cup cooked red beans, kidney beans, lima beans, navy beans, pinto beans, white beans, lentils, or black-eyed peas
Vegetables	1 artichoke (cooked)
Fruits	½ cup blackberries or raspberries 4 prunes (dried) ½ avocado

Foods with 1 to 3 g Fiber per Serving

Food Group	Choose
Grains	1 whole grain bagel (3.5-inch diameter) 1 slice whole wheat, cracked wheat, pumpernickel, rye, or corn bread 4 whole wheat crackers 1 bran, blueberry, cornmeal, or English muffin ½ cup cereal with 1-3 grams fiber per serving 2 tablespoons bran, rice, or wheat cereal 2 tablespoons wheat germ or whole wheat flour
Vegetables	½ cup bean sprouts (raw) ½ cup beets (diced, canned) ½ cup broccoli, Brussels sprouts, or cabbage (cooked) ½ cup carrots, cauliflower, corn, eggplant, okra (boiled) ½ cup potatoes (baked or mashed) ½ cup spinach, kale, or turnip greens (cooked) ½ cup squash—winter, summer, or zucchini (cooked) ½ cup sweet potatoes or yams ½ cup tomatoes (canned)
Fruits	1 apple (3-inch diameter) or ½ cup applesauce ½ cup apricots (canned) 1 banana ½ cup cherries (canned or fresh) ½ cup cranberries (fresh) 3 dates (whole) 2 medium figs (fresh) ½ cup fruit cocktail (canned) ½ grapefruit 1 kiwi fruit 1 orange (2½-inch diameter) 1 peach (fresh) or ½ cup peaches (canned) 1 pear (fresh) or ½ cup pears (canned) 1 plum (2-inch diameter) ¼ cup raisins ½ cup strawberries (fresh) 1 tangerine
Other	2 tablespoons almonds or peanuts 1 cup popcorn (popped) 1 tablespoon chia seeds or flax seeds

Sample Menu

Meal	Food Choices	Dietary Fiber
Breakfast	½ cup Total Raisin Bran with 1 cup skim milk ½ cup orange juice with pulp 1 cup coffee	2.5 grams 0.3 gram
Lunch	1½ cups chili made with ½ cup kidney beans per serving and topped with 2 tablespoons shredded cheese 8 wheat crackers 1 fresh apple (with skin) 2 cups water or sugar-free lemonade	9 grams 0.7 gram 2.5 grams
Snack	8 oz yogurt 2 cups water	
Dinner	2 cups mixed fresh vegetables, with 2 ounces sliced chicken 1 cup brown rice ½ cup fresh raspberries, blueberries, and sliced bananas 1 cup hot tea	6 grams 3.5 grams 3.5 grams
Snack	2 tablespoons almonds 1 cup hot chocolate	3 grams
Total Fiber: 31 grams		

Discharge Instructions

Infection prevention:

Check your incision with dressing changes. Call the doctor if you notice any redness, bleeding, drainage or foul odor. If you feel you have a fever, check your temperature. If it is above 100.5 degrees and you are having chills, call your doctor.

Swelling:

You may notice some swelling and warmth of the leg after you get home. This is normal and may last several weeks. Whenever you are not active, lie flat with your leg straight and elevated above your heart. Elevate your whole calf on one or more pillows. Vary your position throughout the day, so that your new joint does not get stiff and sore from being in one position too long.

Surgical Stockings:

You may be expected to wear these stockings for up to 4-8 weeks after surgery. DO NOT stop wearing them unless your doctor says it's OK. Your doctor will give you further instructions at your follow up appointment. These stockings help prevent blood clots from forming in your lower legs. Take them off only when you shower and then put on a clean pair. Ensure there are no wrinkles or bunching after applying them. You should have two pairs of stockings, one to wear while the other is being washed. Hand wash stockings in warm water with mild soap, rinse thoroughly and hang to dry. Call the doctor if you have tenderness, redness or pain in the calf of either leg. Do not wait to see if these symptoms resolve. Contact a health care provider right away.

Wound Dressing Changes:

Your nurse will explain how often to change your surgical dressing. Patients using an Aquacel or Optifoam dressing will be permitted to shower 2 days after surgery. When changing the dressing, carefully remove the old dressing and dispose. Examine your incision for signs of infection, such as redness, thick yellow or green tinged drainage, surrounding skin being warm to the touch, or excessive swelling. Do not touch the incision site or use any products or ointments on or near the wound. Peel away the dressing backing while avoiding to touch the non-stick portion of the dressing (the portion that will cover the incision). Place the non-stick portion of the dressing over your incision. Ensure you have a good seal by pressing firmly around the edge of the dressing. A good seal is essential for the dressing to remain water proof. Other types of dressings may require that you cover them with plastic wrap before showering. If you are changing the dressing on the same day you are showering, shower with the old dressing in place and perform the dressing change afterwards. Always ensure that the surrounding skin is dry before replacing the dressing.

Diet:

After surgery you may not have much appetite. You need higher levels of protein than you normally would as well as other nutrients to help you heal better. Consider adding an extra protein beverage at least once a day to give you that extra boost and allow you to recover faster. There are many brands on the market. Choose one that is palatable to you and take at least one a day. If you find that you are unable eat, add an extra protein beverage for any meal that you miss. Eat a healthy balanced diet with lots of protein (meat, eggs, cheese, dry beans, and tofu) and fruits and vegetables. Increased fiber from fruits, vegetables and grains will help prevent constipation if you are taking pain medication during your recovery.

Precaution:

If you have any kind of infection (bladder, ear, tooth abscess) call your doctor for appropriate antibiotics. If you need any invasive procedure during the rest of your life, call your doctor for appropriate antibiotics prior to this procedure. The Academy for Orthopedic Surgeons currently does not recommend the use of antibiotics prior to a dental visit or dental surgery.



From day one.

DVT Prevention

One of the major risks facing patients who undergo hip or knee replacement surgery is a complication called deep vein thrombosis (DVT). DVT refers to the formation of a blood clot in deep veins of the calf or thigh. This can have two serious consequences:

1. The clot can partially or completely block the flow of blood through the vein. This causes blood to pool in the leg below the clot. Swelling and pain may develop.
2. If part or the entire clot breaks free and travels through the vein it can reach the lungs causing a pulmonary embolus (PE). This can quickly become life threatening if it is not treated immediately.

Both of these conditions can be without symptoms and difficult to detect. The symptoms of DVT may include swelling and pain in the leg, and possibly redness where the clot is developing. If you have any of these symptoms, you need to notify your provider. If the clot breaks free and travels to the lungs there may be shortness of breath and chest pain.

You should call 911 or go to the ER if these symptoms develop.

Prevention of DVT and PE happens in 3 parts.

1. Early mobilization. It's important to be up and moving soon after surgery and frequently thereafter. We encourage people to be out of bed the day of surgery after the anesthesia has worn off. Please call the nurse and wait for her/him before you get up. You will have physical therapy at least twice a day. You may be up to the bathroom or a chair for meals with assistance. The simplest exercise is to pump your ankles up and down 20 or more times every hour.

2. Mechanical devices, such as sequential compression devices (SCDs) or foot pumps can help prevent DVT but are not a substitute for ankle pumps. These devices increase blood circulation in your legs. TED hose are the tight-fitting white stockings that help prevent swelling and aid in improving blood flow.
3. Blood thinning medications (anticoagulants) are used to prevent blood from clotting as well. Every medication has potential side effects. One of the side effects of these medications is that they can cause bleeding. You need to be cautious with razors, use a soft toothbrush and avoid physical activities that might cause injury such as use of power tools. Call your care provider immediately if you experience excessive bruising, nose bleeds, bleeding from gums, tarry stools, blood in urine, fainting or dizziness. **It is very important that you pick up this medication before you get home. If you are unable to pick it up, call your doctor as soon as possible.**



Discharge Instructions

Pain Control

Being prepared to manage your pain before you get home is an essential part of your discharge process. During your hospitalization it is likely that you have been given multiple medications to control your pain. The following is a guide to help you transition your pain control regimen to a home environment. Your pain regimen is specific to your type of surgery or medical condition therefore some of the following paragraphs may not apply to you. Please consult your physician, pharmacist or nurse if you have any questions regarding your condition and how it applies to the information provided.

Opioids:

Brand Name	Generic Name
Norco/Lortab/Vicodin	Hydrocodone/acetaminophen
Percocet	Oxycodone/acetaminophen
Oxy IR	Oxycodone
Dilaudid	Hydromorphone
Morphine Sulfate IR	Morphine
Ultram	Tramadol

Most patients will require an opioid pain medication to control their post-operative pain. These medications should be utilized for moderate to severe pain. Most of these medications can be taken every 3-6 hours as needed for pain. Be sure to check the directions provided with your medication (typically these are printed on your pill bottle) to ensure that you are taking it appropriately. It is advised that you keep a log of when you take your medications to avoid an accidental overdose. As you recover from your surgery you should find that you need less and less of these medications to keep your pain controlled. Opioids can be dangerous when used in amounts greater than prescribed and may cause significant side effects such as; nausea, itching, drowsiness, and/or constipation. As such these should be the first pain medications to be discontinued as your recovery progresses. Opioids should not be suddenly stopped and it is recommended that you taper yourself off your opioids over the course of your recovery as opposed to stopping "cold turkey". Tapering will be covered more in depth in a later section. It is recommended that you take a laxative stool softener such as Senokot-S (senna/docusate) as long as you are taking opioids in order to maintain regular bowel movements. If you go longer than 48 hours between bowel movements you may try utilizing a dose of Miralax every 2 hours until you have a bowel movement. If this is unsuccessful you should notify your provider.

Anti-inflammatories (NSAIDs):

Brand Name	Generic Name
Advil/Motrin	Ibuprofen
Aleve/Naprosyn	Naproxen
Celebrex	Celecoxib
Mobic	Meloxicam
Voltaren	Diclofenac
Lodine	Etodolac
Toradol	Ketorolac
Indocin	Indomethacin

Most patients will be placed on an anti-inflammatory medication following their surgery. These medications help decrease inflammation and treat “deep boney” pain. Several of these medications are available over the counter such as Advil (ibuprofen) and Aleve (naproxen); others are prescription only. Side effects of these medications include stomach upset and dizziness. These medications may cause “thinning of the blood” and should be used with caution when taking a blood thinner like warfarin or lovenox. Notify your physician if you are taking a blood thinner before taking an anti-inflammatory. Check that you are not taking any prescription anti-inflammatories before taking over the counter ones. Typically these medications are taken on a scheduled basis until patients no longer need opioids; they can then begin to use the anti-inflammatory medication on an as needed basis. Sometimes anti-inflammatories should not be taken following a surgical procedure (such as spinal fusions). Please check with your surgeon before taking an anti-inflammatory after your surgery.

Acetaminophen (Tylenol):

Acetaminophen is often used with opioids and anti-inflammatory medications. It is usually taken on a scheduled basis until opioids are no longer needed, at which time it can be taken as needed. Some opioids are combination products and contain acetaminophen; in which case additional acetaminophen should not be used. Liver damage can occur if more than the recommended daily dose is used. Patients with pre-existing liver disease or those who consume large quantities of alcohol may be at increased risk.

Muscle Relaxants:

Patients are often sent home with a muscle relaxant such as Robaxin (methocarbamol). These medications are used for muscle spasms or cramping and are usually taken on an as needed basis. Side effects can include drowsiness, dizziness and lightheadedness. These medications are usually not needed once opioids have been discontinued.

Tapering off your Medications:

During your hospital stay you may have found it necessary to take your opioid pain medications every 3-4 hours in order to stay on top of your pain. As your body heals the pain will decrease and you will find that it is no longer necessary to take your pain medications as regularly. Begin decreasing how often you take your pain medication; for example if you were taking your pain medication every 3-4 hours, try taking it every 4-6 hours. After you are able to manage your pain on this interval you can then start taking them every 6-8 hours; finally once your pain is managed at this level you should begin to only use the pain medication as needed for activities. If you are having trouble taking the pain medication further apart you can try decreasing your dose first. For example if you were taking two tablets at a time try taking only one. This process generally happens over 7-10 days following your discharge; however it may require more or less time depending on your surgery and pain tolerance. Most patients should be opioid free by 6 weeks following their surgery.



Medication Administration Log

Medication: _____

Dosage: _____

AM

TIME

PM

Date	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
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Enter the number of tablets taken into the corresponding date and time slot. Utilize a separate log sheet for each type of medication utilized.



Selected Food-Drug Interactions

Commonly prescribed medications after surgery with food-drug interactions:

NSAID: (non-steroidal anti-inflammatory drugs) used for pain relief

- Should be taken with food to minimize stomach upset and enhance effectiveness.
- Common NSAIDs include aspirin, ibuprofen (Motrin), naproxen (Aleve), celecoxib (Celebrex), indomethacin (Indocin), nabumetone (Relafen), piroxicam (Feldene), meloxicam (Mobic).
- Enteric coated aspirin tablets may be taken without regard to food.
- Acetaminophen (Tylenol) is not an NSAID and may be taken without regard to food.

Opioid Painkillers

- These may cause stomach upset or nausea if taken on an empty stomach.
- Common opioids: codeine, hydrocodone (Lortab, Norco), hydromorphone (Dilaudid), methadone, morphine, oxycodone (Percocet).
- Tramadol (Ultram, Ultracet) is an opioid-like pain killer.

Coumadin (warfarin): anticoagulant, blood thinner

- Try to eat a normal, balanced diet.
- Avoid eating too much food high in vitamin K content such as bacon, beef liver, green leafy vegetables, or herbals containing vitamin K. Do not take fish oil/Omega 3 supplements or glucosamine with this medication.

Iron Supplements: (ferrous sulfate, Niferex, and others)

- Take with food to avoid stomach upset.

Reglan: (metoclopramide) anti-nauseant for stomach upset

- Take 30 minutes before meals for best effect.

Antibiotics:

- Common antibiotics: ciprofloxacin (Cipro), levofloxacin (Levaquin), doxycycline
- Do not take within one hour of dairy products, antacids, calcium supplements, minerals and iron products.
- Dicloxacillin, penicillin tablets: take 30 minutes before meals for best effect.

Calcium supplements:

- If taking more than 600 mg per day, take in divided doses.
- Do not take with a high fiber meal or fiber supplement.
- Take at least two hours before or after iron supplements.

Fish oil/Omega 3 supplements:

- Can interact with blood thinners. Don't take with Coumadin (warfarin), enoxaparin (Lovenox) without checking with your doctor first. May cause bruising and bleeding.

Glucosamine:

- Can interact with Coumadin. Do not take both without checking with your doctor first. May cause bruising and bleeding.

If you have questions about other medications or herbal supplements, please ask to speak to a pharmacist.