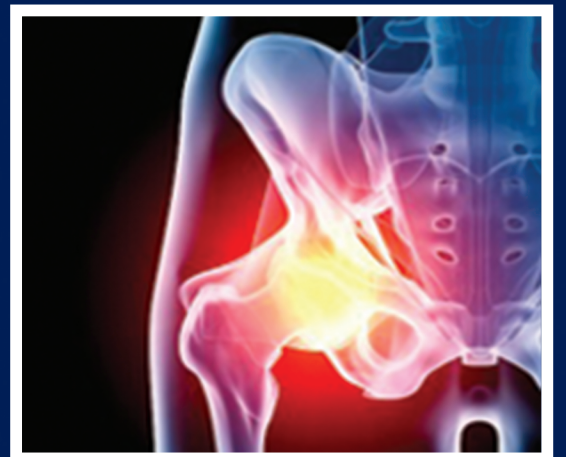
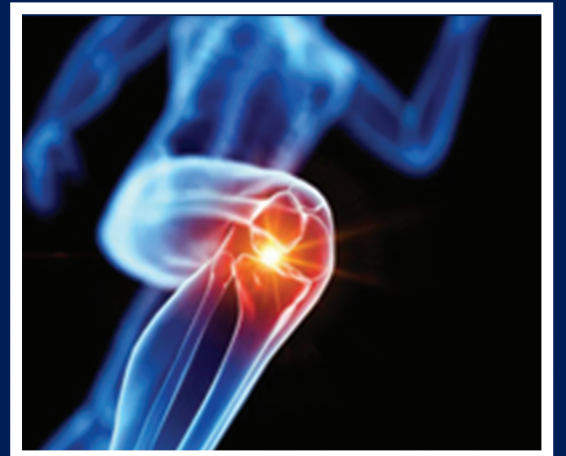


OUTPATIENT TOTAL HIP & KNEE GUIDEBOOK

A step-by-step guide



ORTHOPEDIC SURGEONS AND PRE-SURGERY OFFICES

<p>FROEDTERT SOUTH ORTHOPEDIC AND SPINE CLINIC OFFICE OF DR. ALSAWAF, DR. BEN-ZEV, DR. GEGENHEIMER, AND DR. ZACHARIAS</p>	<p>(262) 656-3590</p>
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REHABILITATION SERVICES AND LOCATIONS

<p>FROEDTERT KENOSHA CENTER SOUTH CLINIC PHYSICAL THERAPY 6308 8TH AVENUE, 2ND FLOOR KENOSHA, WI 53143</p>	<p>(262) 656-3270</p>
<p>SOMERS CLINIC PHYSICAL AND ACQUATIC THERAPY 3400 MARKET LANE, SUITE 100 SOMERS, WI 53144</p>	<p>(262) 551-4700</p>
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WELCOME

Preparing yourself to undergo a total joint replacement can feel overwhelming. It is a major life decision. Understand that you are not alone. Joint replacement is a team effort that involves not only your surgeon, but also the office team, operation room and hospital staff, your primary doctor, also family and friends all working together to make this a positive experience for you.

Your orthopedic surgeon is passionate about helping patients get their mobility back and to live a more active, pain-free life after injury, arthritis, or joint disease has taken this from you.

Once medications, exercise, activity modification and assistive devices can no longer provide you with meaningful relief, total joint replacement is an option to improve your pain and function.

To ensure you have the best possible outcome and fastest recovery, we ask that you prepare yourself mentally and physically for surgery. What your surgeon does in the operating room is only a part of what makes for a successful joint replacement. We will schedule your surgery with plenty of time for you to fully prepare yourself, your support system, and your home. This book includes information on what to do leading up to surgery as well as after to ensure your journey is a success. Please read it carefully and refer to it as often as you need. If you have any questions, never hesitate to reach out. We are all in this together.

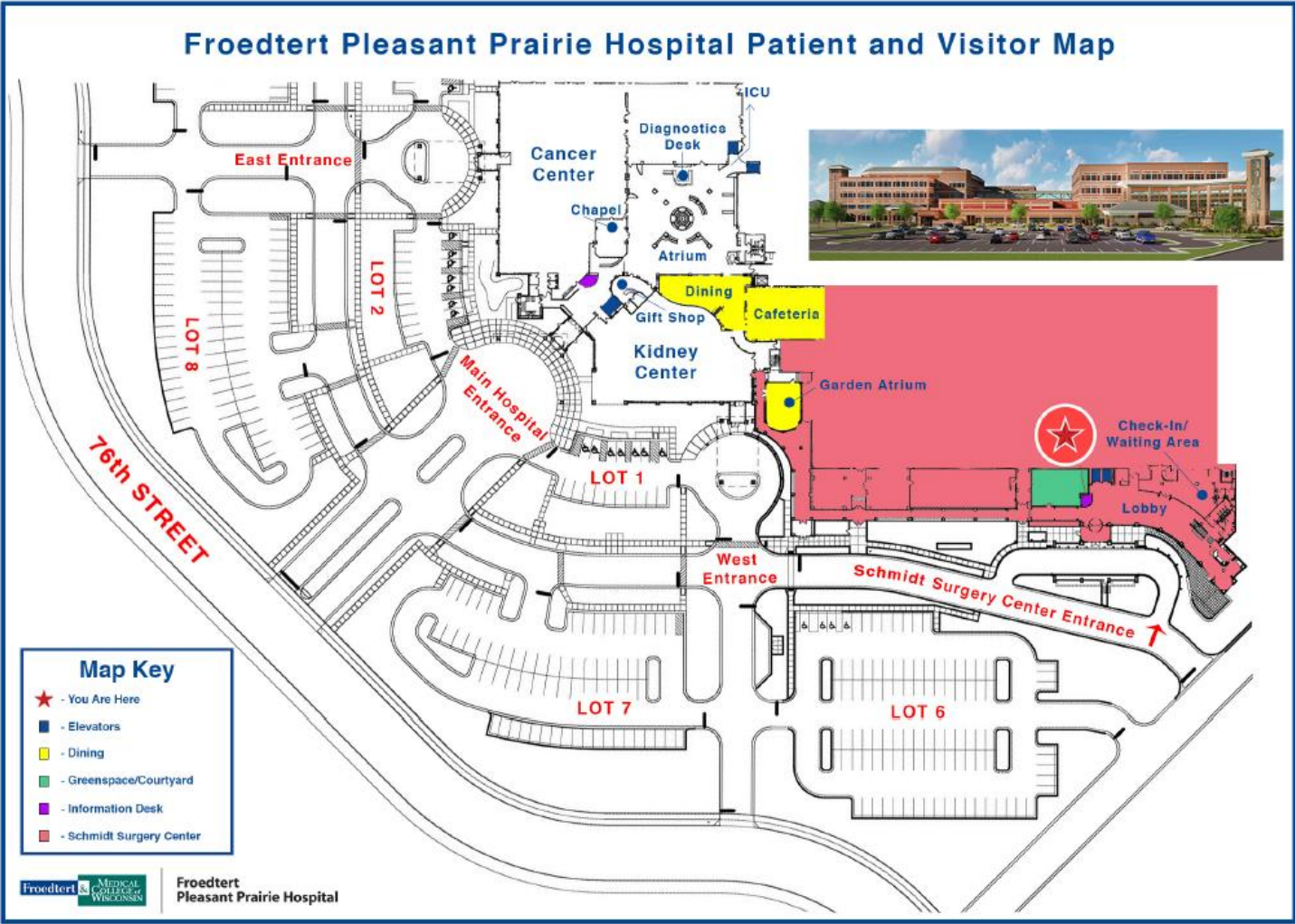
WHAT HAPPENS NEXT?

Preoperative preparation after for your surgery has begun. You may be contacted by various providers to help you get ready for surgery. The number and type of appointments you have will depend on your medical history, the type of surgery you are having, surgeon preference and other factors. A few of the typical preoperative appointments include:

- A preoperative education class for you and your care partner
- Appointments with your primary care physician (PCP), or in some cases a cardiologist or other specialist for medical clearance
- A preoperative physical & occupational therapy evaluation

Preoperative testing appointment(s), which include specific tests and lab work your doctor will order.

MAP AND DIRECTIONS FOR THE DAY OF SURGERY



Froedtert Pleasant Prairie Hospital

Address: 9555 76th Street
Pleasant Prairie, WI 53158

PHONE: (262) 577-8000

BEFORE SURGERY CHECKLIST

- ARRANGE HELP AT HOME:** You will need help at home in the early days after your surgery. It is **VERY IMPORTANT** that you arrange for a family member, friend, or caretaker to spend the first several days/nights with you. Nearly all patients go home on the day of surgery or the day after.
 - We do NOT recommend going to a rehab facility
 - Studies have shown that patients do better at HOME after joint replacement
 - Studies have shown more complications and worse outcomes with rehab placement
- ARRANGE TRANSPORTATION:** You will need help getting home from the hospital after your surgery. You may also need help getting to outpatient physical therapy which starts within 3 days of your surgery. It is **VERY IMPORTANT** that you arrange for a family member, friend, or caretaker to help you get home and to and from therapy.
- PREPARE YOUR HOME:** Make sure you have a sturdy, comfortable armchair and put frequently used items within easy reach. Remove rugs, cords, and clutter, also known as tripping hazards, from your walking paths around your home. You may want to consider preparing meals ahead of time as well.
- MEDICAL CLEARANCE:** You need to see your primary care physician **BEFORE** surgery. This is time sensitive.
 - No more than 30 days before surgery
 - No less than 7 days before surgeryMost patients schedule their appointment for 2 weeks before surgery.
- CARDIAC or SPECIALIST CLEARANCE:** If you have been told that you need to be cleared by someone other than your primary care physician, call them to make this appointment as soon as possible. Most specialist clearance notes are good for 6 months.
- DENTAL CLEARANCE:** You should see your dentist for a full exam before surgery. This can be done within 6 months before your surgery.
 - All dental cavities and dental infections must be treated before surgery
 - Gum and dental infections can cause infection in artificial joints
 - After your joint replacement you will need to take precautions before dental cleanings. More information about this is in the postoperative section of this book.
- PRE-OPERATIVE CLASS:** All patients undergoing total joint replacement **MUST** attend class. The clinic team will help coordinate getting this scheduled. The only exception to this is if you have attended class in the past 2 years.
- PRE-OPERATIVE PT/ OT Visit:** All patients undergoing total joint replacement **MUST** attend a one-time evaluation with both a physical and an occupational therapist. You should expect a call from a scheduler to get this visit and all post op therapy scheduled soon after electing to have surgery. The only exception to this is if you had a joint replaced within the past 2 years and completed these visits previously or if currently working with a therapist at Froedtert South.

Continues on next page

- SKIN HEALTH:** Skin lesions, rashes, cuts, or scabs on the same leg as surgery can cause infection. Use caution and avoid injury in the weeks leading up to surgery. Do not shave any areas of your body from the neck down within 2 days of surgery. If you have concerns, call your surgeons office.
- BATHING BEFORE SURGERY:** You will be given special instructions to shower and cleanse your skin before surgery to help decrease the risk of infection to your new joint.
- WHEN TO STOP EATING AND DRINKING:** It is important that your stomach is empty before surgery to prevent complications. To ensure your safety please follow these instructions:
 - DO NOT EAT anything 8 hours prior to surgery arrival
 - CONTINUE to DRINK clear liquids, STOPPING 2 hours prior to surgery arrival.
 - If you receive 2 bottles of PRE-SURGERY ENSURE, you should drink 1 bottle the evening before surgery, 1 bottle the morning of surgery – finishing 1 hour prior to surgery arrival. *This last drink will break the clear liquid instructions but has been okayed by your anesthesiologist.
- IF YOU HAVE SLEEP APNEA:** Bring your home sleep apnea machine with you to the hospital and tell your anesthesiologist about our sleep apnea.
- INSURANCE AUTHORIZATION:** Your surgeon’s office will contact your insurance carrier to get the authorization for your surgery. You will be contacted if there is a denial – No news is good news. Please feel free to contact your insurance provider to verify the authorization has been completed.
- ARRIVAL TIMES FOR SURGERY:** You will be given a TENTATIVE time to arrive for surgery in your orthopedic surgeon’s office. This is subject to change. You will be called the business day before surgery from a preadmission nurse with the FINALIZED arrival time. It is important to be on time, late arrivals can delay surgery for you as well as other patients.
- WHAT TO BRING TO THE HOSPITAL:** (see page 14)
 - BRING a photo ID and Insurance card
 - BRING a copy of Advance Medical Directives (if you have one)
 - BRING your walker or crutches to the hospital if planning same-day discharge home. If unsure leave in the car and your support person can bring it in if needed.
 - BRING this guidebook
 - If you have sleep apnea BRING your CPAP/BIPAP machine
 - Dress appropriately:
 - Loose-fitting pants, with elastic waist band
 - Shoes with a non-skid sole, that you can easily put on, keeping in mind that swelling may be present
 - ⊗ Please leave jewelry, valuables, and large amounts of money at home

PREPARING FOR A SPEEDY RECOVERY:

PREVENTING COMPLICATIONS

Preventing Complications: Following these steps will promote healing and help prevent:

- Infections
- Blood Clots
- Pneumonia
- Post-Operative Nausea & Vomiting
- Heart Issues

Exercise: (Start Now)

Engage in physical activity at least two times a day beginning at least 7 days before surgery. The stronger you are before surgery, the faster you will recover. ALWAYS speak to your primary care physician before starting a new exercise program. Including daily walks can improve your stamina and help with recovery after joint replacement.

Prior to surgery it is important to see a physical therapist and occupational therapist at one of our designated clinics. (A therapy representative will contact you weeks before surgery to set this up)

- There are 13 exercises located in this guidebook that your surgeon may instruct you to start doing and continue until your surgery. Take 15 to 20 minutes - twice a day - to do your exercises. Perform exercises on both legs. If any of the exercises are too painful to perform, do not continue to do them.
- It is also important to strengthen your entire body, not just your legs, before surgery. Strengthen your arms by doing chair push-ups because you will be relying on your arms when walking with a walker or crutches, getting in/out of bed and chairs, and on/off the toilet. Perform light endurance activities for your heart and lungs – walking for 10 to 15 minutes each day.
- Call and schedule your post-operative therapy at a location close to your home no more than 3 days out from your surgery date. Calling ahead of time will ensure you get a time that works well for you and your ride.

*If you are planning in home therapy, this will be set up by the hospital social worker prior to discharge home.

Breathing Exercises: (7 days Before Surgery)

Practice deep breathing exercises three times a day, beginning at least 7 days before surgery.

Stop Smoking:

It is not safe to undergo joint replacement surgery if you smoke. Smoking increases your risk of serious medical complications and infection. Your surgeon may order a urine nicotine test prior to surgery. This will be discussed with you in the office.

ATTEND EDUCATION CLASS

**Attend a class for joint surgery patients. Bring your Care Partner.
If you cannot attend, inform the care team.**

Preoperative education class helps you and your care partner prepare for your upcoming surgery and postoperative needs. The class provides an understanding of what will happen before, during and after surgery, provides an opportunity to meet the staff that will be caring for you, and allows an opportunity for questions and answers. It is important all patients and their care partner attend a class 2-3 weeks prior to surgery.

Class Outline:

- Learn about joint disease.
- Meet your care team.
- Find out what to expect from your Care Partner/Caregiver.
- Learn breathing exercises.
- Review preoperative exercises.
- Learn about assistive devices and joint protection.
- Understand discharge planning, insurance, and equipment.
- Complete your preoperative forms.

ATTEND PRE-OP THERAPY EVALUATION

All patients undergoing total joint replacement **MUST** attend a one-time evaluation with both a physical and an occupational therapist. You should expect a call from a scheduler to get this visit and all post op therapy visits scheduled soon after electing to have surgery. The only exception to this is if you had a joint replaced within the past 2 years and completed these visits previously or if currently working with a therapist at Froedtert South

Session Outline:

- Obtain information on current home set up and level of function
- Learn about assistive devices and adaptive equipment
- Stair training
- Tub transfer training
- Review exercises
- Learn about precautions
- Opportunity to ask questions

PREPARE YOUR HOME

Make sure everything you need is easy to get to and on the same floor where you will spend most of your time.

- Use a bed that is low enough so that your feet touch the floor when you sit on the edge of the bed.
- Obtain a portable commode or have a bathroom on the same floor where you will spend most of your day.
- Stock up on canned or frozen food, toilet paper, shampoo, and other personal items.
- Buy or make single meals that can be frozen and reheated.
- Make sure you can reach everything you need without getting on your tiptoes or bending down low.
- Put food and other supplies in a cupboard that is between your waist and shoulder level.
- Place glasses, teapot, and other items you use a lot on the kitchen counter.
- Place a chair with a firm back and arm rests in the kitchen, bedroom, bathroom, and other rooms you will use. This way, you can sit when you do your daily tasks.
- Attach a sturdy bag or a small basket to your walker to hold your phone, a notepad, a pen, and any other things you will need to have close by.



Avoiding Falls

Reduce tripping hazards in your home.

- Remove loose wires or cords from areas you walk through to get from one room to another.
- Make a path wide enough for a walker to fit through.
- Pick up throw rugs and tack down loose carpeting.
- Cover slippery surfaces with carpets, be sure they are firmly attached to the floor or have non-skid backs.
- Fix any uneven flooring in doorways. Use good lighting.
- Have night lights placed in hallways and rooms that can be dark.

Pets that are small or move around may cause you to trip. For the first few weeks you are home, consider having your pet stay elsewhere (with a friend, in a kennel, or in the yard).

*After surgery, DO NOT carry anything when you are walking around. You may need your hands to help you balance or to hold onto your walker.

Bathroom Set-up

Raising the toilet seat height will keep you from flexing your new joint too much. You can do this by adding a seat cover, elevated toilet seat or a toilet safety frame. You can also use a commode chair instead of a toilet.

You may need to have safety bars in your bathroom. Grab bars should be secured vertically or horizontally to the wall, not diagonally.

- DO NOT use towel racks as grab bars. They cannot support your weight.
- You will need two grab bars. One helps you get in and out of the tub. The other helps you stand from a sitting position.

You can make several changes to protect yourself when you take a bath or shower:

- Put non-slip suction mats or rubber silicone decals in the tub to prevent falls.
- Use a non-skid bath mat outside the tub for firm footing.
- Keep the floor outside the tub or shower dry.
- Place soap and shampoo where you do not need to stand up, reach, or twist.

Sit on a bath or shower chair when taking a shower:

- Make sure it has rubber tips on the bottom.

Buy a seat without arms if it is placed in a bathtub.



HEALTHY EATING

How you treat your body in the weeks before and after surgery can have a direct effect on how well and how quickly you will heal. Now is the time to take a proactive approach and give your body the building blocks it needs for the best possible recovery. A little preparation now can make a big difference in your recuperation later. Don't wait until after surgery to start making changes!

It is best to start optimizing your food choices at least 2 weeks prior to surgery. The longer you eat healthily before surgery, the better you prepare for recovery after surgery.

Water is essential for health and healing. Make it a goal to drink eight (8) glasses of water every day. Limit the amount of caffeinated and sugar filled drinks. Do not drink alcohol before or after surgery without talking to your provider first.

If you are diabetic, you will need to monitor your carbohydrate intake closely to keep your blood sugar normal. High blood sugar levels can cause longer healing time or infection.

IMPORTANT NOTE: Use this section of your book as a guide to healthy eating and to better your nutrition before and after surgery.



Healthy Food Guide

	ANYTIME	SOMETIMES	SELDOM
FRUITS & VEGETABLES 5-9 servings a day Serving size: 1 piece fruit 1 cup fresh vegetable or fruit ½ cup canned fruit/vegetable	All raw, steamed, grilled or roasted fruits & vegetables Avocado/Olives – rich in healthy fats *GREAT FIBER SOURCES	Dried Fruit – without added sugar 100% Fruit juice – ½ cup only	Coconut French Fries Fried vegetables or fruits Fruits packed in heavy syrup
GRAIN GROUP 4 servings a day Serving Size: 1 oz bread or cereal ½ cup rice, pasta 3 cups air popcorn	Whole grain bread, tortillas, cereals, pastas, & crackers Brown rice, bulgar, barley, steel cut oats, air popcorn Wild Rice * GREAT FIBER SOURCES		Sweetened cereals Biscuits, doughnuts, croissants Fried Rice Pasta & Rice in cream sauce Snack crackers and chips Muffins, bagels, cornbread Granola cereals Waffles/ Pancakes Pretzels Cakes/cookies/pies/donuts
DAIRY GROUP 2 servings a day Serving Size: 8oz/ 1 cup milk/ yogurt ½ cup cottage cheese	Skim, 1% milk Nonfat or lite yogurt Fat Free or 1% cottage cheese Greek yogurt (without added sugar) Unsweetened Soy/Rice/Almond milk	2% milk 2% cottage cheese Low fat cheese	Whole milk cream Whole milk yogurt Hard processed cheeses or cream cheese Cheese Whiz or Velveeta Milkshakes, Ice cream, Sherbet
PROTEIN GROUP 2-6 servings a day Serving Size: Varies by protein	Baked/Grilled Fish & Seafood – 6oz Contain omega 3 fats Skinless White Poultry – 4oz Lean Cut Beef/Venison – 3oz Pork Tenderloin – 4oz Eggs& substitutes Beans, lentils, tofu, etc... Nuts/ Seeds – ¼ cup Nut butters – 2 Tbsp	Dark meat Poultry 10 g fat or more Beef, pork, veal, lamb, ham Canadian bacon Jerky Chicken/Turkey Brats	Fried fish or Poultry Processed lunch meats Chicken nuggets Fried Meat Chuck roast Ribs Ground beef (less than 90% lean) Bologna, salami, sausage, bacon, hot dogs Brats
FATS, OILS & SAUCES Serving Size: 1 Tbsp	Vinegar/Oil based salad dressings Nuts/Seeds Avocado Olive Oil	Butter	Coconut oil, lard, shortening, stick margarine, mayonnaise. Regular creamy salad dressing Creamy sauces

Iron and Vitamin C

Iron is needed to build healthy red blood cells. Vitamin C improves the absorption of iron – in other words, Vitamin C makes it easier for the iron to get into the body and work more efficiently.

During surgery, some blood loss is expected. Ample levels of iron and Vitamin C in your body prior to surgery will help in the replacement of red blood cells that are lost during your operation. Your surgeon may even prescribe iron and vitamin C supplements.

Here is a list of iron and Vitamin C rich foods you may want to add to your diet:

High Iron Foods from Animals	High Iron Foods from Plants (best eaten with Vitamin C)	High Vitamin C Foods
Beef	Dried peas/beans/lentils	Oranges
Chicken	Wheat products	Grapefruit
Clams	Bran cereals	Lemon
Eggs	Oat cereals	Lime
Lamb	Rye bread	Strawberries
Turkey	Broccoli	Tomatoes
Veal	Almonds	Cantaloupe
Pork	Dark leafy greens	Kiwi
Liver	Potatoes	Broccoli
Shrimp	Cabbage or Brussels sprouts	Kale
Tuna	Tomato paste	Brussel Sprouts
Sardines	Dates	Red Cabbage
Oysters	Raisins	Cauliflower
Scallops	Prunes and prune juice	White Potatoes
Haddock	Pistachios	Red Peppers

IMPORTANT NOTE: A sudden increase in your diet of green leafy vegetables can interact with certain blood thinning medications such as Coumadin (warfarin). If green leafy foods such as spinach, broccoli and brussel sprouts are a normal part of your diet, it is important to eat a consistent amount from day to day.

Calcium and Vitamin D

Calcium and vitamin D are nutrients associated with healthy bones, so if you have a broken bone, a stress fracture or have had a joint replacement, make sure to get plenty of these nutrients to strengthen your bones as well as any exercises recommended by your physical therapist. Calcium is an important mineral needed for building new bone as well as maintaining existing bone strength. During joint replacement surgery, bone is removed, and an implant is put in its place. Eventually, new bone will grow around parts of the implant and help make it more stable. A diet rich in calcium can help with this process.

Here is a list of calcium rich foods you may want to add to your diet:

High Vitamin D Foods	High Calcium Foods
Cod liver oil	Low fat Yogurt
Salmon	Milk
Swordfish	Cheese and Cottage Cheese
Tuna fish	Fortified Orange Juice
Fortified Orange juice	Collard Greens
Fortified Dairy and plant milk	Spinach
Sardines	Broccoli.
Beef liver	Tofu
Egg yolk	Sardines
Fortified cereals	Black Beans



High Quality Protein (80-100 grams per day)

Protein is in higher demand after surgery to heal wounds, repair broken bones, build healthy blood cells, keep your immune system strong, and support muscle protein growth and strength. Many times, after surgery you have a decreased appetite, so eat small frequent meals that have High quality proteins with each meal or snack.

High Protein Foods
Lean Beef
Chicken/Turkey
Salmon and other fish
Pork
Venison/Buffalo
Milk
Yogurt and Greek Yogurt
Eggs
Cheese and Cottage Cheese
Legumes
Soy and Tofu



Fiber (25-35 grams per day)

Surgery and pain medications that are commonly prescribed with surgery or acute injury can cause constipation. Increasing dietary fiber intake may reduce the risk of this. Prunes or prune juice along with plenty of water have a natural laxative effect.

Sources of fiber include:

- Fresh fruits and vegetables
- High-fiber whole grain cereals, crackers, and breads
- Legumes such as lentils, chickpeas, black beans, etc.

Avoiding Constipation

What is Constipation?

Constipation occurs when a person has three or fewer bowel movements in a week. It may be difficult or painful to pass stool. The stool may be hard and dry, and you may feel full or uncomfortable. Not everyone has a bowel movement every day. Bowel habits vary from person to person. The number of bowel movements you have may depend on what type of food you eat, medication you are taking, how much exercise you get and other factors.

What can I do to help prevent constipation?

- 1) **Eat more fiber:** Fiber helps form soft, bulky stool making it easier to have a bowel movement. Add fiber slowly to your diet to allow your body to get used to it.
- 2) **Exercise:** Walking 20-30 minutes a day can help keep your bowel movements regular.
- 3) **Drink plenty of water and/or fruit and vegetable juice:** This will help keep the stool soft and easy to pass. Avoid caffeine and alcohol as they can dry out our digestive system.
- 4) **Stool softener or Laxatives:** Take stool softener every day while taking prescribed pain medications. Laxatives can be useful for a limited amount of time. They can be addictive when used long-term.

IMPORTANT NOTE: Notify your primary physician if your bowel habits change (such as diarrhea), or if you are unable to pass stool for 4 days after surgery.

DAY OF SURGERY

- Arrive 2 hours before scheduled surgery time
- Enter through the Schmidt Surgery Center Entrance
- Follow the signs to the Surgery Check In/ Waiting Area
- You are allowed water and/or Gatorade for up to 2 hours before arrival to the hospital except for Ensure Pre-Surgery if ordered (finishing 1 hour prior to arrival)



Froedtert Pleasant Prairie Hospital

Address: 9555 76th Street, Pleasant Prairie, WI 53158

Phone: (262) 577-8000

What do I need to bring to the hospital?

- BRING a photo ID and Insurance card
- BRING a copy of Advance Medical Directives (if you have one)
- BRING your walker or crutches to the hospital if planning same-day discharge home. If unsure leave in the car and your support person can bring it in if needed.
- BRING this guidebook
- If you have sleep apnea BRING your CPAP/BIPAP machine
- Dress appropriately:
 - ✓ Loose-fitting pants, with elastic waist band
 - ✓ Shoes with a non-skid sole, that you can easily put on, keeping in mind that swelling may be present

*Remember to label everything that you bring in with your name if possible.

Special Instructions

- **DO NOT** bring personal belongings or valuables that could get lost
- Leave jewelry, valuables, and large amounts of money at home.
- Remove makeup before your procedure.
- Do not use body lotion or essential oils on any areas below your neck.

Preoperative Skin Cleansing Instructions

Preparing or “prepping” skin before surgery can reduce the risk of infection at the surgical site. You will be given specific instructions for using Hibiclens soap or disposable cloths moistened with a rinse-free 2% Chlorhexidine Gluconate antiseptic solution. Your orthopedic office or total joint coordinator will provide you with the information and instructions for using the preferred product recommended by your surgeon.

Special Instructions

- **Do not shave:** anything lower than your face at least 2 days before surgery, this can increase your risk of infection.
- **Do not wear:** powders, perfumes, or lotions before surgery. Applying a small amount of deodorant under your arms is okay.
- **Wear:** freshly cleaned pajamas and sleep on clean sheets the night before surgery
- **Shower:** morning of surgery if instructed to use Hibiclens again. If using disposable cloths, showering the evening before surgery is mandatory and you may shower the morning of surgery if you wish but not mandatory.
- **Wear:** clean comfortable clothing and supportive shoes with a back to the hospital on the day of surgery. Avoid wearing flip flops or crocs!

Enhanced Recovery After Surgery (ERAS)

What is Enhanced Recovery After Surgery (ERAS)?

ERAS protocols are being adopted into total joint replacement centers across the United States. This protocol includes a plan for the patient to consume an electrolyte sports drink or high carbohydrate drink which helps with faster recovery after surgery. Studies have demonstrated many benefits including:

- Improves comfort before and after surgery
- Prevents dehydration
- Prevents post op nausea and vomiting
- Reduces the body’s reaction to surgical stress

Rules for Eating and Drinking Before Surgery

- **STOP EATING:** 8 hours prior to arrival to the hospital, continue drinking clear liquids during this time is encouraged.
- **STOP DRINKING:** clear liquids 2 hours prior to arrival to the hospital
- **YOU MAY DRINK:** an ENSURE carbohydrate drink or sports drink up to one hour prior to arrival to the hospital. (follow the directions on the instruction sheet)

Understanding Anesthesia

The Operating Room (OR) and Post-Anesthesia Care Unit (PACU) are staffed by board certified/ board eligible physician anesthesiologists.

Types of anesthesia

- **General Anesthesia** – produces temporary unconsciousness.
- **Regional Anesthesia** – involves the comfortable injection of a local anesthetic providing loss of sensation, numbness, and pain control. (Examples include spinal blocks and leg blocks)

For most joint replacements, your anesthesiologist will use a regional technique for post-operative pain. This will provide optimal pain control with the fewest side effects. For the surgery itself, you will receive heavy sedation or a general anesthetic so that you will be comfortable throughout the procedure.

Side effects

Your anesthesiologist will discuss the risks and benefits associated with each anesthetic option, as well as complications or side effects that can occur.

You may be given medications to prevent or treat the nausea which sometimes occurs with anesthesia. The amount of discomfort you experience will depend on several factors, especially the type of surgery. Your anesthesiologist and nurses will provide medications to control your pain in the post-operative period.

Ways to Manage Your Pain

Pain control during and after surgery is likely to be one of the most common concerns of joint replacement patients. With today's medications and pain management techniques, you should remain relatively comfortable throughout your recovery.

Your doctor will choose the method right for you based upon your medical history, the amount of pain you are having and your phase of recovery.

Along with your surgeon, anesthesiologist or nurse anesthetist and your nursing staff, you are a key member of your pain management team. Regardless of the pain management protocol being used, it is important for you to communicate with your care team if the pain medication is not sufficient, if you are



feeling nauseous, or if you are not as alert as you feel you should be. Adjustments can be made to make your pain management program as effective as possible.

Prevent the Pain Cycle

Pain has a cycle. It begins and increases until medication interrupts it. The aim of good pain control is to stop pain before it becomes intolerable. It is especially important to request additional medication 30-45 minutes prior to an exercise session so that you can achieve your goals more comfortably.

Other Methods to Decrease Pain

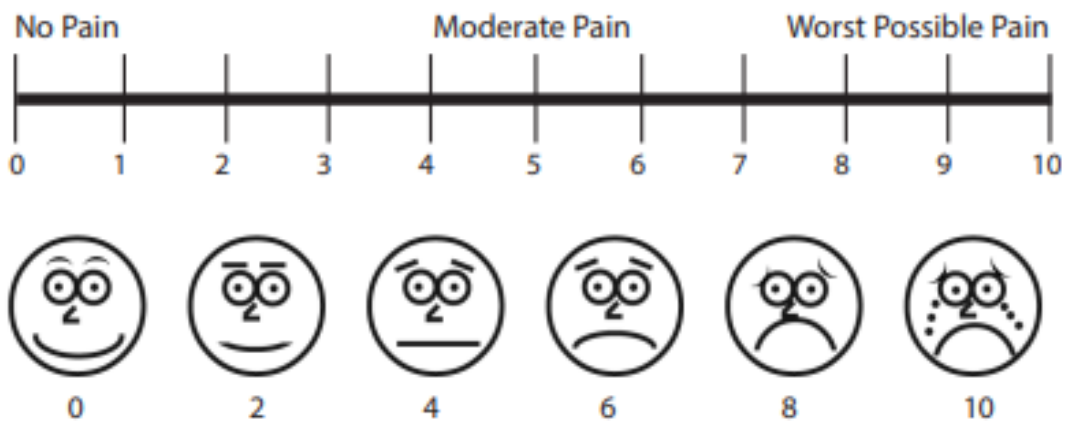
It is important to try to relax after your surgery and one way that may help is to listen to your favorite relaxing music. Frequent position changes and applying ice or cold for 30 minutes at a time on a regular schedule can also help in minimizing your discomfort.

Understanding Pain

Pain can be constant (lasting a long time) or intense (breakthrough) — and pain will change through the recovery process.

Pain scale

Using a number to rate your pain can help the joint team understand and help manage it. “0” means no pain and “10” means the worst pain possible. With good communication, the team can make adjustments to make you more comfortable.



Before Surgery:		Day: _____	Day: _____	Day: _____	Day: _____	Day: _____	Day: _____	
		Time: _____	Time: _____	Time: _____	Time: _____	Time: _____	Time: _____	
		Time: _____	Time: _____	Time: _____	Time: _____	Time: _____	Time: _____	
Seated Exercise:		reps (r)and sets (s)						
Long Arc Quads	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
	minutes _____	minutes _____	minutes _____	minutes _____	minutes _____	minutes _____	minutes _____	
Knee stretch:								
Arm chair pushups:	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
Semi-reclined Exercise: (in bed)								
Ankle pumps	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
Gluteal sets	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
Quad sets	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
Heel slides	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
Hip abd/ adduction	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
Straight leg raise	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
Short Arc Quads	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
Standing Exercise: (at the sink)								
Mini squats	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
Heel raises	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	
Knee flexion	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	r _____ s _____	

After Surgery:	Day: Time:	Day: Time:	Day: Time:	Day: Time:	Day: Time:	Day: Time:
Seated Exercise:	reps (r)	and sets (s)				
Long Arc Quads	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___
	minutes	minutes	minutes	minutes	minutes	minutes
Knee stretch:						
(knee patients only)						
Semi-reclined Exercise: (in bed)						
Ankle pumps	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___
Gluteal sets	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___
Quad sets	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___
Heel slides	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___
Hip abd/ adduction	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___
Short Arc Quads	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___
Standing Exercise: (at the sink)						
Mini squats	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___
Heel raises	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___
Knee flexion	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___	r ___ s ___

(Make copies if needed)

TONE UP FOR SURGERY EXERCISES

Start Preoperative Exercise

Many patients with arthritis avoid using their painful leg. Muscles become weaker, making recovery slower and more difficult. Beginning an exercise program before surgery can help make recovery faster and easier. To get the best benefit, start your exercises now.

Exercising Before Surgery

Consult your doctor before starting preoperative exercises. A number of exercises are listed below that your surgeon and therapist may instruct you to start doing and continue until your surgery. It is also important to strengthen your entire body, not just your legs before surgery. Strengthen your arms by doing chair push-ups because you will be relying on your arms when walking with an assistive device; getting in/out of bed and chairs; and on/off the toilet. Perform light endurance activities for your heart and lungs such as walking for 10 to 15 minutes each day.

Preoperatively: Do not do any exercise on the floor or that is too painful.

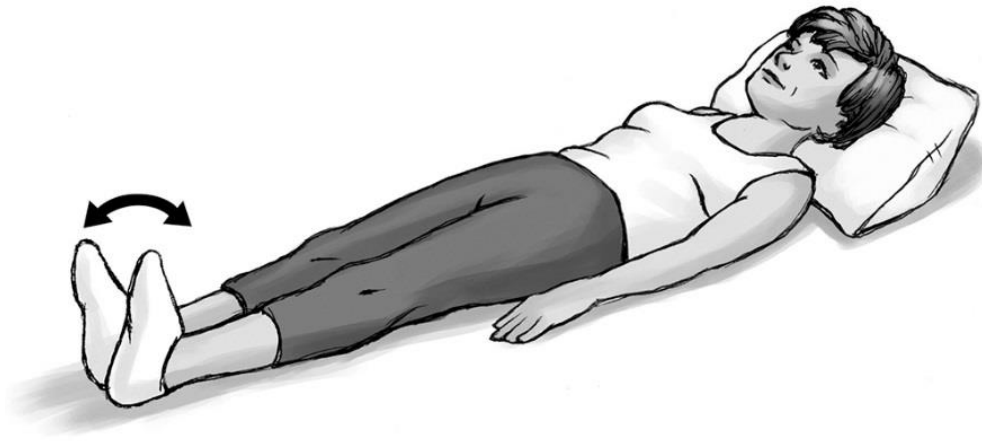
Take 20 to 30 minutes, twice a day to do the following exercises. Perform these exercises on both legs semi-reclined in bed (Not on the floor). The standing exercises should be done holding onto something very sturdy and will not tip. (ex. kitchen/ bathroom sink, or kitchen/ bathroom counter).

- **Ankle Pumps**
- **Gluteal Sets (bottom squeezes)**
- **Quad Sets (knee pushdown)**
- **Heel Slides (slide heels up and down)**
- **Hip Abduction & Adduction (slide heels out & in)**
- **Straight Leg Raises (preop or before surgery only)**
- **Short Arc Quads**
- **Long Arc Quads (knee extension)**
- **Standing Mini Squats**
- **Standing Heel Raises**
- **Standing Knee Flexion – Hamstring Curls**
- **Armchair pushup (preop or before surgery only)**
- **Knee Extension Stretch (knee patients only)**

***Start with 5 repetitions, if you feel okay to continue - work towards the goal is 20 repetitions.**

Ankle Pumps

2 sets of 10 repetitions



Instructions:

Gently point toes up towards your nose and down towards the surface. Do both ankles at the same time or alternate feet. Perform slowly.

Gluteal Sets (bottom squeezes)

2 sets of 10 repetitions



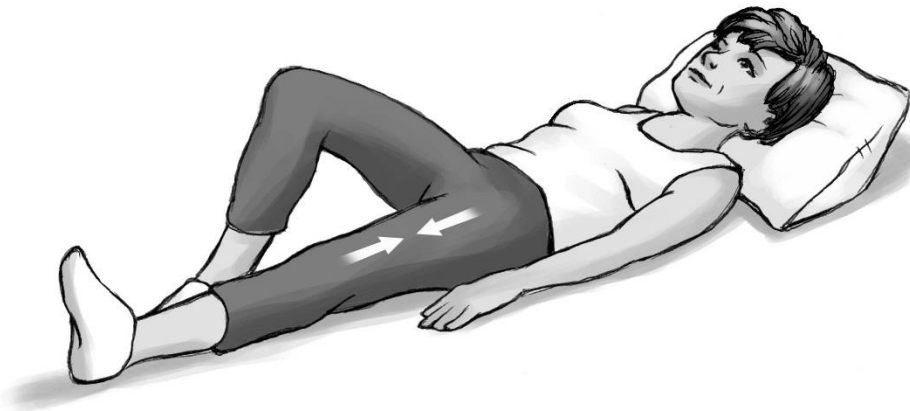
Instructions:

Squeeze your bottom together. Hold for a 5 count. Do NOT hold your breath.

Coach's Note: Patient can place hands on right and left gluteal (buttocks) area and feel for equal muscle contractions. Be sure patients are not holding their breath during this and all other exercises.

Quad Sets (knee pushdown)

2 sets of 10 repetitions



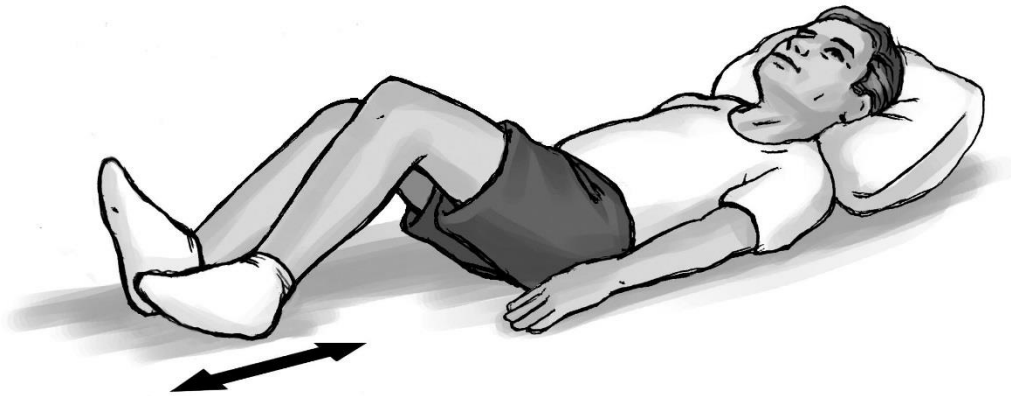
Instructions:

Lie on your back, press knee into mat/surface by tightening muscles on the front of the thigh (quadriceps). Hold. Do NOT hold your breath. Repeat with the opposite leg.

Coach's Note: Look and feel for the muscle above the knee to contract. Done correctly, the heel should come slightly off the surface. Be sure patients are not holding their breath during this and all other exercises.

Heel Slides (Slide heels up & down)

2 sets of 10 repetitions



Instructions:

Lie on your back and slide heel up a flat surface bending knee. After surgery, your therapist may have you use a bed sheet around your foot to assist gaining knee bend. Kneecap facing the ceiling.

Coach's Note: Patient should actively pull the heel up. Some patients are given specific precautions after surgery. Your physical therapist may instruct you in using an assistive device to help with this movement.

Hip Abduction & Adduction Heel (Slide heels out & in)

2 sets of 10 repetitions

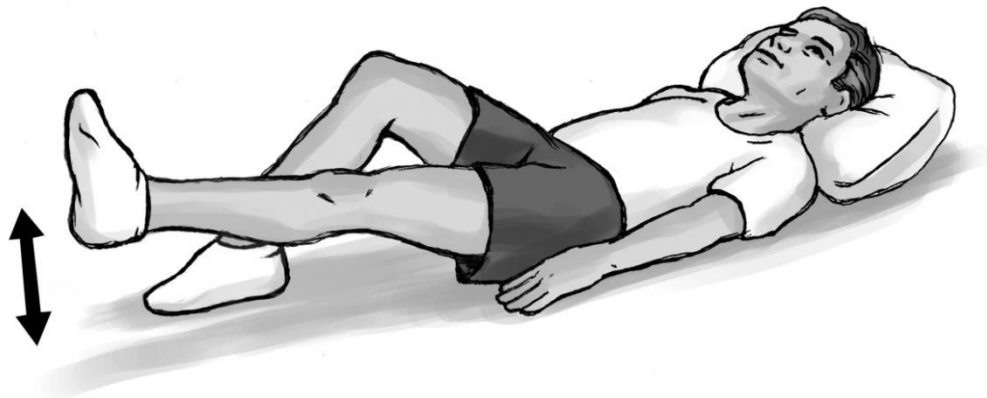


Instructions:

Lie on your back with toes pointing toward the ceiling and knees straight. Tighten quad muscles; slide surgical leg out to side and back to starting position. **DO NOT CROSS MIDLINE.** After surgery, your therapist will advise how and when to start this exercise.

*Pre op Exercise: Straight Leg Raise

2 sets of 10 repetitions



Instructions:

Lie on your back with non-surgical knee bent and foot flat. Tighten quad of surgical leg and lift leg from surface – there is no goal for how high to raise the leg, focus on picking it up and lowering to clear the surface you are lying on. Keep knee straight and toes pointed toward your head. Flexing toes towards nose and obtaining a quad set at this time will help.

Coach's Note: If able, the patient can add a small ankle weight to their leg to increase their strength prior to surgery.

Short Arc Quads

2 sets of 10 repetitions



Instructions:

Lie on your back, place a 6-8 inch rolled towel under your knee. Lift foot from surface, straightening knee as far as possible. Do not raise your thigh off rolled towel.

Coach's Note: Okay to assist the first few if needed and then let the patient try unassisted reps if possible. Be sure patients are not holding their breath during this and all other exercises.

Seated: Long Arc Quads (Knee Extension)

2 sets of 10 repetitions



Instructions:

Sitting in straight-back chair, lift foot up – straightening knee. Do not raise your thigh off the chair. Hold for a 5 count. Knee and toe should face the ceiling.

Coach's Note: Be sure hips remain flat on the chair.

Standing Mini Squats

2 sets of 10 repetitions



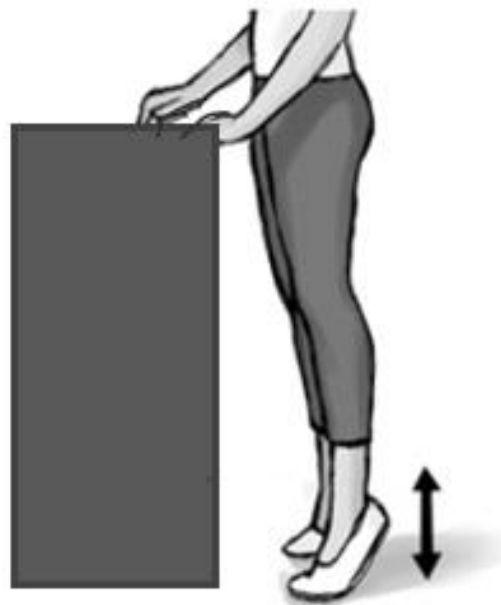
Instructions:

Stand, with feet shoulder-width apart, and hold onto a stationary object. Keep heels on floor as you bend knees to slight squat. Make sure your knees do not go past your toes. Return to upright position tightening buttocks and quads. Keep your body upright, heels on floor and do not squat past 90 degrees hip flexion.

Coach's Note: Patient's knees should not move over their toes during this exercise.

Standing Heel Raises

2 sets of 10 repetitions



Instructions:

Hold onto an immovable surface such as a counter, sink or table. Rise up on toes slowly. Come back to foot flat and lift toes from floor. Stand as straight as possible.

Coach's Note: When lifting heels up, do not lean backward.

Standing Knee Flexion – Hamstring Curls

2 sets of 10 repetitions



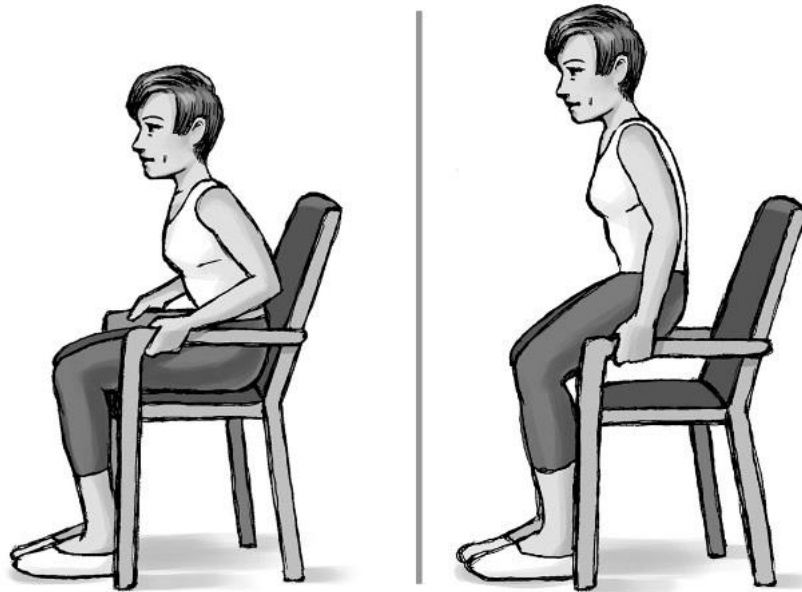
Instructions:

Holding onto an immovable surface, bend the surgical knee bringing your foot up behind you. Straighten leg bringing foot back to the floor. You may use a weight on your ankle.

Coach's Note: The tendency is for the hip to come forward as the knee is bent. Encourage a straight line from the shoulder to knee. Tall posture with a straight back.

*Preop Exercise: Armchair Pushups

2 sets of 10 repetitions



Instructions:

Sitting in sturdy armchair with feet flat on floor, scoot to front of seat and place hands on armrests. Straighten arms raising bottom up from seat as far as possible. Use legs as needed to lift. Progress to using only arms and non-surgical leg to perform pushups. Do not hold breath or strain too hard.

Knee Extension Stretch

(For knee patients only)

Hold 15 minutes



Instructions:

Sitting in a comfortable chair, prop foot of surgical leg on chair or stool. Place towel roll under ankle so calf is unsupported. Keep toes pointing up towards the ceiling. Apply an ice pack on top of knee if desired.

Activities of Daily Living

Standing with a walker

Do NOT pull up on walker to stand! Sit in a chair with armrests.

1. Scoot hips to the front edge of chair.
2. Bring back your foot on the surgical side leg as much as possible.
3. Push up with both hands on armrests. If a chair does not have an armrest, place one hand on walker while pushing off side of chair with other. Balance before grabbing for walker.



Sitting with a walker

1. Back up to center of chair until you feel chair on back of legs.
2. Slide out foot of surgical knee, keeping strong leg close to chair for sitting.
3. Reach back for armrest one at a time.
4. Slowly lower body to chair, keeping surgical side leg forward as you sit.



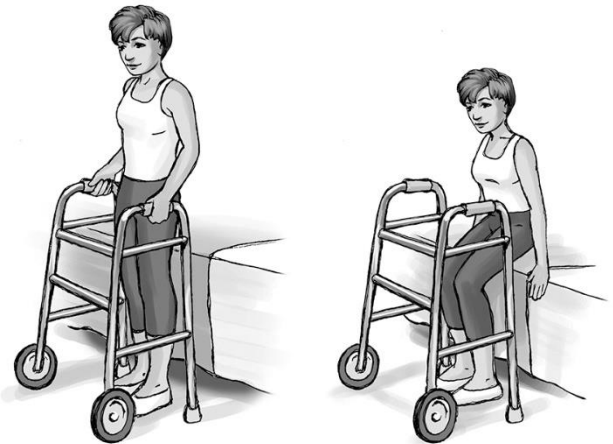
Getting into the bed

1. Back up to the bed until you feel it on back of legs (need to be midway between foot and head of bed).
2. Reaching back with both hands, sit down on edge of bed, and scoot back toward center of mattress. Silk pajama bottoms, satin sheets, or sitting on plastic bag may make it easier.
3. Move walker out of way but keep it within reach.
4. Scoot hips around so you are facing foot of bed.
5. Lift your non-surgical side leg into bed while scooting around.
6. Keep scooting and lift your surgical side leg into bed (if NEEDED you may use a cane, rolled bed sheet, or belt to assist with lifting leg into bed).
7. Scoot hips toward the center of the bed.



Getting out of the bed

1. Scoot hips to edge of the bed.
2. Sit up while lowering the surgical side leg to floor. Only, if necessary, use leg-lifter, a cane, or a belt to lower surgical side leg to floor and then the non-surgical side leg.
3. Scoot to edge of bed.
4. Use both hands to push off bed. If bed is low, place one hand in center of walker while pushing off bed with the other hand.
5. Balance before grabbing walker.



Lying in bed



Keep pillow between legs when lying on back.
Position leg so toes are pointing to ceiling – not inward or outward.



To roll from back to side, bend knees slightly,
place pillow between legs so surgical side
leg does not cross midline. Roll onto side.
Do not sleep on your surgical side

Walking

1. Push rolling walker forward.
2. Step forward placing foot of surgical side leg in middle of walker area.
3. Step forward the non-surgical side leg. Do NOT step past front wheels of walker.



- Note:**
- Take small steps. Keep walker in contact with floor, pushing it forward like shopping cart.
 - If using a rolling walker, advance from basic technique to normal walking pattern. Holding onto walker, step forward with surgical side leg, pushing walker as you go; try to alternate with equal step forward using non-surgical side leg. Continue to push walker forward. When you first start, this *may not* be possible, but you will find this gets easier. Make sure your foot does not go past the front of the walker when taking a step. Ideally, the foot should land in the center of the walker.

Stair Climbing

1. Begin climb (ascend) with non-surgical side leg first (up with good).
2. Go down (descend) with surgical side leg first (down with bad).
3. Always hold on to the railing.
4. Step- to pattern: Both feet are on the same step when going up and down.

Tub Transfers

Getting into the tub using a bath seat

1. Place bath seat in tub facing faucet.
2. Back up to tub until you feel it at back of knees. Be sure you are in line with the bath seat.
3. Reach back with one hand for bath seat. Keep the other hand in center of walker.
4. Slowly lower onto bath seat, keeping surgical leg out straight.
5. Move walker out of way but within reach.
6. Lift legs over edge of tub, using leg lifter for surgical side leg, if necessary.
Hold onto shower seat or railing.

Getting out of the tub using a bath seat

1. Lift legs over outside of tub.
2. Scoot to edge of bath seat.
3. Push up with one hand on back of bath seat while holding on to center of walker with other hand.
4. Balance before grabbing walker.



- Note:**
- Although bath seats, grab bars, long-handled bath brushes, and hand-held showers make bathing easier and safer, they are typically not covered by insurance.
 - Use rubber mat or non-skid adhesive on bottom of tub or shower.

Car Transfers

Getting into the car

1. Push the car seat all the way back, recline seat back to allow for adequate room to get in and out, but always have it upright for travel.
2. Place a plastic bag on your seat if needed to help you slide.
3. Back up to car until you feel it touch back of leg.
4. Hold on to immovable object – car seat or dashboard – and slide surgical side foot out straight. Watch your head as you sit down. Slowly lower yourself to the car seat.
5. Lean back as you lift surgical side leg into car. Use your cane, leg lifter, or other device to assist.



Getting out of the car

1. Bring your legs out one at a time.
2. Lead with your hips and shoulders and do not twist your back.
3. Place your right hand on back of the seat and the left hand on the frame or dashboard.
4. Push up to stand.
5. Reach for the walker when you are stable.



Getting Dressed

A reacher or dressing stick can help remove pants from foot and off the floor.

Putting on pants and underwear

1. Sit down. Put surgical side leg in first and then non-surgical side leg. Use reacher or dressing stick to guide waistband over foot.
2. Pull pants up over knees.
3. Stand with walker in front to pull pants up.



Taking off pants and underwear

1. Back up to chair or bed.
2. Unfasten pants and let them drop to floor. Push underwear down to knees.
3. Lower yourself down, keeping surgical side leg out straight. Take non-surgical side leg out first and then surgical side leg. Use reacher as necessary to guide pants off legs.

Using the sock aid

1. Slide sock onto sock aid.
2. Hold cord and drop sock aid in front of foot. Easier to do if knee is bent.
3. Slip foot into sock aid.
4. Straighten knee, point toe, and pull sock on pulling straight back. Keep pulling until sock aid pulls out.



Using the long-handled shoehorn

1. Use a reacher, dressing stick, or long-handled shoehorn to slide shoe in front of foot.
2. Place shoehorn inside shoe against back of heel.
3. Lean back as you lift leg and place toes in shoe.
4. Step down into shoe, sliding heel down shoehorn.

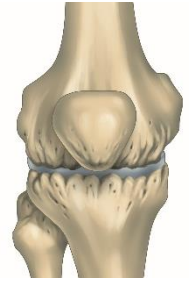
This can be performed sitting or standing. Wear sturdy slip-on shoes or shoes with Velcro closures or elastic shoelaces.

Do **NOT** wear high-heeled shoes or shoes without backs.

FREQUENTLY ASKED KNEE QUESTIONS

What is osteoarthritis and why does my knee hurt?

Osteoarthritis, the most common form of arthritis, is a wear and tear condition that destroys joint cartilage. Joint cartilage is durable, smooth tissue that covers the ends of bones where joints are located. It cushions the bones during movement, and because it is smooth and slippery, it allows for motion with minimal friction. Trauma, repetitive movement, or for no apparent reason, the cartilage wears down exposing the bone ends. Over time, cartilage destruction can result in painful bone-on-bone contact, swelling, and loss of motion.



What is total knee replacement?

The term total knee replacement is misleading. The knee is not replaced, but rather an implant is used to re-cap the worn ends of the bone. This is done with a metal alloy on the femur (bone between the hip and knee) and a plastic spacer on the tibia (large bone between your knee and ankle) and patella (kneecap). This creates a new, smooth cushion and a functional joint that can reduce or eliminate pain.



What is partial knee replacement?



What happens during a partial knee replacement is that the deteriorated cartilage between the tibia and femur is replaced. Patients who have disease restricted to one side of the knee are typically candidates for the procedure. Because a partial knee implant is smaller than a total knee implant, the surgical incision can be significantly smaller. A partial knee implant consists of a metal component that is attached to the femur (bone between the hip and knee), and a plastic cap that covers the worn area of the tibia (large bone between your knee and ankle). This creates a new, smooth cushion and a functional joint that can reduce or eliminate pain.

How long will my new knee last and can a second replacement be done?

All implants have a limited life depending on an individual's age, weight, activity level, and medical condition(s). How long a joint implant's longevity will vary in every patient. An implant is a medical device subject to wear that may lead to mechanical failure. There is no guarantee that your implant will last for any specified length of time.

What are the major risks?

Most surgeries go well, without complications. However, infection and blood clots are two serious complications. To avoid these complications, your surgeon may use antibiotics and blood thinners.

What happens during knee surgery?

Typically, your surgeon will reserve approximately two hours for surgery. Some of the time will be taken by operating room staff to prepare you for surgery. Some patients may receive a spinal or epidural anesthetic – which numbs the legs and does not require you to be asleep. The choice is between you, your surgeon, and the anesthesiologist.



Will surgery be painful?

You will have discomfort following surgery, but we keep you comfortable with appropriate medication. Most patients will receive oral pain medication and may receive some additional IV medication for “breakthrough” pain, if needed.

How long and where will my scar be?

Surgical scars will vary in length, but most surgeons make it as small as possible. It will be straight down center of your knee, unless you have previous scars, in which case your surgeon may use an existing scar. There may be lasting numbness around the scar.

Will I need a walker, crutches, or a cane?

You will progress at your own rate. Often patients use a walker, crutches, or a cane immediately after surgery. A member of your care team can help arrange for equipment as needed.



How long will I be at the hospital/ surgery center?

You will be at the hospital/ surgery center for a very short stay after surgery; you will most likely go home the same day. Patients are generally discharged to home once medically stable and able to sit, stand, and walk safely with a walker or other assistive device.

Proper Elevation Following Knee Arthroplasty Surgery

In order to properly elevate your leg, you should:

- **Be lying flat – it is more difficult to properly elevate your leg sitting in a chair**
- **Have 3-5 pillows stacked lengthwise underneath your calf and ankle**
- **Knee above the level of your heart**
- **Ankle above the level of your knee**
- **Your surgeon might say “toes above nose” or “knee above nose”**
- **Icing your knee and performing ankle pumps at this time will also help reduce pain and swelling of the leg**

Do this for 30–60 minutes, 4-8 times a day the first 7 days after surgery. After 1 week, elevate your leg as needed to help with continued swelling. This exercise helps reduce swelling and lowers the risk of blood clots for both hip and knee replacement patients.

Elevation after total knee replacement works on full extension of the knee with the goal of 0 degrees or straight as an arrow. This is necessary to walk without a limp.

FREQUENTLY ASKED HIP QUESTIONS

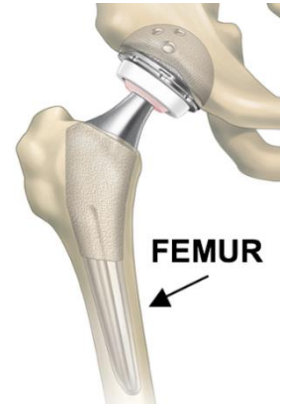
What is osteoarthritis and why does my hip hurt?

Osteoarthritis, the most common form of arthritis, is a wear and tear condition that destroys joint cartilage. Joint cartilage is durable, smooth tissue that covers the ends of bones where joints are located. It cushions the bones during movement, and because it is smooth and slippery, it allows for motion with minimal friction. Trauma, repetitive movement, or for no apparent reason, the cartilage wears down exposing the bone ends. Over time, cartilage destruction can result in painful bone-on-bone contact, swelling and loss of motion.

What is total hip replacement?

The term total hip replacement is misleading. The hip is not replaced, but rather an implant is used to re-cap the worn ends of the bone.

- Head of femur (bone between the hip and knee) is removed.
- Metal stem is inserted into femur shaft and topped with a metal or ceramic ball.
- Worn socket (acetabulum) is smoothed and lined with a metal cup and either a plastic, metal, or ceramic liner.



No longer does bone rub on bone, causing pain and stiffness.

How long will my new hip last and can a second replacement be done?

All implants have a limited life depending on an individual's age, weight, activity level, and medical condition(s). How long a joint implant's longevity will vary in every patient. An implant is a medical device subject to wear that may lead to mechanical failure. There is no guarantee that your implant will last for any specified length of time.

What are the major risks?

Most surgeries go well, without complications. However, infection and blood clots are two serious complications. To avoid these complications, your surgeon may use antibiotics and blood thinners.

What happens during hip surgery?

Typically, your surgeon will reserve approximately two hours for surgery. Some of the time will be taken by operating room staff to prepare you for surgery. Some patients may receive a spinal or epidural anesthetic, which numbs the legs and does not require you to have general anesthesia. The choice is between you, your surgeon, and the anesthesiologist.



Will surgery be painful?

You will have discomfort following surgery, but we keep you comfortable with appropriate medication. Most patients will receive oral pain medication and may receive some additional IV medication for “breakthrough” pain, if needed.

How long and where will my scar be?

Type of surgical technique will determine location and length of scar. Your surgeon will discuss which type of approach is best for you. There may be some numbness around scar after it is healed. This is normal, and numbness disappears with time.

Will I need a walker, crutches, or a cane?

You will progress at your own rate. Often patients use a walker, crutches, or a cane-immediately after surgery. A member of your care team can arrange for equipment as needed.

How long will I be at the hospital/ surgery center?

You will be at the hospital/ surgery center for a very short stay after surgery; you will most likely go home the same day. Patients are generally discharged to home once medically stable and are able to sit, stand, and walk safely with a walker or other assistive device.



Hip Precautions

Hip precautions are to keep you from dislocating your hip. Dislocation is defined as moving a body part out of its usual position. During your stay at the hospital, your therapists and nursing staff will remind you of specific hip precautions to follow until your surgeon tells you otherwise.

Anterior Approach Hip Precautions



Do not turn your feet outward.



Do not extend your surgical hip behind you.



Do not extend or move your surgical leg out to the side.

The anterior approach to hip replacement does not cut any muscles during surgery, minimizing risks of dislocation. This approach does not have as many restrictions as the traditional posterior approach but is still major surgery and you will need time to recover. For the first few weeks following surgery, keep in mind the following guidelines:

- Do not extend your surgical leg behind you too far
 - Take small steps when backing up
 - Do not bend over and kick the surgical leg behind you
- Do not turn your toes outward
 - Use caution when turning around, taking several small steps instead of pivoting on the surgical leg
- When reaching, do not reach across your body. Point your toes toward where you are reaching to avoid turning your toes outward

Posterior approach hip precautions



DO NOT cross your legs



DO NOT bend past 90°



DO NOT twist or turn your
toes inward

Some examples of activities to avoid for a posterior hip replacement:

- Do not bend hip beyond 90 degrees
 - Do not bring your knee toward your chest
 - Do not bend over at the trunk
 - Do not bend over to pick something up from the floor. Use a reacher or ask for help
 - Do not reach forward past your knees when sitting or lying down
 - Do not sit on a low surface that causes your knees to be higher than your hips
 - When standing up or sitting down, do not lean forward
 - Use long handled tools for lower body dressing
- Do not cross your knees or ankles
 - Keep a firm bed pillow or abductor pillow between your knees in bed or in the chair if you are tempted to cross your legs
 - Do not cross your surgical ankle onto the opposite knee
 - Keep a pillow between your knees if you are lying on your side
- Do not turn your toes inward
 - Use caution when turning around, taking several small steps instead of pivoting on the surgical leg
 - When reaching, do not reach across your body. Point your toes toward where you are reaching to avoid turning your toes inward

Anterior lateral approach hip precaution

- No repetitive hip abduction
- No straight leg raises

Some examples of activities to avoid initially for ALL hip patients:

- Do not lie on your surgical hip
- Do not twist on your surgical leg (pick your feet up)
- Do not pound on your surgical leg - for example perform one step at a time on the stairs
- Do not cross your legs placing your surgical ankle on you opposite (non-surgical knee) and lean forward ("figure 4 sit")



Proper Elevation Following Hip Arthroplasty Surgery

In order to properly elevate your leg, you should:

- Be lying flat or semi reclined in bed– it is more difficult to properly elevate your leg sitting in a chair
- Have 3-5 pillows stacked lengthwise underneath your calf and ankle
- Knee above the level of your heart
- Ankle above the level of your knee
- Your surgeon might say “toes above nose” or “knee above nose”
- Icing your hip and performing ankle pumps at this time will also help reduce pain and swelling of the leg

Do this for 30–60 minutes, 4-8 times a day the first 7 days after surgery. After 1 week, elevate your leg as needed to help with continued swelling. This exercise helps reduce swelling and lowers the risk of blood clots for both hip and knee replacement patients.

General Discharge Instructions

- Keep your incision clean and dry. If you have a dressing in place, change it as directed.
- Discuss the use of antibiotics before having dental work or any other invasive procedure with your dentist or doctor.
- Sit in chairs with arms. Using the arms of chairs make it easier to stand or sit.
- Do not sit for more than two hours at a time.
- Take a nap if you are tired but do not stay in bed all day.
- Do not drive until your surgeon says it is ok to drive. **Do not drive while taking narcotic pain medications.**
- Continue to wear your support stockings if ordered by your surgeon.
- Take your medications as instructed. This may include blood thinners or antibiotics to prevent infection.
- Participate in daily activities as independently as possible.
- Be sure to change positions of your leg during the night.
- You should be up and walking as tolerated with a walker or cane unless your therapist has instructed otherwise.
- You may climb stairs. Remember to have someone with you the first few times you go up and down stairs. Try one step at a time, using the railing when possible. Avoid excessive stair climbing unless your therapist has instructed you otherwise.
- Continue to apply ice and elevate your leg after exercise and at the end of the day if swelling continues.
- Please call your surgeon's office at any time if any of the following occur or if you have any concerns:
 - Redness in the incision
 - Excessive warmth in or around the incision
 - Drainage that is excessive, bloody, or green like pus
 - Fever over 101. degrees
 - Swelling in your leg, calf, and foot that does not diminish with elevation or is painful

Continues on next page

*DO NOT go directly to the Emergency Room unless instructed by your surgeon or nurse. When the office is closed, the operator will connect you to the surgeon on call.

*If you develop chest pain or shortness of breath, this is an EMERGENCY. (Call 9-1-1)

- Call your primary care doctor for any medical issues.
- Keep your knee higher than your heart, to tolerance, for proper elevation and to decrease swelling.
- If you are using a pillow to elevate your leg at night, sleep with a pillow under your ankle, not your knee.

Follow up appointment

- Call your surgeon's office to schedule your follow up appointment in two weeks if you do not already have one scheduled.

Daily Homework

- **Ankle pumps**

Perform at least 20 ankle pumps every hour while awake.

- **Place roll under your surgical foot**

Keep the blanket roll/towel roll under your ankle as much as possible. Use the **large blanket roll** for 30 minutes to one hour three to four times a day.

- **Dangling your feet at mealtimes**

Sit in your chair with your legs and feet down while you eat. This will help with bending your knees and stretching your quadriceps muscles. The rest of the time keep your knees straight and, on the roll, as described above.

- **Ice packs / Ice Machine**

Apply ice packs to your effected joint for pain relief for 30 minutes at a time, while elevating, for the first 1-2 weeks after surgery, and after therapy and exercises as needed. If you have an ice machine, this can be used for longer timeframes because it will regulate the temperature of the water circulating.

- **Sleeping in bed**

To maximize straightening (extension) of the hip and knee, you should lie **flat** on your back when in bed. DO NOT raise the head of your bed for sleeping unless you have a medical condition that requires it.

- **Hip precautions**

Hip precautions are to keep you from dislocating your hip. During your stay at the hospital, your therapists and nursing staff will remind you of specific hip precautions to follow until your surgeon tells you otherwise. (see page 48)

- **Knee precautions**

Do not kneel on your surgical knee. Do not pivot or twist on the surgical knee when surgical side foot is planted.

- **Walking**

Walking is a wonderful weight bearing exercise that promotes bone growth to strengthen and stabilize your new prosthesis.

CARING FOR YOURSELF AT HOME

Be Comfortable

- Take pain medicine at least 30 minutes before physical therapy.
- Wean yourself off prescription medication to a non-prescription pain reliever. Take Tylenol® up to four times per day or other non-prescription pain relievers that have been approved by your doctor.

Note: The maximum daily dose of Tylenol® (acetaminophen) is 4,000 mg per day. Various prescription pain pills such as Percocet, Norco, Vicodin, and Ultracet (tramadol + acetaminophen) contain acetaminophen.

- Change position frequently (every 45 minutes to 1 hour) to prevent stiffness.
- Use ice for pain control at least 20 minutes every 1-2 hours.

Body Changes

- Your appetite may be poor, but your desire for solid food will return.
- Drink plenty of fluids.
- You may have difficulty sleeping. It may help to not take naps longer than one hour during the day. Over time your body should return to your normal sleep pattern.
- Your energy level will be low; this may last for up to the next four weeks as you regain your strength.
- Pain medication that contains narcotics promotes constipation. Use stool softeners or laxatives, if necessary.

Blood Clots

Your surgeon will instruct you to take aspirin or a blood thinner to avoid blood clots in your legs. If you were given Coumadin, it will be necessary to do blood tests once or twice weekly to monitor the medication's effectiveness and adjust the dose.

- If you are discharged home with home health services, a home health nurse will come out twice a week to draw a prothrombin (bleeding time) time test. Results are called to your primary care doctor who will adjust your dose.
- If you are not utilizing home health nursing, you will go to one of the Froedtert South's Labs and have your blood drawn there. Your primary care doctor will monitor your lab results and contact you to adjust the dose of blood thinner medication.

Compression Stockings

Your surgeon may order special stockings to compress the veins in your legs. This helps keep swelling down and reduces the chance for blood clots.

- If swelling in the surgical side leg is bothersome, elevate your leg for short periods. Lie down and raise your leg above your heart level.
- Wear the stockings continuously and remove only at night.
- Notify your surgeon if pain or swelling increases in either leg.
- Wear stockings as directed until you see your surgeon at your post-operative follow up appointment; ask your surgeon when you can stop.

Incision Care

- Please keep your incision clean and dry. The Mepilex dressing is designed to be left in place for up to 14 days or as directed by your surgeon.
- You may take a sponge bath being careful not to get any water or moisture under the dressing.

Tip: Use Press’N Seal from the kitchen when washing up to avoid getting the dressing wet. Tear off a piece large enough to cover the bandage and simply stick it to your skin. After washing up, remove the Press’N Seal!

- After dressing is off you can get the incision area wet, do not scrub the incision until directed by your surgeon.
- Notify your surgeon if there is increased drainage, redness, pain, odor, or heat around the incision.
- Take your temperature if you are feeling warm or sick. Call your surgeon if your temperature/fever exceeds 100.4 degrees F.

Driving

Requirements:

- You must be off all narcotic pain medications before you can drive
- You must be able to safely operate your vehicle without pain

Timeline: Most patients are released to drive at their post op visit or 2-4 weeks post-op

RECOGNIZING AND PREVENTING POTENTIAL COMPLICATIONS

CALL YOUR SURGEONS OFFICE IMMEDIATELY IF YOU NOTICE:

- Incision area looking red or feels hot to the touch
- Excessive warmth in or around the incision
- Drainage that is excessive, bloody, or green like pus
- Fever over 100.4* F
- Swelling in your leg, calf, and foot that does not diminish with elevation or is painful

Signs of an infection

- Increased swelling and redness at the incision site
- Change in color, amount, and/or odor of drainage
- Increased knee pain
- Fever greater than 100.4 degrees F

Infection prevention

- Take proper care of your incision
- Notify your doctor(s) and dentist(s) that you have had a joint replacement
- We recommend that you ask your surgeon(s) or dentist about having dental work or other invasive procedures done. General prophylactic antibiotics are prescribed before these procedures

Signs of a blood clot

- Swelling in the thigh, calf, or ankle that does not go down with elevation
- Pain, heat, and tenderness in the calf, back of knee, or groin area
- Blood clots can form in either leg

Blood clot prevention

- Perform at least 20 ankle pumps every hour while awake
- Walk several times a day
- Wear compression stockings if ordered
- Take blood thinners as directed

Surgery may cause the blood to slow and coagulate in veins of the legs creating a blood clot. If a clot occurs, you may need to be admitted to the hospital to receive intravenous blood thinners.

Ice & Elevation

- Use ice for at least 20 minutes every 1-2 hours. Feel free to leave the ice pack on longer, if needed. Apply it over pant leg or with material between ice and skin.
- If using an ice machine – this can be used for longer timeframes because it will regulate the temperature of the water circulating.
- Elevate your leg/legs (toes above your nose) to help with swelling.
 - ⇒ Ankle pumps while elevating will help reduce swelling.

Signs of a pulmonary embolism

- Sudden chest pain
- Difficult and/or rapid breathing
- Shortness of breath
- Sweating
- Confusion

Pulmonary embolism prevention

- Follow guidelines to prevent blood clots in legs which are listed above

An unrecognized blood clot could break away from the vein and travel to the lungs. This is an emergency — **CALL 911**



Dos and Don'ts for The Rest of Your Life

What to do

- Notify your dentist or other doctor/surgeon in advance if you are having dental work or other invasive procedures. Generally, antibiotics are taken prior to procedure.
- Although risks are low for post-operative infections, the risk remains. A prosthetic joint could possibly attract bacteria from an infection located in another part of your body.
- If you develop a fever of more than 100.4 degrees or sustain an injury such as a deep cut or puncture wound, you should clean it as best you can, put a dressing or adhesive bandage on it, and notify your doctor. The closer the injury is to your prosthesis, the greater the concern. Occasionally, antibiotics may be needed. Superficial scratches may be treated with topical antibiotic ointment. Notify your doctor if the area is painful or reddened.
- When traveling, stop and change positions hourly to prevent your joint from tightening.

Exercise

With permission from your surgeon and primary care doctor, you should be on a regular exercise program three to four times per week, lasting 20 to 30 minutes.

- Impact activities such as running, and singles tennis may put too much load on the joint and are generally not recommended.
- High-risk activities such as downhill skiing are discouraged because of risk of fractures around the prosthesis and damage to prosthesis itself.

Exercise – dos

- Choose low impact activity
- Recommended exercise classes
- Home program outlined in this Guidebook
- Regular 1-3 mile walks
- Home treadmill (for walking)
- Stationary bike
- Aquatic exercises
- Regular exercise at fitness center
- Low-impact sports/activities such as golf, bowling, gardening, dancing, swimming, etc.
- Consult surgeon or physical therapist about specific sport activities.

Exercise – don'ts

- Do not run or engage in high-impact activities or activities that require a lot of starts, stops, turns, and twisting motions.
- Do not participate in high-risk activities such as contact sports.
- Do not take up sports requiring strength and agility until you discuss it with your surgeon or physical therapist.

Importance of Lifetime Follow-up Visits

When should you follow-up with your surgeon?

- Every year unless instructed differently
- Anytime you have mild pain for more than a week
- Anytime you have moderate or severe pain

Understand, there are reasons for routine follow-up visits with your orthopedic surgeon.

If you have a cemented knee, the integrity of cement needs to be evaluated. With time and stress, cement may crack. A crack in cement does not necessarily mean you need another surgery, but it means you need to be followed more closely.

Your knee could become loose, might lead to pain. Alternatively, the cracked cement could cause a reaction in the bone called osteolysis, which may cause the bone to thin out and cause loosening.

Another reason for follow-up is the plastic liner in your knee may wear. Tiny wear particles combine with white blood cells and may get in the bone and cause osteolysis (similar to what can happen with cement).

X-rays taken at follow-up visits can detect problems. New x-rays can be compared with previous x-rays to make these determinations. This will be done in your surgeon's office.

If you are unsure how long it has been or when your next visit should be scheduled, call your surgeon.

After Surgery Symptoms and Action Plan

I'VE GOT THIS



THESE SYMPTOMS ARE OKAY

- Small amount of redness around the surgery site that is not hot to the touch, splotching, or streaking.
- Drainage that is clear, red, or pink that does not soak through the dressing.
- Minor constipation, not eating as much.
- Upset stomach or nausea without vomiting.
- Skin or face feels flush without fever or low fever lower than 100.4°F.
- Pain, stiffness, and swelling.
- Bruising around the incision, leg, and/or ankle area.

DAILY ACTION PLAN

Surgery site: Continue to check. Site should look better each day. Keep covered if draining.

Constipation: Take stool softeners as prescribed, drink plenty of fluids, eat high fiber foods.

Upset stomach: Take pain medication with food.

Low fever: Take deep breaths and cough 10 times every hour, increase fluid intake.

Pain, stiffness, swelling: Ice and elevate 3-5 times a day. Take pain medications as prescribed. Walk and change positions frequently. Wear compression stockings during the day (if instructed to use)

I MIGHT NEED HELP



CALL THE SURGEON IF YOU HAVE ANY OF THESE SYMPTOMS OR HAVE QUESTIONS

- Worsening redness around the surgery site that spreads, or surgery site begins to pull apart.
- Drainage that soaks through the dressing or foul-smelling, green, yellow, or cloudy.
- Constipation that does not get better with current stool medication.
- Drainage that stopped then started again.
- Pain or swelling that worsens – icing and elevation not helping.
- Upset stomach that is not getting better.
- Fever greater than 100.4° F with or without chills.
- Decreased mobility and additional help needed to do daily tasks.
- Increased heart rate or heart palpitations.

ACTION PLAN

The surgeon's office will give direction on next steps to take

If the office is closed:

- Call your surgeon's office and speak to the answering service who will have an on-call surgeon give you a call back.
- Present to the walk-in clinic or urgent care for further medical direction if advised or symptoms get worse.

I NEED HELP



EMERGENCY SYMPTOMS

- Sudden numbness or weakness (especially on one side of the body), sudden trouble walking, or loss of balance.
- Sudden, severe headache.
- New shortness of breath or trouble breathing.
- Chest pain, pain in one or both arms, jaw, neck, or back.
- Inability to urinate.
- Blood in stool or dark, tarry stools.
- Feeling confused, or family thinks so.

ACTION PLAN

- CALL 911 OR GO TO THE EMERGENCY ROOM