

WHAT TO EXPECT

Your Guide to Knee Replacement



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Dear Patient,

Welcome to NewYork-Presbyterian Hospital/Columbia University Medical Center (NYP/CU). In an effort to help you get the most out of your hospital experience, we have developed this guide to help you before, during, and after your hospital stay. The objectives of this guide are:

- 1) To help prepare you for your surgery and hospital experience
- 2) To optimize your recovery from your Knee Replacement while in the hospital and later at home

It is important to remember that this is only a general guide to recovery from your surgery. Keep in mind that not all patients have the same medical conditions or needs. Therefore, your physician or therapist may make changes from this book. **THEIR CHANGES TAKE PRECEDENCE!**

As you know, NYP/CU, one of the top medical centers in the country, is world-renowned for its innovations in medicine and surgery. At NYP/CU, we offer Joint Replacement surgery to patients whose complex medical conditions have prevented them from undergoing surgery in other institutions. All our staff are committed to performing with excellence; our goal is to help you, our patient, achieve optimal success from your surgery. They complement and support the outstanding surgical and medical staff for which NewYork-Presbyterian Hospital/Columbia University Medical Center is world-renowned.

You, yourself, are the driving force toward a successful recovery! You can help achieve optimal results from this surgery by becoming an active, helpful part of the NYP/CU team before, during, and after your surgery. The overall, long-range benefit of your surgery depends very much on the success of your continuing rehabilitation at home. Therefore, we hope that you will continue what the team has taught you long after you have left us.

This guide structures your participation from this point onwards. Therefore, it is important that you and your home care helper(s) read this book carefully, and refer to it throughout your hospitalization. Bring this book to the hospital with you, so you can refer to it as needed.

Sincerely,
NewYork-Presbyterian Hospital/Columbia University Medical Center and
Columbia University Medical Center Department of Orthopedic Surgery

WHAT IS KNEE REPLACEMENT?

If your knee is severely damaged by arthritis or injury, it may be hard for you to perform simple activities such as walking or climbing stairs. You may even begin to feel pain while you're sitting or lying down.

If medications, changing your activity level, and using walking supports are no longer helpful, you may want to consider knee replacement. By resurfacing your knee's damaged and worn surfaces, total knee replacement can relieve your pain, correct your leg deformity, and help you resume relatively normal activities.

How the Normal Knee Works

The knee is the largest joint in the body. Nearly normal knee function is needed to perform routine everyday activities. The knee is made up of the lower end of the thighbone (*femur*), which rotates on the upper end of the shinbone (*tibia*), and the kneecap (*patella*), which slides in a groove on the end of the femur. Large ligaments attach to the femur and tibia to provide stability. The long thigh muscles give the knee strength.

Normally, the joint surfaces where these three bones touch are covered with *articular cartilage*, a smooth substance that cushions the bones and enables them to move easily.

All remaining surfaces of the knee are covered by a thin, smooth tissue liner called the *synovial membrane*. This membrane releases a special fluid that lubricates the knee which reduces friction to nearly zero in a healthy knee.

Normally, all of these components work in harmony. But disease or injury can disrupt this harmony, resulting in pain, muscle weakness, and less function.

WHAT IS KNEE REPLACEMENT? (continued)

Realistic Expectations About Knee Replacement

An important factor in deciding whether or not to have knee replacement surgery is understanding what the procedure can and can't do.

More than 90 percent of individuals who undergo total knee replacement experience a dramatic reduction of knee pain and a significant improvement in the ability to perform common activities of daily living. However, total knee replacement won't make you a super-athlete or allow you to do more than you could before you developed arthritis.

Following surgery, you will be advised to avoid some types of activity for the rest of your life, including jogging and high impact sports.

With normal use and activity, every knee replacement develops some wear in its plastic cushion. Excessive activity or weight may accelerate this normal wear and cause the knee replacement to loosen and become painful. With appropriate activity modification, knee replacements can last for many years

About the Surgery

The procedure itself takes about one to two hours. Your orthopedic surgeon will remove the damaged cartilage and bone and then position the new metal and plastic joint surfaces to restore the alignment and function of your knee.

Many different types of designs and materials are currently used in total knee replacement surgery. Nearly all of them consist of three components: *the femoral component* (made of a highly polished strong metal), the *tibial component* (made of a durable plastic often held in a metal tray), and the *patellar component* (also plastic).

WHAT IS KNEE REPLACEMENT? (continued)

After the Surgery

You may feel some numbness in the skin around your incision. You also may feel some stiffness, particularly with bending activities. Improvement of knee motion is a goal of total knee replacement, but restoration of full motion is uncommon. The motion of your knee replacement after surgery is predicted by the motion of your knee prior to surgery. Many people with arthritis have limited knee motion before surgery and it is important to note that their final motion may improve somewhat, but will often never be as full as it was prior to the onset of arthritis.

Most patients can expect to almost straighten the replaced knee and to bend the knee sufficiently to go up and down stairs and get in and out of a car. Kneeling is usually uncomfortable, but it is not harmful. Occasionally, you may feel some soft clicking of the metal and plastic with knee bending or walking – this is entirely normal. These differences often diminish with time and most patients find these are minor, compared to the pain and limited function they experienced prior to surgery.

Your new knee may activate metal detectors required for security in airports and some buildings. Tell the security agent about your knee replacement if the alarm is activated.

KEY PEOPLE TO KNOW		
CONTACT	NAME	EXTENSION
ORTHOPAEDIC SURGEON		
INTERNIST (MEDICAL MD)		
RESIDENT		
NURSE PRACTITIONER		
SOCIAL WORKER		
NURSE MANAGER		
OTHER KEY CONTACTS		
CONTACT	NAME	EXTENSION
PRE-OP TESTING		
OPERATING ROOM		
OR WAITING ROOM		



YOUR PRE-OP CHECKLIST



Discuss with your Surgeon:

- What to expect while undergoing Total Knee Replacement Surgery
- Pre-Op blood donation program
- Any special concerns related to your personal condition
- Key medications, specifically aspirin, Plavix and Coumadin
- Pre-Op Medications

Pre-surgical Screening Appointment

- Date _____ Time _____ Location _____
- Phone No. _____ Hours _____
- Diagnostic testing
- Patient Data Base profile
- BRING A LIST OF YOUR CURRENT MEDICATIONS AND MEDICAL HISTORY INFORMATION

Internist appointment:

- Remind internist to fax reports to your surgeon
- Medical/physical examination
- Review of diagnostic testing
- Medical clearance for surgery

Follow medication regimen prescribed by your Physician



Attend Pre-Op Patient Education Class:

- Date_____Time_____Location_____

Practice your exercises as instructed by the R.N. or Physical Therapist

Prepare your home for discharge as instructed by the R.N.

Complete Your Health Care Proxy

TIME AND PLACE TO ARRIVE AT NYP: The nurse will call you on the business day prior to your surgery to confirm your expected time and place for admission

The nurse will tell you: time you are scheduled for surgery; review your Pre-Op instructions; answer your questions; and tell you where to come. If your physical condition changes in the days before surgery – cold, rash, cough, fever, or stomach upset – notify your doctor. He or she may want to reschedule your surgery. On the day before the surgery, if you have not received a call by 5pm, please call _____.

BOWEL PREPARATION: Patients who will have epidural anesthesia and who are admitted on the same day as their surgical procedure are advised to carry out the following bowel preparation:

The day prior to surgery, drink a liquid diet, if possible. Liquids include soups, Jell-O, custard, yogurt, ice cream, cold cereals, etc. You must eat lightly.





Then, the evening before surgery, a couple of hours after dinner, give yourself a Fleets enema.

The night or morning before surgery, use the Betadine Sponge to wash the surgical area. Rinse the area well. You will receive the Betadine Sponge when you come for your Pre-Surgical Screening appointment, or you can purchase it from your local pharmacy.

DO NOT EAT OR DRINK anything after midnight the night before surgery unless otherwise instructed. It is often advised that you take any normal medication with a sip of water the morning of surgery, but confirm with your internist. Do not use alcohol or sedatives 24 hours before surgery. If you are delayed on the day of surgery please call.

WHAT TO BRING TO THE HOSPITAL

✓	ITEM
	Surgical Consent signed by you (if not previously provided)
	X-rays and lab reports (if requested)
	Health Care Proxy
	Your cane or crutches, if you need them (wheelchairs are available at the hospital entrance)
	Flat supportive athletic or walking shoes that are non-slip
	Short nightgown, or loose pajamas, or baggy shorts, etc. (They must fit over dressings; you won't be able to wear pajamas or shorts at first)
	Short, lightweight bathrobe (Short clothing helps prevent tripping while walking)
	Personal toiletries
	Eyeglasses instead of contact lenses (They are easier to take off and less likely to be lost in the hospital We cannot be responsible if you lose them)
	Dentures: we will provide a container which you must use (When you remove them, make sure to keep the container on your bedside table or in a drawer, not on the bed or a food tray. As with glasses, we cannot be responsible for loss)
	Your "What To Expect: Total Knee" patient education book

WHAT TO BRING TO THE HOSPITAL (continued)

✓	ITEM
	Bring a written list of the medications you have been taking (include any you may have stopped in anticipation of surgery)
	Telephone numbers of people you may want to call
	Insurance Information
	Small amount of money for newspapers, items from gift cart, etc
	A book, magazine or hobby item to assist relaxation
	Sweat suit or loose, comfortable fitting clothes to wear home (your family could bring these when you are ready to leave)
	Credit card, checks, or cash for TV and telephone services

WHAT NOT TO BRING TO THE HOSPITAL

ITEM
Valuables
Jewelry
Large amounts of money
Credit cards other than one for the TV and other amenities/services

Cash in excess of \$20.00 should be deposited in the hospital safe when you arrive, or sent home with your family. Although we respect your property rights, the hospital staff cannot guarantee security for your personal property.

PLANNING FOR YOUR HOSPITAL STAY

Personal articles and clothing should be limited to those that fit in a single, small piece of luggage. There is very little storage space in your in-patient room. We suggest you plan in two phases:

- What you may need, or want, while in the hospital. If you expect family or someone else to visit you soon as you go to your in-patient room, it may be most convenient for them to bring in the things you want in the hospital.
- What you will need for your trip home. This will include the loose fitting clothing, proper, non-skid shoes, outer coat (in season), etc. These items can be brought in by family the day you leave. Two pillows will be necessary for your car ride home...arrange for them to be available now.
- The hospital provides basic toiletry articles. If you prefer a special type of soap or hair product, please bring them. If desired, bring your basic cosmetics.
- Electric razors and battery-operated appliances are the only appliances you may bring to the hospital. This is for the safety of yourself and other patients.
- Women: Your surgery may trigger a change in your menstrual cycle. Sanitary pads are available and will be provided by the hospital.

PLANNING FOR YOUR HOSPITAL STAY (continued)

Regarding your cane or crutches (if you use them): You will need a cane or crutches when you begin to practice walking in the hospital. Ask your surgeon if the one(s) you have are the type you will need during recovery. If not, the hospital will provide them.

Regarding your hospital stay, please note the following: We prefer that you use the hospital gown after surgery. It is less restricting and easier to get on and off. Besides, clean gowns and robes are available at all times. You will be walking shortly after surgery. Shoes with non-skid soles are preferable. Bring orthotics, if you use them.

Relaxation items:

An MP3 player, or personal stereo, your favorite CDs, a stuffed animal, reading materials, or any personal articles that may help you to relax. Arrange for these items to be brought to you in your in-patient room. TV and telephone service are available in your room (at additional charge).

Medications:

Bring only the medications you will need for your hospital stay. Once you arrive at NYP, we will supply all your medications. If you bring your own supply, it will be deposited in the hospital pharmacy safe. However, if the prescription is brought in the original container and can be identified by the hospital pharmacist, and is authorized by your doctor, it can be given to you instead of the same medication from the hospital pharmacy. The nursing staff must keep it for you and administer the medication as prescribed.

YOUR ANESTHESIOLOGIST & ANESTHESIA

General Anesthesia

For many patients, general anesthesia is the type usually thought of when having surgery. The anesthesiologist induces “sleep”, using a combination of medications. During general anesthesia, you are completely unaware of surgery and do not experience pain or consciousness. You “wake up” after the surgery is over.

Your Anesthesiologist in the Operating Room

While in the operating room, you are monitored constantly by your anesthesiologist. The monitoring includes EKG, blood pressure, pulse oximetry, and temperature. In addition to these standard monitors, many patients may require the insertion of an arterial line which provides second to second blood pressure determinations, and direct or central access to your venous system. This is used to correct blood volume changes, and to monitor the heart and lungs more closely. This line, called CVP or PA Catheter, is installed after you are “asleep”. The use of these monitors will be discussed by your anesthesiologist.

Blood Transfusions

Depending upon your surgery and medical conditions, you may require blood transfusion during surgery or post-operatively. Your anesthesiologist reduces the need for transfusion by lowering blood pressure during surgery, and occasionally using a blood recycling system. However, blood transfusion is often necessary for Knee Replacement Surgery.

Some patients donate their own blood or have friends/family donate prior to the day of surgery. Prior donation is handled through your surgeon’s office. However, if prior donation has not occurred or is insufficient, you may need blood from the Blood Bank. The blood we use is carefully screened to exclude contamination by disease including Hepatitis and HIV, and is therefore, considered safe. We do not transfuse blood unless it is absolutely necessary.

YOUR INITIAL RECOVERY AFTER SURGERY IN THE POST-ANESTHESIA CARE UNIT (PACU)

General Information:

After surgery, you will need immediate, careful monitoring, while you recover from anesthesia and gradually awaken.

You will be moved directly from the Operating Room to a special Recovery Room, which we call PACU (Post-Anesthesia Care Unit). In PACU, you will be provided with oxygen, intravenous lines, and continuous cardiac and respiratory monitoring, while your anesthesia wears off.

PACU is staffed by Registered Nurses who have advanced education and training in the post-operative care of patients undergoing orthopaedic surgery. These nurses continuously monitor your condition and provide aid and comfort as you recover.

An anesthesiologist, a doctor who specializes in the care of patients undergoing surgery and who provides anesthesia, will also be in the PACU to monitor your recovery from anesthesia.

Visitations while you are in PACU:

Visitation in PACU is limited in order to promote privacy for all patients, decrease the risk of infection, and to enhance the healing process. However, parents/guardians of pediatric patients (under 18 years old) will be allowed in PACU on a controlled basis.

Every effort will be made to provide your family with current information about your condition. They will be informed about your transfer to your in-patient room, as soon as your room assignment is known.

PAIN MANAGEMENT PROGRAM

Beginning your Pain Management Program:

At NYP, we are aware that your surgery will be followed by pain, which may or may not begin to be felt in the PACU. Therefore, your personal Pain Management Program will be started by the anesthesiologist and your pain will be placed under control before you leave PACU. The Nurse Practitioner from Acute Pain Services may also visit you while you are in PACU.

You will remain in PACU until your recovery is stabilized. The anesthesiologist or medical doctor will determine your readiness to be transferred to your in-patient hospital room.

The Patient's Rights:

The patient has the right to expect management of pain to include but not be limited to:

- A concerned staff committed to pain prevention and management
- Information about pain and pain relief measures
- His/Her reports of pain to be respected
- Health professionals responding appropriately to reports of pain
- Availability of pain relief specialists

The Patient's Responsibilities:

In order for the patient to have his/her pain treated effectively, it is important for the patient to:

- Request pain relief on a timely basis
- Work with the doctor and nurses to develop a pain management plan
- Help the doctor and nurses assess his/her pain and report whether the pain relief measures were effective
- Talk to the doctor and nurse about any worries about taking pain medication

PAIN MANAGEMENT PROGRAM (continued)

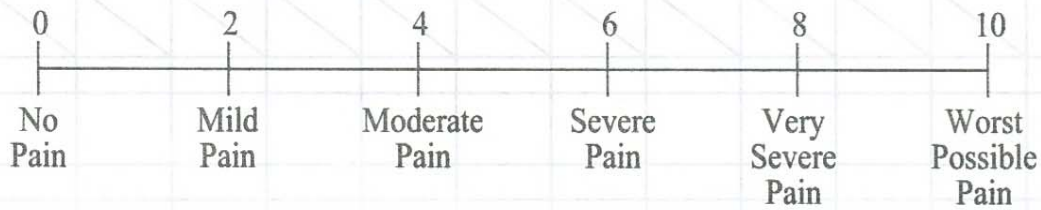
Since there are no direct clinical tests or tools to measure pain, you must be ready to tell the staff what your pain feels like, where it is located, and if it changes at times. Sometimes pain is constant, other times it comes in bursts. Pain can be sharp, burning, tingling, or aching.

You will be asked to rate how much pain you have by using one of the Pain Scales on the next page:

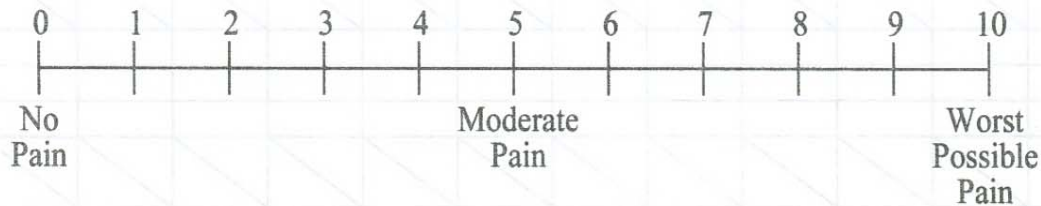
PAIN MANAGEMENT PROGRAM (continued)

PAIN INTENSITY SCALES

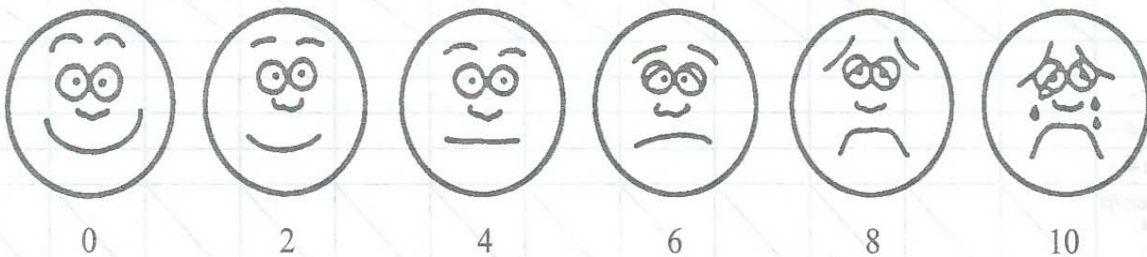
Simple Descriptive Pain Intensity Scale



0-10 Numeric Pain Intensity Scale



Wong/Baker Faces Rating Scale



1) Explain to the patient that each face is for a person who feels happy because he has no pain (hurt, or whatever word the patient uses) or feels sad because he has some or a lot of pain.

2) Point to the appropriate face and state, "This face is ...":

0 "very happy because he doesn't hurt at all."

2 "hurts just a little bit."

4 "hurts a little more."

6 "hurts even more."

8 "hurts a whole lot."

10 "hurts as much as you can imagine, although you don't have to be crying to feel this bad."

PAIN MANAGEMENT PROGRAM (continued)

Even under your personal Pain Management Program, your pain level may change at times. Be sure to tell your nurse if it becomes worse.

Your need for pain control after surgery will be met immediately by either injections or by Patient Controlled Analgesia (PCA), Epidural Patient Controlled Analgesia (PCEA), Regional Patient Controlled Analgesia (PCRA), or rarely, by injections. PCA, PCEA, and PCRA are described on the next page.

If you have been taking prescribed injections, tell your nurse as soon as the pain starts. Your pain is easier to control if you do not allow it to become severe before taking a pain medication. Please discuss the best schedule for you with your nurse.

With either method of pain medication, please notify your nurse or doctor if you are not getting pain relief. We want you to be as comfortable as possible while you heal. In addition, you will be able to participate better in your own recovery activities.

A day or two after surgery, you will be switched to a pain medication given by mouth. By this time, your surgical pain will be less severe and you will be able to progress with various activities more readily. Oral pain medication helps patients resume daily activities with a minimum amount of discomfort. In addition, it is important to understand that oral medications can be prescribed in a way that makes them just as strong as other forms of medication.

For additional pain relief we will provide you with **ice packs** or other cold therapy and introduce you to helpful **relaxation exercises**. Both are described on a following page.

PAIN MANAGEMENT PROGRAM (continued)

Cold Therapy:

Cold therapy in the form of ice packs or another cold therapy method will also be provided as an intervention to reduce swelling and pain. Cold therapy produces an anesthetic effect when placed on the surgical area.

We recommend that ice packs be applied to the surgery site for 20 minutes every four hours (**4 or 5 times each day**) throughout your hospitalization. Don't hesitate to ask your nursing staff for ice packs between various activities.

Cold therapy can be very helpful at home. If your legs feel heavy and stiff, we recommend that you rest in bed with ice packs applied to the tender or swollen areas. It can be as simple as wrapping ice cubes in a towel. There are also commercial cold packs available which you can keep cold, ready to use, in your refrigerator or freezer.

Relaxation Exercises:

Relaxation exercises, such as slow rhythmic breathing, can help you handle any pain you may be feeling, as well as providing overall comfort.

1. Breathe in slowly and deeply.
2. As you breathe out slowly, feel yourself beginning to relax, feel the tension leaving your body.
3. Now breathe in and out slowly and regularly, at whatever rate is comfortable for you. You may wish to try abdominal breathing (using your diaphragm). If you do not know how to do abdominal breathing, ask your nurse for assistance.

PAIN MANAGEMENT PROGRAM (continued)

4. To help you focus on your breathing, breathe slowly and rhythmically. Breathe in and say silently, “in, two, three”; then breathe out and say silently to yourself, “out, two, three.”

5. It may help you to imagine that you are doing this in a place that is very calming and relaxing for you, such as lying in the sun at the beach or in your own special place.

6. You may possibly relax by performing steps 1 through 4 only once. It may help to repeat steps 3 and 4 for up to 20 minutes.

7. End with a slow, deep breath. AS you breathe out, say to yourself, “I feel alert and relaxed.” Then concentrate on staying that way.

WHAT IS PATIENT CONTROLLED ANALGESIA (PCA, PCEA, PCRA)?

Patient Controlled Analgesia is a unique pain control system combining professional staff, equipment, and YOU, the patient. A special team of nurses, pharmacists and anesthesiologists supervise your use of a microprocessor-controlled electric pump, called a PCA pump.

The pump is programmed to deliver medication to you with your own unique prescription. You may receive the medication by way of an intravenous catheter, an epidural catheter, and/or a regional catheter. These will be described in greater detail below.

This way of receiving medication is called “Patient Controlled” because you receive the medication when you press a button on the PCA pump which tells the pump to inject the pain medication into the tubing (catheter). You may also have medication flowing continuously; in addition to the ‘booster shot’ you are able to give yourself.

Precautions against an overdose have been incorporated into PCA. The pump is programmed to NOT respond to a patient’s request for a booster shot, if the pre-programmed allowance has been used up for a period of time allowed. However, the PCA system automatically records both the fulfilled and unfulfilled requests, so the nurse will know of unfulfilled requests when the machine is checked. Also, if the medicine is making you sleepy (a sign that this is enough medicine for now) then you will be too sleepy to push the dosing button. REMEMBER, in order to keep this method of pain control safe, EVERYONE must follow the rules. Only the patient is allowed to press the dosing button. If a well-meaning family member or friend pushes the button, especially when you are sleeping, the built in safety precautions are bypassed, and the patient may receive a dose of medication that is unsafe!

If all of the medication allowance is used, but there is still pain, tell your nurse. The nurse can call the Acute Pain Service. The members of the service (doctors and nurses specially trained in the care of the patient with

WHAT IS PATIENT CONTROLLED ANALGESIA (PCA, PCEA, PCRA)? (continued)

pain) can then check on you and adjust the medication or PCA pump settings.

The unit nurses check regularly to make sure that you have adequate pain relief with minimal unpleasant side effects. A member of the Acute Pain Service visits daily when you are receiving medication by the PCA pump, even if your pain management is going well. If any problems arise, someone from Acute Pain Service is on call 24 hours a day, 7 days a week.

Epidural PCA

Patients who have surgery on the hips, knees or ankles will usually have epidural anesthesia. In addition to medicine which will make you sleep, you will also receive medicine that makes your lower body numb and not able to move much. After a local anesthetic injection to the skin, a catheter (very thin tubing) is placed between the bones of the back for administering the local anesthesia for your operation. Afterwards, by starting a flow of pain medication through this catheter, pain relief can be continued into the post-operative period. Therefore, the PCA pump is often attached to the epidural catheter. As described above, you will be able to give yourself a 'booster shot' if needed, in order to make the pain manageable.

Intravenous PCA

If the anesthesia used for your surgery was not epidural anesthesia, or if your surgeon and anesthesiologist feel an IV to be the preferred method of applying pain control after the surgery, the PCA pump will be attached to intravenous (IV) tubing. This means that the PCA pump will be programmed to inject pain medication directly into your blood stream, by way of the IV. Again, you can give yourself a 'booster shot' of the medication, if needed, just by pressing the dosing button on the PCA pump. This PCA method should keep you comfortable most of the time.

**WHAT IS PATIENT CONTROLLED ANALGESIA (PCA, PCEA, PCRA)?
(continued)**

Regional PCA

Another method of PCA pain control is used in combination with Intravenous PCA. This is called regional analgesia. In this method, the same catheter that is used for epidural analgesia is placed very close to a nerve that supplies the area of the operation. The same local anesthetic medication used with epidural catheters is 'injected' into the soft tissues surrounding the responsible nerve, through the thin tubing. The medication then causes this nerve to have less ability to feel, in general, and to feel pain specifically. The medicine may only flow continuously or you may be able to give yourself 'booster shots' by pressing the dosing button.

Since peripheral nerves (the nerves that supply the arms and legs) are not as exact as the nerves that are affected by the epidural analgesia, we do not expect pain control to be 100%. However, when we combine this method with the IV method we described above, pain control is usually excellent with minimal side effects.

About your pain medications

Medications used to control pain are carefully prepared in order to assure quality and safety. Some of these medications include Morphine, hydromorphone (dilaudid) and fentanyl, which are opioids (morphine like medications), and bupivacaine (Marcaine) or ropivacaine, which are local anesthetics. Local anesthetic is a type of medication used to temporarily make a part of our body feel numb, so we do not feel pain. Novacaine, which you may have had at the dentist's office, is a type of local anesthetic.

Patients must inform their anesthesiologist and peri-operative nurse about any problems encountered with medications of any type in the past. You must also inform them of ANY medications you are taking or have taken in the last 30 days, including over the counter (OTC) medications and herbal supplements or medications.

AFTER YOUR TOTAL KNEE REPLACEMENT SURGERY

Once you are in your inpatient room, you will encounter various conditions and activities:

- **Vital signs:** Your vital signs, which consist of blood pressure, pulse, respiratory rate and temperature, are taken frequently after surgery. The circulation of blood and motion in your legs will also be assessed regularly.
- **Breathing and exercise:** You will be asked to breathe deeply, to use your spirometer (described on following pages) and to exercise your legs often in order to prevent complications.
- **Surgical dressing and drainage:** You will have a bulky dressing around the surgical site. You may have a very thin tubing inserted into the surgical site that will be attached to a drain. This drainage tube is necessary to collect any bloody fluid that has accumulated under the skin and muscle. Both the bulky dressing and surgical drain will be removed a day or so after surgery.
- **Urination after surgery:** Some patients may have a catheter 24-48 hours after surgery. Patients may be unable to urinate on their own after surgery. This is related to temporary effects of anesthesia, your pain medicine and your need to be in bed. A catheter will be inserted into your bladder to remove urine, if you are unable to urinate on your own. The catheter will be removed 1 or 2 days after surgery.
- **Blood transfusion:** A blood transfusion may be necessary to replace blood loss during surgery. If you or your family donated blood ahead of time, you can be assured that you will receive your donated unit(s).
- **Venaflow:** You will have special wraps placed on your lower leg after surgery. These foot wraps attach to a pneumatic compression device. This modern technology is designed to ease lower limb blood flow. The lower leg wraps are to be worn during the first couple of days after surgery when in bed.

Some key procedures which will promote healing and help prevent complications are described on the following pages. Of most importance,



you will be introduced to precautions or restrictions of movement which you MUST observe.

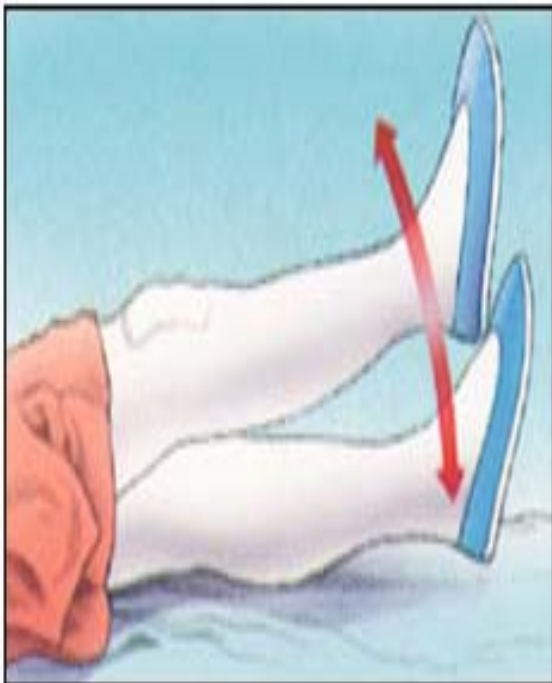
PREVENTING CIRCULATION PROBLEMS

Soon after surgery, you will be asked to perform gentle exercises. These exercises, such as ankle pumps, quad sets and gluteal sets, will help prevent circulation problems. They will also strengthen your muscles. Other exercises appropriate for you (some are reviewed later in this section) will be taught by the physical therapist and nursing staff.

To enhance your circulation, YOU will be expected to perform these exercises 10 times each, every hour while awake.

Quad Sets

Tighten your thigh muscle. Try to straighten your knee. Hold for 5 to 10 seconds. Repeat this exercise approximately 10 times during a two minute period, rest for one minutes, and repeat. Continue until your thigh feels fatigued.



Straight Leg Raises

Tighten the thigh muscle with your knee fully straightened on the bed, as with the Quad set.

Lift your leg several inches.

Hold for five to 10 seconds. Slowly lower.

Repeat until your thigh feels fatigued.

You also can do leg raises while sitting. Fully tighten your thigh muscle and hold your knee fully straightened with your leg unsupported. Repeat as above.

Continue these exercises periodically until full strength returns to your thigh.

PREVENTING CIRCULATION PROBLEMS (continued)



Ankle Pumps

Move your foot up and down rhythmically by contracting the calf and shin muscles.

Perform this exercise periodically for two to three minutes, two or three times an hour in the recovery room.

Continue this exercise until you are fully recovered and all ankle and lower-leg swelling has subsided.

PREVENTING LUNG PROBLEMS

After surgery, it is important to exercise your lungs by taking deep breaths. Normally, you may take deep breaths each hour, usually without being aware of it. They are spontaneous, automatic, and occur in the form of sighs and yawns.

However, when you are experiencing pain or drowsiness from the anesthesia, or from your pain medication, your normal breathing pattern can change. Therefore, you will be provided with an inspirimeter by the nursing staff. A member of the staff will show you how to use your inspirimeter.

Using the inspirimeter will force you to take deep breaths which are necessary to expand the small air sacs of your lungs and help clear the air passages of mucous. This helps avoid fever post-op. We recommend that you use your inspirimeter 10 times every hour while awake for the first several days following surgery

PREVENTING LUNG PROBLEMS (continued)

To achieve a slow Sustained Maximal Inspiration (SMI)...inhale at a rate sufficient to raise only the ball in the first chamber, while the ball in the second chamber remains at rest.

With the unit in an upright position, exhale normally; then place your lips tightly around the mouthpiece

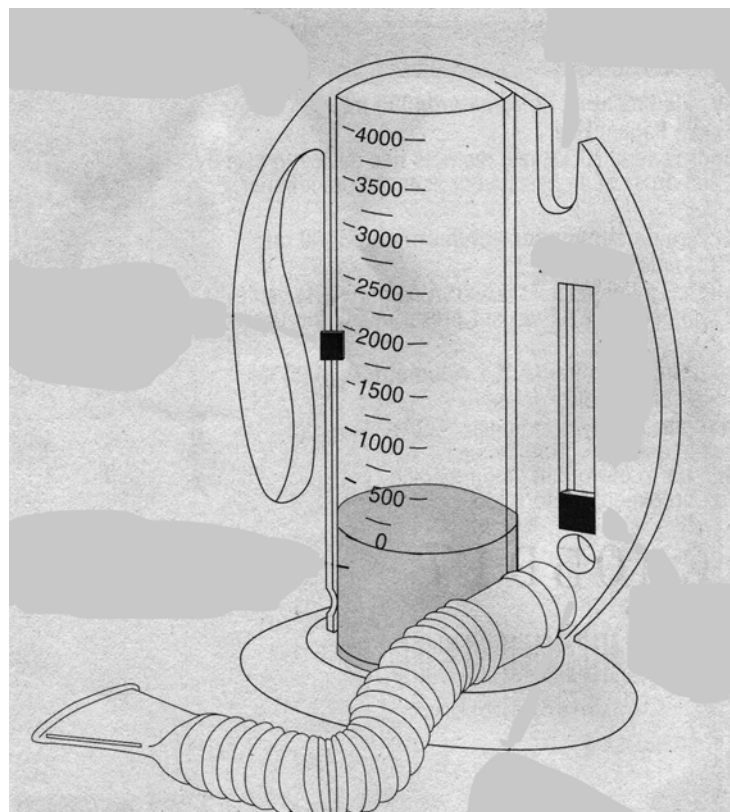
For a higher flow rate...

Inhale at a rate sufficient to raise the first and second balls, while the ball in the third chamber remains at rest.

Exhale...

After performing exercise, remove the mouthpiece from your lips and exhale normally.

Then relax...



PREVENTING LUNG PROBLEMS (continued)

Coughing: Another excellent way to help breath and clear your lungs

Coughing is, of course, one of nature's important methods for clearing your lungs at any time...not just after surgery.

1. Breathe in deeply through your nose.
2. Hold your breath and count to 5.
3. Breathe out slowly through your mouth
4. ON the 5th deep breath, cough from your abdomen as you breathe out.
5. Make a habit of doing this 2-3 times hourly, especially when it is inconvenient to use your spirometer.

ANTICOAGULATION THERAPY

Phlebitis (inflammation of the veins of the legs) or Deep Vein Thrombosis (DVT), which refers to blood clotting in the veins of the leg, is a possible risk after total joint replacement surgery.

For the prevention of Deep Vein Thrombosis (DVT) after surgery, many patients will be prescribed an oral anticoagulant. The purpose of an oral anticoagulant is to prevent your blood from clotting.

Type of medication

Depending on your medical condition and/or preference of your surgeon, you will be prescribed with either buffered aspirin twice a day or warfarin, for anticoagulation, or an injection. If you are prescribed warfarin, daily blood tests will be necessary to determine the dosage of medication required. Upon discharge home, weekly or bi-weekly blood tests will continue for the duration of the therapy. Your primary medical doctor or orthopedic surgeon will adjust the dose accordingly.

If you are prescribed Coumadin® postoperatively, the venipuncture technician will draw your blood daily so we can monitor your PROTIME. If you are prescribed injections, the nurse will educate you how to do them at home prior to discharge.

The PROTIME Test measures the time it takes for a clot to form. Your doctor may compare your time to a standard, then determine the effect Coumadin® has had on your clotting time, and adjust your dosage accordingly.

ANTICOAGULATION THERAPY (continued)

Testing for Deep Vein Thrombosis to monitor Coumadin® usage

Depending upon your surgeon's preference, an Ultrasound Doppler Test or Venogram may be ordered. Both tests are described on the following page.

If your Doppler or Venogram result is negative for DVT, then Coumadin® therapy may be discontinued by your doctor when you are discharged from the hospital.

If your Doppler or Venogram result is positive for a DVT, you will probably continue to receive Coumadin® for another 6-12 weeks by prescription.

If you go home on Coumadin® therapy, you will require routine monitoring of your PROTIME level. Your nurse, professional care coordinator and doctor will provide further instructions.

Special Tests to Evaluate Deep Vein Thrombosis (Blood Clotting)

Testing for Deep Vein Thrombosis by the Doppler or Venogram tests described here will depend upon your surgeon's practice.

The Ultrasound Doppler Test:

This is a non-invasive test for detecting Deep Vein Thrombosis. The test creates and measures sound waves generated by moving blood cells.

The patient lies in the semi-upright position for the examination. There is no discomfort or special preparation for this test. The staff will discuss the results and any indicated treatment with you.

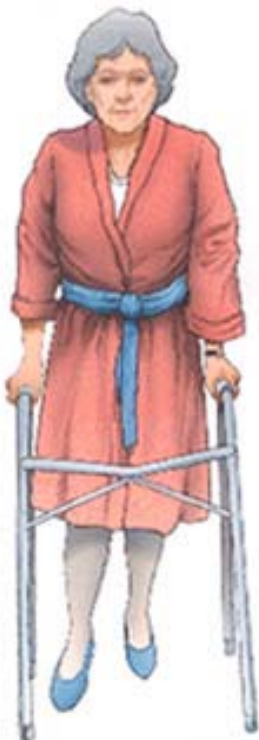
REHABILITATION FROM TOTAL KNEE REPLACEMENT

Physical therapy and occupational therapy are an integral part of your post-operative care at NYPH and after you return home. You will receive a visit from your physical therapist on the first post-operative day.

Your daily therapy sessions

You will be seen by a physical therapist/OT on the day after surgery. Your therapists will instruct you in your exercise program, which is directed toward improving your functional mobility by increasing the range of motion and strength of your legs.

For the first few days after surgery, some patients benefit from taking pain medication 30-45 minutes prior to their therapy session. You should discuss this with your nurse and/or therapist.



Beginning to walk

Your therapist will help you in sitting up with your feet over the bedside (we call it dangling). You will then stand with the use of a walker and the continued help of your therapist. As soon as possible, you will be allowed to bear full weight on the operative leg, and, then, will try walking.

As the days progress, you will increase the distance. Many patients progress to a straight cane within a few weeks after surgery.

REHABILITATION FROM TOTAL KNEE REPLACEMENT (continued)



Stair climbing

You will practice stair climbing (if appropriate) several times prior to discharge.

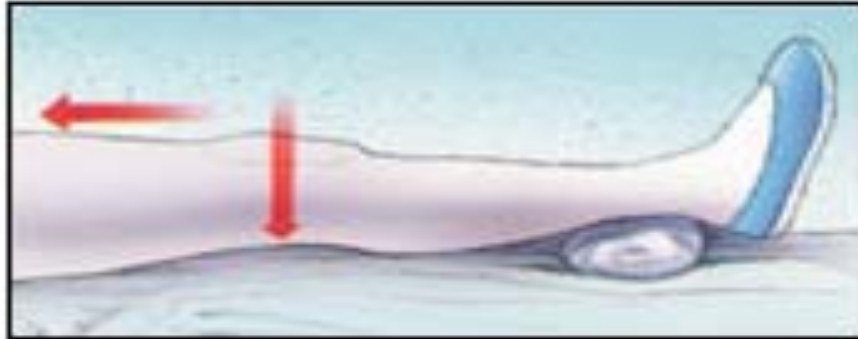
Looking ahead

Before leaving, you will be instructed in an exercise program for home.

Remember, you make the difference. It is extremely important that you understand that **your** motivation and **your** participation in **your** therapy program is a vital element in the speed and success of your long-range rehabilitation, as well as getting ready to go home.

REHABILITATION FROM TOTAL KNEE REPLACEMENT (continued)

Other examples of your exercise program may include the following:



Knee Straightening Exercises

Place a small rolled towel just above your heel so that it is not touching the bed. Tighten your thigh. Try to fully straighten your knee and to touch the back of your knee to the bed. Hold fully straightened for five to 10 seconds. Repeat until your thigh feels fatigued.



Bed-Supported Knee Bends

Bend your knee as much as possible while sliding your foot on the bed. Hold your knee in a maximally bent position for 5 to 10 seconds and then straighten. Repeat several times until your leg feels fatigued or until you can completely bend your knee.

REHABILITATION FROM TOTAL KNEE REPLACEMENT (continued)



Sitting Supported Knee Bends

While sitting at bedside or in a chair with your thigh supported, place your foot behind the heel of your operated knee for support.

Slowly bend your knee as far as you can.

Hold your knee in this position for 5 to 10 seconds.

Repeat several times until your leg feels fatigued or until you can completely bend your knee.



Sitting Unsupported Knee Bends

While sitting at bedside or in a chair with your thigh supported, bend or straighten your knee as far as you can until your foot rests on the floor.

With your foot lightly resting on the floor, slide your upper body forward in the chair to increase your knee bend.

Hold for 5 to 10 seconds.

Straighten your knee fully.

Repeat several times until your leg feels fatigued or until you can completely bend or straighten your knee.

**PROGRESS GUIDELINES: GENERAL DAILY GOALS after TKA
(MAY VARY)**

- Day of Surgery- Post operative
 - Transfer from recovery room to hospital bed
 - Routine x-rays
 - Pain control
 - Bedrest
 - Clear liquid diet
 - Intravenous antibiotics (for 24 hours)

- Day 1
 - Physical Therapy evaluation
 - Occupational Therapy evaluation
 - Social work evaluation to help with discharge planning
 - Improved pain control
 - Routine blood tests
 - Out of bed in AM (Get up and Go program)
 - Ambulation with assistance from Physical Therapy/Nursing
 - Regular diet
 - Medication to prevent blood clots (for duration of hospital stay)
 - Patient education
 - Continuous passive motion machine to knee (occasionally indicated)

- Day 2
 - Bandage changed/removed
 - Ambulation with Physical Therapy/Nursing (twice per day)
 - Continuous passive motion machine to knee (if indicated)
 - Occupational Therapy
 - Foley catheter removed (if not done sooner)
 - Oral pain medication
 - Regular diet
 - Plans set for discharge (with Social Worker)
 - Patient education

**PROGRESS GUIDELINES: GENERAL DAILY GOALS after TKA
(MAY VARY)**

- Day 3
 - Dry surgical incision
 - Oral pain medication
 - Ambulation with Physical Therapy/Nursing (twice per day)
 - Continuous Passive Motion machine to knee (if indicated)
 - Occupational Therapy
 - Patient Education and discharge instructions
 - Discharge to home/rehabilitation facility – 10 AM

DISCHARGE INSTRUCTIONS

Medication prescription from your doctor

Just before leaving, your doctor will give you a pain medication prescription for you to get filled at your own pharmacy. **If any of your personal medications are with the nurses or stored at the Hospital, make sure you get them back at this time.**

Surgical site care

Infections rarely happen after surgery, but you must remain alert to the possibility:

1. Check the surgical site daily for signs of wound infection.
Symptoms are:
 - a. Increased redness
 - b. Increase in swelling
 - c. Increase in pain
 - d. Any drainage
 - e. Oral temperature greater than 99 F

If any of the above symptoms occur, please notify your surgeon immediately. Telephone number: _____

2. If your sutures or staples have been removed, you may shower. Make sure you dry the surgical site gently, but completely. Don't peel sterile-strips from incision. They will fall off by themselves within 3 to 6 days.
3. If you are discharged with sutures or staples in place, you may not shower unless otherwise advised by your surgeon. Please keep surgical incision dry at all times. DO NOT wear tight fitted clothes over incision. To avoid friction to surgical area, you may tape a dry sterile gauze pad over incision.

DISCHARGE INSTRUCTIONS (continued)

Pain Management

1. Continue to apply ice packs to operation area for 20-minute intervals a few times a day. Especially after activity, cold therapy will continue to reduce post-operative swelling and provide you with greater comfort.
2. Take your pain medication as prescribed by your doctor. Remember to take it before the pain becomes too severe. It will help reduce the pain sooner.
3. In the event that the pain medication does not work, or you are experiencing unpleasant side effects, do not hesitate to call your orthopedic surgeon.
4. If you are taking medication, please AVOID alcoholic beverages.

Remember to continue all of the precautions for Total Knee Replacement. Your surgeon will tell you when and if you can move beyond these limitations.

1. **DO NOT** cross your legs or ankles when standing.
2. Avoid sitting in low, soft chairs such as sofas, and car seats. You should sit on a chair using two firm pillows to raise the height of the seat.
3. Make sure your bed level is high, so that you maintain proper leg positioning when sitting on the side, or getting in or out.

DISCHARGE INSTRUCTIONS (continued)

Long-range protection against infection: Antibiotic Prophylaxis

Although it is very rare, the bloodstream carrying infection from another part of the body can infect an artificial joint. Therefore, it is important that your medical doctor treat every bacterial infection (pneumonia, urinary tract infection, abscesses, etc.) promptly. Routine colds and flu, as well as cuts and bruises, do not need to be treated with antibiotics.

To prevent infection at any time in the future, you should take Amoxicillin*:

2 grams one hour before having any of the following procedures:

- Skin Biopsy
- Podiatry procedures which involve cutting into the skin
- Cystoscopy
- Colonoscopy/Endoscopy
- Dermatologic procedures which involve cutting into the skin

To prevent infection for two years after surgery, you should take Amoxicillin*, 2 grams one hour before having any of these following procedures:

- Routine dental cleaning or any dental procedures, including root canals

***Note: If you are unable to take Amoxicillin, use Clindamycin:**

600 milligrams one hour before the procedure. Amoxicillin is a form of Penicillin, so if you are allergic to Penicillin, you should take Clindamycin instead.

DISCHARGE INSTRUCTIONS (continued)

You do **not** need to take antibiotics for the following procedures:

- Pedicures/Manicures
- Gynecologic exams
- Cataract Surgery
- Injections or Blood work

It is important that you tell your doctor and dentist that you have an artificial joint, so that they may remind you to take antibiotics, and to prescribe them, as appropriate. In addition, they may wish to consult with your Orthopedic Surgeon or Rheumatologist.

If you have any questions about germs or infections, or any type of procedure, you should call your Orthopedic Surgeon or Rheumatologist.

Your rehabilitation program at home

This program will be an extremely important part of your continuing recovery. Please refer to the Home Recovery Section. If you have questions, ask your physical therapist for answers before you leave.

When to begin driving your car

Most patients are able to resume driving by about four weeks after surgery. It depends upon your leg positioning, strength and coordination. First, check with your surgeon.

DISCHARGE INSTRUCTIONS (continued)

Follow-up appointments with your orthopedic surgeon

Regardless of how well you feel after you have been home for a while, follow-up appointments with your surgeon are essential. Call his office to arrange mutually convenient dates and times.

Additional specific discharge instructions

Your surgeon may have additional instructions for you to follow upon discharge. You can record them here as a reminder. This is also a good place to make notes about questions you may have related to your discharges.

HOME RECOVERY & EXERCISE

Recovery At Home

During the first few weeks at home, you adapt what you learned at the hospital to your own setting. You will need to prepare your home for your recovery.

1. You will need a firm chair with arms. Add two (2) firm pillows to low chair to provide proper height.
2. Make sure your bed height is 18 inches, or more, in order to keep your hips above your knee when you sit on the edge. Add a second mattress if necessary.
3. General safety Measures:
 - Be sure all walking areas are free of clutter.
 - Remove throw rugs.
 - Watch for small pets and grandchildren.
 - Make sure hallways/stairways and bathrooms are well-lighted.
4. Store items within easy reach, not in high or low cabinets.
5. Prepare meals ahead of time and store in freezer. (Helpful hint: have your favorite home delivery numbers handy).
6. **If you are discharged with staples still in place, you may not shower unless otherwise advised by your surgeon.** After sutures or staples are removed, you may take a shower, but not a tub bath, until given permission by your surgeon.

HOME RECOVERY & EXERCISE (continued)

Showering/Dressing

You cannot take a bath until your surgeon gives permission. However, you can shower any time. In fact, you can take one in the hospital before leaving, if cleared by your doctor. If you have any question about this, please ask your nurse.

Showering in a tub/shower

Your new knee(s) may make it easier for you to get in and out of a tub/shower than before. However, in both the short and long run you should be concerned with safety as you enter and leave a tub/shower. Equip your tub/shower or your shower with safety handrails and a non-slip surface. Please arrange for this prior to your hospitalization, if possible.

Showering is good time to exercise your knee(s)

Bending your knees in order to wash your feet is a normal movement. Bend your knee to its maximum for washing. Then repeat the movement a few extra times as an added exercise. The warm shower water could help offset any initial discomfort.

Dressing

With a greater range of motion, you should be able to dress your lower body more easily shortly after your surgery.

Dressing is good time to exercise your knee(s)

Please focus on bending your knee(s) as far as possible when you dress. Think of this as another added exercise. Any discomfort you feel now will be step toward freedom from discomfort in the future.

As you know, much of what you normally do each day does not require bending your knee(s) to maximum. However, both showering and dressing do require extra bending of your knee(s). Please take advantage of this situation to repeatedly work on your knee range of motion as a normal part of your daily routine.

HOME RECOVERY & EXERCISE (continued)

Home Exercise Program (Perform only those ordered by your therapist or doctor.)

1. Quad Set

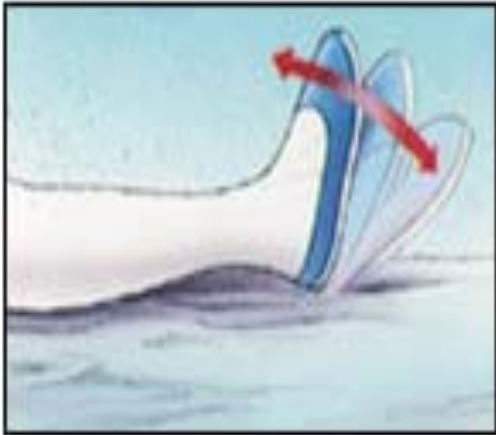
- Lie on your back on a firm mattress
- Tighten knee muscles of operated leg. This can be done by straightening your knee as much as possible and then pushing the back of your knee into the bed.
- Hold for the count of 6. Relax.
- Perform _____ repetitions, _____ times a day.

2. Gluteal Set

- Lie on your back on a firm mattress
- Pinch your buttocks together.
- Hold for the count of 6. Relax.
- Perform _____ repetitions, _____ times a day.

HOME RECOVERY & EXERCISE (continued)

3. Ankle Pumps



Ankle Pumps

Move your foot up and down rhythmically by contracting the calf and shin muscles.

Perform _____ repetitions _____ times a day.

4. Knee Bend



Sitting Unsupported Knee Bends

While sitting at bedside or in a chair with your thigh supported, bend your knee as far as you can until your foot rests on the floor.

With your foot lightly resting on the floor, slide your upper body forward in the chair to increase your knee bend.

Hold for 5 to 10 seconds.

Straighten your knee fully.

Perform _____ repetitions _____ times a day.

HOME RECOVERY & EXERCISE (continued)

5. Straight Leg Raises



Straight Leg Raises

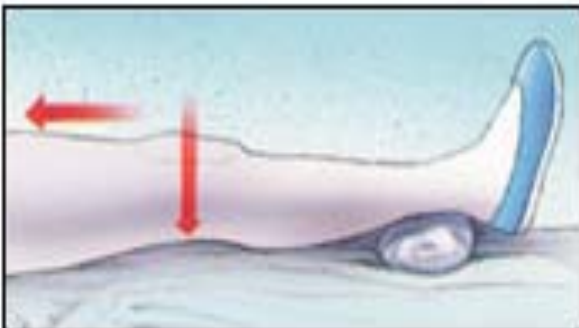
Tighten the thigh muscle with your knee fully straightened on the bed, as with the Quad set.

Lift your leg several inches. Hold for five to 10 seconds. Slowly lower.

Perform _____ repetitions _____ times a day.

(If you have had operations for both knees, you may have to keep one leg extended as you straight leg raise the other.)

6. Knee Straightening



Knee Straightening Exercises

Place a small rolled towel just above your heel so that it is not touching the bed.

Tighten your thigh. Try to fully straighten your knee and to touch the back of your knee to the bed.

Hold fully straightened for five to 10 seconds.

Perform _____ repetitions _____ times a day.

HOME RECOVERY & EXERCISE (continued)

7. Bed Supported Knee Bends



Bed-Supported Knee Bends

Bend your knee as much as possible while sliding your foot on the bed.

Hold your knee in a maximally bent position for 5 to 10 seconds and then straighten.

Perform _____ repetitions _____ times a day.

8. Sitting Supported Knee Bends



Sitting Supported Knee Bends

While sitting at bedside or in a chair with your thigh supported, place your foot behind the heel of your operated knee for support.

Slowly bend your knee as far as you can.

Hold your knee in this position for 5 to 10 seconds.

Perform _____ repetitions _____ times a day.

HOME RECOVERY & EXERCISE (continued)

9. Stair stretch

- Place your operated leg on the first or second step.
- Keeping non-operated leg on floor, lean forward towards your operated leg, bending the knee as much as possible
- Hold for the count of 6.
- Relax, straighten knee.
- Perform _____ repetitions, _____ times a day.

10. Hamstring isometrics

- Lying on your back, bend operated knee slightly.
- Push heel into bed.
- Hold for the count of 6.
- Perform _____ repetitions, _____ times a day.

Your physician and therapist may have additional exercises added to your rehabilitation program. Please refer to any additional materials provided to you by your therapist and physician.

HEALTHFUL EATING FOR THE SURGERY PATIENTS

Before Your Surgery

If you were following a physician-prescribed diet before hospitalization, it is important that this information be conveyed to the physician and registered dietitian. It is also essential that you let your doctor or nurse know if you have recently been taking any of the following: vitamins, minerals, herbals, and nutrition supplements. By letting them know what you are taking, they can avoid any possible problems with the medications and treatments you may be getting during your hospital stay.

The Day of Surgery

You cannot eat or drink anything before the surgery, not even water. Sips of water may be allowed with your medicines as directed by your doctor.

Hospital Stay

During your hospital stay, it is important to consume balanced, nutritious meals with adequate calories and nutrients to maintain your nutritional status. This will enable your body to heal with less risk of complications, such as infection or poor wound healing.

There is no “special” diet for total knee replacement. After the surgery, you will be on a clear liquid diet. You will get liquids such as chicken broth and apple juice. By the next day, you may be ready for a general diet unless you have special diet needs.

A therapeutic or modified diet such as a sodium-restricted diet, low fat diet, or diabetic diet may be ordered by your physician based on your medical condition. Your registered dietitian will visit you during your hospital stay to provide diet instruction on the therapeutic diet.

Keep in mind that your body is healing and requires adequate nourishment for tissue regeneration at this time. **Therefore, your hospital stay is not a good time to begin a weight loss program.**

If you have questions or concerns about your diet or wish to speak with your registered dietitian, please call: 4-FOOD or 43663

(The above number can only be reached from inside the hospital.)

HEALTHFUL EATING FOR THE SURGERY PATIENTS (continued)

Nutrition After Hospitalization

After you leave the hospital, your diet continues to be important for successful healing, as well as for building the muscle structure and strength required to take full advantage of your knee(s). Continue a well-balanced diet and follow any diet instructions given to you during your hospital stay.

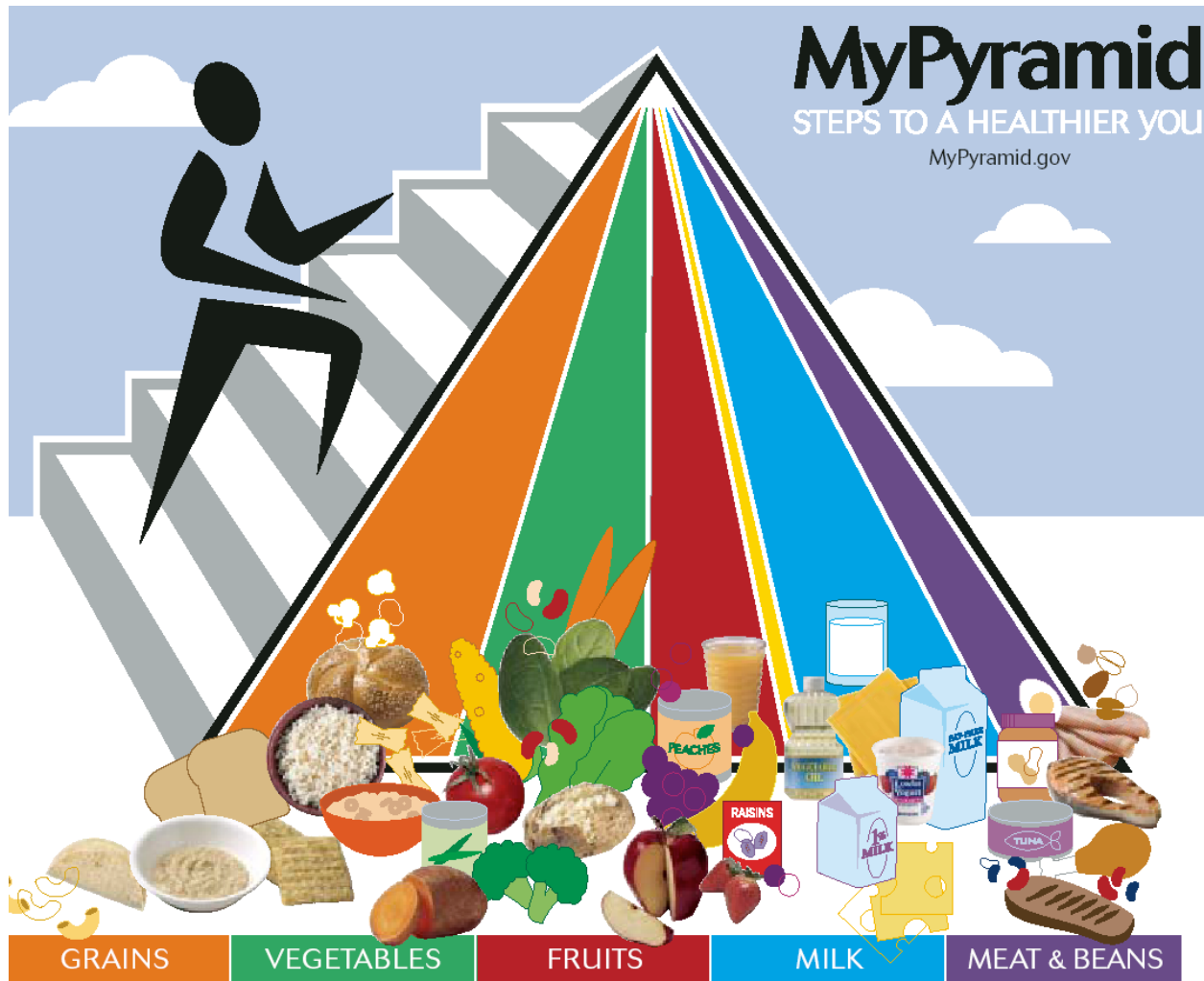
If you are interested in weight loss, discuss the appropriate time to begin a program with your physician and registered dietitian. Outpatient nutrition counseling can be arranged by calling the Nutrition Wellness Center at 212-746-0838.

Constipation may occur after surgery because of reduced physical activity and the use of pain medication. To solve this problem:

1. Drink at least eight 8-oz. glasses of water daily.
2. Add fiber to your diet by eating at least 5 servings of fruits and vegetables and 3-4 servings of whole grains such as multigrain bread, brown rice, and whole grain cereals.
3. Eat yogurt with live culture.
4. If you do experience constipation, you may take an over-the-counter stool softener, laxative or fiber supplements.

Continue to eat well for your health and well-being!

FOOD GUIDE PYRAMID A guide to healthy daily food choices



The Pyramid outlines what to eat each day. It is not a rigid prescription, but rather, a general guide that lets you choose a healthful diet that's right for you. The Pyramid calls for eating a variety of foods to get the nutrients you need and, at the same time, the right amount of calories to maintain a healthy weight. Each group provides some, but not all, of the nutrients you need. Foods in one group cannot replace those in another. Therefore, no one food group is more important than another.

GRAINS Make half your grains whole	VEGETABLES Vary your veggies	FRUITS Focus on fruits	MILK Get your calcium-rich foods	MEAT & BEANS Go lean with protein
<p>Eat at least 3 oz. of whole-grain cereals, breads, crackers, rice, or pasta every day</p> <p>1 oz. is about 1 slice of bread, about 1 cup of breakfast cereal, or 1/2 cup of cooked rice, cereal, or pasta</p>	<p>Eat more dark-green veggies like broccoli, spinach, and other dark leafy greens</p> <p>Eat more orange vegetables like carrots and sweetpotatoes</p> <p>Eat more dry beans and peas like pinto beans, kidney beans, and lentils</p>	<p>Eat a variety of fruit</p> <p>Choose fresh, frozen, canned, or dried fruit</p> <p>Go easy on fruit juices</p>	<p>Go low-fat or fat-free when you choose milk, yogurt, and other milk products</p> <p>If you don't or can't consume milk, choose lactose-free products or other calcium sources such as fortified foods and beverages</p>	<p>Choose low-fat or lean meats and poultry</p> <p>Bake it, broil it, or grill it</p> <p>Vary your protein routine – choose more fish, beans, peas, nuts, and seeds</p>

For a 2,000-calorie diet, you need the amounts below from each food group. To find the amounts that are right for you, go to MyPyramid.gov.

Eat 6 oz. every day	Eat 2 1/2 cups every day	Eat 2 cups every day	Get 3 cups every day; for kids aged 2 to 8, it's 2	Eat 5 1/2 oz. every day
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Find your balance between food and physical activity

- Be sure to stay within your daily calorie needs.
- Be physically active for at least 30 minutes most days of the week.
- About 60 minutes a day of physical activity may be needed to prevent weight gain.
- For sustaining weight loss, at least 60 to 90 minutes a day of physical activity may be required.
- Children and teenagers should be physically active for 60 minutes every day, or most days.

Know the limits on fats, sugars, and salt (sodium)

- Make most of your fat sources from fish, nuts, and vegetable oils.
- Limit solid fats like butter, stick margarine, shortening, and lard, as well as foods that contain these.
- Check the Nutrition Facts label to keep saturated fats, *trans* fats, and sodium low.
- Choose food and beverages low in added sugars. Added sugars contribute calories with few, if any, nutrients.



HEALTHFUL EATING FOR THE SURGERY PATIENTS (continued)

****What counts as one serving?**

Bread, Cereal Rice & Pasta Group	Vegetable Group	Fruit Group	Milk, Yogurt, & Cheese Group	Meat, Poultry Fish, Dry Beans Eggs & Nuts Group	Fats, Oils & Sweets Group
1 slice of bread	½ cup of chopped, raw or cooked vegetables	1 piece of fruit or melon wedge	1 cup of milk or yogurt	2-3 ounces of fish, cooked lean meat, or poultry	LIMIT calories from this group, especially if you need to lose weight
½ cup of cooked rice or pasta	1 cup of leafy raw vegetables	¾ cup of juice	1-1/2 ounces of natural cheese	Count ½ cup of cooked beans, or 1 egg, or 2 tablespoons of peanut butter as 1 ounce of lean meat	
½ cup of cooked cereal		½ cup of canned fruit	2 ounces of processed cheese		
1 ounce of ready to eat cereal		¼ cup of dried fruit			

The amount you eat at one time may be more than one serving: for example, a dinner portion of spaghetti may count as anywhere from 2-5 servings (1-2 ½ cups), depending on how much is consumed.

It is important to know the appropriate size of each food group to help you eat in moderation. In the next section, you will find sample meal patterns based on various calorie levels.

HEALTHFUL EATING FOR THE SURGERY PATIENTS (continued)

My Meal Pattern (from mypyramid.gov)

Below are suggested diet plans for different calorie levels showing the amount of food recommended per day from each food group. Most women fall under the 1400-calorie level and most men under 1800-calorie level.

	1400 calories	1800 calories	2200 calories
Grains	5 servings	6 servings	7 servings
Vegetables	3 servings	5 servings	6 servings
Fruits	3 servings	3 servings	4 servings
Milk	2 servings	3 servings	3 servings
Meat and Beans	4 oz	5 oz	6 oz
Oil & Discretionary Calories	Aim for 4 tsp of oil	Aim for 5 tsp of oil	Aim for 6 tsp of oil



CUMC PASTORAL CARE DEPARTMENT

The Pastoral Care Department has trained pastoral care providers: ecumenical chaplains, ordained ministers, priests, rabbi, Eucharistic ministers, representing a variety of faiths, available to patients, families & staff upon request. Services are televised via channel 6 in patient rooms. Additional holiday and special services are held throughout the year upon notice.

WAYS in which the PASTORAL CARE DEPARTMENT CAN HELP YOU...

- *active listening, empathetic, & supportive presence
- *competent religious, spiritual, emotional and pastoral counseling
- *crisis intervention
- *discerning End-of-Life issues (DNR, DNI, Healthcare Proxy)
- *family support

CONTACT NUMBERS:

Pastoral Care 212.305.5817 or ext. 55817
On Call Chaplain Pager 5547, starting 8:30AM to 9PM
On Call Priest (24/7) Check schedule with either:
 Fr. Mel Ferrer, pager 5534 or Fr. Don Johnston,
 pager 5543

LOCATION of PASTORAL CARE & PAULINE A HARTFORD MEMORIAL CHAPEL:

Pastoral Care Office is open Monday through Friday, 8:30AM – 5PM in the Presbyterian Hospital building, next to the Security Department & Garden Café. Chapel adjacent to the office in separate building is always available for meditation.