



Columbia University  
**Center for Shoulder, Elbow  
and Sports Medicine**

**NewYork-Presbyterian**  
Columbia University Medical Center

# WHAT TO EXPECT

## Your Guide to Total Shoulder Replacement



## TABLE OF CONTENTS

1. Introduction
  - Welcome Letter
  - Key Contacts
  - Our Neighborhood
  
2. Surgery Preparation
  - What is Total Shoulder Replacement?
  - Pre-Operation Checklist
  - Planning Your Hospital Stay
  
3. Day of Surgery
  - What to Expect on the Day of Surgery
  - Your Anesthesiologist and Anesthesia
  - Blood Transfusions
  
4. Initial Recovery in Post Anesthesia Care Unit
  - Overview
  - Relaxation Exercises
  - Pain Management
  
5. Recovery & Rehabilitation
  - Overview of Post-Operative Recovery
  - Prevention of Post-Operative Complications
  - Anticoagulation Therapy & Thrombosis
  - Rehabilitation Overview

<b>TABLE OF CONTENTS (continued)</b>
--------------------------------------

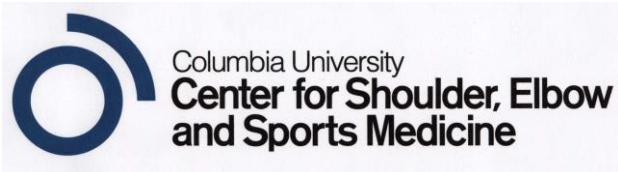
6. Progress Guidelines  
    Post Total Shoulder Replacement

7. Discharge Instructions  
    Surgical Site Care  
    Pain Management  
    Protection Against Infection  
    When Can You Begin Driving?  
    Follow Up Appointments

8. Home Recovery & Exercise  
    General Recovery Guidelines  
    Bathing/Showering  
    Dressing  
    Rehabilitation

9. Nutrition  
    Nutrition Before Surgery  
    Nutrition on Day of Surgery  
    Nutrition During Hospital Stay  
    Nutrition After Discharge  
    Food Guide Pyramid  
    My Meal Plan:  
        1200 Calories  
        1800 Calories  
        2200 Calories

10. Other  
    Pastoral Care  
    Other Educational Resources



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 Shoulder 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 the 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 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 TOTAL SHOULDER REPLACEMENT?

If your shoulder is severely damaged by arthritis or injury, it may be hard for you to perform simple activities such as reaching overhead or out to the side. You may even begin to feel pain while you're at rest or sleeping.

If medications, changing your activity level, and limiting motion to avoid pain are no longer helpful, you may want to consider shoulder replacement. By resurfacing your shoulder's damaged and worn surfaces, shoulder replacement can relieve your pain and help you resume relatively normal activities.

### **What is Arthritis**

Arthritis causes damage to the bone surfaces and cartilage resulting in stiffness, pain, rubbing noises (crepitus), muscle weakness, and loss of function.

### **How the Normal Shoulder Works**

Nearly normal shoulder function is needed to perform routine everyday activities. The shoulder is made up of the ball (humerus) and socket (glenoid). Large tendons (rotator cuff) attach to the humerus to allow a wide range of motion and to provide strength.

Normally, the joint surfaces where these 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 shoulder are covered by a thin, smooth tissue liner called the *synovial membrane*. This membrane releases a special fluid that lubricates the shoulder which reduces friction to nearly zero in a healthy shoulder.

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 TOTAL SHOULDER REPLACEMENT? (continued)

### Realistic Expectations About Shoulder Replacement

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

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

### About the Surgery

The procedure itself takes about one to two hours. An incision about six inches long is made over the shoulder joint. The incision is gradually made deeper through muscle and other tissue until the bone of the joint are exposed. 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 shoulder. Many different types of designs and materials are currently used in shoulder replacement surgery. Nearly all of them consist of two components: *the humeral component* (made of a highly polished strong metal), the *glenoid component* (made of a durable plastic).

## **WHAT IS TOTAL SHOULDER REPLACEMENT? (continued)**

### **Insertion of the socket**

The implant that replaces the socket consists of a durable plastic insert with a very smooth, cupped surface of the glenoid. Special precision instruments are used to remove the damaged cartilage and bone of glenoid and to shape the socket so it will match the shape of the implant that will be inserted. Holes are then drilled into the socket to accommodate the fixation pegs on the implant. These pegs help stabilize the implant. The socket implant is attached by using a special kind of cement for bones. The cement is pressed into the holes. The implant is then inserted.

### **Replacing Ball Portion of Joint**

The upper arm bone has relatively soft, porous bone tissue in the center. This part of the bone is called the "canal." Special instruments are used to clear some of this soft bone from the canal. Using a precision guide and saw, the damaged rounded portion (ball) of the humerus is removed. The metal stem implant may be held in place by either using the special bone cement, or by making it fit very tightly in the canal. The surgeon will choose the best method, depending on the patient's age and expected activity level. If cement is used, it is injected into the canal first, and then the implant is inserted into the canal. If cement is not used, the implant is simply inserted into the canal.

The stem and the partial sphere are two pieces and are chosen based on your own anatomy. When all the implants are in place, the surgeon places the new ball that is now part of the upper arm bone into the new socket. If necessary, the surgeon may adjust the ligaments that surround the shoulder to achieve the best possible shoulder function. When the ligaments are properly adjusted, the surgeon sews the layers of tissue back into their proper position. A plastic tube ("drain") may be inserted into the wound to allow blood to drain from the site during the first few hours after surgery. The edges of the skin are sewn together, and a sterile bandage is applied to the shoulder. Then, the patient is taken to the recovery room.



## WHAT IS TOTAL SHOULDER REPLACEMENT? (continued)

### **After the Surgery**

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

Most patients can expect to raise the hand overhead and out to the side but reaching behind the back may continue to be difficult. Occasionally, you may feel some soft clicking of the metal and plastic with shoulder motion—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 shoulder may activate metal detectors required for security in airports and some buildings. Tell the security agent about your shoulder replacement if the alarm is activated.

### **Down The Road**

The prosthesis itself can last for 15-20 years. But as time passes, with normal use and activity, every shoulder replacement may develop some wear in its plastic socket. Excessive activity or weight may accelerate this normal wear causing the shoulder replacement to loosen and become painful. With appropriate activity modification your replacement can last for many years. If further surgical intervention is necessary the old prosthesis will be replaced with new components.



<b>KEY PEOPLE TO KNOW</b>		
<b>CONTACT</b>	<b>NAME</b>	<b>EXTENSION</b>
ORTHOPAEDIC SURGEON		
INTERNIST (MEDICAL MD)		
RESIDENT		
NURSE PRACTITIONER		
SOCIAL WORKER OR CARE COORDINATOR		
NURSE MANAGER		
NURSE		
<b>OTHER KEY CONTACTS</b>		
<b>CONTACT</b>	<b>NAME</b>	<b>EXTENSION</b>
PT / REHAB		
PHARMACY		



## YOUR PRE-OP CHECKLIST



Discuss with your Surgeon:

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

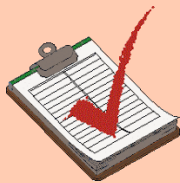
Pre-surgical Screening Appointment

- 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



## **YOUR PRE-OP CHECKLIST (continued)**



Practice your exercises as instructed by the Physical Therapist/ Doctor

Prepare your home for discharge

Complete Your Health Care Proxy

**TIME AND PLACE TO ARRIVE:** On the **business** day prior to surgery (this will be Friday for Monday surgeries) the hospital nurse will call the number you provided between 3:30-6:00 pm to tell you the 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.

**DO NOT EAT OR DRINK** anything after midnight the night before surgery unless otherwise instructed. It is often advised that you take any 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.

**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
	Flat supportive athletic or walking shoes that are non-slip. Slip on shoes are easier to put on after surgery
	Short, lightweight bathrobe
	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)
	Telephone numbers of people you may want to call. You may bring your cell phone
	Bring a written list of the medications you have been taking (include any you may have stopped in anticipation of surgery)
	Small amount of money for newspapers, items from gift cart, etc
	A book, magazine or hobby item to assist relaxation
	Loose, comfortable fitting clothes to wear home. A shirt that opens in the front is easier to take on/off (your family could bring these when you are ready to leave)
	Credit card or a small amount of cash

**WHAT NOT TO BRING TO THE HOSPITAL**

<b>ITEM</b>
Valuables (iPads, laptops)
Jewelry
Large amounts of money

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-especially a loose shirt that opens in the front, non-skid shoes (slip-on shoes are easy to get on & off), outer coat (in season), etc. These items can be brought in by family the day you leave.
- 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.
- 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.

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 socks 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:**

A music player, 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.

### **Medications:**

Once you arrive at NYPH the hospital will usually supply your medications. However, we suggest that you bring your medications in case there are any issues with our pharmacy. If you bring your own supply, it will be deposited in the hospital pharmacy safe. Bring all prescription medications in their original containers so they can be identified by the hospital pharmacist. The nursing staff will keep the medications for you and administer them 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. The use of these monitors will be discussed by your anesthesiologist.

### **Blood Transfusions**

Blood transfusions are sometimes necessary following total shoulder replacement surgery. Your anesthesiologist reduces the need for transfusion by lowering blood pressure during surgery.



## **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 fluids, and continuous cardiac and respiratory monitoring, while your anesthesia wears off.

PACU is staffed by Registered Nurses who have education and training in the immediate 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.

**As a general rule, visitors are not allowed to stay overnight in patient rooms (unless you have made special arrangements to pay for a private room).**

## **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 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)**

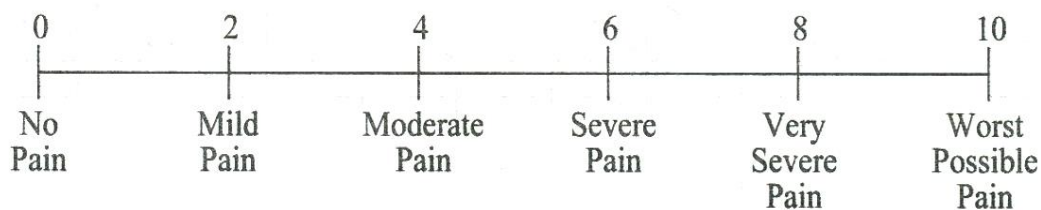
Since there are no direct clinical tests or tools to measure pain, you must be ready to tell the staff what your pain feels like, where it is located, and if it changes at times. Sometimes pain is constant, other times it comes in bursts. Pain can be sharp, burning, tingling, or aching.

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

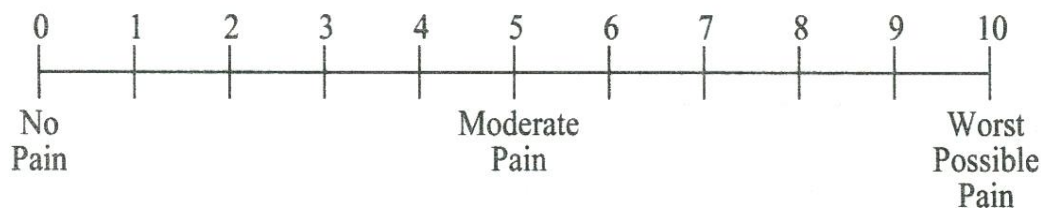
**PAIN MANAGEMENT PROGRAM (continued)**

**PAIN INTENSITY SCALES**

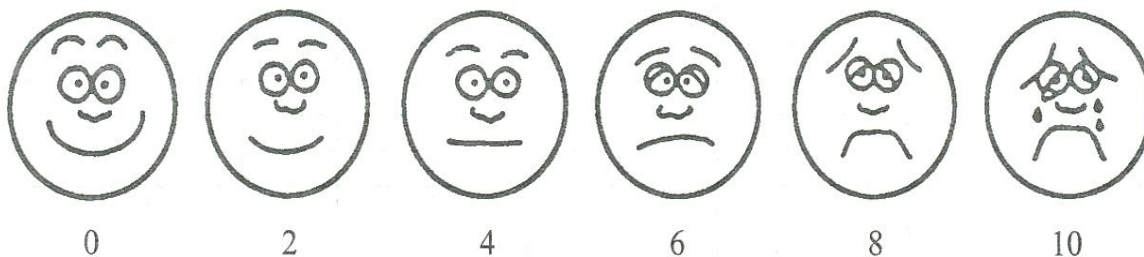
**Simple Descriptive Pain Intensity Scale**



**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.

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.

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 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 with a barrier 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 shoulder feels 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:**

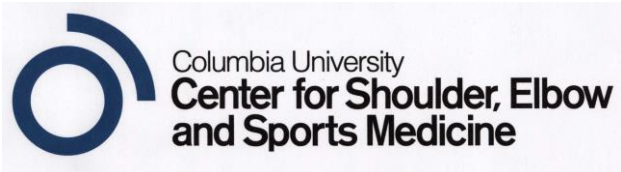
Relaxation exercises, such as slow rhythmic breathing, can help you handle any pain you may be feeling, as well as providing overall comfort.

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.





### **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 SHOULDER REPLACEMENT SURGERY

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

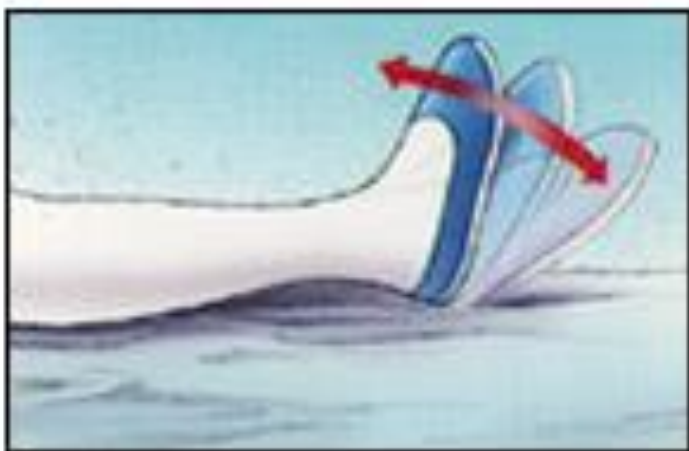
- **Vital signs:** Your vital signs, which consist of blood pressure, pulse, respiratory rate and temperature, are taken frequently after surgery.
- **Breathing and exercise:** You will be asked to breathe deeply, to use your spirometer (described on following pages) and to exercise your legs often in order to prevent complications.
- **Surgical dressing and drainage:** You will have a 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 one day after surgery.
- **Anticoagulation Therapy:** For the prevention of Deep Vein Thrombosis (DVT) after surgery, many patients are prescribed Enteric coated ASA 325 bid x 4 weeks as an oral anticoagulant. The purpose of an oral anticoagulant is to prevent your blood from clotting.

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 and quad 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.**



### **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 CIRCULATION PROBLEMS (continued)

### **Quad Sets**

Tighten your thigh muscle.

Try to straighten your knee.

Hold for 6 seconds.

Repeat this exercise approximately 10 times during a two minute period, rest for one minute, and repeat.

Continue until your thigh feels fatigued.

## 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 inspiriometer by the nursing staff. A member of the staff will show you how to use your inspiriometer.

Using the inspiriometer 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 inspiriometer 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

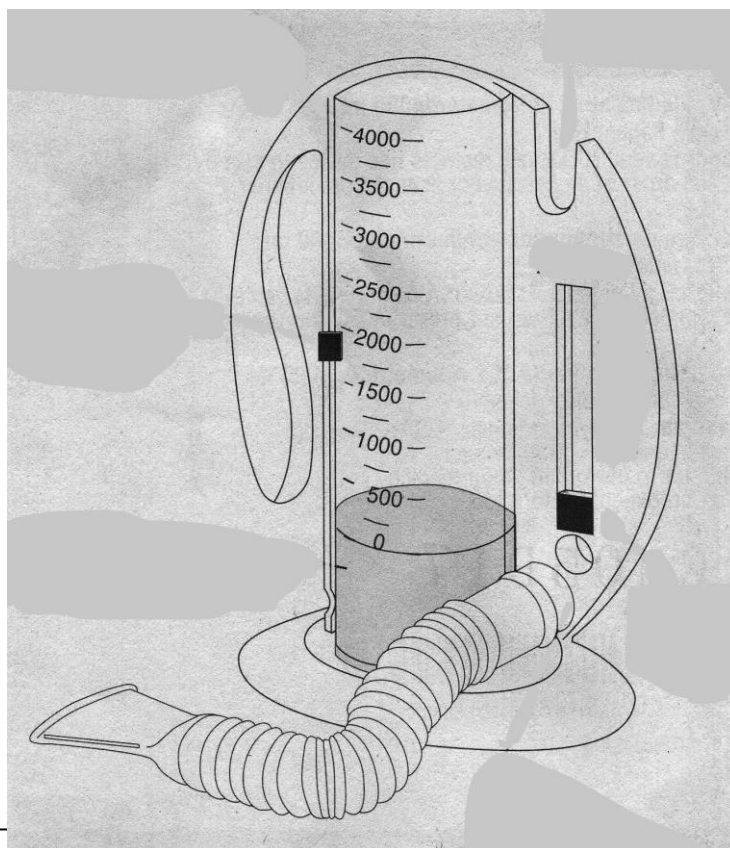
For a higher flow rate...

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 5<sup>th</sup> 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.



## REHABILITATION FROM TOTAL SHOULDER REPLACEMENT

Physical therapy (PT) is an integral part of your post-operative care at NYPH and after you return home.

### **Your daily therapy sessions**

You will be seen by a PT 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 shoulder.

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.

### **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.

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

- Day of Surgery- Post operative
  - Transfer from recovery room to hospital bed
  - Routine x-rays
  - Pain control
  - Bedrest
  - Regular diet (as tolerated)
  - Intravenous antibiotics (for 24 hours)
  
- Post op Day 1
  - Bandage check
  - Physical Therapy evaluation
  - Social work or Care Coordinator evaluation to help with discharge planning as needed
  - Improved pain control
  - Routine blood tests
  - Out of bed in AM
  - Ambulation with assistance from Physical Therapy/Nursing
  - Regular diet
  - Patient education
  - Possible discharge if ready
  
- Post op Day 2
  - Bandage changed/removed
  - Ambulation with Physical Therapy/Nursing (twice per day)
  - Oral pain medication
  - Regular diet
  - Plans set for discharge (with Social Worker) Discharge to home  
Discharge time is approximately 10 a.m.

## 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 you were not given this pre-operatively). **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. You may shower when you get home. Make sure you dry the surgical site gently, but completely. Don't peel sterile-strips (white bandages affixed to skin) from incision. They will fall off by themselves within 3 to 6 days.

## DISCHARGE INSTRUCTIONS (continued)

### Pain Management

1. Continue to apply ice packs or cryotherapy 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.

### 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

## DISCHARGE INSTRUCTIONS (continued)

**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.

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. If you have questions, ask your physical therapist for answers before you leave.

## **DISCHARGE INSTRUCTIONS (continued)**

### **When to begin driving your car**

Most patients are able to resume driving between two-four weeks after surgery. It depends upon your shoulder positioning, strength and coordination. First, check with your surgeon.

### **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 the office to arrange your 1<sup>st</sup> post-operative visit between 7-14 days from your surgery.

### **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. 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.
2. Store items within easy reach, not in high or low cabinets.
3. Prepare meals ahead of time and store in freezer. (Helpful hint: go grocery shopping before surgery and have your favorite home delivery numbers handy).





## 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.

## HEALTHFUL EATING FOR THE SURGERY PATIENTS (continued)

### **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**

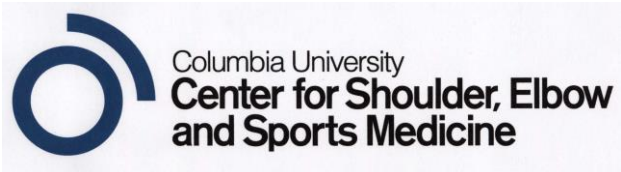
During your hospital stay, it is important to consume balanced, nutritious meals with adequate calories and nutrients to maintain your nutritional status. This will enable your body to heal with less risk of complications, such as infection or poor wound healing.

There is no “special” diet for total shoulder replacement.

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.)

### **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 shoulder. Continue a well-balanced diet and follow any diet instructions given to you during your hospital stay.

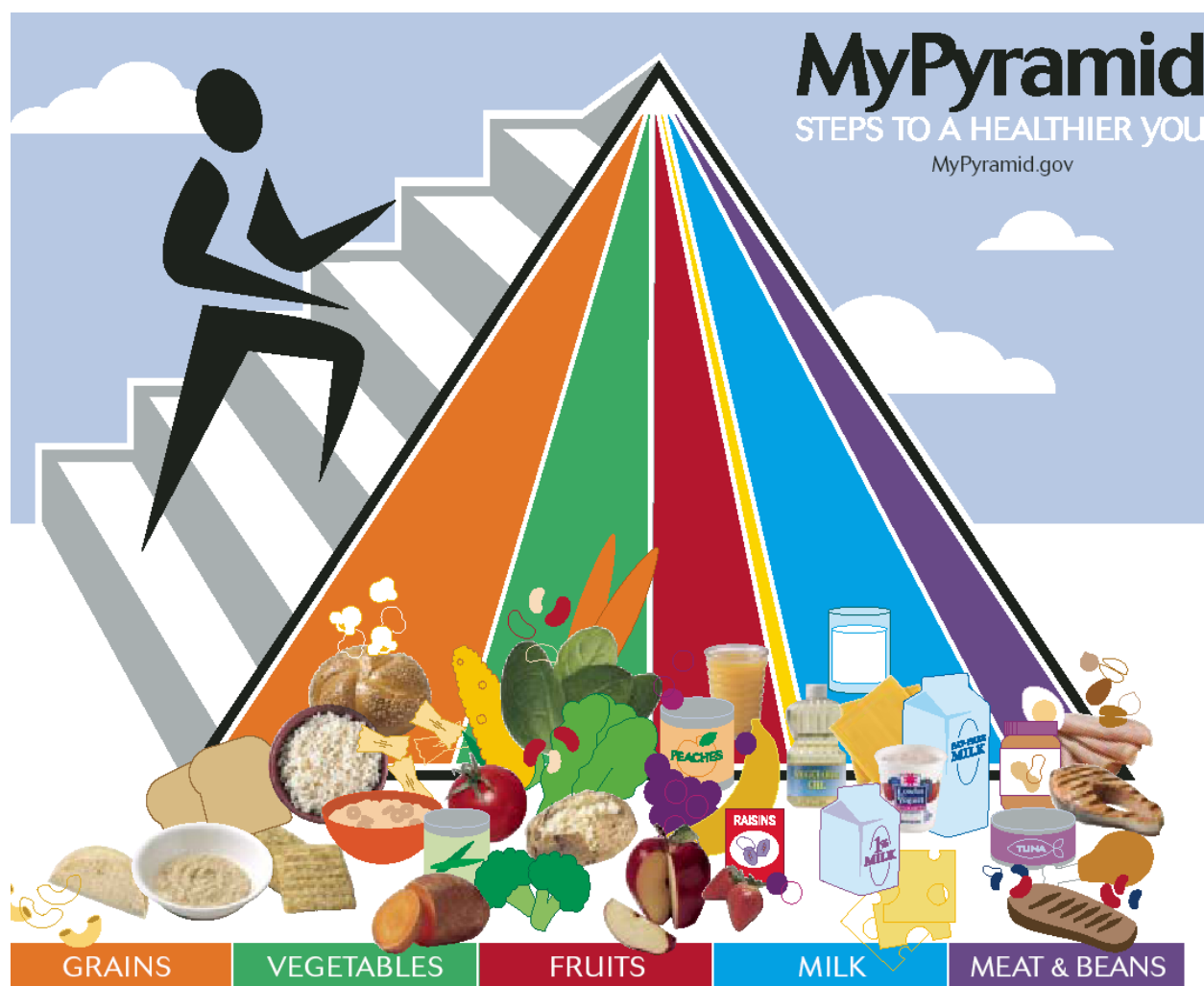
Constipation may occur after surgery because of reduced physical activity and the use of pain medication. To solve this problem:

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.

<b>GRAINS</b> Make half your grains whole	<b>VEGETABLES</b> Vary your veggies	<b>FRUITS</b> Focus on fruits	<b>MILK</b> Get your calcium-rich foods	<b>MEAT &amp; BEANS</b> 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](http://MyPyramid.gov).

Eat 6 oz. every day	Eat 2½ cups every day	Eat 2 cups every day	Get 3 cups every day; for kids aged 2 to 8, it's 2	Eat 5½ oz. every day
---------------------	-----------------------	----------------------	---	----------------------

### 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?**

<b>Bread, Cereal Rice &amp; Pasta Group</b>	<b>Vegetable Group</b>	<b>Fruit Group</b>	<b>Milk, Yogurt, &amp; Cheese Group</b>	<b>Meat, Poultry Fish, Dry Beans Eggs &amp; Nuts Group</b>	<b>Fats, Oils &amp; Sweets Group</b>
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.

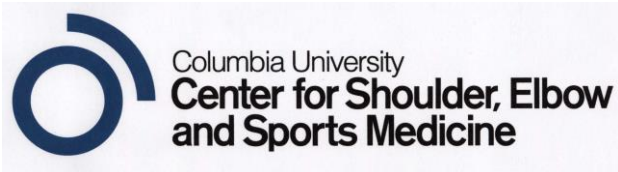
It is important to know the appropriate size of each food group to help you eat in moderation. In the next section, you will find sample meal patterns based on various calorie levels.

**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.

	<b>1400 calories</b>	<b>1800 calories</b>	<b>2200 calories</b>
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



## OTHER HOSPITAL SERVICES

**Pastoral Care:** The Pastoral Care Department has trained pastoral care providers: ecumenical chaplains, ordained ministers, priests, rabbis, Eucharistic ministers, who are available to you and your family upon request. Services are televised on channel 6 in patient rooms. Additional holiday and special services are held throughout the year.

**CONTACT NUMBERS:**

Pastoral Care                      212.305.5817 or ext. 55817

The Pastoral Care Office is open Monday through Friday, 8:30AM – 5PM in the Presbyterian Hospital building, next to the Security Department & Garden Café.

The PAULINE A HARTFORD MEMORIAL CHAPEL is adjacent to the office in separate building is always available for meditation.