WHAT TO EXPECT

Guide to Reverse Shoulder Replacement

[Image of shoulder anatomy, including labels for Rotator Cuff Tear Arthropathy, Glenoid, Scapula, Humerus, Glenosphere, and Humerosocket.]
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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 Reverse 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
If your shoulder is severely damaged by chronic irreparable rotator cuff tear, failed prior shoulder replacement, prior injury, or other derangements, it may be hard for you to perform simple activities such as reaching overhead or living without pain. 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 reverse shoulder replacement. By resurfacing your shoulder's damaged and worn surfaces, and using your deltoid muscle to move your arm, a reverse shoulder replacement can relieve your pain and help you resume more normal activities.

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 without friction while bathed in lubricating joint fluid.

Normally, all of these components work in harmony. But rotator cuff tears, disease or injury can disrupt this harmony, resulting in pain, muscle weakness, and loss of function.
Realistic Expectations About Reverse Shoulder Replacement

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

More than 90 percent of individuals who undergo reverse shoulder replacement experience a dramatic reduction of shoulder pain and a significant improvement in the ability to lift the arm above shoulder level and to perform common activities of daily living. However, a reverse shoulder replacement won't make you a super-athlete or allow you to do more than you could before you developed your shoulder condition. In fact, most individuals continue to have trouble reaching behind their back and some continue to have difficulty reaching their arm out to the side.

About the Surgery

The procedure itself takes about one to two hours. An incision about six inches long is made over the front of 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 ball and plastic joint socket to maintain alignment and regain function to your shoulder. The reverse shoulder replacement is called “Reverse” because the metal ball is placed on the original socket side while the plastic socket is placed on the original ball side of the joint. Hence, the ball and socket are reversed from the original locations. Many different types of designs and materials are currently used in reverse shoulder replacement surgery. Nearly all of them consist of two components: the *glenosphere* (made of a highly polished strong metal hemisphere attached to the glenoid via a baseplate), and the *humerosocket component* (made of a metal stem and durable plastic).
Replacing the Glenoid Socket with the Glenosphere

The glenosphere implant replaces the normal scapular socket and is a very smooth metal hemisphere which attaches to a metal baseplate which is implanted and screwed into the glenoid socket. First special precision instruments remove the damaged glenoid cartilage and holes are then drilled into the glenoid socket to accommodate the metal peg and screws of the baseplate implant. These pegs and screws help stabilize the implant until the native bone grows into the implant and secures its fixation. The glenosphere is then attached to the baseplate and the implant is complete.

Replacing The Humerus Ball with a Humerosocket

The upper arm bone has relatively soft central canal inside a tube of strong outer bone. This central part of the bone is called the "medullary canal." Special instruments are used to clear some of this soft bone from the canal to allow the metal stem to be inserted. Using a precision guide and saw, the damaged rounded portion (ball) of the humerus is removed. The metal humeral stem implant may be held in place by either using 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.

Matching Your Anatomy

The humeral stem size and thickness of the plastic socket are chosen based on your own anatomy and balancing of the soft tissues. When all the implants are in place, the surgeon assesses the stability of the new reverse replacement and if necessary adjusts the thickness or depth of the plastic socket. When the replacement is balanced, the surgeon sews the layers of tissue back into their proper position. A plastic drain tube may be inserted into the wound to allow extra fluid and blood to drain from the operative site during the first few days 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.
After the Surgery

You may feel some numbness in the skin around your incision. You also may feel some pain from the surgical exposure. Some people feel the arthritic pain is immediately relieved by the replacement by the time they leave the hospital. You may use your hand at waist level for reading, eating, and other light activities. During the first 4 weeks you must use the sling at all times and you are restricted from lifting anything heavier than a cup of coffee, pulling or pushing objects, or reaching behind you.

Physical Therapy

You must use the sling at all times including sleeping during the first 4 weeks after surgery to allow for healing. You may come out of the sling with the therapist’s instruction 3 times a day to move your elbow, wrist and hand, but NOT your shoulder. Your doctor will begin moving your shoulder 4 weeks after surgery. You will not begin physical therapy until after 4 weeks. Some individuals never need physical therapy and can regain function with home exercises as instructed by your doctor, while other patients benefit from a therapist’s care. It is important to note that motion will improve up to 6 months after surgery, but will often never be as full as it was prior to the onset of your shoulder problem.
Final Outcome

Most patients can expect excellent relief of pain and the ability to raise their hand overhead. Some individuals return to light sporting activities while others cannot. Some individuals have difficulty reaching out to the side and most have trouble reaching behind their back. Occasionally, you may feel some soft snapping with shoulder motion—this is entirely normal. Feeling like your shoulder is sliding out of place or having new pain on the boney top edge of your shoulder is not normal and you should have it evaluated.

Metal Detectors

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. We do not give notes or cards as proof of your replacement; your small surgical scar should be sufficient evidence.

Down The Road

The reverse replacement 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 from the bone and become painful. With appropriate activity modification your replacement can last for many years. If further surgery is necessary the worn reverse replacement parts will be replaced with new components.
# Key People to Know

<table>
<thead>
<tr>
<th>CONTACT</th>
<th>NAME</th>
<th>EXTENSION</th>
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<tbody>
<tr>
<td>Orthopaedic Surgeon</td>
<td></td>
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<tr>
<td>Internist (Medical MD)</td>
<td></td>
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<tr>
<td>Resident</td>
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<tr>
<td>Nurse Practitioner</td>
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<tr>
<td>Social Worker</td>
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<td>Nurse Manager</td>
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<td>Nurse</td>
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## Other Key Contacts

<table>
<thead>
<tr>
<th>CONTACT</th>
<th>NAME</th>
<th>EXTENSION</th>
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<tbody>
<tr>
<td>PT / Rehab</td>
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<tr>
<td>Pharmacy</td>
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Discuss with your Surgeon:

- What to expect while undergoing Reverse 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
Practice your exercises as instructed by the R.N. or Physical Therapist

Prepare your home for discharge

Complete Your Health Care Proxy

TIME AND PLACE TO ARRIVE AT NYP: The surgical scheduler 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.
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. If you are delayed on the day of surgery please call.
<table>
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<tr>
<th>ITEM</th>
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<tbody>
<tr>
<td>Surgical Consent signed by you (if not previously provided)</td>
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<tr>
<td>X-rays and lab reports (if requested)</td>
</tr>
<tr>
<td>Health Care Proxy</td>
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<tr>
<td>Flat supportive athletic or walking shoes that are non-slip</td>
</tr>
<tr>
<td>Short, lightweight bathrobe</td>
</tr>
<tr>
<td>Personal toiletries</td>
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<tr>
<td>Eyeglasses instead of contact lenses</td>
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<tr>
<td>(They are easier to take off and less likely to be lost in the hospital We cannot be responsible if you lose them)</td>
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<tr>
<td>Dentures: we will provide a container which you must use</td>
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<tr>
<td>(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)</td>
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<tr>
<td>Telephone numbers of people you may want to call</td>
</tr>
<tr>
<td>Bring a written list of the medications you have been taking (include any you may have stopped in anticipation of surgery)</td>
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<tr>
<td>Small amount of money for newspapers, items from gift cart, etc</td>
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<tr>
<td>A book, magazine or hobby item to assist relaxation</td>
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<tr>
<td>Sweat suit or loose, comfortable fitting clothes to wear home</td>
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<tr>
<td>(Your family could bring these when you are ready to leave)</td>
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<tr>
<td>Credit card, checks, or cash for telephone services</td>
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# WHAT NOT TO BRING TO THE HOSPITAL

<table>
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<tr>
<th>ITEM</th>
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<tbody>
<tr>
<td>Valuables</td>
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<tr>
<td>Jewelry</td>
</tr>
<tr>
<td>Large amounts of money</td>
</tr>
<tr>
<td>Credit cards other than one for the TV and other amenities/services</td>
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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.
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.

• 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 MP3 player, or personal battery-operated 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.

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.
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.

Regional Anesthesia
Regional anesthesia is a type of anesthesia that blocks the nerves from feeling pain. It is used in combination with general anesthesia or sedation so that you are “sleeping” or “near asleep” during the shoulder replacement and without pain. This nerve blockade is an injection of anesthesia near the nerves traveling toward the shoulder and temporarily causes your arm to become numb and without muscle control for the first 6 to 24 hours. Depending on your medical history and preferences the anesthesia doctor may discuss regional anesthesia as an option for you during reverse shoulder replacement.

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.

Visitation 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.
Beginning your Pain Management Program:
At NYP, we are dedicated to treating your pain and making your recovery as pain free as possible. We are aware that your surgery will likely be followed by some amount of 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 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
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 INTENSITY SCALES

Simple Descriptive Pain Intensity Scale

0  2  4  6  8  10
No Pain  Mild Pain  Moderate Pain  Severe Pain  Very Severe Pain  Worst Possible Pain

0-10 Numeric Pain Intensity Scale

0  1  2  3  4  5  6  7  8  9  10
No Pain  Moderate Pain  Worst Possible Pain

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."
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 devices like a cryocuff and introduce you to helpful relaxation exercises. Both are described on a following page.
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 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.
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.
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 inspirometer (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. Any bulky dressing and surgical drain will be removed one to two days after surgery. A smaller dressing may be applied.
- **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.
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.

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**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.
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 inspirometer by the nursing staff. A member of the staff will show you how to use your inspirometer.

Using the inspirometer 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 inspirometer 10 times every hour while awake for the first several days following surgery.
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…
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 inspirometer.
Your Daily Therapy Sessions

Occupational therapists will instruct you on the day after surgery to move your hand, wrist, and elbow and teach you techniques to dress and care for yourself with one arm in a sling.

Your therapists will instruct you in your exercise program to be continued in the hospital and at home, which is directed toward improving your functional mobility of your hand and improved waist level activities. 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.

You will NOT begin physical therapy (PT) on your shoulder until at least 4 weeks after surgery. Some individuals never need physical therapy and can regain shoulder function with home exercises as instructed by your doctor, while other patients benefit from a therapist’s care. During the first 4 weeks after surgery you must wear the sling at all times, including sleeping, to allow for healing. You may come out of the sling to shower with your arm at your side and 3 times a day to move your elbow, wrist and hand, but NOT your shoulder.

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 REVERSE SHOULDER REPLACEMENT (MAY VARY)

- **Day of Surgery- Post operative**
  - Transfer from recovery room to hospital bed
  - Routine x-rays
  - Pain control
  - Regular diet (as tolerated)
  - Intravenous antibiotics (for 24 hours)

- **Post-op Day 1**
  - Bandage change
  - Physical Therapy/Occupational Therapy evaluation
  - Social work evaluation to help with discharge planning
  - 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 – (has to be cleared by surgeon)

- **Post-op Day 2**
  - Bandage changed/removed
  - Ambulation with Therapy/Nursing
  - Oral pain medication
  - Regular diet
  - Plans set for discharge. Discharge to home/ **target discharge time is 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.
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 Amoxycillin*:

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 Amoxycillin*, 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 Amoxycillin, use Clindamycin: 600 milligrams one hour before the procedure. Amoxycillin 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.
When to begin driving your car

Most patients are able to resume driving between four and six weeks after reverse shoulder replacement 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 1st post-operative visit between 7-14 days from your surgery.

Long Term Follow-Up

Your surgeon is dedicated to checking the successful outcome of your shoulder replacement over the long term even if you have no pain and are doing great. We expect you to return for clinical and radiographic visits each year during the first 2 years after the surgery and then every 5 years after that with new x-rays. If you live far away you may have your local doctor perform the x-rays and send them to us.

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.
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: have your favorite home delivery numbers handy, if available).
Additional Instructions

________________________________________________________________________
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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 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!
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
- Eat at least 3 oz. of whole-grain cereals, breads, crackers, rice, or pasta every day
- 1 oz. is about 1 slice of bread, about 1 cup of breakfast cereal, or ½ cup of cooked rice, cereal, or pasta

### Vegetables
Vary your veggies
- Eat more dark-green veggies like broccoli, spinach, and other dark leafy greens
- Eat more orange vegetables like carrots and sweet potatoes
- Eat more dry beans and peas like pinto beans, kidney beans, and lentils

### Fruits
Focus on fruits
- Eat a variety of fruit
- Choose fresh, frozen, canned, or dried fruit
- Go easy on fruit juices

### Milk
Get your calcium-rich foods
- Go low-fat or fat-free when you choose milk, yogurt, and other milk products
- If you don’t or can’t consume milk, choose lactose-free products or other calcium sources such as fortified foods and beverages

### Meat & Beans
Go lean with protein
- Choose low-fat or lean meats and poultry
- Bake it, broil it, or grill it
- Vary your protein routine — choose more fish, beans, peas, nuts, and seeds

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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 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

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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.

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### 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.

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[MyPyramid.gov]
**What counts as one serving?**

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

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.
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.

<table>
<thead>
<tr>
<th></th>
<th><strong>1400 calories</strong></th>
<th><strong>1800 calories</strong></th>
<th><strong>2200 calories</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains</td>
<td>5 servings</td>
<td>6 servings</td>
<td>7 servings</td>
</tr>
<tr>
<td>Vegetables</td>
<td>3 servings</td>
<td>5 servings</td>
<td>6 servings</td>
</tr>
<tr>
<td>Fruits</td>
<td>3 servings</td>
<td>3 servings</td>
<td>4 servings</td>
</tr>
<tr>
<td>Milk</td>
<td>2 servings</td>
<td>3 servings</td>
<td>3 servings</td>
</tr>
<tr>
<td>Meat and Beans</td>
<td>4 oz</td>
<td>5 oz</td>
<td>6 oz</td>
</tr>
<tr>
<td>Oil &amp; Discretionary Calories</td>
<td>Aim for 4 tsp of oil</td>
<td>Aim for 5 tsp of oil</td>
<td>Aim for 6 tsp of oil</td>
</tr>
</tbody>
</table>
Social Work: Social workers at New York-Presbyterian Hospital provide services to patients of all ages – from children to adults – who are admitted to our Hospital or who are seen on an outpatient basis. As part of your health care team, the professional social work staff helps patients and families understand and cope with medical, psychological, and social issues related to their illness. Our social workers offer many services to help patients during their treatment. These include:

- Counseling
- Patient Advocacy
- Discharge planning

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.