Your Guide to a Successful Recovery

Preparation, education and a pre-planned discharge are very important for a joint replacement surgery. This booklet was made to help you understand:

• What to expect through every step of your surgery process
• What you will need to do before and after surgery
• How to care for your new joint

Remember, this is just a guide. Your Care Coordinator, Physician, Physician’s Assistant, Nurses or Therapists may add to or make changes to any of the suggested care plans. Always use their recommendations first and ask questions if you are unsure of any information. Keep your guide as a handy reference for at least the first year after your surgery.

___________________________________________

Patient Name

___________________________________________

Surgery Date

Please Bring This Book with you to:

• Every office visit
• Your hospital pre-op class
• The hospital on admission
• All Outpatient rehab appointments, home health visits, or nursing home
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The Care Coordinator
Care Coordinators are here to help you; the patient, navigate the surgical process. From preparing for surgery to post-operative care, your Care Coordinator will help guide you and address your questions and concerns about your surgical procedure.

Your Care Coordinator will:

• Provide education throughout your surgical process
• Assess your needs at home
• Assist in coordinating your discharge plan
• Act as your guide throughout the course of treatment from Pre-operative to Post-operative discharge.
• Answer questions and coordinate your hospital care with the Joint Replacement team
• Coordinate scheduling your Joint Replacement Education Class
• Act as a liaison between the doctor’s office, the hospital, testing facilities and home care if needed.
• Answer questions and direct you to the correct resources within the hospital.

You may call your Care Coordinator any time to ask questions about your surgery.

Phone: 407-303-7963
AdventHealth Altamonte Springs

AdventHealth Altamonte Springs is dedicated to providing the highest level of care, the latest technology and most advanced screening to those in our community. We work one-on-one with our neighbors, families and friends to improve overall health and wellness. When those in our local community become healthier, it’s easier to prevent diseases and live a healthier lifestyle.

Located only a short drive from Orlando, the attractions and beaches, AdventHealth Altamonte Springs reaches many of the diverse communities in Central Florida. Our facility attracts many of the world’s top physicians and medical research professionals. These experts provide state-of-the-art care in a close-knit community setting.

Through an interdisciplinary approach, each patient receives a personalized plan of treatment. Our doctors take the time to explain medications, treatment options, side effects and risks so patients understand as much as possible about their health care. We take time to answer your questions because we understand communication is key. Our team provides the spiritual, emotional and medical support you need to recover and achieve your highest level of wellness.

ADDRESS:
601 East Altamonte Drive
Altamonte Springs, FL 32701
Main Phone: (407) 303-5700

Concierge:
407-303-5395
Located in main lobby
Assists with transportation needs.
Offers local hotel and restaurant info.
Provides directions throughout hospital.

Uptown Cafe:
Daily from 06:30am-11pm
Breakfast: 06:30am-09:30am
Lunch: 11am-2pm
Dinner: 4:30pm-8pm

Eden Spa & Altamonte Gift Shop:
(Hours are subject to change)
Monday-Thursday: 7am-8pm
Friday: 7am-4pm
Saturday: Closed
Sunday 12pm-5pm
(407) 303-1191

Security:
Emergency: 407-303-1515
Non-Emergency: 407-393-1916
Amenities

To create a positive experience, our facility is designed with patients, healing and physicians in mind. Here are just a few of the hospital amenities we provide at AdventHealth Altamonte Springs:

- Chapel and Healing Garden
- Concierge Services
- Electronic Information Display Panels
- Interactive Patient Education
- Pastoral Care
- Bedside delivery of prescribed medication via Walgreens arranged through our care Management and nursing team
- Physician Referral Services
- Uptown Café
- Gift Shop
- Tours & Consults
- Valet Parking
- Free Wi-Fi
- Security
- ATM

Pastoral Care:
Available 24 hours a day, 7 days a week.
Please ask your nurse or care team.

Chapel:
24 hours a day, 7 days a week

Eden Spa:
Monday-Friday 9am-8pm
Weekends 9am-5:30pm
407-303-3318

ATM:
Located in the main lobby near registration
Pre-Operative Care

Included in this section:

**Pre-Operative Care Checklist**
- A checklist to help guide you through the pre-op process

**Scheduling Surgery**
- What you will need before scheduling your surgery

1-2 Weeks After Scheduling Surgery
- Pre-op Exercises, Goals, Guidelines
- Schedule Education Class

3-6 Weeks Before Surgery
- Stop Smoking

**Pre-Registration**

**Pre-Admission Testing**

1-2 Weeks Before Surgery
- Pre-op visit to surgeon
- Stopping Medications
- Blood thinner warning

**Preparing Your Home**
- How to prepare
- Arrangements to make
- Obstacles
- Environments to consider

**Day & Night Before Surgery**

**Morning of Surgery**

**What to Bring to the Hospital**

**Pre-Op Shower Instructions**
Pre-Operative Care Checklist

BEFORE YOUR SURGERY WILL BE SCHEDULED:
□ Obtain medical clearance from primary care physician and any specialist as required. Please provide all clearance information to the orthopedic surgeon’s office. Also, please keep a copy for your own records.

WITHIN 1-2 WEEKS AFTER RECEIVING YOUR SURGERY DATE:
□ Begin pre-operative exercises located in Appendix A. These should be done twice a day on both legs/arms.
□ Schedule pre-operative education class with the Care Coordinator, if not already scheduled in the orthopedic surgeon’s office.

3-6 WEEKS PRIOR TO SURGERY:
□ Stop smoking.

BEFORE ATTENDING THE EDUCATION CLASS:
□ Confirm the date/time for class with your care coordinator before coming to the hospital.
□ Fill out all forms in Appendix G prior to class
□ Bring this book.
□ Bring your Coach

1-2 WEEKS PRIOR TO SURGERY:
□ Stop all medications that can increase bleeding unless otherwise instructed by your physician
□ Attend your pre-operative appointment with the surgeon’s office if applicable
□ Attend the pre-operative testing/pre-registration appointment with the hospital (Please bring your insurance cards and your prescription card, if it is different from your insurance card)
□ Prepare your home for your return from the hospital

NIGHT BEFORE AND THE DAY OF SURGERY:
□ Wash with the chlorhexidine prep using the instructions in this guide.
□ Do NOT eat or drink anything after midnight.
□ Have personal belongings packed and in your car.
□ Arrive to the hospital on time and report to surgical check in.
Pre-Operative Care

Scheduling your Surgery

Obtain Medical Clearance
You must obtain your medical clearance before your surgery is scheduled. Also, if recommended by the surgeon or primary care physician you may be required to obtain clearance from a specialist such as your cardiologist, pulmonologist, etc. These clearances must be obtained prior to scheduling your surgery as well.

Your primary care physician will order any labs or exams that need to be completed to medically clear you for surgery.

We do prefer that your medical clearance includes basic laboratory work, a chest x-ray and an EKG.

Please bring these exam results with you on your pre-operative testing day. If these tests are not included in your medical clearance, we will complete them on your pre-operative testing day.

One to Two Weeks after Scheduling Surgery

Pre-Operative Exercises, Goals and Activity Guidelines – See Appendix A
It is very important that you begin to strengthen and stretch your muscles prior to your surgery.

Your physician may even prescribe physical therapy for you prior to surgery as an exercise plan. If not, complete the exercises shown here, that your physician wants you to start doing now and continue until your surgery. This can make a huge difference in the amount of pain you have during your recovery period. You should be able to do them in about 15-20 minutes and it is typically recommended that you do all of them twice a day.

Consider this a minimum amount of exercise before your surgery. There is a picture guide of the exercises in Appendix A. Please let the care team know during the pre-operative class if you need further guidance on completing these exercises.

Also, remember that you need to strengthen your entire body, not just your leg. It is very important that you strengthen your arms because you will be relying on your arms to help you get in and out of bed, in and out of a chair, walk, and to do your exercises post-operatively.

STOP doing any exercise that is too painful!
Pre-Operative Care

Pre-Operative Education Class

A special class is held for all joint replacement surgery patients. **You should plan to attend this class two to four weeks before your surgery.** You will only need to attend one class. Members of the team will be there to answer your questions. It is strongly suggested that you bring a family member or friend to act as your “coach.” The coach’s role will be explained in class. The outline of the class is as follows:

- What to expect Before, During and After Surgery
- The roles of “Coach/Caregiver” and “Care Coordinator”
- Exercises
- Infection Prevention
- Preparing your home
- Pain Control
- Preventing complications
- Going home
- Protocols
- Presentation by Physical Therapist

To schedule your class, call the Care Coordinator:

407-303-7963

Items to bring to class:

1. Friend or family member who will be helping in your recovery
2. This book (Passport)
3. All forms completed in Appendix G

Parking

There is handicap parking available up front. However, if there are no handicap spaces available, the valet will park your car for free.
Pre-Operative Care

Three to Six Weeks before Surgery

Stop Smoking
It is very important to stop smoking before your surgery. Smoking makes it harder to get oxygen to your healing joint, which is vital in the healing process. If you need help on how to quit smoking, please contact your Care Coordinator, they will be able to guide you to the best resources.

Eat Right – See Appendix F for guides on eating healthy and preparing for surgery.

Pre-Register for Hospital
You will need to pre-register for your hospital visit. This will be done in the hospital before pre-admission testing. Please be sure to bring:

- Driver’s license or photo I.D.
- Insurance cards & Prescription insurance card
- Employer address & phone number
- Any co-payment required by the insurance company
- Emergency contact phone number & address

Pre-Admission Testing Appointment- Main Lobby Registration
You will have a pre-operative testing appointment with the hospital before your surgery.

Please note that you must pre-register before this appointment.

The pre-operative testing department will complete lab work or tests ordered by your surgeon and review your medication information with a clinical pharmacist.

If you have had an EKG and/or chest-x ray done within 6 months, please bring these results with you to this appointment.
Pre-Operative Care

One to Two Weeks before Surgery

Pre-Operative Visit to Surgeon

You may be scheduled for an appointment in your surgeon's office before your surgery. This will serve as final check-up and a time to ask any questions that you might have.

Stop Medications That Increase Bleeding
Stop all anti-inflammatory medications such as aspirin, Motrin, Naproxen, Vitamin E, Fish Oil, etc. as your doctor instructs. These medications may cause increased bleeding.

**If you are taking a blood thinner, you will need special instructions for stopping the medication by the prescribing physician.

Prepare Your Home for Your Return from the Hospital

1. Preparing your home prior to surgery.
   a. Clean, do laundry and put it away.
   b. Put clean linens on the bed.
   c. Prepare meals and freeze them in single serving containers.
   d. Cut the grass, tend to the garden, and finish any other yard work.
   e. Install night lights in bathrooms, bedrooms, and hallways.

2. Arrangements
   a. Arrange for someone to collect your mail, empty trash, take trash to/from curb.
   b. Arrange for someone to care for pets (i.e. walk the dog, empty litter boxes, give food/water).
   c. Arrange for someone to help completing heavy housework (vacuuming, mopping) and general housework.
   d. Arrange for someone to do your grocery shopping.
   e. Arrange to get any adaptive equipment or devices (reacher, sock aid, shower chair, etc.)
Pre-Operative Care

Prepare Your Home for Your Return from the Hospital continued...

3. Check your home for obstacles.
   a. Remove throw rugs, tack down loose carpet.
   b. Remove electrical cords and other obstructions from walkways/hallways.
   c. Check bathroom for the need of grab bars.
   d. Assess stairs - if there is more than one step with no railing, consider having one installed.
   e. Look at the lay-out of your bathroom. Will the space around your toilet accommodate a 3-1 commode approximately 19” x 28”? (Measure interior of tub, if there is no other shower available, and also take into account the "curvature" of the tub. The chair needs to sit flat in the tub for safety.) Check the shower stall (opening, amount of space, door swing/slide). Measure heights of built-in benches/seats in shower stall (more often than not they are too low). *
   f. Check the height of your bed. Is it too high? Too low? Is there enough space around the bed to maneuver a walker?
   g. Find appropriate chairs in which you can sit. *The chairs you choose should be firm. The seat should be higher than the back of your knee. It should also have arms to help getting up and down and should not have wheels.*
      
      *These suggestions vary from surgeon to surgeon, so please be sure to follow your surgeon’s specific instructions.

4. Check before surgery
   a. Look at the layout of your home office (i.e. computer hard drive easily accessible? Filing drawers?) What type of chair do you have (i.e. casters/wheels)?

   b. Do "DRY-RUNS" of any routine(s) you have, or any community environments you may encounter. Keep in mind the physical demands of each activity, and your body positioning/ body mechanics. What are some of the physical/ environmental barriers you will encounter?
Pre-Operative Care

Some suggested environments to consider:

**Work:** What does your job require your body to do (standing for too long, lifting, bending, etc.)? What body positions does it put you in? What type of chair do you have (casters/wheels)?

**Places of worship:** Pews or theater-style seats may be too low, older churches may not have handicap accessible bathroom stalls. Are there other chair options?

**Favorite restaurants:** Seats, chairs with casters, chairs vs. booths, accessibility of toilets

**Homes of friends or family members’ home you frequently visit:** Do they have stairs/steps, even if you don’t? Are there appropriate chairs to sit in? What about a secondary residence to which you might be returning or vacationing?

**Fitness Centers (or home gyms):** What type of work-out routines do you do? What machines/equipment is used?

**Movie Theatres, Concert halls, Hair dresser/barber shop, etc…:**

Night Before and The Day of Surgery

**Special Instructions:**

You will be instructed by your physician about medications, skin care, showering, etc.

- **DO NOT take medication for diabetes on the day of surgery.**
- Please take medications for your heart, thyroid or blood pressure the morning of surgery. Without water if possible or a sip of water is okay.
- Pack a suitcase with clothes for your hospital stay. Loose fitting shorts or Capri’s are preferred; no long pants.
- Please leave jewelry, valuables and large amounts of money at home.

Night Before Surgery

**Do Not Eat or Drink**

- Do not eat or drink anything after midnight.
- No chewing gum.

**Showering**

- You will need to shower with Chlorhexidine Prep / Hibiclens the night before surgery. This will be provided to you at your pre-operative appointment with the hospital. See page 14 for instructions.
Pre-Operative Care

Morning of Surgery

Do Not Eat or Drink.
- Do not eat or drink anything after midnight. No chewing gum.
- **Arrive on time.** If you are late, it could result in having to move your surgery to a much later time.

Showering
- Do not bathe with soap or shampoo. Use the Chlorhexidine Prep again. See following page for instructions.
- Do not wear any make up

What to Bring to the Hospital
- Personal hygiene items are available at the hospital. Please make sure you pack shorts, tops, well-fitted slippers and flat shoes or tennis shoes.
- For safety reasons, **DO NOT** bring electrical items. You may bring battery-operated items.
- Bring any assistive devices (rolling walker/cane/etc.) to the hospital so we may inspect it for safety and adjust it to fit your height.
- You must also bring the following to the hospital:
  - A copy of your Advance Directives (See Appendix D for information)
  - Your insurance card, prescription card, driver’s license or photo I.D., and any co-payment required by your insurance company.
  - CPAP or Bi-PAP machine if needed
  - This Book
Showering / Preparing Your Skin Before Surgery: 
Instructions for Pre-Operative Showers with a Chlorhexidine Prep Solution 
(Hibiclens)

Evidence shows that pre-operative showers with an antiseptic solution can reduce the risk of infection at the surgical site. These showers decrease the amount of normal bacteria on your skin, thus reducing the risk of infection.

You will perform these showers the night before and the morning of surgery.

Take a shower and wash your entire body in the following manner:

• Wash and rinse your hair first using your normal shampoo. Make sure you completely rinse the shampoo from your hair and body. Do not wash hair with your last shower.

• Wash your face with your regular soap or cleanser and rinse completely.

• Turn the shower off.

• Apply the antiseptic solution to a wet, clean washcloth and lather your entire body from the neck down. Never use the antiseptic solution near your eyes or ears.

• Gently wash your body and focus on the areas where the incision(s) will be located for three minutes. Avoid scrubbing your skin too hard.

• Once you have completed the scrub, wait three minutes. Turn the shower on and rinse the antiseptic solution off of your body completely.

• Do not wash with regular soap after you have used the antiseptic solution.

• Pat yourself dry with a clean, freshly washed towel.

• After the last shower before surgery, DO NOT apply powders, deodorants or lotions. Dress in freshly washed clothes. Sleep in freshly washed sheets and linens the night before surgery.

Chlorhexidine Prep Solution should be provided to you at your Pre-testing appointment

**HIBICLENS can also be purchased from the following stores:**
Walgreens, CVS, Wal-Mart, RITEAID
Hospital Care / Discharge Planning

Included in this section:

**MORNING OF AND DAYS AFTER SURGERY:**
- An overview of what to expect the day of and the days following surgery.

**COACH’S CHECK LIST**
- A check list to help your coach prepare for leaving the hospital

**DISCHARGE INSTRUCTIONS**
- Information about Physical Therapy and follow-up care
- A list of items you should have in your possession before discharge
- What to watch for after discharge

**FREQUENTLY ASKED POST OPERATIVE QUESTIONS**
- Common questions asked after surgery
Hospital Care/Discharge Planning

Day of Surgery

Before Surgery, in the Pre-Op Unit: You will be prepped for surgery; an IV will be started; skin will be cleansed with Chlorhexidine prep; you will meet with your operating room nurse, anesthesiologist* and surgeon.

*Your anesthesiologist will determine the type of anesthesia which is best suited for you. For information about the different types of anesthesia and what to expect before, during and after your surgery, please refer to Appendix E.

Immediately after surgery, you will be taken to a recovery area (PACU – Post Anesthesia Care Unit) where you may remain for 1-3 hours. During this time, pain control is typically established, and your vital signs are monitored. You can expect to have the following equipment.

- **Sequential Compression Devices (SCD)** - Used to prevent blood clots.
- **TED hose** - Used to prevent blood clots and minimize swelling.
- **Incentive Spirometer** - Used to prevent pneumonia
- **Drains** - Drains may be placed to reduce swelling at MD discretion.
- **Foley catheter** - May be placed in your bladder to drain your urine and will be removed the day after surgery.

Family visitation is limited in the recovery room, but the recovery team will keep your family updated on your progress.

After Recovery, you will be taken to your in-patient room. There are no restrictions on visitors or visitation hours. It is recommended you have no more than one or two visitors on the day of your surgery.

- You should also begin using your Incentive Spirometer and doing the deep breathing exercises that you learned in class.
- You can expect to be assisted out of bed.
- You will be receiving pain medication, as tolerated.
- **It is very important that you begin ankle pumps on this first day.** This will help prevent blood clots from forming in your legs.

Ankle Pumps: Flex foot. Point Toes. Repeat
Hospital Care/Discharge Planning

The Day After Surgery: Post-Op Day 1

Your morning will start early.

- Labs will be drawn
- Vital signs taken
- Bathing/Dressing with help
- Help out of bed and into a chair
- Visit from surgeon or physician’s assistant
- Physical therapy assessment
- Walking with physical therapist
- Occupational therapy assessment

Visitors are welcome, preferably late afternoons or evenings.

*Some patients are discharged on this day.* Other arrangements can be made for earlier discharges on a case by case basis. **Make sure that your Coach is available to provide transportation home.**

Criteria for Discharge

You will be able to go home when you have met the following criteria

- Cleared by physical therapy for safety
- Cleared by the orthopedic team
- Pain is managed
- Cleared by the medical doctor
Hospital Care/Discharge Planning

COACH’S DISCHARGE CHECKLIST:

COACHES, ARE YOU READY FOR DISCHARGE DAY?

Before patient discharge, we want to make sure you know the following. Check if you feel comfortable with the following:

- What blood thinner your loved one is going home on? Does it need monitored? If so when and where? (See Appendix E)
- Is there a surgical dressing? If so, when does it need changed?
- The signs and symptoms of infection?
- How to put on the TED hose?
- How often the TED hose should be removed and for how long?
- How to assist the patient in and out of bed?
- The exercise program to follow at home?
- How to assist the patient up and down stairs?

If you have any questions or concerns, please do not hesitate to ask a member of the Joint Care Team prior to discharge.
Hospital Care/Discharge Planning

DISCHARGE INSTRUCTIONS:

Congratulations, You Have Just Received a New Joint!
Here is a list of things that should be in place or in your possession prior to your discharge:

1. You will need to continue physical therapy after your discharge. Continue the exercise program prescribed to you in the hospital.

2. You will get prescriptions for pain medication and blood thinner (See Appendix E). You may be discharged on aspirin 325mg twice daily for 6 weeks, Xarelto for 21 days, or Coumadin for 4 weeks. During this time, you should have your blood drawn two times per week (Coumadin only). The home care agencies/rehab centers should adjust your dose once they receive the results. The results will also be faxed to your surgeon’s office.

3. You will need prescriptions for any new medications since your surgery.

4. You should continue taking a stool softener until you are no longer on pain medication (ex. Colace, Senokot S). It is important to maintain a good bowel program since constipation can occur as a result of the pain medications and the iron supplementation.

5. You will need a follow up appointment in the surgeon’s office. If you are unsure of your follow up appointment, please contact the surgeon’s office after discharge.

**If leaving the hospital and going to a rehab facility please have them bring you to your follow up appointment, unless you have been seen by your surgeon in the rehab center.**

THINGS TO WATCH FOR AFTER DISCHARGE

1. If you suddenly begin to run a fever greater than 101.4 call your surgeon.
2. If you have significant drainage from your wound after discharge or an increase in redness and swelling call your surgeon.
3. If you experience a sudden onset of calf pain, especially if the calf pain is in the non-operative leg call your surgeon.
4. If you experience sudden chest pains or shortness of breath call 911.
Post-Operative/Home Care

Included in this section:

CARING FOR YOURSELF AT HOME
- Basic Patient Activity
- Dressings and Incision Care
- Managing discomfort
- Body changes
- Stockings
- Total Knee Arthroplasty (TKA) Protocol – Single and Bilateral

RECOGNIZING & PREVENTING POTENTIAL COMPLICATIONS
- Infections
- Blood clots
- Pulmonary Embolus

FREQUENTLY ASKED POST-OPERATIVE QUESTIONS
- Commonly asked questions after surgery

Post-Operative/Home Care

When you go home, there are a variety of things you need to know for your safety, your recovery and your comfort.

What you can do at home:

- Ankle pumps (See Appendix A)
- Deep breathing (incentive spirometry – you will take this home)
- Do 3-4 deep breaths every 30-60 minutes while awake
- Patients who have had a THA (Total knee replacement) will have below knee TED hose on both of their legs. Please remove TED hose for 2 hours per day.
- You may shower according to the instructions in the "Caring for Your Incision" section below. If you do get the incision wet, do not towel dry it. Instead, use a blow dryer on a cool setting.
- You should continue taking a stool softener (i.e. Senokot S, Colace) until you are no longer on prescription pain medication. It is important to maintain a good bowel program since constipation can occur.
- See Appendix B for information and examples on proper body positioning when sitting down, standing up and lying down.
Dressings

- You will do daily dressing changes until the follow up appointment with the surgeon’s office; if you have gauze dressings. If you have the aquacel dressing you will keep it in place for seven days and change it on POD7. You will then replace with a new aquacel dressing for an additional seven days, for a total of 14 days.
- If you notice any drainage after the dressing has been removed on post-operative day 7, please call your surgeon’s office.

Caring for Your Incision

- Keep your incision dry.
- Keep your incision covered until your staples are removed; if you have staples present.
- You may shower 2-3 days after surgery utilizing the hibiclens foam provided at the hospital. Before showering, wrap the incision site with plastic wrap, a plastic bag, or a garbage bag. Continue this procedure until the first post-op visit.
- Notify your surgeon if there is increased drainage, redness, pain, odor or heat around the incision.
- Take your temperature if you feel warm or sick. Call your surgeon if it exceeds 101.4°F.

Post-Operative/Home Care

Control Your Discomfort

- Take pain medicine at least 30 minutes before physical therapy.
- Gradually wean yourself from prescription medication to non-prescription pain reliever. You may take two extra-strength Tylenol tablets in place of your prescription medication, up to four times per day.
- Change your position every 45 minutes throughout the day.
- If instructed by your surgeon, use ice for pain control. In the hospital you may be provided an ice machine. You can use it as much as you would like. A bag of frozen peas wrapped in a kitchen towel also makes an ideal ice pack. Mark the bag of peas and return them to the freezer so they can be used as an ice pack again later.
  - **Not all surgeons recommend or use ice packs or ice machines. Please follow your doctor’s recommendations.
Body Changes

- Your appetite may be poor. Drink plenty of fluids to keep from getting dehydrated. Your desire for solid food will return.
- You may have difficulty sleeping, which is normal. Do not sleep or nap too much during the day.
- Your energy level will be lower than normal for at least the first month.
- Narcotic pain medication can cause constipation. Use stool softeners or laxatives if necessary.

Stockings/TED Hose/Ace Wraps - You may be asked to wear special stockings or Ace Wraps. These are used to help compress the veins in your legs to keep swelling down and reduce the chance for blood clots.

- If swelling in the operative leg is bothersome, elevate the leg for short periods throughout the day. It is best to lie down and raise the leg above the heart level.
- Wear the stockings continuously, removing per your surgeon’s instructions.
- Notify your surgeon if you notice increased swelling or pain in either leg.
- Ask your surgeon when you can discontinue stockings.

Total Knee Arthroplasty Protocol (TKA) Single and Bilateral

- Full weight bearing. May progress from a walker to a cane to nothing as tolerated if you are not limping.
- Extension (stretching) exercises. (See Appendix A)
- Continue exercises from therapy twice daily.
- You should see a physical therapist equal to or greater than, two times a week. Ice should be used after activity, exercise or physical therapy. In addition, it may be used at any other time to assist in reducing pain and swelling.
  a. Remember, most of your success depends upon the effort you put into physical therapy after your discharge. Your goal for flexion (bending your knee) is at least 90 degrees. Your goal for extension (straightening) is 0 degrees by your first follow up appointment.

Post-Operative/Home Care

Recognizing & Preventing Potential Complications

Infection

*Signs of Infection*

- Increased swelling and redness at the incision site
- Change in color, amount or odor of drainage
- Increased pain in incision
- Fever greater than 101.4
Prevention of Infection
- Take proper care of your incision as directed.
- **IT IS IMPORTANT TO NOTIFY** your primary care physician and dentist that you have had a joint replacement before you have any dental work done. They will likely prescribe antibiotics to take before the procedure as a precaution.
- Refer to Appendix E for other procedures which you may need antibiotic protection.

Blood Clots in Legs (DVT)
Surgery may cause the blood to slow and thicken in the veins of your legs, creating a blood clot, a condition called Deep Vein Thrombosis or DVT. This is why blood thinners are taken after surgery. If a clot occurs despite these measures, you may need to be admitted back to the hospital. (See Appendix E for more information about blood thinners.)

**Signs of blood clots in legs**
- Swelling in thigh, calf or ankle that does not go down when raised above heart level.
- Pain, heat and tenderness in calf, back of the knee or groin area. **NOTE:** blood clots can form in either leg.

**Prevention of blood clots**
- Ankle pumps (right and left sides)
- Walking
- Compression stockings
- Blood thinners

Post-Operative/Home Care
Recognizing & Preventing Potential Complications Cont.

Pulmonary Embolus (PE)
An unrecognized blood clot could break away from the vein and travel to the lungs. This is an emergency and you should **CALL 911** if suspected.

**Signs of Pulmonary Embolus (PE)**
- Sudden chest pain
- Difficult and/or rapid breathing
- Shortness of breath
- Sweating
- Confusion

**Prevention of Pulmonary Embolus**
- Prevent blood clot in legs
- Recognize a blood clot in the leg and call physician promptly
# POST-OP GUIDE & GOALS FOLLOWING KNEE REPLACEMENT SURGERY

- Day of surgery: walk 30 feet with assistance, using walker
- Discharge home afternoon after surgery: walking 100-300 feet using walker with Range of Motion 0-100 degrees

<table>
<thead>
<tr>
<th></th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3-4</th>
<th>Week 4-8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ROM (Range of Motion)</strong></td>
<td>0-100 DEGREES</td>
<td>0-120 DEGREES</td>
<td>0-120 DEGREES</td>
<td>0-130 DEGREES</td>
</tr>
<tr>
<td><strong>Rest, Ice, and Elevation</strong></td>
<td>Periods of Rest with leg raised (at heart level) and ice applied for 30 minutes, 6-8 times a day (to decrease swelling that is expected)</td>
<td>Periods of Rest with leg raised (at heart level) and ice applied for 30 minutes, 4-5 times a day (to decrease swelling that is expected)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Activity</strong></td>
<td>Take short walks often, around the house, with a walker.</td>
<td>Take short walks often, inside and outside the house, with or without a walker.</td>
<td>Start swimming, stationary bike riding, golfing or dancing. NO high impact activities.</td>
<td>Walk long distances without tiring.</td>
</tr>
<tr>
<td></td>
<td>Chair exercises 5 times daily for flexion and extension</td>
<td>Chair exercises 5 times daily for flexion and extension</td>
<td>Chair exercises 5 times daily for flexion and extension</td>
<td>Return to work—this will vary from patient to patient</td>
</tr>
<tr>
<td></td>
<td>Perform Lymph Massage (see reverse side) twice per day before exercising in the morning and before going to bed at night.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Doctor Appointments</strong></td>
<td>2 week follow up with orthopaedic surgeon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Take showers with Mepilex bandage in place until after post-op day 5.</td>
<td>You may begin driving when no longer taking narcotic pain medications.</td>
<td>You no longer need narcotic pain medication. Over the counter medications only.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remove Ted Stockings at night before bed and replace in the morning.</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

6 Months: **Follow Up with your orthopaedic surgeon**

⇒ Not all patients progress the same; limits due to medical conditions, elasticity of tendons and muscles, and extent of surgery will impact individual progress.
Post-Op/Home Care

FREQUENTLY ASKED POST-OPERATIVE QUESTIONS

Will I need help at home?
Yes, the first several days or weeks, depending on your progress, you will need someone to assist you with meal preparation, etc. Preparing ahead of time, before your surgery, can minimize the amount of help needed. Having the laundry done, house cleaned, yard work completed, clean linens put on the bed and single portion frozen meals can reduce the need for extra help.

How long until I can drive and get back to normal?
If surgery was on your right leg, driving could be restricted up to 6 weeks. If surgery was on your left leg, and you have an automatic transmission, you could be driving in two weeks. Getting back to "normal" will depend on your progress. You must be off pain medications before you start driving again.

When will I be able to get back to work?
Most people take at least one month off from work, unless their jobs require a lot of sitting (desk job/receptionist) and they can return to work with an assistive device. An occupational therapist or physical therapist can help make suggestions for joint protection and help you save your energy while on the job.

How often will I need to be seen by my doctor following the surgery?
You will be seen for your first post-operative office visit two weeks after discharge. The number of follow-up visits will depend on your progress. Many patients are seen at six weeks, twelve weeks, one year and then every couple of years. (See Appendix C for more information about long term follow-up care.)

Are there any permanent restrictions following this surgery?
Yes, high-impact activities such as running, singles tennis and basketball are not recommended. Injury prone sports such as downhill skiing are also restricted.

What physical/recreational activities may I participate in after my surgery?
You are encouraged to participate in low-impact activities such as walking, dancing, golfing, hiking, swimming, bowling and gardening at your surgeon’s discretion. Make sure that you check with your surgeon before beginning any of these activities.

I have noticed swelling in my knee and/or ankle. Is that normal?
It can be normal to have swelling in your knee and ankle after joint replacement surgery. Apply ice to the affected area and elevate your leg. If swelling does not improve or you are concerned about it, please call your physician.

When will my staples be removed?
Your staples are usually removed at your first office visit around the two-week mark; however, they may be left in as long as 6 weeks.

I have noticed a large amount of bruising/blisters on my leg. Is that normal?
It is very common for patients to have bruising and/or blisters after joint replacement surgery. It is important to not pop the blisters and keep them covered. If you experience bruising monitor closely and notify the surgeon if they become warm or hard.

I am having trouble sleeping. What can I take?
It is a very common occurrence to have difficulty sleeping for a few weeks after your surgery. First try adjusting your routines at night. If that is unsuccessful, you may then try an over the counter sleep aid such as Sominex,
Benadryl, melatonin etc. If you find that you are still having difficulty sleeping, please notify the surgeon’s office. Your sleeping patterns will improve as time goes on.

APPENDIX

Appendix A
• Exercises Before Surgery,
• Exercises in the hospital and 1-2 weeks post-operatively.
• Additional exercises

Appendix B
• Examples of proper positioning
• Getting in and out of the bed
• Getting in and out of the bath tub
• Getting in and out of the car

Appendix C
• Follow up Care

Appendix D
• Advanced Directive & Living Will

Appendix E
• Anesthesia: Types & side effects
• Blood Thinners
• Antibiotic Protection

Appendix F
• Nutrition and Surgery
• Nutrient Requirements Pre/Post Surgery

Appendix G
• Commitment Statement
• Patient Reported Questions
• VR-12
• HOOS Mini
• Patient assessment tool
Appendix A
Exercises Before Surgery
*Should be done a minimum of 2x per day.

(1) Ankle Pumps
- Flex foot.
- Point Toes.
- Repeat 20 times.

(2) Armchair Push-Ups
This exercise will help strengthen your arms for walking with crutches or a walker.
- Sit in an armchair.
- Place hands on armrests.
- Straighten arms, raising your bottom up off chair seat if possible. Feet should be flat on floor.
- Repeat 20 times.
Appendix A
Exercises Before Surgery
*Should be done a minimum of 2x per day.

(3) Quad Sets — Knee Push-Downs
- Lie back.
- Press knee into mat, tightening the muscles on the front of thigh.
- Do NOT hold breath.
- Repeat 20 times.

(4) Gluteal Sets — Bottom Squeezes
- Squeeze bottom together.
- Relax.
- Do NOT hold breath.
- Repeat 20 times.
Appendix A

Exercises Before Surgery
*Should be done a minimum of 2x per day.

5) Seated Hamstring Stretch
- Sit on couch or bed with leg extended
- Lean forward and pull ankle up
- Stretch until pull is felt
- Hold for 20-30 seconds
- Keep back straight
- Relax
- Repeat 5 times

6) Knee extension- Long Arc
- Sit with back against chair
- Straighten knee
- Repeat 20 times

7) Straight leg raises
- Lie on back
- Keep the good knee bent and foot flat
- Lift surgical leg up approximately 12 inches
- Keep knee straight and toes pointed up
- Repeat 20 times
Appendix A

Exercises in the Hospital / 1-2 Weeks After Surgery
*Should be done every day 2x per day

(1) Extension Stretch
- Prop foot of operated leg up on chair.
- Slide your bottom forward slightly in the chair.
- Place a towel roll under your ankle as needed.
- Place ice pack and 5-10lbs of weight on top of knee (a 5-10lb. bag of rice works well).
- Do for a maximum of 20 minutes, 5x per day.

(2) 8 Seated Knee Flexion – Knee Bending
- Sitting in a straight back chair, cross leg with operated leg on the bottom,
- Slide feet underneath chair, gently stretch and bend knee as far as possible.
- Then plant your foot and slide your bottom forward on chair.
- Hold stretch for 30 seconds and repeat 20 times.
Appendix A

Exercises in the Hospital / 1-2 Weeks After Surgery

*Should be done every day or per surgeon’s orders

(3) **Heel Slides - Slide Heels Up and Down**
- Lie on couch or bed.
- Slide heel toward your bottom.
- Repeat 50 times.

(4) **Short Arc Quads – (Post-Operative ONLY)**
- Lie on back and place towel roll under thigh of operated leg.
- Lift foot, straightening knee. Do not raise thigh off roll.
- Repeat 20 times.
Appendix A
Additional Exercises
As you progress at home, your therapist may have you complete additional exercises to further enhance your recovery. After your therapy session ask your therapist to mark the appropriate exercises in your book.

(1) Straight Leg Raises
- Lie on back with unaffected knee bent and foot flat.
- Lift the surgical leg up 12 inches. Keep knee straight and toes pointed up.
- Relax.
- Repeat 20 times.

(2) Knee Extension — Long Arc
- Sit straight with back against chair.
- Straighten knee.
- Repeat 20 times.
Appendix A
Additional Exercises

As you progress at home, your therapist may have you complete additional exercises to further enhance your recovery. After your therapy session ask your therapist to mark the appropriate exercises in your book.

(3) Prone Knee Flexion Stretch
- Lie on stomach. (Put a pillow under your stomach if this bothers your back.)
- Bring heel towards buttocks as far as possible.
- Bring foot back down to the floor
- Repeat 20 times.

(4) Ankle Dorsiflexion — Plantar Flexion
- While standing, hold on to a firm surface.
- Raise up on toes.
- Go back on heels.
- Repeat 20 times.
Appendix A
Additional Exercises

As you progress at home, your therapist may have you complete additional exercises to further enhance your recovery. After your therapy session ask your therapist to mark the appropriate exercises in your book.

(5) Quarter Squat
NOTE: PLEASE DO THESE WITH YOUR THERAPIST FIRST.

- With feet shoulder-width apart and back to wall, slide down wall until knees are at 30–45° of bend.
- Return to upright position.

**CAUTION:** YOU SHOULD NOT BEND KNEES ENOUGH TO CAUSE PAIN.

(6) Marching

- While standing, march in place.
- Hold on to a firm surface for balance.
- Have therapist write in length of time: _____________
Appendix A
Additional Exercises

As you progress at home, your therapist may have you complete additional exercises to further enhance your recovery. After your therapy session ask your therapist to mark the appropriate exercises in your book.

(7) Single Leg Step-Up
NOTE: PLEASE DO THESE WITH YOUR THERAPIST FIRST.
Use a step or book. Height of step will depend on your strength.
Start slow.
You may exercise your good leg as well.

- With foot of surgical leg on step, straighten that leg.
- Return.
- Repeat ____ times.

(8) Retro Leg Step-Up
NOTE: PLEASE DO THESE WITH YOUR THERAPIST FIRST.
- Use a step or book. Ask therapist how high it should be.
- Step up/backwards with one foot, then the other.
- Step off/forward in the same way.
- Repeat ____ times.
Appendix B
Examples of Proper Body Positioning Post-Op

Lying in Bed
When lying in bed, keep knee straight. Avoid putting a pillow underneath your knee. The knee should be kept as straight as possible. You can place a small pillow under your ankle to assist in straightening.

Standing up from chair. Do NOT pull up on the walker to stand!
Sit in a chair with arm rests when possible.
1. Scoot to the front edge of the chair.
2. Push up with both hands on the armrests. If sitting in a chair without armrest, place one hand on the walker while pushing off the side of the chair with the other.
3. Balance yourself before grabbing for the walker.
Appendix B
Activities of Daily Living

Transfer- Bed

Getting into bed:
1. Back up to the bed until you feel it on the back of your legs (you need to be midway between the foot and the head of the bed). Slide operated leg out in front of you when sitting down.
2. Reaching back with both hands, sit down on the edge of the bed and then scoot back toward the center of the mattress. (Silk pajama bottoms, satin sheets, or sitting on a plastic bag may make it easier).
3. Move your walker out of the way but keep it within reach.
4. Scoot your hips around so that you are facing the foot of the bed.
5. Lift your leg into the bed while scooting around (if this is your operated leg, you may use a cane, a rolled bed sheet, a belt, or your theraband to assist with lifting that leg into bed).
6. Keep scooting and lift your other leg into the bed.
7. Scoot your hips towards the center of the bed.
   - NOTE: DO NOT CROSS YOUR LEGS to help the operated leg into bed.

Getting out of bed:
1. Scoot your hips to the edge of the bed.
2. Sit up while lowering your non-surgical leg to the floor.
3. If necessary, use a leg-lifter to lower your surgical leg to the floor.
4. Scoot to the edge of the bed.
5. Use both hands to push off bed. If the bed is too low, place one hand in the center of the walker while pushing up off the bed with the other.
6. Balance yourself before grabbing for the walker.
Appendix B
Activities of Daily Living

Transfer- Tub

Getting into the tub using a bath seat:
1. Place the bath seat in the tub facing faucets.
2. Back up to the tub until you can feel it on the back of your knees. Be sure you are in front of the tub bench.
3. Reach back with one hand for the bath seat. Keep the other hand in the center of the walker.
4. Slowly lower yourself onto the bath seat, keeping the surgical leg out straight.
5. Move the walker out of the way, but keep it in reach.
6. Lift your legs over the edge of the tub, using a leg lifter for the surgical leg, if necessary.

Getting out of the tub using a bath seat:
1. Lift your legs over the outside of the tub.
2. Scoot to the edge of the bath seat.
3. Push up with one hand on the back of the bath seat while holding on to the center of the walker with the other hand.
4. Balance yourself before grabbing the walker.

Transfer- Automobile

1. Push the car seat all the way back; recline it if possible but return it to the upright position for traveling.
2. Place a plastic trash bag on the seat of the car to help you slide and turn frontward.
3. Back up to the car until you feel it touch the back of your legs.
4. Reach back for the car seat and lower yourself down. Keep your operated leg straight out in front of you and duck your head so that you don’t hit it on the doorframe.
5. Turn frontward, leaning back as you lift the surgical leg into the car.
Appendix C
Follow-Up Care

The Importance of Lifetime-Follow Up Visits
Over the past several years, orthopedic surgeons have discovered that many people are not following up with their surgeons on a regular basis. The reason for this may be that they do not realize they are supposed to or they do not understand why it is important.

So, when should you follow up with your surgeon? These are some general rules:

- As instructed by your physician (every 1-2 years)
- Anytime you have mild pain for more than a week
- Anytime you have moderate or severe pain

There are two good reasons for routine follow-up visits with your orthopedic surgeon:

1. If you have a cemented knee, your surgeon needs to evaluate the integrity of the cement. With stress, cement may wear down or loosen. You probably would be unaware of this happening because it usually happens slowly over time. Seeing a change in the cement does not necessarily mean you need another surgery, but it does mean we need to follow things more closely.

   Why? Two things could happen. Your hardware could become loose, and this might lead to pain. Or, the changes in the cement could cause a reaction in the bone called osteolysis, which may cause the bone to thin out and cause loosening. In both cases, you might not know this is happening for years. Orthopedists are continually learning more about how to deal with both of these problems. The sooner we know about potential problems; the better chance we have of avoiding more serious problems.

2. The second reason for follow-up is that the plastic liner in your knee may wear. Little wear particles combine with white blood cells and may get in the bone and cause osteolysis, similar to what can happen with cement. Treatments and procedures are available to keep this from worsening, but your surgeon must know about the problems.

   X-rays taken at your follow-up visits can detect these problems. Your new X-rays can be compared with previous films to make these determinations. This should be done in your doctor’s office.

We are happy that most patients do so well they do not often think of us. However, we enjoy seeing you and want to continue to provide you with the best care and advice. If you are unsure how long it has been or when your next visit should be scheduled, call your doctor. We will be delighted to hear from you.
Appendix D
Advance Directives

Exercise Your Right Put Your Health Care Decisions in Writing
It is our policy to place patients’ wishes and individual considerations at the forefront of their care and to respect and uphold those wishes.

What are Advance Medical Directives?
Advance Directives are a means of communicating to all caregivers the patient’s wishes regarding health care. If a patient has a Living Will or has appointed a Health Care Agent and is no longer able to express his or her wishes to the physician, family or hospital staff, the Medical Center is committed to honoring the wishes of the patient as they are documented at the time the patient was able to make that determination.

There are different types of Advance Directives, and you may wish to consult your attorney concerning the legal implications of each.

LIVING WILLS are written instructions that explain your wishes for health care if you have a terminal condition or irreversible coma and are unable to communicate.

APPOINTMENT OF A HEALTH CARE AGENT (sometimes called a Medical Power of Attorney) is a document that lets you name a person (your agent) to make medical decisions for you, if you become unable to do so.

HEALTH CARE INSTRUCTIONS are your specific choices regarding use of life sustaining equipment, hydration and nutrition, and use of pain medications.

*On admission to the hospital you will be asked if you have an Advance Directive. If you do, please bring copies of the documents to the hospital with you so they can become a part of your Medical Record. Advance Directives are not a requirement for hospital admission.
Appendix E

Anesthesia

What types of anesthesia are available?
Decisions regarding your anesthesia are tailored to your personal needs. The types available for you are:

- General Anesthesia provides loss of consciousness.
- Regional Anesthesia involves the injection of a local anesthetic to provide numbness, loss of pain, or loss of sensation to a large region of the body. Regional anesthetic techniques include spinal blocks, epidural blocks, and saphenous nerve block. Typically, general anesthesia and regional anesthesia are done in conjunction with each other.

Will I have any side effects?
Your anesthesiologist will discuss the risks and benefits associated with the different anesthetic options as well as any complications or side effects that can occur with each type of anesthetic. Nausea or vomiting may be related to anesthesia or the type of surgical procedure. Medications to treat nausea and vomiting will be given if needed. The amount of discomfort you experience will depend on several factors, especially the type of surgery. Your pain discomfort should be minimal, but do not expect to be totally pain-free. The staff will teach you the pain scale (0–10) to assess your pain level.

What will happen before my surgery?
You will meet your anesthesiologist immediately before your surgery. Your anesthesiologist will review all information needed to evaluate your general health. This will include your medical history, laboratory test results, allergies and current medications. With this information, the anesthesiologist will determine the type of anesthesia best suited for you. If a regional anesthetic is to be used, it will be done in the pre-operative area. He or she will also answer any further questions you may have.

What happens during surgery/anesthesia?
Your anesthesia will be provided by an anesthesia care team. An anesthesiologist with a Certified Registered Nurse Anesthetist (CRNA) will provide your care while in the operating room. They will monitor your vital signs (Blood Pressure, Heart Rate, and Oxygen Level) during surgery and administer any medications necessary to provide you a safe surgical procedure.

What can I expect after the operation?
After surgery, you will be taken to the Post Anesthesia Care Unit (PACU) where specially trained nurses will watch you closely.
Appendix E

Blood Thinners

Blood Thinners
The surgeon will place you on an anticoagulant, also called a blood thinner, in order to assist in preventing patients from forming blood clots. Most patients will go home on a blood thinner. The specific medication will be decided on by your surgeon based on your medical history and physician preference.

Monitoring the dosage after a patient is discharged HOME from the hospital on Coumadin/Warfarin — If you are discharged to home on Coumadin/Warfarin with home health services, the home health nurse will come out twice a week to draw blood for the prothrombin time/INT lab tests. These results are called to the physician’s office. You will be called that evening to adjust your dose, if necessary.

<table>
<thead>
<tr>
<th>Medication Purpose</th>
<th>Medication Names: Generic (Brand)</th>
<th>Most Common Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Thinners</td>
<td><strong>Injectable</strong></td>
<td>• Risk of bleeding&lt;br&gt;• Upset stomach&lt;br&gt;• Bruising&lt;br&gt;• Burning at injection site&lt;br&gt;• Decrease in platelets</td>
</tr>
<tr>
<td></td>
<td>• Enoxaparin (Lovenox®)&lt;br&gt;• Fondaparinux (Arixtra®)&lt;br&gt;• Heparin</td>
<td><strong>Oral blood thinners</strong>&lt;br&gt;• Aspirin&lt;br&gt;• Rivaroxaban (Xarelto®)&lt;br&gt;• Warfarin (Coumadin®)&lt;br&gt;• Apixaban (Eliquis®)</td>
</tr>
<tr>
<td></td>
<td><strong>Tell your nurse or doctor if you notice any bleeding or black colored stools</strong></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E

Antibiotic Protection

Antibiotic Protection for Implanted Joint Prosthetics
Reduce the chance of infection by following these infection prevention precautions written for your dentist and treating physicians to follow. An untreated infection elsewhere in your body may spread to your joint replacement.

Teeth cleaning, fillings:
AMOXICILLIN, 2 grams one hour prior to the procedure; 1.0 grams 6 hours after the initial dose. Alternative: (allergy to Amoxicillin or Penicillin) EES (Erythromycin Ethyl-Succinate), 800 mg Two hours prior to procedure and 400 mg 6 hours after the initial dose.

Dental extractions, root canal:
Same as #1, but continue every 6 hours for two days.

Urinary tract procedures: (cystoscopy, transurethral resection of prostate (TURP)
AMPICILLIN, 2 grams plus GENTAMICIN 80 mg IV or by injection ½ hour prior to procedure

Gastrointestinal tract procedures: (colonoscopy, sigmoidoscopy, endoscopy with biopsy)
AMOXICILLIN 3 grams by mouth, one hour prior to the procedure then AMOXICILLIN 1.5 grams by mouth 6 hours after the initial dose. Alternative: VANCOMYCIN, 1 gram IV one hour prior to the procedure, plus GENTAMICIN, 80 mg IV one hour prior to the procedure.

Endoscopy without biopsy, sigmoidoscopy, barium enema:
AMOXICILLIN 3 grams by mouth, one hour prior to the procedure, then 1.5 grams 6 hours after the initial dose. Alternative: VANCOMYCIN, 1 gram IV one hour prior to the procedure.

Skin boils, infected lesions, podiatry procedures, such as nail cutting, ingrown toenails:
DICLOXACILLIN or KEFLEX 500 mg every 6 hours by mouth until lesion has improved. Alternative: EES, 400 mg

Surgery:
Inform the surgeon that you have had a joint replacement

Cardiac catheterization:
Inform your cardiologist that you have had a joint replacement. We recommend that you have antibiotics before the procedure.

*AMPICILLIN, VANCOMYCIN, GENTAMICIN given by IV or injection MUST be administered and prescribed by your treating physician.
Appendix F

Nutrition and Surgery

It is important to eat properly prior to and after surgery so that your body has the optimal nutrition to heal. You will have more strength to move, sit up and walk, as well as have an increased ability to resist any potential infection.

Follow these guidelines to prepare yourself nutritionally for surgery:

- Eat balanced meals, using the Food Guide Pyramid as a reference for choosing a healthy diet. The Food Guide Pyramid recommends 6-11 servings from the bread, cereal, rice and pasta group, 3-5 servings from the vegetable group, 2-4 servings from the fruit group and 2-3 servings from the meat, poultry, fish, dry beans, eggs, and nuts group. It is recommended that fats, oils and sweets be used sparingly.

- Be sure you get enough calories and protein. If necessary, use a supplement such as milkshakes, Ensure, Boost, Carnation Instant Breakfast, etc., to add to your calorie and protein intake.

- If you are on a special diet, such as low fat for heart disease, or a calculated calorie/carbohydrate diet for diabetes, continue to follow your diet. Please be sure to inform your nurse of any dietary requirements you might have.

- Do not try to lose weight in the weeks before surgery. If you have been instructed by your surgeon to lose weight, please make an appointment with a dietitian to get information about the best way to lose weight without putting yourself at risk. In the days prior to your surgery, eat a well-balanced diet. The day prior to your surgery, eat light, low fat meals during the day, but be sure to get enough calories. Avoid foods that can cause constipation or those that can produce gas.

To help minimize discomfort or constipation after surgery, try to have a bowel movement on the day before your surgery.

Below is a list of common gas forming foods. Try to minimize your intake of:

- Apples
- Avocados
- Beans (Kidney, Lima and Navy)
- Broccoli
- Brussel Sprouts
- Cabbage
- Cantaloupe
- Cauliflower
- Corn
- Cucumbers
- Honeydew Melon
- Leeks
- Lentils
- Onions
- Peas (split or black-eyed)
- Peppers (green)
- Pimentos
- Radishes
- Rutabagas
- Sauerkraut
- Shallots
- Soybeans
- Turnips
# Nutrient Requirements Pre/Post Surgery

<table>
<thead>
<tr>
<th>NUTRIENTS</th>
<th>IT HELPS YOUR BODY WITH:</th>
<th>FOUND IN THESE COMMON FOODS:</th>
<th>HOW MUCH/DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>Healing, tissue repair and re-growth</td>
<td>Meat, poultry, fish, eggs, milk, cheese, legumes (dried beans, ie: kidney beans, lentils, chick peas), soy products, nuts, seeds</td>
<td>65-100 grams</td>
</tr>
<tr>
<td>Carbohydrates</td>
<td>Energy for healing and preventing protein/muscle breakdown</td>
<td>Fruits, vegetables, legumes (beans), breads, cereals, rice, pasta, grains</td>
<td></td>
</tr>
<tr>
<td>Fiber</td>
<td>Helps prevent constipation</td>
<td>Bran, vegetables (cauliflower, broccoli, cabbage) fruits (prunes, berries, bananas), beans</td>
<td>25-40 grams</td>
</tr>
<tr>
<td>Lipids (fats)</td>
<td>Absorption of fat-soluble vitamins, immune response, energy</td>
<td>Oils (olive, canola, sunflower), nuts, seeds, avocado, salad dressings, margarine, butter</td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>Forming hemoglobin and carrying oxygen **best when eaten w/vitamin C rich foods</td>
<td>Liver, lean red meat, poultry, fish, iron-fortified cereals, legumes, dark leafy greens, dried fruits</td>
<td>18mg</td>
</tr>
<tr>
<td>Calcium</td>
<td>Building/maintaining bones and muscle contraction</td>
<td>Milk, cheese, yogurt, soy products, turnip and mustard greens, collards, kale, broccoli, almonds</td>
<td>1500 mg</td>
</tr>
<tr>
<td>Zinc</td>
<td>Helps in wound healing, component of enzymes</td>
<td>Meat, liver, eggs, oysters and other seafood</td>
<td>15mg</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>Helps in wound healing and growth, maintenance of skin</td>
<td>Carrots, sweet potatoes, dark yellow or green leafy vegetables (spinach and broccoli), milk, cheese, liver, egg yolk</td>
<td>5000 IU</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Helps in bone healing and calcium absorption</td>
<td>Fortified milk, butter, margarine, fortified cereals, liver fatty fish (salmon), egg yolk</td>
<td>400-800 IU</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>Antioxidant/disease-fighting properties (do NOT take supplements BEFORE surgery)</td>
<td>Vegetable oils (corn or sunflower), beef liver, milk, eggs, butter, green leafy vegetables, fortified cereals</td>
<td>30 IU</td>
</tr>
<tr>
<td>Vitamin K</td>
<td>Helps wound healing response and blood clotting</td>
<td>Green leafy vegetables, fatty fish, liver, vegetable oil</td>
<td>80µg men, 65µg women</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>Building connective tissue, essential nutrient for healing</td>
<td>Citrus-fruits, strawberries, tomatoes, peppers, greens, raw cabbage, melon</td>
<td>60mg</td>
</tr>
</tbody>
</table>

**Tips:**
- If your appetite decreases after surgery, try eating smaller meals more frequently and add a protein drink between meals.
- Eat protein with every meal.
- Drink 8 cups of water daily to help prevent constipation.
### Appendix F

**Nutrition and Surgery**

#### Protein Sources
- 1 large egg 6 grams
- ¼ cup egg beaters 4.5 grams
- 3 ounces can white tuna 23 grams
- 4 inch onion, sesame or poppy seed bagel 5.4 mg
- 1 Boca Burger patty 13 grams
- 3 ounces cooked lean steak 23 grams
- 3 ounces cooked lean roast beef 24 grams
- 3 ounces cooked lean pork 24 grams
- 4 ounces roasted chicken breast 36 grams
- 3 ounces roasted white meat turkey 28 grams
- 4 ounces cooked cod/flounder/Pollock 28 grams

#### Iron Sources
- ¼ cup 100% iron fortified ready to eat cereal 18 mg
- ½ cup grits 7.1 mg
- ½ cup cream of wheat 5.2 mg
- 3 ounces chicken liver 10.8 mg
- 3 ounces canned clams 23.8 mg
- 3 ounces oysters 13.2 mg
- 1 ounce pumpkin seed 4.2 mg

#### Calcium Sources
- ½ cup fortified cereal 200 – 670 mg
- 1 cup skim milk 305 mg
- 1 cup calcium-fortified soy or rice milk 300 - 370 mg
- 8 ounce plain or fruit yogurt 275 - 450 mg
- 1 ounce cheese 200 – 220 mg

#### Fiber Sources
- 1 medium artichoke 10.3 grams
- ½ cup navy beans 9.5 grams
- ½ cup black beans 7.5 grams
- Apple with skin 3.3 grams
- 1 medium banana 3.1 grams
- 1 ounce almonds 3.5 grams
- ½ papaya 2.8 grams
- ½ cup green peas 3.5 grams
- 5 prunes 3.5 grams
- ½ cup can pumpkin 3.6 grams
- ½ cup spinach 3.5 grams

#### Zinc Sources
- 3 ounces steamed oysters 30 mg
- 3 ounces steamed Alaskan king crab 6.5 mg
- 3 ounces roasted dark turkey meat 3.9 mg
- 3 ounces roasted pork loin 2.1 mg
- 1 ounce cashews 1.6 mg
- 1 cup cooked brown rice 1.1 mg
Appendix F
Nutrition and Surgery

**Vitamin A Sources**
- ¼ cup fortified egg substitute 407mcg
- 1 cup fortified skim milk 150mcg
- 1 medium egg 84mcg
- 1 ounce cheddar cheese 90mcg
- 1 ounce Swiss cheese 84mcg
- ½ cup cooked sweet potato 11.5 mcg
- 1 cup fresh kale 14.7mcg
- ½ cup cooked carrots 10.7 mcg
- 1 cup fresh red pepper 10.1

**Vitamin K Sources**
- ½ cup broccoli 110 mcg
- ½ cup green beets 350 mcg
- ½ cup turnip greens 425 mcg
- ½ cup kale 531 mcg
- ½ cup spinach 444 mcg
- ½ cup Swiss chard 287 mcg

**Vitamin D Sources**
- 3 ounces Halibut 200IU
- 3 ounces Salmon 370IU
- ½ cup fortified cereal 100IU
- 1 cup milk 125 IU
- 3 ounces Trout 650 IU
- 1 medium/large egg 40 IU
- 3 ounces of canned tuna 80IU

**Vitamin C Sources**
- 3 ounce red pepper 163 mg
- 3 ounce green pepper 110 mg
- ½ cup black currants 101 mg
- 1 cup cooked broccoli 98 mg
- 1 cup orange juice 98 mg
- 1 medium kiwi 75 mg
- ½ medium papaya 95 mg
- 1 cup cranberry juice 90 mg
- 1 cup strawberries 85 mg
- 1 medium navel orange 80 mg

**Vitamin E Sources**
- 1 tablespoon corn or soybean oil 12mg
- 1 tablespoon Canola or sunflower oil 8mg
- 1 cup cooked Kale 7mg
- 5 ounce sweet potato 5mg
- 1 cup cooked spinach 4mg
- 1 cup blueberries 3 mg
- 1 cup cooked broccoli 2mg
Appendix G

Forms

Please complete all forms and return to the Care Coordinator

Please take the time to fill out the following forms:

- CJR Patient Commitment Statement (return to coordinator)
- Patient reported questions (return to coordinator)
- VR-12 (return to coordinator)
- HOOS mini (return to coordinator)
- Patient assessment tool (stays in the book)

These forms are used to see how you are feeling prior to surgery, what you may need during your hospital stay, and help us to assist you in planning your discharge. If you have questions about and specific form or questions on a form please contact your care coordinator.
CJR Patient Commitment Statement

I ________________________________ commit to being an active participant in my care for a successful outcome. My goal is to regain my mobility. I take full responsibility for my health and my healthcare. My responsibilities include but are not limited to:

- I agree to attend the Joint Pre-Operative Orientation Course if not attended within the last 6 months.
- I agree to identify at least one 'coach' who will attend the orientation course with me and who will be available to assist me at home for the first 5 to 7 days after discharge
  ○ ____________________ Coach (name and phone #)
- I understand that if there are no complications and if not otherwise planned by the orthopedic team, I will be discharged the day following surgery or once my therapy goals are met:
  ○ to home
  ○ to home with Home Health Care
  ○ to home with outpatient physical therapy
- I understand that inpatient rehabilitation and skilled nursing facility care is not typically included in the approach to joint replacement care but may be utilized ONLY if my physician states it is medically necessary for my recovery.
- I will ACTIVELY participate in all my therapy sessions and work towards my therapy goals.
- I agree to plan for transportation to daily outpatient physical therapy if I have knee replacement surgery, and if my surgeon deems it necessary.
- I agree that I will call my care coordinator or my orthopedic surgeon before going to the doctor or emergency room for pain, swelling, redness or concern about infection unless it is a life threatening emergency
  ○ ____________________ Care Coordinator (name and phone #)
    Available Hours: ____________________
  ○ ____________________ Orthopedic Surgeon (name and phone #)

Patient signature ________________________________ Date ____________
The following questions ask for your view on the pain you have had. Please check the appropriate box.

1. What amount of pain have you experienced in the last week in your other knee/hip?
   - None
   - Mild
   - Moderate
   - Severe
   - Extreme

2. My BACK PAIN at the moment is?
   - None
   - Very Mild
   - Moderate
   - Fairly Severe
   - Very Severe
   - Worst Imaginable

The following question asks about your comfortability with medical forms.

1. How comfortable are you filling out medical forms by yourself?
   - Extremely
   - Quite A Bit
   - Somewhat
   - A Little Bit
   - Not At All

Preferred Method Of Contact:

Please order 1-5, with 1 being your preferred contact method and 5 being your least preferred method contacted method, for how you would like us to contact you for your follow-up surveys. Please print clearly.

_____ Regular Mail: Please provide your mailing address: _____________________________

_____ Email/Online Survey: We will send you a link to the survey via email. Please provide your email address: _____________________________

_____ Telephone Call: We will go over the survey with you on the phone. Please provide the best number for us to reach you during normal business hours M-F 8am-5pm. _____________________________

_____ Text: We will text you the survey questions and you will respond back via text. Normal texting rates may apply. Please provide us with a number to text. _____________________________
THE VETERANS RAND 12-ITEM HEALTH SURVEY (VR-12)

The following questions ask for your views about your health—how you feel and how well you are able to do your usual activities. All kinds of people across the country are being asked these same questions. Their answers and yours will help to improve health care for everyone. There are no right or wrong answers; please choose the answer that best fits your life right now.

Answer each question by marking an ‘X’ next to the best response. For example:

What is your gender?
- □ Male
- □ Female

Q1. In general, would you say your health is:
- □ Excellent
- □ Very good
- □ Good
- □ Fair
- □ Poor

“How would you rate your current overall health situation? Meaning your overall well-being, how you currently feel physically, mentally and emotionally.”

Q2. The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

a. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling or playing golf?
- □ Yes, limited a lot
- □ Yes, limited a little
- □ No, not limited at all

“How does your current health situation limit your daily activities?”

b. Climbing several flights of stairs?
- □ Yes, limited a lot
- □ Yes, limited a little
- □ No, not limited at all

“How does your current health situation limit your ability to climb stairs?”

Public reporting burden for this collection of information is estimated to average 7 minutes per response. This time includes the length of time allotted for the survey questions. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Address, ATTN; PRA (XXX-XXXX). Do not return the completed form to this address.
Q3. **During the past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of your physical health**?

a. Accomplished less than you would like.
   - [ ] No, none of the time
   - [ ] Yes, a little of the time
   - [ ] Yes, some of the time
   - [ ] Yes, most of the time
   - [ ] Yes, all of the time

   “In the last 4 weeks, how often did you accomplish less than you would like due to your physical health?”

b. Were limited in the kind of work or other activities.
   - [ ] No, none of the time
   - [ ] Yes, a little of the time
   - [ ] Yes, some of the time
   - [ ] Yes, most of the time
   - [ ] Yes, all of the time

   “In the last 4 weeks, how often were you limited in the kind of work or other activities you enjoy due to your physical health?”

Q4. **During the past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?

a. Accomplished less than you would like.
   - [ ] No, none of the time
   - [ ] Yes, a little of the time
   - [ ] Yes, some of the time
   - [ ] Yes, most of the time
   - [ ] Yes, all of the time

   “In the last 4 weeks, how often did you accomplish less than you would like due to your emotional health?”

b. Didn’t do work or other activities as carefully as usual.
   - [ ] No, none of the time
   - [ ] Yes, a little of the time
   - [ ] Yes, some of the time
   - [ ] Yes, most of the time
   - [ ] Yes, all of the time

   “In the last 4 weeks, how often were you unable to participate at work or during other activities due to your emotional health?”

Q5. **During the past 4 weeks**, how much did pain interfere with your normal work (including both work outside the home and housework)?

   - [ ] Not at all
   - [ ] A little bit
   - [ ] Moderately
   - [ ] Quite a bit
   - [ ] Extremely

   “In the last 4 weeks, how often did pain interfere or keep you from doing your daily routine due to your physical health?”
These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling.

Q6a. How much of the time during the past 4 weeks:
Have you felt calm and peaceful?

- All of the time
- Most of the time
- A good bit of the time
- Some of the time
- A little of the time
- None of the time

“In the last 4 weeks, how often have you felt relaxed, calm and at peace?”

Q6b. How much of the time during the past 4 weeks:
Did you have a lot of energy?

- All of the time
- Most of the time
- A good bit of the time
- Some of the time
- A little of the time
- None of the time

“In the last 4 weeks, how often did you have a lot of energy?”

Q6c. How much of the time during the past 4 weeks:
Have you felt downhearted and blue?

- All of the time
- Most of the time
- A good bit of the time
- Some of the time
- A little of the time
- None of the time

“In the last 4 weeks, how often have you felt depressed, downhearted and blue?”

Q7. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?

- All of the time
- Most of the time
- Some of the time
- A little of the time
- None of the time

“In the last 4 weeks, how often was your social life, social activities limited due to your physical or emotional health?”
Now, we’d like to ask you some questions about how your health may have changed.

Q8. Compared to one year ago, how would you rate your **physical health** in general now?

- [ ] Much better
- [ ] Slightly better
- [ ] About the same
- [ ] Slightly worse
- [ ] Much worse

“Looking back to last year at this time, how would you rate your current physical health situation compared to last year’s physical health situation?”

Q9. Compared to one year ago, how would you rate your **emotional problems** (such as feeling anxious, depressed or irritable) now?

- [ ] Much better
- [ ] Slightly better
- [ ] About the same
- [ ] Slightly worse
- [ ] Much worse

“Looking back to last year at this time, how would you rate your current emotional health situation compared to last year’s emotional health situation?”

Your answers are important!

Thank you for completing this questionnaire!
HOOS, JR. HIP SURVEY

INSTRUCTIONS: This survey asks for your view about your hip. This information will help us keep track of how you feel about your hip and how well you are able to do your usual activities. Answer every question by ticking the appropriate box, only one box for each question. If you are unsure about how to answer a question, please give the best answer you can.

Pain
What amount of hip pain have you experienced the last week during the following activities?

1. Going up or down stairs
   - None
   - Mild
   - Moderate
   - Severe
   - Extreme

2. Walking on an uneven surface
   - None
   - Mild
   - Moderate
   - Severe
   - Extreme

Function, daily living
The following questions concern your physical function. By this we mean your ability to move around and to look after yourself. For each of the following activities please indicate the degree of difficulty you have experienced in the last week due to your hip.

3. Rising from sitting
   - None
   - Mild
   - Moderate
   - Severe
   - Extreme

4. Bending to floor/pick up an object
   - None
   - Mild
   - Moderate
   - Severe
   - Extreme

5. Lying in bed (turning over, maintaining hip position)
   - None
   - Mild
   - Moderate
   - Severe
   - Extreme

6. Sitting
   - None
   - Mild
   - Moderate
   - Severe
   - Extreme
<table>
<thead>
<tr>
<th>Test and Measures</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROM:</td>
<td></td>
</tr>
<tr>
<td>Ambulation Distance:</td>
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<td>Incision Appearance:</td>
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</tr>
<tr>
<td>Pain (Faces):</td>
<td></td>
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</table>

Discharge Medications:

Other Information: