

Total Joint Replacement Bootcamp:

What you need to know before your surgery...

John V. Horberg, M.D.

Orthopaedic Adult Reconstructive Surgery



Thank You for Trusting Team Horberg!

Undergoing joint replacement surgery is a major life decision. My team and I do not take that responsibility lightly. We make it our mission to make sure this experience a pleasant one for you.

Both in and out of the OR, you are in good hands. My team and I will provide you with the most cutting edge and compassionate care available and are here for you every step of the way.

- John V Horberg, MD







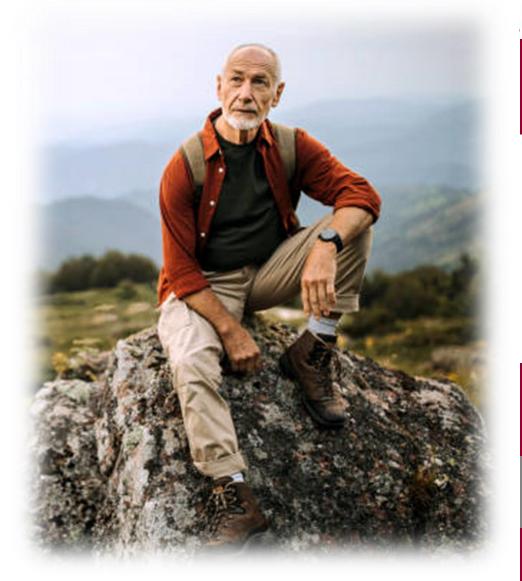
The Secret to a Successful Outcome



- Prepare yourself
- Prepare your home
- Prepare your family & friends

Follow your surgeon's instructions

- Dr. Horberg's Joint Replacement Handbook
- Pre-operative information from office staff
- Pre-operative bootcamp video
- Pre-operative & Post-operative physical therapy
- Post-operative discharge instructions







Goals for Surgery

- Get you back to a healthy active lifestyle
 - Decreased joint pain
 - Improved strength and range of motion
 - Improved endurance
- Return to the activities that you enjoy doing!









Goals for This Boot Camp Video

Prepare in advance for surgery

- Prepare yourself
- Prepare your home
- Prepare someone to help you after

What to expect on the day of surgery

- Day of surgery details
- Discharge HOME!!

Optimizing your recovery

- Rehabilitation
- Pain control
- Long term follow up





Preparing for Surgery: First Steps

- 1. Total Joint Bootcamp Video
- 2. Physical Therapy "Prehab" Visit
- 3. Total Joint Handbook







1) Total Joint Bootcamp Video

- Watch this video and take notes
- Return and review as often as you need







2) Physical Therapy Prehab

- Meet your physical therapist BEFORE surgery
- Learn exercises to do BEFORE and AFTER surgery
- Be evaluated for and learn to use assistive devices (walker, braces, etc...)
- Another opportunity to ask questions and prepare yourself for surgery
- BRING YOUR FAMILY/FRIENDS WHO WILL HELP YOU AFTER SURGERY





3) Total Joint Handbook

- Review this book often as you prepare for surgery
 - FEEL FREE TO TAKE NOTES IN IT
- Bring this book on the day of surgery
- Bring this book to your therapy appointments
- Bring this book to your visits with Dr. Horberg
- REVIEW PRE-OPERATIVE CHECKLIST TO MAKE SURE YOU DON'T FORGET ANYTING PRIOR TO SURGERY

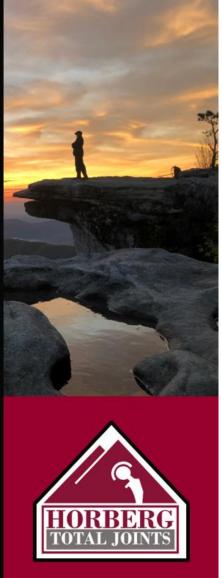
Total Joint Replacement Handbook



John V Horberg, MD

Adult Reconstructive Surgery
Orthopaedic Trauma









Pre-Operative Visit with Dr. Horberg

This is an opportunity to ask last minute questions and make sure you are ready!

Tell Dr. Horberg About:

- Your Past Medical History
 - Blood clots, bleeding disorders
 - Heart, lung, kidney, liver disease
- Medications You Take
 - Blood thinners, immunosuppressants
- Allergies to Medications







Pre-Operative Visit: Clearance

Clearance For ALL Patients

- Primary Care Physician (within 30d of surgery)
- Dentist (within 6mo of surgery)

Testing for ALL Patients

- Pre-Operative Labs & EKG
- Additional testing on case by case basis

Clearance For SOME Patients

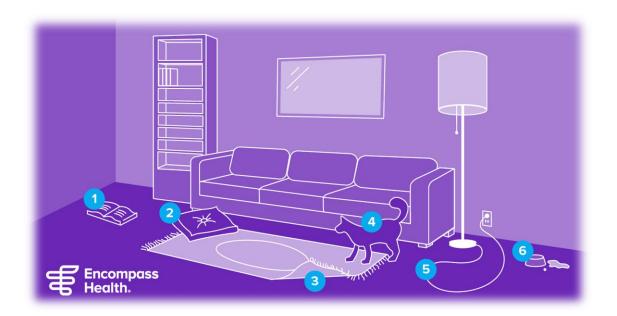
Specialist Clearance (cardiology etc...)



Please complete all testing in a timely fashion! Your surgery may be CANCELLED or RESCHEDULED if you fail to get clearance in time...

Fall Prevention:

- Clear walking paths, hallways and floors of clutter
- Consider removing rugs that can be a tripping hazard after surgery
- Watch out for cords, end tables, etc... that can get in your way
- Remember: you will have a walker in the early days after surgery







Pets:

- Make sure you have a plan ensuring your pets are taken care of
- DO NOT let your pets jump on you or become a tripping hazard
- DO NOT let your pets sniff, lick, scratch or touch the limb you had surgery on







Meal Prep:

- Purchase groceries ahead of time to make healthy meals after surgery
- Consider preparing several days worth of meals in advance so you don't have to cook immediately after surgery
- Nutritional advice and ideas can be found in the Total Joint Handbook

Over the Counter Medications & Supplements:

A list of medications & supplements can be found in the Total Joint Handbook







Preparing Your Home: Grocery List



Over the Counter Medications & Supplements YOU NEED TO BUY Before Surgery:

- 1. Probiotic: (any generic) buy enough for 8 weeks
- 2. Stool Softener: (Colace or Surfak) buy enough for 8 weeks
- 3. Stimulant Laxative: (Dulcolax) buy enough for 1 week if needed
- 4. Osmotic Laxative: (Milk of Magnesia, Mirilax) buy enough for 1 week if needed
- 5. Suppository: (Dulcolax) buy enough for 1 week if needed
- **6. Prilosec:** (generic) buy enough for **8 weeks**
- 7. Lotion w/ Vitamin E: (any brand, non-scented)

PLAN AHEAD:

These medications and supplements are necessary to prevent complications after surgery. Please have them ready BEFORE surgery



Plan Your "Spot":

- Pick a favorite, supportive chair or sofa where you will rest after surgery
- Prepare frequently used items (remotes, books, computers, chargers) within easy reach of your "spot"

Single Level Living:

- If possible, try to arrange your home so that you can spend most of your time on one level and avoid stairs during the early recovery period
- It is OK to go up and down stairs but limiting how often you need to will help make the first day or two after surgery easier



Ice Pack:

- Put a 2-4 ice packs in the freezer before you leave home so they are ready for you to use after surgery
- If you don't have an ice pack, a large bag of frozen vegetables works well
- Do NOT put ice packs directly on your skin; wrap them in a towel or washcloth









Most insurance providers do NOT cover ice pumps/machines



Everyone Goes Home!

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After surgery, ALL PATIENTS will be discharged to their HOME

- We do NOT send patients to rehabilitation centers
- Most patients will NOT need home health nursing or therapy
- You MUST prepare yourself and your home for recovery at HOME

ALL PATIENTS need to arrange for a FRIEND or FAMILY MEMBER to help after surgery

- You MUST have someone stay with you for the first couple days after surgery
- You MUST have someone to drive you to therapy, appointments, etc...
 - Most patients will resume driving in 4-6 weeks





Everyone Goes Home!

There's no place like HOME

- Studies clearly show that patients do BETTER when they go HOME after surgery
 - Fewer infections
 - Better sleep
 - Better nutrition
 - More active with faster rehabilitation
 - Less waiting for assistance from staff
- Skilled nursing facilities require MEDICAL NECESSITY
 - Insurance will not cover these facilities in most cases
 - Medical necessity is determined by nursing after surgery





Everyone Goes Home!

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What about the WEATHER here in WYOMING...?

- We can arrange discounted rates at a hotel near the hospital or surgery center
- You may want to stay in town the night before and/or after surgery
- Dr. Horberg's staff can help make these arrangements







Managing Your Home Medications

Beginning 14 Days Before Surgery there are some medications you will need to stop taking.

 A detailed list of many medications you need to STOP TAKING as well as medications you can CONTINUE TAKING can be found in your handbook.

Important Note on Medications:

Your PRIMARY DOCTOR has the FINAL SAY about which medications you need to take and when/which medications you need to stop.

Medications to Stop BEFORE Surgery

14 Days before surgery: STOP

Stop all infusions such as:

Remicade & Enbrel – Also stop any medicine taken by mouth for rheumatoid arthritis such as methotrexate Stop any male or female hormones including creams and patches:

Emcyt – Estraderm – Estratest – Estrace – Estradiol – Estrogens – Ogen – Premarin – Prempro – Testosterone *(you may need to use alternative birth control options during this time)*

7 Days before surgery: STOP

Stop all antiplatelet medications:

Aggrenox – Plavix (clopidogrel) – Pletal (cilostazol) – Trental (pentoxil) – Ticlid – Antithrombotics *(if you have heart stents and take antiplatelets, check with your cardiologist before stopping them) Stop all diet pills prescribed by a physician:

5 Days before surgery: STOP

Stop all aspirin-containing products such as:

Alka-Seltzer – BC Powder – Bufferin – Disalsid (Salsalate) – Dolobid (Diflunisal) – Ecotrin – Ecedrin – Fasprin – Goody's Powder – Norgesic – Pepto Bismol – Percodan – Uncoated Aspirin

*(if you have heart stents and take antiplatelets, check with your cardiologist before stopping them)

Stop all arthritis pills/non-steroidal anti-inflammatory (NSAID) medications such as:

Advil (ibuprophen) – Clinoril (sulindac) – Lodine (etolodac) – Nuprin (ibuprophen), Aleve (Naproxen) – Daypro (oxaprozin) – Meclomen (meclofenamate) – Orudis (ketoprofen) – Anaprox (naproxen) – Voltaren (diclofenac) = Mediprin (ibuprophen) – Oruvail (ketoprofen) – Ansaid (flurbiprofen) – Feldene (piroxicam) – Relafen (nabumetone) – Athrotec (diclofenac +cytotec) – Motrin (ibuprofen) – Naprelan (naproxen) – Tolectin (tolmetin) – Cataflam (diclofenac potassium) – Indocin (indomethacin) – Naprosvn (naproxen)

*You may CONTINUE to take Mobic (meloxicam) or Celebrex (celecoxib) up to the day before surgery.

Stop all over the counter medications such as: Vitamins, Herbs and Supplements

A – B – C – E – K – Multivitamins – Fish Oil – Omega 3, 6, 9 – Juice Plus – CoQ10 Echinacea – Ephedra – Garlic – Ginko – Ginseng – Kava – St. John's Wort – Valerian – Saw Palmetto Glucosamine – Chondroitin – MSM

Stop taking anticoagulants such as:

Coumadin (warfarin), Xarelto (aivaroxaban), Eliquis (apixaban)

*(Discuss "bridge therapy" using lovenox or other short acting anticoagulants with your primary doctor)

Important Note on Medications

You need to talk to your **PRIMARY DOCTOR** about which medications you should stop or continue. If you don't see a medication you are taking on this list, talk to your **PRIMARY DOCTOR** about it. This section is only a guide. Your **PRIMARY DOCTOR** has **FINAL SAY** about which medications to stop or continue.

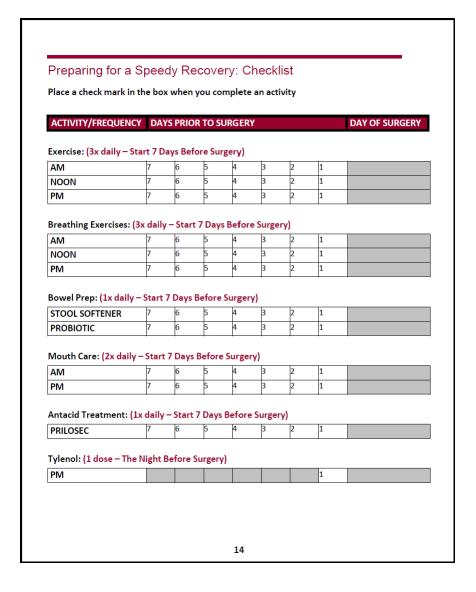




Preventing Complications

Preventing Complications: While no surgery is without the risk of complications, Dr. Horberg believes in being proactive. Following this perioperative regimen can reduce the risk of:

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

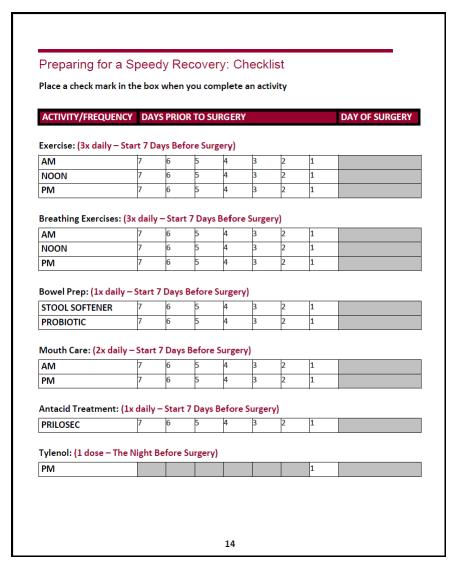






Preventing Complications

- **1. Exercise:** (7 days before surgery)
 - At least 3 times per day
- **2. Breathing Exercises:** (7 days before surgery)
 - At least 3 times per day
- 3. Stop Smoking:
 - It is not safe to smoke before or after surgery. This increases your risk of infection and serious medical complications.

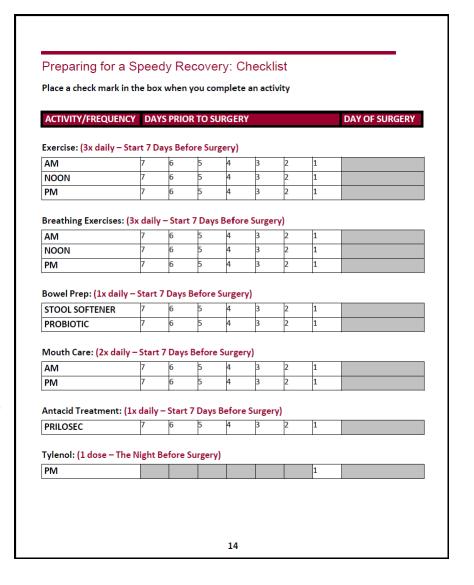






Preventing Complications

- 4. **Begin Bowel Prep:** (7 days before surgery)
 - <u>Stool Softeners</u>- prevent constipation
 - Take as long as you are on pain medications
 - <u>Probiotics</u>- prevent bowel issues caused by perioperative antibiotics
- **5. Begin Mouth Care:** (7 days before surgery)
 - Brush and mouthwash at least twice a day
- **6. Begin Antacids:** (7 days before surgery)
 - Take as long as you are on anti-inflammatories
- **7. Begin Taking Tylenol:** (the night before surgery)









Pre-Operative Exercise

Why is Exercise BEFORE Surgery Important?

It is important to be as fit as possible before surgery. This will make your recovery faster.

Exercises and instructions can be found in your handbook

How Much Should I Do?

 A good goal is 15-20 minutes at a time, 2-3 times a day in the weeks leading up to surgery.

Prehab Therapy

Formal PT to before surgery to go over rehab plan

Speedy Recovery: Postoperative Exercises

Staying Fit: the best way to ensure a speedy recovery is to stay fit and active. It is best to start a simple walking program and home exercises BEFORE surgery to help you recover faster. In this section you will find a list of exercises that you will need to do BEFORE AND AFTER surgery. Video demonstrations can be found on Dr. Horberg's YouTube Page. You should start these exercises SEVEN (7) DAYS before surgery and continue throughout your recovery.

HOME EXERCISE PROGRAM:

- You should plan to do your exercises 2-3 times each day while your recover
- Break each exercise into 2-4 sets of 10-20 repetitions each

GETTING STARTED:

• You may need to build up your strength and endurance to reach these goals, that's ok!

AS YOU PROGRESS:

- Your physical therapy team will make changes and add exercises to your plan
- Your physical therapy team will tailor your plan to your specific needs as time goes on

Supine Ankle Pumps

Setup: Begin lying on your back with your legs straight.

Movement: Slowly pump your ankles by bending and straightening them. Repeat.

Tip: Keep legs relaxed while you move your ankles.



Supine Quadriceps Sets (Knee Push Downs)

Setup: Begin lying on your back with your legs straight.

Movement: Gently squeeze your thigh muscles, pushing the back of your knee down into the floor or bed. Hold for 2-3 seconds. Repeat.

Tip: Keep your back flat against the floor or bed during exercise.

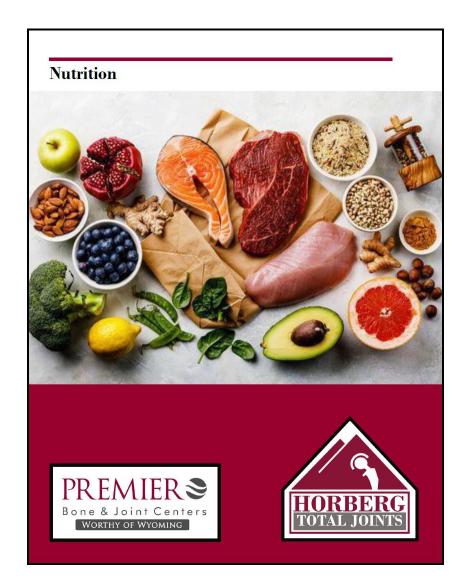


Pre-Operative Nutrition

Why is Nutrition Important Before/After Surgery?

Good nutrition is a very important part of recovery from surgery and necessary for healing. You should start a healthy diet at least 2 weeks before surgery.

- Water: drink 8 glasses of water a day
- Protein: protein helps heal wounds, eat at least one serving with every meal or snack
- Iron: needed to make new blood
- Fiber: helps prevent constipation
- Sugar: limit sugar intake before/after surgery







Pre-Operative Bathing Instructions

Why Bathing with a Special Soap Before Surgery is Important

The American Association of Hip & Knee surgeons (AAHKS), American Academy of Orthopaedic Surgeons (AAOS) and the Centers for Disease Control (CDC) all recommend that patient shower or bathe with an antiseptic agent the day before and morning of joint replacement. Research has shown that this helps **REDUCE** the risk of **INFECTION** after joint replacement.









Pre-Operative Bathing Instructions

Bathing Instructions

Timing: Take a shower/bath the **NIGHT BEFORE AND** the **MORNING OF** surgery

Special Soap: use the HIBICLENS soap our office provides you with

- **Rinse:** rinse your body thoroughly with water
- **Soap:** apply Hibicens soap liberally and scrub your whole body gently
 - Pay extra attention to your groin, arm pits, hands, feet & belly button
 - Pay Extra attention to the place where your incision will go
- Allow Soap to Set: allow Hibiclens to remain on skin for 2 minutes
- Rinse: thoroughly rinse off your body an remove all soap
- **Dry:** gently dry with a towel











Pre-Operative Bathing Instructions

Special Hygiene Instructions

- Do Not Shave: do not shave anything below your face before surgery, this can increase risk of infection
- **Do Not Wear:** powders, deodorant, perfumes or lotions before surgery
- Wear: freshly cleaned pajamas and sleep on clean sheets the night before surgery
- Shower Again: do not forget to shower and use hibiclens the morning of surgery
- Wear: freshly washed, comfortable clothing to the hospital on the day of surgery









When to Stop Eating/Drinking

Enhanced Recovery After Surgery (ERAS) Protocol

The ERAS protocol is a plan for patients to consume an electrolyte containing "sports drink" (like Gatorade) to help restore your electrolytes and maintain hydration while fasting for surgery. Studies suggest benefits including:

- Improved comfort before and after surgery
- Prevention of dehydration
- Prevention of post-op nausea and vomiting
- Reduction of the body's reaction to surgical stress







When to Stop Eating/Drinking

Enhanced Recovery After Surgery (ERAS) Protocol RULES:

- STOP EATING: no food after MIDNIGHT the night before surgery
- STOP DRINKING: no liquids at all before TWO HOURS before surgery
- YOU MAY DRINK: clear liquids (WATER or CLEAR GATORADE) until TWO HOURS before arriving to hospital or surgery center

What Liquids Can I Drink During This Time?

Sports Drink: clear or yellow Gatorade (or water)

How Much Can I Drink?

- The Night Before Surgery- up to 24oz
- The Morning of Surgery- up to 12oz







The Night Before Surgery





Last Minute Reminders:

- Nothing To Eat: no food after MIDNIGHT
- You CAN Drink: water or Gatorade until 2 HOURS before surgery
- Brush Your Teeth: thoroughly and rinse with water
- Pre-Operative Scrub: using hibiclens soap from office
- Remove Nail Polish: to allow for oxygen measuring devices
- Arrange Help: to drive you home and stay with you after surgery
- **Shopping List:** remember to buy groceries and OTC meds!









The Night Before Surgery





What to Pack:

- Bring YOUR HANDBOOK with you!
- Bring CPAP/BiPAP machine if you use one
- Bring a list of your home medications
- Bring loose fitting comfortable clothes to wear home & a pair of pajamas
- Bring clean socks, underwear and supportive shoes
- Bring insurance card & drivers license
- Please do NOT bring jewelry or valuables







Morning of Surgery





What to Expect:

Arrival:

- Please arrive **ON TIME** to the hospital or surgery center
- Being late will delay your surgery as well as others

• Family:

- Your family will be with you until you move to the operating room
- They will be shown where they can wait for you

Preparation:

- IV's will be placed, medications given, your operative site cleaned/shaved
- It can take **2-3 hours** to fully prepare you for surgery





Morning of Surgery





Who You Will Meet:

Dr. Horberg:

Answer last minute questions & mark operative limb

OR Staff:

Nurses, techs and staff will prepare you for surgery
 Anesthesia Staff:

- Discuss the plan for your sedation and pain control
- Go over medical history one last time
- Administer sedation, blocks, etc...





Surgery: What to Expect

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How Long Does it Take?

Surgical times can vary widely. In general, Dr. Horberg will take as much time as needed to "do the job right." Ask Dr. Horberg before surgery for a more accurate estimate.

Family Updates:

- Staff will keep your family up to date when surgery starts and stops
- Dr. Horberg will update your family after surgery is completed

Recovery

- After surgery you will be taken to the PACU to recover
- After recovery in the PACU, you will be discharged home or taken to your room



Afternoon/Evening After Surgery

What to Expect:

- **Diet:** advance as tolerated starting with clear liquids
- Nursing Checks: vital signs, movement, sensation, etc...
- Pain Checks: use ice often and ask for pain medications if needed
- Walking: you will walk with therapy the day of surgery
- Exercises: you will do some exercises on your own to prevent blood clots
- Breathing Treatments: do your breathing exercises 10x per hour
- Change Clothes: staff will help you change into the clothes you will wear home









Afternoon/Evening After Surgery

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You May Have Some Equipment Attached to You:

- Foot/Leg pumps to prevent blood clots
- Compression stockings
- Pulse oximeter to monitor oxygen levels
- Oxygen if needed
- Bandages or VAC over surgical wound
- Urinary catheter (uncommon)
- IV(s) in your arm for meds
- Ice pack over surgical site









Discharge after Surgery

WHAT TO EXPECT:

ALL PATIENTS should expect to be discharged either on the DAY OF surgery or the DAY AFTER!

Studies have shown that longer hospital stays lead to poorer outcomes

EVERYONE goes **HOME** after surgery

- ALL patients go HOME after surgery
- You will NOT be sent to a rehab facility
- Most patients will NOT need home health nursing/therapy
- You MUST prepare yourself and your home recovery from surgery
- You MUST arrange for a friend or family member to stay with you after surgery
 - This person may need to arrange for travel and/or time off work. PLAN AHEAD!!





Discharge after Surgery

GOALS FOR DISCHARGE: The Four "P's"

Pass Urine......Anesthesia can make it difficulty to urinate initially Pass Gas.....Anesthesia can slow your bowel function Pain Control......We want your pain to be under reasonable control Physical/Occupational Therapy.......You will work with a therapist before discharge

We want YOU to feel SAFE before going HOME

We want you to feel safe and prepared to go home prior to leaving the hospital or surgery center. We will transition you off of IV pain medications onto oral pain medications and help you to be a comfortable as possible. We will go over last minute instructions and reminders prior to your discharge home. It is our goal to make sure you are set up for a **SUCCESSFUL** recovery.





JOINT REPLACEMENT IS A TEAM SPORT:

Dr. Horberg, his staff, your primary care doctor and your therapists will ALL work TOGETHER to help make your recovery go as smoothly as possible!

YOU are the most important member of that team! It is important to stay on top of your appointments, therapy and instructions to improve how well YOU recover.





What to Expect after Surgery

How Will I Feel?

Even with modern advances, joint replacement is a major operation. After surgery most patients feel tired, sore and weak. There are tips in your handbook that can improve your energy and minimize your discomfort.

Medications:

After surgery you will need to take several prescription AND over the counter medications. These are designed to keep you safe and comfortable after surgery. It is VERY IMPORTANT to understand your medication instructions and follow them.





What to Expect after Surgery

Follow-Up Appointments:

Please keep all follow-up appointments. We make these to make sure you are healing properly. Expect to have x-rays at some of these visits. Avoid clothing with zippers, belts or snaps that may obstruct x-rays. Please wear loose fitting clothing so that Dr. Horberg can examine your incision.

Physical Therapy:

Therapy is an important part of recovery. It is very important that you keep your therapy appointments and try your best to participate. How well you feel depends on how much effort you put into your recovery.



Revision Joint Replacement: is the term we use for surgery to correct a previous joint replacement that has worn out, become infected or otherwise failed. These operations are often more involved than the original surgery and can be more challenging to recover from. Sometimes multiple operations are needed to correct the problem.

How Will I Feel?

Revision operations are often more extensive than primary joint replacement and can involve more discomfort during recovery. We use a multimodal pain control regimen to keep you as comfortable as possible.





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How Long Does Recovery Take?

As with most surgeries, everyone recovers at their own pace. With revision surgery, it becomes even harder to predict your recovery. Most patients take a bit longer to

recover fully than they did following their original joint replacement.

- Incisions can take longer to heal as well. Do not be alarmed!
- Bleeding from the incision can take 1-2 weeks to completely stop







What Restrictions are There?

- You may need to use assistive devices such as crutches or a walker.
- You may have weight bearing or activity restrictions.
- You may need to use a protective brace, immobilizer, pillow, etc...

Post Revision Restrictions:

These restrictions are based on what needs to be done in surgery. You will receive FINAL instructions AFTER surgery.







YOUR RESPONSIBILITES

Successful recovery from revision surgery is more involved and requires you to **follow your instructions diligently**. While recovery can be burdensome, **your outcome** depends on following the instructions and plan set out by Dr. Horberg and his team.

- Take all **medications as prescribed**, many are vital to prevent complications
- Abide by your post-op restrictions and be diligent with your therapy
- You may need to repeat labs, imaging or other tests, please do this in a timely fashion

Setting Expectations:

While we make every attempt to achieve a "forgotten joint" after your revision, repeated operations are UNPREDICTABLE. Depending on the reason for the revision and the damage we need to repair, some patients may have discomfort or limitations that may not ever COMPLETELY resolve.



Post-Operative Instructions

YOUR Recovery is What YOU Make of it

How successful YOUR outcome after joint replacement depends on how much effort YOU put into your recovery!

- Follow the discharge instructions you are given by Dr. Horberg's team
- Be diligent with your physical therapy and home exercises
- Take your medications as prescribed
- Keep all follow up, therapy and testing appointments





HORBERG TOTAL JOINT DISCHARGE INSTRUCTIONS

Follow Up Instructions:

- Follow Up with: Dr. John Horberg
 - o When: 3 Weeks
 - Call: (307) 745-8851 to schedule/confirm appointment

Where to Find Answers to Questions:

- . Review the "Total Joint Replacement Handbook" you received prior to surgery. A copy can be downloaded from Dr. Horberg's website if need be.
- · Review this discharge order sheet and the "Total Joint Bootcamp" videos available on Dr. Horberg's YouTube
- Call PBJC and ask to speak with "Team Horberg" (307) 745-8851

Dressing Care Instructions:

- Total Shoulder Replacement-
 - You may shower with mepilex dressing in place Do NOT bathe/submerge this dressing
 - Remove mepilex dressing on Post-Op Day #7
 - . There is dressing with skin glue & mesh on beneath this
 - Leave Prineo dressing (skin glue & mesh) in place until follow up (~3 weeks)
 - You may shower with this dressing
 - Do NOT bathe/submerge this dressing
 - If the edges begin to peel up, cut off with clean scissors
 - Keep sling in place at all times unless showering Ok to remove sling to shower

Total Hip Replacement-

- You may shower with mepilex dressing in place
 - Do NOT bathe/submerge this dressing
- Remove mepilex dressing on Post-Op Day #7
- . There is dressing with skin glue & mesh on beneath this
- Leave Prineo dressing (skin glue & mesh) in place until follow up (~3 weeks)
 - You may shower with this dressing
 - Do NOT bathe/submerge this dressing
- If the edges begin to peel up, cut off with clean scissors

Total Knee Replacement-

- You may shower with mepilex dressing in place
- Do NOT bathe/submerge this dressing Remove mepilex dressing on Post-Op Day #7
 - . There is dressing with skin glue & mesh on beneath this
- Leave Prineo dressing (skin glue & mesh) in place until follow up (~3 weeks)
 - You may shower with this dressing
 - Do NOT bathe/submerge this dressing . If the edges begin to peel up, cut off with clean scissors
- o If you have a knee immobilizer, keep this in place unless showering
 - Ok to remove immobilizer to shower
- Wound/Incisional VAC- if you have a wound or incisional VAC follow care instructions as provided by hospital





Post-Operative Medications



Prescription Medications:

You will receive a prescription from Dr. Horberg's team to fill at your pharmacy on the day of surgery.



Over the Counter Medications:

YOU will need to purchase these medications and supplements in advance. A list can be found IN YOUR HANDBOOK







Pain Medicines: Most patients will receive two different pain medications. These should be alternated with one another. These medications are quite strong and should be taken sparingly. **Try to wean yourself as soon as you are able.**

Anti-Inflammatories: Most patients receive a 30 day supply of Celebrex or Meloxicam. These help limit inflammation, pain as well prevent a complication called "heterotopic ossification." Take these for at least 30 days

Steroids: These are used to limit inflammation, nausea and pain. Most patients take Decadron or a similar steroid for two days. **Take all pills as prescribed.**

Blood Thinners: These are used to prevent blood clots. Most patients will be treated for 30 days. **Take all pills as prescribed.**

Antibiotics: Used to prevent infection. Take all pills as prescribed



Post-Operative Medications: "OTC"

Probiotic: these medications limit changes in bowel habits caused by medication.

Begin 7 days before surgery and continue for 30 days after surgery.

Stool Softener: (Colace or Surfak) these medications help prevent constipation.

Begin 7 days before surgery and continue for 30 days after surgery.

Stimulant Laxative: (Dulcolax) use as directed for constipation

Osmotic Laxative: (Milk of Magnesia, Mirilax) use as directed for constipation

Suppository: (Dulcolax) use as directed for constipation

Prilosec: (omeprazole) these help prevent acid reflux while taking anti-inflammatories

Begin 7 days before surgery and continue for 30 days after surgery.

Lotion w/ Vitamin E: (any brand, unscented) massage into your incision after your dressing is removed to speed scar healing



Pain Management

REMEMBER: Some pain after surgery is NORMAL!

We will do our best to keep your pain MANAGEABLE



Ice:

Use your ice packs 20 minutes every 1-2 hours until you no longer have pain

Movement:

Get up and walk and/or change positions often when lying down or sitting in a chair. Elevating your limb above the heart can be helpful as well.

Relaxation & Distraction:

Sometimes focusing your energy on something else will help lessen the pain you are experiencing. Now is a great time to try meditation, deep breathing exercises, coloring or using guided imagery or relaxation. Videos can be found on YouTube to help.









Pain Management

REMEMBER: Some pain after surgery is NORMAL!
We will do our best to keep your pain MANAGEABLE



Medications:

You will go home with a variety of medications that can help with pain.

- Pain Medications: uses these sparingly and wean yourself as soon as you're are able
- Meloxicam or Celebrex: take these daily for 30 days to limit inflammation
- **Decadron:** take these for the first two days after surgery to limit pain and nausea

Warning:

Narcotic pain medications should not be taken on a set schedule.

- Do NOT set an alarm or allow someone to wake you up to take your medications
- Do NOT take your pain medications unless you are having pain





Bandages

- Outer Bandage: (Mepilex) Remove this bandage 7 DAYS after surgery
- Inner Bandage: (Prineo) Keep this bandage in place until your FOLLOW UP VISIT
- Note: Both of these bandages are WATERPROOF and safe to shower with





Other Dressings: in some cases (especially revisions) you may have a different type of dressing. In these cases you will receive specific instructions



Bathing

- Shower: You can shower starting 4 DAYS after surgery
- Bath: You can take a bath starting 4 WEEKS after surgery
- Swimming: You can submerge your incision in a pool starting 4 WEEKS after surgery

• Note: If your incision is still oozing or has not fully healed, DO NOT submerge in a

pool, bath or other body of water.







Activities & Exercise

- Walking: You can begin walking on the SAME DAY as surgery
- Stairs: You can begin doing stairs on the SAME DAY as surgery
- Stretching: You can gentle range of motion exercises on the SAME DAY as surgery
- **Strengthening:** You can begin light weight or body weight exercises the SAME DAY as surgery
- **Vigorous Exercise:** You can begin easing into weight lifting, circuit training, yoga, pilates, mountain biking and more vigorous exercises 6 WEEKS after surgery
- Running/Jumping: Implant manufacturers do not recommend running or other high impact activity activities after joint replacement.
 - If you choose to pursue these activities, please wait 6 MONTHS after surgery





Driving

Requirements:

- You must be OFF all narcotic PAIN MEDICATION before you can drive
- You must be able to SAFELY operate your vehicle without pain
- You should PRACTICE in an empty parking lot or safe place with someone before driving on the road or highway.

• Timeline:

- Most HIP and KNEE patients can drive between 4-6 weeks after surgery
- Note: only YOU can decide when YOU are ready to resume driving
 - Dr. Horberg does NOT make this decision for you
 - YOU take full responsibility for your own safety and the safety of others when you drive



Return to Work

- Manual Labor: Most patients return to physical labor 8-12 WEEKS after surgery
- **Light Duty:** Most patients return to desk or light duty work at 4-6 WEEKS after surgery
- Note: Everyone recovers at their own pace!











Incisions & Skin

- **Bruising:** this can extend through the entire limb but usually resolves in 2-3 weeks
- **Swelling:** in both arms or legs is normal. It may swell so much early on that putting shoes/socks on becomes difficult. This can come and go for up to a year after surgery.
- Redness/Warmth: healing tissue can cause warmth & redness for a few months
 after surgery
- **Bleeding/Oozing:** this is normal in the first 1-2 weeks after surgery. Don't be alarmed, just cover the incision with a clean bandage to protect your clothing. This can be more pronounced after a **revision joint replacement** but will typically stop with time.





Pain & Other Sensations

- **Pain:** we do everything we can to minimize our discomfort after surgery. Nevertheless, pain is a part of recovery. Everyone recovers at their own pace.
- **Numbness/Tingling:** around the incision is normal. This usually improves with time but there will always be some residual numbness in some places.
- **Sounds:** a prosthetic joint can make noises as you move. This usually gets less pronounced with time but is a normal part of joint replacement surgery.
- Clicks & Clunks: As your joint replacement heals, feeling clicks, clunks and pops is normal. Tissues thicken and remodel as they heal and can catch or snap over each other. This can sometimes cause brief pain that typically goes away quickly.





Strength, Endurance & Function

- Strength/Endurance: feeling weak and fatigued after surgery is normal, your strength and stamina will gradually improve with time
- **Stiffness:** scar tissue and swelling can make a new joint feel stiff. It is important to be diligent with your therapy and home exercises to avoid permanent stiffness
- **Daily Activities:** walking distances, getting in and out of chairs or the car, going up and down stairs and other daily activities may be a challenge at first. This improves with time.



Setting Expectations:

- DON'T WORRY: Recovery is NOT always a linear process.
- You may have good days and bad days, this is NORMAL.
- With time, most unpleasant sensations gradually disappear.

NOTE:

If you are concerned about your new joint, call our office, ask for TEAM HORBERG and we can answer your questions or arrange an appointment to reevaluate you. Dr. Horberg & his TEAM are always here for you!





Preventing Blood Clots





Blood Thinners:

You will get a blood thinner based on your medical history and risk for blood clots after surgery.

- Low Risk Patients: aspirin 81mg twice-a-day after surgery
- **High Risk Patients:** you may get a stronger medication. If you are already on a blood thinner, you may be asked to resume this the morning after surgery.

Please Avoid the Following while on your Blood Thinner:

- Alcohol: please do not use alcohol until you are off all blood thinners and pain meds
- Arthritis Medications: NSAIDs can increase risk of bleeding
- Over the Counter Medications: unless your primary doctor and Dr. Horberg approve



Preventing Blood Clots





Please contact your PRIMARY DOCTOR if you have these symptoms:

- Bleeding that does not stop after a cut
- Nosebleeds
- Throwing up blood
- Dark brown urine or red/black streaks in stool

Walking & Exercise:

This is the best way to prevent a blood clot after surgery. Please take a short break to walk every 1-2 hours while awake. Make sure you do your home exercises several times daily.



Preventing Blood Clots





Signs/Symptoms of a Blood Clot:

While this is rare, please report the below symptoms to your primary care doctor immediately after you notice them. Remember that blood clots can happen in either arm/leg after surgery.

- Swelling in the leg/arm that looks worse in the morning
- Sharp, constant pain in the calf muscle or whole leg usually worse with movement
- Hot, tight, and /or burning sensation in arms/legs
- Dark redness at or below affected area

If you develop CHEST PAIN or SHORTNESS
OF BREATH call 911 IMMEDIATELY



Preventing Infection

<u>VERY IMPORTANT</u>: you will need to take ANTIBIOTICS before ALL dental procedures or cleanings for the REST OF YOUR LIFE.



Oral Antibiotics: most patients will take their antibiotics by mouth

- Take the antibiotic ONE HOUR before your cleaning or procedure
- Augmentin: (amoxicillin/clavulonate) 875/125mg
- **Keflex:** (cefalexin) 2 grams

IV Antibiotics: some patients may need to take their antibiotics by IV

- Take the antibiotic **ONE HOUR** before your cleaning or procedure
- Ancef: (cefazolin) 2 grams
- Amoxicillin: (amoxicillin) 1 gram

Patients with Allergy to Penicillins or Cefalosporins:

- Take the antibiotic ONE HOUR before your cleaning or procedure
- Cleocin: (clindamycin) 600mg





VERY IMPORTANT: you will need to take ANTIBIOTICS before ALL dental procedures or cleanings for the REST OF YOUR LIFE.



Routine Dental Care: wait SIX (6) MONTHS after your joint replacement surgery to see your dentist for routine checkups or cleanings

Emergency Dental Care: if your have an unexpected problem such as bleeding gums, tooth pain, broken tooth, loose tooth/filling or dental infection, **CALL** our office **BEFORE** seeing your dentist to get antibiotic recommendations.

If you are having SURGERY: most surgeries require pre-operative antibiotics. Be sure to tell your surgeon that you have a joint replacement and will require an antibiotic before surgery. Contact our office if there are any issues or concerns

IF YOU FEEL SICK: contact your primary doctor for proper treatment. Infections in other parts of the body can cause joint infections IF YOUR NEW JOINT HURTS: if you are worried about your new joint, call our office for an appointment. NEVER let another doctor stick a needle in your new joint.





Preventing Constipation

What is Constipation?

Constipation occurs when a person has three or fewer bowel movements a week and struggles to pass stool. Pain medications can cause constipation.

What Can I do to Prevent Constipation?

- Eat More Fiber: this helps make your stool softer, more bulky and easier to pass
- Exercise: walking 20-30 minutes a day will help keep your bowel movements regular
- Drink Water and/or Fruit and Vegetable Juice: this will keep your stools soft and hydrated. Avoid caffein and alcohol which can dry out your digestive system.
- Laxatives: these can be used for a limited time if needed but limit use to avoid becoming "addicted" to them.



Preventing Constipation







Home Routine to Prevent Constipation after Surgery:

Buy these items ahead of time and keep them on hand:

- Stool Softener: take every day while on pain pills
 - <u>Docusate (Colace)</u>- 100mg 2 tabs by mouth twice daily w/ 8oz of water
- Stimulant Laxitive: if no bowel movement by day two & three
 - Biscodyl (Dulcolax)- 10mg tab by mouth 1-2 times daily
- Osmotic Laxative: if no bowel movement by day four
 - Milk of Magnesia 30mL liquid by mouth 1-2 times daily -or-
 - Miralax- 17g packet w/8oz of water by mouth once daily
 - Magnesium Citrate 240mL by mouth once daily
- Suppository: if no bowel movement by day five & six
 - <u>Dulcolax</u>- per rectum once a day





Complications after joint replacement are rare but can occur. Most complications are minor and require only time or minor treatment to heal. Occasionally severe complications can occur, and it is important to know how to spot them.

Call Dr. Horberg's Office if you have:

- Pain: call us first for pain in the HIP, KNEE or SHOULDER
- Redness/Swelling: call us first if the skin around your incision is red or swollen
- Bleeding: if bleeding won't stop after surgery, call us first for instructions
- Drainage: white/yellow/green drainage can be a sign of infection, call us first for further instructions
- Wound Opening: call us first for instructions if your wound starts to opens up





Complications after joint replacement are rare but can occur. Most complications are minor and require only time or minor treatment to heal. Occasionally severe complications can occur, and it is important to know how to spot them.

Call Your Primary Doctor's Office if:

- You Feel III: if you feel ill after surgery, call your primary doctor for instructions or to schedule a visit.
- You Have Questions about your Home Medications: if you have questions about the medications you took before surgery or concerns about whether they interact with your post-operative medications, call your primary doctor.





Complications after joint replacement are rare but can occur. Most complications are minor and require only time or minor treatment to heal. Occasionally severe complications can occur, and it is important to know how to spot them.

Go to the EMERGENCY ROOM if you have:

- CHEST PAIN: chest pain can be a sign of a heart problem or pulmonary embolus
- SHORTNESS OF BREATH: shortness of breath can be a sign of a heart problem, lung problem or pulmonary embolus
- SUDDEN FACIAL DROOP, WEAKNESS or SLURRED SPEECH: sudden weakness on one side of your body, facial drooping or slurred/garbled speech can be a sign of a stroke

CALL 911 or GO to the ER IMMEDIATELY!



Complications after joint replacement are rare but can occur. Most complications are minor and require only time or minor treatment to heal. Occasionally severe complications can occur, and it is important to know how to spot them.

FOR MOST PROBLEMS WITH YOUR JOINT:

- Do NOT go to the ER or your Primary Doctor: these doctors are NOT SURGEONS and are not as familiar with managing joint replacements as we are.
- Call PREMIER BONE & JOINT CENTERS FIRST: for all problems related to your new HIP, KNEE or SHOULDER. Team Horberg will always manage your new joint.
- NEVER let ANYONE ELSE put a needle in your NEW JOINT: this can cause infection, only Dr. Horberg should decide to put a needle in your NEW JOINT

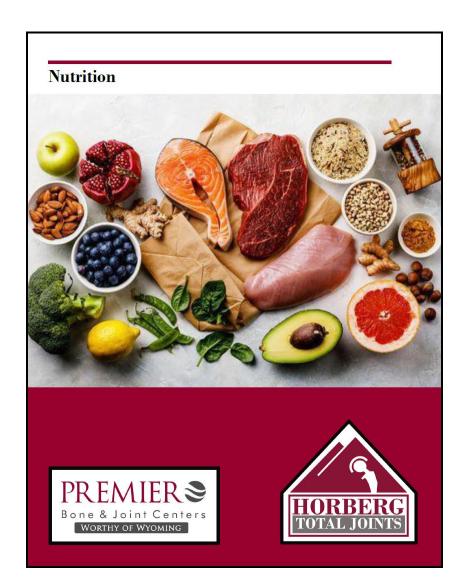


Post-Operative Nutrition

Why is Nutrition Important Before/After Surgery?

Good nutrition is a very important part of recovery from surgery and necessary for healing. You should continue your healthy diet after surgery.

- Water: drink 8 glasses of water a day
- Protein: protein helps heal wounds, eat at least one serving with every meal or snack
- Iron: needed to make new blood
- Fiber: helps prevent constipation
- Sugar: limit sugar intake before/after surgery



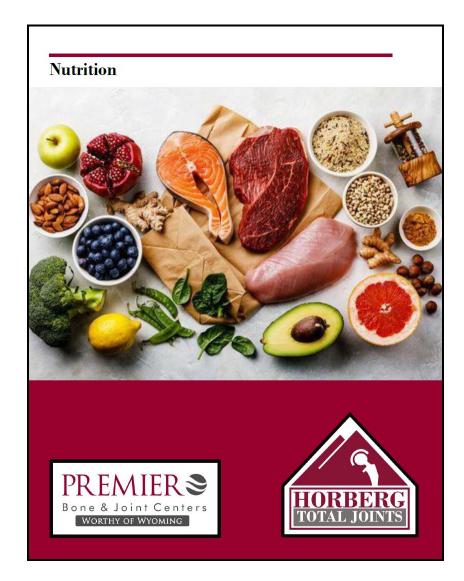




Post-Operative Nutrition

What should I Avoid?

- Tobacco: smoking or using other tobacco products will delay healing or cause infection. If you quit before surgery, congratulations!
- Sweets/Sugars: foods high in sugar provide no meaningful nutrition and can cause weight gain.
 This can impair healing and increase the risk of infection.
- Alcohol: it is **NOT SAFE** to consume alcohol while you are taking pain medications.







Post-Operative Therapy & Exercises

FORMAL PHYSICAL THERAPY

- PT is necessary to achieve the best possible result
- Going to outpatient PT is best
 - Specialized equipment and exercise machines
 - Wound care supplies and expertise
 - Therapists tailor your rehab to your needs

HOME EXERCISE PROGRAM

- Do your exercises 2-3 times each day
- Break each exercise into 2-4 sets of 10-20 reps
 - We will help you schedule your first physical therapy appointment!
 - Therapy will begin within 3-5 days after your surgery.

Speedy Recovery: Postoperative Exercises

Staying Fit: the best way to ensure a speedy recovery is to stay fit and active. It is best to start a simple walking program and home exercises BEFORE surgery to help you recover faster. In this section you will find a list of exercises that you will need to do BEFORE AND AFTER surgery. Video demonstrations can be found on Dr. Horberg's YouTube Page. You should start these exercises SEVEN (7) DAYS before surgery and continue throughout your recovery.

HOME EXERCISE PROGRAM:

- You should plan to do your exercises 2-3 times each day while your recover
- Break each exercise into 2-4 sets of 10-20 repetitions each

GETTING STARTED:

• You may need to build up your strength and endurance to reach these goals, that's ok!

AS YOU PROGRESS:

- Your physical therapy team will make changes and add exercises to your plan
- Your physical therapy team will tailor your plan to your specific needs as time goes on

Supine Ankle Pumps

Setup: Begin lying on your back with your legs straight.

 $\textbf{Movement:} \ \textbf{Slowly pump your ankles by bending and straightening them.} \ \textbf{Repeat.}$

Tip: Keep legs relaxed while you move your ankles.



Supine Quadriceps Sets (Knee Push Downs)

Setup: Begin lying on your back with your legs straight.

Movement: Gently squeeze your thigh muscles, pushing the back of your knee down into the floor or bed. Hold for 2-3 seconds. Repeat.

Tip: Keep your back flat against the floor or bed during exercise.



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Follow Up Schedule

Three Weeks After Surgery: Wound Check

- Evaluate wound healing and early postoperative range of motion
- We will remove your lower dressing at this visit
- Review X-Rays to assess component position

Six Weeks After Surgery: Function Check

- Evaluate functional status, range of motion & early recovery
- Review medications and rehabilitation goals
- Discontinue most perioperative medications
- Resume most activities





Follow Up Schedule

Six Months After Surgery: Function Check

- Evaluate functional status, range of motion & progress with rehabilitation
- Review X-Rays to confirm stable implant position

One Year After Surgery: Graduate from Recovery Phase

- Evaluate functional status, range of motion and activity level
- Review X-Rays to confirm stable implant position

Every 1-5 Years After Surgery: Long Term Surveillance

- Evaluate functional status, range of motion and activity level
- Review X-Rays to confirm stable implant position
- We can be flexible in scheduling these visits to fit your schedule and lifestyle





Follow Up Schedule

LONG TERM FOLLOW UP:

Dr. Horberg believes it is important to keep in touch with his total joint patients long term. Often, small issues with a joint replacement can be identified and treated before they become major problems. After your have recovered from surgery, we can spread out follow up visits to suit your schedule, but we are always here for you.

Dr. Horberg will ALWAYS be your joint replacement specialist and he is happy to keep an eye on joint you may have had performed by other surgeons as well.



Doc, I Still Have Questions...?

WE HAVE ANSWERS!

- Dr. Horberg's Joint Replacement Handbook
- Dr. Horberg's Joint Replacement Bootcamp Video
- Dr. Horberg's YouTube Channel
- Dr. Horberg's Website
- Ask your physical therapist
- Call our office and ask for Team Horberg
- Schedule a visit with Dr. Horberg







Joint Replacement is a Team Sport!!





