Enhanced Recovery After Surgery

A guide for patients
Patient Education Booklet
Your Guide to Colorectal Surgery

We care about your surgical success. We have teamed up with the Agency for Healthcare Research and Quality (AHRQ), in conjunction with the Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality, to offer you enhanced education and information to prepare you for surgery. We hope this guide will assist you every step of the way while you’re in the hospital and after your surgery.

Patient Name: ___________________________________________

Surgeon Name: ___________________________________________

Preparing for surgery can feel overwhelming. You may be receiving a lot of information. It is important to remember that every patient is different. Your care team will tailor your recovery program to your needs and your surgical team is here to help you from beginning to end.

Let’s get started with your preparation for surgery!

Please read this booklet as soon as you are able, and bring it with you to all of your appointments and hospitalizations. It is important for you, your family, and your friends to understand what to anticipate so that everyone can fully participate in your recovery.

**Frequently Used Phone Numbers**

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Light Eastern Maine Medical Center (main line)</td>
<td>207.973.7000</td>
</tr>
<tr>
<td>Northern Light Surgery</td>
<td>207.973.8881</td>
</tr>
<tr>
<td>Northern Light Surgery and Trauma</td>
<td>207.973.4949</td>
</tr>
<tr>
<td>Northern Light Wound and Ostomy Nurse</td>
<td>207.973.4024</td>
</tr>
</tbody>
</table>
You are part of the team!

For best results, you want to be at your optimal health! This will help with healing and getting you back to your normal routine as soon as possible.

As soon as you know you are scheduled for surgery:
- Start walking for 20 minutes, three times a week. This helps with a better recovery and a quicker return home.
- **Stop Smoking!** Smoking increases your risk of complications after surgery and your wound may not heal as well.
- Abstain from alcohol as soon as you know you will have surgery. Alcohol consumption increases your risk for surgical site infection after your surgery.
- We recommend that you stop smoking and drinking any type of alcohol for at least four weeks prior to your surgery.
- Increase your protein intake and or drink protein shakes.
- If your surgeon has indicated you will have, or may have an ostomy, begin reviewing the ostomy literature provided to you by your surgeon’s office.

Ask Questions!

Please write down questions you have and be sure to ask your surgical team when you see them, or call their office. Use the summary checklist on page 8 as a guide to what you need to do to prepare for your surgery and recovery after surgery.

What to Expect – Why Prepare?

Preparing for surgery can be overwhelming. Know that your team is here to help from beginning to the end of your stay.

You will be a part of the Enhanced Recovery After Surgery (ERAS) care path. This is an evidence-based program with a pathway for each phase of your care before, during, and after surgery. The more prepared you are, the better your recovery will be, and the quicker you can return home to your normal routine.

You are a part of the team and your participation is crucial to your recovery.

This education book is to guide you through preparing for surgery and recovery. Please read and follow the instructions, and bring this book with you to the hospital.
Preventing for Surgery

- Your hospital stay may be from 2 to 4 days (unless the doctor has told you differently).
- No Smoking: If you smoke, we recommend quitting now before surgery. Do not use nicotine products.

**Resources for Quitting Smoking:**
- Partners for Tobacco Free Maine: 1-877-786-4986
- American Heart Association: 1-800-937-0944
- www.AmericanHeart.org

- No Alcohol: Do not drink alcohol 24 hours before surgery. If you drink alcohol, your surgery may be cancelled.

**Activity:**
- Walk 3 to 5 days a week for 20 minutes a day.

**Nutrition:**
- Eating well before surgery is important for healing. Strive to eat a healthy diet high in vitamins and minerals. Increase your protein intake with lean meats and protein shakes.

**Purchase:**
- Buy a 238 gram bottle of Miralax, a 64 oz bottle of Gatorade, Dulcolax, and antibiotics prescriptions (if given) for your bowel prep.

You may also want to buy other clear liquids: Jell-O, popsicles, apple juice, clear broth, coffee, tea, white grape juice, ice tea, lemonade (with NO pulp), coconut water, and white cranberry juice.

**Do not drink:**
- Red cranberry juice, or any other red, blue or purple drinks just prior to surgery.

**Immunonutrition and Carbohydrate Loading**
- If your surgeon has indicated you need to use immunonutrition and carbohydrate supplements prior to surgery, you will be provided with instructions on a separate handout. Be sure to follow the directions carefully and call your surgeon’s office if you have any questions.

The Day Before Surgery

Start your **clear liquid diet** when you wake up. If you were prescribed an Immunonutrition supplement, **DO NOT** drink this today. You will begin this again after surgery once your surgeon says you can have full liquids.

**9 pm** Take 2 Dulcolax tablets

**10 pm** Take the last dose of Neomycin and Flagyl

If you have persistent nausea or vomiting, call the surgical office. An anti-nausea medication may be prescribed for you.

The Night Before Surgery

- **Drink clear liquids!** You may continue to drink clear liquids up until 2 hours before surgery. Drink nothing else. No milk or cream.

- **Showering** - Use half of the bottle of soap you received from the office, wash from the neck down.

- **Do not shave your abdomen (belly) area.**
Surgery Day

The Morning Of Surgery

Take another shower with the other half of the bottle of soap. Use a clean towel and clean clothes.

- Take the medications that you discussed with the Anesthesia nurse.

What to Bring in the Hospital

- A pack of gum or hard candy for after surgery
- Glasses, hearing aids, toiletries
- Advanced directive (optional)
- This Patient Guide
- Leave jewelry at home except a wedding band, which is ok to wear

Arriving at the Hospital

- You may park in the garage or use our free valet parking at the Main Entrance.
- Once you enter the main lobby, the elevators are on the right, across from the staircase.
- Go to the third floor and follow the signs to Surgical Patient Reception.

Pre-Surgery

- Once you check in, the nursing tech will come out and get you. Your family member can go to the pre-surgery room with you.
- You will be weighed and your vital signs taken.
- You will change into a hospital gown and be given a pair of socks.
- You will meet your Anesthesia team, your Surgeon and the operating room Nurse.
- An intravenous catheter (IV) will be placed in your hand or arm.
- You will be given preemptive pain medication and anti-nausea medication.
- This is where you will have an epidural placed if needed.
- You will be given an injection of heparin with a very small needle to help prevent blood clots.

Operating Room

The team will bring you to the operating room on a stretcher

- Your family will go to the waiting room.
- You will get medicine in your IV and a mask with oxygen will be placed over your nose and mouth.
- You will drift off to sleep.

Recovery Room

- You will wake up from anesthesia.
- You may have a small catheter in your bladder constantly emptying your urine.
- It is important to take deep breaths and cough.
- If you are not nauseous you may have sips of water.
- The surgeon will talk with your family to let them know how you are.
- One person can visit you in the recovery room when you are ready (usually in 60-90 min).
- If you are in the recovery room longer than 2 hours (due to room availability), it is important to start moving around and sitting on the edge of the bed.
- After 2 hours you can start chewing gum as long as you are not feeling nauseous.
Your Room in the Surgical Unit

- Once you are moved to your room, your family can join you.
- You can continue to drink sips of clear liquids and chew gum.
  This stimulates gastric juices, and gets you ready to start eating quicker.
- You will be able to sit on the edge of the bed and sit in a chair that night.
- You will use a pain scale of 1 to 10. 1 to 3 is little pain, 4 to 6 is moderate pain, and 7 to 10 is severe pain.
- You will have pain medications around the clock that are non-narcotics.
  You can have something stronger if needed.
- You will experience some pain regardless of the medications.
  The more you walk, the better you will feel, and the quicker you can go home.
- We want to minimize narcotics, as they cause constipation and nausea.
  This can prolong your stay in the hospital.

During your stay

It is very important to get out of bed, sit in a chair, and walk multiple times a day! The next few days, stay out of bed for 6 hours (total) in the chair and walk 3-5 times each day.

Any time you get up, if you feel weak, dizzy, have known balance issues or a prior history of falling, have your nurse help you.

Massaging sequential compression devices

- Wear at all times except when walking! This prevents blood clots which can be dangerous and detrimental to your recovery.

Incentive Spirometer / Cough and Deep Breathing

- Use the incentive spirometer to do deep breathing exercises. This is a machine that helps you expand your lungs and helps prevent pneumonia while you are in the hospital.
- Your nurse will show you how to do these lung exercises. It is very important that you do these several times each hour while you are awake.

Diet

Your diet will start with clear liquids and progress to full liquids then to a light diet as long as you are free from nausea.

Possible Side Effect:

Some patients may experience what is called an “ILEUS.” This is when the bowels are “sleeping” and are not working quite yet. This may manifest as bloating, nausea, vomiting and intolerance to food. If you feel this at any point, you should limit or stop your current diet as recommended by your care team. This is not necessarily a worrisome event and should resolve with time. If you do experience an ileus you may have a small tube inserted in your nose to drain stomach fluids.
Going Home

Discharge

You will go home when you are....

- Free of nausea and vomiting
- Walking
- Passing gas or had a bowel movement
- Experiencing good pain control with oral pain meds

Questions After You Leave the Hospital

Once you are discharged, you may call 973.7000 and ask for your surgeon’s office.

Call Your Surgeon If You Experience Any of These Symptoms:

- Fever higher than 101.5
- Your wound is RED and more painful or has drainage
- You are vomiting and can’t keep fluid down
- If your pain is worse
- If you have lower leg swelling, or calf pain

General Instructions And Concerns At Home:

Wound Care: It may be slightly red and tender or have some bruising which is expected. You may have some small bandages on the incisions called Steri-strips. You may shower with these and they tend to fall off or peel on their own within two weeks. If you have staples in your incision, these will be removed during your follow up appointment, usually in 10-14 days. Do not scrub your incisions. Gently wash the area and let water run through it.

Bowel movements: Erratic bowel movements are common after your surgery. You may have loose stools one day and have constipation on another day. This should stabilize within a few weeks.

- For constipation: Try to increase fluid intake. Over the counter stool softeners such as Docusate are ok to take especially if you are taking narcotics for pain
- For loose stools: Eat bulky foods like bread, peanut butter and bananas.

Activity: It is ok to walk around the house and go up and down the stairs. However, avoid activity that puts pressure and pain on your abdomen such as sit-ups and sexual intercourse. Avoid lifting objects >10-15 lbs. for 4 to 6 weeks. Avoid driving until you are no longer taking narcotic pain medications.

Fatigue is common after surgery and you may find that you need to take extra naps. This is normal and you will slowly build your strength back in a few weeks.

Bathing: You may shower as permitted by your surgeon. Do not swim or soak in a tub for two weeks after your surgery.

Appetite and Post-Surgery Diet: It is not unusual to lose 10-15 pounds after surgery and to have a decreased appetite. This will stabilize in 3-4 weeks.

- Eat a soft diet and increase over time
- Eat high protein foods and nutritional drinks
- Drink 8-10 glasses of fluids per day.

Eat:

Do Not Eat:

For the first couple of weeks, avoid greasy food, spicy food, carbonated beverages, and raw fruits, and vegetables.
## Actions to Take Before Surgery

### 1-2 Days Before Surgery

- Receive phone call from the Anesthesia office to remind you what time to arrive for your surgery, review medications to take the day of surgery, go over health history and answer last-minute questions.

- Have all prescriptions, supplies, and clear liquids needed for your bowel preparation.

- Have your soap from the office for your skin preparation/shower.

### One Day Before Surgery

- Start Clear Liquid diet, bowel prep and take antibiotics as instructed. No solid food: clear liquids only!

- The night before your surgery, shower and use the soap (½ the bottle) following the instructions for proper use.

- Put clean sheets on your bed and wear clean pajamas.

### Morning of Surgery

- Shower and use the other ½ of the bottle of soap.

- Take medications as instructed. Clear liquids ONLY.

- Do not drink anything two (2) hours before surgery.
### Actions to Take Right After Surgery

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen</td>
<td>Keep the oxygen placed in the recovery room for 24 hours. This helps you to heal.</td>
</tr>
<tr>
<td>Mobility</td>
<td>Two hours after your surgery is over, sit on the edge of the bed, try to take a few steps, and sit in a chair. Wear your sequential compression device (SCD) when in bed.</td>
</tr>
<tr>
<td>Incentive Spirometer</td>
<td>Use this machine to perform deep breathing exercises each hour while you are awake.</td>
</tr>
<tr>
<td>Diet to stimulate your bowels</td>
<td>Start taking sips of clear liquids, if you have no nausea. You may chew gum and suck on hard candy three times a day.</td>
</tr>
<tr>
<td>Pain management</td>
<td>Scheduled medications will be given to you to manage your pain. If you are concerned about pain, talk with your nurse.</td>
</tr>
<tr>
<td>Urinary catheter</td>
<td>You may have a catheter in your bladder that drains urine for a day or two.</td>
</tr>
</tbody>
</table>

### Actions to take the First Day After Surgery

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>Spend at least 6 hours out of bed. Walk in the hallway at least 3 to 5 times. Wear your sequential compression device (SCD) when in bed.</td>
</tr>
<tr>
<td>Incentive Spirometer</td>
<td>Continue to use this machine to do deep breathing exercises.</td>
</tr>
<tr>
<td>Diet</td>
<td>Drink clear liquids as you feel up to it. You can continue to chew gum. You may be offered full liquids if you have no nausea. If your surgeon says an Immunonutrition drink is right for you, be sure to drink as much of each one when they arrive on your tray. You may be disconnected from the intravenous fluids if you are drinking well. Ask your nurse if it has not been done.</td>
</tr>
<tr>
<td>Pain management</td>
<td>Scheduled medications will be given to you to help manage your pain. If you are concerned about pain, talk with your nurse.</td>
</tr>
<tr>
<td>Urinary catheter</td>
<td>Your urinary catheter may be removed. Ask if it is not addressed by your care team.</td>
</tr>
<tr>
<td>If with an ostomy</td>
<td>Participate in your ostomy care. Work with your nurse to understand how to care for yourself after discharge.</td>
</tr>
</tbody>
</table>
**Actions to Take the **Second Day** After Surgery**

<table>
<thead>
<tr>
<th>Check when done</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Mobility</td>
<td>Spend at least 6 hours out of bed in the chair. (Eat your meals in the chair.) Walk at least 3 to 6 times in hallway. Wear your sequential compression device (SCD) when in bed.</td>
</tr>
<tr>
<td>☐ Incentive Spirometer</td>
<td>Continue to use this machine to do deep breathing exercises.</td>
</tr>
<tr>
<td>☐ Diet</td>
<td>You will be placed on a full liquid diet. Some patients advance to a soft diet if tolerating full liquids.</td>
</tr>
<tr>
<td>☐ Pain management</td>
<td>Scheduled medications will be given to you to manage your pain. If you are concerned about pain, talk with your nurse.</td>
</tr>
<tr>
<td>☐ Urinary catheter</td>
<td>Your urinary catheter will be removed if not already done. Please ask your nurse if not addressed.</td>
</tr>
<tr>
<td>☐ If ostomy</td>
<td>Learn how to empty your ostomy bag (if you have one) and care for the skin. Learn how to measure ostomy liquid output. Ask your nurse or doctor to tell you what you can do at home to keep from getting dehydrated due to removal of all or part of your colon.</td>
</tr>
</tbody>
</table>

If you have any questions about preparing for your surgery, please contact your surgeon’s office.
### Actions to Take the **Third Day** After Surgery

<table>
<thead>
<tr>
<th>Check When Done</th>
<th>Mobility</th>
<th>Spend much of the day out of bed and walking.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Diet</td>
<td>Your diet should be advanced to soft (post-surgical light) diet if you have no nausea.</td>
</tr>
<tr>
<td></td>
<td>Pain management</td>
<td>Your pain should be well controlled on oral pain medication. Talk to your care team about how to manage your pain at home.</td>
</tr>
<tr>
<td></td>
<td>Discharge planning</td>
<td>You are ready to be discharged if you are drinking/eating well (no nausea), and passing gas, and your pain is well controlled.</td>
</tr>
<tr>
<td></td>
<td>Discharge instructions</td>
<td>Talk to your nurse about signs and symptoms of infection, and what to do if you think you have an infection.</td>
</tr>
<tr>
<td></td>
<td>If with an ostomy</td>
<td>You may go home with new prescriptions and changes in your medications. Make sure you go through them with your nurse and understand the instructions regarding these medications.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drink plenty of fluids at home. Talk to your nurse about what actions you can take to prevent dehydration after you leave the hospital.</td>
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<tr>
<td></td>
<td></td>
<td>Talk to your nurse about what foods you can eat to make your ostomy output thicker and prevent dehydration.</td>
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<tr>
<td></td>
<td></td>
<td>Demonstrate how to remove and apply a new ostomy bag.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check that you have ostomy supplies for use at home. Learn how to order additional supplies so you don't run out of supplies at home.</td>
</tr>
</tbody>
</table>
Notes
Please write down any questions you may want to ask your care team.