



Enhanced Recovery After Surgery (ERAS) Your Guide To Colon Surgery



Enhanced Recovery After Surgery (ERAS)

What is Enhanced Recovery?

Enhanced recovery is a new way of improving the experience of patients who need major surgery. It helps patients recovery sooner so life can return to normal as quickly as possible. The ERAS program focuses on making sure that patients are actively involved in their recovery.

There are four main stages:

- 1. Planning and preparing before surgery** – giving you plenty of information so you feel ready.
- 2. Reducing the physical stress of the operation** – allowing you to drink up to four hours before your surgery.
- 3. A pain relief plan** that focuses on giving you the right medicine you need to keep you comfortable during and after surgery.
- 4. Early feeding and moving around after surgery** – allow you to eat, drink and walk around as soon as you can.

It is important that you know what to expect before, during and after your surgery. Your care team will work closely with you to plan your care and treatment. YOU are the most important part of the care team.

It is important for you to participate in your recovery and to follow our advice. By working together, we hope your hospital stay is as short and pain-free as possible.

Thank you for choosing North Mississippi Medical Center.

We are happy you chose us to care for you! This book will provide you with some general information about what to expect before and after your surgery. It will also explain the best ways to prepare so that you can recover quickly.

Please bring this booklet with you to:

✓ **Your admission to the hospital**

✓ **Follow-up visits**

Patient Name

Surgery Date

Surgeon

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WHAT IS A COLECTOMY?

A colectomy is an operation in which part of the colon is removed. Most colectomies are done through a small incision in the middle of the abdomen that runs up and down or side to side. Small instruments are inserted through the incision. This is to view and move the organs. During the colectomy, the surgeon removes the diseased part of the colon and then sews or staples the colon back together. The surgeon may also remove some lymph nodes from the area to look for cancer. The surgeon will also examine the other organs in the abdomen. In most cases, a colectomy can be done in one to three hours. Patients having this surgery are usually in the hospital for two to four days at most.

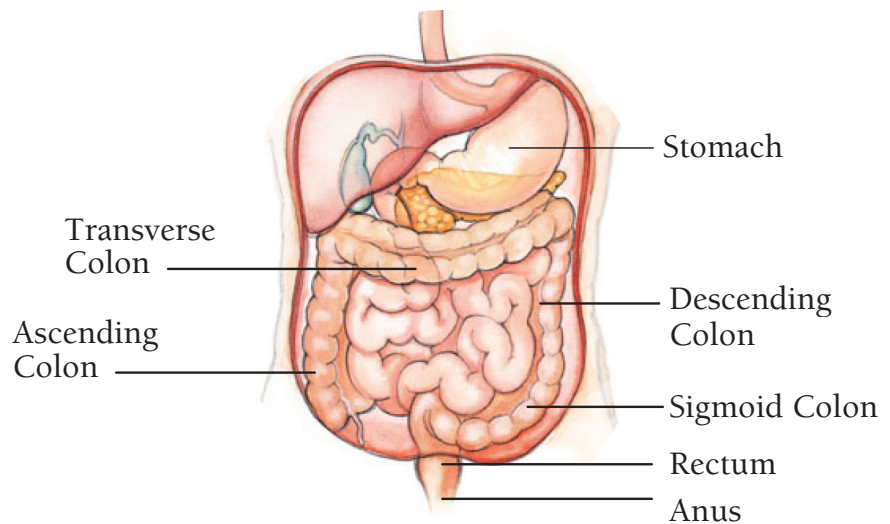
A colectomy is different than a “colostomy.” A colostomy is an operation on which an opening in the end of the colon is sewn to the surface skin of the abdomen. The surgeon often knows whether or not you will need a colostomy before the surgery starts and he or she will discuss this with you in detail. As a rule, we avoid making a colostomy whenever possible.

If you have an ostomy (colostomy or ileostomy) placed, a certified wound nurse will see you in the hospital and teach you how to care for your ostomy. Your physician may also order you to go home with home care to make sure you feel confident caring for yourself.

Potential Risks and Complications

The risks and complications of a colectomy include:

- Side effects from the anesthesia
- Infection
- Bleeding, with a possible need for a transfusion
- Damage to nearby organs
- Blood clots in the legs or lungs
- Anastomotic leak



PRE-ANESTHESIA TESTING

After your clinic visit, you may need to answer some questions or have tests done before your surgery. This may occur over the phone or at the Pre-Anesthesia Testing, located at Longtown Medical Park, 4381 S. Eason Blvd. For more information on Pre-Anesthesia Testing, call (662) 377-4295.

At your PAT visit, you will:

- Meet with your nurse practitioner who will review your medical history and determine if more tests are indicated prior to your surgery.
- Have labs and blood drawn
- Get an EKG (a test of your heart), if necessary
- Receive special soap to bathe with the night before and morning of surgery
- Receive a special carbohydrate drink to drink three hours before your scheduled surgery

You may be asked to see a specialist, such as a cardiologist (heart doctor), to evaluate you before your surgery.

Bring all the medications you take every day (including herbal supplements*) to this appointment. You may need to stop some of your regular medications before surgery. The nurse practitioner will tell you if need to stop taking them.

*Some herbal supplements increase your chance of abnormal bleeding: Echinacea, Garlic, Ginkgo, Ginseng, Kava, Saw Palmetto, St. John's Wort and Valerian Root. It is important to tell your doctor if you take any of these medications.

If you are taking a GLP-1 agonists for weight-loss/diabetes such as Trulicity, Mounjaro, Wegovy, Ozempic, Saxenda, or Rybelsus, the nurse practitioner will review this, along with your other medications. You may be given instructions to withhold this medication for one week prior to your scheduled surgery date.

BEFORE YOUR SURGERY

Diet

A very important part of your preparation is cleaning your colon for surgery. This is often called a “bowel prep.” You will be given a solution to drink that will empty your bowel. The staff member that schedules your surgery will give you printed instructions for your bowel prep. The bowel prep is important because it helps the colon heal together after surgery and it helps prevent a wound infection. Your surgeon may also have you take antibiotic pills the day before surgery.

The day before your surgery, you will be able to have clear liquids only. Acceptable liquids are listed below. You may drink clear liquids up until four hours before your scheduled surgery time. If you take any medications on a regular basis, ask your surgeon if you should take them on the morning before surgery.

Clear Liquid Diet

You can eat or drink only things you can see through. You can drink this up until four hours before your surgery.

These are acceptable clear liquids:

- Plain water
- Fruit juices without pulp, such as apple juice, grape juice or cranberry juice
- Strained lemonade, limeade or fruit punch
- Clear, fat-free broth (bouillon or consommé)
- Clear sodas (Ginger Ale, Sprite)
- Plain gelatin (Jell-O)
- Italian ice
- Kool-Aid
- Honey
- Popsicles without bits of fruit or fruit pulp
- Tea or coffee without milk or cream (may add sugar or lemon juice)
- Sports drinks
- Clear nutritional supplements, such as Ensure Clear or Boost Breeze
- Hard candies

These are NOT acceptable clear liquids:

- Milk
- Tomato juice
- Fruit juice with pulp
- Fruit nectars

*Three hours prior to your scheduled surgery time, you must drink the carbohydrate drink provided.

Medications

Two weeks before your surgery, avoid taking aspirin or aspirin-containing products unless otherwise instructed by your surgeon. These include buffered aspirin, Bufferin, regular Anacin, Fiorinal, Codeine with aspirin, Darvon compound, Soma compound, and all Alka-Seltzer products.

Also avoid all non-steroidal anti-inflammatory medications (For example: Advil, Motrin, Nuprin, Indocin, Naprosyn, Meclomen, Clinoril, Feldene and Relefen).

If you take medication that thins your blood such as: Coumadin, Plavix, Aggrenox, Brilinta, Clopidogrel, Dipyridamole, Persantine, Pletal, Ticagrelor, Ticlopidine, Ticlid, Trental, Vimovo, Warfarin, Dabigatran etexilate, Effient, Eliquis, Jantoven, Xarelto, or any other medications such as these; please follow your surgeon's instructions on how to stop these medications before surgery.

All of these medications can thin your blood can cause more bleeding in surgery or after surgery. If you need medication for pain during this time, please ask your doctor if you have any questions about which medications are okay.

Smoking

Smoking is known to slow the healing process and can increase your risk for surgical complications. If you have been thinking about quitting smoking, this is a good time to do so. Quitting smoking is the single most important thing you can do to improve your overall health. To join NMMC's smoking cessation program, call (662) 377-5687 or 1-800-THE DESK (1-800-843-3375).

Illness

Notify your surgeon right away if you develop any kind of illness within 10 days before your surgery. Sometimes even minor health problems (cold, flu, temperature, herpes outbreak, skin rash or infection, a "flare-up" of a health problem) can be quite serious when combined with the stress of surgery.

Arrival Time

To find out your surgery arrival time, please call Surgery Scheduling at (662) 377-4380 the evening before your surgery between the hours of 3 and 4 p.m. If your surgery is scheduled for a Monday, call Sunday between the hours of 4 and 5 p.m.

*Surgery starting time may change due to emergencies or other delays.

DAY OF SURGERY

On the day of your surgery, please report to the East Tower second floor.

What to bring to the hospital

- A list of your current medications, including dosage and strength
- Any paperwork given to you by the doctor or doctor's office
- A book or something to do while you wait
- A change of comfortable clothes for discharge
- Any toiletries that you may need
- Any assistance devices you use at home to help you walk (walker, cane or crutches)
- Sugar-free gum for after surgery
- THIS BOOK

What NOT to bring to the hospital

- Any jewelry
- Any valuables
- Anyone under the age of 14

Arriving at the hospital

- When you arrive at the hospital, enter the East Tower and go to the Second Floor. Once you are checked in, someone will bring you to the Preoperative Holding Area. Only one person can go back to this area with you. NO ONE under the age of 14 can go with you.
- Identify a Care Partner for your stay in the hospital.
- Have a responsible adult with you to hear your discharge instructions and drive you home.

The Preoperative Holding Area

- Here, you will meet your surgical team.
- You will have an IV put in your arm. An IV is a soft flexible tube that you will get medicines and fluids through.
- A nurse will verify your medical information and current medications.
- You will sign a consent for the surgery.

In the Operating Room

This is what you can expect:

- Your nurse will give you a warm blanket to make sure you are comfortable.
- Small paper sticky pads will be put on your chest. They are attached to a monitor so that your heart can be watched.
- A blood pressure cuff will be put on your arm. It will check your blood pressure every few minutes.
- A probe will be placed on your finger to check how much oxygen is in your blood.
- You will be given extra oxygen to breathe through a mask.
- Your anesthesiologist will give you medicine through your IV. It will make you go into a deep sleep.

The Surgery

Once you are asleep, your surgeon will perform the operation that was discussed with you. Someone from the operating room will call and keep your family updated on your progress.

Recovery Room

After surgery, you will be taken to the recovery room. Most patients remain in the recovery room for about one hour and then are assigned an inpatient room.

Hospital Inpatient Unit

From the recovery room, you will be sent to the surgical floor. The staff will tell your family your room number so they can join you.

Once you are awake:

- You will be given clear fluids to drink.
- You will get out of bed (with help) to start moving as soon as possible. This speeds up your recovery and reduces the risk of getting blood clots and pneumonia.

Over the next two to four days, monitors and tubes will be removed. By the time you leave the hospital, you will not have any tubes.

Your Care Team

In addition to the nursing staff, the Surgery team will care for you. This team is led by your surgeon and may or may not include residents. There will always be a physician in the hospital 24 hours a day to tend to your needs. If at any time during your hospital stay you have any problems, please feel free to ask for the charge nurse on the floor or call the Careline at (662) 377-2273.

Daily Goals

While you are in the hospital, you will have daily goals to help you recover. These goals include:

- Getting out of bed and being active
- Eating and drinking
- Managing your pain

Managing Your Pain

Managing your pain is an important part of your recovery. We will ask you regularly about your level of comfort. It is important that you are able to take deep breaths, cough and move.

To manage your pain after surgery, you will be given several types of medication before and after surgery around the clock to keep you comfortable. This will decrease your need for the amount of narcotics you have to take after surgery. Narcotics can slow bowel and over all recovery. Narcotics can also increase your chance of nausea and vomiting.

Surgery Checklist: Recover Safely & Quickly

Please follow these steps before and after your colon surgery.

	Night Before Surgery	Morning of surgery	4-6 Hours After Surgery	First day after Surgery	Discharge Day	After Discharge
Pain Control	Continue if prescribed by MD	Continue if prescribed by MD	<ul style="list-style-type: none"> • IV medicines • Medicine by mouth 	Medicine by mouth	Medicine by mouth	Medicine by mouth
Skin Care	<ul style="list-style-type: none"> • Shower • Use provided special soap 	<ul style="list-style-type: none"> • Shower • Use provided special soap 	Follow wound care instructions	Follow wound care instructions	Follow wound care instructions	Follow wound care instructions
Diet	Clear liquid only (See attached sheet)	Clear liquid including carbohydrate drink 3 hours before surgery	<ul style="list-style-type: none"> • Eat soft foods • Drink liquids • Chew gum (DO NOT SWALLOW GUM) 	<ul style="list-style-type: none"> • Eat soft foods • Drink liquids • Chew gum 	<ul style="list-style-type: none"> • Eat soft foods • Drink liquids • Chew gum 	<ul style="list-style-type: none"> • Eat soft foods • Drink liquids
Activity	<ul style="list-style-type: none"> • Walk • Do not smoke 	<ul style="list-style-type: none"> • Your usual routine • Do not smoke 	<ul style="list-style-type: none"> • Raise head of bed 30 degrees • Eat meals in chair • Walk in hallway • Do not smoke 	<ul style="list-style-type: none"> • Eat meals in chair • Walk in hallway 5 times • Do not smoke 	<ul style="list-style-type: none"> • Eat meals in chair • Walk in hallway 5 times • Discharge to home • Do not smoke 	<ul style="list-style-type: none"> • Exercise daily based on discharge instructions • Do not smoke
Incentive Spirometer			10 times each hour when awake	10 times each hour when awake	10 times each hour when awake	10 times each hour when awake for first 10 days when home
Treatments	Bowel prep as prescribed	Tell your nurse if you are in pain	<ul style="list-style-type: none"> • Tell your nurse if you pass gas, have a bowel movement or have pain • Check wound dressing 	Urinary catheter removed	Instructions in discharge information	Follow discharge instructions

AFTER SURGERY

Most people who have colon surgery recover without any problems. These people go home within two to four days. A small number of patients may have a slower recovery and need to stay a little longer.

Eating and Drinking

After surgery, you might experience nausea and vomiting. Your nurse will be giving you nausea and reflux medicines to help with this. Please let your nurse know if you are nauseated.

When you get to your room in the hospital after surgery, they will bring you clear liquids to drink. If you tolerate drinking liquids without nausea or vomiting, you will be able to eat. The dietitian will prepare you a special diet that is low in fiber and fat.

During this time, you can also chew sugar free gum. This will help stimulate the movement of your colon.

DISCHARGE

You will be able to come home when you are able to:

- Get out of bed and walk without help
- Eat the food provided without feeling nauseated
- Passing gas
- Have a bowel movement
- Have normal urinary function
- No fever
- No wound problems
- Adequate pain control

Before you are discharged, you will be given:

- A copy of your discharge instructions
- A list of any medications you may need
- A prescription to manage your pain
- Instructions on when to return to have your staples removed, if you have staples
- Instructions on when to return to see your surgeon

COMPLICATIONS

Infection

There are germs in the colon which can spread to the area around it and can cause infection because the colon is not clean. In addition:

- Most patients have bladder catheters during surgery. These can increase the chance of urinary infections.
- Spending too much time in bed can sometimes lead to lung infections (pneumonia).

Infections do not happen often and are not usually serious. Your care team will monitor you very closely for signs and symptoms of infection: fever, unusual redness and swelling and unusual drainage.

Wound Infection

This is one of the most common complications of surgery. If you develop a wound infection, you may have an open wound that requires dressing changes at home. If you require home care for dressing changes, we will arrange this for you.

Post-operative nausea and vomiting

It is very common to feel sick after your surgery. We will give you medication to try to prevent this. If you do feel sick, you should eat less food and switch to a liquid diet. Small frequent meals or drinks are best in this situation. As long as you can drink and keep yourself hydrated, the stomach upset will likely pass.

Postoperative ileus

Following surgery, your bowel can stop moving. When this happens, food and gas have trouble passing through the intestines. This is called an ileus and is one of the most common and frustrating complications following colon surgery.

If you do get an ileus, it usually only lasts two to three days. The best way to avoid it is to decrease the amount of narcotic pain medications you take, get up as much as possible after your surgery, eat small frequent meals and drink at least eight glasses of fluid daily.

Anastomotic Leak

This is a serious complication that develops if the two ends of the bowel that are joined together do not heal. If this happens, it is usually within five to seven days after surgery. Symptoms of a leak include severe abdominal pain, fever and vomiting. This often needs another operation and a temporary ostomy.

Blood Clots

Blood clotting is a normal process in your body that prevents excessive bleeding. Sometimes, clots form abnormally within your body. After surgery, blood clots can form and lead to deep veins of your body called deep vein thrombosis (DVT) and pulmonary embolism (PE). DVT and PE are collectively known as venous thromboembolism (VTE). These blood clots can travel anywhere in your body and can be a life threatening event. To prevent this complication while you are in the hospital, you will be receiving special medication to thin your blood. You will also be wearing special inflatable boots when you are not walking. Your care team will monitor you closely for this complication.

AT HOME

Bowel Function

After your operation, your bowel function will take several weeks to settle down and may be slightly unpredictable at first. For most patients, this will get back to normal with time.

Patients can have a variety of bowel complaints, including:

- Irregular bowel habits
- Bowel movements that are loose or constipation
- Difficulty controlling bowel movements with occasional accidents
- Continuing to feel that you need to have a bowel movement even if you've had several in a row

Make sure you eat regular meals, drink plenty of fluids, and take regular walks during the first two weeks after your operation.

It is important to let us know if you are having very watery diarrhea more than six times daily. There is a dangerous bacterial infection that we may want to test you for if you are having a lot of watery diarrhea.

Abdominal Pain

It is not unusual to suffer gripping pains (spasms) during the first week following removal of a portion of your bowel. These spasms usually last for a few minutes but typically go away.

If you have severe pain lasting more than one to two hours or have a fever and feel generally sick, you should contact us.

Wound Care

For the first one to two weeks following your surgery, your wound may be slightly red and uncomfortable. If your wound is inflamed, painful, swollen or leaking milky fluid, please contact us.

- You may shower and let the soapy water wash over your incision.
- Avoid soaking in the tub for one month following surgery or until the wound is well healed.
- The wound will “soften up” in several months.
- It is common to have lumpy areas in the wound near the belly button and at the ends of the incision.
- If you have staples or sutures, we will arrange for them to be removed 7-14 days after discharge.

Diet at home

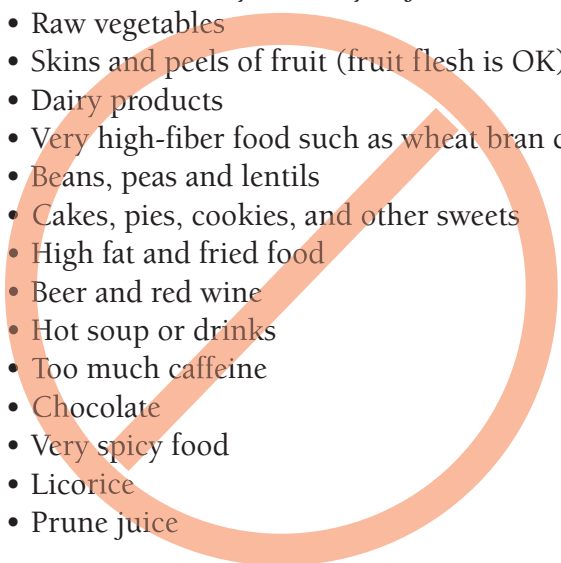
Some of the common symptoms you might experience after a colectomy include diarrhea, dehydration and gas. These symptoms can happen because your colon has not yet resumed normal functioning. One of the things the colon does is absorb liquid – if it's not doing that properly, dehydration and diarrhea can result.

These foods are easy-to-digest and should decrease diarrhea:

- Applesauce
- Bananas
- Boiled white rice
- White bread or toast
- Cream of rice or cream of wheat
- Low-sugar cereals
- Pasta
- Peanut butter
- Potatoes
- Pretzels
- Yogurt
- Tapioca

Other easy-to-get soft, low-residue foods are eggs, cooked fish or tender meat, mild cheese, soft-cooked fruits or vegetables, puddings, sherbet and ice cream.

Foods to avoid until your body adjusts to a colectomy include:

- Raw vegetables
 - Skins and peels of fruit (fruit flesh is OK)
 - Dairy products
 - Very high-fiber food such as wheat bran cereals and breads
 - Beans, peas and lentils
 - Cakes, pies, cookies, and other sweets
 - High fat and fried food
 - Beer and red wine
 - Hot soup or drinks
 - Too much caffeine
 - Chocolate
 - Very spicy food
 - Licorice
 - Prune juice
- 

It can take time for your body to readjust to high-fiber foods. Try adding back one high-fiber food at a time so you don't overwhelm your system (which can lead to constipation). Make sure you also drink plenty of fluids (8-10 cups of water a day) to help your body digest food and eliminate waste

Activity

- Avoid heavy lifting (more than about 10 pounds) for six weeks
- You may use stairs and take short walks.
- Gradually increase your walking distance, but stop before you think you've reached your tolerance. If you feel fine the next day, increase the distance a little bit.

Remember, it can take two to three months to fully recover. It is not unusual to be tired and need an afternoon nap six to eight weeks following surgery. Your body is using its energy to heal your wounds on the inside and out.

Work

Typically, you should be able to return to work four to six weeks after your surgery. If your job requires heavy lifting, you may not be able to return to work until six to eight weeks after your operation. You should check with your employer on the sick leave policy of your workplace, which may be important for returning to work. Your surgeon will release you back to work when he feels you are ready.

Driving

Do not drive for two to four weeks after your surgery or follow your surgeon's instructions. Check with your surgeon at your clinic follow-up appointment.

When to Call

Complications do not happen very often, but it is important for you to know what to look for if you start to feel bad.

After you leave the hospital, you should call us at any time if:

- You have a fever greater than 100.5
- You are vomiting and cannot keep down liquids
- You have increased or new pain that was not there before
- You are unable to pass gas for 24 hours
- Your wound opens up, is draining pus or is very red

After hours, you can reach the surgeon on-call by calling (662) 377-3798.

