

Enhanced RECOVERY

Colon and Rectal Surgery

A Guide for Patients and Families



Enhanced Recovery



TEAMWORK

A team of health care providers is ready to help you during your hospitalization and recovery.

You are an important member of this team.

Taking an active role in your own care is very important for a fast and smooth recovery.

IHA Colon and Rectal Surgery

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Introduction

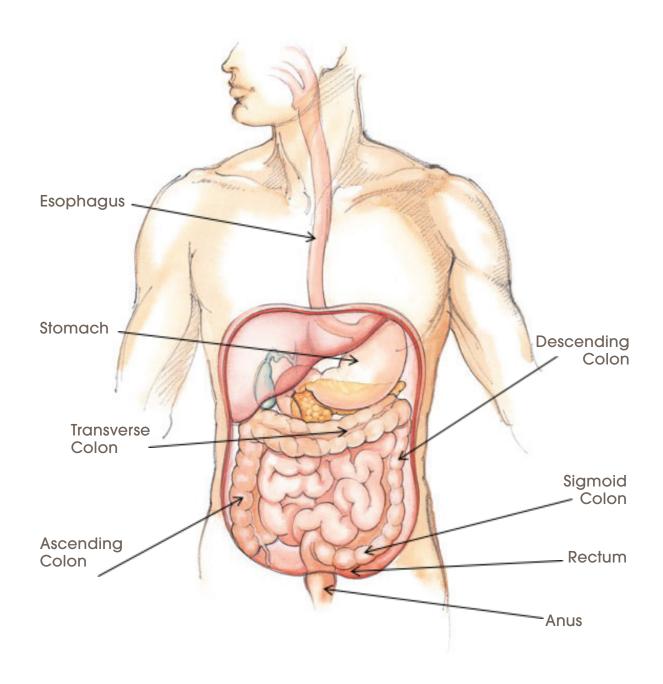
Surgery is an option to treat many diseases of the colon and rectum (large intestine). These diseases include colon and rectal cancer, diverticulitis, inflammatory bowel disease, fistulas and others. You and your doctor have determined that this procedure is the next step in your treatment. This handbook will help you understand more about colon and rectal surgery. It will also help you to know how to prepare for your surgery, help you understand what to expect during your hospitalization and how to care for yourself when you go home. Knowing what to expect may reduce any concerns that you may have about your upcoming surgical experience.





The Colon

Food digestion begins in the mouth and ends in the anus. The colon is that part of the digestive system responsible for the last stage of digesting foods. The main function of the colon is to absorb water and minerals from the stool. The colon is about five feet long and can be divided into five parts. These are the ascending colon, the transverse colon, the descending colon, the sigmoid colon and the rectum. A surgeon can usually remove any area of the colon and then connect back together again.





What is Colon Surgery?

It is an operation in which part of the colon is removed.

Open colorectal operations are performed through an incision in the middle of your abdomen that varies in length depending on the disease process and body size. Minimally invasive (sometimes referred to as laparoscopic and robotic) surgeries are done through small incisions. Small instruments are inserted through these incisions to view and move the organs. At the time of surgery, the surgeon removes the diseased part of the colon and then sews or staples the colon back together. The surgeon may also remove lymph nodes from the area to look for cancer. The surgeon will also examine the other organs in the abdomen. In most cases, this surgery can be completed in one to three hours. Patients having this surgery are typically in the hospital for two to five days.

Potential Risks and Complications

Some risks and complications of colon surgery include:

- Side effects from the medications used to put you to sleep
- Infection
- Bleeding, with a possible need for a blood transfusion
- Damage to nearby organs
- Blood clots in the legs or lungs

Be sure to read this book thoroughly and ask your surgeon if you have any questions.

What is Enhanced Recovery?

It is a program for surgical recovery based on the most current research findings. It is a 19 step pathway that originated in Denmark.

This pathway of perioperative care encompasses preoperative, operative and postoperative techniques which result in fewer complications, less postoperative pain, reduction in hospital length of stay and a quicker return to work and normal activities.



Before Surgery

Once you have met with the surgeon and it has been determined you need surgery, they will perform a preoperative evaluation. This will include reviewing your medical and surgical histories. You may be scheduled for additional testing based on your history. These tests may include a physical examination, blood tests and an EKG. If you have heart or lung problems or if the team has any concerns, you may be asked to see a specialist or have additional testing.

A nurse will contact you by phone one to five days prior to your surgery. This nurse will review your current medications and answer any questions regarding your surgery. They will also confirm your surgery and arrival times. Instructions will be given about what may be required of you before and after surgery.

If you have not been contacted or received instructions the day before your surgery (by 1 p.m.), please call to speak with a nurse at:

734-712-3622 - Monday – Friday, 7 a.m. - 5 p.m. **734-712-3860** - After hours

Patient Financial Services

(Registration, scheduling and billing)

Registration information, including medical insurance information, will be obtained by phone before your surgery. If a patient financial services representative is unable to reach you by phone, please call **877-791-2051** or toll-free **800-676-0437** prior to your surgery.

Medications



You will receive a call from a nurse one to five days before your surgery. They will tell you what medications you should or

should not take the morning of surgery. Some medications you may have to stop sooner. Vitamins and supplements should be stopped two weeks before surgery. Blood thinning medications, such as Coumadin, Lovenox. Plavix and Xarelto should be discussed with your surgeon at least two weeks before your surgery.

Smoking

Smoking is known to slow the healing process and can increase your risk for surgical complications like infection and blood clots. If you

have been thinking about quitting, this is a good time to do so. Talk to your primary care doctor before surgery to get help with quitting. Quitting smoking is the single most important thing you can do to improve your overall health. There are a number of ways to stop smoking, including smoking aids such as the nicotine patch and other medications to help reduce cigarette cravings and help ease withdrawal symptoms. This hospital campus is smoke free (including e-cigarettes). You will be unable to smoke while you are a patient here. Call 1-800-QUIT-NOW for resources and support within your community.

Illness

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

Contact your surgeon's office at **734-712-8150** if you develop these symptoms.



The Day Before Surgery





High Carbohydrate Preop Drinks: (Not for patients with Type 1 Diabetes)

- □ Ensure[™] Pre-Surgery clear nutrition drink 3 bottles
 - No substitutions essential part of your preparation for surgery as it will aid in your recovery
- Research shows that drinking a high carbohydrate drink before surgery improves well-being and recovery from surgery



Bowel Prep

- ☐ Miralax 8.3 ounce size
 - Available at most pharmacies for about \$10 including St. Joseph Mercy Towers Pharmacy
 - No prescription needed
 - May use less expensive generic equivalent called polyethylene glycol 3350



- □ **Dulcolax Tablets** you only need four tablets
 - Available at most pharmacies for under \$5 including \$t. Joseph Mercy Towers Pharmacy
 - No prescription needed
 - May use less expensive generic equivalent called bisacodyl 5 mg tablets



- ☐ Gatorade 64 ounces any flavor
 - One 64 ounce bottle or two 32 ounce bottles (about \$2 total)
 - If you have diabetes or need to watch your salt intake, you can use "low calorie" Gatorade or Powerade Zero instead of regular Gatorade



Timeline for the Day Before Surgery

When you wake up:	Clear Liquid Diet – All Day Until Midnight		
	Water, black coffee or tea (you may add sugar), Jell-O, popsicles, clear juice (like apple or white grape juice), soda, Kool-aid, broth or bouillon		
□ ll a.m.	Clear Liquid Breakfast Take two Dulcolax (bisacodyl) tablets		
	Clear Liquid Lunch		
□ Noon	Take Ondansetron (Zofran™) 4mg (antinausea pill)		
□ 1 p.m.	Take Metronidazole (Flagyl™) 250mg and Neomycin 1000mg (antibiotics)		
□ 2 p.m.	Take Metronidazole (Flagyl™) 250mg and Neomycin 1000mg (antibiotics) Mix entire 8.3 ounces Miralax Laxative with 64 ounces regular Gatorade (follow instructions for Gatorade/Miralax prep). Start drinking one cup (8 ounces) every 15 minutes. Finish entire 64 ounces by 4 p.m.		
□ 4 p.m.	Take Ondansetron (Zofran™) 4mg (antinausea pill)		
□ 6 p.m.	Clear Liquid Dinner Begin drinking two bottles of Ensure™ Pre-Surgery clear nutrition drink previously purchased from Joe's Java. Sip slowly. Finish by 10 p.m. Save the remaining bottle for tomorrow morning.		
□ 8 p.m.	Take two Dulcolax (bisacodyl) tablets		
□ 10 p.m.	Take Metronidazole (Flagyl™) 250mg and Neomycin 1000mg (antibiotics)		
□ In the evening	Take a shower and dry off. Use the six chlorhexidine wipes as directed (next page). Let air dry. If your surgery is in the afternoon, this step can be completed in the morning.		
	May take Ondansetron (Zofran™) as needed for nausea every four hours.		

STOP LIQUID DIET AT MIDNIGHT. NOTHING ELSE TO EAT OR DRINK TONIGHT.

DAY OF SURGERY: Slowly sip the remaining bottle of **Ensure™ Pre-Surgery** clear nutrition drink on the way to the hospital. You must finish two hours before surgery.

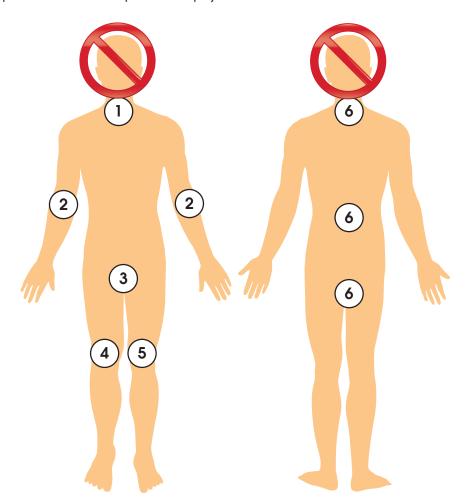


Do This the Night Before Surgery

Chlorhexidine (CHG) Shower: Only use CHG wipes below the jawline

The night before surgery you will be instructed to shower. After you shower, towel dry and do not apply lotions, oils, powder, etc. Dress in clean clothing and wait two hours to ensure skin is cool and dry. You may then proceed with the Chlorhexidine Gluconate wipe directions. You will use a total of six wipes.

- 1. Neck, shoulders and chest
- 2. Both arms and hands
- 3. Abdomen and groin
- 4. Right leg and foot
- 5. Left leg and foot
- 6. Back of neck, back and the buttocks
- *Do the Chlorhexidine shower before going to bed. Skin may feel sticky for a few minutes. Do NOT wipe off. Allow to air dry.
- *After shower, put on clean underpants and pajamas





Things You Can Do Before Surgery

- Increase activity You will be given instruction on exercises you can do before surgery. You will also be supplied tools to help you increase your activity. Slowly increase your activity every day leading up to your day of surgery. This might mean walking and increasing the amount of steps you take every day or if you are unable to walk every day, this might mean doing some exercises with stretchy exercise bands (these will be given to you) that you can do from a seated position.
- 2. Deep breathing exercises We will supply you with a deep breathing tool (incentive spirometer). We want you to use this every day before surgery. Bring it with you to the hospital and we will have you use it after surgery. Our goal in the hospital is 10 times an hour while awake. Before surgery, use it as often as possible.
- 3. Improve nutritional status Many times people have poor nutrition going in to surgery. If you can improve your nutrition even a small amount, it will help with recovery after surgery. We encourage increasing your lean protein intake before surgery. Examples of lean protein are Greek yogurt, chicken, fish, eggs and lean beef. You may also drink high protein supplements such as Ensure or Boost.
- 4. Stop smoking If you smoke, quitting is the most important thing you can do to improve your recovery. Talk to your primary care doctor about starting nicotine patches. We can order the patches while you are in the hospital. Smoking decreases wound healing and puts you at greater risk of other complications.

There are many services available to help you quit smoking. Michigan has a tobacco quit line that people who are trying to quit can call and receive counseling over the phone. The hours are 7 a.m. to 1 p.m. and callers can leave a message. Calls will be returned in one business day.

The phone number for the National Tobacco Quitline is: **800-QUIT-NOW**

Other resources are available at:

- American Lung Association 800-LUNG-USA
- American Cancer Society 800-227-2345
- cdc.gov/tobacco
- smokefree.gov
- 5. De-stress Research has shown a daily practice of 10 minutes of a relaxing activity can improve your healing and help you recover more quickly. Choose whatever calms you. For some, this could be listening to soothing music. For others, it could be reading a novel. Be sure to bring any books or music on the day of surgery to help you relax during your hospital stay.



Surgery Day

Arriving at the Hospital

On the day of surgery, you will arrive at the hospital two hours before your scheduled surgery. You will drink the last bottle of **EnsureTM Pre-Surgery** on your way. It needs to be finished two hours before surgery which is also your arrival time.

When you arrive at the hospital, go to the Patient Towers Area (parking lot B) and check in at the front desk. Once you are checked in, you will be given directions to the Preoperative Holding Area (Main Surgery Center, Floor 2).

Items to Bring With You:

- Driver's license /photo identification
- Medical Insurance card
- Copy of Living Will or Durable Power of Attorney for Health Care
- Glasses case or contact lens case and solution
- Sturdy walking shoes, if needed
- Assistive device for walking
- This booklet
- CPAP machine, if needed
- Wheelchairs are located at front entrance, if needed
- Pajamas, robe, slippers, personal toiletries and your own pillow
- Leave your suitcase in the car (your family can bring it to your room after surgery)

Items Not to Bring

- Jewelry
- Large sums of money
- Credit cards or checkbook
- Electronics

Items to Remove Before Surgery

- Jewelry
- Glasses and contact lenses
- Dentures or any removable dental work
- Wigs
- Make-up
- Hairclips, hairpins
- Tampons

Pre-Operative Holding

In the preoperative holding area, you will meet your surgical team. Your family and friends will wait for you in the surgery family room.

After you have changed into a hospital gown and have had your IV started, a family member or companion may be invited to stay with you in the preoperative area until it is time to go to the operating room. Family or companions are limited to two in the preoperative area at any given time.

Main Surgery Center

Your family or companion will be given a pager which will alert them when to return to the Main Surgery Center. The pager allows guests to travel within the facility while they wait. After surgery, your doctor will talk to your family or companion in the surgery family room.

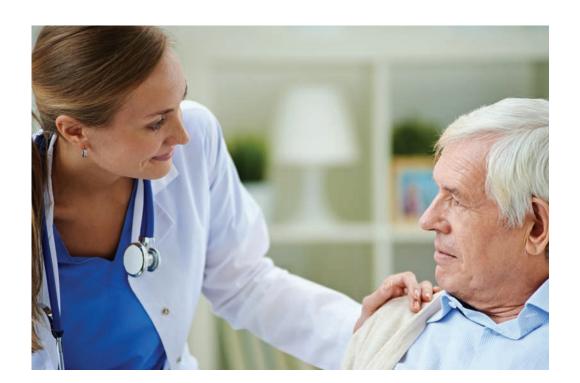
Your family will be informed when you are assigned a hospital room. They can meet you in your hospital room after you come out of recovery. No visitors are allowed in the recovery area.



The Operating Room

You can expect that:

- The lights will be bright and the room temperature will seem cool.
- Small paper sticky pads will be put on your chest. They are attached to a monitor so your heart can be monitored.
- A blood pressure cuff will be placed 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.
- The anesthesiologist will give you medicine through your IV. It will make you go into a deep sleep. Your nurse will be near you as you go to sleep.
- Warm blankets are available for your comfort.





The Surgery

Once you are asleep, your surgeon will perform the operation that was discussed with you.

Colon surgery may be performed in three ways:

- Open surgery involves making a longer incision in your abdomen to access your colon. Your surgeon uses surgical tools to free your colon from the surrounding tissue and cuts out either a portion of the colon or the entire colon.
- Laparoscopic surgery, also called minimally invasive, involves several small incisions in your abdomen. Your surgeon passes a tiny video camera through one incision and special surgical tools through the other incisions. The surgeon watches a video screen in the operating room as the tools are used to free the colon from the surrounding tissue. The colon is then brought out through a small incision in your abdomen. This allows the surgeon to remove the diseased colon segment. Once the two colon ends are brought together, the surgeon returns the colon to your abdomen through the incision.
- Robotic surgery is similar to laparoscopic surgery but utilizes a sharp three dimensional image and very precise movements.

The type of operation you undergo depends on the reason for your operation and surgeon preference. Laparoscopic and robotic surgery may reduce the pain and recovery time after surgery, but not everyone is a candidate for this procedure. Also, in some situations your operation may begin as laparoscopic, but circumstances may force your surgical team to convert to an open surgery.

Once the colon has been repaired or removed, your surgeon will reconnect your intestines to allow your body to expel waste. Your surgeon will discuss your options with you before your operation.

- Rejoining the remaining portions of your colon. The surgeon may stitch the remaining portions of your colon together, creating what is called an anastomosis. Stool then leaves your body as before.
- Connecting your intestine to an opening created in your abdomen. The surgeon may attach your colon (colostomy) or small intestine (ileostomy) to the skin through an opening created in your abdominal wall. This allows waste to leave your body through the opening (stoma). You may wear a bag on the outside of the stoma to collect stool. This can be permanent or temporary.
- Connecting your small intestine to your anus. After removing both the colon and the rectum (proctocolectomy), the surgeon may use a portion of your small intestine to create a pouch that is attached to your anus (ileoanal anastomosis). This allows you to expel waste normally, though you may have several watery bowel movements each day and may need to take slowing medications like imodium. As part of this procedure, you may undergo a temporary ileostomy.





Pain and Comfort Measures

Comfort Measures

It is important for you to be as comfortable and as pain-free as possible after surgery. Keeping pain under control helps patients recover and heal more quickly. We encourage you to be involved in your pain management after surgery.

There are four options for treating pain. Each method has its benefits and potential side effects. You and your doctor will decide which one is best for you. The options include Patient Controlled Analgesia, an epidural catheter, TAP Block, pain pills, or combinations of these. These options are described below.

Patient Controlled Analgesia (PCA): Analgesia simply means pain relief. This type of pain control uses a special pump that is connected to your IV. You will give yourself pain medication as you need it by pushing a button. The system has safeguards to prevent you from getting too much medication.

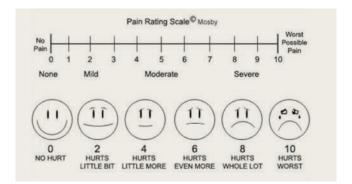
Epidural Analgesia: If you use this method, a doctor will insert a small plastic tube into your back in the preoperative suite just prior to your operation. Pain medication is injected into this tube to bathe the epidural space next to the spinal cord nerves. This method is an excellent option for those who are candidates and provides excellent pain relief. A pump can be used to give a constant dose of pain medication. You can also give yourself pain medications as you need it by pushing a button. This system also has safeguards to prevent you from getting too much medication.

TAP Block: This option is characterized by injection of the same medication used for epidurals into the left and right side of the abdominal wall. It bathes the nerves that cause incisional pain and, like the epidural, is an option that provides excellent pain relief, especially for those having laparoscopic or robotic surgery.

Oral Medication (Pain Pills): For most patients, oral pain medications will be started as soon as they are awake, alert and able to tolerate liquids. For people that cannot swallow pills, there are liquid and other forms of pain medications available. Many of the medications used are commonly known or referred to as opioids (the class of medications) or narcotics.

Goals of Pain Management

The goal of pain management is to keep you comfortable. Your pain needs to be controlled so that you are able to participate in activities that help you recover, such as walking. Your nurses will ask you to rank your pain on a scale of zero to 10. Zero means that you have no pain and 10 means that it is the worst pain that you can imagine. If you do not feel your pain is controlled, please tell your nurse and adjustments will be made. Upon discharge, you will receive a prescription for pain medicine and usually this is the same medication that relieved your pain in the hospital. At home, you will need to taper off your pain medication, by taking fewer pills each day. Usually within two weeks you will no longer need pain medication for your surgical pain.



Opioid-Induced Constipation

Opioid pain medications cause the bowels to slow down and not work as quickly, thereby increasing nausea, complications and can possibly increase your hospital length of stay. These medications also cause your stool to harden and make it difficult to pass while on them. This is known as opioid-induced constipation. This problem usually can be controlled by taking stool softeners (such as Colace, docusate) and /or laxatives (senna, Miralax, biscodyl) which will most likely be provided to you during your stay. When you are discharged, you will need to continue taking medications for constipation while on the opioid pain medication. You will be provided with a pain regimen to include multiple types of pain relief that allow decreasing opioid pain medications in a short period of time, thereby decreasing complications and improving outcomes.



After Your Surgery

When you wake up, your surgery will be finished and you will be in the Post Anesthesia Care Unit (PACU). This used to be called the Recovery Room. Your first memory after surgery will likely be in the PACU. This is where you will recover from the effects of anesthesia. The PACU nurse provides constant care. They will take your blood pressure and pulse every 15 minutes, check your dressing (if you have one) and your IV. Oxygen will be given by way of a small short tube placed under your nose or an oxygen mask. The PACU nurse will ask you to take deep breaths and cough. This will help expand your lungs to prevent complications such as pneumonia. You will be asked to move your hands and feet as part of the recovery process. Your level of comfort will also be carefully evaluated by your nurse. Medications will be available if you have pain or discomfort.

The amount of time spent in the PACU will vary depending on several factors including the type of surgery you had and the type of anesthetic. The minimum recovery stay is between 30 minutes and one hour.

In the PACU, you may have some of the following:

- An oxygen mask or soft oxygen prongs that go in your nose
- An IV line in your hand, arm or neck
- An epidural catheter in your back to deliver pain medicine
- A bladder catheter (Foley) to drain your urine
- Inflating boots (SCDs) on your legs to prevent blood clots
- A heart monitor with sticky pads attached to your chest
- A blood pressure cuff on your arm to monitor your blood pressure
- A probe attached to your finger to measure the oxygen in your blood
- A dressing over your incision

Some patients will have a tube in their nose (NG or nasogastric tube). This small tube goes down into the stomach and drains fluids and gas. It keeps the stomach from getting bloated after surgery. Some patients may also have a JP drainage tube placed in their abdomen. This tube is connected to a suction bulb that you can see outside of your abdomen.



Your Daily Goals While in the Hospital

A Checklist for Colon and Rectal Surgery Patients

Second Day After Surgery		
(Many patients will be discharged on this day.)		
□ Continue soft diet		
☐ Walk in the hallway more than three times (It is important to walk in the hallway and not just		
around your room. The distance walking will help build endurance for discharge to home.)		
□ Sit in a chair when not walking		
☐ Cough and take deep breaths 10 times each hour		
☐ Receive a shot to prevent blood clots		
 □ Wear inflating leg wraps to prevent blood clots (when not walking) 		
(when not walking)		

Colon and Rectal Surgery



Possible Issues After Surgery

Most people who have colon and rectal surgery recover without complications. These people go home within one to three days, especially those who have laparoscopic or robotic surgery.

A small number of patients may have a slower recovery and need to stay a little longer.

Trouble Eating and Drinking

About 10 percent of patients develop trouble with eating or drinking. They may also feel nauseated. Narcotic pain medicines can cause this. After surgery, food and drink may move slowly through your intestines. This gets better over time and usually does not last long.

Once you begin having bowel movements and if you notice they are slowing down or have stopped and you are feeling full or nauseated, stop eating regular food and begin clear liquids again. This should subside and regular bowel movements should return. If they do not, or if you begin vomiting, notify your surgeon.

Bowel Function

Walking is the best way to get your bowels moving. The first few bowel movements after surgery may contain some blood. This is normal. Do not be concerned. The first bowel movements may also be loose and/or urgent – it will take some time for the bowels to get back to a normal function. Opioid pain medicine can cause constipation. You will be given a stool softener (such as docusate) two times a day; and, you might need to continue taking it as long as you are on the opioid pain medicine.

Infection

One of the most common problems after surgery is infection. This is because the colon has bacteria, even after bowel prep. These bacteria can cause infections in other locations such as the incision or in the abdomen.

These infections do not occur often and are not usually serious. Your surgical care team will monitor and investigate potential infections throughout your stay. Refer to the handout given to you in the office for a complete list of possible risks and complications associated with your surgery. This handout may also be retrieved at stjoesannarbor.org/patient-handouts. If you do not have this handout and/or have questions, be sure to tell your surgeon.



Discharge Goals

You will be discharged when you are:

- Drinking all of the liquid your body needs without feeling sick
- Controlling your pain with pain medications
- Getting out of bed and walking without help or returning to your level of activity prior to the operation
- Identifying your discharge destination (home versus subacute rehabilitation facility). It is important to identify your discharge destination before surgery at your enhanced recovery preoperative class. If this is not done, talk to your surgeon prior to surgery. A case manager will discuss your options with you in the hospital if you are not sure what you will need for discharge.

How Long Will This Take?

You may be able to meet the discharge goals as early as day one after surgery, but for most it is day two (especially laparoscopic and robotic) or day three or four (open surgery). It is important to share this information with the person who is taking you home so everything will be ready when you are. You will need someone at home to help you for at least the first week after surgery. It is important to make plans for this before coming to the hospital. Passing gas is the first sign the bowel is waking up and working. You do not need to move your bowels before you go home.

Discharge Planning

Your case manager or social worker works with your doctors, nurse and other members of the care team. Together, they will see what you need for discharge and design your discharge plan. If you need help at home or a rehabilitation stay, they will help make these arrangements for you.

Home Care

After discharge, a home care nurse may come to your home. You will be asked to keep track of the fluids you take in and the amount of urine and number of bowel movements daily. The home care nurse will monitor you and watch closely for any signs of dehydration or infection.

Rehabilitation Facility

Most people will go home after discharge from the hospital. However, some people will have a short stay in a subacute rehabilitation facility. To go to a rehabilitation facility, your medical team must say that it is medically necessary and your insurance company must say that they will pay for it.



Planning for Discharge - After Colon and Rectal Surgery

You will most likely need someone to stay with your for the first one to two weeks after discharge. You may need help with meals, housekeeping, transportation and personal care. <u>Answering the following questions may help you plan for your needs after discharge from the hospital.</u>

	Yes	No
1. Are you above the age of 70?		
2. Do you live alone?		
3. Do you require help at home?		
4. Do you need help walking 50 feet or greater?		
5. Do you use a cane or walker?		

If you answered yes to any of the above questions you **may** benefit from a short stay at a subacute rehabilitation facility (SAR) to rebuild your strength. Each health insurance company has different requirements for admission to these facilities. You will have to meet your insurance company's requirements in order to be approved for a facility.

If you think you will need to go to a SAR facility after your hospitalization, you should explore your options before surgery. Review the attached list of Subacute Rehabilitation facilities with your family. Choose your top three options. Give these choices to your nurse when you are admitted to the hospital. A social worker will meet with you while you are in the hospital to help you and your family member with plans for Subacute Rehab.

My Top Three Subacute Rehabilitation Choices	My Family Member Contact Person:
1	Name
2	Home phone #
3	Cell phone #

For Discharge to Home

If you will be returning directly home with support of your family at discharge, we will be setting up home care services for you. Home Care will be providing a nurse to come to your home. The nurse will come out a few times to help you adjust from being in the hospital to recovery at home. You will be meeting with a nurse case manager in the hospital who will give you further information and assistance.

If you haven't already done so, please arrange for someone to stay with you for the first one to two weeks at home. Also, make sure a family member or friend is available at the hospital on the morning you are discharged to review medication and other instructions. It is important for the staff to be able to work with your caregiver during the discharge process.



At Home

Discharge Instructions:

Activity:

- Avoid heavy lifting (no 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.

Wound Care:

- The strong layers under the skin may be closed with sutures.
- Your skin is closed with dissolving sutures, staples or glue.
- If you have staples, they may be removed before you leave the hospital and steri strips (small pieces of tape) will be placed across your incision. You may go home with staples and have a scheduled appointment to have them removed in the office, usually 10-14 days after surgery.
- Do not take a tub bath or soak in water until your wound is completely healed. You may shower and wash over the incisions with clean washcloth and soap.
- Once a day for the first week, you will also need to wipe over the incisions with a chlorhexidine wipe and let them air dry. This will start when you are in the hospital.

Diet:

Eat your usual diet or whatever appeals to you. Drink plenty of liquids each day to help avoid dehydration. Aim for at least six and a half to eight cups (1600 ml to 2000ml) of fluid or more per day. Limit the amount of caffeine you drink such as coffee, tea and soda. Avoid greasy and spicy foods while recovering from surgery. Following colon and rectal surgery, it is important to know that no two people react the same way to the same foods. Be patient and progress slowly. Some foods may cause unpleasant side effects such as gas, diarrhea or constipation. By adding one food at a time, you will learn which foods (if any) will bother you. It is usually helpful to eat meals at regular intervals, three or more times per day. Smaller meals produce less gas.

Soft Diet:

Your physician may recommend a soft diet for you following surgery. A post-op soft diet is designed as a transition between the clear liquid and a regular diet for postoperative patients unable to tolerate a regular diet and patients with mild gastrointestinal problems. It is soft in texture, low in fiber, no seeds, low spice, low acid and easier to digest.



Post-Op Diet Guidelines

Food Group	Foods Allowed	Foods to Avoid
Breads and Cereals	Enriched white, refined wheat or rye bread or rolls, pancakes, waffles, graham crackers, rusk, zwieback, quick breads refined corn, oat rice and wheat cereals	Bread, rolls or crackers containing whole grain flour or bran, bread or products with nuts or dried fruits, whole grain waffles, whole wheat or bran cereals
Potato and Potato Substitutes	Potato, sweet or white without skin, hominy, macaroni noodles, spaghetti, white rice	Fried potatoes, potato chips, whole grain rice
Soups	Any kind from allowed foods	Highly seasoned soups and soups made with gas-producing vegetables
Fruits	Cranberry juice and apple juice or puree, banana, melon, canned or cooked: apples, pears, apricots, peaches, rhubarb	Pineapple, citrus fruit and juice, other fresh and dried fruits
Vegetables	Cooked carrots, green beans, yellow beans, mushrooms, pumpkin	Raw and fried vegetables, tomatoes (canned and fresh), whole kernel corn, peas, gas producing vegetables (e.g. broccoli, Brussels sprouts, cabbage, onions, leeks, cauliflower, cucumber, green pepper, sauerkraut, dried beans and peas)
Meats and Meat Substitutes	Tender meat, fish or fowl, eggs, mild cheese, cottage cheese	Strong smelling or highly seasoned meats, cheeses, or fish, bacon, sausage



Food Group	Foods Allowed	Foods to Avoid
Dairy	Any	Yogurt with nuts or any of the fruits to avoid
Desserts and Sweets	Frozen desserts, fruit whips, pudding, gelatin or pie made from allowed foods, plain cake or cookies	All sweets and desserts containing nuts, coconut or dried fruits or fruits to avoid, fried pastries
Fats	Butter, margarine, salad dressing, all fats and oils	Highly seasoned salad dressings
Beverages	Any	None
Miscellaneous	White sauce, gravy, catsup, mustard, smooth peanut butter, vinegar, mild spices	Nuts, olives, pickles, relish, chunky peanut butter, whole spice, strong flavored seasoning and condiments (e.g. garlic, ginger, chili sauce, chili pepper, horseradish, hot sauce)

Adding Fiber:

- Dietary fiber is the indigestible part of whole grains, vegetables and fruits. Add these foods to your diet slowly. We recommend you only add one serving per day at a time.
- Slowly increase the amount of fiber you eat to 25-35 grams per day.
- You may want to start with a half cup of cereal. If you do well with that, add a piece of fruit or a half cup of salad. Remember, you may react differently to different foods, so if one doesn't go well, try something else.
- Eat whole grain breads and cereals. Look for choices with 100 percent whole wheat, rye, oats, or bran as the first or second ingredient.
- Have brown or wild rice instead of white rice or potatoes.
- Enjoy a variety of grains. Good choices include barley, oats, farro, kamut and quinoa.
- Bake with whole wheat flour.
- Enjoy baked beans more often. Add dried beans and peas to casseroles or soups.

- Choose fresh fruits and vegetables instead of juices.
- Compare food labels of similar foods to find higher fiber choices. On packaged foods, the amount of fiber per serving is listed on the Nutrition Facts Label.
- Check the Nutrition Facts Label and try to choose products with at least four grams dietary fiber per serving.
- Drink plenty of fluids. Set a goal of at least six to eight cups per day. You may need even more fluids as you eat higher amounts of fiber. Fluid helps your body process fiber without discomfort.



Tracking Your Intake and Output

You will be sent home with a patient log to keep track of you intake and output. You are at a higher risk of getting dehydrated after surgery so this is very important.

Drink plenty of liquids each day. Aim for at least six and a half to eight cups (1600 - 2000 ml) of fluid or more each day. Limit the amount of caffeine you drink such as coffee, tea or soda because too much caffeine can cause dehydration.

Signs of mild dehydration are thirst, dry mouth, headache and dizziness. If urine volume is low (750 - 800 ml in 24 hours) **OR** if urine is dark yellow, increase the amount of liquids you are drinking. When you are well-hydrated, urine should be very light yellow or have almost no color at all. If symptoms don't improve after drinking more liquids or if signs of dehydration worsen – such as severe dizziness that prevents you from walking, no urine at all or very low volume urine that is very dark yellow, orange or brownish in color – then call the doctor or go straight to the Emergency Room.

What to Do For Some Common Diet Problems

Diarrhea

Foods that can cause loose stools or diarrhea:

- Green beans
- Beer/Alcohol
- Broccoli
- Fresh fruits
- Grape juice
- Chocolate
- Aspartame/Artificial sweetener
- Fried foods
- Spicy foods
- Prunes/Juice
- Raw vegetables
- Spinach/Leafy green vegetables

Foods that can help loose stools or diarrhea:

- Applesauce
- Bananas
- Cheese
- Creamy peanut butter
- Boiled milk
- Bread
- Marshmallows
- Pasta/Noodles
- Pretzels
- Tapioca
- Yogurt
- White rice

Constipation

- Increase your fluids, especially water
- Increase exercise, even if it means just a little extra walking
- Eat more fiber (add slowly, one at a time):
 - Bran or whole grain cereals
 - Fresh fruit
 - Vegetables
 - Whole wheat bread
- Slowly work to decrease the amount of opioid pain medication you are taking if pain is getting better.



Gas

Gas production is a normal part of intestinal function. However, excessive gas can be uncomfortable. Studies have shown that diet can affect the amount of intestinal gas production. The following foods may produce more gas:

Apples

Apricots

■ Bagels

Beans

■ Bread

■ Brussels sprouts

Cabbage

Carrots

■ Celery

■ Citrus fruits

Eggplant

■ Lettuce

■ Milk and milk products *

Onions

Pastries

Potatoes

■ Pretzels

■ Prune juice

Raisins

■ Wheat germ

Dietary fat may cause increased pressure and bloating. Try decreasing the amount of fat in your diet.

Home Care

Home care services are available for Enhanced Recovery patients.

Comfort plays an important role on the road to recovery. Home care offers a wide range of services to assist with your recovery such as nursing and rehabilitation services. Home care is generally paid for by Medicare, Medicaid and most insurance plan.

Home care has a specialized team of nurses who will provide visits one to three times per week. The home care nurses will provide education and teaching regarding the following items:

- Ostomy/wound care
- Signs and symptoms of infection
- Signs and symptoms of dehydration
- Understanding intake and output
- Assist with ordering ostomy/wound care supplies if needed

Home care works closely with your physician, providing a complete plan of care based on the needs of each individual patient.

^{*}Try Lactaid milk or taking Lactaid tablet with dairy products

Colon and Rectal Surgery



Driving

Do not drive for a least one week and until you longer need pain medication. If you have questions or concerns about driving, contact your surgeon's office at **734-712-8150** (Ann Arbor) or **810-494-6881** (Livingston).

Medication

- Your surgeon will order pain medication to use at home. These medications take from 30 minutes to one hour to start working after you take them. For the first three to four days, consider taking your pain medication around the clock if needed. Then, start to decrease the amount of tablets you are taking each day and also increase the amount of time between doses. Don't let the pain get too bad.
- Continue taking any other medications that you normally take unless instructed otherwise.

Lovenox

Certain underlying medical conditions (colon cancer, rectal cancer, Crohn's and ulcerative colitis) along with having surgery put you at a greater risk of developing a blood clot. If you are having surgery for one of these conditions, you will need to go home on Lovenox (enoxaparin) for 28 days after surgery. Lovenox (enoxaparin) is a daily injection given in the abdomen under the skin. It is a blood thinning medication used to prevent blood clots from forming. An explanation of how to use this medication is as follows:

- **Step 1** Wash and dry your hands thoroughly.
- **Step 2** Sit or lie in a comfortable position and choose an area on the right or left side of the abdomen, at least two inches from the belly button.
- **Step 3** Clean the injection site with an alcohol swab and let dry.
- **Step 4** Remove the needle cap by pulling it straight off the syringe and discard it in the sharps container (or an empty laundry detergent container that you have marked as "sharps").
- **Step 5** Hold the syringe like a pencil in your writing hand.
- **Step 6** With your other hand, pinch an inch of the cleansed area to make a fold in the skin. Insert the full length of the needle straight down at a 90 degree angle into the skin fold.
- **Step 7** Press the plunger with your thumb until the syringe is empty.
- Step 8 Pull the needle straight out at the same angle it was inserted and release the skin fold.
- **Step 9** Point the needle down and away from yourself and others and push down on the plunger to activate the safety shield.
- **Step 10** Place the used syringe in a sharps container (or an empty laundry detergent container that you have marked "sharps").



When and Who to Call

Contact your surgeon's office for any of the following symptoms:

- Temperature over 100.5°F
- Abdomen is bloated
- No bowel movement within four days after discharge
- Bowel movements stop abruptly
- Separation of wound edges, thick green or yellow drainage from the wound, or increasing redness swelling, warmth or pain of the incision
- Severe nausea or vomiting
- Increased abdominal pain that is not relieved by pain medication
- Shortness of breath or chest pain
- Swelling in your legs
- Any other new symptoms

Follow-up Care

- A couple of days after your discharge a nurse may call to see how you are doing at home.
- If you are having problems or concerns prior to receiving your call, don't hesitate to call your surgeon's office.
- You will have an appointment to see your surgeon five to 21 days after discharge.
- You may also have an appointment to be seen in the early Discharge Clinic in the first week after surgery. Please call your surgeon's office to schedule an appointment if you do not have one scheduled.

We hope that this booklet has helped you feel more prepared for your surgery.



If you have any questions or concerns about your surgery, please feel free to call your surgeon at:

734-712-8150



Colostomy Home Guide

A colostomy is a surgical opening for stool to leave your body when a medical condition prevents it from leaving through the usual opening (rectum). During surgery, a piece of the large intestine (colon) is brought through an opening in the abdominal wall. This new opening is called a stoma or ostomy. A pouch fits over the stoma to collect stool and gas. Your stool may be liquid, somewhat pasty, or formed.

Caring For Your Stoma

Normally, the stoma looks like the inside of your cheek: pink and moist. At first it will be swollen and will decrease in size within four to six weeks.

Keep the skin around your stoma clean and dry. Gently wash your stoma and the skin around your stoma with a clean washcloth or a soft paper towel. You do not use soap, as different soap may contain lotion and may interfere with the seal of the pouch. If you develop a skin irritation, your stoma nurse may recommend using stoma powder with no sting spray to treat the skin prior to pouch application. **DO NOT** use any products other than those specifically recommended by your ostomy nurse.

Your stoma should not be uncomfortable. If you notice stinging or burning, your pouch may be leaking, and the skin around your stoma may be coming in contact with your stool. This can cause skin irritation. You should re-measure your stoma and replace your pouch with a new one.

Ostomy Pouches

The pouch that fits over your stoma can be made of one or two pieces. A one-piece pouch has a skin barrier piece and the pouch which are together. A two-piece pouch has a skin barrier with a separate pouch that snaps on and off the skin barrier. You should empty your pouch when it is one-third to one-half full. Do not let more stool or gas build up as this could cause your pouch to leak.

Some ostomy pouches have a built-in gas release filter. Ostomy lubricating deodorizer can be put into the pouch to prevent odor and help stool to slide out of the pouch more easily and completely.

Emptying Your Ostomy Pouch

You have received lessons on how to empty your pouch from the ostomy nurse. Here are reminders on how to empty your pouch:

- Wash your hands with soap and water
- Sit far back on the toilet
- Put pieces of toilet paper into the toilet water to prevent splashing as you empty the stool into the toilet
- Open the tail end of the pouch and empty the stool into the toilet
- Clean the first two inches on the pouch with toilet paper
- Close the pouch. Remember, three rolls to open, three rolls to close
- Wash your hands

Colon and Rectal Surgery



Changing Your Ostomy Pouch

Change your ostomy pouch about every three to five days. Always change your pouch sooner if you notice any discomfort or irritation on the skin around the stoma. When possible, plan to change your pouching system before eating or drinking. This may lessen the chance of stool coming out during the change. The ideal time is first thing in the morning. Your ostomy nurse has taught you and assisted you with how to change your pouch. Here are reminders on how to apply a new pouch:

- Relax and take a deep breath!
- Lay out your needed supplies.
- Wash your hands with soap and water.
- Carefully remove the old pouch.
- Wash the stoma and the skin around your stoma and allow to dry. Men should gently shave any hair around the stoma, as this will make the pouch stick better.
- Use the stoma measuring guide to decide what size hole you will need to cut in the skin barrier piece (pouch) or your previous pouch template. Choose the smallest possible size that will hold the stoma but will not touch it.
- Use the guide or previous template to trace a circle on the back of the new skin barrier piece. Cut the hole.

- Before removing the backing, place the skin barrier piece over the stoma to make sure the hole is the correct size.
- Remove the adhesive paper backing from the skin barrier piece.
- You may be advised to add an adhesive ring to the opening around the skin barrier.
- Carefully apply the skin barrier piece over your stoma.
- If you are using a two-piece pouch, snap the pouch onto the skin barrier piece.
- If using lubricating deodorizer, add it to the pouch at this time and each time after you empty you pouch.
- Close the pouch.
- Put your hand over your pouch to help warm it for about five minutes, so that it conforms to your body better.
- Wash your hands again.
- If your stoma starts to function at any time during your pouch change, RELAX and simply clean the area around your stoma. Be careful not to apply a new pouch to damp skin.

Colon and Rectal Surgery



Diet Tips

- Continue to follow your usual diet.
- Drink about eight ounces glasses of water each day.
- You can prevent gas by eating slowly and chewing food thoroughly.
- If you feel concerned that you have too much gas, you can cut back on gas producing foods, such as:
 - Spicy foods
 - Onions
 - Cruciferous vegetables (cabbage, broccoli, Brussels sprouts)
 - Beans and legumes
 - Some cheeses
 - Eggs
 - Fish
 - Carbonated drinks
 - Chewing gum

General Tips

- You can shower with or without the pouch. Remember, if the pouch is off during the shower, stool may come out.
- If your pouch is wet, you can blot it dry with a towel or use a hairdryer on cool setting.
- Avoid wearing tight clothing directly over your stoma. Tight clothing can irritate the stoma or prevent stool from draining into the pouch, which can cause a leak.
- You should ALWAYS have an extra pouch with you when traveling, at work, in the car, etc. You can never plan when you may have an unexpected leak. Do not leave them anywhere it is too warm, as parts of them can melt.
- DO NOT let your seat belt rest on your stoma. Try to keep the seat belt above or below your stoma or use a pillow to cushion it.
- You should still participate in sports; however, use caution with activities where there is a risk of getting hit in the abdomen.
- You may swim with an ostomy, but should never swim without your pouch on. Be mindful you may need to change your pouch sooner than normal after swimming.
- It is a good idea to empty your pouch prior to sex. Some people and their partners feel very comfortable seeing the pouch during sex, while others choose to wear lingerie or a shirt that covers their pouch. You may purchase intimate apparel especially designed to conceal your pouch.
- Most ostomy supplies are delivered right to your home. You have been sent home with a catalog to guide you with product selection. Your home care nurse should assist you with any questions.
- Always bring ostomy supplies when you visit your surgeon or ostomy nurse.



Ordering Supplies After Discharge

- Always allow enough time for delivery when ordering your supplies.
- Re-measure your stoma before ordering pouches during the first six weeks.
- Keep a list of your ostomy supplies along with the order numbers.

When Should I Call My Ostomy Nurse

- If you have persistent problems with pouch leakage.
- If you notice skin irritation in the area of your pouch.
- If you have difficulty obtaining your ostomy supplies.
- If you notice a change in the size or color of your stoma, especially if it becomes red, purple black or pale white.
- If there is no stool from the stoma or diarrhea (requiring more frequent than normal pouch emptying).
- If you have any questions or concerns call your ostomy nurse Monday Friday, 7 a.m. 3:30 p.m. Messages left after hours will be returned the following day, and messages left over the weekend will be answered the following Monday morning.

St. Joseph Mercy Ann Arbor Ostomy Nurses 734-712-3960

Reichert Health Center, Suite 6011 Patients seen by appointments only.

Outpatient Clinic Ostomy Nurse 734-712-8229

Michigan Heart and Vascular Institute (MHVI), Suite 104 Monday - Friday: 9 a.m. - 5 p.m.



Ileostomy Home Guide

An ileostomy is a surgical opening for stool to leave your body when a medical condition prevents it from leaving through the usual opening (rectum). During surgery, a piece of small intestine (ileum) is brought through an opening in the abdominal wall. This new opening is called a stoma or ostomy. A pouch fits over the stoma to collect stool and gas. Your stool may be liquid at first, but should become the consistency of applesauce.

Caring For Your Stoma

Normally, the stoma looks like the inside of your cheek: pink and moist. At first it will be swollen and will decrease in size within four to six weeks.

Keep the skin around your stoma clean and dry. Gently wash your stoma and the skin around your stoma with a clean washcloth or a soft paper towel. You do not use soap, as different soap may contain lotion and may interfere with the seal of the pouch. If you develop a skin irritation, your stoma nurse may recommend using stoma powder with no sting spray to treat the skin prior to pouch application. **DO NOT** use any products other than those specifically recommended by your ostomy nurse.

Your stoma should not be uncomfortable. If you notice stinging or burning, your pouch may be leaking, and the skin around your stoma may be coming in contact with your stool. This can cause skin irritation. You should re-measure your stoma and replace your pouch with a new one.

Ostomy Pouches

The pouch that fits over your stoma can be made of one or two pieces. A one-piece pouch has a skin barrier piece and the pouch which are together. A two-piece pouch has a skin barrier with a separate pouch that snaps on and off the skin barrier. You should empty your pouch when it is one-third to one-half full. Do not let more stool or gas build up as this could cause your pouch to leak.

Some ostomy pouches have a built-in gas release filter. Ostomy lubricating deodorizer can be put into the pouch to prevent odor and help stool to slide out of the pouch more easily and completely.

Emptying Your Ostomy Pouch

You have received lessons on how to empty your pouch from the ostomy nurse. Here are reminders on how to empty your pouch:

- Wash your hands with soap and water
- Sit far back on the toilet
- Put pieces of toilet paper into the toilet water to prevent splashing as you empty the stool into the toilet
- Open the tail end of the pouch and empty the stool into the toilet
- Clean the first two inches on the pouch with toilet paper
- Close the pouch. Remember, three rolls to open, and three rolls to close
- Wash your hands



Changing Your Ostomy Pouch

Change your ostomy pouch about every three to five days. Always change your pouch sooner if you notice any discomfort or irritation on the skin around the stoma. When possible, plan to change your pouching system before eating or drinking. This may lessen the chance of stool coming out during the change. The ideal time is first thing in the morning. Your ostomy nurse has taught you and assisted you with how to change your pouch. Here are reminders on how to apply a new pouch:

- Relax and take a deep breath!
- Lay out your needed supplies.
- Wash your hands with soap and water.
- Carefully remove the old pouch.
- Wash the stoma and the skin around your stoma and allow to dry. Men should gently shave any hair around the stoma, as this will make the pouch stick better.
- Use the stoma measuring guide to decide what size hole you will need to cut in the skin barrier piece (pouch) or your previous pouch template. Choose the smallest possible size that will hold the stoma but will not touch it.
- Use the guide or previous template to trace a circle on the back of the new skin barrier piece.
 Cut the hole.

- Before removing the backing, place the skin barrier piece over the stoma to make sure the hole is the correct size.
- Remove the adhesive paper backing from the skin barrier piece.
- You may be advised to add an adhesive ring to the opening around the skin barrier.
- Carefully apply the skin barrier piece over your stoma.
- If you are using a two-piece pouch, snap the pouch onto the skin barrier piece.
- If using lubricating deodorizer, add it to the pouch at this time and each time after you empty you pouch.
- Close the pouch.
- Put your hand over your pouch to help warm it for about five minutes, so that it conforms to your body better.
- Wash your hands again.
- If your stoma starts to function at any time during your pouch change, RELAX and simply clean the area around your stoma. Be careful not to apply a new pouch to damp skin.

Colon and Rectal Surgery



Diet Tips

- When you have an ileostomy, you may be at risk for a food blockage. Food blockages are usually caused after eating fibrous foods that clump together and cannot pass through the stoma. You do not need to avoid fibrous foods, but gradually introduce them into your diet after surgery and ALWAYS CHEW YOUR FOOD WELL!
- If you do develop a food blockage, you may have abdominal bloating or cramping, watery stools or temporary absence of stool, and your stoma may swell. You may try massaging your abdomen or taking a warm bath. If the blockage lasts more than three hours, or you start to vomit, call your physician or go to the nearest Emergency Department.

Fibrous Foods:

- Celery
- Cabbage and coleslaw
- Pineapple
- Mushrooms
- Corn and popcorn
- Whole fruits and vegetables, especially with the skins on
- Foods that contain seeds
- Oranges, grapefruit, tangerines and other citrus fruits
- Nuts
- Chinese vegetables
- Coconut

Foods That Thicken Stool:

- Applesauce
- Bananas
- Cheese
- Creamy peanut butter
- Boiled milk
- Bread
- Marshmallows
- Pasta/Noodles
- Pretzels
- Tapioca
- Yogurt
- White rice

Foods That Cause Stools To Be Loose:

- Green beans
- Beer/Alcohol
- Broccoli
- Fresh fruits
- Grape juice
- Chocolate
- Aspartame/Artificial sweetener
- Fried foods
- Spicy foods
- Prunes/ Juice
- Raw vegetables
- Spinach/leafy green vegetables



Avoiding Dehydration

- Ileostomy output averages between 800 cc (ml) to 1200 (ml) in 24 hours. The output should be an oatmeal or applesauce consistency. It is normal to empty your ileostomy pouch four to eight times a day when it is half full.
- You will measure and record your intake and output for the first two weeks at home. This information is used to help indicate if you are at risk of dehydration. If you have more than 1500cc (ml) of stool in a 24 hour period and are not drinking enough, you could be advised to drink more and add an antidiarrheal medication.
- Antidiarrheal medication, Imodium and Lomotil may be prescribed by your doctor. These medications can be effective in reducing ileostomy output. It is important to take these medications 30 minutes before meals because they work to slow the movement of stool.

General Tips

- You can shower with or without the pouch. Remember, if the pouch is off during the shower, stool may come out.
- If your pouch is wet, you can blot it dry with a towel or use a hairdryer on cool setting.
- Avoid wearing tight clothing directly over your stoma. Tight clothing can irritate the stoma or prevent stool from draining into the pouch, which can cause a leak.
- You should ALWAYS have an extra pouch with you when traveling, at work, in the car, etc. You can never plan when you may have an unexpected leak. Do not leave them anywhere it is too warm, as parts of them can melt.
- DO NOT let your seat belt rest on your stoma. Try to keep the seat belt above or below your stoma or use a pillow to cushion it.
- You should still participate in sports; however use caution with activities where there is a risk of getting hit in the abdomen.
- You may swim with an ostomy, but should never swim without your pouch on. Be mindful you may need to change your pouch sooner than normal after swimming.
- It is a good idea to empty your pouch prior to sex. Some people and their partners feel very comfortable seeing the pouch during sex, while others choose to wear lingerie or a T-shirt that covers their pouch. You may purchase intimate apparel especially designed to conceal your pouch.
- Never take laxatives with an ileostomy. This may cause your stool to be too thin and can lead to dehydration.
- Most ostomy supplies are delivered right to your home. You have been sent home with a catalog to guide you with product selection. Your home care nurse should assist you with any questions.



Ordering Supplies After Discharge

- Always allow enough time for delivery when ordering your supplies
- Re-measure your stoma before ordering pouches during the first six weeks.
- Keep a list of your ostomy supplies along with the order numbers

When Should I Call My Ostomy Nurse

- If you have persistent problems with pouch leakage
- If you notice skin irritation in the area of your pouch
- If you have difficulty obtaining your ostomy supplies
- If you notice a change in the size or color of your stoma, especially if it becomes red, purple black or pale white
- If there is no stool from the stoma or diarrhea (requiring more frequent than normal pouch emptying)
- If you have any questions or concerns, call your ostomy nurse Monday - Friday, 7 a.m. - 3:30 p.m. Messages left after hours will be returned the following day and messages left over the weekend will be answered the following Monday morning

Seek Medical Care If:

- You notice a change in the size or color of your stoma, especially if it becomes red, purple, black or pale white
- You have bloody stools or excessive bleeding from the ostomy (it is normal if your stoma has small bleeding and should stop quickly)
- There is anything unusual protruding from the ostomy
- No stool from the stoma or diarrhea > 1500 cc (ml) in 24 hours
- You notice any bleeding, skin irritations, or drainage on the skin around your stoma

St. Joseph Mercy Ann Arbor Ostomy Nurses 734-712-3960

Reichert Health Center, Suite 6011 Patients seen by appointments only.

Outpatient Clinic Ostomy Nurse 734-712-8229

Michigan Heart and Vascular Institute (MHVI), Suite 104 Monday - Friday: 9 a.m. - 5 p.m.

Colon and Rectal Surgery



Notes	
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Common Measurements:

1 cup (8 oz.) = 240 mL 12 oz. can/bottle = 360 mL 20 oz. bottle = 600 mL 1 quart (32 oz.) = 960 mL Small popsicle - 80 mL

Patient Log Intake and Output

Date	Fluid INTAKE Record amount of all liquids you drink such as water, juice, etc.	OUTPUT Record all liquid outputs such as urine, liquid stool from ostomy bags or drains with significant liquid output.	BMs Record number of stools (Example: Iff-)
	Total: mL (add all amounts)	Urine amounts:mL Ostomy/drains/ other amounts:mL Total:mL (add all amounts)	Total # of BMs:
	Total: mL (add all amounts)	Urine amounts:mL Ostomy/drains/ other amounts:mL Total:mL (add all amounts)	Total # of BMs:
	Total: mL (add all amounts)	Urine amounts:mL Ostomy/drains/ other amounts:mL Total:mL (add all amounts)	Total # of BMs:
	Total: mL (add all amounts)	Urine amounts:mL Ostomy/drains/ other amounts:mL Total:mL (add all amounts)	Total # of BMs:

Drink plenty of liquids each day to help avoid dehydration. Aim for at least six and a half to eight cups (1600 mL to 2000 mL) or more each day. The best liquid to drink is water. Limit the amount of caffeine you drink such as coffee, tea and soda – because too much caffeine can cause dehydration. If you have kidney disease, please check with your doctor about how much liquid you drink.

Signs of mild dehydration are thirst, dry mouth, headache and dizziness. If urine volume is low (less than 750-800 mL in 25 hours) or if urine is dark yellow – increase the amount of liquids you are drinking. When you are well hydrated, urine should be very light yellow, or almost no color at all. If symptoms don't improve after drinking ore liquids or if the signs of dehydration become more severe – such as severe dizziness that prevents you from walking, no urine at all or very low volume urine that is very dark yellow, orange or brownish in color, severe lethargy, tiredness or confusion – call the doctor or go straight to the Emergency Room.

Common Measurements:

1 cup (8 oz.) = 240 mL 12 oz. can/bottle = 360 mL 20 oz. bottle = 600 mL 1 quart (32 oz.) = 960 mL Small popsicle - 80 mL

Patient Log Intake and Output

Date	Fluid INTAKE Record amount of all liquids you drink such as water, juice, etc.	OUTPUT Record all liquid outputs such as urine, liquid stool from ostomy bags or drains with significant liquid output.	BMs Record number of stools (Example: IIII-)
	Total: mL (add all amounts)	Urine amounts:mL Ostomy/drains/ other amounts:mL Total:mL (add all amounts)	Total # of BMs:
	Total: mL (add all amounts)	Urine amounts:mL Ostomy/drains/ other amounts:mL Total:mL (add all amounts)	Total # of BMs:
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	Total:mL (add all amounts)	Urine amounts:mL Ostomy/drains/ other amounts:mL Total:mL (add all amounts)	Total # of BMs:



Important Exercises To Do After Your Surgery

Please read these instructions before your surgery so that you will be prepared to start these exercises as soon as possible after surgery.

Incentive Spirometer

Deep breathing is very important after surgery. It expands the lungs, helps circulation and helps prevent pneumonia. Your surgeon wants you to perform deep breathing exercises after surgery. You will also use an incentive spirometer to help you meet goals for deep breathing.

What is an Incentive Spirometer?

The incentive spirometer is a plastic device that helps you to breathe deeply. It encourages you to take deep breaths and gives you instant feedback on how well you are doing.

How Do I Use the Incentive Spirometer?

The device is easy to use. Follow these steps:

- Sit up as straight as possible so that your lungs can fully expand. Hold the spirometer's mouthpiece
 with one hand and the spirometer's handle with your other hand. Keep the spirometer level with your
 mouth.
- 2. Exhale normally, and then place your lips tightly around the spirometer's mouthpiece.
- 3. Slowly inhale through the mouthpiece as much air as you can. Give this your best effort! Watch the blue disc in the spirometer rise to see how deeply you inhaled. The deeper you breathe, the higher the blue disc rises. Hold your breath and count to five. Try to keep the disc elevated in the spirometer if you can.
- 4. Finally, remove the mouthpiece from your mouth and exhale normally. Rest for a moment and then repeat the exercise. Rest in between each deep breath. As you fully expand your lungs you will see the disc rise higher. You can track your progress on the spirometer with the sliding arrow. As you master one level, aim to move the disc higher with the next set of deep breaths





What is My Goal for the Incentive Spirometer?

Take at least 10 deep breaths every hour, resting after each deep breath.

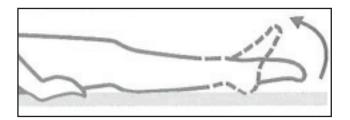
Leg Exercises

These exercises will help return blood from your legs to your heart. This improves circulation and helps prevent blood clots. You should do these exercises when you are in bed after your operation. You can practice these at home.

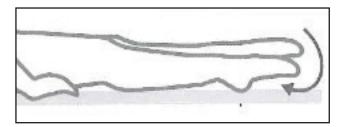


How Do I Exercise My Legs After Surgery?

 Push toes of both feet toward the end of the bed.
 Relax both feet. Pull toes of both feet toward your chin. Relax both feet.



2. Point your toes and draw a circle with them, first to the right and then to the left.



What is My Goal for the Leg Exercises?

It is important that you exercise your legs every hour while you are awake.

Walking

Walking involves all your systems, promotes normal body functions, helps you to take deep breaths, improves your circulation and helps relieve any gas pains or muscle spasms you might have. Ask for help getting out of bed until your nurse tells it is safe for you to do this alone or with a family member.

What is My Goal for Walking?

You should take a short walk with help on day of surgery. Starting the day after surgery you should take a walk out in the hall at least five times each day. Try to walk a little farther each time you walk.