

Bowel Problems: Prevention and Treatment



THE UNIVERSITY OF TEXAS
MD Anderson
~~Cancer~~ Center

Making Cancer History®

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Bowel Changes During Cancer Treatment

Cancer can change your normal bowel patterns, depending on the type of cancer you have and your treatment plan. These changes can affect how you feel and your ability to go about your daily activities. If you have constipation or diarrhea, this guide can help. You will learn the symptoms and causes of bowel problems and how to treat them.

Though you may feel embarrassed, your care team is used to helping patients with bowel problems. It is very important to report signs and symptoms to your care team. The sooner you tell your team, the sooner they can work with you to relieve your symptoms.

Normal Bowel Movements

Body waste (called stool) is usually medium brown, soft and formed. “Normal” depends on the person. Only you know what is normal for you. Is your stool too difficult to pass? Are your bowel movements more or less frequent than before?

There are 7 types of stool. See the stool chart on this page. Types 3 and 4 are best for comfort and overall health.

How do bowel movements happen?

The organs in the body that help digest food are part of the digestive system, also called the gastrointestinal

(GI) tract (Figure 1 on page 5). After food passes through the stomach and small intestine, the remaining material is mostly waste products in liquid form. This liquid stool then enters the large intestine (colon) where water is absorbed for use in the body. The last portion of the colon empties stool into the rectum. The rectum acts like a pouch to hold stool until a bowel movement happens. During a bowel movement, stool passes through the anus and out of the body. New food and fluids can then move through the digestive system and supply the body with nutrients.








How often should I go?

Frequency is different for each person, but should happen in a consistent pattern day to day. Bowel movements usually happen after a big meal when contents in the GI tract move down to make room for incoming food. For example, many people have a bowel movement in the morning after eating breakfast.

The frequency of how often you go during cancer treatment is related to how much food you eat. Everyone is different, but a **general guideline** is:

- If you eat 3 meals a day, expect a bowel movement every day.
- If you eat half your normal amount of food, expect a bowel movement every other day.
- If you eat one-third of the amount, expect a bowel movement every third day.

Bristol Stool Chart

Type 1		Separate hard lumps	Severe constipation
Type 2		Lumpy and sausage like	Mild constipation
Type 3		A sausage shape with cracks in the surface	Normal
Type 4		Like a smooth, sausage or snake	Normal
Type 5		Soft blobs with clear-cut edges	Lacking fiber
Type 6		Mushy consistency with ragged edges	Mild diarrhea
Type 7		Liquid consistency with no solid pieces	Severe diarrhea

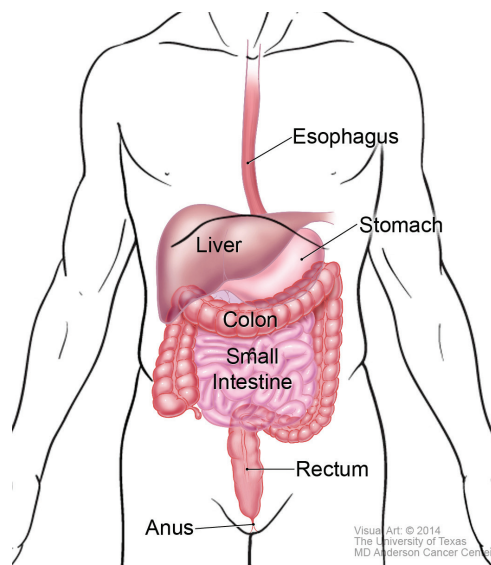


Figure 1 GI Tract

Constipation

Constipation is the infrequent or difficult passing of hard, dry stool.

Causes

- Not drinking enough fluid
- Not eating enough food
- Not enough fiber in the diet
- Lack of physical activity
- Constipating medicines

Constipating Medicines

If you take constipating medicines, such as opioids for pain or Zofran® for nausea, you should also take stimulant laxatives and stool softeners. Check with your doctor or nurse about how much to take per day. See page 13 for more information.

Opioid pain medicines slow down the movement of stool through the GI tract and will cause stool to harden. Common opioids prescribed are:

- Morphine (MS Contin®)
- Hydrocodone (Norco®)
- Oxycodone (OxyContin®)
- Fentanyl (Duragesic®)
- Hydromorphone (Dilaudid®)

Other medicines may also cause constipation, including:

- Some anti-nausea drugs such as ondansetron (Zofran®)
- Some anti-depressants such as fluoxetine (Prozac®) and amitriptyline (Elavil®)
- Antihistamines
- Calcium channel blockers
- Diuretics (water pills)
- Iron supplements
- Muscle relaxers
- Parkinson's disease medicines
- Calcium-based antacids or calcium supplements

Always read the label on over-the-counter products and understand what you are taking and why. Sometimes your care team may tell you to take over-the-counter medicine differently than the package label says. Always follow your care team's instructions.

Prescription medicines can cause changes in your bowel. Check with your doctor or pharmacist about how your medicines may affect your bowel.

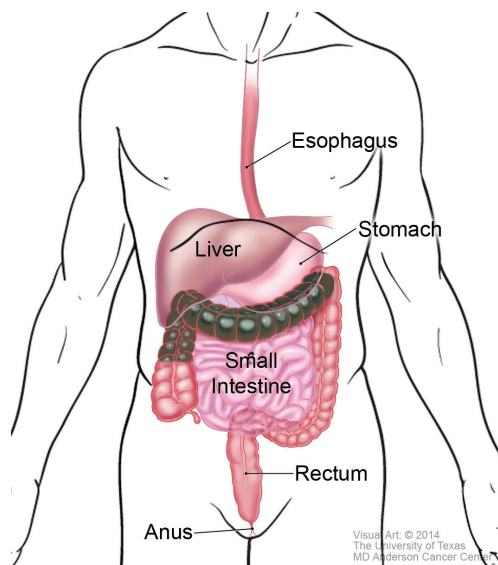


Figure 2 High Impaction

Symptoms

- No bowel movement for 3 or more days
- Straining during a bowel movement
- Hard stool
- Gas
- Bloating

Report the following symptoms to your doctor:

- No bowel movement for 3 or more days
- Abdominal pain, cramping
- Fever
- Nausea and vomiting

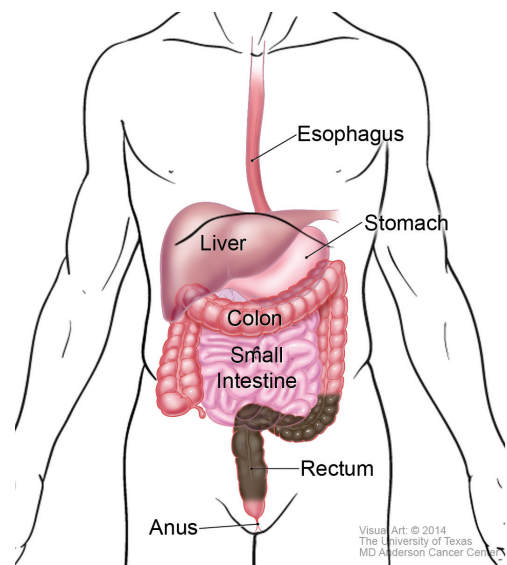


Figure 3 Low Impaction

Impactions

An impaction is a case of severe constipation. It is a build-up of stool either in the upper or lower part of the colon (Figures 2 and 3)

An impaction can happen if constipation is not treated.

Impaction Symptoms

- No bowel movement for 5 or more days
- Not being able to eat
- Pain in the belly or the belly becoming swollen and possibly hard
- Passing liquid stool that is seeping around formed stool
- Not being able to pass stool that you feel in the rectum
- Not being able to sit comfortably, because it feels like you are sitting on something

Call your doctor if you think you may have an impaction.



Preventing Constipation

- **Fluid:** Drink 2 to 3 quarts (equal to 64 to 96 ounces) of non-alcoholic fluids each day. At least half of your daily fluid intake should be from non-caffeinated fluids, like water. For some people, drinking a hot liquid helps to bring on a bowel movement. Consider including the following hot beverages as part of your daily fluid intake:
 - Broth
 - Herbal tea
 - Decaffeinated tea or coffee
 - Hot water with lemon
- **Food:** Eat a high-fiber diet to prevent constipation. If you are able to be active every day (out of a chair or bed more than half the day) and can drink 64 to 96 ounces of fluid each day, eating a high-fiber diet can help with constipation. This diet includes 25 to 35 grams of fiber each day. Good sources of fiber include:
 - Whole grains: These include high-fiber cereal (4 grams of fiber per 1/3 to 1/2 cup of cereal) and foods made with whole wheat flour, whole oats or oat flour, corn meal or brown rice.
 - Peas and lentils: Pinto beans, black beans, white beans, chickpeas, split peas and black-eyed peas.
 - Fruits: Especially blackberries, raspberries and dried prunes
 - Vegetables: Especially those eaten with the skin on
 - Ground flaxseed, chia seeds and wheat germ: Consider adding these to yogurt, oatmeal or smoothies.
- **Fiber:** You may need to take medicinal fiber. Common brands of medicinal fiber are Metamucil® and Citrucel®. Follow these steps:
 1. Mix 6.8 grams of Metamucil or 1 tablespoon of Citrucel in 8 ounces of water and drink.
 2. Drink 8 more ounces of fluid, like water.

Do not take medicinal fiber if you have a history of blockages in the bowel, or if you are on chemotherapy that causes diarrhea.
- **Activity:** Daily physical activity helps keep the digestive system active. Ask your doctor about how much physical activity is best for you.
- **Timing:** Go to the bathroom right away when you feel the urge to have a bowel movement – don't wait.



For constipation: Several generic brands of combination stool softener and stimulant laxatives

Laxatives and Stool Softeners

Stimulant laxatives and stool softeners are medicines that can help you have a bowel movement. Stimulant laxatives help move stool down the GI tract and stool softeners help keep fluid in the stool. Some are in pill form while others are in liquid form. Many are available without a prescription.

The chart on page 13 provides information on laxatives and other products available to help pass stool. Your care team can help you decide which product is best for you. Keep in mind that many store brand or generic products work equally as well as name brand products and often cost less.

Contact your doctor, nurse or pharmacist if you have questions.

Treating Constipation

Follow these tips to help treat constipation.

- Drink a hot or warm liquid after eating a meal.
- Drinking senna-based hot tea can help relieve constipation. Senna is an herb that is approved by the Food and Drug Administration (FDA) for use as an over-the-counter laxative. Several senna tea brands are available in the tea or natural product section of grocery and drug stores. Avoid tea labeled as dieter's tea. This tea contains herbal ingredients that can cause pain, gas and cramping leading to diarrhea.

- If you do not have a bowel movement by late afternoon on the day you expect, follow these guidelines.
 - Drink 4 ounces of prune juice followed by 8 ounces of hot liquid. Avoid drinking caffeinated coffee.
 - If you do not have a bowel movement by bedtime, take milk of magnesia. This gentle laxative is available over-the-counter in liquid or pill form. Take 2 tablespoons or 2 pills of milk of magnesia at bedtime with 8 ounces of water.
 - If you do not have a bowel movement by breakfast the next morning, you may repeat the dose of milk of magnesia and 8 ounces of water every 6 hours until you have a bowel movement. If you have kidney problems, ask your care team before repeating the dose.
- You may need an enema if you feel like you have a large amount of stool in your bowel. Talk with your nurse or doctor before using an enema. You will receive instructions on the type of enema that is right for you and how to take it.
- Follow the prevention guidelines on pages 7 and 8 after you no longer feel constipated.

Learn about your risk for constipation by answering the Constipation Risk Assessment Tool on page 12.



For diarrhea: Name brand and generic anti-diarrhea medicine

Diarrhea

Diarrhea is the passing of loose, liquid stool more than 3 times per day.

Causes

- Anxiety
- Food allergies
- Fried and spicy foods
- Increasing your daily intake of fiber too quickly
- Infections or parasites in the GI tract
- Inflammatory bowel disease (IBD)
- Irritable bowel syndrome (IBS)
- Medicines and medical treatment

Medicines and Medical Treatment That May Cause Diarrhea

- Antacids with a magnesium base
- Antibiotics
- Laxatives
- Radiation treatment to the abdomen
- Some chemotherapy medicines
- Surgery that shortens the small intestine or colon

Some liquid nutrition supplements, such as Boost Plus®, can cause diarrhea in some people. Your dietitian can help you choose the best supplement for you.

Symptoms

- More bowel movements than normal
- Loose, liquid stools
- Pain in the belly
- You are unable to hold back a bowel movement

If you have diarrhea and don't know why, talk to your doctor or nurse. Your treatment will vary depending on the cause of the diarrhea. It is important to treat the cause, not the symptom.

Preventing Diarrhea

- If you are lactose intolerant, take a lactase enzyme product like Lactaid® when eating or drinking milk or milk products.
- Avoid foods containing known allergens.
- Wash all fresh fruits and vegetables before eating.
- Drink no more than 4 to 8 ounces of fluids with meals. Try sipping liquids throughout the day rather than drinking large amounts in a short time period.



Preventing Diarrhea

- Add **probiotic foods** to your diet. Probiotics are made of good bacteria and yeast. The good bacteria helps to fight off issues caused by bad bacteria, such as problems with digestion and bowel function. Taking probiotics may help to balance out the bacteria in your stomach and can help you feel better. Some foods that naturally contain probiotics are:

- Yogurt with live cultures
- Kefir (a yogurt-like drink)
- Buttermilk
- Sauerkraut
- Kombucha tea

Discuss taking probiotics with your care team before adding them to your diet.

- Some antibiotic medicine can reduce the amount of healthy bacteria in the GI tract. When you take antibiotics, eat yogurt containing live cultures or small amounts of kefir 2 times a day.
- If you will have radiation treatment, chemotherapy or surgery, ask your doctor for a consultation with a dietitian.

Treating Diarrhea

- Eat small, frequent meals to help slow movement in the GI tract.
- Limit fluids with meals to 8 ounces.
- Avoid fried and spicy foods.
- Add foods to your diet that slow the movement of stool in the GI tract, like those in the BRAT diet (banana, rice, applesauce and toast). These foods help reduce the number of stools.
- Avoid drinking hot liquids until your diarrhea stops.
- Check with your care team about taking over-the-counter anti-diarrhea medicine, such as Imodium®. **Do not** take more than 16 milligrams of Imodium per day.
- If you still have diarrhea after taking 16 milligrams of Imodium, ask your doctor about a prescription medicine called Lomotil®.
- Tell your care team if your diarrhea continues. Fluid loss and electrolyte imbalances can occur if diarrhea does not improve.

The Learning Center



MD Anderson Resources

Have questions?

Your care team can help you with bowel management questions. They can refer you to other resources in MD Anderson, such as a dietitian or the Supportive Care Clinic, who may also provide help.

Videos

MD Anderson offers patient education videos to help you learn about bowel management. Watch this video: **Bowel Management**. It is available through your MyChart patient portal or at The Learning Center locations. Visit The Learning Center to view videos that your health care team recommends. You may also access other patient education videos through MyChart.mdanderson.org or the MyChart app under Resources.

The Learning Center

The Learning Center is a patient education library. We provide current and reliable information on cancer prevention, treatment, coping and general health.

- Theodore N. Law Learning Center
Main Building, Floor 4, near Elevator A
713-745-8063
- Levit Family Learning Center
Mays Clinic, Floor 2, near The Tree Sculpture
713-563-8010
- Visit The Learning Center's
Recommended Resources
<https://mdanderson.tlc.libguides.com>

Constipation Risk Assessment

The Constipation Risk Assessment Tool on page 12 will help you determine your risk for constipation.

Directions: For questions 1 and 2, answer by checking Yes or No. For questions 3 through 18, write a number in the score box next to the question. Add the numbers to find your constipation risk score and write it down on page 12.

What does your score mean?

Low Risk for Constipation – Learn more about managing symptoms that may be caused by cancer treatment. Ask your care team for more information or visit The Learning Center.

Moderate Risk for Constipation – Show your care team your score and ask if a bowel maintenance program is right for you.

High Risk for Constipation – Show your care team your score and ask them to check your bowel. Your care team can give you information about how to treat and prevent constipation.

Constipation Risk Assessment Tool

Risk Factor	Score
1. Do you believe that you easily become constipated? Yes <input type="checkbox"/> No <input type="checkbox"/>	
2. Do you take laxatives to relieve constipation? Yes <input type="checkbox"/> No <input type="checkbox"/>	
3. Do you have problems having a bowel movement when you are away from home? Yes = 2 No = 0	<input type="checkbox"/>
4. Are you? Male = 1 Female = 2	<input type="checkbox"/>
5. How mobile are you? • Walk independently = 0 • Need a cane, walker or help from others to walk = 1 • Restricted to a bed or chair = 2 • Bed bound = 3	<input type="checkbox"/>
6. How many servings of fiber, fruits and vegetables do you eat each day? • 2 servings or less = 2 • 3-4 servings = 1 • 5 servings or more = 0	<input type="checkbox"/>
7. Do you eat bran products (such as bran cereal) each day? Yes = 0 No = 2	<input type="checkbox"/>
8. How much fluid do you drink each day? • 10 glasses (8 ounces each) or more = 0 • 6-9 glasses (8 ounces each) = 1 • 5 glasses (8 ounces each) or less = 2	<input type="checkbox"/>
9. Have you been told that you have depression? Yes = 2 No = 0	<input type="checkbox"/>
10. Have you been told that you have dementia or a learning disability? Yes = 2 No = 0	<input type="checkbox"/>
11. Do you have a metabolic disorder, such as low potassium levels, high calcium levels or kidney problems? Yes = 2 No = 0	<input type="checkbox"/>

Risk Factor	Score
12. Do you have a tumor in your rectum or ovary or have you had surgery in your pelvic (hip) area? Yes = 3 No = 0	<input type="checkbox"/>
13. Have you had a stroke or do you have a neuromuscular disorder, such as multiple sclerosis, a spinal cord compression or Parkinson's disease? Yes = 3 No = 0	<input type="checkbox"/>
14. Do you have diabetes or take thyroid medicine? Yes = 3 No = 0	<input type="checkbox"/>
15. Do you have a lot of cancer in your belly or have adhesions, hemorrhoids, irritable bowel syndrome, any type of prolapse or have been told that you have an ileus? Yes = 3 No = 0	<input type="checkbox"/>
16. Are you currently taking these medicines? • Anti-depressants = 2 • Anti-inflammatory medicine = 3 • Anti-nausea medicine, such as ondansetron/Zofran® = 2 • Anti-seizure medicine = 2 • Calcium channel blockers = 2 • Iron supplements = 2 • Pain medicine (opioids) = 5 • Parkinson's disease medicine = 2	<input type="checkbox"/>
Add total and write in box	
17. Are you taking one of these constipating chemotherapy medicines? • Vincristine • Vinblastine • Thalidomide Yes = 5 No = 0	<input type="checkbox"/>
18. Are you receiving other constipating cancer treatments as explained by your health care provider? Yes = 3 No = 0	<input type="checkbox"/>

Total Score	<input type="checkbox"/>
Score Chart <ul style="list-style-type: none"> • 10 or less = Low risk for constipation • 11-15 = Moderate risk for constipation • 16 or greater = High risk for constipation 	
Used with permission by Janice Richmond	

Laxatives and Stool Softeners

These are examples of over-the-counter medicines that help to pass stool and prevent constipation.

Type	Examples	Action	Side Effects	Forms	Time to Work
Fiber Laxatives	<ul style="list-style-type: none"> Methylcellulose (Citrucel®) Psyllium husk (Metamucil®) 	Absorbs water (adequate water intake is essential) to form soft, bulky stool triggering contraction of intestinal muscles	<ul style="list-style-type: none"> Bloating Gas Cramping Worsening constipation or choking if not taken with enough water 	<ul style="list-style-type: none"> Capsule Powder to stir into water or other beverage 	12-72 hours
Osmotic Laxatives	<ul style="list-style-type: none"> Polyethylene Glycol 3350 (Miralax®) Lactulose (prescription only) 	Draws fluid into colon to allow easier passage of stool	<ul style="list-style-type: none"> Bloating Gas Cramping Dehydration Diarrhea 	<ul style="list-style-type: none"> Powder that dissolves in a beverage Liquid 	12-96 hours
Saline Laxatives	<ul style="list-style-type: none"> Magnesium citrate Milk of magnesia Sodium phosphate 	Increases fluid in the small intestine	<ul style="list-style-type: none"> Cramping Gas, bloating Nausea, vomiting Diarrhea Electrolyte imbalance 	<ul style="list-style-type: none"> Liquid that is taken with at least 8 ounces of water Rectal enema 	30 minutes-6 hours
Stimulant Laxatives	<ul style="list-style-type: none"> Sennosides (Senokot®) Bisacodyl (Dulcolax®) 	Increases the muscle contractions that move stool through the digestive system	<ul style="list-style-type: none"> Abdominal pain Nausea Weakness May turn urine reddish-brown 	<ul style="list-style-type: none"> Pills Liquid 	6-12 hours
Stool Softeners	<ul style="list-style-type: none"> Docusate sodium (Colace®) 	Adds more fluid and fat to stool to make it easier to pass	<ul style="list-style-type: none"> Cramping Throat irritation 	<ul style="list-style-type: none"> Pills Liquid that is taken with at least 8 ounces of water Rectal enema 	12-72 hours
Suppositories	<ul style="list-style-type: none"> Glycerin 	Draws fluid into the colon causing muscle contractions	<ul style="list-style-type: none"> Rectal irritation Cramping Sensation of inability or difficulty to empty the bowel 	A small cone-shaped solid that is inserted in the rectum. The solid dissolves and releases medicine.	15-30 minutes

Notes

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