

Constipation

Isabel Prieto MD and Allison Wyman MD

What is constipation?

Constipation is a very common complaint. It affects up to 15% of all adults. It is more common as we age, affecting up to 30% of all adults over the age of 60. This condition can mean something different to everyone. However, these are some of the most common symptoms:

- Infrequent bowel movements (usually less than 3 bowel movements per week)
- Hard or lumpy stools
- Painful stool or stool that is difficult to pass
- Straining or using special positions to pass stool
- Feeling like you have not fully emptied your bowels

Causes

There are many things that may change your stool consistency, frequency, or your ability to pass stool normally. Remember that you may have more than one factor causing you to feel constipated.

Speed of Transit

Many times, constipation can occur when the food you eat moves slowly through your digestive tract. The slower the stool moves through the large intestine (see Figure 1), the more water your body absorbs from your stool. This causes the stool to dry out and get hard. This transit is affected by things such as changes in diet, hydration, and activity.



Figure 1: Constipation can occur when the stool moves slowly through the large intestine

Medications

Constipation also can sometimes be a side effect of medications. If you have noticed a change in your bowel habits since starting any medications, discuss this with your doctor before stopping your medications.

Physical Causes



In some cases, our pelvic and anal muscles can lack coordination making it difficult to pass stool. Additionally, some disorders such as diabetes and thyroid disease can cause constipation. Disorders of pelvic support such as rectocele can lead to a type of constipation. Finally, there are more serious causes of constipation such as intestinal obstructions and tumors, or disorders of the brain and spine.

Make sure to tell your doctor about your symptoms. Seek medical help if you have persistent or severe pain in your belly, bloating, vomiting, fever, blood in your stool, failure to pass gas, lower back pain, or unintended weight loss. It is also important to tell your doctor if anyone in your family has had colon or rectal cancer.



Diagnosis

Your doctor will decide which tests (if any) are best for you. Your symptoms, and physical and rectal exams, are often all that are needed to diagnose constipation. If the cause of your constipation still isn't clear, your doctor may order some of the following tests:

Fecal occult blood test: This test checks the stool for signs of blood that can't be seen with the naked eye.

Lab tests: Your doctor may check for blood count, hormones, glucose, kidney function, etc.

Sigmoidoscopy or colonoscopy: These tests use a flexible tube to look at your large intestine.

Abdominal x-ray: This test can show an obstruction in the bowels. Or, it can be done after you swallow special capsules so the doctor can measure the transit of the stool through the bowels over the span of several days (also known as a *transit study*).

Computed tomography (CT scan) or Magnetic Resonance Imaging (MRI): These studies can take pictures of your organs and your bowels so your doctor can see if there are any masses or abnormal findings.

Anorectal manometry: A thin balloon is placed in the rectum to measure the pelvic muscles and rectal sensation.

Defecography: X-ray or MRI can be used to evaluate how well you hold and empty your stool



Treatment

At Home Options

There are many ways to treat constipation starting at home. Here are some things to do that may help your constipation:

Increase your physical activity and exercise:

Healthy adults should do at least 150 minutes per week (20-30 min per day) of moderate-intensity aerobic physical activity.

Toilet training:

- Use the bathroom when you feel the urge
- Sit in a position with your knees above your hips and lean forward. The Squatty Potty is a tool that is often used to help with this position.
- Practice deep relaxation while using the bathroom
- Avoid straining when passing stool

Stay on the toilet no longer than 5-10 minutes Changing your diet:

- Add up to 25-30g of fiber daily
- Drink hot caffeinated beverage after waking up
- Eat breakfast within 1 hour of waking up
- Drink 1.5-2 L of fluid per day



A healthy breakfast full of fiber is a great way to start your day. Photo by @kevinmccutcheon via Unsplash

Medications

There are many different types of medications that can be used to treat constipation including both over-the-counter and ones that require a prescription. To decide which is best for you, consult with your doctor prior to starting any of these treatments.

Fiber (bulk-forming laxatives): Psyllium husk and methylcellulose are soluble fibers that help hold water within your stool to increase the bulk and make it easier to pass stool. They should be started slowly as they can cause bloating and cramping. Insoluble fibers such as wheat bran are not as effective.

Osmotic laxatives: These function by attracting water into the large intestine in order to loosen the stool for passage. Some options are polyethylene glycol (Miralax), lactulose, sorbitol, magnesium citrate, magnesium phosphate, magnesium hydroxide, or sodium phosphate enemas. Those with heart or kidney disease should talk to their doctor before to starting these treatments.



Stimulant laxatives: These laxatives should be used 30 minutes after meals to be most effective. They should not be used for more than 4 weeks. This type of laxative includes glycerin, biscodyl, senna, and sodium picosulfate.

Prescription medications such as linaclotide (Linzess) & lubiprostone (Amitiza) can be considered if your constipation doesn't improve with other treatments.

Biofeedback Therapy

This treatment helps those who need help to retrain the muscles that control bowel movements.

Prevention

- Make sure you are getting enough fiber in your diet (25-30g fiber daily)
- Be sure to hydrate with water or other liquids
- Exercise and maintain good physical activity levels
- Try to have a bowel movement around the same time every day

Take Home Points:

- Constipation is very common and can be prevented by taking the right steps in your diet and physical activity.
- Everyone's symptoms may vary but in general you may have constipation if you have:
 - o less than 3 bowel movements per week
 - hard or painful stools
 - o the feeling of incomplete emptying of your bowels
 - o to use special maneuvers to have a bowel movement
- Because there are many different causes of constipation, it is important to talk to your doctor about your symptoms to determine the best way to diagnose and treat constipation.

Resources:

Squatty Potty: https://www.squattypotty.com NIH-NIDDK Patient link Constipation: <u>https://www.niddk.nih.gov/health-information/digestive-diseases/constipation</u>

References:



- Bharucha AE, Dorn SD, Lembo A, Pressman A. American Gastroenterological Association medical position statement on constipation. *Gastroenterology*. 2013;144(1):211–217.
- Brandt LJ, Bjorkman D, Fennerty MB et al. Systematic review on the management of irritable bowel syndrome in North America. Am J Gastroenterol 2002;97 (11 Suppl): S7–S26.
- Brandt LJ, Prather CM, Quigley EM et al. Systematic review on the management of chronic constipation in North America. Am J Gastroenterol 2005;100 (Suppl 1): S5– S21.
- Ford AC, Moayyedi P, Lacy B, Lembo A, Saito Y, Schiller L, Soffer E, Spiegel B, Quigley EM et al. American College of Gastroenterology Monograph on the Management of Irritable Bowel Syndrome and Chronic Idiopathic Constipation. Am J Gastroenterol 2014;109:S2-S26.
- Longstreth GF, Thompson WG, Chey WD et al. Functional bowel disorders. Gastroenterology 2006;130:1480–1491.
- Muller-Lissner SA, Kamm MA, Scarpignato C, Wald A. Myths and misconceptions about chronic constipation. Am J Gastroenterol 2005; 100:232–242.
- Rao SS, Ozturk R, Laine L et al. Clinical utility of diagnostic tests for constipation in adults: a systematic review. Am J Gastroenterol 2005;100(7):1605
- Sikirov D. Comparison of straining during defecation in three positions: results and implications for human health. Dig Dis Sci 2003; 48:1201–1205.

About the Authors:



Isabel Prieto is currently a fellow at the University of South Florida in the Division of Female Pelvic Medicine & Reconstructive Surgery. She completed her medical school training at Ponce Health Sciences University in Ponce, Puerto Rico and went on to complete her residency training in Obstetrics & Gynecology at the University of South Florida.

No conflicts of interest to report.





Allison Wyman, MD, FACOG is an Assistant Professor of Female Pelvic Medicine Reconstructive Surgery, Department of Obstetrics and Gynecology at Morsani College of Medicine, University of South Florida located in Tampa, Florida. She completed her residency in Obstetrics and Gynecology at University Hospitals Case Medical Center/Case Western Reserve University School of Medicine, followed by a three-year fellowship in Female Pelvic Medicine and Reconstructive Surgery at the University of South Florida.

No conflicts of interest to report.