

Constipation

An educational handout for patients



What is constipation?

Constipation is a common bowel problem that affects millions of Americans of all ages. It is more common in women and older persons. Constipation is often defined as infrequent bowel movements, but in actual fact, many people describe it as difficult bowel movements. Constipation comprises many symptoms, not a single symptom.

What are the symptoms of constipation?

People with constipation have one or more of the following symptoms:

- need to strain when having bowel movements
- hard stools
- feeling of incomplete emptying of stool
- use of fingers to assist bowel movements
- infrequent bowel movements
- dry, hard, or large stool that hurt when they are passed
- abdominal bloating or discomfort or pain

What causes constipation?

There is wide variation in normal bowel function. Healthy people may have a bowel movement 3 times a day to 3 times a week. A disorder that affects the normal function of the colon or rectum can cause constipation.

Common causes of constipation include:

- sluggish or slow movement of stool through the colon; also known as **slow-transit constipation**.
- difficulty passing stool; some doctors call this **dyssynergic defecation**, which means the anal muscles are not coordinated to move stool.

Constipation may cause abdominal pain and bloating. When the abdominal discomfort or pain is a main feature along with irregular bowel movements, some doctors will call it **irritable bowel syndrome with constipation**.

Other issues or conditions may play a role in the cause of constipation, such as:

- some **medicines** for pain (examples: codeine, morphine), iron, antidepressants, antihistamines, some medicines for high blood pressure, and others.
- pregnancy, underactive thyroid gland, stroke, diabetes, colon cancer, painful anal problems.



What are the complications of constipation?

While troublesome, constipation usually is not life threatening. Complications include bloating, pain, gas, hemorrhoids, anal fissure (tear in the skin that lines the anus), rectal bleeding, rectal prolapse (rectal tissue pushes out through the anus), stool impaction (a mass of dry, hard stool that can't be passed), and stool leakage.

What tests are used to diagnose constipation?

Your doctor may order blood tests to check for an underactive thyroid gland or diabetes. An X-ray of the abdomen may be taken to look for retained stool in the intestine. Your doctor may do an **anoscopy**, to look at the lower few inches of the bowel, or a **colonoscopy** to look at the entire length of the colon. Or you may need a barium enema X-ray of the colon.

The following tests can identify a disorder of colonic or anorectal function that may cause constipation:

Colonic transit study: This test measures the speed at which stool moves through the colon. An X-ray is taken after several small plastic rings are swallowed. This test can also be done by swallowing a wireless capsule.

Anorectal Manometry: A probe placed in the rectum measures:

- strength of the anal sphincter muscles
- sensation or feeling in the rectum
- reflexes that control bowel movements
- movement of the rectal and anal muscles

Defecography: This test checks how the rectum is working during a bowel movement. Barium paste is placed in the rectum. The patient is asked to cough, squeeze, and push the barium out and an X-ray is taken. Defecography may also be done by magnetic resonance imaging (MRI).

Balloon expulsion test: This test measures the ability to pass a balloon or stool-like device from the rectum.

What are the initial ways to treat constipation?

The first treatment for constipation is to eat a diet high in roughage (fiber). Dietary fiber holds water, which keeps the stool soft. Fiber also adds bulk to stool. A soft, bulky stool is easier to pass. Many Americans eat only 7–10 grams of fiber a day. A low-fiber diet may cause constipation.

A daily amount of 20–25 grams of fiber is recommended. Natural sources of fiber include fresh fruits and vegetables. Dried plums (prunes) and prune juice may also be useful.

Other sources of fiber include bran, psyllium (Metamucil®, Effer-Syllium®, Perdiem Fiber®, and Fiberall® powder or wafers) and synthetic bulking agents (Citrucel®, Fiberall® chewable tablets, and Fiber One®). Take fiber supplements at mealtime with a full glass of water. These will help to restore



© Nir & Naranga



and maintain regularity. Add fiber slowly to your diet so your digestive system can adjust to the increased fiber. If you need to supplement dietary fiber, begin by taking 1 or 2 rounded teaspoons of powder 1 to 2 times a day with meals. These supplements are very safe. If you are not getting the desired results, you should increase the daily dose.

What are some steps to take every day?

Establish regular daily bowel habits; don't ignore the urge to have a bowel movement. Allow 15 minutes after breakfast or after your main meal of the day to sit on the toilet. Do not strain. You may find that elevating your feet on a footstool in front of the toilet or bending forward helps stool to pass. Daily exercise can stimulate the muscles of the colon.



Plan ahead if your daily routine is likely to change. Constipation often occurs during travel or vacation, or in stressful situations.

Avoid routine use of harsh (stimulant) laxatives that contain cascara, senna, and castor oil unless your doctor has recommended them. Prolonged use can be habit-forming and may damage your intestine.

Over-the-counter laxatives or stool softeners such as milk of magnesia, sodium docusate (Colace®), and polyethylene glycol (Miralax®) are safe and effective for occasional or mild constipation. The dose may need adjustment to find out what works best for your body. Whenever possible, avoid taking medicines that cause constipation.

What if these steps don't work?

Several medicines are available to treat constipation. These include drugs that promote better bowel movements, such as lubiprostone (Amitiza®), and drugs that speed up the movement of stool through the colon. Other medicines may ease the pain that may come with constipation. Talk to your doctor about prescription medicines.

Another approach is necessary if the constipation results from an inability to pass stool. It involves retraining the intestinal muscles using biofeedback techniques. Some patients may need to use enemas or suppositories to relieve constipation.

Does surgery have a role in the treatment of constipation?

Rarely, it is necessary to remove the colon with an abdominal operation or less invasive keyhole surgery.

Are there any new or experimental therapies?

Several new drugs, such as prucalopride, which stimulates the colon, and linaclotide, which increases fluid secretion in the intestine, are being tested for the treatment of constipation. Also, new approaches that do not use drugs are being tested.

For more information, go to the ANMS web site at www.motilitysociety.org and NIH web site at www.nih.gov.

For a list of doctors in your area who specialize in gastrointestinal motility problems, go to our web site:

www.motilitysociety.org

This patient information brochure was prepared for the American Neurogastroenterology and Motility Society (ANMS). The opinions expressed are primarily those of the authors and not ANMS. ANMS does not guarantee or endorse any product or statement in this brochure. This brochure is intended to provide general information only. This brochure is not intended to replace the knowledge or diagnosis or advice of your health care provider. Written by Satish S. C. Rao, MD, PhD and reviewed by Michael Camilleri, MD and Henry P. Parkman, MD on behalf of ANMS.

Copyright © 2011 American Neurogastroenterology and Motility Society

American Neurogastroenterology and Motility Society • ph 734-699-1130 • fax 734-699-1136 • e-mail admin@motilitysociety.org