Fecal Incontinence

National Digestive Diseases Information Clearinghouse

National Institute of Diabetes and Digestive and Kidney Diseases

NATIONAL INSTITUTES OF HEALTH

Fecal incontinence is the inability to control your bowels. When you feel the urge to have a bowel movement, you may not be able to hold it until you get to a toilet. Or stool may leak from the rectum unexpectedly, sometimes while passing gas.

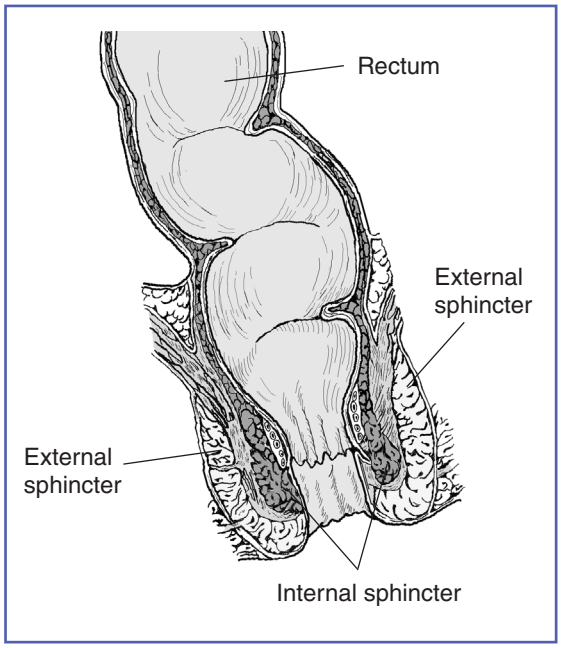
More than 5.5 million Americans have fecal incontinence. It affects people of all ages—children and adults. Fecal incontinence is more common in women and older adults, but it is not a normal part of aging.

Loss of bowel control can be devastating. People who have fecal incontinence may feel ashamed, embarrassed, or humiliated. Some don't want to leave the house out of fear they might have an accident in public. Most try to hide the problem as long as possible, so they withdraw from friends and family. The social isolation is unfortunate but may be reduced with treatment that improves bowel control and makes incontinence easier to manage.

What causes fecal incontinence?

Fecal incontinence can have several causes:

- constipation
- damage to the anal sphincter muscles
- damage to the nerves of the anal sphincter muscles or the rectum
- loss of storage capacity in the rectum
- diarrhea
- pelvic floor dysfunction



Anatomy of the rectum and anus.

Constipation

Constipation is one of the most common causes of fecal incontinence. Constipation causes large, hard stools to become lodged in the rectum. Watery stool can then leak out around the hardened stool. Constipation also causes the muscles of the rectum to stretch, which weakens the muscles so they can't hold stool in the rectum long enough for a person to reach a bathroom.

Muscle Damage

Fecal incontinence can be caused by injury to one or both of the ring-like muscles at the end of the rectum called the anal internal and external sphincters. The sphincters keep stool inside. When damaged, the

U.S. Department of Health and Human Services

muscles aren't strong enough to do their job and stool can leak out. In women, the damage often happens when giving birth. The risk of injury is greatest if the doctor uses forceps to help deliver the baby or performs an episiotomy, which is a cut in the vaginal area to prevent it from tearing during birth. Hemorrhoid surgery can also damage the sphincters.

Nerve Damage

Fecal incontinence can be caused by damage to the nerves that control the anal sphincters or the nerves that sense stool in the rectum. If the nerves that control the sphincters are injured, the muscles don't work properly and incontinence can occur. If the sensory nerves are damaged, they don't sense that stool is in the rectum so you won't feel the need to use the bathroom until stool has leaked out. Nerve damage can be caused by childbirth, a long-term habit of straining to pass stool, stroke, physical disability due to injury, and diseases that affect the nerves such as diabetes and multiple sclerosis.

Loss of Storage Capacity

Normally, the rectum stretches to hold stool until you can get to a bathroom. But rectal surgery, radiation treatment, and inflammatory bowel disease can cause scarring that makes the walls of the rectum stiff and less elastic. The rectum then can't stretch as much to hold stool and fecal incontinence results. Inflammatory bowel disease also can irritate rectal walls, making them unable to contain stool.

Diarrhea

Diarrhea, or loose stool, is more difficult to control than solid stool because with diarrhea the rectum fills with stool at a faster rate. Even people who don't have fecal incontinence can leak stool when they have diarrhea.

Pelvic Floor Dysfunction

Abnormalities of the pelvic floor muscles and nerves can cause fecal incontinence. Examples include

- impaired ability to sense stool in the rectum
- decreased ability to contract muscles in the anal canal to defecate
- dropping down of the rectum, a condition called rectal prolapse
- protrusion of the rectum through the vagina, a condition called rectocele
- general weakness and sagging of the pelvic floor

Childbirth is often the cause of pelvic floor dysfunction, and incontinence usually doesn't appear until the midforties or later.

How is fecal incontinence diagnosed?

Doctors understand the feelings associated with fecal incontinence, so you can talk freely with your doctor. The doctor will ask some health-related questions, do a physical exam, and possibly run some medical tests. Your doctor may refer you to a specialist, such as a gastroenterologist, proctologist, or colorectal surgeon.

The doctor or specialist may conduct one or more tests:

- Anal manometry checks the tightness of the anal sphincter and its ability to respond to signals, as well as the sensitivity and function of the rectum. Magnetic resonance imaging (MRI) is sometimes used to evaluate the sphincter.
- Anorectal ultrasonography evaluates the structure of the anal sphincters.
- Proctography, also known as defecography, shows how much stool the rectum can hold, how well the rectum holds it, and how well the rectum can evacuate it.
- Proctosigmoidoscopy allows doctors to look inside the rectum and lower colon for signs of disease or other problems that can cause fecal incontinence, such as inflammation, tumors, or scar tissue.
- Anal electromyography tests for nerve damage, which is often associated with injury during childbirth.

How is fecal incontinence treated?

Effective treatments are available for fecal incontinence and can improve or restore bowel control. The type of treatment depends on the cause and severity of fecal incontinence; it may include dietary changes, medication, bowel training, or surgery. More than one treatment may be necessary for successful control because continence is a complicated chain of events.

Dietary Changes

Food affects the consistency of stool and how quickly it passes through the digestive system. If your stools are hard to control because they are watery, you may find that eating high-fiber foods adds bulk and makes stool easier to control. But people with well-formed stools may find that high-fiber foods act as a laxative and contribute to the problem. Foods and drinks that may make the problem worse are those containing caffeine—like coffee, tea, or chocolate—which relaxes the internal anal sphincter muscles.

You can adjust what and how you eat to help manage fecal incontinence.

- **Keep a food diary.** List what you eat, how much you eat, and when you have an incontinent episode. After a few days, you may begin to see a pattern involving certain foods and incontinence. After you identify foods that seem to cause problems, cut back on them and see whether incontinence improves. Foods and drinks that typically cause diarrhea, and so should probably be avoided, include
  - drinks and foods containing caffeine
  - cured or smoked meat such as sausage, ham, or turkey
  - spicy foods
  - alcoholic beverages
  - dairy products such as milk, cheese, or ice cream
  - fruits such as apples, peaches, or pears
  - fatty and greasy foods
  - sweeteners, such as sorbitol, xylitol, mannitol, and fructose, which are found in diet drinks, sugarless gum and candy, chocolate, and fruit juices
- **Eat small meals more frequently.** In some people, large meals cause bowel contractions that lead to diarrhea. You can still eat the same amount of food in a day, but space it out by eating several small meals.
- **Eat and drink at different times.** Liquid helps move food through the digestive system. So if you want to slow things down, drink something half an hour before or after meals, but not with meals.
- **Eat the right amount of fiber.** For many people, fiber makes stool soft, formed, and easier to control. Fiber is found in fruits, vegetables, and grains, like those listed on page 5. You need to eat 20 to 30 grams of fiber a day, but add it to your diet slowly so your body can adjust. Too much fiber all at once can cause bloating, gas, or even diarrhea. Also, too much insoluble, or undigestible, fiber can contribute to diarrhea. If you find that eating more fiber makes your diarrhea worse, try cutting back to two servings each of fruits and vegetables and removing skins and seeds from your food.

What Foods Have Fiber?

Examples of foods that have fiber include

Breads, cereals, and beans	Fiber
1/2 cup of black-eyed peas, cooked	4.0 grams
1/2 cup of kidney beans, cooked	5.7 grams
1/2 cup of lima beans, cooked	4.5 grams
Whole-grain cereal, cold	
• 1/2 cup of All-Bran	9.6 grams
• 3/4 cup of Total	2.4 grams
• 3/4 cup of Post Bran Flakes	5.3 grams
1 packet of whole-grain cereal, hot (oatmeal, Wheatena)	3.0 grams
1 slice of whole-wheat or multigrain bread	1.7 grams
Fruits	
1 medium apple	3.3 grams
1 medium peach	1.8 grams
1/2 cup of raspberries	4.0 grams
1 medium tangerine	1.9 grams
Vegetables	
1 cup of acorn squash, raw	2.1 grams
1 medium stalk of broccoli, raw	3.9 grams
5 brussels sprouts, raw	3.6 grams
1 cup of cabbage, raw	2.0 grams
1 medium carrot, raw	1.8 grams
1 cup of cauliflower, raw	2.5 grams
1 cup of spinach, cooked	4.3 grams
1 cup of zucchini, raw	1.4 grams

Source: USDA/ARS Nutrient Data Laboratory

- **Eat foods that make stool bulkier.** Foods that contain soluble, or digestible, fiber slow the emptying of the bowels, including bananas, rice, tapioca, bread, potatoes, applesauce, cheese, smooth peanut butter, yogurt, pasta, and oatmeal.
- **Get plenty to drink.** Drink eight 8-ounce glasses of liquid a day to help prevent dehydration and keep stool soft and formed. Water is a good choice. Avoid drinks with caffeine, alcohol, milk, or carbonation if you find they trigger diarrhea.

Over time, diarrhea can keep your body from absorbing vitamins and minerals. Ask your doctor if you need a vitamin supplement.

Medication

If diarrhea is causing your incontinence, medication may help. Sometimes doctors recommend using bulk laxatives to help people develop a more regular bowel pattern. Or the doctor may prescribe antidiarrheal medicines such as loperamide or diphenoxylate to slow down the bowel and help control the problem.

Bowel Training

Bowel training helps some people relearn how to control their bowel movements. In some cases, bowel training involves strengthening muscles; in others, it means training the bowels to empty at a specific time of day.

- **Use biofeedback.** Biofeedback is a way to strengthen and coordinate the muscles and has helped some people with incontinence. Special computer equipment measures muscle contractions while you do exercises—called Kegels—to strengthen the rectum and improve rectal sensation. These exercises work muscles in the pelvic floor, including those involved in controlling stool. Computer feedback about how the muscles are working shows whether you're doing the exercises correctly and whether the muscles are getting stronger. Whether biofeedback will work for you depends on the cause of your fecal incontinence, how severe the muscle damage is, and your ability to do the exercises.
- **Develop a regular pattern of bowel movements.** Some people—particularly those whose fecal incontinence is caused by constipation—achieve bowel control by training themselves to have bowel movements at specific times during the day, such as after every meal. The key to this approach is persistence—it may take awhile to develop a regular pattern. Try not to get frustrated or give up if it doesn't work right away.

Surgery

Surgery to repair the anal sphincter may be an option for people who have not responded to dietary treatment and biofeedback and for those whose fecal incontinence is caused by injury to the pelvic floor, anal canal, or anal sphincter. People who have severe fecal incontinence that doesn't respond to other treatments may benefit from injection of bulking agents in the anus or nerve stimulation in the lower pelvic area. A colostomy may be indicated for people with severe fecal incontinence who haven't been helped by other procedures. This procedure involves disconnecting the colon and bringing one end through an opening in the abdomen—called a stoma—through which stool leaves the body and is collected in a pouch. The colostomy may be temporary or permanent.

What to Do About Anal Discomfort

The skin around the anus is delicate and sensitive. Constipation and diarrhea or contact between skin and stool can cause pain or itching. Here's what you can do to relieve discomfort:

- Wash the area with water, but not soap, after a bowel movement. Soap can dry out the skin, making discomfort worse. If possible, wash in the shower with lukewarm water or use a sitz bath. Or try a no-rinse skin cleanser. Try not to use toilet paper to clean up—rubbing with dry toilet paper will only further irritate the skin. Premoistened, alcohol-free towelettes are a better choice.
- Let the area air dry after washing. If you don't have time, gently pat yourself dry with a lint-free cloth.
- Use a moisture barrier cream, which is a protective cream to help prevent skin irritation from direct contact with stool. You should first clean the area well to avoid trapping bacteria that could cause further problems. However, talk with your health care professional before you try anal ointments and creams because some have ingredients that can be irritating. Your health care professional can recommend an appropriate cream or ointment.
- Try using nonmedicated talcum powder or cornstarch to relieve anal discomfort.
- Wear cotton underwear and loose clothes that "breathe." Tight clothes that block air can worsen anal problems. Change soiled underwear as soon as possible.
- If you use pads or disposable undergarments, make sure they have an absorbent wicking layer on top. Products with a wicking layer protect the skin by pulling stool and moisture away from the skin and into the pad.

How can I cope with my feelings about fecal incontinence?

Because fecal incontinence can cause distress in the form of embarrassment, fear, and loneliness, taking steps to deal with it is important. Treatment can improve your life and help you feel better about yourself. If you haven't been to a doctor yet, make an appointment. Also, consider contacting the organizations listed at the end of this fact sheet. Such groups can help you find information and support and, in some cases, referrals to doctors who specialize in treating fecal incontinence.

Everyday Practical Tips

- Take a backpack or tote bag containing cleanup supplies and a change of clothing with you everywhere.
- Locate public restrooms before you need them.
- Use the toilet before leaving home.
- If you think an episode is likely, wear disposable undergarments or sanitary pads.
- If episodes are frequent, use oral fecal deodorants to add to your comfort level.

What if my child has fecal incontinence?

If your child has fecal incontinence, he or she needs to see a doctor to determine the cause and treatment. Fecal incontinence can occur in children because of a birth defect or disease, but in most cases it's because of chronic constipation.

Potty-trained children often get constipated simply because they refuse to go to the bathroom. The problem might stem from embarrassment over using a public toilet or unwillingness to stop playing and go to the bathroom. But if the child continues to hold in stool, the feces will accumulate and harden in the rectum. The child might have a stomachache and not eat much, despite being hungry. And it can be painful when he or she eventually does pass the stool, which can lead to fear of having another bowel movement.

Children who are constipated may soil their underpants. Soiling happens when liquid stool from farther up in the bowel seeps past the hard stool in the rectum and leaks out. Soiling is a sign of fecal incontinence. Try to remember that your child cannot control the liquid stool and may not even know it has passed.

Why Children Get Constipated

- They were potty-trained too early.
- They refuse to have a bowel movement because of painful ones in the past, embarrassment, stubbornness, or even a dislike of public bathrooms.
- They are in an unfamiliar place.
- They are reacting to family stress such as a new sibling or their parents' divorce.
- They can't get to a bathroom when they need to go so they hold it. As the rectum fills with stool, the child may lose the urge to go and become constipated as the stool dries and hardens.

The first step in treating the problem is passing the built-up stool. The doctor may prescribe one or more enemas or a drink that helps clean out the bowel, such as magnesium citrate, mineral oil, or polyethylene glycol.

The next step is preventing future constipation. You will play a big role in this part of your child's treatment. You may need to teach your child bowel habits, which means training your child to have regular bowel movements. Experts recommend that parents of children with poor bowel habits encourage them to sit on the toilet four times each day—after meals and at bedtime—for 5 minutes. Give rewards for bowel movements and do not punish children for incontinent episodes.

Some changes in eating habits may also be necessary. Your child should eat more high-fiber foods to soften stool, avoid dairy products if they cause constipation, and drink plenty of fluids every day, including water and juices such as prune, grape, or apricot, which help prevent constipation. If necessary, the doctor may prescribe laxatives.

It may take several months to break the pattern of withholding stool and constipation, and episodes may occur again in the future. The key is to pay close attention to your child's bowel habits. Some warning signs to watch for include

- pain with bowel movements
- hard stool
- constipation
- refusal to go to the bathroom
- soiled underwear
- signs of holding back a bowel movement, such as squatting, crossing the legs, or rocking back and forth

Hope Through Research

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) conducts and supports research into many kinds of digestive disorders, including fecal incontinence. In addition, researchers throughout the country are working to find possible solutions to the problem of fecal incontinence. Some studies address fecal incontinence due to anal sphincter damage and combine surgical procedures with electrical stimulation.

The U.S. Government does not endorse or favor any specific commercial product or company. Trade, proprietary, or company names appearing in this document are used only because they are considered necessary in the context of the information provided. If a product is not mentioned, the omission does not mean or imply that the product is unsatisfactory.

This publication may contain information about medications used to treat a health condition. When this publication was prepared, the NIDDK included the most current information available. Occasionally, new information about medication is released. For updates or for questions about any medications, please contact the U.S. Food and Drug Administration at 1–888–INFO–FDA (463–6332), a toll-free call, or visit their website at *www.fda.gov*. Consult your doctor for more information.

For More Information

American Academy of Family Physicians
P.O. Box 11210
Shawnee Mission, KS 66207–1210
Phone: 1–800–274–2237 or 913–906–6000
Email: fp@aafp.org
Internet: www.aafp.org

International Foundation for Functional Gastrointestinal Disorders
P.O. Box 170864
Milwaukee, WI 53217–8076
Phone: 1–888–964–2001 or 414–964–1799
Fax: 414–964–7176
Email: iffgd@iffgd.org
Internet: www.iffgd.org

American College of Gastroenterology
P.O. Box 342260
Bethesda, MD 20827–2260
Phone: 301–263–9000
Internet: www.acg.gi.org

You may also find additional information on this topic using the following databases:

The NIDDK Reference Collection is a collection of thousands of materials produced for patients and health care professionals, including fact sheets, brochures, and audiovisual materials. Visit *www.catalog.niddk.nih.gov/resources*.

MedlinePlus brings together a wealth of information from the National Library of Medicine, the National Institutes of Health, and other government agencies and health-related organizations. MedlinePlus offers easy access to medical journal articles, a medical dictionary and medical encyclopedia, health information in Spanish, hospital and physician directories, drug and supplement lists, interactive patient tutorials, links to hundreds of clinical trials, and the latest health news. Visit *www.medlineplus.gov*.

National Digestive Diseases Information Clearinghouse

2 Information Way
Bethesda, MD 20892–3570
Phone: 1–800–891–5389
Fax: 703–738–4929
Email: nddic@info.niddk.nih.gov
Internet: www.digestive.niddk.nih.gov

The National Digestive Diseases Information Clearinghouse (NDDIC) is a service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The NIDDK is part of the National Institutes of Health of the U.S. Department of Health and Human Services. Established in 1980, the Clearinghouse provides information about digestive diseases to people with digestive disorders and to their families, health care professionals, and the public. The NDDIC answers inquiries, develops and distributes publications, and works closely with professional and patient organizations and Government agencies to coordinate resources about digestive diseases.

Publications produced by the Clearinghouse are carefully reviewed by both NIDDK scientists and outside experts. This fact sheet was originally reviewed by Arnold Wald, M.D., University of Pittsburgh Medical Center; Paul Hyman, M.D., University of Kansas Medical Center; and Diane Darrell, A.P.R.N., B.C., Research College of Nursing, Kansas City, MO.

This fact sheet is also available at *www.digestive.niddk.nih.gov*.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health

NIH Publication No. 07–4866
July 2007