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 can get to a toilet. Or stool may leak from the rectum unexpectedly.

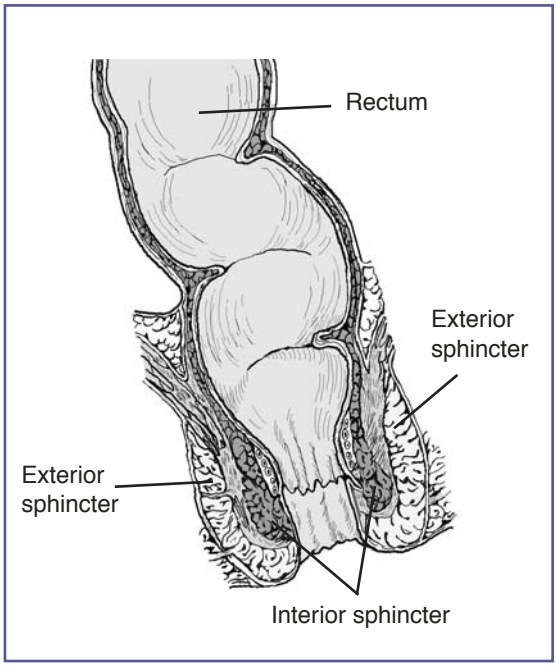
More than 6.5 million Americans have fecal incontinence. It affects people of all ages—children as well as adults. Fecal incontinence is more common in women than in men and more common in older adults than in younger ones. It is not, however, a normal part of aging.

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 because treatment can improve bowel control and make incontinence easier to manage.

Causes

Fecal incontinence can have several causes:

- 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.

Muscle Damage

Fecal incontinence is most often caused by injury to one or both of the ring-like muscles at the end of the rectum called the anal internal and/or external sphincters. The sphincters keep stool inside. When damaged, the 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 does an episiotomy, which is a cut in the vaginal area to prevent it from tearing during birth. Hemorrhoid surgery can damage the sphincters as well.

Nerve Damage

Fecal incontinence can also be caused by damage to the nerves that control the anal sphincters or to the nerves that sense stool in the rectum. If the nerves that control the sphincters are injured, the muscle doesn't work properly and incontinence can occur. If the sensory nerves are damaged, they don't sense that stool is in the rectum. You then 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, 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 and can't hold stool, and fecal incontinence results. Inflammatory bowel disease also can make rectal walls very irritated and thereby unable to contain stool.

Diarrhea

Diarrhea, or loose stool, is more difficult to control than solid stool that is formed. Even people who don't have fecal incontinence can have an accident when they have diarrhea.

Pelvic Floor Dysfunction

Abnormalities of the pelvic floor can lead to fecal incontinence. Examples of some abnormalities are decreased perception of rectal sensation, decreased anal canal pressures, decreased squeeze pressure of the anal canal, impaired anal sensation, a dropping down of the rectum (rectal prolapse), protrusion of the rectum through the vagina (rectocele), and/or generalized weakness and sagging of the pelvic floor. Often the cause of pelvic floor dysfunction is childbirth, and incontinence doesn't show up until the midforties or later.

Diagnosis

The doctor will ask health-related questions and do a physical exam and possibly other medical 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.
- 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 the stool.
- Proctosigmoidoscopy allows doctors to look inside the rectum for signs of disease or other problems that could cause fecal incontinence, such as inflammation, tumors, or scar tissue.
- Anal electromyography tests for nerve damage, which is often associated with obstetric injury.

Treatment

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 since continence is a complicated chain of events.

Dietary Changes

Food affects the consistency of stool and how quickly it passes through the digestive system. One way to help control fecal incontinence in some persons is to eat foods that add bulk to stool, making it less watery and easier to control. Also, avoid foods that contribute to the problem. They include foods and drinks containing caffeine, like coffee, tea, and chocolate, which relax the internal anal sphincter muscle. Another approach is to eat foods low in fiber to decrease the work of the anal sphincters. Fruit can act as a natural laxative and should be eaten sparingly.

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 between certain foods and incontinence. After you identify foods that seem to cause problems, cut back on them and see whether incontinence improves. Foods that typically cause diarrhea, and so should probably be avoided, include
  - caffeine
  - cured or smoked meat like sausage, ham, or turkey
  - spicy foods
  - alcohol
  - dairy products like milk, cheese, and ice cream
  - fruits like apples, peaches, or pears
  - fatty and greasy foods
  - sweeteners, like sorbitol, xylitol, mannitol, and fructose, which are found in diet drinks, sugarless gum and candy, chocolate, and fruit juices
- **Eat smaller 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 the meals.
- **Eat more fiber.** Fiber makes stool soft, formed, and easier to control. Fiber is found in fruits, vegetables, and grains, like those listed in the box on page 4. You'll 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. So 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.
- **Eat foods that make stool bulkier.** Foods that contain soluble, or digestible, fiber slow the emptying of the bowels. Examples are bananas, rice, tapioca, bread, potatoes, apple-

What Foods Have Fiber?

Examples of foods that have fiber include

Breads, cereals, and beans	**fiber**
½ cup of black-eyed peas, cooked	4 grams
½ cup of kidney beans, cooked	5.5 grams
½ cup of lima beans, cooked	4.5 grams
Whole-grain cereal, cold	
• ½ cup of All-Bran	10 grams
• ¾ cup of Total	3 grams
• ¾ cup of Post Bran Flakes	5 grams
1 packet of whole-grain cereal, hot (oatmeal, Wheatena)	3 grams
1 slice of whole-wheat or multigrain bread	3 grams
Fruits	
1 medium apple	4 grams
1 medium peach	2 grams
½ cup of raspberries	4 grams
1 medium tangerine	3 grams
Vegetables	
1 cup of acorn squash, raw	2 grams
1 medium stalk of broccoli, raw	4 grams
5 brussels sprouts, raw	3 grams
1 cup of cabbage, raw	2 grams
1 medium carrot, raw	2 grams
1 cup of cauliflower, raw	2 grams
1 cup of spinach, cooked	2 grams
1 cup of zucchini, raw	2 grams

Source: USDA/ARS Nutrient Data Laboratory

sauce, cheese, smooth peanut butter, yogurt, pasta, and oatmeal.

- **Get plenty to drink.** You need to drink eight 8-ounce glasses of liquid a day to help prevent dehydration and to keep stool soft and formed. Water is a good choice, but avoid drinks with caffeine, alcohol, milk, or carbonation if you find that they trigger diarrhea.

Over time, diarrhea can rob you of vitamins and minerals. Ask your doctor if you need a vitamin supplement.

Medication

If diarrhea is causing the incontinence, medication may help. Sometimes doctors recommend using bulk laxatives to help people develop a more regular bowel pattern. Or the doctor may prescribe anti-diarrheal 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 bowels. In some cases, it 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. Special computer equipment measures muscle contractions as you do exercises—called Kegel exercises—to strengthen the rectum. 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 a while to develop a regular pattern. Try not to get frustrated or give up if it doesn't work right away.

Surgery

Surgery may be an option for people whose fecal incontinence is caused by injury to the pelvic floor, anal canal, or anal sphincter. Various procedures can be done, from simple ones like repairing damaged areas, to complex ones like attaching an artificial anal sphincter or replacing anal muscle with muscle from the leg or forearm. People who have severe fecal incontinence that doesn't respond to other treatments may decide to have a colostomy, which involves removing a portion of the bowel. The remaining part is then either attached to the anus if it still works properly, or to a hole in the abdomen called a stoma, through which stool leaves the body and is collected in a pouch.

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 irritate the skin more. 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. However, talk to your health care professional before you try anal ointments and creams because some have ingredients that can be irritating. Also, you should clean the area well first to avoid trapping bacteria that could cause further problems. Your health care professional can recommend an appropriate cream or ointment.
- Try using nonmedicated talcum powder or corn starch 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 diapers, 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.

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 so you know where to go.
- Use the toilet before heading out.
- 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.

Emotional Considerations

Because fecal incontinence can cause distress in the form of embarrassment, fear, and loneliness, taking steps to deal with it is important. Treatment can help 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 on page 7. Such groups can help you find information and support and, in some cases, referrals to doctors who specialize in treating fecal incontinence.

Fecal Incontinence in Children

If your child has fecal incontinence, you need 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 when he or she eventually does pass the stool, it can be painful, which can lead to fear of having a bowel movement.

A child who is constipated may soil his or her 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 did not do this on purpose. He or she cannot control the liquid stool and may not even know it has passed.

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, like 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 their child to sit on the toilet four times each day (after meals and at bedtime) for 5 minutes. Give rewards for bowel movements and remember that it is important not to punish your child for incontinent episodes.

Some changes in eating habits may be necessary too. 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 like 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 underpants
- signs of holding back a bowel movement, like squatting, crossing the legs, or rocking back and forth

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 like 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.

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 hard 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.

For More Information

You can get information about fecal incontinence, as well as support, from

American Academy of Family Physicians
11400 Tomahawk Creek Parkway
Leawood, KS 66211–2672
Phone: (913) 906–6000
Email: fp@aafp.org
Internet: www.aafp.org

International Foundation for Functional Gastrointestinal Disorders
P.O. Box 17864
Milwaukee, WI 53217
Phone: 1–888–964–2001 or (414) 964–1799
Fax: (414) 964–7176
Email: iffgd@iffgd.org
Internet: www.iffgd.org

National Digestive Diseases Information Clearinghouse

2 Information Way
Bethesda, MD 20892–3570
Phone: 1–800–891–5389 or (301) 654–3810
Fax: (301) 907–8906
Email: nddic@info.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 under 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. 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 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.niddk.nih.gov* under "Health Information."

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

NIH Publication No. 01–4866
September 2001