



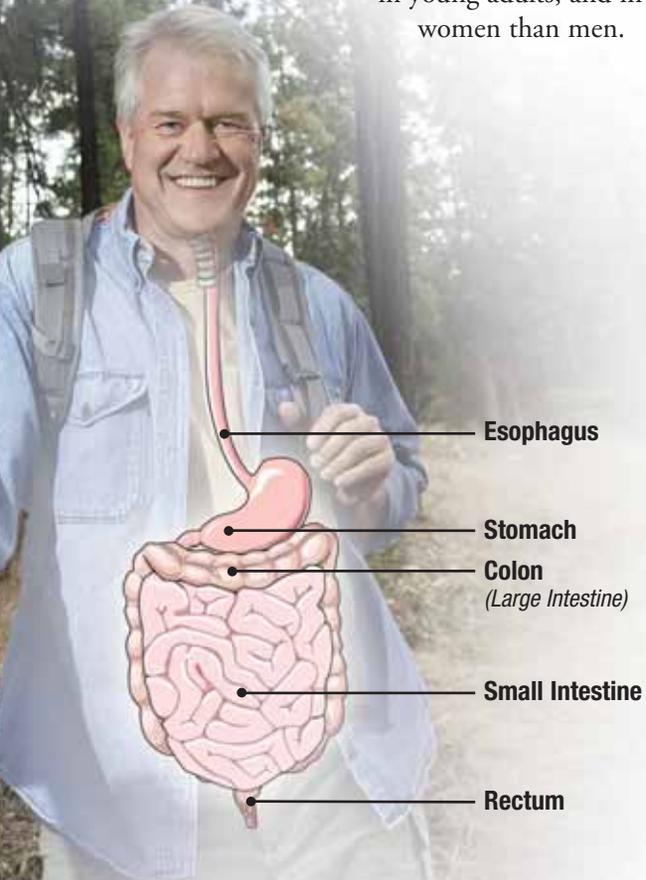
Chronic Constipation



Bowel function is not a topic for polite conversation. Indeed, when your function is normal, there's no need to talk about it. But millions of Americans are troubled by constipation, and they should talk about it—not to their neighbors, but to their doctors. Constipation is a medical problem, and your doctor can guide you to a program of diet, exercise, and medication to bring relief.

What is Constipation?

Although estimates vary widely, up to 28% of adult Americans may suffer from constipation. The problem is more common in the elderly than in young adults, and in women than men.



Is your constipation periodic (occasional) or chronic? Periodic constipation occurs infrequently and can usually be relieved by diet and exercise. Chronic constipation is more serious and may require medical attention. If you suffer from any two of these symptoms for a period of at least 3 months, you may have chronic constipation:

Hard or lumpy stools	Frequent use of enemas, laxatives, or suppositories
Fewer than three bowel movements in a week	
Difficulty passing stools	Feeling like your bowel is never totally empty
Straining	Feeling like there is something blocking your bowel
Abdominal discomfort and bloating	

The good news is that chronic constipation can be treated. Prescription medications and lifestyle changes can help. Most importantly, talk to your doctor, and speak openly about your symptoms of constipation.

Normal Intestinal Function

Food and fluids start their long tour through your intestinal tract by passing rapidly through your mouth and food pipe (*esophagus*) into your stomach. The stomach muscles relax to accommodate your meal, but within about 20 minutes fluids move into the *small intestine* and solids follow a few minutes later.

Although the process starts in the mouth and stomach, most of the digestive process occurs in the small intestine. As nutrients and fluids are absorbed into the bloodstream, the intestinal

For more information about chronic constipation from Harvard Health Publications, go to www.patientedu.org/constipation.

contents become smaller and denser. The wall of the intestinal tract contains muscles that contract rhythmically to propel the intestinal contents onward to the large intestine, or *colon*.

The colon absorbs some additional fluid, and the millions of bacteria that live there give the stool its characteristic color and odor. Involuntary rhythmic muscular contractions propel the intestinal contents through the 4 1/2 foot long colon. The time it takes varies enormously; in healthy people with good diets, 18 to 36 hours is about average.

The last step is the rectum. The colon can store a large amount of fecal material. As the rectum fills up, it signals the need to have a bowel movement. To accomplish that task, the two rings of muscles that guard the anal canal to keep stools from leak-

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ing out have to relax. At the same time, the muscles of the lower colon have to contract to propel the stool outward, and voluntary contractions of the abdominal muscles (“straining”) increase pressure to aid the process.

The Causes of Constipation

Most cases of chronic constipation are caused by lifestyle factors, particularly inadequate dietary fiber and exercise. But in some cases, underlying problems slow bowel function (see Table 1 below).

Table 1: Causes of Constipation

Low-fiber diet You should consume 25 to 30 grams of fiber every day to soften the stool and encourage proper bowel function

Not enough liquids To help prevent stools from becoming dry and hard, your daily fluid intake should be equivalent to 6 to 8 glasses of water

Lack of exercise Regular exercise is necessary to strengthen the lower colon muscles and promote normal muscle contractions in the bowel wall

Ignoring the urge Disregarding the urge to move the bowel can not only cause constipation, but may also cause you to stop feeling the urge to go

Change in routine Changes in diet and the normal time of meals, as well as limited access to rest-rooms can cause you to become constipated

Overuse of laxatives Long-term use of over-the-counter laxatives can teach your bowel to rely on these medicines, and can eventually cause constipation rather than relieve it

Medication side effects Constipation can be a side effect of many different prescription and non-prescription medications, including supplements and vitamins

Local pain or discomfort Pain around the anus, such as an anal fissure or hemorrhoids, can make bowel movements painful or uncomfortable; this may cause you to resist the urge to have a bowel movement

Pregnancy Hormonal changes or added pressure on the intestines from the uterus can affect bowels

Bowel diseases Including tumors, diverticulosis, irritable bowel syndrome (IBS), inflammatory bowel disease, and strictures (scarring)

Other medical conditions Including diabetes, an under-active thyroid gland, multiple sclerosis, Parkinson’s disease, spinal cord disorders, depression, anxiety, low potassium levels, and high calcium levels

Evaluation

Your doctor will review your general health, your medications and supplements, and your family history, with an emphasis on bowel disease. A physical exam may reveal clues; abdominal and rectal exams are particularly important. But in most cases, a detailed review of your diet, exercise, and bowel habits will provide the most important information.

Although there are no specific lab tests for constipation, your doctor may check for blood in your stool and for anemia, diabetes, thyroid abnormalities, and blood potassium and calcium levels.

Warning symptoms should prompt more intensive testing. Table 2 lists some red flags.

Patients with constipation warning signs may benefit from additional tests, such as *colonoscopy*, *sigmoidoscopy*, or *barium x-rays*. And even without warning symptoms, everyone over 50 should have regular screening tests for colon cancer to detect polyps and tumors long before they cause constipation.

Table 2: Constipation Warning Signs

• New constipation or sudden change in bowel function	• Fever
	• Anemia
• Vomiting, abdominal distention, abdominal pain	• Rectal pain
• Intestinal bleeding	• Family history of colon cancer or inflammatory bowel disease
• Weight loss	

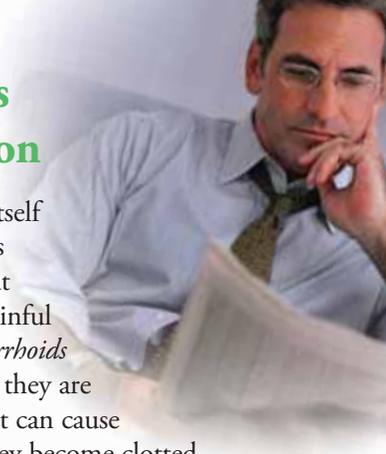
Consequences of Constipation

Chronic constipation itself does not lead to serious medical conditions. But straining can trigger painful rectal problems. *Hemorrhoids* are the most common; they are swollen rectal veins that can cause rectal bleeding or, if they become clotted (*thrombosed*), severe rectal pain. The combination of straining and hard stools can tear rectal tissue, producing *anal fissures* that are so painful that patients avoid moving their bowels. In elderly people, hard, dry stools can become *impacted* (trapped) in the rectum, preventing normal bowel movements. Straining can also push rectal tissue out through the anus; these *rectal prolapses* may require surgical repair. And the low-fiber diets typically associated with chronic constipation are linked with *diverticulosis* and *diverticulitis*, common colon disorders that can cause bleeding or inflammation with pain and fever.

Even without any complications, the discomfort associated with chronic constipation provides good reason to seek treatment.

Treating Constipation: Goals

The goal of treatment is not regularity but comfort. Success is not judged by the number of bowel movements you have in a week, but by the ease and comfort of bowel function. To reach that goal, every patient with chronic constipation should make lifestyle changes to help. And if more help is needed, your doctor can help you find appropriate medications.



Preventing and Treating Constipation: *Lifestyle*

Lifestyle changes can prevent or treat many cases of chronic constipation. Four things are important:



Dietary Fiber. Dietary fiber is a mix of complex carbohydrates found in the bran of whole grains, the leaves and stems of plants, and in nuts, seeds, fruits and vegetables—but not in any animal foods.

By making the stools bulkier, softer, and easier to pass, fiber protects against constipation and other intestinal disorders. By producing a sensation of fullness and by lowering blood sugar and cholesterol levels, fiber also helps improve general health (Table 3).

Table 3:
Dietary Fiber Can Benefit These Conditions

Intestinal Disorders	Other Disorders
• Constipation	• Heart disease
• Hemorrhoids	• Obesity
• Diverticulosis	• Diabetes
• IBS	• Gallstones
• Colon cancer*	

The Institute of Medicine recommends 38 grams of fiber a day for men younger than 50 and 30 grams a day for older men; for women, the recommended amount is 30 grams a day before age 50 and 21 grams a day thereafter. Most Americans get much, much less. See page 10 for a listing of the fiber content of some foods and supplements.

* The role of dietary fiber in colon cancer is not yet well understood



Exercise. Exercise speeds the transportation of waste through the intestinal tract. It's one of the reasons people who exercise regularly enjoy substantial protection against colon cancer. And like dietary fiber, exercise has many

benefits beyond constipation. It reduces the risk of heart disease, stroke, high blood pressure, diabetes, obesity, and many other problems.

For the sake of your heart and your health, as well as your bowel function, you should exercise nearly every day. A 30-minute walk is a great way to start.



Fluids. Doctors no longer believe that everyone needs 8 glasses of water a day. But everyone with chronic constipation should have 6 to 8 glasses of fluids a day.



Establish a good routine.

Always try to “heed the call” and head for the bathroom whenever you feel the urge to move your bowels. Holding back gives your gut the wrong message. In addition, set aside some time to sit on

the toilet every day. Eating stimulates the colon, so a few minutes after a meal may be best. Since coffee also stimulates the colon, many people find after breakfast best—particularly if they've been smart enough to start the day with bran cereal.

Table 4: Examples of High-Fiber Foods		
Food	Serving Size	Fiber Content*
Cereals		
All Bran Extra Fiber	1/2 cup	13
Fiber One	1/2 cup	13
All Bran	1/2 cup	9
Shredded Wheat	1 cup	6
Oatmeal	1 cup (cooked)	4
Grains		
Barley	1 cup (cooked)	6
Brown rice	1 cup (cooked)	4
Baked Goods		
Rye Krisp	1 square	5
Bran muffins	1	2
Whole wheat bread	1 slice	2
Legumes		
Baked beans	1 cup (canned)	10
Kidney beans	1/2 cup (cooked)	7
Lima beans	1/2 cup (cooked)	5
Greens		
Spinach	1 cup (cooked)	4
Vegetables		
Brussels sprouts	1/2 cup	4
Broccoli	1/2 cup	3
Carrot	1 medium	2
Tomato	1 medium	2
String beans	1/2 cup	2
Fruit		
Apple (with skin)	1 medium	4
Pear (with skin)	1 medium	4
Banana	1 medium	3
Dried Fruits		
Prunes	6	8
Raisins	1/4 cup	3
Nuts and Seeds		
Peanuts	10 nuts	1
Popcorn	1 cup	1
Supplements		
Psyllium	1 tsp or 1 wafer	3-4
Wheat bran	1 oz	3
Wheat germ	1 oz	2
Methyl cellulose	1 tbsp	2

*to nearest gram

Treating Constipation: Medications

Although it may be difficult to talk to your doctor about constipation, it is important since you may need a prescription medication to provide relief.

When combined with lifestyle changes, medications prescribed by your doctor can help stools move more easily through your intestines. Some prescription medicines draw fluids into the intestine, making the stool softer and easier to pass, while other medications help speed up slowed muscle contractions in your intestines.

If you are experiencing symptoms of chronic constipation, be sure to talk with your doctor about what medications may be right for you.

Conquering Constipation

In healthy people, bowel function should be regular, painless, and natural. Many people in industrialized societies suffer from chronic constipation and its complications because they have gotten away from the natural lifestyle. Getting back to basics with a high-fiber diet and regular exercise can restore natural bowel function for many patients—and when more help is needed, doctors can choose a prescription medication to help relieve chronic constipation.



To learn more about chronic constipation, visit the **Pri-Med Patient Education Center** at www.patientedu.org/constipation.

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