



understanding
CONSTIPATION

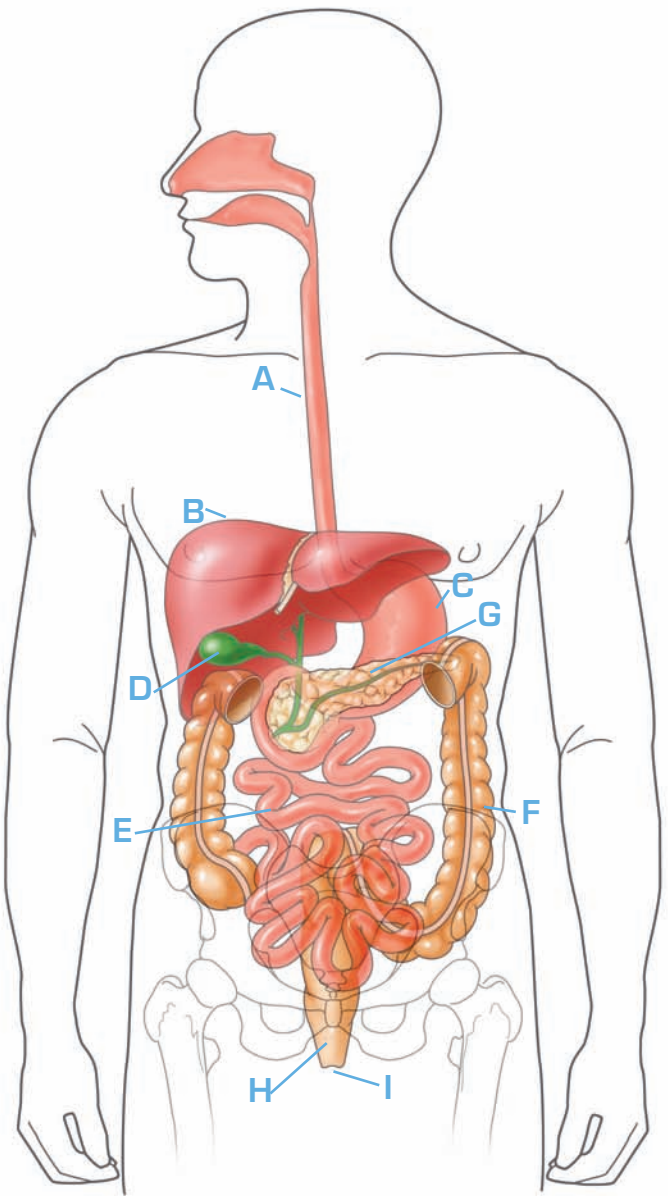
A patient's guide from your doctor and



Constipation Basics

- The frequency of bowel movements among healthy people varies from three movements a day to three a week.
- Individuals must determine what is normal for them.
- As a rule, constipation should be suspected if more than three days pass between bowel movements or if there is difficulty or pain when passing a hardened stool.
- Most people experience occasional short bouts of constipation. If a laxative is necessary for longer than three weeks, check with a doctor.
- Prevention is the best approach to constipation. While there is no way to ensure never experiencing constipation, the following guidelines should help:
 - Know what is normal and do not rely unnecessarily on laxatives.
 - Eat a well-balanced diet that includes unprocessed bran, whole-wheat grains, fresh fruits and vegetables.
 - Drink plenty of fluids.
 - Exercise regularly.
 - Set aside time after breakfast or dinner for undisturbed visits to the toilet.
 - Don't ignore the urge to have a bowel movement.
 - Whenever there is a significant or prolonged change in bowel habits, check with a doctor.

Your Digestive System



A. Esophagus

B. Liver

C. Stomach

D. Gallbladder

E. Small Intestine

F. Large Intestine

G. Pancreas

H. Rectum

I. Anus

Laxative Types

Adapted from NIH Publication No. 07-2759; July 2007: www.digestive.niddk.nih.gov

Bulk-forming

These need to be taken with water. Generally the safest form of laxative, but may interfere with absorption of some medicines. Also known as fiber supplements, these laxatives absorb water in the intestine and may make stool softer.

Many people who report little to no relief after taking bulk-forming laxatives may experience more bloating and abdominal pain.

Stimulants

Cause rhythmic muscle contractions in the intestines.

Studies suggest that phenolphthalein, an ingredient in some stimulant laxatives, might increase a person's risk for cancer. The Food and Drug Administration has proposed a ban on all over-the-counter products containing phenolphthalein. Most laxative makers have replaced, or plan to replace, phenolphthalein with a safer ingredient.

Osmotics

Cause fluids to flow in a special way through the colon, resulting in bowel distention. This class of drugs is useful for people with idiopathic constipation (constipation with no known cause). People with diabetes should be monitored for electrolyte imbalances.

Stool softeners

Moisten the stool and prevent dehydration. These laxatives are often recommended after childbirth or surgery.

Stool softeners are suggested for people who should avoid straining in order to pass a bowel movement. The prolonged use of this class of drugs may result in an electrolyte imbalance.

Lubricants

Grease the stool, enabling it to move through the intestine more easily. Mineral oil is the most common example.

Lubricants typically stimulate a bowel movement within eight hours.

Saline laxatives

Act like a sponge to draw water into the colon for easier passage of stool. Saline laxatives are used to treat acute constipation if there is no indication of bowel obstruction.

Electrolyte imbalances have been reported with extended use, especially in small children and people with renal deficiency.

Chloride channel activators

Increase intestinal fluid and motility to help stool pass, thereby reducing the symptoms of constipation. Thereafter, a doctor should assess the need for continued use.



To help you understand and manage your condition, the AGA Institute provides you with the following information, designed to give you some basic facts, to help you better understand your condition and to serve as a starting point for discussions with your doctor.

Constipation

Constipation is the infrequent and difficult passage of stool. The frequency of bowel movements among healthy people varies greatly, ranging from three movements a day to three a week.

- ▶ As a rule, if more than three days pass without a bowel movement, the intestinal contents may harden and a person may have difficulty or even pain during elimination. Stool may harden and be painful to pass, however, even after shorter intervals between bowel movements. Straining during bowel movements or the feeling of incomplete evacuation may also be reported as constipation.

Common Misconceptions About Constipation

Many false beliefs exist concerning proper bowel habits. One of these is that a bowel movement every day is necessary. Another common fallacy is that wastes stored in the body are absorbed and are dangerous to health or shorten the life span.

These misconceptions have led to a marked overuse and abuse of laxatives. Every year, Americans spend \$725 million on laxatives. Many are not needed and routine use of some stimulant laxatives can cause dependency.

Is Constipation Serious?

Although it may be extremely bothersome, constipation itself usually is not serious. However, it may signal and be the only noticeable symptom of a serious underlying disorder such as cancer. Constipation can lead to complications, such as hemorrhoids caused by extreme straining or fissures caused by the hard stool stretching the sphincters. Bleeding can occur for either of these reasons and appears as bright red streaks on the surface of the stool. Fissures may be quite painful and can aggravate the constipation that originally caused them. Fecal impactions tend to occur in very young children and in older adults and may be accompanied by a loss of control of stool, with liquid stool flowing around the hard impaction.

Occasionally, straining causes a small amount of intestinal lining to push out from the rectal opening. This condition is known as rectal prolapse and may lead to secretion of mucus that may stain underpants. In children, mucus may be a feature of cystic fibrosis.

Causes of Constipation

Constipation is a symptom, not a disease. Like a fever, constipation can be caused by many different conditions. Most people have experienced an occasional brief bout of constipation that has corrected itself with diet and time. The following is a list of some of the most common causes of constipation:

- ▶ **Poor Diet.** A main cause of constipation may be a diet high in animal fats (meats, dairy products, eggs) and refined sugar (rich desserts and other sweets), but low in fiber (vegetables, fruits, whole grains), especially insoluble dietary fiber, which helps move bulk through the intestines and promote bowel movements. Some studies have suggested that high-fiber diets result in larger stools, more frequent bowel movements and, therefore, less constipation.
- ▶ **Imaginary Constipation.** This is very common and results from misconceptions about what is normal and what is not. If recognized early enough, this type of constipation can be cured by informing the sufferer that the frequency of his or her bowel movements is normal.
- ▶ **Irritable Bowel Syndrome (IBS).** Also known as spastic colon, IBS is one of the most common causes of constipation in the U.S. Some people develop spasms of the colon that delay the speed with which the contents of the intestine move through the digestive tract, leading to constipation.
- ▶ **Poor Bowel Habits.** A person can initiate a cycle of constipation by ignoring the urge to have a bowel movement. Some people do this to avoid using public toilets, others because they are too busy. After a period of time, a person may stop feeling the urge. This leads to progressive constipation.
- ▶ **Laxative Abuse.** People who habitually take stimulant laxatives become dependent upon them and may require increasing dosages until, finally, the intestine becomes insensitive and fails to work properly.
- ▶ **Travel.** People often experience constipation when traveling long distances, which may relate to changes in lifestyle, schedule, diet and drinking water.
- ▶ **Hormonal Disturbances.** Certain hormonal disturbances, such as an underactive thyroid gland, can produce constipation.
- ▶ **Pregnancy.** Pregnancy is another common cause of constipation, which may be partly due to hormonal changes during pregnancy.
- ▶ **Fissures and Hemorrhoids.** Painful conditions of the anus can produce a spasm of the anal sphincter muscle, which can delay a bowel movement.

- ▶ **Specific Diseases.** Many diseases that affect the body tissues, such as scleroderma or lupus, and certain neurological or muscular diseases, such as multiple sclerosis, Parkinson's disease and stroke, can be responsible for constipation.
- ▶ **Loss of Body Salts.** The loss of body salts through the kidneys or through vomiting or diarrhea is another cause of constipation.
- ▶ **Mechanical Compression.** Scarring, inflammation around diverticula, tumors and cancer can produce mechanical compression of the intestine and result in constipation.
- ▶ **Nerve Damage.** Injuries to the spinal cord and tumors pressing on the spinal cord can produce constipation by affecting the nerves that lead to the intestine.
- ▶ **Medications.** Many medications can cause constipation. These include pain medications (especially narcotics), antacids that contain aluminum or calcium, antispasmodic drugs, antidepressant drugs, tranquilizers, iron supplements, anticonvulsants for epilepsy, antiparkinsonism drugs and calcium channel blockers for high blood pressure and heart conditions.
- ▶ **Colonic Motility Disorders.** The peristaltic activity of the intestine may be ineffective resulting in colonic inertia or outlet obstruction.

Constipation in Children

Constipation is common in children and may be related to any of the causes noted in the previous section. In a small number of children, constipation may be the result of physical problems. Children with such defects as the absence of normal nerve endings in portions of the bowel, abnormalities of the spinal cord, thyroid deficiency, mental retardation, and certain other inherited metabolic disorders often suffer symptoms of constipation. Constipation in children, however, is usually due to poor bowel habits.

Studies show that many children who suffer from constipation when they are older have a history of passing stools that are firmer than average in their early weeks of life. Because this occurs before there are significant variations in diet, habits or attitudes, it suggests that many children who develop constipation have a normal tendency to have firmer stools. Such children suffer little from the tendency unless it is aggravated by poor bowel habits or poor diet.

Constipation may result in pain when the child has bowel movements. Cracks in the skin, called fissures, may develop in the anus. These fissures can bleed or increase pain, causing a child to withhold his or her stool.

Children may withhold their stools for other reasons as well. Some find it inconvenient to use toilets outside the home. Also, severe emotional stress caused by family crises or difficulties at school may cause children to withhold their stools. In these instances, the periods between bowel movements may become quite long, in some cases lasting longer than one or two weeks. These children may develop fecal impactions, a situation in which the stool is packed so tightly in the bowel that the normal pushing action of the bowel is not enough to expel the stool spontaneously.

Constipation in Older Adults

Older adults are five times more likely than younger adults to report problems with constipation. Poor diet, insufficient intake of fluids, lack of exercise, the use of certain drugs to treat other conditions, and poor bowel habits can result in constipation. Experts agree, however, that too often older people become overly concerned with having a bowel movement and that constipation is frequently an imaginary ailment.

Diet and dietary habits can play a role in developing constipation. Lack of interest in eating — a problem common to many single or widowed older people — may lead to heavy use of convenience foods, which tend to be low in fiber. In addition, loss of teeth may force older people to choose soft, processed foods, which also tend to be low in fiber.

Older people sometimes cut back on fluids, especially if they are not eating regular or balanced meals or to avoid urinating if they experience stress incontinence. Water and other fluids add bulk to stools, making bowel movements softer and easier to pass.

Prolonged bedrest, for example, after an accident or during an illness, and lack of exercise may contribute to constipation. Also, drugs prescribed for other conditions, such as antidepressants, antacids containing aluminum or calcium, antihistamines, diuretics, and antiparkinsonism drugs, can produce constipation in some people.

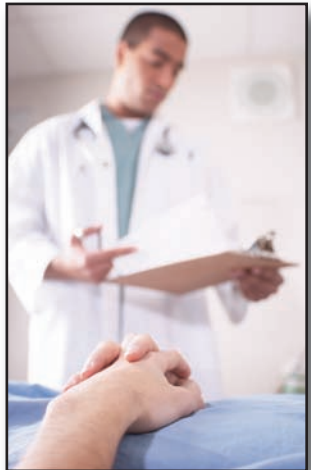
The preoccupation with bowel movements sometimes leads older people to depend heavily on stimulant laxatives, which can be habit-forming. The bowel begins to rely on laxatives to bring on bowel movements, and over time, the natural mechanisms fail to work without the help of drugs. Habitual use of enemas also can lead to a loss of normal function.

When to Seek Medical Attention

The doctor should be notified when symptoms are severe, last longer than three weeks, or are disabling; or when any of the complications listed above occur. The doctor should be informed whenever a significant and prolonged change of usual bowel habits occurs.

The historical features are key to helping the physician determine a diagnosis and treatment. Is it the infrequency of bowel movements, straining, pain or unsatisfied bowel movements that is most distressing?

In addition, a full record of prescription and over-the-counter medications should be provided to the doctor.



Diagnostic Tests

Constipation may be caused by abnormalities or obstructions of the digestive system in some people. A doctor can perform tests to determine if constipation is the symptom of an underlying disorder.

In addition to routine blood, urine and stool tests, a sigmoidoscopy may help detect problems in the rectum and lower colon. In this procedure, which can be done in the doctor's office, the doctor inserts a flexible, lighted instrument through the anus to examine the rectum and lower intestine. The doctor may perform a colonoscopy to inspect the entire colon. In colonoscopy, an instrument similar to the sigmoidoscope that is longer and able to follow the twists and turns of the entire large intestine, is used. To learn more about colonoscopy, read the AGA Institute brochure on that topic in your gastroenterologist's office or visit www.gastro.org/patient.

Other highly specialized techniques are available for measuring pressures and movements within the colon and its sphincter muscles.

Treatment

The first step in treating constipation is to understand that normal frequency varies widely, from three bowel movements a day to three a week. Each person must determine what is normal to avoid becoming dependent on laxatives.

For most people, dietary and lifestyle improvements can lessen the chances of constipation. A well-balanced diet that includes fiber-rich foods, such as unprocessed bran, whole-grain bread, and fresh fruits and vegetables, is recommended. Drinking plenty of fluids and exercising regularly will help to stimulate intestinal activity. Special exercises may be necessary to tone up abdominal muscles after pregnancy or whenever abdominal muscles are lax.

Bowel habits also are important. Sufficient time should be set aside to allow for undisturbed visits to the bathroom. In addition, the urge to have a bowel movement should not be ignored.

If an underlying disorder is causing constipation, treatment will be directed toward the specific cause. For example, if an underactive thyroid is causing constipation, the doctor may prescribe thyroid hormone replacement therapy.

In most cases, stimulant laxatives should be the last resort and taken only under a doctor's supervision. A doctor is best qualified to determine when a laxative is needed and which type is best. There are various types of oral laxatives and they work in different ways. (See list of laxatives.)

Above all, it is necessary to recognize that a successful treatment program requires persistent effort and time. Constipation does not occur overnight and it is not reasonable to expect that constipation can be relieved overnight.

Go to www.gastro.org/patient
for more information on digestive
health and tests performed by
gastroenterologists and to find an
AGA member physician in your area.

The American Gastroenterological Association (AGA) is dedicated to the mission of advancing the science and practice of gastroenterology. Founded in 1897, the AGA is one of the oldest medical-specialty societies in the U.S. Our 16,000 members include physicians and scientists who research, diagnose and treat disorders of the gastrointestinal tract and liver. The AGA Institute runs the organization's practice, research and educational programs.

The content in the series of AGA Institute patient education brochures was reviewed by the following gastroenterologists:

John I. Allen, MD, MBA, AGAF

*Minnesota Gastroenterology
Chair, AGA Clinical Practice & Quality
Management Committee*

Harry R. Aslanian, MD

Yale University School of Medicine

Stephen J. Bickston, MD, AGAF

University of Virginia Health System

Joel V. Brill, MD, AGAF

*Predictive Health LLC
Chair, AGA Practice Management
& Economics Committee*

Marcia I. Canto, MD, MHS

Johns Hopkins University

Richard Davis, Jr. PA-C

University of Florida College of Medicine

Mark H. DeLegge, MD, AGAF

Medical University of South Carolina

Kenneth DeVault, MD

Mayo Clinic, Jacksonville

Stephen W. Hiltz, MD, MBA, AGAF

TriState Gastroenterology

Lawrence R.

Kosinski, MD, MBA, AGAF

Elgin Gastroenterology, S.C.

Linda A. Lee, MD, AGAF

Johns Hopkins School of Medicine

Stephen A. McClave, MD, AGAF

University of Louisville School of Medicine

Kimberley Persley, MD

Texas Digestive Disease Consultants

John Schaffner, MD

Mayo Clinic, Rochester

Joanne A.P. Wilson, MD, FACP, AGAF

Duke University Medical Center

Cynthia M. Yoshida, MD, AGAF

University of Virginia Health System

Atif Zaman, MD, MPH

Oregon Health and Science University



AGAINSTITUTE
AGA Education, Practice and Research



The Digestive Health Initiative® (DHI) is an AGA Institute initiative that offers educational programs on digestive disorders for individuals who are affected by a digestive disease, in an effort to educate the larger health-care community.

This brochure was produced by the AGA Institute and funded by a grant from TAP Pharmaceutical Products Inc.



For more information about digestive diseases,
please visit the AGA Web site at www.gastro.org.

The AGA Institute offers the information in these brochures for educational purposes to provide accurate and helpful health information for the general public. This information is not intended as medical advice and should not be used for diagnosis. The information in these brochures should not be considered a replacement for consultation with a health-care professional. If you have questions or concerns about the information found in these brochures, please contact your health-care provider. We encourage you to use the information and questions in these brochures with your health-care provider(s) as a way of creating a dialogue and partnership about your condition and your treatment.