

Definition

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.

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 some are harmful.

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 (vegetable, fruits, whole grains). Some studies suggest 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 movement is normal.

Irritable Bowel Syndrome (IBS)

Also known as spastic colon, IBS is one of the most common causes of constipation in the United States. 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 laxatives become dependent on 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. The reason may be partly mechanical, in that the pressure of the heavy womb compresses the intestine, and 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, antispasmodic drugs, antidepressant drugs, tranquilizers, iron supplements, and anticonvulsants for epilepsy.

Causes of 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, usually is 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 stool 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 where the stool is packed so tightly in the bowel is not enough to expel the stool spontaneously.

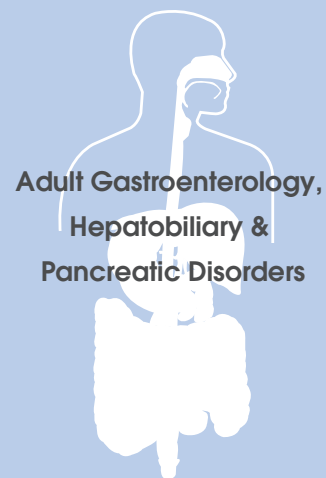
Constipation in Older Adults

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 in many single or widowed older people) may lead to heavy use of convenience foods, which tend to be low in fiber. In addition, loss

Patient
Education

Constipation



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. Water and other fluids add bulk to stools, making bowel movements softer and easier to pass.

Prolonged bed rest, 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 laxatives, which can be habit forming. The bowel movements and, over time, the natural mechanism fail to work without the help of drugs. Habitual use of enemas also can lead to a loss of normal functions.

Diagnosis Tests Help Determine the
Causes of Constipation

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 performed 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, but longer and able to follow the twists and turns of the entire large intestine, is used. A barium enema x-ray will provide similar information. If bleeding is present, a double-contrast barium enema is preferred.

Other highly specialized techniques are available for measuring pressures and movements within the colon and its sphincter muscles, but these are used only in unusual cases.

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.

When is Medical Attention Needed?

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.

Treatment for Constipation

The first step in treating constipation is to understand that normal frequency varies widely, from three bowel movements a day to one 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 breads, 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 visit 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 some cases, 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 to oral laxatives, and they work in different ways. (See box in page 5.)

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.

In Conclusion...

The frequency of bowel movements among healthy people varies from three movements a day to three a week. Individuals must determine what is normal. 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, but if a laxative is necessary for longer than three weeks, check with a doctor.

Doctors agree that 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 on 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 defecate.
- Whenever there is a significant or prolonged change in bowel habits, check with a doctor.

Additional Readings

Cummings M. Overuse hazardous: laxatives rarely needed. FDA Consumer 1991; 25(3): 33-35. Article reprint available from the Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, or in libraries. This article discusses the dangers of the overuse of laxatives and suggest alternative methods for treating constipation.

Diet Nutrition and Cancer Prevention: The Good News (NIH Publication No. 87-2878). Pamphlet available from the Cancer Information Service, Office of Cancer Communications, National Cancer Institute, 9000 Rockville Pike, Bethesda, MD 20892. 1-800-4-CANCER. Discusses high-fiber diet and fiber-rich foods.

Oral Laxatives

- **Bulk-forming laxatives** are generally considered the safest laxative form but can interfere with the absorption of some drugs. These laxatives, which should be taken with eight ounces of water, absorb water in the intestine and make the stool softer. Bulk laxatives include *psyllium* (Metamucil), *methylcellulose* (Citrucel), *calcium polycarbophil* (FiberCon), and *bran* (in food and supplements).

- **Stimulants** cause rhythmic muscular contractions in the small or large intestine. These agents can lead to dependency and can damage the bowel with prolonged daily use. These products include *phenolphthalein* (Correctol, ExLax), *bisacodyl* (Dulcolax), *castor oil* (Purge, Neoloid), and *senna* (Senokot, Fletcher's Castoria).

- **Stool softeners**, or wetting agents, provide moisture to the stool and prevent excessive dehydration. These laxatives often are recommended after childbirth or surgery. Products include those with *docusate* (Colace, Dialose and Surfak).

- **Lubricants** grease the stool and make it slip through the intestine more easily. *Mineral oil* is the most commonly used lubricant.

- **Osmotics** are salts or carbohydrates that cause water to remain in the intestine for easier movement of stool. Laxatives in this group include *milk of magnesia*, citrate of magnesia, lactulose, and *Epsom salts*.