

Patient Education

# Irritable Bowel Syndrome

Adult Gastroenterology
Hepatobiliary &
Pancreatic Disorders

## Definition

Irritable bowel syndrome (IBS) is a chronic disorder of the colon. Its cause and cure are as yet unknown.

Doctors call it a functional disorder because there is no sign of disease when the colon is examined by x-ray or other diagnostic methods.

However, IBS causes a variety of symptoms, including lower abdominal pain, gas, bloating, constipation and diarrhea.

Over the years, IBS has called by many names - mucous colitis, spastic colon, colitis, spastic bowel, and functional bowel disease. Most of these terms are inaccurate. Colitis, for instance, means inflammation of the colon. IBS, on the other hand, causes no inflammation and should never be confused with the more serious disorder - ulcerative colitis.

Although IBS can cause a great deal of discomfort, it is not serious and does not lead to any serious disease. With attention to proper diet, stress management, and sometimes medication prescribed by their physician, most people with IBS can keep their symptoms under control.

## What are the Symptoms of IBS?

It is important to remember that normal bowel function varies widely from person to person. Doctors generally agree that normal bowel function ranges from three stools a day to three each week. A normal movement is one that is formed but not hard, contains blood, and is passed without cramps or pain.

People with IBS, on the other hand, usually have some combination of constipation and diarrhea as well as pain, gas, and abdominal bloating. Most people with IBS have episodes of lower abdominal pain and constipation, sometimes followed by diarrhea. Others may have pain and mild constipation and no diarrhea.

The rarest of the disorder is severe, painless diarrhea. People in this group may have watery bowel movements after breakfast almost every day. These may be followed by episodes of diarrhea after meals, following stressfull events, or for no apparent reason.

Although IBS is usually a mild annoyance, for some people it can be disabling. Patients in the latter group may be afraid to go to dinner parties, seek employment, or travel on public transportation.

## What Causes IBS?

Because doctors are unable to pinpoint its organic cause, IBS often is considered to be caused by emotional conflict or stress. While stress may certainly be a factor, recent studies indicate that other factors may be involved.

Most IBS symptoms are related to an abnormal motility (movement) pattern of the colon. The colon connects the small intestine with the anus (figure 1). Approximately six feet long, the colon has two major functions: it absorbs water and salts from digestive products that enter from the small intestine. Two liters of liquid matter enter the colon from the small intestine each day. This material may remain there for several days until most of the fluid and salts are absorbed back into the body. The stool then passes through the colon by a delicate pattern of movements to

the rectum, where it is stored until a bowel movement occurs.

Movements of the colon are controlled by nerves and hormones and by electrical activity in the colon muscle. The electrical activity serves as a "pacemaker" similar to the mechanism that controls hart function.

Movements of the colon propel the contents slowly back and forth, but mainly toward the rectum. Segments of the colon also contract periodically to promote the absorption of water from feces.

In people who have IBS, the muscle of the lower portion of the colon contracts abnormally. All abnormal contraction or spasm - may be related to episodes of painful cramps. Sometimes the spasm delays the passage of stool, leading to constipation. At other times, the spasm leads to more rapid passage of feces and results in diarrhea.

## How is IBS Diagnosed?

IBS is a diagnosis that doctors reach after more serious organic diseases are excluded. This process is necessary because IBS offers doctors no signposts to help identify the disorder. A complete medical history that includes a careful description of symptoms, a physical examination, and specific laboratory tests will be performed.

Also, your doctor will probably order some diagnostic tests such as x-rays or endoscopy to eliminate organic causes of your symptoms. Unless your symptoms change, you will not need to undergo these tests again.

## How Do Diet and Stress Affect IBS?

The potential for abnormal function of the colon is always present in people with IBS, but something must trigger it to cause symptoms. The factors that seem to be the most likely culprits are diet and emotional stress. Many people note that their symptoms occur following a meal or when they are under stress. No one is sure why this happens, but scientists have some clues.

Eating causes contractions of the colon. Normally, this response may cause an urge to have a bowel movement within 30 to 60 minutes after a meal. In people with IBS, the exaggerated reflex can lead to cramps and sometimes diarrhea.

The strength of the response is directly related to the number of calories, and especially the amount of fat in a meal. Fat, in any form (animal or vegetable) is the strongest stimulus of colonic contractions after a meal. Fat is primarily found in meat, especially bacon and sausage; poultry skin; dairy products including milk, cream, cheese and butter; vegetable oils; margarines; shortenings; and nondairy whipped toppings.

Stress also stimulates colonic spasm in people with IBS. This process is not clearly understood, but scientists point out that the colon is partially controlled by the nervous system.

Mental health counseling is sometimes helpful for alleviating the symptoms due to IBS. However, doctors are quick to note that this does not mean IBS is the result of a personality disorder. IBS is at least partially a disorder of colon motility.

## How Does a Proper Diet Help IBS?

For many people, eating the proper diet helps lessen IBS symptoms. Before considering a change in diet, you should note wether any particular foods seem to cause distress and then discuss them with your physician.

If dairy products cause your symptoms to flare up, try decreasing the amount consumed at any one time.

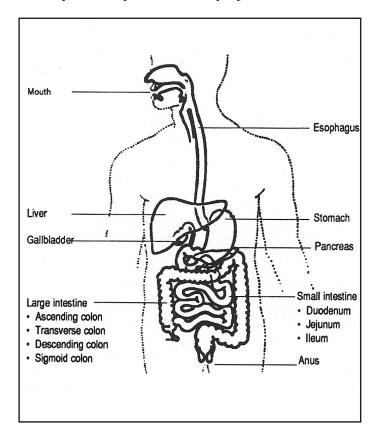
Yogurt can also be a satisfactory substitute. Dairy products are important sources of calcium and other nutrients the body needs and should not be avoided entirely, unless absolutely necessary.

Dietary fiber, present in whole grain breads and cereals and in fruits and vegetables, also have proved to be helpful in lessening IBS symptoms. Your doctor should be consulted prior to using an over-the-counter fiber supplement. High-fiber diets keep the colon mildly distended, which helps to prevent spasms from developing.

Some forms of fiber also keep water in the stools, thereby preventing hard, difficult-to-pass stools from forming. Doctors usually recommend that your eat just enough fiber so that soft, easily passed, painless bowel movements are produced.

High-fiber diets may cause gas and bloating. However, over time these symptoms may dissipate as the digestive tract becomes used to the increased fiber intake.

Large meals may also cause cramping and diarrhea in some people suffering from IBS. Therefore, eating smaller meals more frequently, or eating smaller portions of foods at mealtimes, especially if the foods are low in fat and rich in carbohydrates and protein, may also help to alleviate symptoms.



able Bowel Brochure 1 7/18/06, 1:32 PM



Patient Education

## **Irritable Bowel Syndrome**

**Adult Gastroenterology Hepatobiliary & Pancreatic Disorders** 

Foods high in carbohydrates and low in fat include pastas, rice, breads, cereals, fruits and vegetables, etc. while those high in protein and low in fact include chicken and turkey without the skin, lean meats, most fish, low-fat dairy products such as skim milk and low fat cheeses.

## Can Drugs Relieve **IBS Symptoms?**

No consensus exists among doctors about the drugs to be used in IBS. Some doctors abut the drugs to be used in IBS. Some doctors prescribe a combination of antispasmodic drugs and tranquilizers and these may relieve symptoms. Other physicians feel that, first, they should reassure patients and discuss means of controlling stress-inducing factors in their life situations.

The variable nature of the disorder makes it difficult to con-

duct a well-designed clinical trial, which would help establish the best form of treatment for IBS.

## How is IBS Linked to More Serious Problems?

IBS has not been shown to lead to any serious, organic diseases. There is no link between IBS and inflammatory bowel diseases such as Crohn's disease or ulcerative colotis. IBS does not lead to cancer.

Some doctors think there may be a connection between IBS and the later development of diverticulosis.

Diverticulosis, a condition in which small outpouchings (diverticula) form in the wall of the colon, is very common in people over 60. However, the relationship between diverticulosis and IBS is not proven.

The major concerns in drug therapy of IBS are drug dependency and the effects the disorder can have on lifestyle. In an effort to regulate colonic activity or minimize stress, some patients become dependent on laxatives or tranquilizers. If this becomes the case, doctors generally try to withdraw the drugs slowly.

A few patients have a more severe form of the disorder and the fear of pain and diarrhea may cause them to withdraw from normal activity. In such cases, doctors may recommend mental health counseling.

## Glossary

**Abdomen** (AB do men)

The large cavity between the chest and the pelvis. It contains the stomach, small intestine and colon.

Antispasmodic Drugs (AN tee spaz MOD ik)
Drugs that decrease the strength of smooth muscle contractions of intestine.

Chronic

Of long duration.

**Diverticulosis** (DI ver TIK yu LO sis) The condition in which outpouchings form in the wall of the digestive tract.

### Diverticulum

(DI ver TIK yu lum)

An outpouching that forms in the wall of the digestive tract. Plural form: diverticula.

### Functional Disorder

Any condition in which an organ or part of the body does not work the way it is supposed to, even though x-rays and other diagnostic methods show no sign of disease.

*Motility*. Contractions of the muscle of the digestive tract and movement of its contents.

7/18/06, 1:32 PM