



IBS

A patient's guide to living with irritable bowel syndrome



A PROGRAM OF
THE AGA INSTITUTE

IBS Basics

- Irritable bowel syndrome (IBS) is a common disorder of the intestines with symptoms that include crampy pain, gassiness, bloating and changes in bowel habits.
- Some people with IBS have constipation (difficult or infrequent bowel movements), others have diarrhea (frequent loose stools, often with an urgent need to move the bowels), and some people experience both.
- Sometimes the person with IBS has a crampy urge to move the bowels, but cannot do so.
- IBS does not cause permanent harm to the intestines and does not lead to cancer.
- For many people, eating a proper diet and living a healthy lifestyle may lessen IBS symptoms.

The information in this brochure will give you some basic facts about IBS. It will help you better understand and manage your condition and will serve as a starting point for discussions with your doctor.



Most people with IBS are able to control their symptoms through diet, stress management and, sometimes, medication prescribed by their doctors.



Living with IBS

The cause of IBS is unknown, and likely there are many causes; as a result, there is no one treatment for everyone. Doctors call it a functional disorder because the symptoms result from an oversensitivity of the muscles and nerves of the intestine affecting the way in which they function. There is no sign of disease when the colon is examined and, much like a headache or muscle strain, IBS can cause a great deal of discomfort and distress, even though no structural abnormalities are identified.

The good news is that IBS does not cause permanent harm to the intestines and does not lead to intestinal bleeding of the bowel or to a life-threatening disease, such as cancer.

Often IBS is just a mild annoyance, but for some people it can be disabling. They may be afraid to go to social events, to go out to a job or to travel even short distances. Most people with IBS, however, are able to control their symptoms through diet, stress management and, sometimes, with medications prescribed by their doctor.

Through the years, IBS has been called by many names — colitis, mucous colitis, spastic colon, spastic bowel and functional bowel disease. Most of these terms are inaccurate. Colitis, for instance, means inflammation of the large intestine (colon). IBS, however, does not cause inflammation and should not be confused with ulcerative colitis, which is a more serious disorder.

The Normal Colon

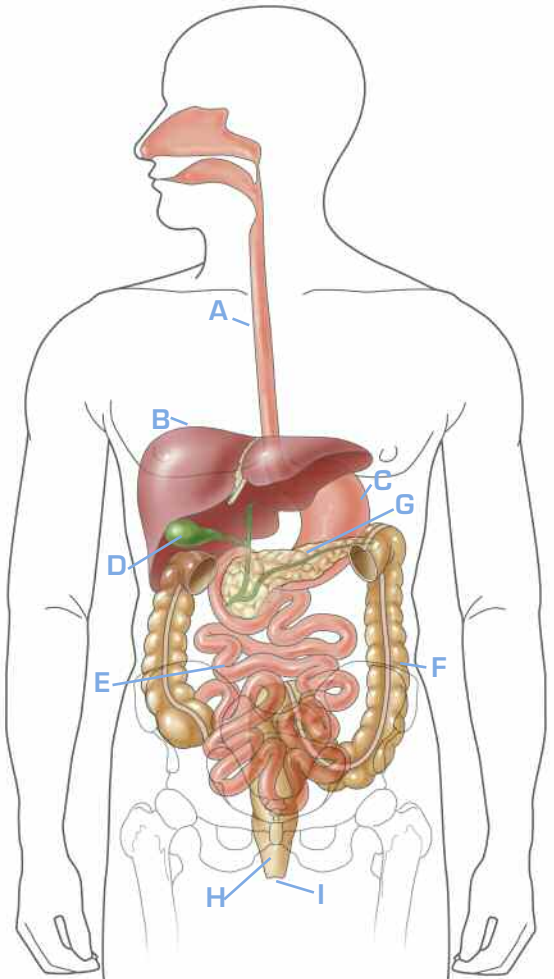
The colon, which is about six feet long, connects to the small intestine at one end and to the rectum and anus at the other end. The major function of the colon is to absorb water and salts from digestive products that enter from the small intestine. Two quarts of liquid matter enter the right colon from the small intestine each day. This material may remain there for several days until most of the fluid and salts are absorbed into the body. The stool then passes through the colon by a pattern of movements to the left side of the colon, where it is stored until a bowel movement occurs.

Normal colon motility (contraction of intestinal muscles and movement of its contents) is 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 heart function.

Movements of the colon propel the contents slowly back and forth, but mainly from the right to left colon toward the rectum. A few times each day, strong muscle contractions move down the colon pushing fecal material ahead of them. Some of these strong contractions result in a bowel movement.

The Digestive System

- A. Esophagus
- B. Liver
- C. Stomach
- D. Gallbladder
- E. Small intestine
- F. Colon
(Large intestine)
- G. Pancreas
- H. Rectum
- I. Anus



Causes of IBS

IBS results from a combination of several factors that can affect gastrointestinal (GI) functioning. This includes poor regulation of the muscle contractions of the GI tract causing abnormal movement (referred to as dysmotility), increased sensitivity of the nerves attached to the intestinal tract that produce the electrical activity (called visceral hypersensitivity), or problems in the communication between the nerves of the brain and gut (known as brain-gut dysfunction). Any or all of these factors lead to the symptoms that we can recognize as IBS.

- ▶ **Colonic dysmotility.** Researchers have found that the colon muscle of a person with IBS contracts and can even go into spasm after only mild stimulation. There are two “sets” of muscles in the colon, longitudinal and circular, that can lead either to non-propulsive (also called segmental contractions) or propulsive contractions. Propulsive contractions can move stool through quickly, producing diarrhea, while non-propulsive segmental contractions will hold back stool and produce constipation. The person with IBS seems to have a colon that is more sensitive and reactive than usual, so it responds by producing more diarrhea or constipation than normal. That is why someone with IBS can have both types of symptoms, even in the same day.
- ▶ **Visceral hypersensitivity** (increased sensitivity of intestinal nerves). When the intestines are stimulated or stretched, the nerves attached to the intestines fire signals that go to the brain, where they are experienced as discomfort or pain, depending on the degree of stimulation. Persons with IBS will feel discomfort or pain with less stimulation than healthy individuals; this is called visceral hypersensitivity. These nerves can be made more sensitive because of an infection or inflammation of the intestines or injury, such as from an operation or in response to psychological stress.
- ▶ **Brain-gut dysfunction.** The nerves in the intestinal tract come from the same origins as the nerves in the brain and spinal cord in the fetus, and are closely connected to each other in adult life. Stimulation of the bowel can affect areas in the brain producing emotional distress, which in turn can affect bowel functioning. This occurs because various chemicals, including hormones or medications (like antidepressants), can release substances that influence both brain and intestinal functioning. This relationship is called the brain-gut connection. Emotional conflict can lead to greater IBS symptoms; therefore, treatments directed at emotional distress, like hypnosis or relaxation methods and antidepressants, can help reduce symptoms. This understanding can help eliminate concerns by patients or their families about IBS being a psychiatric disorder. Rather, it is a condition in which the gut is sensitive to a variety of stimuli to the bowel, including psychological distress, which can affect anyone.

Symptoms & Diagnosis

It is important to realize that normal bowel function varies from person to person. Normal bowel movements range from as many as three stools a day to as few as three a week. A normal movement is one that is formed, but not hard, contains no blood, and is passed without cramps or pain.

People with IBS usually have crampy abdominal pain that is associated with constipation and/or diarrhea or abdominal bloating. In some people,

constipation predominates (IBS-C); in others diarrhea is more common (IBS-D). Some people have both (IBS-M for “mixed”) or neither (IBS-U for “unspecified”). Over time, constipation and diarrhea can even alternate (IBS-A). Sometimes, people with IBS pass mucus with their bowel movements.

Bleeding, fever, weight loss and persistent severe pain are not symptoms of IBS and may indicate other problems.

IBS Triggers

- ▶ Many people report that their symptoms occur following a meal. 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 urge may come sooner and may be associated with pain, cramps and diarrhea. Certain foods may trigger spasms in some people. Sometimes the spasm delays the passage of stool, leading to constipation.
- ▶ Certain food substances, like complex carbohydrates and caffeine, fatty foods, or alcoholic drinks, can cause loose stools in many people, but are more likely to affect those with IBS.
- ▶ Researchers have found that women with IBS may have more symptoms during their menstrual periods, suggesting that reproductive hormones can increase IBS symptoms.
- ▶ Emotional distress, like preparing for a speech, taking an examination or traveling, can produce intestinal symptoms of diarrhea, constipation or pain in everyone, but more so in those with IBS who seem more sensitive to these events.



How IBS is Diagnosed

IBS is usually diagnosed after doctors identify certain symptoms that are typical for the condition and are present after excluding other diseases. The doctor will take a complete medical history that includes a careful description of symptoms.

Recently, the use of specific symptom criteria (known as the Rome Criteria — see table 1) can help make a diagnosis of IBS with confidence. In addition, a physical examination and a laboratory test will be done. A stool sample may be tested for evidence of bleeding or to exclude the possibility of infection.

Certain findings during the evaluation, called “alarm signs,” may lead to further testing because they may signal other medical disorders. These alarm signs can include rectal bleeding, significant weight loss, low blood count or a family history of cancer.

The doctor may order other diagnostic procedures, such as X-rays or colonoscopy (viewing the colon

Is IBS Linked to More Serious Problems?

IBS does not lead to more serious diseases, such as cancer or inflammatory bowel disease (ulcerative colitis or Crohn’s disease). It is important to have an appropriate initial evaluation to exclude other diseases and then treat the IBS while staying vigilant to any new findings that may arise over time.

Table 1 Rome III Diagnostic Criteria* for IBS Recurrent abdominal pain or discomfort** at least three days/month in last three months associated with two or more of the following:	
1. Improvement with defecation	
2. Onset associated with a change in frequency of stool.	
3. Onset associated with a change in form (appearance) of stool.	
* Criteria fulfilled for the last three months with symptom onset at least six months prior to diagnosis. ** “Discomfort” means an uncomfortable sensation not described as pain.	
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through a flexible tube inserted through the anus), to find out if there is another disease. To learn more about colonoscopy, read the AGA Institute brochure on that topic in your gastroenterologist’s office or visit www.gastro.org/patient.

Some patients have severe IBS, and the pain, diarrhea or constipation and resultant impairment in quality of life may cause them to withdraw from normal activities. In such cases, doctors may recommend behavioral-health counseling.

Treatment

Start with a Good Diet

For many people, eating a proper diet that also avoids eating large amounts of food items at one time may help lessen IBS symptoms. Before changing your diet, it is a good idea to keep a journal noting which foods seem to cause distress, and discuss your findings with your doctor. For instance, if dairy products cause your symptoms to flare up, you can try eating less of those foods. High fat can stimulate the bowels and produce nausea or cramping.

Sometimes, it is not what you eat, but the amount you eat that activates IBS symptoms. Many find that reducing the amount of food and eating smaller portions more frequently can reduce symptoms. IBS is a condition in which there is an overreaction to stimuli to the bowel, and this can include dietary substances. Some individuals may be more sensitive to food items that in larger quantities can affect everyone. Recent attention has been drawn to the FODMAP (FODMAP= fermentable oligo-, di- and mono-saccharides and polyols) concept; this relates to avoiding the ingestion of fermentable sugars, such as fructose or lactose, sorbitol, and fructans present in wheat. These food items, if poorly absorbed, are broken down by bacteria to produce symptoms of gaseousness, bloating, abdominal discomfort and diarrhea, which are seen in IBS.

There are many websites that discuss the types of items to be avoided with the FODMAP diet. You also may want to consult a registered dietitian, who can help you make changes in your diet.

Fiber

Insoluble dietary fiber or fiber supplements, such as psyllium or polycarbophil, which helps move bulk through the intestines and promotes bowel movements, may lessen constipation if associated with IBS symptoms. Whole-grain breads, cereals and beans are good sources of fiber for patients with IBS. High-fiber diets keep the colon mildly distended, which may help to prevent spasms from developing.

Some forms of fiber also keep water in the stools, thereby preventing hard stools that are difficult to pass. Doctors usually recommend that you eat just enough fiber so that you have soft, easily passed, painless bowel movements. However, high-fiber diets may also cause gas and bloating and thus should be taken in moderation.

Table 2
High-Fiber Foods

Food	Grams of Fiber
1/2 cup All-Bran	9.6
1/2 cup navy beans	9.5
1/2 cup of kidney beans	8.2
1/2 cup of black beans	7.5
3/4 cup bran flakes	5.3
1 medium sweet potato with skin	4.8
1/2 cup green peas	4.4
1 medium pear with skin	4.3

Source: digestive.niddk.nih.gov/ddiseases/pubs/diverticulosis/

Role of Medicines in Relieving IBS Symptoms

There is no standard way of treating IBS, and treatment choices often depend on the predominant set of symptoms that are present. For example, if chronic constipation is predominant (IBS-C), prescription drugs or over-the-counter products, such as polyethylene glycol solutions that increase intestinal fluid to help pass stool, may be appropriate. When diarrhea is more prominent (IBS-D), over-the-counter loperamide or several different types of prescription drugs may be used.

Probiotics may also help IBS symptoms and are safe. Occasionally, antibiotics can be used with certain patients, but overtreatment should be avoided. Finally, antidepressant drugs are used when abdominal pain is more severe, because they can help reduce visceral sensitivity and brain-gut dysfunction that contribute to the symptoms.

Psychological Treatments

There are several psychological treatments that can help reduce the symptoms of IBS. These include:

- ▶ Cognitive-behavioral treatment.
- ▶ Hypnosis.
- ▶ Stress management.
- ▶ Meditation.
- ▶ Other relaxation methods.

These treatments seem to reduce abdominal discomfort and the psychological distress associated with IBS symptoms, improve coping skills, and help patients adapt to their symptoms.

There are no harmful effects and these treatments can be used in addition to or instead of the usual medical treatments.

Psychological treatments seem to reduce abdominal discomfort and the psychological stress associated with IBS symptoms.



IBS Notes & Patterns

Keep track of how you feel, what you eat, what stress you are feeling and what exercise you are getting. Noticing patterns in your activities can guide your gastroenterologist in helping you avoid your personal IBS triggers. By keeping a log of your behaviors, you and your physician will have a head start on alleviating the symptoms. Get started by answering the following questions.

1. What are the main symptoms that are bothering you and how would you describe them?
 - a. Pain (describe: steady, cramping, burning)? What is the location?
 - b. Diarrhea or constipation (or both)? Do they affect the pain?
 - c. Bloating?
 - d. Nausea or vomiting?
2. What are the experiences that make your symptoms worse (and describe)?
 - a. Eating (what type, how often)?
 - b. Stress (what type)?
 - c. Physical activity?
 - d. Menstrual cycle?
3. What medicines are you taking and which ones help or don't help?

For more information on IBS.

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

If IBS is significantly affecting your life, the AGA publishes a book, "Master Your IBS," that will show you how to reduce the severity and frequency of your symptoms. It can be ordered from Amazon.com and Barnes & Noble.com.

Go to www.theromefoundation.org for medical information about the diagnosis and management of IBS and other functional gastrointestinal disorders.

Go to www.iffgd.org for educational brochures and patient forums on IBS.

The American Gastroenterological Association is the trusted voice of the GI community. Founded in 1897, the AGA has grown to include 17,000 members from around the globe who are involved in all aspects of the science, practice and advancement of gastroenterology. The AGA Institute administers the practice, research and educational programs of the organization. www.gastro.org.

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