

written by
Harvard Medical School



Irritable Bowel Syndrome



PRIMED
Patient Education Center
www.patientedu.org

When you visit your doctor to get help for unpleasant symptoms, you probably expect 3 things: 1) a diagnosis, 2) a treatment plan, and 3) a clear scientific explanation of what's going on. But for millions of Americans with belly pain and abnormal bowel function, a trip to the doctor can be a bit frustrating. And when the diagnosis is irritable bowel syndrome (IBS), it's still hard for doctors to explain why you feel miserable. Even though doctors don't know exactly what causes IBS, they do have a logical approach to diagnosis and treatment. In most cases, the diagnosis depends on just a few simple tests, and the treatment may involve some trial-and-error. In most cases, treatment will make your life easier and more comfortable.

For more information about Irritable Bowel Syndrome from Harvard Health Publications, go to www.patientedu.org/ibs.

Who Gets IBS?

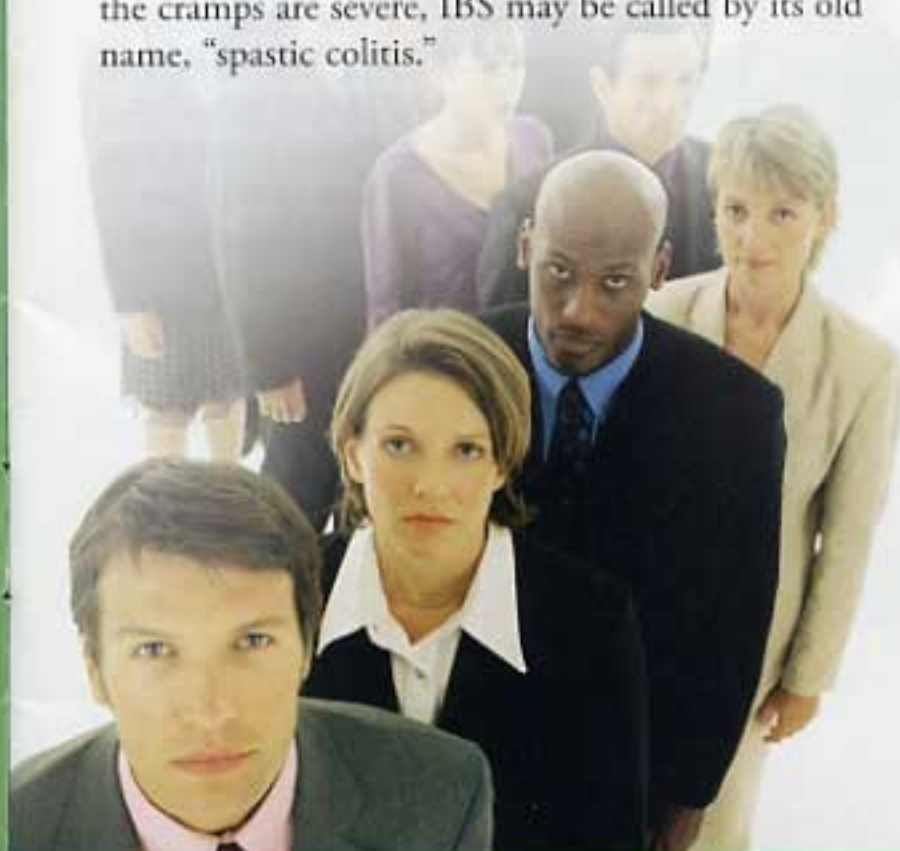
IBS is very common. In the United States and Europe, about 1 of every 10 adults has IBS symptoms. In fact, IBS accounts for more missed days at work in the U.S. than any illness except the common cold.

IBS is twice as common in women as men and can strike at any age. Symptoms typically start before age 35 and then continue for many years.

Major Symptoms

The main symptoms of IBS are abdominal pain and abnormal bowel function.

Most people with IBS feel mild-to-severe stomach cramps. Pain is generally focused on the lower left side, but it usually comes and goes. Eating is the most common pain trigger, and bowel movements can usually provide some relief. Emotional stress can make the pain worse. In some women, menstrual periods also seem to increase IBS pain. When the cramps are severe, IBS may be called by its old name, "spastic colitis."



All patients with IBS have abnormal bowel function. Common problems include:

Constipation. Although many patients with IBS have diarrhea, many others have constipation. They may have just 1 to 3 bowel movements a week. When they have daily movements, stools are often small, hard, and difficult to pass. As a result, patients often strain on the toilet and may develop rectal pain. Some depend on laxatives and enemas more than they should.

Diarrhea. Stools are soft and loose, but not watery or very large. Many people feel better after going to the bathroom. However, they often feel that they have not completely emptied themselves. Breakfast and other meals may trigger the diarrhea. In IBS, diarrhea is most common in the morning, but it never wakes patients up at night (see Warning Symptoms, page 7).

Rectal mucus. Everyone with IBS has diarrhea, constipation, or both. In addition, about half of all IBS patients complain of mucus in their bowel movements. In the past, some patients with IBS were diagnosed as having “mucous colitis.” It is important to note that bleeding is not a feature of IBS (see Warning Signs, page 7).



Patterns of IBS

Experts have divided IBS into 3 main types:

- 1 IBS with constipation.** Patients have hard stools more than 25% of the time and loose stools less than 25% of the time.
- 2 IBS with diarrhea.** Patients have loose stools more than 25% of the time and hard stools less than 25% of the time.
- 3 Mixed or alternating IBS.** Patients switch between loose and hard stools.

IBS patients should keep track of their bowel function so their doctors will know if they should start treatment by targeting diarrhea, constipation, or pain.

Other Intestinal Symptoms

The major symptoms of IBS, **pain and abnormal bowel habits, are caused by abnormal function of the colon**, which is the lowest part of the digestive tract. But some patients also have symptoms related to the upper digestive tract. These problems may include:

- A feeling of early fullness after meals
- Indigestion
- Nausea
- Upper abdominal or lower chest pain
- Abdominal bloating, belching, and/or rectal gas

Mental distress is often linked to IBS.

Non-Intestinal Symptoms

Some women with IBS may have problems with sexual or urinary function. Other problems, such as high blood pressure, asthma, allergies, and pain and stiffness in the muscles linked to *fibromyalgia*, are more common in patients with IBS than in healthy people. Experts don't know if these illnesses are related to IBS.

The Role of Stress

Mental distress is often linked to IBS. About half of all IBS patients are depressed. Others are troubled by anxiety, sleep disturbances, or other stress reactions.

Because many patients with IBS don't have major mental problems, experts don't think that stress causes IBS. Still, stress often triggers a 'flare up' in IBS, and coping skills are an important part of treatment for everyone (see page 12).



Warning Signs

When it comes to diagnosing IBS, doctors rely on symptoms, not tests. But certain warning symptoms tell doctors to do tests for other illnesses, such as infectious diarrhea, food allergies, thyroid disease, inflammation or infection of the colon (*diverticulitis*), inflammatory bowel disease, or abdominal cancer. Here are some warning symptoms:

- Symptoms that begin after age 50
- Symptoms that start abruptly, are unusually severe, or get worse rapidly
- Symptoms that begin after taking antibiotics
- Severe or persistent diarrhea
- Nighttime diarrhea
- Nighttime pain that interrupts sleep
- Fever
- Weight loss
- Blood in the stool
- Anemia (low level of red blood cells)
- A family history of colon cancer or inflammatory bowel disease

Diagnosis

Experts have developed simple guidelines for diagnosing IBS. These standards apply to people whose symptoms have been present for 6 months or more. **The key feature is abdominal pain or discomfort that has occurred at least 3 days a month for the 3 months prior to diagnosis along with at least 2 of the following:**

- Pain associated with a change in stool frequency
- Pain associated with a change in stool consistency (form)
- Pain that improves after bowel movements

If your symptoms meet these simple standards and you don't have any warning symptoms, your doctor can diagnose IBS after finding that your physical exam, complete blood count, and a simple blood test for inflammation (a CRP or ESR test) are all normal. In fact, **experts advise against more tests in this situation.** But if your doctors suspect a diagnosis other than IBS, other studies may be needed. These studies include stool tests for parasites or abnormal bac-

teria, blood tests for thyroid disease or celiac disease, or a colonoscopy or abdominal CT (computed tomography) scan for tumors and inflammatory bowel disease. **In IBS, all these tests are normal.**

What Causes IBS If All Tests Are Normal?

IBS is a *functional disorder* of the colon. **In other words, the structure of the bowel is normal, but it does not work smoothly and properly.** Scientists don't know why this happens, but there are several potential reasons:

- **Abnormal sensitivity of intestinal nerves.** Bowel contractions that are normally painless produce discomfort or pain.
- **Abnormal sensitivity of the brain.** Signals from the intestines are magnified and interpreted as pain.
- **Abnormal reactivity of the intestines.** Triggers such as meals or stress produce abnormal contractions or secretions.
- **Abnormal balance of intestinal bacteria.**

After research clarifies the causes of IBS, your doctor can target therapy more precisely. But even now, treatment can help most IBS patients.





Step 3: Reduce Stress

It's easier said than done in our busy world. Still, it's important to pace yourself and set priorities. Try to avoid stressful situations (and people). Focus on enjoyable activities (and people). Get some exercise every day. Get enough sleep. Consider a support group, counseling, therapy, or hypnosis. And don't get stressed about IBS leading to more serious medical problems—it won't.

Your doctor may recommend drugs to relieve specific symptoms of IBS.

Step 4: Medication

IBS is a complex disorder, and no medication can help every patient. Still, your doctor may recommend drugs to relieve specific symptoms. Remember to discuss the pros and cons of all medications with your doctor. Use the lowest dose that helps. Be sure to follow-up with your doctor to check your progress.

Here are some drugs that may help IBS symptoms:

Drugs for constipation. In April 2008, the FDA approved *lubiprostone* for the treatment of Irritable Bowel Syndrome–Constipation in adult women 18 years of age and older. This drug had previously been approved for the treatment of Chronic Idiopathic Constipation. Please talk to your doctor about whether this drug is right for you.

If fiber is not helpful, laxatives may be a good option. Many doctors recommend osmotic laxatives, such as *magnesium citrate* or *polyethylene glycol*, for men and women. Bowel stimulants, such as *senna* and *cascant*, should be avoided. Do not overuse any laxative (see the PEC brochure 'Chronic Constipation').

Drugs for diarrhea. An over-the-counter drug, *loperamide*, is the place to start. Instead of taking it on a regular basis, use it only as you need it. Many patients benefit from taking two 2 mg tablets after the first loose stool and one 2 mg tablet after each subsequent stool. You should not take more than 16 mg a day.

Drugs for cramps. Prescription anti-spasm drugs such as *dicyclomine* and *hyoscyamine* may help. They are usually taken only as needed, usually before meals.

Drugs for depression. Tricyclic antidepressants such as *amitriptyline* may reduce intestinal spasms, diarrhea, and nerve pain, even in patients who are not depressed. Many doctors prescribe a low bedtime dose for IBS. Patients with IBS who also have problems with depression may benefit from higher doses or from other medications for depression or anxiety.

Drugs for bacteria. Although experience is limited, some IBS patients have benefited from *rifaximin*, an antibiotic that acts only on bowel bacteria. Other

'Medication' continued on following page.





Step 1: Identify Triggers

Keep a diary to find out if certain things make you feel worse. Stress and foods are two important triggers. Many people have trouble with:



- Dairy products that contain *lactose* (milk sugar)

- Chewing gum, beverages, and foods sweetened with *fructose* or *sorbitol*



- Gas-producing vegetables, such as beans, broccoli, cabbage, and cauliflower



- Apples, bananas, and citrus fruits

- Caffeine, chocolate, and alcohol

- Fatty foods



- Nuts

- Carbonated beverages

Step 2: Diet

Eliminate foods that trigger symptoms—but avoid drastic or overly strict diets. Even if dairy products don't trigger symptoms, try avoiding lactose for 2 weeks to see if it helps. That means switching to lactose-free or soy milk and avoiding other dairy products or taking lactase tablets before you eat foods that have even small amounts of lactose. Some patients feel better if they avoid wheat. If you think wheat might be a problem for you, ask your doctor to do a blood test to check for sensitivity to *gluten* (wheat protein).



Along with avoiding foods that trigger problems, you should try to find foods that help. If you have IBS with constipation, dietary fiber may help. See the PEC brochure 'Chronic Constipation' for a list of high-fiber foods. Increase your fiber slowly and avoid foods that cause gas, cramps, or diarrhea. *Psyllium* or *methylcellulose* supplements make it easy to increase your fiber in a gradual, measured way. Start with just 1 teaspoon a day. Then gradually add another spoonful every 2 to 4 days as tolerated. Always be sure to drink lots of water to help fiber work well.



patients try to restore normal gut bacteria by taking a *probiotic*, such as *bifidobacteria*. Doctors don't know if these treatments are effective and safe.

Restricted drugs. Two drugs, *alosetron* and *tegaserod*, have been developed specifically for IBS. Because of potentially serious side effects, the FDA has restricted these drugs for certain women with severe IBS who meet specific guidelines.

Living with IBS

IBS is a chronic condition. Although doctors don't know its cause, they do know it's a real problem that develops from abnormal bowel function. There are no tests to diagnose IBS, but if necessary, your doctor can do tests to rule out other conditions.

There is no cure for IBS, but many treatments can help. **Dietary changes, stress control, and a healthy lifestyle are the basics.** If you need more help, work with your doctor to find medications that provide relief.

Above all, remember that IBS is not a threat to your health and that simple treatments can help you live a full and happy life with IBS.



For More Information



National Library of Medicine

<http://www.nlm.nih.gov/medlineplus/irritablebowelsyndrome.html>



National Institute of Diabetes and Digestive and Kidney Diseases

<http://digestive.niddk.nih.gov/ddiseases/pubs/ibs>



International Foundation for Functional Gastrointestinal Disorders

www.aboutibs.org



The American College of Gastroenterology

www.acg.gi.org



The American Gastroenterological Association

www.gastro.org