Irritable bowel syndrome (IBS) is a common disorder that affects the large intestine. Signs and symptoms include cramping, abdominal pain, bloating, gas, and diarrhea or constipation, or both. IBS is a chronic condition that you'll need to manage long term.

Causes

The precise cause of IBS isn't known. Factors that appear to play a role include:

* **Muscle contractions in the intestine.**  Contractions that are stronger and last longer than normal can cause gas, bloating and diarrhea. Weak intestinal contractions can slow food passage and lead to hard, dry stools.
* **Nervous system.** Abnormalities in the nerves in your digestive system may cause you to experience greater than normal discomfort when your abdomen stretches from gas or stool. Poorly coordinated signals between the brain and the intestines can cause your body to overreact to changes that normally occur in the digestive process, resulting in pain, diarrhea or constipation.
* **Inflammation in the intestines.** Some people with IBS have an increased number of immune-system cells in their intestines. This immune-system response is associated with pain and diarrhea.
* **Severe infection.** IBS can develop after a severe bout of diarrhea (gastroenteritis) caused by bacteria or a virus. IBS might also be associated with a surplus of bacteria in the intestines (bacterial overgrowth).
* **Changes in bacteria in the gut (microflora).** Microflora are the "good" bacteria that reside in the intestines and play a key role in health. Research indicates that microflora in people with IBS might differ from microflora in healthy people.

Risk factors

Many people have occasional signs and symptoms of IBS. But you're more likely to have the syndrome if you:

* **Are young.** IBS occurs more frequently in people under age 50.
* **Are female.** . Estrogen therapy before or after menopause also is a risk factor for IBS.
* **Have a family history of IBS.**
* **Have a mental health problem.** Anxiety, depression and other mental health issues are associated with IBS. A history of sexual, physical or emotional abuse also might be a risk factor.

Complications

Chronic constipation or diarrhea can cause hemorrhoids.

In addition, IBS is associated with:

* **Poor quality of life.** Many people with moderate to severe IBS report poor quality of life. Research indicates that people with IBS miss three times as many days from work as do those without bowel symptoms.
* **Mood disorders.** Experiencing the signs and symptoms of IBS can lead to depression or anxiety. Depression and anxiety also can make IBS worse.

### Diagnosis

The Rome IV criteria for the diagnosis of irritable bowel syndrome require that patients have had recurrent abdominal pain on average at least 1 day per week during the previous 3 months that is associated with two or more of the following

* Related to defecation (may be increased or unchanged by defecation)
* Associated with a change in stool frequency
* Associated with a change in stool form or appearance

Four bowel patterns may be seen with irritable bowel syndrome, and these remain in the Rome IV classification.]These patterns include the following:

* IBS-D (diarrhea predominant)
* IBS-C (constipation predominant)
* IBS-M (mixed diarrhea and constipation)
* IBS-U (unclassified; the symptoms cannot be categorized into one of the above three subtypes)
* **Manning criteria.** These criteria focus on pain relieved by passing stool and on having incomplete bowel movements, mucus in the stool and changes in stool consistency. The more symptoms you have, the greater the likelihood of IBS.

Your doctor will also likely assess whether you have other signs or symptoms that might suggest another, more serious, condition. These signs and symptoms include:

* **Onset of signs and symptoms after age 50**
* **Weight loss**
* **Rectal bleeding**
* **Fever**
* **Nausea or recurrent vomiting**
* Abdominal pain, especially if it's not completely relieved by a bowel movement, or occurs at night
* Diarrhea that is persistent or awakens you from sleep
* Anemia related to low iron

If you have these signs or symptoms, or if an initial treatment for IBS doesn't work, you'll likely need additional tests.

**Additional tests**

Your doctor may recommend several tests, including stool studies to check for infection or problems with your intestine's ability to take in the nutrients from food (malabsorption). You may also have a number of other tests to rule out other causes for your symptoms.

Imaging tests can include:

* **Flexible sigmoidoscopy.** Your doctor examines the lower part of the colon (sigmoid) with a flexible, lighted tube (sigmoidoscope).
* **Colonoscopy.** Your doctor uses a small, flexible tube to examine the entire length of the colon.
* **X-ray or CT scan.** These tests produce images of your abdomen and pelvis that might allow your doctor to rule out other causes of your symptoms, especially if you have abdominal pain. Your doctor might fill your large intestine with a liquid (barium) to make any problems more visible on X-ray. This barium test is sometimes called a lower GI series.

Laboratory tests can include:

* **Lactose intolerance tests.** . Your doctor may order a breath test or ask you to remove milk and milk products from your diet for several weeks.
* **Breath test for bacterial overgrowth.** A breath test also can determine if you have bacterial overgrowth in your small intestine. Bacterial overgrowth is more common among people who have had bowel surgery or who have diabetes or some other disease that slows down digestion.
* **Upper endoscopy**  the doctor to inspect your upper digestive tract and obtain a tissue sample (biopsy) from your small intestine and fluid to look for overgrowth of bacteria. Your doctor might recommend endoscopy if celiac disease is suspected.
* **Stool tests.** Your stool might be examined for bacteria or parasites, or a digestive liquid produced in your liver (bile acid), if you have chronic diarrhea.

Treatment

Treatment of IBS focuses on relieving symptoms so that you can live as normally as possible.

Mild signs and symptoms can often be controlled by managing stress and by making changes in your diet and lifestyle. Try to:

* Avoid foods that trigger your symptoms
* Eat high-fiber foods
* Drink plenty of fluids
* Exercise regularly
* Get enough sleep

Your doctor might suggest that you eliminate from your diet:

* **High-gas foods.** If you experience bloating or gas, you might avoid items such as carbonated and alcoholic beverages, caffeine, raw fruit, and certain vegetables, such as cabbage, broccoli and cauliflower.
* **Gluten.** Research shows that some people with IBS report improvement in diarrhea symptoms if they stop eating gluten (wheat, barley and rye) even if they don't have celiac disease.
* **FODMAPs.** Some people are sensitive to certain carbohydrates such as fructose, fructans, lactose and others, known as FODMAPs — fermentable oligo-, di-, and monosaccharides and polyols. FODMAPs are found in certain grains, vegetables, fruits and dairy products. Your IBS symptoms might ease if you follow a strict low-FODMAP diet and then reintroduce foods one at a time.

A dietitian can help you with these diet changes.

If your problems are moderate or severe, your doctor might suggest counseling — especially if you have depression or if stress tends to worsen your symptoms.

In addition, based on your symptoms your doctor might suggest medications such as:

* **Fiber supplements.** Taking a supplement such as psyllium (Metamucil) with fluids may help control constipation.
* **Laxatives.** If fiber doesn't help symptoms, your doctor may prescribe magnesium hydroxide oral (Phillips' Milk of Magnesia) or polyethylene glycol (Miralax).
* **Anti-diarrheal medications.** Over-the-counter medications, such as loperamide (Imodium), can help control diarrhea.
* **Anticholinergic medications.** Medications such as dicyclomine (Bentyl) can help relieve painful bowel spasms. They are sometimes prescribed for people who have bouts of diarrhea. These medications are generally safe but can cause constipation, dry mouth and blurred vision.
* **Tricyclic antidepressants.** This type of medication can help relieve depression as well as inhibit the activity of neurons that control the intestines to help reduce pain. If you have diarrhea and abdominal pain without depression, your doctor may suggest a lower than normal dose of imipramine (Tofranil), desipramine (Norpramine) or nortriptyline (Pamelor). Side effects — which might be reduced if you take the medication at bedtime — can include drowsiness, blurred vision, dizziness and dry mouth.
* **SSRI antidepressants.** Selective serotonin reuptake inhibitor (SSRI) antidepressants, such as fluoxetine (Prozac, Sarafem) or paroxetine (Paxil), may help if you're depressed and have pain and constipation.
* **Pain medications.** Pregabalin (Lyrica) or gabapentin (Neurontin) might ease severe pain or bloating.

**Medications specifically for IBS**

Medications approved for certain people with IBS include:

* **Alosetron (Lotronex).** Alosetron is designed to relax the colon and slow the movement of waste through the lower bowel. Alosetron can be prescribed only by doctors enrolled in a special program, is intended for severe cases of **diarrhea-predominant IBS in women who haven't responded to other treatments, and isn't approved for use by men**. It has been linked to rare but important side effects, so it should only be considered when other treatments aren't successful.
* **Eluxadoline (Viberzi).** Eluxadoline can ease diarrhea by reducing muscle contractions and fluid secretion in the intestine, and increasing muscle tone in the rectum. Side effects can include nausea, abdominal pain and mild constipation. Eluxadoline has also been associated with pancreatitis, which can be serious and more common in certain individuals.
* **Rifaximin (Xifaxan).** This antibiotic can decrease bacterial overgrowth and diarrhea.
* **Lubiprostone (Amitiza).** Lubiprostone can increase fluid secretion in your small intestine to help with the passage of stool. It's approved for women who have IBS with **constipation**, and is generally prescribed only for women with severe symptoms that haven't responded to other treatments.
* **Linaclotide (Linzess).** Linaclotide also can increase fluid secretion in your small intestine to help you pass stool. **Linaclotide can cause diarrhea, but taking the medication 30 to 60 minutes before eating might help.**

**Rapid weight loss.** As the body metabolizes fat during rapid weight loss, it causes the liver to secrete extra cholesterol into bile, which can cause gallstones.