



UNIVERSITY MEDICAL GROUP

Department of Surgery  
Colon & Rectal Division

## **IRRITABLE BOWEL SYNDROME**

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### **How Do I Know I Have IBS?**

You are a relatively young person, in your twenties, thirties, or forties, who enjoys good health. Without any warning you begin to experience periods of lower abdominal discomfort, which may increase in intensity. You have pain that feels like cramps. You need to move your bowels more often than usual and to move them quickly. “Precipitously” is your doctor’s word for this urgent need. Suddenly your stools are different: loose, watery, even explosive, without blood but possibly containing mucus that looks like the uncooked white of an egg or the stuff you blow out of your nose with a simple cold.

This kind of disturbance in your intestine may repeat itself so that you begin to see a pattern. It happened before when a teenager, most inconveniently, just before taking an examination in high school or before going out on your first date. Or these periodic storms may be followed by times when your abdomen feels and even looks blown up; you feel distended, full of gas. The cramps return, but now you want to move your bowels and cannot. The whole experience sounds a bit like what you have heard others talk about: the “nervous stomach.” If you consult your doctor after it happens a few times, he or she reassuringly tells you that you are suffering from irritable bowel syndrome (IBS). You are a bit reassured when the doctor informs you after doing some tests that he or she cannot find any organic basis for the distress, but you are not much consoled when you learn that your condition is quite common; it helps only a little to know that many others are in the same boat. Perhaps 15% of the adult population has the same condition, although many never go to the doctor about it. Even so, the IBS is the commonest reason in the United States consult gastroenterologists, the physicians who specialize in disorders of the gastrointestinal tract.

What is making my bowel so irritable? This combination of symptoms and the change in the behavior of your lower intestinal tract, which physicians label the irritable bowel syndrome (a syndrome is just the name for a constellation of signs and symptoms that go together), has a multitude of names: the irritable bowel, the nervous gut, the unstable bowel, the adaptive colon, the spastic bowel, among others. These terms are one way of labeling for convenience the group of symptoms that is bothering you. Although these diagnostic labels are not misleading, some other loosely used terms are. For a long time, when emphasis was placed on the passage of mucus with the bowel movements, the condition was called mucous colitis, and even now the IBS is called spastic colitis or just colitis. Unfortunately, this implies that the condition is an inflammation of the intestine and colon. This is not the case. There is no evidence that any inflammation is going on. It may lead you to think you are suffering from one of the more serious conditions (ulcerative colitis and Crohn's disease). Your concern about that may make you even more anxious about your condition and contribute to your discomfort.

You should know right away that no physician believes that the irritable bowel is a forerunner of ulcerative colitis or Crohn's disease, the so-called inflammatory bowel diseases (IBD), nor does the IBS become an inflammatory condition. It should also be stressed that IBS has nothing to do with the development of cancer of the colon. (Cancer of the small bowel or small intestine is one of the rarest diseases on earth.) As for the colon, the IBS is not a forerunner of either malignant tumors or the serious inflammation of ulcerative colitis and/or Crohn's disease.

Yet IBS can be very uncomfortable, and at times you may very well wonder and worry whether the hard, crampy abdominal discomfort you have can really be due to a nonorganic cause.

*Is IBS a Wastebasket Diagnosis of All the Lower Bowel Disturbances We Don't Understand?*

There are many conditions and disturbances of the intestinal tract we do not yet understand or cannot even classify. The IBS is not one. At present we think that it is a definite disturbance of the function of the bowel, which goes hand in hand with the symptoms described earlier. Unfortunately, many people believe that the absence of an organic cause means that the individual has brought it on him or herself, adding unnecessary guilt to suffering. The

gist of the problem is that the parts are not properly working and we need to sort out the possible reasons. Understood in this way, the irritable bowel is a disorder in the functioning of the lower intestinal tract for which we have at present no organic structural cause. So for the question raised at the beginning of this section, the answer is that the IBS is not a wastebasket diagnosis but a similar group of disturbances of the lower bowel, despite the individual variations that can occur in different patients.

*What are IBS Patients' Most Common Complaints? How Does IBS Show Itself?*

If you recognize yourself so far in this chapter, you will have some, but not necessarily all, of these disturbances:

1. Abdominal pain relieved by having a bowel movement.
2. Looser and more frequent bowel movements with your abdominal pain.
3. Bloated and distended abdomen, or a feeling that your abdomen is swollen.
4. Some mucus in the stools
5. Very often, the most common sensation that you have not completely emptied your bowel after a movement, or what I call the “sense of incomplete evacuation.”

One important sign you do not have is rectal bleeding. People with IBS can have rectal bleeding but it's often due to trivial causes and never to IBS. It may be due to internal or external hemorrhoids (swollen, varicose veins around the rectum and anus), or a fissure (a crack or split in the lining where the rectum joins the skin around the anus) or to a more serious condition that needs investigation.

Or your symptoms may group themselves differently:

1. One group, the so-called spastic colon usually centers around abdominal pain in association with bowel defecation
2. Another may be constipation (difficulty in moving your bowels) with or without pain
3. Then there are times when you have only painless diarrhea (“too often and too loose” is my rough definition of diarrhea)

4. More often you swing from periods of diarrhea to those of difficulty in passing stools.
5. The feeling of fullness and swelling, which in your instinctive way you feel is due to “gas”: too much gas in the intestinal tract or the inability to satisfactorily pass this gas through the rectum, with or without a bowel movement.

*If It's All So Simple, Why Is It so Hard to Make the Diagnosis? Why Does My Doctor Plan so Many Tests?*

The most important concern is to be sure that there is no organic basis for your symptoms and to thus rule out the possibility that you have a serious illness that mimics IBS. Difficulty in moving your bowels may be due to a mechanical blockage: a growth, small or large, benign or malignant. Diarrhea can be caused by many reasons, among them parasites and tumors that secrete fluid, and pain can be caused by inflammation as well as growths. So important is this part of the plan for your future treatment that for many doctors IBS becomes a diagnosis of exclusion: being sure that you don't have a number of conditions it would be a shame or even disastrous to overlook. Sometimes you may even think that the doctor is more concerned with conditions that you do not have than with those you do. Furthermore, if you have a typical history of IBS, chances are that it has gone on for a long time. In this case you need to know that the underlying situation has not changed into something else or that you haven't developed a new condition that mimics the old. Finally, if you have seen blood in the bowel movements, a whole group of new conditions there must be diagnosed or disproved.

*What Does the Doctor's Examination Consist Of?*

The first and most important part is the story you tell your physician and the facts he or she elicits from questioning you. Walt Whitman said that great poets need good readers. Similarly, good doctors need good patients. If you can, give your doctor your complete medical history coherently and logically in correct time sequence; if you can't, bring some notes that you have organized. For his or her part, your doctor needs to have time to listen and to ask you further questions. Although the physical examination is important to be sure other conditions are not also present, the irritable bowel has few physical signs. You may have noticed that on the left side, in the lower quadrant of the abdomen, there may be a firm rubber hose like structure. This is the somewhat tender sigmoid colon.

### *What Other Tests Are Necessary?*

A blood count and a search for blood in the stool (if you have not noted any obvious bleeding), easily and conveniently collected at home, are clearly in order and without any risk. Your doctor's decision to search for parasites in the stool requires a reasonable suspicion that they exist and, equally important, a laboratory your doctor trusts.

### *What About the More Invasive Tests?*

I feel strongly that a sigmoidoscopic examination is necessary. This allows inspection of the lower portion of the bowel for 10-15 inches, with a lighted instrument introduced through the rectum, and must be preceded by proper cleansing so the observer can get a clear look. When done by an experienced person, the risk (mainly of perforation) is minimal and one that a prudent person would accept. Recent developments with flexible, fiber optic viewing devices allow a thinner, flexible instrument, known as the flexible sigmoidoscope, to be passed even further through the lower bowel. The choice here depends on your doctor's experience with these instruments. In general, if you haven't noted bleeding, and no blood was found in a minimum of six specimens of stool, there is little need to continue tests. As with other medical conditions, however, personal health history in most individuals remains the most important basis for examination, testing, and diagnosis. If you do have bleeding, either obvious or hidden, there is no question that you must be investigated properly to determine the source of the blood.

Until recently the barium enema was the only means available. It consists of x-ray examination of the colon after filling the rectum with barium-containing fluid, much as in an ordinary enema. Prior to this the colon must be well cleaned out by laxatives, enemas, and a special low-fiber diet. No anesthesia is needed, the discomfort is mild, and the risks extremely low. The fine detail of the pictures taken during this examination is improved if air is introduced into the rectum, so that a thin film of fluid covers the lining. This double contrast technique (air and barium fluid) has the advantage of revealing small polyps and tiny ulcerations, but the air makes many patients quite uncomfortable. Again, the risk is minimal. The flexible colonoscope provides an alternate way of looking into the interior of the whole colon. Like the flexible sigmoidoscope, this instrument makes use of a flexible

fiber optic system. An experienced user can insert the colonoscope from the rectum all the way around the right side (the cecum). This, like the barium enema, requires careful cleaning out of the colon.

Because this procedure is more uncomfortable than the barium enema, most patients are given sedative and pain-preventing medication by intravenous injection beforehand. This is done in an endoscopic suite either as an outpatient in a hospital, or in an endoscopist's office. Except in the presence of bleeding, I do not feel that your irritable bowel should be routinely colonoscoped, but this is a matter for individual decision by your doctor.

### *How Can My Irritable Bowel Syndrome Be Treated?*

If we knew the cause or causes of this group of symptoms, treatment would be easier and directed at providing comfort and eliminating or avoiding the cause. This is not the case at present, however, we do know that something has clearly disturbed the automatic functioning of the bowel, and that the search must be for possible irritants either coming from the outside or arising within the body. It is natural to think first in terms of something consumed: food, drugs, antibiotics, and so on. The refined diet of the Western world, which is low in fiber, has been compared with the fiber-rich foods of the Third World, and the low fiber content blamed for the irritable bowel. In fact, this is far from proven nor does a high-fiber diet always improve bowel symptoms.

Food intolerance, also known as food sensitivities or food allergies, have always been blamed for IBS. Many of us do have lactose intolerance: We cannot digest milk and milk products, especially as we grow older, because the enzyme in our intestine, lactase, which digests lactose (the sugar of milk), declines. But lactose intolerance accounts for only a few people with IBS. Recent research on food intolerance has led some investigators to suspect that wheat, dairy products, and possibly eggs cause IBS in some individuals. This approach may be helpful and is worth a trial. Some medicines such as antibiotics and narcotics can trigger the irritable bowel, whereas some patients clearly date their problem to an attack of a "virus," causing any one of the common acute upsets of the bowel with diarrhea. "Nerves" have always been blamed for the IBS. You may have observed a pattern in your own case of emotional upsets or stresses preceding the onset of symptoms. On the other hand, there are many besides yourself who cannot see any connection between their feelings and their gut. Yet there

must be something to the general perception that brain and bowel are connected. Depression is often present and plays an important role in the whole picture. Some workers in this field have wondered whether the IBS should not be called the irritable brain rather than the irritable bowel. More recently, doctors have looked at disturbances in the movements of the colon, known as motility, for different patterns. Some do indeed exist, but it is difficult to relate these disturbances (an increased or decreased amount of contraction of the colon) to the proven symptoms. Having taken you through this catalogue of possible factors and current ideas about IBS, you may very well ask me what my own concept is. I believe that the IBS is a disorder in the normal rhythm of the contraction and relaxation of the intestinal musculature apparatus, triggered off by a wide variety of irritants in your internal and external environment.

### *What About Specifics of Treatment?*

Probably the most important thing a doctor can do is to reassure you about the nature of your disorder. Just knowing you do not have a serious organic disease of the colon helps a lot; although the IBS may make you uncomfortable, it will not shorten your life nor does it lead to any diseases.

### *What About Habits?*

#### **The Big Three**

There are plenty of compelling reasons for not smoking. If you smoke and suffer from IBS, you should be aware that nicotine can be an irritant. Stop smoking. Stopping cigarette smoking is not easy, even for highly motivated and medically informed patients, including doctors.

#### **CAFFEINE**

Since caffeine is clearly upsetting to the bowel, I think a trial of stopping all caffeine-containing beverages or food should be tried: avoid coffee, tea, chocolate, and cola drinks containing caffeine. From a food chemist I learned years ago that discarding the first cup of tea made from a fresh tea bag and drinking tea brewed from the used bag, reduces the theobromine and caffeine in the remaining cups to very low levels.

#### **ALCOHOL**

Although I am generally not opposed to moderate use of alcohol, I think a trail of stopping alcohol consumption is in order. Many patients find that wine, especially red, contributes to their discomfort.

## **MILK AND MILK PRODUCTS**

By the time most patients get to see me with their irritable bowel symptoms, they have discovered for themselves whether they can tolerate milk and milk products. If there is any doubt, or if they have not considered this before, I suggest a 2 week trial of withdrawal of milk and milk products from their diet. Yogurt seems to be tolerated, because the organisms in yogurt supply the needed enzyme lactase. I have not found that a lactose tolerance test, similar to a glucose tolerance test for diabetes, has helped me in this connection and so I don't subject my patients to this testing. If they are truly lactase deficient, adding the enzyme to milk may be worthwhile, since preparation of this substance (LactAid, for example) is now available.

Hardly anyone in the Western world has not heard that fiber, bran, and other bulk-forming foods are good for the intestines. As a result everyone is eating bran muffins, adding bran to their breakfast cereals, or taking some form of plant seeds such as Metamucil to avoid constipation, diverticulosis, and cancer of the colon. As noted earlier, it is far from proven that lack of fiber is an important factor in all instances of IBS, and not everyone on a high-fiber-bran diet; some may feel worse. If you are among those who have dry, hard, constipated stools, an increase in fiber is worth trying; in the diarrheal form, however, I am not convinced of its worth. The plant seeds tend to bind water and they may help in the diarrheal phases also. You may have eliminated salads and fresh fruits from your diet because you thought they might be harmful. Do not do this from theory: Convince yourself by several trials whether or not you can handle them.

### *Specific Foods*

Many sufferers of IBS eliminate so many items from their diets because they suspect them of causing trouble that they may end up eating very poor, unbalanced meals. Some patients clearly have a limited tolerance for roughage and do better when salad and some fruits are reduced or eliminated, but this can be carried too far. For example, bananas are often even well tolerated by some, especially if eaten ripe. But the haphazard

elimination of one class of foods after another is to be avoided. Only repeated trials can convince you that you really cannot tolerate salad or a specific fruits. Most cooked or steamed vegetables can be eaten, but some people do better if the cabbage family of vegetables is eliminated. Beans are notorious gas formers. A few people have difficulty in handling gluten, a protein that is present in wheat, rye, oats, and barley. Gluten can cause a severe diarrheal disorder in youngsters called celiac disease but, some adults have a limited tolerance for gluten without it being celiac disease. In rare instances, a trial of withdrawal of these items may help. The fear of eating specific foods because of substantial allergies or sensitivities can be carried too far and may lead to deficient diet. In rare instances where there is a documented family history of allergies, or of allergenic disorders such as hives, hay fever, or eczema, and where elimination diets do not help. I sometimes in desperation fall back on a “core” diet. For 2 or 3 weeks, I ask the patient to eat only one starch (rice); one protein (lamb or, rarely, only chicken); one fruit (canned Bartlett pears); and to drink only bottled mineral water before allowing them to add one new food at a time. Although tedious, this approach may help to pinpoint the offending food or drink. In this age of megavitamins, it is prudent to supplement your diet with an ordinary multivitamin tablet, although high doses, which can be toxic, should be avoided. If your physician has taken you off milk and milk products, and especially if you are a woman of menopausal age, supplementary calcium will be needed.

## **Medicines**

While drugs can't “cure” your condition, they can give you symptomatic comfort. One such group is anticholinergics, which block one portion of the automatic nerves that regulate the contractions of the intestines. The basic example of this class is atropine or its belladonna, taken in the form of tincture of belladonna in a number of small drops. Sometimes one of the anticholinergic group is combined with a general relaxer or tranquilizer (Donnatal and Librax are examples of these combinations). Antispasmodics, which act directly by blocking nervous impulses to the intestinal muscles, also give people considerable relief (Bentyl is one medication).

Bulk agents (like Metamucil) may be helpful if dietary fiber and roughage do not relieve constipation. For those with disturbing amounts of diarrhea and cramps, several newer drugs, loperamide (Imodium) and diphenoxylate (Lomotil) are enjoying widespread use at present in reducing diarrhea: The

first actually reduces the secretion of fluid by the intestine; the latter is related to codeine and contains atropine as well. They help by slowing down intestinal contractions. Much research at present is focusing on the relation of the brain and the gut in an attempt to understand how one can influence the other. Chemical substances, peptides (chains of amino acids, the building blocks of protein) of identical character are present in both organs, and researcher's intuition is that they must in some way interact, so that our moods and our feelings are correlated with our bodily functions. Some doctors feel strongly that antidepressants or mood elevating drugs help their patients (Elavil is an example of this class). Some people do not recognize that their basic mood is depression and, for them, antidepressants are very helpful. I am not dismissing the careful, limited use of these medicines to tide you over a rough period, but they should be used sparingly to avoid your becoming dependent on them.

### *Handling Stress*

Whatever the theories about the IBS, your experience and mine convinces us that under certain circumstances, stress – whether physical or psychological – does affect your gastrointestinal tract. This may be no different for IBS than the bad effects stress has upon any other disorder of the body: arthritis, peptic ulcer, pneumonia, tuberculosis, and so on, but it is no less real or true. On the question of physical stress, you would agree that the proper mixture of work, play, and rest is important for good health, but no physician can write the correct prescription for you. You must solve this difficult equation yourself. But of one point I am convinced: We are born with the same neuromuscular apparatus of our ancestors who lived and evolved millions of years ago. They lived in a hostile environment where they had to fight their predators or flee them. Many of our gastrointestinal reflexes are left over from that readiness for “fight or flight.” Unlike our ancestors, however, we cannot fight our “predators” – the pressures that economic responsibilities put upon us, the steps on the ladders of our careers, the unappreciative boss and the demanding public we may have to serve, the needs of aging and sick parents – nor can we flee them. Physical exercise, however, is a good way of discharging neutral and muscular tension. It is not, in my opinion, merely a matter of physical fitness but a way of releasing and getting rid of pent-up nervous energy. I am not a fanatic about this point, but you must find ways of doing some exercise. It may not be the currently-in vogue jogging, or running; walking briskly and swimming are also good forms. For tennis you may need to end up playing doubles, and for golf you may need a golf cart,

but swimming you can do all your life in moderation. For the cardiovascular system (heart, lungs, and their circulation) short spurts of physical activity (20-30 minute periods three times a week) seem to be valuable. For the more continuous stress of daily living in the contemporary world, I feel that a more continuous, almost daily, program of tension releasing exercise is better. After a stressful day, 15-20 minutes of exercise such as riding a stationary bicycle or using a rowing machine may make your gut more receptive to the evening meal.

### *Relaxation and Your Bowel*

You may wonder why I have been stressing relaxation of the intestinal muscles so much. Patients are puzzled, worried, and even skeptical when I tell them that there is no organic basis for their abdominal pain, because it suggests that doctors have overlooked something you and they fear. “How can I have so much pain, without there being something there?” There is something there. The pain arises from the intense contractions of the circular muscles that surround the lower bowel. If you make a fist and hold your hand contracted for 5 minutes, you will have a sore hand. Keep contracted for 25 minutes and it will be a very sore hand. Contraction or distention of the intestines is the most powerful way of causing intestinal pain, even more than cutting the intestines. It is no wonder, then, that you have pain when your spastic bowel acts up.

How can relaxation techniques control these uncontrolled? Unwished for waves of contractions, especially as these contractions are not under our will? Indeed, the actions of many of our bodily functions are under the control of our autonomic (or “automatic”) nervous system, also known as the involuntary nervous system. We have just begun to understand that certain things about our bodies, which we thought we had no control over, can be influenced and modified consciously.

### *Altering Your Lifestyle*

I am aware of the constraints that everyday life places on each of us, but within these limits, review your priorities. You may need to trim your career goals, expected income, and social ambitions realistically. You are ambitious, but must you be vice-president in charge of everything? Are you taking on more as a suburban homemaker than you need or can handle in your child’s school. I am not saying cut out from life and its stresses, but

protect yourself from the unrewarding ones if you can. A lot of books, lectures, and courses these days are directed to stress and its management. Although learning how to handle stress better and adjusting your lifestyle to your physical and psychological resources are worthwhile pursuits, my patients have not found these courses particularly helpful, because they are so general and abstract. You may need discussion and direction based on a more concrete knowledge of your particular lifestyle.

In the end you can't avoid living with your irritable bowel, but neither will it shorten your life one day. Some students of the problem even believe that most persons who have the syndrome do not ever consult a doctor! If you have seen a doctor about your IBS, have been carefully but not exhaustively investigated, and found to fit this pattern of functional bowel disorders, then that knowledge will itself help you to go on enduring the symptoms, relieved of the anxiety that you have some terrible underlying disease. In addition, once you have been alerted to the nature of your malady, you can begin to pay attention to the clues your symptoms are pointing towards. You can then try to see what patterns occur in your symptoms daily life that seems to coincide with flare-ups of the IBS. Here you will have to become Sherlock Holmes for your Dr. Watson. Review your habits: tobacco, caffeine, and alcohol – the “Big Three.” Watch your eating habits carefully; some obviously need changing. Accept the fact that pills will not help too much. Do something about your failure to follow through or your good intentions to start a realistic exercise program. If you have done alone what your doctor suggests and still hurt a lot, consider getting some professional counseling or modifying your behavior, especially your destructive habits, or even trying biofeedback techniques.

Abstracted from *Your Gut Feelings: A Complete Guide to Living Better with Intestinal Problems* by Henry D. Janowitz, MD.