



A Comprehensive Look at Irritable Bowel Syndrome (IBS)



By: Lin Chang MD, Professor of Medicine at the David Geffen School of Medicine at UCLA, Los Angeles, CA; adapted from article by Douglas A. Drossman MD, Drossman Gastroenterology PLLC, Chapel Hill, NC; edited by William D. Chey MD, Nostrant Collegiate Professor, University of Michigan, Ann Arbor, MI

International Foundation for Gastrointestinal Disorders www.iffgd.org

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Overview

Irritable bowel syndrome (IBS) affects up to 5-10% of individuals worldwide. IBS affects children and adults of both genders. Although IBS does not shorten a person’s life span, it is associated with a large health care and economic burden. Studies have shown that IBS patients have an increased number of health care visits, diagnostic tests, and surgeries. IBS can also severely impact a person’s quality of life.

The purposes of this publication are to 1) describe the symptoms of IBS and the factors that may trigger them and 2) explain how IBS is diagnosed and treated. Answers to frequently asked questions are provided at the end. A better understanding of the causes and the different available treatment options will hopefully help individuals find proper care and manage their condition better.

Key Terms in this Fact Sheet

Functional GI disorders are disorders that occur because of abnormal functioning of the GI tract, which can affect motility, sensation, and brain–gut communication.

Motility is movement in the body (in this context, usually movement of food through the GI tract).

Gastrointestinal (GI) tract is the system of connected digestive organs starting with the mouth, proceeding through the esophagus, stomach, intestines, and anus.

Constipation is commonly defined as having 3 or fewer bowel movements (BMs) a week, and/or difficulty passing BMs.

Diarrhea is defined as loose, watery, or frequent BMs.

In IBS, the digestive system appears normal on routine tests. For this reason, it has been referred to as a functional gastrointestinal (GI) disorder. However, there is increasing evidence that the GI symptoms experienced in IBS may be caused by one of more of the following:

- Abnormalities in gut motility
- Improper functioning of the immune system (over or under active)
- Abnormal amounts of bacteria and other organisms (like viruses and fungi) in the gut (microbiota)
- The *central nervous system’s* interpretation of painful signals coming from the gut.

The **central nervous system** (CNS) is the part of the nervous system consisting primarily of the brain and spinal cord.

Understanding IBS

For most people, IBS is best understood as a long-term or chronic condition in which they experience reoccurring issues with abdominal pain or discomfort associated in some way to their bowel movements. Some patients with IBS, particularly those whose problems started after food poisoning or traveler’s diarrhea (post-infectious IBS) can gradually get better over time. Others will have IBS for their entire lives.

Subtypes of IBS

IBS is often categorized based on the most common type of bowel movements experienced. These groups include:

- Irritable bowel syndrome with diarrhea (IBS-D) – symptoms of diarrhea occur most often
- Irritable bowel syndrome with constipation (IBS-C) – symptoms of constipation occur most often

- Irritable bowel syndrome mixed (IBS-M) – symptoms of both constipation and diarrhea occur

Identifying the subgroup of IBS is helpful when deciding which tests and/or treatments are best. The severity of the symptoms should also be considered. Grouping IBS patients by their most common bowel movement type is also useful for researchers who are trying to better understand what causes IBS or the best way to care for patients with IBS.

Symptoms of IBS

Experiencing abdominal pain and/or discomfort with a change in *bowel habits* is the key symptom of IBS. The pain and/or discomfort can either be relieved or made worse by having a bowel movement.

A change in **bowel habits** can be any change what is normal for *you*, such as how often you have a bowel movement or what the bowel movement looks like (how watery or solid, its color, how much you expel at a time).

Other common symptoms of IBS include:

- bloating (a sensation of fullness in the belly),
- urgency (the need to rush to have a bowel movement),
- mucus (thick white or yellow liquid) in the stool, and
- the feeling of incompletely emptying after a bowel movement.

Symptoms can change over time. There can be periods when symptoms get worse as well as periods when symptoms lessen or disappear. In addition, the main type of bowel movements experienced may change over time. For example, some people who suffer mainly from constipation (or diarrhea) may later experience a change to the opposite or develop a mixture of both constipation and diarrhea. Sometimes changes in diet, behavior, or using over the counter remedies or prescription drugs can lead to such changes. Other times, a cause for the change is not known.

Diagnosing IBS

The first step in making a positive diagnosis of IBS is for the healthcare provider to identify if an individual has symptoms of IBS. The next important step is to look for signs and symptoms that raise concerns for a condition other than IBS, such as inflammatory bowel disease

“Alarm signs” or “Alarm Symptoms”

There is a collection of symptoms that healthcare providers use to make sure something other than IBS is not causing symptoms. They are often called “Alarm signs” or “Alarm Symptoms”. These features include:

- Blood in bowel movements – This blood can be bright red to black in color and may be in or around bowel movements.
- Low blood counts (anemia) – This is determined by blood work or lab tests ordered by a healthcare provider.
- New onset of symptoms over the age of 50.
- Losing weight without trying.
- Diarrhea that wakes you up from sleep at night.
- A family history of IBD, colon cancer, or celiac disease.

These alarm signs are usually not explained by IBS and can represent other medical problems. When these signs or symptoms occur, they should be brought to the attention of a healthcare provider to perform additional tests.

(IBD) (ulcerative colitis and Crohn’s disease) or celiac disease.

Usually, the healthcare provider will then examine the abdomen, rectum and anus.

The abdominal examination is a physical examination of the abdomen which generally done in four different stages by your healthcare provider

- 1) inspection of the visible characteristics of the abdomen;
- 2) listening to the abdomen with a stethoscope.
- 3) using their hands to inspect the patient's abdomen.
- 4) tapping the patient's abdomen and abdominal organs.

A **stethoscope** is a medical device used by a healthcare professional to listen to internal sounds of the body.

The **abdomen** is the area between the chest and the hips that contains the stomach, small intestine, large intestine (colon), liver, gall bladder, pancreas, and spleen. It is also sometimes referred to as the belly area.

The **rectum** is the final section of the large intestine where bowel movements are stored before being emptied through the anus.

The **anus** is the lower opening of the GI tract.

A digital rectal exam (DRE) is an examination of the lower rectum and anus. The healthcare provider uses a gloved, lubricated finger in the anus to check for any abnormal findings. The provider will first look at the outside of the anus for hemorrhoids or fissures. In women, this exam may be done at the same time as a pelvic exam.

The DRE is also done to evaluate the functioning of the anal and pelvic floor muscles, particularly if there is incontinence (involuntary passage of stool) or severe constipation with a feeling of incomplete emptying after a bowel movement.

Hemorrhoids are veins around the anus or lower rectum that are swollen and inflamed.

An **Anal fissure** is a crack in the skin in or adjacent to the anus or anal canal.

When a person has typical IBS symptoms, non-worrying findings on physical examination and normal blood and stool tests, studies show they can be confidently diagnosed with IBS. However, there are several situations where additional testing should be considered, particularly in patients with mostly diarrhea or diarrhea mixed with constipation.

- A colon examination, such as a colonoscopy, should be performed in all patients at or above the age of 45 who have not had one previously, as a screening test for colon polyps and cancer and not specifically for IBS. However, they may be done for younger patients particularly if the healthcare provider is suspicious of other bowel diseases such as ulcerative colitis or Crohn's disease. For those with mostly diarrhea, biopsies (small tissue samplings) can be taken during the procedure to determine if microscopic colitis or mild inflammation of the colon is present.
- Another consideration is a blood test for celiac disease. This is a genetic condition of the small intestine that develops in people intolerant to gluten (a common ingredient in many foods including grains, wheat, rye and barley, as well as many processed foods). It causes malabsorption of nutrients and food and results in symptoms similar to those in IBS. If the blood test is positive, an upper endoscopy should be performed to examine and biopsy the small intestine to confirm the diagnosis.

- Stool tests – In patients with diarrhea symptoms, fecal calprotectin or lactoferrin and a stool test for a parasite called Giardia are recommended to exclude inflammatory and infectious causes of chronic diarrhea.

Related Fact Sheet from IFFGD
258 - Patient Guide to Chronic Diarrhea

Importantly, even if another diagnosis is made, it may exist along with a diagnosis of IBS. The healthcare provider will then need to decide which condition or conditions are to be treated and how.

Treating IBS

The key to achieving relief for IBS is for people to embrace the understanding that IBS is a condition in which multiple factors can contribute to its development and can trigger the symptoms. Some examples include:

- There may be a family history of IBS or diseases with similar symptoms.
- Symptoms may be preceded by a GI infection, such as food poisoning.
- Symptoms may be related to stressful events.

A strong partnership between a patient and an empathetic, knowledgeable healthcare provider can produce a big improvement and control over symptoms for individuals with IBS.

The first line of treatment for IBS includes general measures such as:

- implementing diet and lifestyle changes, which may be associated with symptoms,
- obtaining education about IBS, and
- establishing an effective relationship between the patient and their health care provider.

Diet changes

Persons with IBS should consider whether their symptoms are related to what they eat and/or drink. If certain foods trigger or worsen symptoms, reducing or avoiding them can sometimes help. For some patients with symptoms after eating, it may be helpful to eat smaller, more frequent meals.

General dietary recommendations include:

- eating regular meals at a slower pace
- eating until feeling full and not more

- drinking at least 8 cups of fluid per day
- limiting intake of tea and coffee to 2 cups per day
- reducing intake of alcohol and carbonated or sugary drinks
- and avoiding garlic and onions and any other foods that *consistently* trigger symptoms

A low FODMAP (fermentable, oligo-, di-, and monosaccharides and polyols) diet may significantly reduce IBS symptoms. Before starting the low FODMAP diet, it is important to consult your healthcare provider to see if this diet is a good treatment option for you and to work with a registered GI dietitian.

Related Fact Sheets from IFFGD

117 – FODMAP Overview

120 – IBS and Nutrition

IFFGD’s **Dietitian Listing** is a resource that allows you to search for a dietitian that is in your area or treats a specific condition.



<https://www.iffgd.org/resources/dietitian-listing.html>

Lifestyle changes

Increased stress may result in the onset or worsening of IBS symptoms and associated non-bowel symptoms such as fatigue or low energy. Proper rest and exercise can help reduce stress levels and positively influence IBS symptoms. Dealing with IBS symptoms is stressful. Learning more about the disorder, communicating effectively with your healthcare provider, and taking a more proactive role in your self-care can reduce that stress and improve control over symptoms.

Related Fact Sheets from IFFGD

277 – Got Stress?

147 –Personal Daily Diary for IBS

Medications

If diet and lifestyle changes do not completely relieve IBS symptoms, medications may be helpful. From the start, pharmacologic treatments for IBS have been created to improve either constipation or diarrhea. However, with increasing knowledge of

Pharmacologic refers to the use of drugs and how they work.

the causes of IBS several new medications have been developed that improve the pain and/or discomfort as well.

A thorough evaluation by a healthcare provider is an important step toward receiving the most appropriate treatment for your symptoms. Be sure to discuss any treatment plan thoroughly with your healthcare provider before beginning it.

This helps those with IBS to

- understand the treatment and why it is being used,
- be aware of any alternatives if available,
- understand the risks as well as benefits of the treatment,
- and know what to do if side effects occur or symptoms return.

Related Fact Sheet from IFFGD

168 - Current Pharmacologic Treatments for Adults with Irritable Bowel Syndrome

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537 Long Point Road, Unit 101
Mt Pleasant, SC 29464

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