IN THIS CHAPTER

- Understanding IBS as a disorder of gut-brain interaction
- Delving into why IBS diagnosis is important and how the diagnostic process works
- Discovering science-backed approaches to managing IBS
- Coping with IBS in special situations

Chapter 1
A Road Map to Success with IBS

Under normal circumstances, the brain and the digestive tract (or gut) are good buddies. They send messages back and forth all day long — sharing the minutiae of what you're eating and your emotional state, giving thumbs-up emojis when everything's going well and warning each other when they sense trouble.

But in someone with irritable bowel syndrome (IBS), the communication between the gut and the brain is much more chaotic. The gut may send a very routine message that a sip of coffee is incoming, and the brain responds with an all-out emergency alarm, sending signals to speed up the muscle contractions in the gut and prepare for a bowel movement. Or the gut may sense a small, normal bubble of air and kick up the drama, telling the brain to activate its pain centers. In fact, different sensations in the gut all day long may be interpreted as signals to activate pain-sensitive regions of the brain.

IBS (not to be confused with inflammatory bowel disease, or IBD) is a disorder of gut-brain interaction (DGBI), which involves disruption in the normal two-way communication that should proceed seamlessly between the gut and the brain.

This chapter is an overview of what IBS is, why it's important to receive a diagnosis, and how to manage IBS using a holistic approach that encompasses your diet and other aspects of your lifestyle.

Comprehending IBS

Over the past 200 years, doctors and scientists have gradually come to understand more about the pattern of symptoms that characterizes IBS and how the symptoms arise. IBS was previously known as a functional disorder (with no known physical cause), but now it's better understood as a DGBI.

Discovering what defines IBS

IBS is best perceived as a cluster of digestive symptoms that indicate faulty gut-brain communication. Individuals with IBS may have very different underlying factors contributing to these symptoms.

No physical damage to the digestive tract is observed in IBS. As outlined in Chapter 2, the defining features of IBS are as follows:

- Abdominal pain that's related to bowel movements.
- Abnormal bowel movements, either more or less often than normal for you, or with a different appearance than usual; the bowel movements may be loose and watery or hard and lumpy.

Outside of these core symptoms, people with IBS often experience other gastrointestinal (GI) symptoms such as bloating, distension, intestinal gas, and burping.

Although IBS is not a life-threatening condition, it can have an outsize effect on your quality of life. Proper diagnosis is essential, and treatment should be approached with seriousness and determination.

Pinpointing who tends to get IBS and why

In the United States, researchers estimate that around 6 percent of adults have a diagnosis of IBS and about 15 percent live with IBS-like symptoms. Rates of IBS are different in various countries around the world and tend to change over time.

Chapter 3 covers various risk factors that increase someone's chance of developing IBS.

Although the root cause of IBS is complex, the following biological changes are sometimes seen (inconsistently) in people with IBS:

- **Abnormal GI motility:** Motility is how quickly food and fluids move through the digestive tract with the help of gut muscles. Motility disruptions can result in diarrhea (if too fast) or constipation (if too slow).
- **Increased sensitivity to pain or discomfort in the digestive tract:** In people with IBS, scientists have found increased sensitivity to pain, and/or activation of the brain's pain centers in response to normal, non-painful gut stimuli.
- **A more permeable gut barrier:** The gut barrier usually seals off the digestive tract from the rest of the body while retaining spaces between cells that can open up to let in essential nutrients and water. Some people with IBS have a more permeable (or leaky) gut barrier, leading to symptoms that include abdominal pain.
- ***Dysregulation* (abnormal cell activity) of the immune system:** Even though IBS is not associated with abnormal clinical measures of inflammation, some people with IBS have different patterns of immune cell activation than people without IBS.
- **Pelvic floor dysfunction:** Some cases of IBS are associated with pelvic floor muscles not working properly, contributing to diarrhea or constipation.
- **Difficulty digesting or absorbing some carbohydrates:** Some people with IBS show disrupted chemistry in the small intestine, which causes certain carbohydrates to be poorly absorbed and leads to the production of gases and water to result in diarrhea. Others may lack the enzymes (chemicals) to break down specific carbohydrates such as the lactose in dairy products, causing digestive symptoms.
- **Changes in the community of gut microbes:** Studies have found differences in the types and amounts of microorganisms in the digestive tracts of people with IBS, compared with healthy people. These microorganisms help regulate the immune system and other body functions such as motility, so their disruption may cause gut symptoms.

Understanding how the gut-brain axis works

IBS is characterized by a breakdown in the functioning of the gut-brain axis, the two-way communication channel that extends between the digestive tract and the brain. Chapter 4 delves into the components of the gut-brain axis and how they work together.

The main parts of your digestive tract, from top to bottom, are:

- Oral cavity (mouth)
- Esophagus
- Stomach
- Small intestine
- Large intestine

Other organs, such as the liver and pancreas, also make important contributions to digestion. However, the digestive tract itself maintains a stable environment by managing two main functions: digestion and *absorption* (letting things in) along with *defense* (keeping things out). It manages these functions with the help of several other important but lesser-known systems: the gut's own nervous system, called the *enteric nervous system* (ENS); gut microorganisms; the immune system; and the enteroendocrine system.

The main channels of two-way communication between the gut and the brain are:

- **Nerve activation:** ENS neurons interact with the *vagus nerve,* which is the main superhighway for gut-brain messages.
- **Immune signals:** Immune cells from the gut can release signals that reach the brain.
- **Hormone and other molecule signals:** Various hormones and other molecules (called *metabolites*) produced in the gut can activate ENS neurons and convey messages to the brain. These molecules may also circulate in the blood and reach targets in the brain.

Some of these modes of communication are disrupted in IBS.

Navigating a Diagnosis of IBS

If you have IBS-like symptoms, seeking an official IBS diagnosis is important because it allows you to rule out closely related conditions that require very different treatments. Chapters 5 and 6 correct the record on the misunderstandings around IBS diagnosis.

Getting diagnosed

Diagnosis by a medical professional is a critical first step in taking charge of your IBS. Other conditions — such as celiac disease, colorectal cancer, endometriosis, IBD, small intestinal bacterial overgrowth, and thyroid disorders — may look similar to IBS but require very different treatments, so they should be ruled out before proceeding. Chapter 5 walks through the typical process of IBS diagnosis.

No single test positively confirms that you have IBS, so diagnosis involves two phases:

- Confirming symptoms that fit the IBS pattern
- Ruling out other conditions that may account for the symptoms

The diagnosis may be confirmed only after the symptoms occur for six months or more.

TIP

When seeking a diagnosis, keeping a written log is the best way to track your symptoms in the days and weeks before your doctor's appointment.

A medical history is usually the first step in IBS diagnosis. Then, after your doctor conducts a physical examination, some or all of the following tests may be carried out:

- Cross-sectional imaging (such as an abdominal ultrasound)
- Blood tests
- Stool tests
- Endoscopic evaluations

After this information is collected, the doctor puts the pieces together and determines whether an IBS diagnosis is appropriate. During the process of diagnosis, be cautious about implementing dietary changes prematurely because they can negatively affect some test results.

Knowing what to expect after diagnosis

Receiving a diagnosis of IBS can leave you wondering "What's next?" You may feel relieved to know the name of your condition, overwhelmed by the thought of starting to change your lifestyle, and many other emotions. As Chapter 6 explains, after diagnosis you begin a personal emotional journey as you embrace a new way of understanding your health. During this journey, you can deliberately adjust your mindset to set you up for positive action and give you the best chance of success.

Some simple actions may help you accept the diagnosis and embrace your feelings about it, helping you move forward positively and proactively:

- Naming your emotions
- Gaining more (science-backed) information about IBS
- Committing to care for yourself

TIP

Every person with IBS deserves care and support, and after you're diagnosed you may find it helpful to create a list of people who can support you in various ways throughout your IBS journey. Typically this list may include:

- Primary care provider
- Specialist physicians
- Registered dietitian
- Other medical professionals
- Alternative healthcare providers
- Household members
- Family members or friends
- Other people with IBS

Approaching IBS Treatment

The state-of-the-art approach to IBS treatment involves adjusting your diet and other aspects of your lifestyle to normalize gut-brain communication. Unfortunately, no magic pill exists that will resolve all IBS symptoms. But viewed in a positive way, this lifestyle approach to treating IBS may mean you'll end up

with your symptoms more under control while being healthier and more resilient overall. And as the science continues to progress, some treatment options may be refined or added to the list.

Changing your diet

Changing what and how you eat is a very effective lifestyle solution to gain control over your IBS symptoms, and Chapter 7 goes over the basics of dietary change for IBS management.

REMEMBER

Before you significantly change the foods you eat, a first step for IBS management is to consider some simple strategies around how you eat:

- Implementing regular mealtimes
- Avoiding overeating and undereating
- Eating mindfully, free of distractions

Then you may decide to implement some basic dietary changes, advisable for many people with IBS, that probably won't interfere with your overall nutritional intake:

- Staying hydrated by drinking enough water
- Reducing your intake of alcohol, caffeine, and carbonated drinks
- Avoiding artificial sweeteners and ultra-processed foods that contain many additives
- Limiting fatty and fried foods

If you implement these basic changes and your symptoms still persist, you may want to consider making a bigger change in your overall dietary pattern.

TIP

Your most important tool when you make dietary changes is a food diary, which is a list of all the foods you consume over a certain time period. A food diary helps you track your progress and decide if your dietary change is worthwhile.

Choosing a specific diet for IBS management

Dietary change in IBS has the potential to reduce the burden of gut-irritating foods in your digestive tract, enabling gut-brain communication to proceed more

smoothly. However, people with IBS should take care not to overly restrict their diet because they may put themselves at risk for a nutritional deficiency.

According to current research, the most effective diet for improving IBS symptoms is called low-FODMAP (*FODMAP* stands for *fermentable oligosaccharides, disaccharides, monosaccharides, and polyols*). However, several other diets are easier to implement and may give you almost as much relief from symptoms. Chapter 8 goes over the specific diets that are shown to reduce IBS symptoms, but here's a quick overview:

- **NICE diet:** Relatively easy to implement, this diet reduces symptoms almost as much as a low-FODMAP diet. This diet entails restricting bothersome items such as caffeine and high-fiber foods, and eating mindfully with small, regular meals.
- **Low-FODMAP diet:** This fairly restrictive diet is highly effective for reducing IBS symptoms and involves three separate phases: restriction, reintroduction, and personalization. However, the restricted foods are not intuitive, so it takes extra effort and guidance to make sure you're adhering to it.
- **FODMAP gentle diet:** This is a toned-down version of a full low-FODMAP diet. FODMAP gentle involves removing key high-FODMAP foods from the diet and is relatively easy to implement on your own.
- **Gluten-free diet:** This diet eliminates only gluten, so it's easier to grasp and implement than the low-FODMAP diet. Wheat (a major source of FODMAPs in most people's diets) is not allowed.
- **Mediterranean diet:** This well-rounded diet is focused on fruits, vegetables, whole grains, nuts, seeds, olive oil, and fatty fish, which can help maintain the health of the gut. It's a proven diet for supporting long-term health, although it may only reduce IBS symptoms to a modest degree.

Chapter 17 is packed with practical tips to help you succeed at the challenging task of changing your diet. For delicious snack and meal options that are low-FODMAP, Chapters 18 through 21 feature a collection of recipes you can incorporate into your dietary planning.

Navigating medications

Several medications are available for treating IBS, and many people with IBS include a medication as part of their comprehensive IBS management plan to stabilize their symptoms over the long term. Some medications target IBS in general, while others are specific to IBS-C or IBS-D. Chapter 9 breaks down the different types of medications (and supplements) that are shown to reduce symptoms.

REMEMBER

When considering medications for helping you manage your IBS, remember that no IBS medication works for everyone and most of the available medications have a modest effect. Trial and error may be necessary to find the medication that works best for you.

Some of the nonprescription products shown to improve IBS symptoms include:

- Antidiarrheals
- Bulking agents
- Peppermint oil
- Specific probiotics

Categories of prescription medications demonstrated to improve IBS symptoms are:

- Antibiotics
- Antidiarrheals
- Antispasmodics
- Neuromodulators
- Promotility agents
- Secretagogues

See Chapter 9 for more information about these medications.

Exploring emerging treatments

Some treatments (certain herbal supplements, for example) don't currently have a lot of scientific evidence showing they work, so they're considered emerging treatments for IBS. As Chapter 10 discusses, some of these treatments seem compelling because they're recommended to you through word of mouth or supported by testimonials in marketing materials or on social media. You may decide to try one or more of these treatments (as long as they're safe), but be sure to discuss them beforehand with your doctor.

Seeking mind-body treatments

With IBS symptoms often being sensitive to stress and mood, a missing piece of the treatment puzzle for many people with IBS is an intervention that targets the brain.

Mind-body interventions are brain retraining techniques that help improve neural pathways to normalize your body's function. These treatments target the two-way messages that travel through the gut-brain axis, creating a way to calm both the brain and body simultaneously. They work by restoring the balance between *sympathetic* (fight-or-flight) and *parasympathetic* (rest-and-digest) nervous system functions and normalizing pain processing in the brain.

REMEMBER

An overall aim for those with IBS can be to develop mindfulness (intentionally making yourself focus on the present moment while accepting all your thoughts and emotions), which leads to improvements in the severity of IBS symptoms, a better quality of life, and less pronounced anxiety.

The following mind-body interventions are scientifically demonstrated to help you reduce IBS symptoms:

- Clinical hypnosis or gut-directed hypnotherapy
- Cognitive behavioral therapy (unlearning the negative thoughts and behaviors around your gut symptoms and stress)
- Breathing exercises
- Meditation
- Mindfulness-based stress reduction
- Yoga

Adjusting your lifestyle

Your lifestyle is your overall collection of habits and behaviors together with your living conditions. It's the most significant factor in helping you manage your IBS. If you've already implemented both diet and mind-body treatments, Chapter 12 delves into how to change other aspects of your lifestyle for IBS management.

Besides diet and mind-body interventions, the lifestyle factors most likely to have an impact on your IBS symptoms are:

- Daily moderate-intensity physical activity/exercise
- Proper sleep (seven to nine hours per night)
- Staying healthy by avoiding infections

Adjusting your toilet position and technique can also make a difference for some people with IBS. Plus, you may decide to incorporate professional services such as massage into your lifestyle if they're accessible to you.

Maximizing your quality of life

Beyond all the IBS treatment strategies described in this book, which work synergistically to improve symptoms, you can employ other strategies to help improve your quality of life overall as you live with IBS. The number-one factor for improving your quality of life with IBS is maintaining your social contact and supports. Plus, because IBS is so prevalent across the population, many new tools and supports have emerged specifically for IBS management. Chapter 13 has a wealth of tools, services, tips, and tricks to make your life easier; you can find out how to navigate different situations at home, at work, at school, in public places, in others' homes, while eating out, while traveling, or during dating and intimacy. After you read through Chapter 13, you can also look to Chapter 22 for ten must-have items for your day-to-day survival with IBS.

Managing IBS in Special Cases

Certain special cases may require adjustments to how IBS is managed:

- **IBS in childhood:** Anywhere between 3 percent and 25 percent of children have IBS-like symptoms, with only a subset of them receiving an IBS diagnosis. Rest assured, most children with IBS grow and develop in an normal way. The diagnosis and treatment of IBS in children is largely the same as it is in adults, but Chapter 14 outlines a few key considerations for kids. Clear communication between the child, parent/caregiver, and doctor is essential for proper management of IBS. For the best outcomes, manage IBS symptoms by adjusting the child's diet, environment, and other lifestyle factors such as physical activity. The foundational principles of diet for children with IBS are to eat calmly and mindfully, establish good nutrition and hydration, and avoid any specific foods that trigger symptoms.
- **IBS during pregnancy:** People with IBS may find that, during pregnancy, their symptoms stay the same, get worse, or improve. IBS doesn't harm the baby or cause negative outcomes. Chapter 15 covers how to plan for pregnancy when you have IBS, as well as how to manage during pregnancy and in the postpartum period. Before pregnancy, your goal should be to have your IBS symptoms as well controlled as possible. During pregnancy, proper nutrition and hydration are essential, even if you have to work around certain foods that

trigger symptoms. Keeping your body and mind relaxed is important for good pregnancy outcomes, as well as for reducing IBS symptoms. Check with a doctor or pharmacist before starting to take any medications or supplements for IBS during pregnancy.

- **IBS in athletes:** High levels of athletic performance put stress on the body and frequently cause GI symptoms in normal, healthy athletes, making bowel urgency a common problem. However, athletes with IBS may face additional challenges. But as Chapter 16 explains, IBS doesn't have to stand in the way of high athletic performance. If you experience more gut symptoms as you train harder, you may make adaptations such as bathroom stops along your route or looser clothing while you train. Athletes with IBS also have to balance their high requirement for energy intake with avoidance of gut-irritating foods. Before competitions, avoid your personal triggers as well as common gut-disrupting foods. You may also decide to experiment with the timing of your meals to minimize gut symptoms as you train and compete.