



## Understanding **IRRITABLE BOWEL SYNDROME** with **DIARRHEA (IBS-D)**

### *What is Irritable Bowel Syndrome with Diarrhea (IBS-D)?*

Irritable Bowel Syndrome (IBS) is a common chronic gastrointestinal disorder that involves problems with how the bowel moves digestive material through our intestines (motility) and how the gut and the brain interprets pain signals in the bowel (sensitivity). Those affected by IBS may experience recurrent abdominal pain, nausea, and irregular bowel patterns that are often painful. Symptoms are often chronic and intermittent and may last for months or years. While the cause(s) of IBS remains unclear there is growing evidence that a dynamic interplay between gut factors including diet, immune activation, microbiome, bile acids and brain factors including psychological stress and life experiences could underlie symptoms.

IBS affects between 10 and 15 percent of people in the developed world, about one-third of whom have IBS with diarrhea as the primary symptom, commonly referred to IBS-D. People with IBS-D experience frequent abdominal pain and watery bowel movements, and, on occasion, loss of bowel control. In fact, approximately 1 out of every 3 people with IBS-D have loss of bowel control or soiling. This has a strong, negative impact on day-to-day life, however these and other symptoms of IBS-D can be managed.

### *What are the symptoms of IBS-D?*

The features of IBS-D include:

- diarrhea or loose, watery stools, especially in the morning or after meals
- passing stools three or more times per day
- sudden urgency before bowel movements
- feeling of incomplete emptying after bowel movements

- abdominal pain or cramping
- loss of bowel control or soiling yourself

In addition to experiencing the common symptoms associated with IBS, some patients also experience upper gut symptoms such as nausea, belching, heartburn, and bloating.

### *What causes IBS-D?*

Although the exact cause of IBS is unknown, it is believed that IBS may be caused by one of several factors:

- **Brain-gut dysfunction:** There is a dynamic bidirectional communication between the gut and the brain. A malfunction may occur along the many different pathways that connect the brain and gut and changes in one pathway ultimately cannot affect others.
- **Bacterial Infection:** food poisoning, traveler's diarrhea. These infectious agents are cleared from the body typically within days but lead to chronic alterations in motility (gut too fast or too slow) and abnormal sensory signaling to the brain.
- **Bile acids:** these are normally absorbed in the small bowel but some patients spill too many into the large bowel (colon) and this can trigger diarrhea and cramps.
- **Food Sensitivity:** many patients have meal-induced symptoms. Some patients have a hypersensitive gut and meals induce gut motility (e.g. distention) that can cause symptoms. There is also growing evidence that some food may also have specific actions on gut motility and this could involve alterations in the microbiome or that an individual's microbiome might also make them more susceptible to specific foods. However much more research is needed in this area.
- **Use of antibiotics or new medications:** antibiotics can cause an imbalance of intestinal bacteria and other medications a change in the motility in the gut.

## IRRITABLE BOWEL SYNDROME with DIARRHEA (IBS-D)

- **Stress and anxiety:** These are not the cause of IBS but are recognized as a common trigger of symptoms in some individuals.
- **Heredity:** IBS can run in families but it is unclear how much of this association is related to some common environment or genetics. Recent research has identified one or more genetic defects that could be involved in a sub-set of IBS but further studies are needed to determine whether these defects are important. Consequently, genetic testing is not indicated.

### How IBS-D is diagnosed?

Your physician will first conduct a careful review your medical history and a physical examination. Utilizing IBS diagnostic algorithms, such as the Rome Foundation's Diagnostic Criteria for Functional Gastrointestinal Disorders, and excluding any "red flags" suggesting other disorders your physician will then establish a diagnosis of IBS based on your symptoms. If diarrhea is predominant, then it is determined that you have IBS-D.

Few tests are typically required, especially in young people as doctors can make the diagnosis with a high degree of certainty. A measure of your blood cell counts (CBC) and a blood test to exclude celiac disease (tissue transglutaminase) are recommended. If the onset is relatively recent, your doctor may order stool cultures to exclude an ongoing infection. If you are suspected of being lactose intolerant, your doctor may order testing to exclude this (breath test or blood test). In addition, if you have a family history of diseases such as Celiac Disease, Crohn's Disease, Ulcerative Colitis or colon cancer, or if your symptoms onset after the age of 45 – 50 years old, your physician may order further tests. They may include blood, stool, and imaging (colonoscopy with biopsies, sigmoidoscopy with biopsies).

### Treating IBS-D

Treating goals in the management of IBS-D are to improve pain and diarrhea and other associated symptoms including gas, and bloating. To get relief from your IBS-D you will need to combine a few approaches, such as changes to your diet, over-the-counter (OTC) products and/or prescription medications. Although symptoms of IBS-D are not caused by psychological stressors, stress can exacerbate symptoms. Therefore, finding ways to reduce stress is important. Your physician can help design a treatment plan that is right for you.

**Lifestyle and Diet:** Managing any type of IBS requires healthy lifestyle habits. This includes reducing stress, getting regular exercise, and getting adequate sleep. For those with IBS-D, dietary changes may be especially helpful. It is important that you speak with your doctor or registered dietitian before making any changes to your diet.

Identify food triggers – Tracking foods you eat and logging the times you experienced symptoms/distress may help reveal connections between food and IBS-D. You should take detailed notes that should include the types and amounts of foods eaten and the time of consumption. It's important to also record the time and description of distressing bowel events or related pain and discomfort.

Below are some dietary considerations which you may want to discuss with your doctor and/or registered dietitian.

- High-fat foods may worsen symptoms of IBS-D
- Dairy products – lactose free products may be better tolerated
- Avoid alcohol
- A reduction of caffeine may be beneficial. This includes caffeinated drinks, such as coffee, tea, colas and energy drinks
- Sorbitol sweeteners (found in some chewing gum) may be problematic
- Drink plenty of water
- Probiotic supplements such as lactobacillus acidophilus may help alleviate IBS symptoms including abdominal pain, bloating, and bowel movement irregularity. Ask your health care professional for more information.
- A diet low in FODMAPs (fermentable oligo-saccharides, di-saccharides, mono-saccharides, and polyols), a group of short-chain carbohydrates, may help relieve symptoms. The diet is used in the short-term followed by re-introduction to assess tolerance to individual foods. Consult your health-care professional for more information.
- Eating large meals also may trigger abdominal cramping and diarrhea. It's best to eat smaller meals.
- Fibre may be helpful in reducing symptoms of IBS-D. If a trial of a fiber supplement such as psyllium is used, fiber should be added gradually, because it initially may worsen bloating and gassiness. If you have IBS-D, look for foods with more soluble fiber, the type that takes longer to digest (such as that found in oats).

## IRRITABLE BOWEL SYNDROME with DIARRHEA (IBS-D)

### Lifestyle Tips

Stress is considered one of the triggers of IBS symptoms. Here are some healthy habits that may also help reduce IBS symptoms.

- Exercise may improve and could reduce stress.
- Get enough rest. This allows your body to maintain basic function, repair and manage stress.
- Use relaxation techniques: deep breathing, visualization, Yoga.
- Consult a professional trained in Cognitive Behavioral Therapy or Gut Directed Hypnotherapy.

### Medication

While lifestyle and dietary changes can play a role in helping manage mild IBS-D symptoms, if your symptoms do not improve, you may require further intervention. Over the Counter (OTC) and prescription therapies are available for treating IBS-D. OTC medications are recommended for short term/occasional use. If your symptoms are still unresolved, you should consult with your health care provider. With the right medication, you may find relief and prevent IBS-D from inhibiting your everyday activities and quality of life.

*OTC therapies include: Peppermint oil, probiotics, fiber, alpha galactosidase enzymes (e.g. Beano), simethicone, although efficacy with many products is not proven.*

#### Prescription Drugs

IBS-D patients suffer from a multitude of symptoms including abdominal pain, bloating, and diarrhea. The commonly used prescription drugs only address a single symptom rather than the constellation of symptoms observed in IBS-D patients. Recent advancements in the treatment of IBS have produced newer medications that not only treat the multiple symptoms but have been specifically studied and approved for use by Health Canada in IBS-D patients.

Physicians may now prescribe one or a combination of drugs that:

- reduce abdominal pain by blocking the pain signals to the brain
- relax the muscles in the gut to reduce diarrhea and the urgent, uncontrollable need to use the washroom (urgency)

- reduce both abdominal and bowel symptoms including pain, bloating, urgency and diarrhea

Your doctor can determine if a combination or a single treatment is right for you.

### Risks associated with IBS-D

If left untreated, IBS-D can potentially lead to additional health complications. These include:

- Diarrhea may aggravate hemorrhoids in people who already have them.
- Eliminating many foods from the diet may result in a diet that is too limited in nutrients that could cause health problems.
- Stress and anxiety can result from the pain, and can impact a person's quality of life.

### When to see a healthcare provider

It is important to see a healthcare provider if you do not find relief from persistent symptoms, or if you are having any of the symptoms below.

Symptoms that may indicate a more serious condition include:

- Rectal bleeding
- Abdominal pain that progresses or occurs at night
- Weight loss

### Preparing for your appointment

Good communication with your doctor is an important part of managing your digestive health, regardless of your diagnosis. To ensure that all doctors have the most accurate information about you, it's a good idea to keep a journal in which you:

- Write down the symptoms that are bothering you, and how long you have had them.
- Write down key personal and medical information, including any recent changes or stressful events in your life.
- Jot down triggers (such as food, stress, activity, or menstrual cycle) that seem to make your symptoms worse
- Make a list of the medications you are taking, including the condition that you are taking them for; this should include any non-prescription medications, probiotics or

## IRRITABLE BOWEL SYNDROME with DIARRHEA (IBS-D)

herbal preparations you may use. Also, note if any of your medications seem to affect your symptoms.

- Create a list of the health-related questions you would like your doctor to answer during your appointment.

If you have an iPhone or Android smartphone, you can easily track your symptoms and create reports for your doctor using the FREE CDHF Gi BodyGuard smartphone app.

### Partnering for best health

Working collaboratively with your health care professional will help you protect your body from digestive diseases and maximize your digestive health. When you report your health status completely, concisely and accurately, your physician can provide you with the best care and treatment plan. Be sure to stay informed on ways to maintain your health and well-being, track and record your symptoms, and write down questions and concerns to discuss at your next appointment.

### Learn more about IBS

The Canadian Digestive Health Foundation provides information, tools and support to help you take control your digestive health with confidence and optimism. Visit [www.CDHF.ca](http://www.CDHF.ca) to view free recorded on-line seminars, read personal stories and access other helpful resources. Watch our information videos on:

#### Living Positively with IBS (Irritable Bowel Syndrome)

In this presentation, Dr. Stephen Vanner helps you better understand IBS, its symptoms, what IBS is not, factors that affect the syndrome, tests you may need and how to best manage your symptoms. Click here to watch the video.

[www.CDHF.ca/LivingPositivelyIBS](http://www.CDHF.ca/LivingPositivelyIBS)

### CDHF App helps track information

The CDHF has developed a smart phone app for iPhone and Android called

**Gi BodyGuard** to help you quickly, easily and privately track and share your digestive symptoms with your physician.

**Gi BodyGuard** has a built-in symptom tracker (stool, pain, blood), food, fitness and medication trackers, a health history form and appointment/medication reminders. Using **Gi BodyGuard** is quick, easy and private.



As well, **Gi BodyGuard** lets you produce comprehensive reports so you can share important information with your physician during your next appointment. You can download **Gi BodyGuard** for free at:

[www.CDHF.ca/Gibodyguard](http://www.CDHF.ca/Gibodyguard)

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UNDERSTAND.

TAKE CONTROL.

LIVE BETTER.

**Please note:** The information contained in this digestive disorder guide is not a substitute for medical care and the advice of your physician. There may be variations in treatment that your physician may recommend based on your individual facts and circumstances. Always consult with your physician when you have concerns about your health.

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- Please send me information about protecting and improving my digestive health.

Over 20 million Canadians suffer from digestive disorders every year. The Canadian Digestive Health Foundation believes this is unnecessary and unacceptable.

We reduce suffering and improve quality of life by empowering Canadians with trusted, up to date, science-based information about digestive health and disease.

As the Foundation of the Canadian Association of Gastroenterology, we work directly with leading physicians, scientists, and other health care professionals to help you understand and take control of your digestive health with confidence and optimism.

Through research and public education, we aim to:

 **REDUCE**  
the incidence and prevalence of digestive disorders

 **IMPROVE**  
understanding of digestive health issues

 **SUPPORT**  
those suffering from digestive disorders

 **ENHANCE**  
quality of life for those living with digestive disorders

## Request for support

The Canadian Digestive Health Foundation is a national charity governed by a volunteer board of directors. We rely on donations from the public and the generosity of our partners to develop and deliver our programs. Please consider including our Foundation as one of your chosen charities.

## Contact us/Donate to

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