IRRITABLE BOWEL SYNDROME (IBS)

WHAT IS IT?
Irritable bowel syndrome (IBS) is a chronic condition of the digestive tract. It is characterized by disturbances in intestinal motor function and sensation. For unknown reasons, the intestines are overly sensitive to stimuli that normally do not cause problems in other people.
- IBS is not a “colitis” because it does not involve inflammation of the colon.
- IBS is considered a “functional” disorder because there is no sign of disease when the colon is examined.

The exaggeration of normal bowel activity in IBS may be due to changes to the nerves within the intestines, the central nervous system, and/or the immune system. Changes in intestinal flora and bacterial overgrowth may also contribute to symptoms.
- Triggers may include certain foods (the type or quantity), hormonal changes (like the menstrual cycle), medications, stress, intestinal infections (eg. Salmonella, viruses), etc.
- Normal amounts of gas or stool in the colon may be perceived as excessive and painful.
- Abnormal contractions of the colon may lead to cramping and diarrhea.

While IBS can cause discomfort and distress, it does not result in permanent harm to the intestines and does not lead to serious illnesses, such as cancer.

HOW COMMON IS IT?
IBS is the most commonly diagnosed gastrointestinal condition:
- It occurs in 10-15% of the adult population in the US.
- IBS is 1.5-3 times more common in women than in men.
- Symptoms usually appear during the late teens or early 20’s.

WHAT ARE THE SYMPTOMS?
Symptoms and severity vary from person to person. However, chronic abdominal pain and a change in bowel habits must be present to make a diagnosis. Symptoms typically wax and wane and often improve with lifestyle changes. Only a small number of people with IBS suffer from disabling symptoms.
The most common symptoms include:
- Intermittent abdominal pain and fullness; cramping may improve after a bowel movement.
- Diarrhea or constipation (or alternating diarrhea and constipation).
  - Diarrhea often presents as frequent loose stools, small to moderate in volume. Symptoms usually occur during the day, especially in the morning or after meals. Stools are often preceded by an extreme sense of urgency and followed by a feeling of incomplete emptying.
  - Constipation is often characterized by small hard stools and the sensation of incomplete emptying, even when there is no stool remaining in the rectum.
- Mucus in the stool.
- Bloating and gas; heartburn.
- Nausea.
- Early satiety (an early sense of fullness with meals).

WHAT ARE “RED FLAGS”?
“Red flag” symptoms are NOT typical for IBS and may indicate a more serious gastrointestinal condition. Examples include:
- Bloody stools.
- Weight loss.
- Fever.
- Nocturnal or progressively worsening abdominal pain.
- Unexplained iron deficiency anemia.

It is very important to seek medical evaluation if you experience any of these symptoms or a significant change in your bowel pattern.

HOW IS IT DIAGNOSED?
No specific testing is diagnostic for IBS:
- Diagnosis is based primarily on your pattern of symptoms and physical exam findings.
- Depending on your symptoms, your healthcare provider may recommend further testing (such as blood tests, stool tests, and/or a colonoscopy) to rule out more serious conditions.
- Routine lab tests are usually normal.
**HOW IS IT TREATED?**

Treatment is tailored towards your specific pattern of symptoms. Because IBS is a chronic condition, the goal is to find long-term solutions to minimize symptoms and to improve quality of life. Patience and communication with your medical provider are extremely important.

- The best way to treat IBS is to eat a healthy diet, avoid triggers, and learn to manage stress.
- Medications may be considered if symptoms do not improve with lifestyle changes. Medications can decrease symptoms, but they do not cure IBS.
- You may need to try different treatment combinations before finding one that works best for you.

**Dietary Considerations**

- **Know your triggers.** Food does not cause IBS but may trigger or worsen symptoms. Keep a food diary, and avoid foods that consistently cause distress. Elimination diets should be done under the supervision of a medical provider to ensure that you are not eliminating important nutritional sources. If a restricted diet is necessary, you may be advised to take daily vitamins.
  
  - **A traditional IBS diet** can help improve symptoms. The basics include:
    - Having a regular meal pattern.
    - Avoiding large meals, which can trigger cramping and diarrhea.
    - Reducing fat and caffeine intake if cramping is an issue. Decaffeinated coffee may still cause symptoms due to its high acidity.
    - Reducing gas-producing foods, which can cause flatulence, bloating, and/or pain. Common culprits include beans, broccoli, cauliflower, cabbage, Brussels’ sprouts, and carbonated beverages. Some people also have trouble with carrots, celery, onions, sprouts, wheat, bananas, apricots, raisins, prunes, pretzels, and bagels.
      *Decrease the gas-producing potential of beans by presoaking dried beans, discarding the soaking water, and cooking with fresh water.
    - **Eliminate all lactose-containing products for 2 weeks** to see if symptoms improve. Over 30% of individuals with IBS develop symptoms when they consume dairy products. Lactose intolerance can also mimic IBS symptoms. Refer to our “Lactose Intolerance” patient brochure for more information.
    - **Try a low FODMAP diet** (a diet low in fermentable carbohydrates) if pain/bloating continue despite avoiding traditional gas-producing foods. Fermentable oligo-, di-, and monosaccharides and polyols (FODMAPs) are poorly absorbed and can lead to abdominal bloating and pain. If symptoms improve after 6-8 weeks on the low FODMAP diet, gradually reintroduce foods high in FODMAPs to determine which ones are tolerable. Refer to our low FODMAP handout for a good starting place. Set up an appointment with our registered dietitian for free expert guidance.
    - **Consider a 2-week trial of a gluten-free diet** if you have persistent diarrhea and bloating/gas despite trying a low FODMAP diet and avoiding gas-producing foods.

  - **Increasing dietary fiber** can help with constipation, diarrhea, and/or intestinal cramping:
    - Fiber helps constipation by moving stool more quickly through the intestines.
    - Fiber can decrease diarrhea by improving the consistency of stools.
    - Fiber helps to decrease intestinal spasms and cramping by keeping the colon mildly distended.

  - **There are 2 types of dietary fiber:**
    - **Insoluble fiber** is what we traditionally think of as fiber and use to treat constipation. Insoluble fiber comes from plant cell walls that resist digestion and retain water. This adds bulk to stool, making it softer and easier to pass through the intestines.
      - Foods: whole grain breads/cereals/pasta, wheat bran, rye, many vegetables, and the peels of various fruits, such as apples and pears.
    - **Soluble fiber** is made of carbohydrates, dissolves in water, and is digested by bacteria in the intestines. Because it stimulates the growth of colonic flora, it can help promote a healthy intestine. It improves constipation by increasing stool bulk and helps diarrhea by slowing digestion.
      - Foods: fruits (apples, citrus, prunes), legumes (beans, peas), oats, barley.
      - Supplements: Natural fiber supplements include Metamucil (psyllium) and Benefiber (wheat dextrin). Fibercon (polycarbophil) and Citrucel (methylcellulose) are synthetic fiber supplements. These bulk-forming laxatives work by absorbing water and increasing stool mass.

  - **The American Heart Association recommends 25-30gms of dietary fiber per day.**
    - It is important to drink plenty of water when increasing fiber in the diet (especially when using supplements). Without enough water, fiber will have difficulty moving stools through the intestines, which can worsen constipation.
    - Refer to the nutrition label on packaged foods to determine the amount of fiber per serving. A list of high fiber foods is included at the end of this handout.
Fiber side effects: Fiber can be a double-edged sword for people with intestinal issues. While it often helps constipation, it can increase gas and bloating, especially when starting fiber therapy.
- To minimize side effects, remember to start low and go slow.
- When adding a supplement, start with ½ to 1 tablespoon daily. If you do not notice an improvement in 3-4 days, increase the supplement to twice a day.
- Synthetic fiber supplements may have fewer side effects, since they are more soluble than natural fiber supplements.
- If your symptoms worsen with a high fiber diet, decrease your intake, and consult your healthcare provider about other treatment options.

Stress Reduction
Stress & anxiety may trigger or worsen IBS symptoms. Consider the following ways to improve stress:
- Learn new ways to cope with stress. Try breathing & relaxation techniques, meditation, yoga, etc.
- Regular exercise can decrease stress and increase your sense of well-being. Exercise can also help regulate the bowels. Try an aerobic form of exercise at least 3 times a week for 10 weeks.
- Some people may benefit from talking to a trained therapist, joining a support group, and/or receiving cognitive behavioral therapy (CBT). CBT helps patients identify unhealthy thoughts that contribute to their anxiety/stress and learn how to change those thoughts.

Medications
Prescription medications are available for symptoms that do not respond to changes in diet and lifestyle habits.
- Antispasmodic medications may be taken as needed for abdominal pain and cramping. These medications block the nervous system’s stimulation of the gastrointestinal tract. Examples include dicyclomine (Bentyl) and hyoscyamine (Levsin).
  - These drugs work particularly well when taken before the onset of symptoms (eg. before meals or other identifiable triggers).
  - Common side effects include dry mouth, dry eyes, constipation, and blurred vision.
- Over-the-counter laxatives and antidiarrheal medications may be helpful but should be used with caution. It is best to use the lowest effective dose for the shortest time possible, as regular use may cause more problems in the long-run.
- Certain antidepressant medications may help decrease pain:
  - Tricyclic antidepressants (TCAs) reduce pain perception. They also slow intestinal transit time, which may be beneficial in patients with diarrhea. Fatigue is a common side effect when starting a TCA. Doses are increased gradually, and full effects may not be seen for 3-4 weeks.
  - Serotonin reuptake inhibitors (SSRIs) may be considered if depression is also present.
- Patients with severe constipation or diarrhea unresponsive to all other IBS therapies may be considered for specific drug treatments under the supervision of a GI specialist.


<table>
<thead>
<tr>
<th>HIGH FIBER FOODS</th>
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<tbody>
<tr>
<td><strong>Bran, Whole Grains, Cereals, Pasta</strong></td>
</tr>
<tr>
<td>Barley, bran muffins, brown rice, granola, oatmeal</td>
</tr>
<tr>
<td>Rye bread, whole grain breads</td>
</tr>
<tr>
<td>Bran cereals, whole grain cereals (Fiber One, Raisin Bran, Shredded Wheat)</td>
</tr>
<tr>
<td>Whole wheat pasta</td>
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<tr>
<td>Popcorn (unbuttered)</td>
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<tr>
<td><strong>Legumes, Nuts, Seeds</strong></td>
</tr>
<tr>
<td>Baked beans, black beans, lentils, lima beans, split peas</td>
</tr>
<tr>
<td>Almonds, pecans, pistachios, sunflower seeds</td>
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<tr>
<td><strong>Raw Fruit</strong> (including skin and pulp)</td>
</tr>
<tr>
<td>Apples, bananas, berries, figs, grapes, melons, nectarines, oranges, peaches, pears, plums, strawberries</td>
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<tr>
<td><strong>Cooked or Dried Fruit</strong></td>
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<tr>
<td>Applesauce, apricots, figs, prunes, raisins</td>
</tr>
<tr>
<td><strong>Raw Vegetables</strong></td>
</tr>
<tr>
<td>Carrots, cauliflower, celery, green pepper, lettuce, spinach</td>
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<tr>
<td><strong>Cooked Vegetables</strong></td>
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<tr>
<td>Asparagus, artichokes, beans, broccoli, Brussels’ sprouts, cauliflower, corn, peas, potatoes (with skin), rhubarb, spinach, squash, tomato paste, turnip greens</td>
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