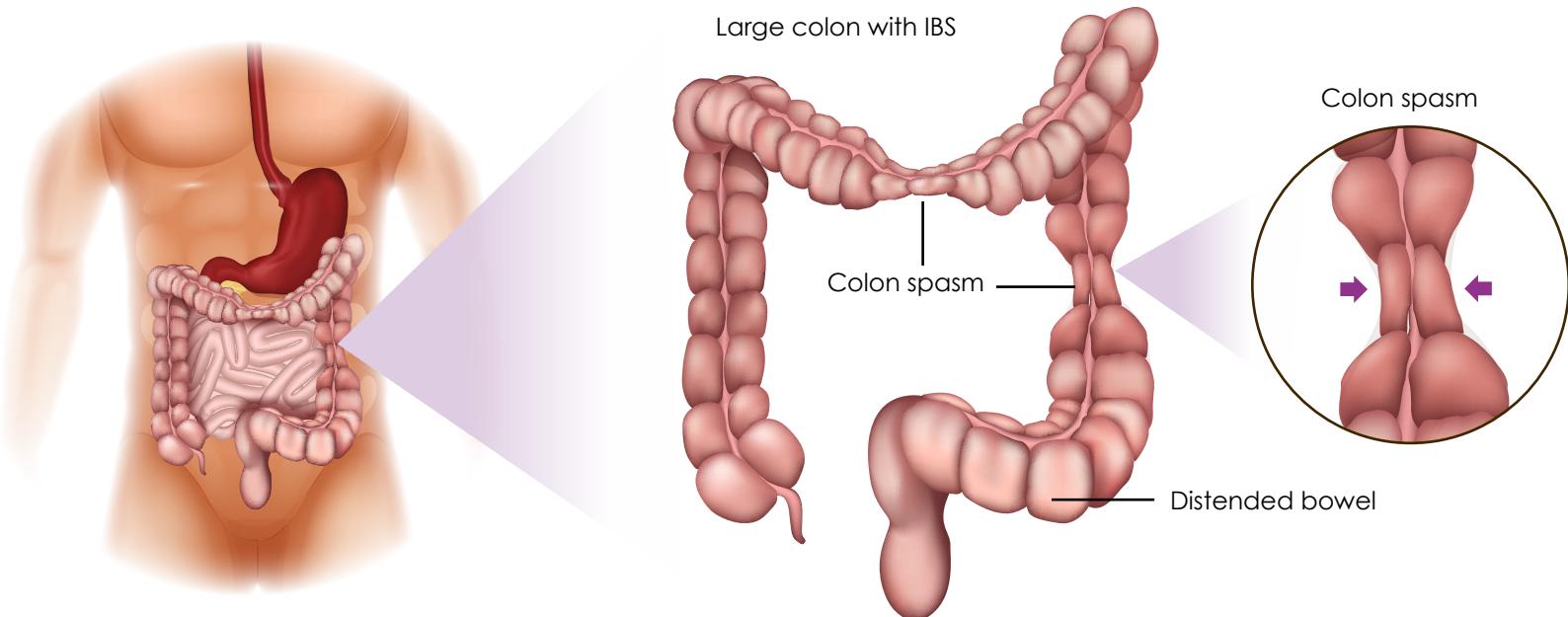


# Understanding IRRITABLE BOWEL SYNDROME



## WHAT IS IRRITABLE BOWEL SYNDROME?

Irritable bowel syndrome (IBS) is a common but uncomfortable disorder that affects the stomach and intestines.



**Sources:** 1. Irritable bowel syndrome. Available at: <https://www.mayoclinic.org/diseases-conditions/irritable-bowel-syndrome/symptoms-causes/syc-20360016>. Accessed on 05/12/2022. 2. Irritable Bowel Syndrome (IBS). Available at: <https://my.clevelandclinic.org/health/diseases/4342-irritable-bowel-syndrome-ibs>. Accessed on 05/12/2022.

## COMMON SYMPTOMS OF IBS

- Symptoms of IBS usually happen time and again.
- Most common symptoms include the following:

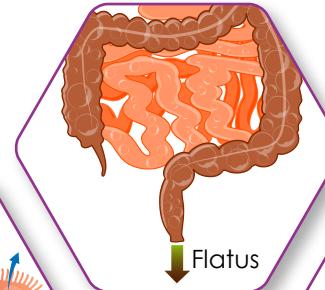
**Abdominal pain**



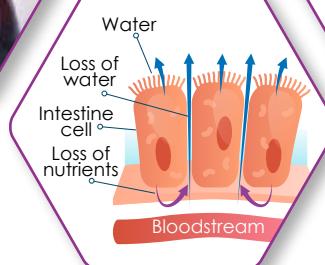
**Constipation**



**Passing of gas**



**Bloating**



**Diarrhea**



**Mucus in stool**

**Sources:** 1. Irritable bowel syndrome. Available at: <https://www.mayoclinic.org/diseases-conditions/irritable-bowel-syndrome/symptoms-causes/syc-20360016>. Accessed on 05/12/2022. 2. Irritable Bowel Syndrome (IBS). Available at: <https://my.clevelandclinic.org/health/diseases/4342-irritable-bowel-syndrome-ibs>. Accessed on 05/12/2022.

## RISK FACTORS FOR IBS

Female gender



Emotional stress,  
tension or anxiety



Severe digestive tract  
infection



Age: Late teens to early 40s



Family history of IBS



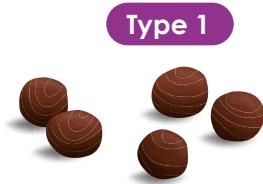
Food intolerance

Medications that can trigger IBS

- Some antibiotics
- Some antidepressants
- Medicines that contain sorbitol, such as cough syrups

**Sources:** 1. Irritable Bowel Syndrome (IBS). Available at: <https://my.clevelandclinic.org/health/diseases/4342-irritable-bowel-syndrome-ibs>. Accessed on 05/12/2022. 2. IBS Triggers and How to Avoid Them. Available at: <https://www.webmd.com/ibs/ibs-triggers-prevention-strategies>. Accessed on 05/12/2022.

## BRISTOL STOOL SCALE: AN ASSESSMENT TOOL FOR IDENTIFYING IBS



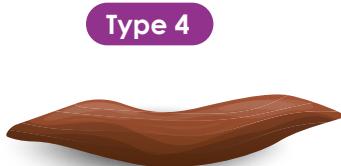
**Type 1**  
Separate hard lumps,  
like nuts (hard to pass)



**Type 2**  
Sausage-shaped  
but lumpy



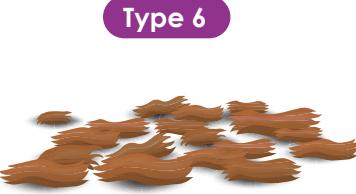
**Type 3**  
Like a sausage but  
with cracks on its surface



**Type 4**  
Like a sausage or snake,  
smooth and soft



**Type 5**  
Soft blobs with clear-cut  
edges (passed easily)



**Type 6**  
Fluffy pieces with ragged  
edges, a mushy stool

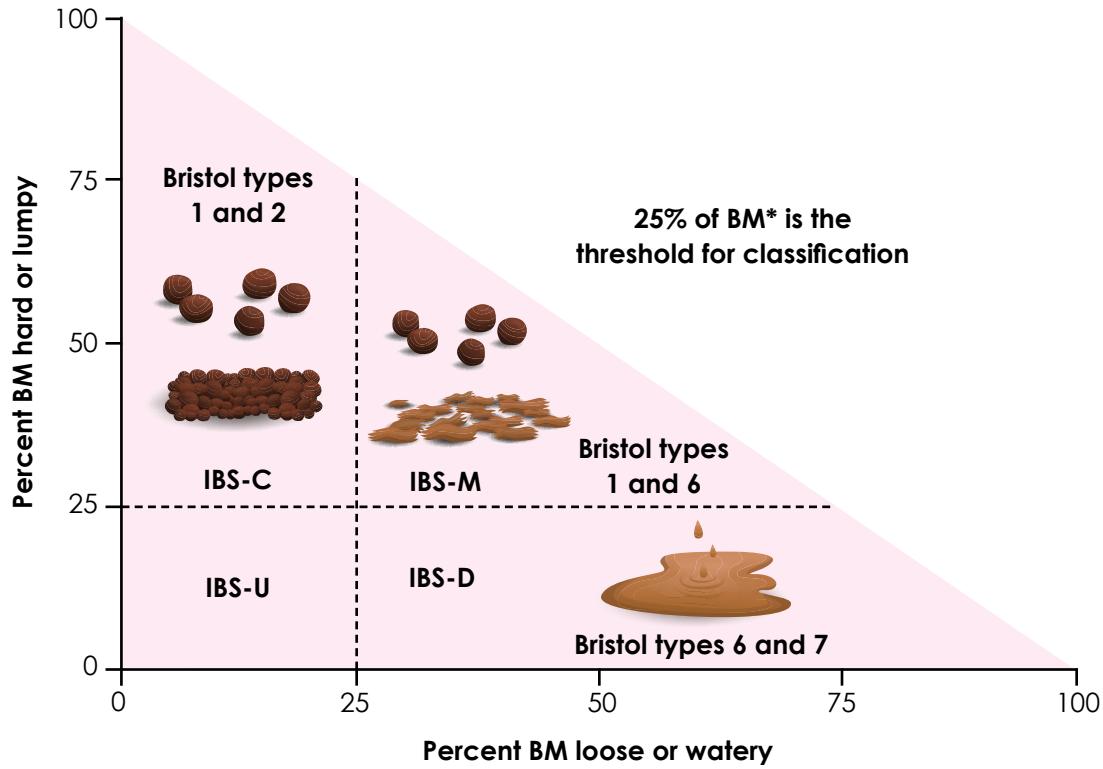


**Type 7**  
Watery, no solid pieces  
ENTIRELY LIQUID

**Source:** Blake MR, Raker JM, Whelan K. Validity and reliability of the Bristol Stool Form Scale in healthy adults and patients with diarrhoea-predominant irritable bowel syndrome. *Aliment Pharmacol Ther.* 2016;44(7):693-703.

## DIFFERENT SUBTYPES OF IBS

- IBS-C (IBS with predominant constipation)
  - » Most of stool is hard and lumpy
- IBS-D (IBS with predominant diarrhea)
  - » Most of stool is loose and watery
- IBS-M (IBS with mixed bowel habits)
  - » Both hard and lumpy bowel movements and loose and watery movements on the same day
- IBS-U (Unclassified IBS)
  - » Symptoms of IBS are present but bowel habits cannot be put into any of the above 3 subtypes



\*BM, bowel movement

**Sources:** 1. Grad S, Dumitrescu DL. Irritable bowel syndrome subtypes: New names for old medical conditions. *Dig Dis.* 2020;38(2):122–127. 2. Menees S, Chey W. The gut microbiome and irritable bowel syndrome. *F1000Res.* 2018;7:F1000 Faculty Rev-1029.

## IMPACT OF IBS ON DAY-TO-DAY LIFE

Depression and anxiety



Sleep disturbances



Weight loss



Malnourishment



Discomfort while performing tasks



Trouble focusing



**Sources:** 1. The Dangers of Untreated IBS-C/CIC. Available at: <https://www.healthline.com/health/ibs-c/the-dangers-of-untreated-ibs-c#Physical-health-complications>. Accessed on 05/12/2022. 2. Ballou S, Bedell A, Keefer L. Psychosocial impact of irritable bowel syndrome: A brief review. *World J Gastrointest Pathophysiol.* 2015;6(4):120-3. 3. Ballou S, McMahon C, Lee HN, et al. Effects of Irritable Bowel Syndrome on Daily Activities Vary Among Subtypes Based on Results From the IBS in America Survey. *Clin Gastroenterol Hepatol.* 2019;17(12):2471-2478.e3.

# DIETARY TRIGGER AND DIETARY ADVICE FOR IBS-D AND IBS-C

## IBS Diarrhea

### Dietary Trigger

- High fiber intake (insoluble type)
- Food and drinks with chocolate, alcohol, caffeine, fructose, or sorbitol
- Carbonated drinks
- Large meals, fried and fatty foods
- Dairy products



## IBS Constipation

### Dietary Trigger

- Breads and cereals made with refined grains
- Processed foods
- Coffee, carbonated drinks, alcohol
- High-protein diets
- Dairy products, especially cheese

### Dietary Advice

- Eat moderate amount of soluble fiber (Whole wheat breads, oats, barley, brown rice, and dried fruits)
- Avoid food items that cause excess gas (broccoli, onions, and cabbage)
- Eat smaller portions
- Drink water an hour before or after meals



### Dietary Advice

- Fiber products can help in case of IBS-constipation
- Good fiber sources include whole-grain bread and cereals, beans, fruits, and vegetables
- Ground flaxseed for seasoning
- Drink plenty of water every day

**Sources:** 1. IBS Triggers and How to Avoid Them. Available at: <https://www.webmd.com/ibs/ibs-triggers-prevention-strategies>. Accessed on 05/12/2022. 2. IBS (Irritable Bowel Syndrome) Triggers and Prevention. Available at: [https://www.emedicinehealth.com/irritable\\_bowel\\_syndrome\\_ibss\\_triggers/article\\_em.htm](https://www.emedicinehealth.com/irritable_bowel_syndrome_ibss_triggers/article_em.htm). Accessed on 05/12/2022.

# LIFESTYLE CHANGES NEEDED IN IBS FOR LEADING A HEALTHY LIFE

Maintain a food diary to help identify foods that trigger symptoms

Drink plenty of fluids

Avoiding food containing gluten may improve diarrhea symptoms

Exercise regularly: Moderate exercise seems to help with IBS



Avoid foods that trigger your symptoms

Eat high-fiber foods (in IBS-C)

Avoid food items that cause increased gas, such as carbonated and alcoholic beverages and certain foods

Avoid diet high in FODMAPs: These can cause bloating, gas, and diarrhea

Get enough sleep

**Sources:** 1. Irritable bowel syndrome. Available at: <https://www.mayoclinic.org/diseases-conditions/irritable-bowel-syndrome/diagnosis-treatment/drc-20360064>. Accessed on 05/12/2022. 2. IBS (Irritable Bowel Syndrome) Triggers and Prevention. Available at: [https://www.emedicinehealth.com/irritable\\_bowel\\_syndrome\\_ibss\\_triggers/article\\_em.htm](https://www.emedicinehealth.com/irritable_bowel_syndrome_ibss_triggers/article_em.htm). Accessed on 05/12/2022.

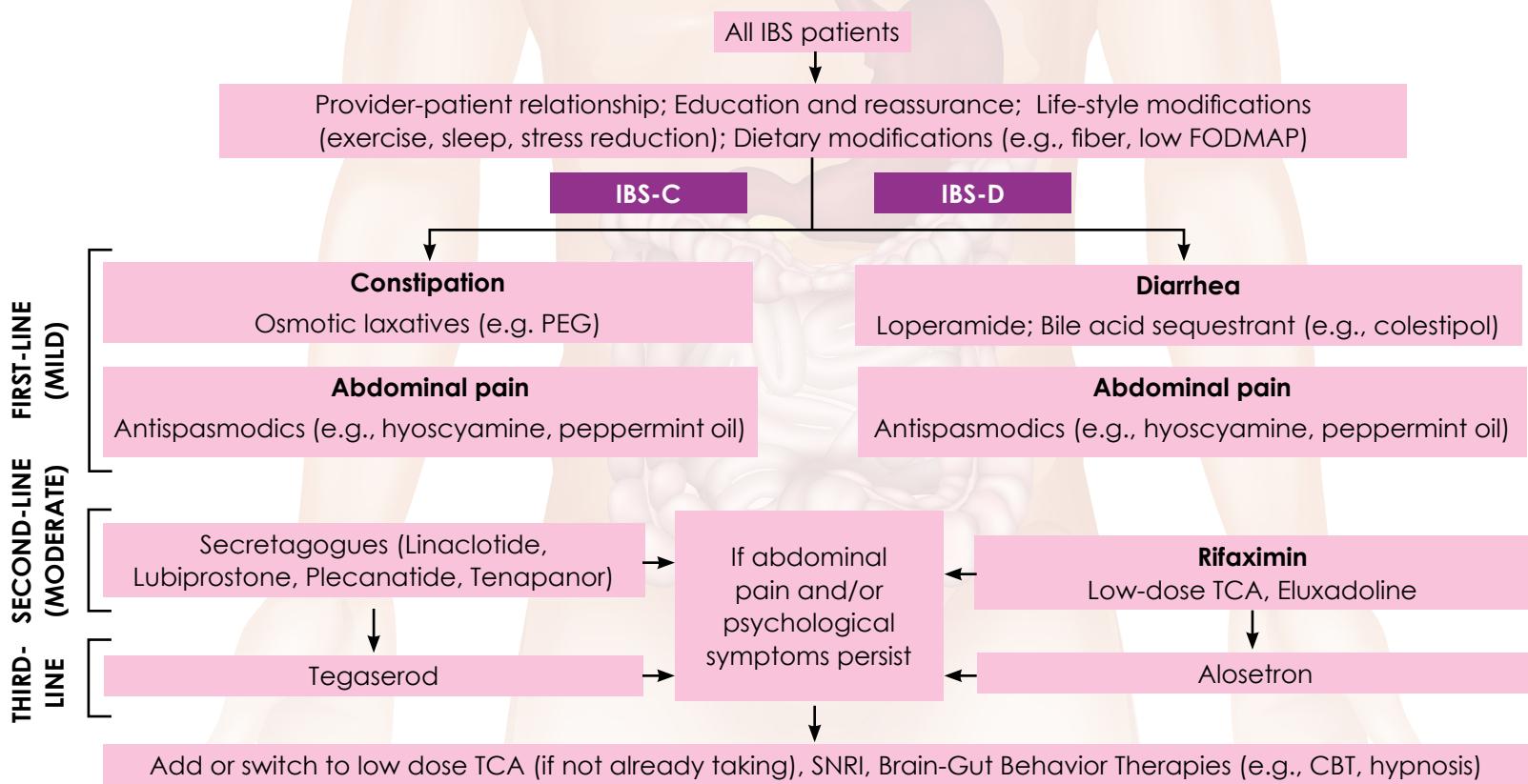
## LOW-FODMAP DIET FOR IBS

- **FODMAPs** = Fermentable Oligosaccharides Disaccharides Monosaccharides And Polyols
- A low-FODMAP diet helps people with IBS have better control over their symptoms.

| FOOD  | VEGETABLES  | FRUITS  | PROTEINS   | DAIRY AND ALTERNATIVES  | STARCHES, CEREALS & GRAINS   |
|-------|---|---|--|---|--|
| EAT   | <br>Lettuce, carrot, cucumber  | <br>Strawberries, pineapples, grapes | <br>Chicken, eggs, tofu            | <br>Almond milk, lactose-free milk, soy milk | <br>Corn flakes, oats, rice cakes, wheat/rye/barley free breads |
| AVOID | <br>Garlic, green peas, onion | <br>Mango, watermelon, peaches      | <br>Legumes, some processed meats | <br>Milk, ice cream, yogurt                 | <br>Wheat/rye/barley based breads, breakfast cereals, biscuits |

Source: Low FODMAP Diet. Available at: <https://my.clevelandclinic.org/health/treatments/22466-low-fodmap-diet>. Accessed on 05/12/2022.

# IBS TREATMENT ALGORITHM



**Abbreviations:** TCA, tricyclic antidepressant; SNRI, serotonin-norepinephrine reuptake inhibitor; PEG, polyethylene glycol; CBT, cognitive behavioral therapy

**Source:** AGA issues clinical guidelines outlining drug treatment plans for patients with irritable bowel syndrome (IBS). Available at: <https://gastro.org/press-releases/aga-issues-clinical-guidelines-outlining-drug-treatment-plans-for-patients-with-irritable-bowel-syndrome-ibs/>. Accessed on 13/12/2022.