

NUTRITION IN FOCUS



The Low-FODMAP and Gluten-Free Diet Plan for Irritable Bowel Syndrome

What Is Irritable Bowel Syndrome?

Irritable bowel syndrome (IBS) is a condition in which the bowel does not work normally, even though it looks normal when examined. Symptoms of IBS are belly pain, cramps, diarrhea, bloating, and gas. These can be mild or severe, and may affect your quality of life.

A diet that is low in types of sugars called FODMAPs and gluten, a protein in wheat and some other grains, has been shown to improve IBS symptoms.

What Are FODMAPs?

FODMAP stands for **f**ermentable **o**ligo-, **d**i-, and **m**ono-saccharides, and **p**olyols. These are types of sugars that are hard for the body to digest. These sugars are:

- **Lactose:** in milk and milk products
- **Fructose:** in fruits, honey, agave, and high-fructose corn syrup
- **Fructans:** in wheat, rye, and some vegetables
- **Galactans:** in beans and lentils
- **Polyols:** in sugar alcohols and some fruits and vegetables

The Low-FODMAP Approach

All people have friendly bacteria called *flora* that live in the gut. Because FODMAPs are hard for the body to digest, they become food for the gut flora. When

the flora ferment (break down) the FODMAP sugars, the process can cause or worsen symptoms of IBS.

Eating a diet low in total FODMAPs may reduce the symptoms of IBS. The first step is to remove as many high-FODMAP foods as you can from your diet for at least 8 weeks. The second step is to add these foods back into your diet one at a time. If IBS symptoms get worse when you eat a high-FODMAP food, you may need to avoid that food or eat a smaller amount.

Low-FODMAP tips:

- Limit fruit to one low-FODMAP fruit per meal. Choose fruits that are fully ripe.
- Avoid or limit foods that cause the most problems: onions, apples, pears, and breads and pastas made with wheat.
- Avoid fiber supplements that have inulin or sorbitol.
- Sugar-free gum, candy, and cough drops may contain sugar alcohols, which can cause diarrhea.

What Is Fructose Intolerance?





Fructose intolerance occurs when the body is unable to absorb and digest fructose well. Common symptoms of fructose intolerance are bloating, gas, belly cramps, and diarrhea.

What Is Gluten Sensitivity?







Gluten sensitivity occurs in people who react to gluten, a protein in grains such as wheat, barley, and rye. Symptoms of gluten sensitivity usually occur hours or days after eating gluten and include bloating, belly pain, diarrhea, bone or joint pain, headaches, and balance problems. It is not celiac disease, which is a far less common, and more serious, autoimmune condition that can damage the small intestine.

The Connection Between IBS and Gluten Sensitivity

Some people diagnosed with IBS say they have fewer symptoms when they follow a gluten-free diet. This may mean that people who have IBS also tend to be sensitive to gluten. Wheat, which has gluten, also contains fructans, a FODMAP type of sugar that causes IBS symptoms in some people.

Foods High and Low in FODMAPs and Gluten		
Type of Food	Caution: High in FODMAPs <i>Avoid these foods or eat less often.</i>	FODMAP-Friendly Choices <i>Choose these foods more often.</i>
Fruits (those with pits or seeds) 	Apples, apricots, blackberries, cherries, dried fruit, lychees, mangoes, nectarines, peaches, pears, plums, prunes, watermelon	Bananas, blueberries, cantaloupe, coconut, cranberries, grapefruit, grapes,* honeydew, kiwis, lemons, limes, oranges, passion fruit, persimmons, pineapples, raspberries, rhubarb, strawberries
Vegetables 	Artichokes, asparagus, beets, broccoli, brussels sprouts, button mushrooms, cabbage, cauliflower, celery, fennel, garlic, leeks, okra, onions, radicchio, shallots, snow peas	Bean sprouts, bell peppers, bok choy, butter lettuce, carrots, chives, corn, cucumbers,* eggplant,* fresh herbs, green beans, potatoes, spinach, squash (butternut, winter), tomatoes, yams, zucchini
Dairy Products 	Lactose-containing cow, goat, and sheep milk; custard; ice cream; some cheeses such as ricotta, cottage, and mascarpone; sour cream; whipped cream; yogurt	Lactose-free milk, cottage cheese, ice cream, and yogurt; some cheeses such as cheddar, mozzarella, parmesan, and Swiss
Non-Dairy Alternatives 	Soy-based non-dairy products (soy ice cream, soy milk, soy yogurt), coconut cream, coconut milk	Rice and almond milk, rice milk ice cream and sorbet

* These FODMAP-approved foods may cause gas.

Type of Food	Caution: High in FODMAPs <i>Avoid these foods or eat less often.</i>	FODMAP-Friendly Choices <i>Choose these foods more often.</i>
Grains 	All grains that include gluten, such as wheat, wheat germ, wheat starch, barley, bran, bulgur, couscous, durum, farro, graham flour, Kamut, malt, malt extract, malt flavoring, malt syrup, matzoh, orzo, rye, seitan, semolina, spelt, tabouli	Gluten-free products, such as amaranth, bread, buckwheat, cereal, corn, crackers, millet, noodles, oats, polenta, potato and corn tortilla chips, quinoa, rice, rice cakes, teff
Meat, Poultry, Fish, Eggs 	Meat, poultry, and fish made with high-FODMAP fruit sauces (for example, barbecue sauce) or high-fructose corn syrup	Beef, canned tuna, chicken, cold cuts, eggs, egg whites, fish, lamb, pork, shellfish, turkey
Vegetarian Protein 	Soy products (for example, edamame, soybeans), black-eyed peas, cashews, chickpeas, hummus, kidney beans, lentils, pistachios	Tempeh, tofu, nut butters, small amounts (10–15) of almonds, hazelnuts, macadamia nuts, pecans, pine nuts, walnuts, pumpkin seeds (1–2 Tbsp.), sesame seeds (1–2 Tbsp.), sunflower seeds (1–2 Tbsp.)
Fats 		Avocados; butter; coconut oil; margarine; mayonnaise; olive, canola, and peanut oil
Sweeteners 	Fructose, sugar alcohols including sorbitol, high fructose corn syrup, sucralose (Splenda), stevia (Pure Via, Truvia), honey, molasses, inulin, agave nectar, sugar-free mints	Aspartame (Equal), other artificial sweeteners not ending in “-ol,” pure maple syrup
Alcohol 	Port wine, rum, sherry	Beer, gin, vodka, wine (1 serving)

Probiotics

If a low-FODMAP diet does not help ease IBS symptoms after several weeks, you may want to try probiotic supplements with the strain of *bifidobacterium infantis*, which may reduce symptoms of IBS.

Gluten-Free and Low-FODMAP Menu

	Breakfast	Lunch	Dinner	Snack
Sunday	Gluten-free oatmeal with cranberries, blueberries, and almond milk	Turkey wrap with butter lettuce, tomatoes, and avocado in a corn tortilla	Baked salmon with sautéed green beans and grilled potatoes	Rice cakes and peanut butter
Monday	Rice cereal with almond milk and banana slices	Seared tuna salad with kale, grilled zucchini, and bell peppers	Grilled chicken breast with sautéed spinach and brown rice	Honeydew melon
Tuesday	Scrambled-egg omelet with bell peppers, tomatoes, spinach, and corn tortillas	Chicken soup with rice noodles, bean sprouts, and carrots	Ground turkey burger on a gluten-free bun with butter lettuce and tomatoes	Cheddar cheese and gluten-free crackers
Wednesday	Strawberry-banana smoothie with almond milk	Stir fry with firm tofu, bamboo shoots, bok choy, eggplant, and brown rice	Gluten-free pasta with mozzarella cheese and a salad of butter lettuce, tomatoes, cucumbers, and a hard-boiled egg	Raspberries
Thursday	Gluten-free pancakes with pure maple syrup and fresh strawberries	Gluten-free pasta with pesto sauce and grilled chicken	Lean steak with mashed potatoes and grilled zucchini and carrots	Trail mix of almonds, peanuts, and walnuts
Friday	Lactose-free yogurt and gluten-free corn muffin	Burrito with ground beef, brown rice, tomatoes, and cheddar cheese in a corn tortilla	Grilled trout with quinoa and grilled eggplant	Kiwi and strawberry fruit mix
Saturday	Corn flakes with almond milk and an orange	Chicken sandwich on gluten-free bread with lettuce, tomatoes, and cucumbers	Shrimp tacos with corn tortillas	Banana with almond butter