

LOW-FODMAP Diet

FODMAP is an acronym for fermentable oligo-di-monosaccharides and polyols, which are carbohydrates found in specific foods. Eliminating foods containing FODMAPS may help immensely with the symptoms of irritable bowel syndrome.

There are 5 categories of foods containing FODMAPS: foods with excess fructose, lactose, fructans, galactans, and polyols.

Normally when carbohydrates are eaten, they are broken down into monosaccharides (sugar molecules including glucose, galactose, and fructose) and absorbed in the small intestine. If malabsorption of carbohydrates occurs, fructose can pass into the large intestine and ferment, leading to bloating and gas. It can also pull water into the lumen, resulting in diarrhea in some people.

Fructans, which consist of fructose molecules bound together, and galactans, which consist of galactose molecules bound together, can also be poorly absorbed and lead to symptoms. Fructose is more readily absorbed when bound to glucose in the form of sucrose, so malabsorption occurs when fructose is present more than glucose in a particular food. Polyols are very poorly absorbed and commonly contribute to symptoms in IBS patients.

FODMAP Categories

- Excess Fructose: Apple, mango, nashi, pear, canned fruit in natural juice, watermelon, fructose, high fructose corn syrup, concentrated fruit sources, large servings of fruit, dried fruit, fruit juice, honey, corn syrup
- Lactose: Milk, yogurt, soft cheese, custard, ice cream, goat's milk
- Fructans: artichoke, asparagus, beet, broccoli, Brussels sprouts, cabbage, eggplant, fennel, garlic, leek, okra, onion, shallots, wheat, rye, (crackers, cookies, pasta), watermelon, persimmon, chicory, dandelion, inulin, pistachio
- Galactans: baked beans, chickpeas, kidney beans, lentils, soybeans
- Polyols: apple, apricot, avocado, blackberry, cherry, nectarine, peach, pear, plum, prune, cauliflower, bell pepper, mushroom, sweet corn, sweeteners containing sorbitol, mannitol, maltitol, xylitol

The purpose of the FODMAP elimination diet is to do a 6-8 week elimination of FODMAP-containing foods to help identify food triggers of IBS. You should notice an improvement in your GI complaints within one week of following a low FODMAP diet. Follow a low FODMAP diet for a full 6-8 weeks before assessing its effectiveness and reintroducing foods high in FODMAPS. At that time, you will reintroduce on test food every four days; if you react to a food, do not test another food for two weeks.

Foods that are high in FODMAPS may aggravate your GI complaints, but they are not causing an allergic reaction or an autoimmune reaction in your body. The foods high in FODMAPS that elicit GI symptoms are causing functional discomfort in your gut that result in gas, bloating, distention, etc.

These are the test foods for each category:

- Lactose: ½ -1 cup milk
- Fructose: ½ mango or 1-2 teaspoons honey
- Fructans: 2 slices wheat bread, 1 garlic clove or 1 cup pasta
- Galactans: ½ cup lentils or chickpeas
- Polyols (sugar alcohols): Sorbitol, 2-4 dried apricots; Mannitol, ½ cup mushrooms

FODMAPS in Food

Type of Food	High in FODMAPs	Low in FODMAPs
Milk	Milk: cow, sheep goat, soy; creamy soups made with milk; evaporated milk; sweetened condensed milk	Milk: almond, coconut, hazelnut, hemp, rice; Lactose free cow's milk; lactose free kefir, lactose free ice cream (non-dairy alternatives); lactase enzyme (to make your own evaporated or condenses milk)
Yogurt	Cow's milk yogurt (Greek yogurt is the lowest in FODMAPs), soy yogurt	Coconut milk yogurt
Cheese	Cottage cheese, ricotta cheese, mascarpone cheese	Hard cheeses including cheddar, Swiss, brie, blue cheese, mozzarella, parmesan, and feta; ricotta or cottage cheese (2 tablespoons or less)' lactose free cottage cheese
Dairy-based condiments	Sour cream, whipping cream	Butter, half and half, cream cheese
Dairy-based desserts	Ice cream, frozen yogurt, sherbet	Sorbet from FODMAPs friendly fruit
Fruit	Apples, pears, cherries, raspberries, blackberries, watermelon, nectarines, white peaches, apricots, plums, peaches, prunes, mango, papaya, persimmon, orange juice, canned fruit, large portions of any fruit	Banana, blueberries, strawberries, cantaloupe, honeydew, grapefruit, lemon, lime, grapes, kiwi, pineapple, rhubarb, tangelos, <1/4 avocado. < 1 tablespoon dried fruit
Vegetables	Artichokes, asparagus, sugar snap peas, cabbage, onions, shallot, leek, onion and garlic salt powders, garlic, cauliflower, mushrooms, pumpkin, green peppers	Bok choy, bean sprouts, red bell pepper, lettuce, spinach, carrots, chives, spring onion (green part only), cucumber, eggplant, green beans, tomato, potatoes, garlic infused oil (sauté onion and garlic in oil and then discard onion and garlic); water chestnuts; <1 stick celery; <1/2 cup sweet potato, broccoli, brussels sprouts, butternut squash, fennel; <10 snow peas
Grains	Wheat, rye, barley (large quantities), spelt	Brown rice, oats, oat bran, quinoa, corn; gluten-free bread, cereals, pastas, crackers without honey; apple/pear juice, agave or HFCS; Namaste Food Perfect Flour Blend or King Arthur Gluten Free Multi-Purpose Flour
Legumes	Chickpeas, hummus, kidney beans, baked beans, edamame, soy milk, lentils	Tofu, peanuts, <1/3 cup green peas

Nuts and Seeds	Pistachios	10-15 max or 1-2 tablespoons of: almonds, macadamia, pecans, pine nuts, walnuts, pumpkin seeds, sesame seeds, sunflower seeds
Sweeteners	Honey, agave, high fructose corn syrup, sorbitol, mannitol, xylitol, maltitol, Splenda	Sugar, glucose, sucrose, pure maple syrup, aspartame
Additives	Inulin, POS (fructo-oligosaccharides), sugar alcohols (see sweeteners), chicory root	
Beverages/ Alcohol	Any with HFCS, high FODMAP fruit/vegetable juices fortified wines (sherry, port), rum	Low FODMAP fruit/vegetable juices (limit to ½ cup at a time), coffee, tea wine, beer, vodka, gin – limit to one serving as all alcohol is a gastric irritant
Protein-rich food		Fish, chicken, turkey, eggs, meat
Fat-rich food		Olive and canola oil, olives, <1/4 avocado

Low FODMAP Sample Menu Options

Breakfast

- Erewhon Corn Flakes or oats, with rice or almond milk, banana and 1 tablespoon sliced almonds
- McDonalds or Starbucks oatmeal with 1 tablespoon dried fruit and nuts
- Quinoa flakes with rice or almond milk, ¾ cup strawberries and 1 tablespoon pecans

Lunch

- Udi's white bread sandwich with sliced turkey, lettuce or spinach leaves, tomato, sliced cheddar cheese and Green Valley lactose-free vanilla yogurt, ½ cup blueberries and baby carrots
- Stir fry with brown rice or rice noodles, chicken, shrimp or beef, peppers, and Bok choy, ask for no onion or garlic and the sauce on the side
- Fruit salad with 1 cup (total) low FODMAP fruits, kiwi, strawberries and blueberries, spinach salad with lemon dressing and cherry tomatoes, and brown rice cakes with natural almond butter

Snack

- Glutino pretzels or Blue Diamond Almond Nut thins and mozzarella string cheese
- Hard boiled egg and cherry tomatoes
- Pumpkin seeds
- Brown rice cakes with natural peanut butter
- Banana and handful almonds
- 1 stick celery with natural almond butter or,
- Carrots and red pepper dipped in tahini

Dinner

- Grilled chicken or salmon with baked sweet potato with olive oil or butter, sauteed spinach and red peppers seasoned with green parts of onion, salt, pepper, handful of pine nuts and olive oil, and a kiwi
- Wendy's baked potato and a side salad with chicken, bring your own homemade salad dressing that does not contain garlic or onion
- Sushi