

Low FODMAP Diet



THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER

If you have gas, abdominal bloating or cramping, or diarrhea after eating carbohydrates, a low FODMAP diet may help. FODMAP stands for **F**ermentable **O**ligosaccharides, **D**isaccharides, **M**onosaccharides and **P**olyols. They are all types of carbohydrates that can cause digestion discomfort.

Your doctor may recommend this diet for 6 to 8 weeks. You will be told when to **slowly add foods back into the diet** to figure out which foods can be eaten or avoided completely. Many people feel better the first week they stop eating these foods.

FODMAP containing carbohydrates

- **Lactose:** It is found in cow, sheep, and goat's milk. Limit foods high in lactose, such as yogurt, ice cream, milk and ricotta cheese.
- **Fructose:** It is found in fruit, fruit juice, honey, high-fructose corn syrup (HFCS) and agave syrup. On a low FODMAP diet, **if you want to eat a food containing fructose, you will need to eat it in combination with foods containing glucose.** When your body gets foods with equal parts fructose and glucose it is easier to digest. Foods with more fructose than glucose, however, will likely cause signs of discomfort to return.
- **Fructans:** Wheat, rye and barley are common foods with fructans.
- **Galactans:** Beans and lentils are common foods with galactans.
- **Polyols:** It is found naturally in some fruits and vegetables, and may be added to sugar-free gums, mints and some medicines. Also called **sugar alcohols**, look for these names on products: sorbitol, xylitol, maltitol, mannitol, isomalt, erythritol, lactitol, and hydrogenated starch hydrolysates.

Low FODMAP diet

Choose foods for the next 6 to 8 weeks under the “foods to include” section in the chart. You will be told when to add new foods back into your diet.

Type of Food	Foods to include Low FODMAPs	Foods to avoid High FODMAPs
Milk	<ul style="list-style-type: none">• Milk: rice, coconut, hemp, almond, lactose-free• Yogurts made with low FODMAP milk or lactose-free kefir• Ice cream made with low FODMAP milk or lactose-free kefir	<ul style="list-style-type: none">• Milk: cow, sheep goat and soy• Yogurts made with evaporated milk or sweetened condensed milk• Other products, such as cream soups, made with evaporated milk or sweetened condensed milk

Type of Food	Foods to include Low FODMAPs	Foods to avoid High FODMAPs
Cheese	<ul style="list-style-type: none"> • Hard cheeses (cheddar, Swiss, Brie, blue cheese, mozzarella, Parmesan and feta) • 2 Tablespoons or less cottage or ricotta cheese per meal 	<ul style="list-style-type: none"> • Mascarpone cheese
Dairy-based condiments and desserts	<ul style="list-style-type: none"> • Butter • Half and half • Cream cheese • Sorbet only from low FODMAP fruits 	<ul style="list-style-type: none"> • Sour cream • Whipping cream • Ice cream, frozen yogurt or sherbet from high FODMAP fruits
Fruit <ul style="list-style-type: none"> • Limit to 1 low FODMAP per meal • Soft fruits have less fructose than firm fruits 	<ul style="list-style-type: none"> • Banana, blueberries, strawberries, raspberries, cantaloupe, oranges, honeydew, grapefruit, lemon, lime, grapes, kiwi, pineapple • Rhubarb less than ¼ of fruit 	<ul style="list-style-type: none"> • Concentrated fruit juices • Dried fruit • Apples, avocado, pears, cherries, blackberries, watermelon, apricots, plums, peaches, nectarines, prunes, mango, papaya
Vegetables	<ul style="list-style-type: none"> • Lettuce, spinach, carrots, cucumber, green beans, eggplant, bok choy, red bell pepper, tomatoes, potatoes, yam, zucchini 	<ul style="list-style-type: none"> • Asparagus, artichokes, sugar snap peas, cabbage, leek, cauliflower, mushrooms, pumpkin, green bell peppers, broccoli, Brussels sprouts, garlic, and onions of all varieties
Herbs	<ul style="list-style-type: none"> • Basil, chili, coriander, ginger, mint, oregano, parsley, rosemary, thyme, salt, pepper 	<ul style="list-style-type: none"> • Nutmeg
Grains	<ul style="list-style-type: none"> • Rice, oats, quinoa, corn, polenta • Gluten-free bread, pasta, cereal, crackers 	<ul style="list-style-type: none"> • Wheat, rye, barley, spelt
Legumes	<ul style="list-style-type: none"> • Tofu • Peanuts 	<ul style="list-style-type: none"> • Chickpeas, hummus • Beans, such as kidney beans, baked beans or edamame • Lentils
Nuts and seeds <ul style="list-style-type: none"> • Limit to 10 nuts or 1 tablespoon of seeds per meal 	<ul style="list-style-type: none"> • Almonds, macadamia, pecans, pine nuts, walnuts • Pumpkin seeds, sesame seeds, sunflower seeds 	<ul style="list-style-type: none"> • Pistachios • Cashews

Type of Food	Foods to <u>include</u> Low FODMAPs	Foods to <u>avoid</u> High FODMAPs
Sweeteners	<ul style="list-style-type: none"> Sugar or glucose Pure maple syrup Equal and Splenda sweeteners 	<ul style="list-style-type: none"> Honey, agave, high fructose corn syrup Sugar alcohols such as sorbitol, mannitol, xylitol, maltitol, isomalt, erythritol, lactitol and hydrogenated starch hydrolysates
Alcohol <ul style="list-style-type: none"> Limit to 1 drink per day 	<ul style="list-style-type: none"> Wine, beer, vodka, gin 	<ul style="list-style-type: none"> Rum
Fat-rich foods	<ul style="list-style-type: none"> Olive and canola oil Butter Olives 	<ul style="list-style-type: none"> Avocado
Protein-rich foods	<ul style="list-style-type: none"> Meat (beef, pork) Poultry (chicken, turkey) Fish Eggs 	<ul style="list-style-type: none"> None to be avoided
Other		<ul style="list-style-type: none"> Caffeinated coffee or tea Carbonated beverages Beverages with high FODMAP sweeteners

Day 1 sample meal plan on low FODMAP diet

Breakfast	1 cup oatmeal (sweetened with maple syrup or sugar if desired) ½ cup fresh blueberries 1 cup coconut or almond milk
Morning snack	10 to 15 almonds 1 small banana Decaffeinated hot tea
Lunch	½ cup tuna salad with light mayo, celery and seasonings 12 rice crackers ¾ cup sliced tomatoes and cucumbers 1 oz potato chips Decaffeinated iced tea
Afternoon snack	3 cups popcorn 1 hard-boiled egg Water

Dinner	<p>4 oz. skinless chicken breast, fish or meat</p> <p>2/3 cup rice</p> <p>1 cup sautéed vegetables such as carrots, peas, red bell pepper, spinach, seasoned with ginger and soy sauce.</p> <p>½ cup sliced strawberries</p> <p>Water flavored with fresh lemon slices</p>
Bedtime snack	<p>12 tortilla chips</p> <p>1 oz melted cheddar cheese</p> <p>Water</p>

Day 2 sample meal plan on low FODMAP diet

Breakfast	<p>1 cup corn or quinoa flakes</p> <p>1 cup rice milk</p> <p>1 banana</p>
Morning snack	<p>¼ cup pumpkin seeds</p> <p>Decaffeinated hot tea</p>
Lunch	<p>2 slices Udi's white bread sandwich with sliced turkey, cheddar cheese, lettuce, tomato and mustard or mayonnaise</p> <p>½ cup grapes</p> <p>½ cup baby carrots</p> <p>6 oz. lactose-free vanilla yogurt</p> <p>Decaffeinated iced tea</p>
Afternoon snack	<p>2 brown rice cakes topped with 2 Tbsp natural peanut butter</p> <p>Water</p>
Dinner	<p>4 oz grilled chicken or salmon</p> <p>Baked sweet potato, topped with butter</p> <p>Spinach salad topped with carrots, cucumber, tomatoes, 2 Tbsp olive oil vinaigrette</p> <p>Water flavored with fresh lemon slices</p>
Bedtime snack	<p>½ cup lactose-free ice cream</p> <p>Water</p>

Dining out on the low FODMAP diet

When dining out, try these tips to stick with the diet:

- Bring a low FODMAP roll, wrap or bread to the restaurant and order a burger, grilled fish, chicken or beef.
- Fill a thermos with lactose-free milk, rice milk or almond milk to add to your cereal, oats or coffee when dining away from home.
- Order a salad and dress it with vinegar or lemon wedges and olive oil.
- Choose brown rice or gluten-free pasta with butter and Parmesan cheese or a baked potato for a side dish.

FODMAP food challenge guidelines

After 6 to 8 weeks on the FODMAP diet, you may begin a food challenge. You will add one or two new foods at a time back into your diet to see if digestion discomfort returns.

- Keep a journal. Write down what is eaten at each meal and identify the new food. Also write down the signs you have or do not have after each meal. Share this with your doctor or dietitian. Use the **Daily Food and Beverage Journal** to track your progress.
- If too many foods are added back into the diet, you may not be able to tell which foods cause problems.
- Start with small amounts of foods as part of the challenge, such as:
 - Lactose: ½ to 1 cup cow's milk
 - Fructose: 1 to 2 teaspoons honey
 - Fructans: 2 slices wheat bread or 1 garlic clove (not a whole garlic bulb)
 - Galactans: ½ cup lentils or chickpeas
 - Polyols (sugar alcohols):
 - Sorbitol: 2 to 4 dried apricots, or
 - Mannitol: ½ cup mushrooms

For more information

To learn more about FODMAP diets or irritable bowel syndrome (IBS), talk with a dietitian or visit these websites:

- The U.S. National Library of Medicine, MedlinePlus, www.medlineplus.gov
- International Foundation for Functional Gastrointestinal Disorders (IFFGD), *The Low FODMAP Diet Approach: Dietary Triggers for IBS Symptoms*, www.aboutibs.org/site/treatment/low-fodmap-diet/

Talk to your doctor or health care team if you have any questions about your care.

The Library for Health Information is available to help you find more health information at (614) 293-3707 or e-mail: health-info@osu.edu.