

<b>Prepared For:</b>		<b>Date:</b>	
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## Low-FODMAP Nutrition Therapy

FODMAP is an acronym that stands for: Fermentable, Oligosaccharides, Disaccharides, Monosaccharides, and Polyols. These are foods components that are restricted in a low-FODMAP diet. This diet is prescribed to reduce symptoms in those who have irritable bowel syndrome (IBS) or inflammatory bowel disease (IBD).

Fermentable	Gut bacteria can ferment food components when eaten in large portions. This can result in bloating, gas, abdominal pain, and diarrhea.
Oligosaccharides	<p><u>Fructan sources:</u> Wheat, rye, garlic, onion, leeks, and artichokes</p> <p><u>Galacto-oligosaccharides (GOS) sources:</u> Beans, lentils, soybeans, and nuts, including cashews</p>
Disaccharides	<p><u>Lactose sources:</u> Dairy products and ingredients from cow, goat, or sheep's milk</p>
Monosaccharides	<p><u>Fructose sources:</u> Certain fruits, honey, and high-fructose corn syrup</p>
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Polyols	<p><u>Sources:</u> sorbitol, mannitol, maltitol, erythritol, xylitol, and isomalt, apricots, avocados, cherries, nectarines, peaches, and plums and mushrooms</p>

### Tips

- Fiber is a part of carbohydrate that is not digested by your body. Fiber is found in plant foods such as fruits, vegetables, whole grains, and legumes (dried beans, peanuts).
- Since some high-fiber foods are also high FODMAP, this diet may limit your fiber intake. Carefully plan your meals to include alternative fiber sources.
- The FODMAP diet can safely include low FODMAP sources of fiber. Your registered dietitian nutritionist (RDN) will help you include appropriate fruits, vegetables, and whole grains for this diet.
- Patients who have IBS and constipation may benefit from eating more fiber. However, if you have IBD and constipation, eating more fiber is not recommended (unless you are in remission and do not have any strictures). Ask your RDN about the right amount of fiber for you.

### ***Preparing for the Low-FODMAP Diet***

Keep a food record of your usual intake and symptoms for 7 days. Each day, record:

## 1. Your food and beverage intake

- When you ate or drank
- How much you ate or drank

## 2. Your symptoms

- Type of symptom
- Severity of symptom
- Timing or onset of symptom

## Prepare for Grocery Shopping and Reading Food Labels

Carefully plan all your meals—those eaten at home and those eaten away from home.

- Make shopping lists of appropriate foods. Read food labels and ingredient statements carefully

1. The higher up an ingredient appears on an ingredient list, the more of that food is contained in the product. Use the ingredients list to identify FODMAP foods so you know which products to avoid.

- If high-FODMAP ingredients are listed at the bottom of an ingredient list, the food may still be considered low-FODMAP and allowed on your diet.

2. Check food labels to select low-FODMAP foods containing 3-4 grams of fiber per serving and include them in daily meals.

<b>Nutrition Facts</b>	
8 servings per container	
<b>Serving size</b>	<b>2/3 cup (55g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
<b>% Daily Value*</b>	
<b>Total Fat</b> 8g	<b>10%</b>
Saturated Fat 1g	<b>5%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>13%</b>
Dietary Fiber 4g	<b>14%</b>
Total Sugars 12g	
Includes 10g Added Sugars	<b>20%</b>
<b>Protein</b> 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%
<small>* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.</small>	

Ingredients	<p><b>Ingredients:</b> Brown sugar, white sugar, <b>almonds, pecans, walnuts, eggs</b>, butter, chocolate chips, milk, whole wheat flour, (<b>wheat</b>), vanilla extract, sea salt, baking soda, xanthan gum,</p> <p>Contains: Nuts, eggs, milk, wheat</p>
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## Following the Low-FODMAP Diet

### Step 1: Eliminate High-FODMAP sources from your diet.

- Meet with your RDN to review your food symptom diary. Your RDN will review the low FODMAP diet and help you understand which foods to eat and which to avoid.
- Follow the low-FODMAP diet for **2-6 weeks** to reduce your symptoms. Aim to drink 64 ounces of water daily. Avoid foods that are made with high amounts of dairy; high-FODMAP fruits and vegetables; regular pastas and bread that contain wheat, barley, rye as ingredients; and sweeteners such as high-fructose corn syrup, honey, and inulin. Use the list of foods recommended for guidance on what foods fit these criteria.
- Limit portion sizes at each meal to keep the FODMAP level low enough to avoid symptoms. The following portion sizes of low-FODMAP foods are allowed.

### Portion Sizes

Dairy	6 ounces of lactose-free* yogurt 8 ounces of lactose-free* milk 1 ounce of aged cheese *if not lactose-free, serving size is smaller
Fruit	1 small banana 1 small orange 1 small handful of berries 1 small handful of grapes 1/3 to 1/2 cup of 100% juice (not made from fruit on the high-FODMAP food list)
Vegetables	1/2 cup serving
Grains	1 slice of bread*  * Traditionally made sourdough breads baked with wheat or spelt can be included in a low-FODMAP diet (avoid other breads made with wheat, rye, and barley)  1/2 cup cereal or grains**  ** Choose grains that are low in gluten (wheat, barley, and rye should <b>not</b> be major ingredients). You do not need to totally avoid gluten unless you have been diagnosed with celiac disease. If you do not have celiac disease, you may consume gluten-containing foods in small amounts only, like the crumb coating on fried chicken.

### Step 2: Test Your Tolerance to FODMAP Foods by Introducing High-FODMAP Foods:

After the initial strict phase of the diet, meet with your RDN, who will advise you as you begin reintroducing foods back into your diet. When you begin to reintroduce foods from the high-FODMAP categories (see the Foods Not Recommended list), be sure to eat them in the amounts listed in the Portion Sizes table.

- Introducing high-FODMAP groups one at a time will help you learn which foods cause your symptoms. Your RDN will design a plan and include which foods and serving sizes are recommended for you.

- Check with your RDN to determine how quickly to reintroduce high-FODMAP foods into your diet.

**Slower approach:** Introduce a high-FODMAP food then wait a couple of days before introducing another high-FODMAP food to “rest” between food reintroductions. Only reintroduce two foods in a given week.

OR

**Faster approach:** Introduce one type of high-FODMAP food each day.

- Continue to limit portion sizes at each meal according to the Portion Sizes table. This will make it easier to identify the foods causing your symptoms.
- **As you reintroduce new foods, keep detailed food symptom records to identify all triggering foods that cause symptoms.**

Each day, you should record:

1. Your food and beverage intake
  - When you ate and drank
  - How much you ate and drank
2. Your symptoms
  - Type of symptom
  - Severity of symptom
  - Timing or onset of symptom

Your RDN will adjust your diet plan to limit the foods that cause increased symptoms and explain what foods to avoid.

#### Foods Recommended

Foods that are listed in **bolded text** are low-FODMAP in any serving size. Other foods (not bolded) are only low-FODMAP when serving size is limited.

Food Group	Food Recommended
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Grains	<p><i>Gluten-free grains:</i> <b>arrowroot, buckwheat flour, cornmeal, cornstarch, gluten-free flour blends, glutinous rice, ground rice, millet, oat bran*, oatmeal*, polenta, potato flour, quinoa*, rice (brown*, white), rice bran, rice flour, sago, sorghum, tapioca, wild rice*</b></p> <p><i>Cereals:</i> <b>baby rice cereal, cream of buckwheat, rice- or corn-based breakfast cereals, oatmeal*, wheat-free, fruit free muesli</b></p> <p><i>Pasta and Noodles:</i> <b>rice noodles, rice vermicelli, gluten-free pasta</b></p> <p><i>Breads and Baked Goods:</i> <b>gluten-free breads,** corn tortilla/taco shells, corn-based crackers, pretzels (½ cup), plain rice cakes/rice crackers, gluten-free cookies,** gluten-free cakes/pastries,** sourdough breads made of wheat or spelt</b></p>
Protein Foods	<p><b>Unseasoned, tender, well-cooked poultry or fish; unseasoned beef; or unseasoned pork</b></p> <p><b>Bacon</b></p> <p><b>Eggs</b></p> <p>Almonds (fewer than 10 nuts)*, hazelnuts (fewer than 10 nuts)*; <b>macadamias*, peanuts*, pecans*, pine nuts*, walnuts*</b></p> <p>Seeds* (chia, pumpkin)</p> <p>2 tablespoons smooth peanut butter</p> <p><b>Tofu, firm (drained); tempeh</b></p>
Dairy	<p><b>Lactose-free milk</b></p> <p><b>Calcium-fortified rice milk; soy milk made from soybean extract (not whole soybeans)</b></p> <p><b>Most lactose-free yogurts and lactose-free kefir</b></p> <p><b>Lactose-free cottage cheese</b></p> <p>2 tablespoons soft cheeses (cottage cheese or ricotta)</p> <p>1 ounce hard, aged, or ripened cheeses (brie, camembert, feta)</p> <p><b>Lactose-free ice cream</b></p> <p><b>Sorbets* made from suitable fruits and sweeteners</b></p>
Vegetables*	<p><b>Alfalfa sprouts, bamboo shoots, bean sprouts, bell pepper, bok choy, broccoli, Brussels sprouts, cabbage (common or red), canned artichoke hearts (1 ounce), carrot, corn (½ cob), cucumber, eggplant, green beans, lettuce (butter, iceberg), olives, parsnip, potatoes, pumpkin, rutabagas, seaweed, sweet potato (½ cup), Swiss chard, spinach, scallion (green part only), squash (yellow, spaghetti), tomatoes, turnips, watercress, yams, zucchini</b></p>

Fruits*	<b>Bananas, blueberries, cantaloupe</b> , dried cranberries (1 tablespoon), <b>grapes, honeydew melon, kiwi, lemons, limes, mandarin oranges, oranges, passion fruit, papaya, pineapple, plantain</b> , dried banana chips (no more than 10 chips), dried shredded coconut (less than ¼ cup), <b>raspberries, star fruit, strawberries, tangelos, tangerines</b>
Oils	Vegetable oils, garlic-infused oil, butter, ghee, lard, margarine (trans fat free)
Other	<p><i>Beverages:</i> <b>Water, mineral water, soda water, sugar-sweetened soft drinks, tonic water</b>, fruit juice (choose only juices made from fruits listed in the Fruits section of this table; limit to ½ cup). Orange juice (one 4-ounce glass freshly squeezed) or cranberry juice (4 ounces), <b>most teas/coffees/alcohol***</b></p> <p><i>Fresh Herbs:</i> <b>Basil, coriander, parsley, rosemary, thyme</b></p> <p><i>Spreads and Condiments:</i> <b>Jam (without high-fructose corn syrup), marmalade (with appropriate ingredients and no high-fructose corn syrup), mayonnaise, mustard, soy sauce, garlic-free sweet chili sauce or hot sauce, pickles/relish, soy sauce, tamari, vinegar</b></p> <p><i>Sweeteners:</i> <b>Sucrose (table sugar, cane sugar), including superfine sugar, confectioner’s sugar, brown sugar, raw sugar, glucose; maple syrup, molasses, artificial sweeteners not ending in “ol” (aspartame, saccharine, and stevia)</b></p> <p><i>Other:</i> <b>Baking powder, baking soda, cocoa, coconut, gelatin, salt, fresh and dried herbs and spices (not including garlic and onion powder), chives, ginger</b></p>

\*Foods to limit if lowering your fiber intake for IBD or IBS. Choose canned and well-cooked fruits and vegetables without seeds, skins, or hulls to reduce fiber.

\*\*Gluten-free foods may contain FODMAPS. Read ingredients lists carefully.

\*\*\* See the Foods Not Recommended table for which teas, coffees, and alcohol should be avoided.

**Foods Not Recommended**

Food Group	Foods Not Recommended
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Grains*	<p>Barley,* bulgur,* chickpea flour (besan)*, couscous (wheat),* durum,* Kamut,* lentil flour*, multigrain flour,* pea flour*, rye,* semolina,* soy flour*, triticale,* wheat bran,* wheat flour,* wheat germ*</p> <p>Wheat-based, mixed-grain cereals,* muesli,* chicory root,* inulin*</p> <p>Noodles, pasta, spaetzle, gnocchi</p> <p>Breads, bread crumbs, cookies, cakes, croissants, muffins, pastries containing wheat/rye</p>
Protein Foods	<p>Black-eyed peas*</p> <p>Dried beans,* chickpeas,* or lentils*</p> <p>Sausage (may contain onion and dehydrated vegetable powders)</p> <p>Soybeans*</p> <p>Pistachios* and cashews*</p> <p>Fatty meats</p> <p>Fried meats</p>
Dairy	<p>Buttermilk</p> <p>Chocolate milk</p> <p>Custard</p> <p>Milk (cow's, goat's, sheep's, condensed, evaporated)</p> <p>Sauces that are milk-based or cheese-based</p> <p>Soft cheeses (in amounts greater than ½ cup): cottage, ricotta</p> <p>Sour cream</p> <p>Soy milk (made from soybeans)</p> <p>Yogurt</p> <p>Ice cream</p>
Vegetables*	<p>Artichokes, asparagus, cabbage (savoy), cauliflower, celery, garlic, leeks, mushrooms, onions (all), scallions (the part that is white), shallots, snow peas, sugar snap peas</p>
Fruits*	<p>Apples, applesauce apricots, Asian pears, avocados, blackberries, boysenberries, cherries, figs, mangoes, nectarines, peaches, pears, persimmon, plums, prunes, tamarillo, watermelon</p>
Oils	<p>none</p>

Other	<p><i>Beverages:</i> Apple, pear and mango juices; other fruit juices in amounts over ½ cup, made with high-fructose corn syrup (HCFS), fortified wines (sherry, port), chamomile tea, fennel tea, chicory-based drinks or coffee substitutes</p> <p><i>Spreads and Condiments:</i> Chutneys, hummus, jellies, gravies made with onion, pickle, relish, salad dressing or sauces made with, salsa, stock, tomato paste</p> <p><i>Sweeteners:</i> Agave nectar, artificial sweeteners (isomalt, mannitol, maltitol, sorbitol, xylitol) honey, corn syrup solids, fructose, fruit juice concentrate, high-fructose corn syrup, and polydextrose.</p> <p><i>Others:</i> Bouillon cubes, garlic and onion powder</p>
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\*Indicates foods that are higher in fiber and should be discussed with RDN if you need to lower your fiber intake. Avocado and coconut should be avoided if restricting fiber

**Low-FODMAP Sample 1-Day Menu for Elimination Diet**

<b>Breakfast</b>	<ul style="list-style-type: none"> <li>1 scrambled egg</li> <li>1 slice gluten-free bread</li> <li>1 teaspoon butter</li> <li>1/2 cup oatmeal</li> <li>1/2 cup blueberries OR strawberries</li> <li>1/2 cup lactose-free milk</li> <li>Coffee or tea</li> </ul>
<b>Morning Snack</b>	<ul style="list-style-type: none"> <li>1 low-fat cheddar cheese stick</li> <li>6 rice crackers</li> <li>1/2 cup cranberry juice</li> </ul>
<b>Lunch</b>	<p>Tuna Sandwich:</p> <ul style="list-style-type: none"> <li>3 tablespoons tuna fish mixed with:</li> <li>2 tablespoons light mayonnaise</li> <li>1 lettuce leaf (butter* or iceberg*)</li> <li>1 slice tomato</li> <li>2 slices gluten-free bread</li> <li>5 carrot sticks*</li> <li>1 clementine orange</li> <li>1 lactose-free yogurt</li> </ul>
<b>Afternoon Snack</b>	<ul style="list-style-type: none"> <li>2 rice cake</li> <li>2 tablespoons peanut butter</li> </ul>
<b>Evening Meal</b>	<ul style="list-style-type: none"> <li>3 ounces chicken breast, grilled</li> <li>1/2 cup cooked brown rice with fresh herbs</li> <li>1/2 cup green beans</li> <li>1/2 cup cubed cantaloupe</li> </ul>

**Notes**

