



FODMAP Eating Plan

What Are FODMAPs?

FODMAPs are dietary sugars found in foods. They are a group of carbohydrates that often are not absorbed well in the small intestine. As they sit in the small intestine, they can pull water into the intestine. This leads to abdominal bloating and diarrhea for some people.

"FODMAP" refers to specific types of carbohydrates found in foods. The term stands for:

- Fermentable
- Oligosaccharides fructans and galactans, found in wheat, garlic and legumes (dried beans and peas)
- **D**isaccharides lactose, found in dairy products (milk and others)
- Monosaccharides excess fructose, found in honey and certain fruits
- And
- Polyols sorbitol and mannitol and certain other low-calorie sweeteners

FODMAPs serve as a source of "food" for bacteria that live in the digestive tract. The bacteria ferment the FODMAPs. That can cause symptoms for people who have a sensitive gastrointestinal (GI) tract. Symptoms include abdominal bloating and expansion called distention, excess gas and abdominal pain. They include changes in bowel habits such as diarrhea and constipation, and other gastrointestinal symptoms.

For more information

If you have questions after you read this, please talk to your health care provider or dietitian.

How Do I Start the FODMAPs Diet?

The FODMAPs diet has three phases:

- Elimination
- Reintroduction
- Maintenance

Elimination phase

During the elimination phase, you avoid all FODMAP foods for two to six weeks. See the food lists. Most people begin to feel much better within a few days. But it may take weeks to feel as healthy as you can after you make this dietary change.

Reintroduction phase

After the elimination phase, if your symptoms are under control, you may begin to eat foods you eliminated. This is the reintroduction phase. You "re-introduce" the foods one at a time. This phase is important because you learn which foods likely caused your symptoms.

Before you begin this phase, you should return for a follow-up visit with the dietitian. He or she can give you instructions about the reintroduction phase.

In general, there are no rules about the order you should use to reintroduce the foods. But there are some important guidelines to follow:

- Keep a food diary. Describe how you react to the food you eat. Your reaction also is called your "tolerance" for the food.
- Only reintroduce one FODMAP group at a time.
- Choose one food or ingredient from one food group. Then include that food or ingredient in your diet once a day for three days.
- If you eliminated a food that is not on any of the food lists, you may try it again during this time.

Maintenance phase

During this phase, your goal is to eat a varied diet. Include as many FODMAP foods as you wish as long as they do not give you symptoms.

Tips for success

- Unless otherwise noted, the serving size shown for some foods is **per meal.**
- Foods listed with serving sizes should be limited to that amount.
- While you are on this diet, be sure you get enough fiber from low FODMAP whole grains, vegetables and fruits. If you need a fiber supplement, consider Citrucel[™] or Fibercon[™]. These do not ferment.
- For the elimination phase, talk to your dietitian or other health care provider about whether you should take a multivitamin and mineral supplement, an additional calcium supplement or both. Also ask whether you should take these products long term.
- If you do not see any changes or improvement in your symptoms after six weeks, talk to your dietitian or other health care provider. This diet does not work for everyone.
- If you have problems with other foods not shared here, such as fatty foods, continue to avoid those.

Note: Researchers continue to test the FODMAP content of foods. Foods not listed have not yet been tested for FODMAP content.

Elimination Phase

Sweeteners

Use allowed sweetener in reasonable amounts. Look on the package for information about how much one serving size is. Limit your intake to just that amount. Check ingredient lists on food and beverage labels to see which FODMAPs may be included.

Note:

- Sugar substitutes do not need to be limited.
- Sugar alcohols are found most often in sugar-free gum and candies. But they also may be used in other sugar-free foods and some medications.

Foods Allowed

Foods to Avoid

Bar sugar Beet sugar	
Brown sugar, 1 Tbsp.	A
Cane sugar, cane juice, cane syrup	F
Corn syrup	F
Dextrose	+
Evaporated cane sugars	ŀ
Glucose	Ν
Glucose polymers	Ν
Glucose syrup	S
Glucose tablets	0
Invert sugar	Т
Maltodextrin	s
Maltose	а
Maple sugar	-
Organic sugar	
Raw sugar	
Real maple syrup	
Rice syrup	
Sucrose	
Sugar, granulated, white	
Sugar, powdered	
Sugar, raw, brown, often called turbinado	

Agave syrup Fructose and crystalline fructose Fruit juice concentrate High-fructose corn syrup (HFCS) Honey Maple-flavored syrup/pancake syrup Molasses

Sugar alcohols

This includes many sugar-free products, such as sugar-free gum, candy, medications, desserts, and protein drinks or bars.

- Erythritol
- Isomalt
- Maltitol
- Mannitol
- Sorbitol
- Xylitol
- Stevia made with erythritol

Foods to Avoid

Foods to Avoid

Sugar substitutes

- Aspartame (Equal[™], NutraSweet[™])
- Saccharin (Sweet N' Low™)
- Sucralose (Splenda™)
- Stevia (Stevia In The Raw™)

Foods Allowed

Miscellaneous foods

For items marked with an asterisk (*), check the product's food label for FODMAP ingredients.

Balsamic vinegar, 1 Tbsp.	Candy sv	vee	tened with sweeteners to avoid
Bouillon made from allowed ingredients Capers,			
1 Tbsp.	Condime	nts	sweetened with sweeteners to
Cocoa powder, 3 tsp.	avoid:		
Dark and milk chocolate, 1 fun size bar* Guar			
gum		•	Barbeque sauce
Jam or jelly*		•	Chutney
Miso paste		•	Ketchup
Mustard*		•	Plum sauce
Pectin		•	Relish
Soy lecithin		•	Sweet and sour sauce
Soy protein isolate		•	Tomato paste
Soy sauce, Tamari		•	Tomato soup
Sugar-free gelatin Tabasco™ sauce		•	
Tahini paste, 1 Tbsp.			
Таріоса	Seasoni	ngs	
Vinegar			
Worcestershire sauce, 2 Tbsp.		•	Garlic powder
-		•	Garlic salt
Seasonings		•	Onion powder
		•	Onion salt

- Cinnamon
- Ginger root and turmeric
- Green leafy herbs, either fresh or dried: parsley, oregano, cilantro,

Fibers of chicory, inulin, fructooligosaccharide (FOS)

coriander, dill, marjoram, thyme, rosemary, mint

- Lemon and lime juice
- Paprika
- Pepper
- Salt
- Seed spices, such as coriander, mustard, cumin, caraway, dill seed, celery seed, sesame seed, poppy seed, nutmeg
- Vanilla extract, real or imitation

Fruit

- Eat up to three servings per day but no more than one serving per meal of the allowed fruits. The fruit may be fresh or frozen.
- Eat fruit with other foods. This slows your digestion of the fructose.
- Pay attention to serving size. The suggested serving for fruit is 1/2 cup or 1 small or medium-size piece, unless otherwise noted.

Foods Allowed

Avocado, 1/8 cup Bananas, 1 med unripe or 1/3 ripe Apples Blueberries Apricots Cantaloupe Blackberries Clementine Boysenberries Coconut, 1/4 cup Cherries Cranberry Dates Dragon fruit Figs Grapes Grapefruit Honeydew Mangos Kiwi Nectarines Lemon or lime Peaches Mandarin Pears Orange Persimmons Plums Papaya Passion fruit Prunes Pineapple

These are often added to foods to increase fiber. Check ingredient lists on foods that have added fiber.

Foods to Avoid

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Foods to Avoid

Pomegranate, 1/2	Tamarillo
Raspberries	Watermelon
Rhubarb	
Strawberries	Canned fruit, all unsweetened and sweetened
Dried cranberries, raisins, currants, 1 Tbsp.	varieties
Dried banana, 10 chips	Dried fruit (Cranberries, raisins, currants, and
	bananas are allowed.)
	Fruit juice, all unsweetened and sweetened
	varieties
	Fruit leather

Vegetables

Serving size is about 1/2 cup cooked or 1 cup raw unless otherwise noted. Start with one serving per meal. Increase the amount you eat as long as you can tolerate it. For healthy eating, have five or more servings per day. This is also suggested, as tolerated, while you follow the low FODMAP diet.

Foods Allowed Foods to Avoid Alfalfa and bean sprouts Bamboo shoots Beets, 2 slices Bell pepper Bok choy Artichoke Broccoli, 1 cup Asparagus Brussels sprouts, 1/2 cup Cauliflower Cabbage: red, common or 1/2 cup savoy Chicory root or greens Carrots **Dandelion** greens Celery, 1/4 stalk Garlic Chili, red, green Leeks Chives **Mushrooms** Corn, 1/2 cob or 1/3 cup of kernels Onions/shallots Cucumber Sugar snap peas Eggplant Endive Fennel, bulb and leaves Ginger root Green beans Jicama

Foods to Avoid

Kale Lettuce: iceberg, romaine, baby lettuce, etc. Okra Olives Parsnip Potatoes, sweet, 1/2 cup Pumpkin, 1/4 cup Radish Rutabaga Snow peas, 5 pods Spinach Spring onion/scallion (green part only) Squash, butternut, 1/4 cup Tomatoes, fresh or canned (no onion/garlic) Turnips Water chestnuts Zucchini

Breads and grain products

Foods Allowed

Wheat, rye and barley-based foods contain the FODMAP fructans. You may substitute wheatfree and gluten-free foods that are also free of other FODMAPs. Be sure to read the food labels. Eat at least four to six servings from this group per day.

Note: Whole grains are good sources of fiber. Try to choose these over other grains: pure buckwheat, oats, millet, brown or wild rice, rice bran, quinoa and popcorn.

Almond flour, 1/4 cup	Amaranth flour
Bread, gluten free with allowed ingredients	Barley
100% buckwheat flour and cereal	Bulgur
Cereals made from corn, rice, oats	Coconut flour
Cornmeal (polenta)	Couscous
Corn tortillas Grits	Gluten-free baked goods, breads, cereals, bars
Millet	with ingredients to avoid
Oats, oat bran, oat flour	Kamut
Pasta made from corn, rice or quinoa	Muesli, all varieties, including gluten-free
Popcorn	Pumpernickel
Pretzels, regular, 1/2 cup	Rye

Foods to Avoid

Foods to Avoid

Pretzels, gluten-free Quinoa Rice: white, brown or wild Rice bran Rice flour Rice crackers/rice cakes Saltine crackers Soba noodles, 100% buckwheat Sourdough bread, wheat or white (The process of making this bread breaks down the fructans.) Tortilla chips

Foods Allowed

Wheat-based food: pasta, cereal, crackers, bread, baked goods

Meat and meat substitutes

Plain meat, poultry and fish that have no additives do not contain FODMAPs.

Foods Allowed	FOODS to Avoid
Chicken	Breaded meats
Eggs, egg substitutes	Commercially prepared meats that may contain
Fish	FODMAP ingredients
Game meats	
Hummus with allowed ingredients, 1/4 cup	Legumes:
Lean meat	
	Baked beans
Legumes:	 Dried or split peas
	Green peas
Chickpeas, 1/4 cup canned	Lima beans/butter beans
 Lentils, 1/2 cup canned 	Dried beans
 Red/green lentils, 1/4 cup boiled 	 Pork and beans
• Edamame, 1 cup in the pod or 1/2	Refried beans
cup shelled	Pinto beans
	Kidney beans
Nut butters, 2 Tbsp.	Black beans
Nuts: almonds, macadamia, peanuts, pecan,	Navy beans
pine nuts, walnuts (small handful)	
Organ meats	Nuts: pistachios and cashews

Protein powders with allowed ingredients Seeds: chia, pumpkin, sesame, sunflower Nuts: pistachios and cashews Soy milk made from soy bean Soy protein made from textured vegetable

Foods to Avoid

Seeds: unsweetened, 2 Tbsp. Shellfish Soy protein isolate Tempeh, 1/2 cup Tofu, firm only Turkey protein (TVP) Tofu, silken

Milk and milk products

Foods and beverages that list a portion size should be limited to that amount per meal unless otherwise noted.

Note: For items marked with an asterisk (*), check the product's food label for FODMAP ingredients.

Beverages and Foods Allowed	Beverages and Foods to Avoid
Almond milk Coconut milk, canned only Goat's milk yogurt Hard/aged cheese, for example: cheddar, Colby, Swiss, brick, parmesan, brie, and mozzarella Hemp milk Kefir (99% lactose-free)* Lactose-free milk Lactose-free ice cream, frozen yogurt* Lactose-free yogurt* Lactose-free cottage cheese Rice milk	Goat's milk Cow's milk Foods made from cow's milk: Custard Frozen yogurt Ice cream Pudding Processed cheese Yogurt
Fats	
Foods Allowed	Foods to Avoid

Butter Cooking sprays Cream, 1 Tbsp. Gravy made with allowed flours or corn starch Margarine Mayonnaise with allowed ingredients

Beverages Allowed

Foods to Avoid

Beverages to Avoid

Oils, any type Sour cream, 1 Tbsp.

Beverages

Beverages listed with a portion size should be limited to that amount per day.

Be Sure to Read Food Labels

Many processed foods have FODMAPs. Read the labels carefully.

	Easta
Nutrition	racts
6 servings per container	
Serving size	1 bar (40g)
Amount per serving	
Calories	190
	% Daily Value*
Total Fat 12g	18%
Saturated Fat 5g	25%
<i>Trans</i> Fat Og	
Cholesterol Og	
Sodium 25mg	1%
Total Carbohydrate 22g	16%
Dietary Fiber 4g	16%
Total Sugars 12g	
Additional Sugars	
Protein 3g	
Potassium 160mg	5%
*The % Daily Value (DV) tells you nutrient in a serving of food con diet. 2,000 calories a day is use nutrition advice.	tributes to a daily
Ingredients Almonds, coconut, dark chocolate (palm kernel oil, chicory root fiber powder, soy lecithin, natural flavo glucose syrup, rice flour, unsweet lecithin, chicory root fiber, sugar, sea salt.	c)sugar, cocoa or, salt), honey, cened chocolate, soy

Other Products That Are Low in FODMAPs

As you wish, you may eat these products. They are allowed on the FODMAP eating plan.

Note: This is not a complete list of foods that are low in FODMAPS.

- Bob's Red Mill[™] Mighty Hot & Tasty Cereal
- CheeriosTM
- Corn bran cereal
- Corn ChexTM cereal
- Blue Diamond[™] Nut Thins
- Mary's Gone[™] crackers, original
- Snyder's of Hanover[™] gluten-free pretzels
- Udi'sTM white sandwich bread
- Jules[™] baking mix
- King Arthur[™] baking mix (gluten-free, multi-purpose flour)
- BisquickTM, gluten free
- NamasteTM Perfect Flour Blend
- Cup 4 CupTM flour blend
- Pamela'sTM Pancake and Baking Mix

Menu Ideas for a Low-FODMAP Plan

Breakfast

- Oat cereal such as oatmeal, oat flakes, Cheerios[™], others
- Corn cereal such as corn flakes, Corn ChexTM, others
- Rice cereal such as Rice KrispiesTM, Rice ChexTM, Cream of RiceTM, others
- Grits
- Hash browns
- Eggs
- Ham
- Bacon
- Omelet made with aged cheese, vegetables
- Udi's or other gluten-free toast with butter or margarine
- Sourdough bread, wheat or white, 100% real
- Lactose-free milk, rice milk or 1 cup of almond milk
- Allowed fruit, 1 serving
- Handful of nuts

Lunch

- Salad with allowed greens, cucumbers, tomatoes, aged cheese, chicken, egg, tuna
- Wine vinegar and oil salad dressing. Limit to 1 Tbsp. if balsamic vinegar is used

- Sandwich made with gluten-free bread such as tuna salad, chicken salad, egg salad, grilled cheese, or meat
- Corn tortilla with seasoned lean protein, shredded lettuce, tomatoes, shredded cheese
- Nachos with cheese
- Homemade soup with allowed ingredients
- No-bean chili with shredded cheese and Fritos[™] corn chips
- Leftovers from another meal
- Allowed fruit, 1 serving

Dinner

- Lean meat
- Meatloaf made from lean ground meat, with egg, oatmeal and allowed seasonings
- Chicken
- Turkey
- Fish
- Shellfish
- Stir fry with allowed foods
- Steamed rice: white, brown or wild
- Potato: baked, boiled or mashed
- Quinoa
- Rice or corn pasta
- Allowed vegetables
- Allowed fruit, 1 serving

Snacks

- Aged cheese
- Lactose-free yogurt
- Corn chips, plain
- Allowed nuts, 1 oz.
- Potato chips, plain
- Popcorn
- Popcorn cakes
- Raw vegetables such as carrots, cherry tomatoes, cucumber, and other allowed vegetables
- Rice cakes
- Peanut butter, 2 Tbsp.
- Rice crackers
- FODMAP-friendly salsa and hummus

Travel Tips

Keep low-FODMAP snacks nearby as you travel.

In your carry-on bag or purse

- Saltine crackers
- Rice crackers or rice cakes
- Low-FODMAP granola bars
- Instant oatmeal packets made with allowed ingredients
- Single-serve peanut butter or almond butter packets

In a cooler during travel by car

- Hummus
- Cheese
- Boiled eggs
- Deli meat
- Yogurt, plain or with allowed ingredients
- Allowed fruit and cut-up vegetables

When dining out

- Go online to review food options at restaurants. Seafood restaurants and steak houses often have good options.
- Call the restaurant ahead of time. Ask how meals are prepared and if any can be changed a bit to meet your dietary needs.
- Choose simple entrees.
- Avoid garlic, onion and most sauces.
- Consider these dining options:
 - Salad with plain grilled protein, oil and suitable vinegar or lemon wedge.
 - Omelet with aged cheese and allowed vegetables. Bacon and ham are okay to eat too.
 - Hamburger, gluten-free bun, lettuce, tomato, French fries.

Other tips

- Request a small refrigerator in the hotel room.
- Make a trip to a local grocery store if needed.
- Before you eat or drink flavored dairy products, read the nutrition label. Avoid FODMAPs that you are not eating or drinking at that time.
- When you travel, be sure to take lactase enzyme pills and any other medications you may need, such as Imodium[™] or fiber supplements.

Reintroduction Phase

After two to six weeks of the elimination diet, if your symptoms have improved, you may start to introduce again foods that have FODMAPs. There are no firm rules about which foods you start with or the order in which you try the food again. However, **if you want to figure out which foods caused your symptoms, there are rules about how you reintroduce the foods.**

- Reintroduce one FODMAP group, such as fructans, at a time. Use one food from that group at a time. See lists of FODMAP groups.
- Keep a food diary. Write down each food you reintroduce and how much you ate. Note whether you had any symptoms after you ate that food group.
- Wait about three days (72 hours) before you move on to the next food.

The food groups that follow list the foods according to which type of FODMAP they contain.

Introduce one food from whichever group you decide to start with.

- You will start with a **half-portion** on the first day. Then try one portion on day two and again on day three.
- If you have symptoms meaning that you do not tolerate that food stop eating that food. Wait for the symptoms to go away. Then try other foods in that FODMAP group. Later, you can retry the poorly tolerated food in a smaller amount.

Add more foods from the same FODMAP group. Continue to add foods from this group until you are ready to try another group. You do not have to try all foods in each group. Eat those you like.

Before you start a new group

Before you start a new group, go back to the basic diet. Stop all foods from the first group. Wait about three days (72 hours) before you introduce another food group into your diet.

Continue to do this until you have once more introduced all food groups. If at any time you try a food that you react to, stop eating that food. Try it again later in a smaller amount.

If a food has more than one FODMAP, wait to try it until after you've separately tried food from each of the FODMAP groups. If you can tolerate those FODMAPs separately, you likely will be able to tolerate them together.

Lactose group

- Milk, cows, goat
- Soft cheese, cottage cheese, ricotta

Check label for FODMAP ingredients in these foods:

- Ice cream, frozen yogurt
- Pudding

- Yogurt, regular
- Yogurt, Greek

Fructose group

- Agave syrup or nectar
- Asparagus
- Figs, fresh
- Honey
- Mango
- Rum
- Sugar snap peas
- Apple. Note: Has fructose and sorbitol.
- Artichoke. **Note:** Canned artichokes have fructose. The Jerusalem artichoke has fructan and fructose.
- Cherries. Note: Have fructose and sorbitol.
- Juice. Note: Has fructose and sorbitol.
- Pear. Note: Has fructose and sorbitol.
- Products with high-fructose corn syrup. **Note:** Check label for FODMAP ingredients.
- Watermelon. Note: Has fructose, fructan and mannitol.

Fructan group

- Banana, more than 1/3 ripe, with brown spots
- Barley
- Beets, more than 2 slices
- Broccoli, more than 1 cup
- Brussels sprouts, more than 1/2 cup
- Cabbage, savoy, more than 1/2 cup
- Dates
- Dried fruit: raisins, cranberries, currants, more than 1 Tbsp.
- Garlic
- Grapefruit
- Inulin and chicory root
- Okra, more than 6 pods
- Onions, shallots, leeks
- Persimmons
- Pistachios, cashews
- Pomegranate, more than 1/2 small
- Pumpkin, more than 1/4 cup
- Rye
- Tea: chamomile, chai, fennel, oolong
- Wheat-based food: pasta, cereal, crackers, bread, baked goods

- Artichoke. **Note:** The globe artichoke has fructan. The Jerusalem artichoke has fructan and fructose.
- Nectarine. Note: Has fructan and sorbitol.
- Plum/prunes. Note: Has fructan and sorbitol.
- Watermelon. Note: Has fructan, fructose and mannitol.

Polyol group

Candy, gum and medicine sweetened with sugar alcohols:

- Erythritol
- Isomalt
- Maltitol
- Mannitol. See also "Polyol (mannitol) group."
- Sorbitol. See also "Polyol (sorbitol) group."
- Xylitol

Polyol (mannitol) group

- Cauliflower
- Celery, more than 1/4 stalk
- Mushrooms
- Snow peas, more than 5 pods
- Sweet potato, more than 1/2 cup
- Butternut squash, more than 1/2 cup. Note: Has mannitol and galactan.
- Watermelon. Note: Has mannitol, fructose and fructan.

Polyol (sorbitol) group

- Apricots
- Avocado, more than 1/8
- Blackberries
- Peaches, yellow
- Sweet corn, more than 1/2 cob, more than 1/3 cup of kernals
- Apples/apple juice. Note: Has sorbitol and fructose.
- Asian pears. Note: Has sorbitol and fructose.
- Cherries. Note: Has sorbitol and fructose.
- Nectarines. Note: Has sorbitol and fructan.
- Pears/pear juice. Note: Has sorbitol and fructose.
- Plums/prunes. Note: Has sorbitol and fructan.

Galactan group (GOS)

- Butternut squash, more than 1/4 cup. Note: Has galactans and mannitol.
- Chickpeas, also called garbanzo beans, canned, more than 1/4 cup

- Coffee, regular or decaffeinated, 8 fl. oz.
- Edamame, 1/2 cup
- Green peas
- Hummus, more than 1/4 cup
- Jicama, 1/2 cup
- Legumes: black beans, kidney beans, pinto beans, baked beans. **Note:** Beans that are canned, rinsed, drained then cooked will have the lowest amount of FODMAPs.
- Lentils, canned, more than 1/2 cup
- Nuts: Pistachios and cashews
- Soy milk, 8 fl. oz.
- Tofu, silken
- Veggie/soy burger, 1 serving

This material is for your education and information only. This content does not replace medical advice, diagnosis or treatment. New medical research may change this information. If you have questions about a medical condition, always talk with your health care provider.

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