



Low FODMAP Diet Education

What are FODMAPs?

FODMAPs are a type of carbohydrates, or sugars and fibers, which are commonly found in a variety of foods. Most people are able to eat a high FODMAP diet without any trouble, while others may not tolerate FODMAPs due to their body's inability to digest and absorb them properly. When this occurs, the FODMAPs move slowly through the small intestines and attract water. When they reach the large intestine, the bacteria feeds off of these FODMAPs and produce gas. When you aren't able to properly digest and absorb FODMAPs you may experience gas, bloating, abdominal cramping, diarrhea and/or constipation. Research has shown following a low FODMAP diet improves these symptoms in 3 out of 4 people.

What does FODMAP stand for?

Fermentable

Oligosaccharides (wheat products, onions, garlic, etc.)

Disaccharides (dairy products)

Monosaccharides (apples, pears, dried fruit, honey, agave etc.)

And

Polyols (sugar alcohols naturally found in food, as well as artificial sweeteners)

How to follow the low FODMAP diet?

The diet consists of three phases: elimination phase, reintroduction phase and maintenance phase. The low FODMAP diet is followed during the elimination phase, **typically 2-6 weeks**. Eliminating all high FODMAP foods during the elimination phase is important to help improve your GI symptoms and get ready for the reintroduction phase. During the reintroduction phase, you will reintroduce each FODMAP group to assess what FODMAPs you can and cannot tolerate. After the reintroduction phase, you will have a better understanding of which FODMAPs trigger your symptoms. The maintenance phase is your personalized diet based on what FODMAPs trigger your symptoms (avoid) and what FODMAPs you can tolerate and in what portion.

Low FODMAP diet → Reintroduction → Maintenance

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Food Group	Low FODMAP	High FODMAP
Grains	Buckwheat, corn flour, corn tortillas, GF bread/pasta (w/o FODMAP ingredients), millet, oats, polenta, rice, rice cakes/flakes, quinoa, slow leavened sourdough wheat or spelt breads, soba noodles, sorghum, teff flour	Rye, wheat, barley
Protein	<ul style="list-style-type: none"> • Beef, chicken, lamb pork • Eggs • Firm tofu, tempeh (w/o FODMAP ingredients) • Canned tuna, fish, shellfish 	Pre-packaged meat/poultry/seafood with seasoning (may contain garlic, onion, etc.)
Beans/Legumes	Canned chickpeas (¼ C.), edamame (1 C.), canned lentils (½ C.)	Baked beans, black beans, broad beans, fava beans, kidney beans, lima beans, navy beans, pinto beans, silken tofu, mature soybeans, soy flour, soymilk from whole soybean, split peas
Dairy	<ul style="list-style-type: none"> • Milk alternatives: Coconut yogurt, almond milk, coconut milk (canned), hemp, rice milk • Lactose-free: yogurts, cottage cheese, cream cheese, cow's milk, sour cream, ice cream • Cheese: Brie, Camembert, cheddar, Colby, Monterey jack, feta, goat cheese, gruyere, Havarti, mozzarella, parmesan, pecorino, Swiss, ricotta (≤ 2 tbsp) • Half & half, whipped cream 	<ul style="list-style-type: none"> • Milk: cow, goat, sheep, soy (from whole soybean), evaporated or condensed milk, plant-based milks made with chicory root/inulin, buttermilk • Yogurt and ice cream/custard made with the above milks or that contain high FODMAP sweeteners • Cheese: ricotta (≥ 2 tbsp), cottage or cream • Miscellaneous: creamed soups, products made with milk products

Food Group	Low FODMAP	High FODMAP
Vegetables	Arugula, bamboo shoots, bean sprouts, beets (canned/pickled), red bell peppers, green bell peppers ($\leq \frac{1}{2}$ C.), bok choy (1 C.), broccoli (< 3 C.), cabbage ($\frac{3}{4}$ C.), capers, carrots, chili pepper, collard greens, sweet corn ($\frac{1}{2}$ cob), cucumber, eggplant, fennel, ginger root, green beans, kale, lettuce, olives, okra, parsnips, pickles (w/o garlic or onion), white potato, pumpkin (canned), radish, rutabaga, seaweed, baby spinach ($1\frac{1}{2}$ C.), spinach, squash (kabocha, patty pan, spaghetti, yellow), sweet potato ($\frac{1}{2}$ small), Swiss chard, tomatoes, turnips, water chestnuts, watercress, zucchini squash (5-6 slices)	Artichokes, asparagus, fresh beets, green bell peppers ($\geq \frac{1}{2}$ C.), bok choy (> 1 C.), broccoli (> 3 C.), Brussel sprouts, butternut squash, cabbage ($> \frac{3}{4}$ C.), cauliflower, celery, garlic, leek bulb, mushrooms (button, Portobello, shitake), onion, peas, pickles (w/ garlic or onion), savoy cabbage, scallion (bulb or white portion), shallots, snow peas, sugar snap pea, sundried tomatoes, sweet potato ($> \frac{1}{2}$ C.), sweet corn ($> \frac{1}{2}$ cob).
Herbs/spices	All spice, bay leaves, basil, chives, cilantro, cardamom, chili, cinnamon, coriander, cloves, cumin, curry, dill, fennel, mint, mustard seeds, nutmeg, oregano, parsley, paprika, pepper, rosemary, sage, scallions, thyme, turmeric	Dried mushrooms, dried beans, garlic powder/salt, onion powder/salt, or any seasoning that contains garlic and/or onions
Fruit	Avocado ($< \frac{1}{8}$), banana (small, firm), banana chips (15 chips), blueberries (handful), clementine, mandarin oranges, cantaloupe ($\frac{3}{4}$ C.), grapes, honeydew, kiwi, lemon, lime, oranges, papaya, passionfruit, pineapple (< 1 C.), plantains, pomegranate (handful), prickly pear, raspberries, rhubarb, starfruit, strawberries	Apple, apricot, ripe banana, avocado ($> \frac{1}{8}$), banana (ripe), banana chips (> 15), blackberries, blueberries ($> \frac{1}{4}$ C.), boysenberries, canned fruit in fruit juice, cantaloupe ($> \frac{3}{4}$ C.), cherries, currants, dates, figs, lychee, grapefruit, mango, nectarine, peach, pear, persimmon, pineapple (< 1 C.), plums, pomegranate ($> \frac{1}{3}$ C.), prunes, tamarillo, watermelon, dried fruit (> 1 tbsp.)

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Nuts & Seeds	Almonds (<10), almond butter (1 tbsp.), brazil nuts, chestnuts, chia seeds, flax seeds, hazelnuts (<10), macadamia nuts, peanuts, peanut butter (2 tbsp.), pecans, pine nuts, poppy seeds, pumpkin seeds, sesame seeds, sunflower seeds, tahini (1 tbsp.) walnuts	Almonds (>10), cashews, hazelnuts (>10), pistachios
Fats/Oils	Avocado oil, butter, canola oil, coconut oil, dairy blend (70% butter, 30% oil), garlic infused oil (only if FODMAP certified), olive oil, peanut oil, sesame oil, vegetable oils	Anything made with high FODMAP foods, such as onion, garlic, wheat, high fructose corn syrup, etc. **garlic infused oil that does not contain garlic in the bottle is OK
Sugars & Sweeteners	Aspartame, acesulfame-K, beet sugar, brown rice syrup, corn syrup, dextrose, glucose, maltodextrin, pure maple syrup, monk fruit, saccharine, sorghum syrup, stevia, sucralose, brown sugar, coconut sugar, confectioner's sugar, raw sugar, white sugar	Agave syrup, fruit juice concentrate, high fructose corn syrup, honey, isomalt, maltitol, mannitol, molasses, sorbitol, xylitol
Beverages	<ul style="list-style-type: none"> • Alcohol: Beer, most white and red wines, vodka, gin, whiskey • Coffee: Espresso, black coffee, tea (black, green, peppermint, white, weak chai made with water, weak dandelion) • Other: cocoa, cranberry juice, diet soda, vegetable blend juice, sparkling water 	<ul style="list-style-type: none"> • Tea: strong chai tea, oolong, chamomile, fennel • Coffee: made with milk/milk alternative high in FODMAPs • Alcohol: rum, mixed drinks with high FODMAP juice/mixer • Other: coconut water, malted milk powder, fruit juice made with high FODMAP fruits or high fructose corn syrup, kombucha

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Food Group	Low FODMAP	High FODMAP
Condiments/Sauces	Apple cider vinegar, balsamic vinegar (1 tbsp.), fish sauce, ketchup (w/o HFCS, garlic or onion), miso paste, mayonnaise (w/o garlic or onion), mustard, oyster sauce, rice wine vinegar, soy sauce, tomato paste, vanilla, wasabi, Worcestershire sauce	Balsamic vinegar (>1 tbsp.), blueberry jam, grape jelly, mixed berry jam, jams/jellies made w/ HFCS, hummus, tzatziki dip, anything made with high FODMAP ingredients
Additives	Almond extract, baking powder, baking soda, buckwheat, cellulose, citric acid, corn starch, guar gum, modified food starch, potato starch, resistant starch, soy lecithin, whey protein isolate, xanthan gum	Amaranth, barley, carob, chicken salt, chicory root, coconut flour, crystalline fructose, dehydrated vegetables (onion, garlic, etc.), fructose/fructose solids, fructose-glucose syrup, fructans, hydrogenated starch hydrolysates, inulin, isoglucose, isomalt, milk solids, textured vegetable protein, soy flour

Resources:

Websites:

<https://www.katescarlata.com/>

<https://www.ibsfree.net/>

<https://www.monashfodmap.com/>

<https://fodmapfriendly.com/>

<https://www.fodyfoods.com/>

- Fody Foods available in some Whole Foods, Fresh Thyme, Earth Fare and Meijer
 - Also available for purchase online via their website or Amazon

Apps:

Monash FODMAP (\$7.99 – 100% worth the money)

- Includes diary, FODMAP food search, recipes, reintroduction, certified FODMAP brands, educational material, etc.

Spoonful and Fast FODMAP Lookup

- Apps available, however the accuracy of the FODMAP content of foods is questionable. Also doesn't always specific low, moderate and high FODMAP portion sizes

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Low FODMAP Menu and Snack Ideas – Kate Scarlata, RDN

Successful Low FODMAP Living!

Here are a few menu and snack ideas to satisfy you and your sensitive belly.

Always check ingredient labels as manufacturers may alter ingredients.

FODMAP friendly Breakfast:

- Oatmeal (½ cup, cooked) topped with strawberries and blueberries (about ½ cup total) and 1 tablespoon chopped walnuts.
- Egg omelet filled with baby spinach, red pepper and cheddar cheese. Enjoy with an orange.
- Udi's white bread toasted with 2 tablespoons peanut butter (all natural) topped with ½ sliced banana and a sprinkle of chia seeds.
- Erehon Corn Flakes or Crispy Brown Rice (gluten free) cereal with lactose free milk and ½ sliced banana and 1 tablespoon pumpkin seeds.
- EnvironKidz Gorilla Munch with lactose free milk topped with ½ cup blueberries.
- Banana Walnut Pancakes: Namaste Waffle and Pancake Mix or Bisquick Gluten free Pancake and Baking Mix prepared with FODMAP friendly ingredients adding in ½ mashed ripe banana, 1 tablespoon chopped walnuts and cook as directed. Top with a drizzle of pure maple syrup.
- Green Valley yogurt (check ingredients avoid those with honey or use other suitable lactose free yogurt) top with ¼ cup Bear Naked Vanilla Almond Granola and ½-1 cup strawberries.
- Chappaqua Simply Granola Vanilla and Flax with lactose free milk and an orange.
- EnvironKidz Panda Puffs with lactose free milk and a kiwifruit.
- Smoothie: ½ cup frozen blueberries, 3-4 ounces plain Chobani Greek* (or substitute in lactose free) yogurt blended with 2 teaspoons chia seeds until frothy (lactose content should be tolerated in 3-4 oz.)
- Vanilla French Toast: Whisk 1-2 eggs with ¼ cup lactose free milk, 1 teaspoon vanilla extract and a dash of cinnamon. Using suitable gluten free bread, dip in mixture and brown up in skillet. Drizzle with pure maple syrup or a sprinkle of confectioner's sugar. Top with ½ cup fresh sliced strawberries and 1 tablespoon of sliced almonds.

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FODMAP friendly Lunch and Dinner:

- "Rice Bowl": scoop of brown rice, layered next with chopped Boston lettuce, cherry tomatoes, and scallion (green part only) top with grilled chicken or shrimp, and grated cheddar. Add fresh lemon juice and olive oil drizzle for dressing.
- Tuna Salad Lettuce Wraps: Tuna mixed with Hellman's mayonnaise, splash of fresh lemon juice, ¼ celery stalk sliced and fresh dill, served in Bibb lettuce leaves and a side of Baked Kettle potato chips. Enjoy with ¾ cup chopped cantaloupe.
- Grilled cheddar, ham and tomato sandwich (use Udi's White bread or other low FODMAP bread choice) with a side of kale salad (1 cup finely chopped kale, 5 cherry tomatoes, 1 tablespoon pumpkin seeds with olive oil and lemon dressing)
- Tostada Pizza-Cook 1 pound ground chicken with 1 tablespoon of chili powder (choose chili powder without added onion such as Spice Appeal Brand), 1 teaspoon cumin, 1 teaspoon paprika and ½ teaspoon salt in non-stick skillet. Add ½ cup of water and simmer until cooked through and no longer pink and cooked through. Top tostada shell with ¼ cup of meat mixture and sprinkle of grated cheddar cheese. Bake in 350 degree F oven until cheese melts (about 3-4 minutes).
- Stuffed Baked Potato: Carefully scoop out hot potato filling from one large baked potato. Mix with 1 tablespoon lactose free milk and 2 teaspoons butter. Sprinkle with ¼ cup shredded cheddar cheese, mash to blend and place back in hot potato. Top with sautéed red peppers and chopped chives.
- Lean piece of grilled steak (London broil or Flank), Bibb lettuce salad with grated carrots, cherry tomatoes and orange pepper slices with red wine vinegar and olive oil dressing and side of roasted potatoes.
- Rice pasta tossed with fresh chopped tomatoes, garlic infused oil (don't eat the garlic!), and fresh basil. Serve with lean, center cut pork chop and sautéed zucchini.
- Quinoa sautéed with red pepper slices, pine nuts and garlic infused olive oil. Enjoy with roasted chicken or grilled fish.
- Corn pasta tossed with garlic infused olive oil, ¼ cup feta cheese, ¼ cup drained and rinsed canned chickpeas, a few kalamata olives, chopped fresh parsley and mint or basil per preference.
- Stuffed peppers: Brown and cook thoroughly ground turkey, beef or Quorn grounds (no onion or garlic). Season with sea salt & pepper. Toss with equal amounts of cooked rice or quinoa. Blend in small amounts of feta cheese, chives and parsley. Stuff peppers and bake in covered casserole dish until pepper is soft and cheese is melted.

FODMAP friendly Snacks!

- Snyder's of Hanover pretzels (gluten free) and cheddar cheese
- Rice cake with peanut butter, ½ ripe banana sliced and topped with 1 tablespoon sliced almonds
- Rice crackers, Swiss cheese slice and 10 grapes
- Vanilla lactose free yogurt (Green Valley) with blueberries and 1 tablespoon chia seeds
- ½ sandwich with Udi's white bread with sliced chicken, Bibb lettuce and tomato slice.
- Lundberg Rice Chips (sea salt), handful of peanuts and a few baby carrots
- Crunchmaster Multi-seed crackers, string cheese and an orange
- Baby carrots and sliced cucumber wedges with dilly dip (Blend ½ cup lactose free cottage cheese with fresh chopped dill, sea salt, pepper in blender until creamy)
- Banana slices with spoonful of almond butter or peanut butter and sprinkle of semi-sweet chocolate chips
- Go Macro protein replenishment peanut butter bar or 88 Acres chocolate and sea salt bar.

Always read manufacturer labels to verify all ingredients are low FODMAP and work with your dietitian and physician to provide appropriate medical guidance. Research is ongoing in FODMAP food analysis so this handout may need to be modified with advances in research. Brand name foods listed here appear to be low FODMAP per ingredients but have not officially been tested for FODMAP content. Always seek guidance of your health professional before altering your diet.

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