

LOW FODMAP DIET

FODMAP is an acronym used to describe a group of dietary carbohydrates that can be poorly absorbed in the small intestine and rapidly fermented by bacteria to produce gas. This gas production can occur in the small and/or large intestine and lead to bloating, pain, nausea, diarrhea and/or constipation in many people.

It has been suggested that some individuals may be more sensitive to these poorly absorbed carbohydrates. Individuals who may benefit from the low FODMAP diet include those with irritable bowel syndrome, inflammatory bowel disease, and celiac disease.

FODMAPs stands for Fermentable Oligo-Di-Monosaccharides and Polyols

Examples of FODMAPs include:

Fructose (in excess) found in certain fruits, honey, and high fructose corn syrup

Lactose: milk and milk products

Fructans: wheat, onions, garlic, and inulin

Galactans: beans, lentils, legumes such as chick peas

Polyols: such as sorbitol and mannitol found in peaches, nectarines, mushrooms and often added as artificial sweeteners

To ensure success, it is recommended you seek guidance from a Registered Dietitian who is experienced in the delivery of the low FODMAP diet approach. The dietitian will ensure that your diet remains nutritionally adequate and you will be provided with suitable food alternatives. It is suggested that the low FODMAP diet be tried for 2 to 6 weeks followed by review by the dietitian, who will then advise on which foods can be reintroduced into your diet.

Food Group	Choose Low FODMAPs	Avoid High FODMAPs
Protein	beef, chicken, tuna, eggs, egg whites, fish, lamb, pork, shellfish, turkey	foods made with high FODMAP fruit sauces or with high fructose corn syrup
Dairy	lactose free dairy, cream cheese(2 tablespoons), half and half(2 tablespoons), sour cream(4 tablespoons), cottage cheese (1/4 cup) cheese (cheddar, colby, swiss, parmesan, camembert, mozzarella, brie, feta, goat), ricotta(2 tablespoons), whipped cream	cow, goat, sheep milk, buttermilk, evaporated milk, yogurt, frozen yogurt, kefir, ice cream, gelato, eggnog, custard
Meat, Non-Dairy Alternatives	almond milk, hemp milk, rice milk, coconut milk(5 fluid ounces), coconut water(3.5 fluid ounces), coconut cream(4 fluid ounces), almonds(10 nuts), peanuts(32 nuts), peanut butter(2 tablespoons), chia seeds (2 tablespoons), ½ cup canned lentils, ¼ cup canned chick peas, tempeh, firm tofu	beans, soybeans, black eyed peas, hummus, pistachios, cashews soy milk(made from whole soy beans)
Grains	gluten-free white bread, millet bread, 100% spelt sourdough, wheat white sourdough(2 slices), wheat white bread (1 slice), brown, white , basmati rice, rice bran, rice cereal, oats, quick(1/4 cup uncooked), granola-fruit and nut(1/4 cup), granola-honey as ingredient(1/4 cup), quinoa, quinoa flakes, polenta (cornmeal), corn tortilla, corn flakes(1/2 cup), popcorn	100% whole wheat or wheat, multigrain bread, gluten-free grains(that contain inulin or pear juice), naan or roti, oatmeal bread , pumpernickel bread, rye bread
Fruits(limit allowed fruits to ½ cup serving per meal unless otherwise specified)	avocado(1/8 whole), banana(1 med), blueberry, cantaloupe, clementine, coconut, dried(1/4 cup), cranberry, dried(1 tablespoon), dragon fruit, durian, grapefruit(1/2 med), grape, guava(ripe),honeydew	apple, apricot, blackberry, boysenberry, cherries, dates, figs(fresh), guava(unripe), mango, nectarine, peach, pear, persimmon, plum, prunes, tamarillo, watermelon,

	melon, kiwi, mandarin, orange(1 med), papaya, passion fruit, pineapple, pomegranate(1/4 cup seeds or ½ sm), raisins(1 tablespoon), raspberry, rhubarb, starfruit, strawberry	dried apple, dates, dried apricot, dried figs, dried mango
Vegetables	alfalfa sprouts, artichoke, hearts canned(1/8 cup), asparagus(1 spear), bean sprouts, green beans, beetroot(2 slices), bell pepper, bok choy, broccoli(1/2 cup), Brussels sprouts(2sprouts),Butternut squash(1/4 cup), cabbage, common(1cup), carrot, celery(1/4 med stalk), red chili pepper, collard greens, corn, sweet(1/2 cob), cucumber, eggplant, kale, leek (1/2 leek), lettuce, parsnip, peas(1/8 cup), potato, pickle, radish, scallions (green part only),snow peas(5 pods), spinach, squash, sweet potato(1/2 cup), tomato, water chestnuts, zucchini	artichoke, globe and jerusalem, cauliflower, garlic, leek, bulb, mushroom, onions, shallots, scallions (white part), sugar snap peas
Sugars and Sweeteners	Dark chocolate(5 squares or 30g), milk or white chocolate(1 fun-size bar or 15g), 100% maple syrup, cocoa powder (2 teaspoons),Stevia, raw sugar, brown sugar	High fructose corn syrup, honey, agave, molasses, maple syrup(with high fructose corn syrup), carob powder, artificial sweeteners: sorbitol, mannitol, isomalt, xylitol
Beverages	coffee, espresso, green tea, peppermint tea, black, white, Chai tea (weak, 8 fluid ounces), orange and grape juice (1/2 cup), wine, red or white (not sherry or port), beer, spirits (not rum), coconut water (3.5 fluid ounces)	any with high fructose corn syrup, fruit juice concentrate, apple juice, pear juice, apple cider, Chamomile tea, Oolong tea, Fennel tea, sherry, port, rum
Condiments and Seasonings	basil, cilantro, coriander, curry leaves, dry mustard powder, fish sauce, garlic scapes, garlic-	garlic, garlic powder, onion, onion powder, ketchup (with high fructose corn

	infused oil, ginger, ground chili powder, ground cumin, lemon or lime juice (1 teaspoon) marjoram, olives, oregano, paprika, parsley, rosemary, salt, scallions (greens only), soy sauce, turmeric, vinegar, Balsamic vinegar (2 tablespoons), butter, margarine, mayonnaise, mustard, ketchup (no high fructose corn syrup)	syrup)
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Dietary fiber intake may be reduced because of the restriction of wheat. There are ways to add fiber without FODMAPs:

- Choose oat bran (2 tablespoons)
- Oats, quick (1/4 cup uncooked)
- Rice bran (2 tablespoons)
- Baked potato with skin
- Quinoa or brown rice
- Tempeh (1 slice)
- Chia seeds (whole or ground 2 tablespoons)
- Low FODMAP fruits and vegetables

Resources:

- www.med.monash.edu/cecs/gastro/index.html
- www.med.monash.edu/cecs/gastro/fodmap/iphone-app.html
- www.ibsfree.net -Flavor without FODMAPs Cookbook by Patsy Catsos, MS, RDN, LDN
- www.katescarlata.com-21 Day Low FODMAP Meal Plan

Shepherd, Sue, and Peter Gibson. *The Complete Low-FODMAP Diet: A Revolutionary Plan for Managing IBS and Other Digestive Disorders*. New York: The Experiment, LLC, 2013. Print

Halmos, Emma, et al. "A Diet Low in FODMAPs Reduces Symptoms of Irritable Bowel Syndrome." *Gastroenterology* 146.1 (2014) : 67-75. Print.

Barrett, Jacqueline, and Peter Gibson. "Fermentable oligosaccharides, disaccharides, monosaccharides and polyols (FODMAPs) and nonallergic food intolerance: FODMAPs or food chemicals?" *Therapeutic Advances in Gastroenterology* 5.4 (2012) : 261-268. Print.

Mullin, Gerard, et al. "Irritable Bowel Syndrome: Contemporary Nutrition Management Strategies." *Journal of Parenteral and Enteral Nutrition*. 38.7 (2014) : 781-799. Print.

