

The Low FODMaP Diet

What Is FODMaP?

The Low FODMaP diet is a form of elimination diet that focuses specifically on foods that contain specific types of fermentable sugars. “FODMaP” is an acronym built on the names of the 5 classes of sugars that are eliminated (Figure 1). Increasing numbers of studies support its use for reducing symptoms of irritable bowel syndrome (IBS). However, most of these studies were short-term (less than 6 weeks), utilized dietitians with specialized training, and did not conclusively show that following this diet is more effective than other general dietary advice (e.g., decreasing alcohol, changing the amount of fat in the diet, or increasing dietary fiber).^{1, 2} That said, the FODMaP diet plan can serve as a framework for an elimination diet that can be individualized, especially if more general elimination diet approaches prove unhelpful.

The Low FODMaP diet works in two ways:

1. It is low in sugars that can be difficult to absorb. These sugars can lead to increased fermentation and gas.
2. Reducing overall sugar intake reduces the osmotic pull of fluids into the intestine, which can reduce diarrhea. This may explain why some research indicates that the FODMaP diet improves pain and boating symptoms by up to 75%, predominately in those with IBS associated with diarrhea.^{2, 3}

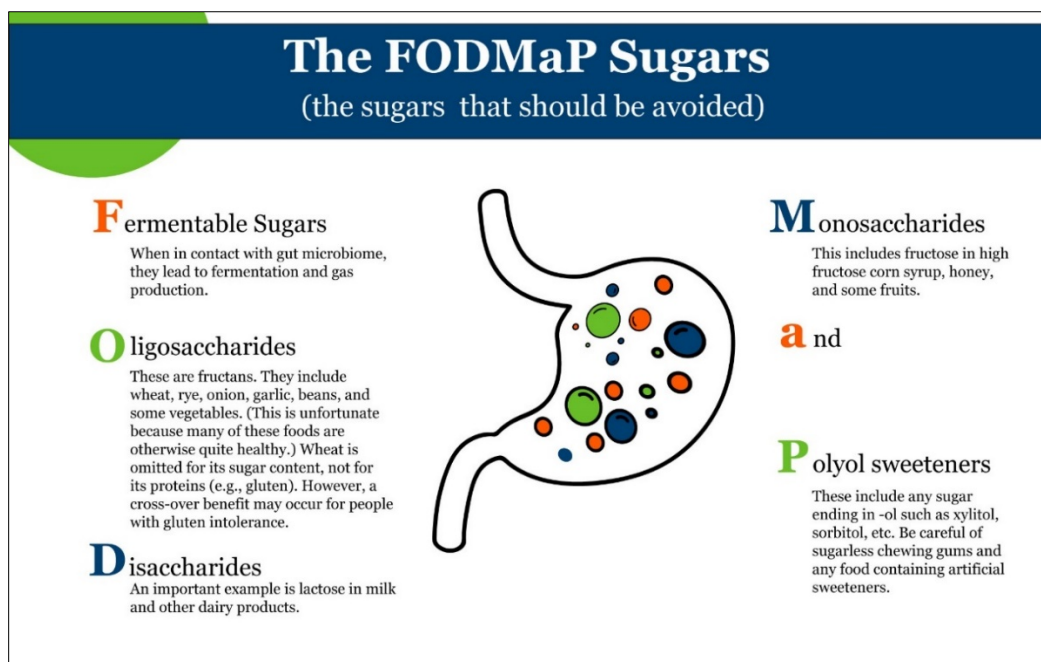


Figure 1. The FODMaP diet's five classes of sugars to avoid.

The Modified Low FODMaP Diet

The Low FODMaP diet can lead to a significantly lowered intake of fiber from fruits and vegetables, which could lead to micronutrient deficiencies and adversely affect the microbiome. Although it has not been extensively studied, some people may benefit from a “modified FODMaP diet,” which prevents these reductions in nutrients by allowing for continued intake of some higher FODMaP foods. This eating approach begins with having patients avoid dairy, wheat, rye, high-fructose corn syrup, honey, and polyol sugars (first row of Figure 2). If this doesn’t work after a trial of a few weeks, they can then do the full FODMaP diet, as outlined in Figure 2.

| Consider starting with the first row (modified FODMaP) and progress to full FODMaP if needed. | FODMaP Diet | | | |
|---|---|--|---|---|
| | Fructose | Lactose | Oligosaccharides | Polyols |
| Avoid (modified FODMaP) Start Here | <input type="checkbox"/> High fructose corn syrup and Honey | <input type="checkbox"/> Anything made from cow, goat or sheep milk that would include lactose. | <input type="checkbox"/> Cereals: Wheat & Rye. Avoid breads, pasta, crackers and biscuits. (Avoid white foods) | <input type="checkbox"/> Sweeteners that end in "ol": Sorbitol, mannitol, xylitol, malitol. Beware of sugarless gum and anything that is artificially sweetened. |
| Avoid | <input type="checkbox"/> Fruits: apples, pears, peaches, mango, watermelon, nectarine, plums, prunes, cherries and lychee. | <input type="checkbox"/> Yogurt | <input type="checkbox"/> Legumes: chickpeas, lentils, kidney beans, baked beans. | |
| Avoid | <input type="checkbox"/> Avoid large servings of fruit in one sitting. Avoid dried fruit, bowls of fruit or fruit juice. | <input type="checkbox"/> Cheeses | <input type="checkbox"/> Vegetables: artichokes, asparagus, Brussels sprout, broccoli, cabbage, garlic, onions, peas, and leaks. | |
| OK to Eat | <input checked="" type="checkbox"/> Fruit: blueberry, banana, grapefruit, grape, honeydew melon, lemon, lime, mandarin, orange, passion fruit, raspberry, strawberry, tangelo, kiwifruit. | <input checked="" type="checkbox"/> Lactose free milk and rice milk. Ice cream substitutes such as sorbet and gelati. Butter is OK in small amounts. | <input checked="" type="checkbox"/> Cereals: gluten-free products. Spelt bread and cereal products. | <input checked="" type="checkbox"/> Sweeteners: Any sweetener other than polyols. This can include stevia (Truvia), agave, sucralose (Splenda), saccharine (Sweet'N Low), aspartame (Equal, NutraSweet) |
| OK to Eat | <input checked="" type="checkbox"/> Honey Substitutes: maple syrup in small amounts. | <input checked="" type="checkbox"/> Lactose free yogurt | <input checked="" type="checkbox"/> Garlic Substitute: garlic-infused oils. | |
| OK to Eat | | <input checked="" type="checkbox"/> Hard cheeses such as cheddar, asiago & parmesan. | <input checked="" type="checkbox"/> Vegetables: Carrot, celery, corn, capsicum, eggplant, green beans, lettuce, pumpkin, tomato, bok choy and bamboo. | |

SmartDraw Academic Edition

Figure 2. The FODMaP diet. This chart was modified from a chart by Gibson and colleagues.⁴



Author(s)

“The FODMaP Diet” was adapted for the University of Wisconsin Integrative Health Program from the original written by David Rakel, MD (2014) and updated by David Lessens, MD, MPH (2020). Sections were adapted from “[Evidence-based dietary management of functional gastrointestinal symptoms: The FODMAP approach](#)” by Peter Gibson and S.J. Shepherd. Modified for the UW Integrative Health website in 2021.

This Integrative Health tool was made possible through a collaborative effort between the University of Wisconsin Integrative Health Program, VA Office of Patient Centered Care and Cultural Transformation, and Pacific Institute for Research and Evaluation.

References

1. Ooi SL, Correa D, Pak SC. Probiotics, prebiotics, and low FODMAP diet for irritable bowel syndrome - What is the current evidence? *Complement Ther Med*. Apr 2019;43:73-80. doi:10.1016/j.ctim.2019.01.010
2. Schumann D, Klose P, Lauche R, Dobos G, Langhorst J, Cramer H. Low fermentable, oligo-, di-, mono-saccharides and polyol diet in the treatment of irritable bowel syndrome: A systematic review and meta-analysis. *Nutrition*. Jan 2018;45:24-31. doi:10.1016/j.nut.2017.07.004
3. Altobelli E, Del Negro V, Angeletti PM, Latella G. Low-FODMAP diet improves irritable bowel syndrome symptoms: a meta-analysis. *Nutrients*. Aug 26 2017;9(9)doi:10.3390/nu9090940
4. Gibson PR, Shepherd SJ. Evidence-based dietary management of functional gastrointestinal symptoms: The FODMAP approach. *J Gastroenterol Hepatol*. 2010;25(2):252-258. doi:10.1111/j.1440-1746.2009.06149.x