

Eating to Reduce Irritable Bowel Symptoms: The FODMaP Diet

What is the FODMaP diet?

The FODMaP diet is a guide to help decrease symptoms of irritable bowel syndrome (IBS). The word “FODMaP” is made up of the first letters of the scientific names of certain types of carbohydrates that are found in foods (see below). We often talk about carbohydrates as a single group. There are actually different types of carbohydrates in different foods. These different types of carbohydrates can have different effects on our digestive systems (the stomach, intestines, and other parts of the body that work together to digest food). If you have IBS, then you probably already know that eating certain foods can cause more symptoms. These can be bloating, gassiness, diarrhea, or constipation. Research studies show that the FODMaP diet is a tool that can help decrease these symptoms.¹⁻³

How does the FODMaP diet work?

The diet works by cutting down or totally cutting out carbohydrates that might cause more symptoms. Carbohydrates that don't get absorbed well pass to the end of the intestine (the colon). Decreasing these carbohydrates helps IBS symptoms in the following two ways:¹

- There are trillions of bacteria living in our intestines. They are important for many things, including digestion and helping us get the nutrients we need from our food. (For more information, see the Whole Health handout “[How a Healthy Gut Makes for a Healthier You.](#)”) Some bacteria use the process of fermentation. This is the same process that brewers use to make beer. As you can imagine, this creates gas. Some people have no problem when gas is produced in the intestines. People with IBS can be more sensitive to the gas, and it causes bloating. Bacteria use the carbohydrates that pass into the colon for fermentation. By decreasing the amount of carbohydrates that the bacteria can use, the FODMaP diet helps decrease the amount of gas and bloating.
- When more carbohydrates pass through into the colon, they pull more water into the stool. People with diarrhea have too much water in the stool. The FODMaP diet decreases this extra water that's pulled into the colon. This decreases diarrhea.

What does FODMaP stand for?

FODMaP stands for the following:

- **F = Fermentable** carbohydrates.
These are carbohydrates that the bacteria in our intestines use for fermentation, which makes gas.
- **O = Oligosaccharides**.
This group of carbohydrates contains fructans and galactans. These are in certain types of grains such as wheat and rye, certain vegetables such as onions, garlic, and cabbage, some fruits, and legumes such as beans.
- **D = Disaccharides**.
Lactose, found in milk products, is the main source of this.
- **M = Monosaccharides**.
This includes fructose, found in foods that have high fructose corn syrup, as well as honey and certain fruits.
- **a = and**
- **P = Polyols**.
Sweeteners whose name ends in “ol” are in this category, like sorbitol and xylitol. These are often artificial sweeteners and found in candy or chewing gum.

How should I use the FODMaP diet?

First, it is important to know that the FODMaP foods do not cause IBS. They only may be part of what increases the symptoms for people with IBS. So, the main goal with using the FODMaP diet is to manage and decrease symptoms, not to cure IBS.

Clinicians may recommend using the FODMaP diet in a variety of ways.⁴ We recommend a “stepwise” approach, as described below.

Take a look at the list of foods above and the table on the following page. A lot of the FODMaP foods are vegetables, fruits, and beans. These are some of the most nutritious foods we can eat. They are important for good health. In addition, many of the FODMaP foods are actually good *prebiotics*, or food for the “healthy bacteria” in the gut. (This is described in the Whole Health handout “[How a Healthy Gut Makes for a Healthier You.](#)”) In fact, there is research being done to figure out exactly how the FODMaP diet affects the bacteria that live in our gut.⁵⁻⁷

Therefore, we recommend a “Stepwise FODMaP” diet. The goal of this approach is to still eat as many fruits and vegetables as possible while decreasing your IBS symptoms. Follow these steps:

1. Start by avoiding dairy, wheat, rye, high-fructose corn syrup, honey, and polyol sugars (artificial sweeteners). These are in the top row of the chart below.
2. If this doesn't work, then continue on down the chart by avoiding foods in the other rows.

- In doing the “Stepwise” FODMaP diet, you may find yourself needing to cut out more foods to start with in order to control symptoms. If you do this, don’t worry! Sometimes this is necessary at the start.
- After doing the FODMaP diet for about 4-6 weeks, you can try adding back foods, one at a time. Keep track in a diary or calendar the date you add back foods and what your symptoms are like. If your symptoms are still OK, then go ahead and eat that food again regularly.

Consider starting with the first row (stepwise FODMaP) and progress to full FODMaP if needed.	FODMaP Diet			
	Fructose	Lactose	Oligosaccharides	Polyols
Avoid (stepwise 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 and rye. Avoid breads, pasta, crackers and biscuits. (Avoid white foods) <input type="checkbox"/> Barley	<input type="checkbox"/> Sweeteners that end in “ol”: sorbitol, mannitol, xylitol, maltitol. Beware of sugarless gum and anything that is artificially sweetened.
Avoid	<input type="checkbox"/> Fruits: apples, pears, peaches, mango, watermelon, nectarine, plums, prunes, cherries grapefruit and lychee.	<input type="checkbox"/> Yogurt	<input type="checkbox"/> Legumes: chickpeas, lentils, kidney beans, baked beans. <input type="checkbox"/> Cashews	None to avoid
Avoid	<input type="checkbox"/> Avoid large servings of fruit in one sitting. Avoid	<input type="checkbox"/> Cheeses	<input type="checkbox"/> Vegetables: artichokes, asparagus, Brussels	None to avoid



	dried fruit, bowls of fruit or fruit juice.		sprout, broccoli, cabbage, garlic, onions, peas, cauliflower, mushrooms, and leeks.	
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This chart was modified from a chart by Gibson et al. {Gibson, 2010, Evidence-based dietary management of functional gastrointestinal symptoms: The FODMAP approach

Consider starting with the first row (stepwise FODMaP) and progress to full FODMaP if needed.	FODMaP Diet			
	Fructose	Lactose	Oligosaccharides	Polyols
OK to Eat	<ul style="list-style-type: none"> ✓ Fruit: blueberry, banana, grape, honeydew melon, lemon, lime, mandarin, orange, passion fruit, raspberry, strawberry, tangelo, kiwifruit. 	<ul style="list-style-type: none"> ✓ Lactose free milk and rice milk. Ice cream substitutes such as sorbet and gelatin. Butter is OK in small amounts. 	<ul style="list-style-type: none"> ✓ Cereals: gluten-free products. Spelt bread and cereal products. ✓ Chia Seeds ✓ Rolled Oats ✓ Quinoa 	<ul style="list-style-type: none"> ✓ Sweeteners: Any sweetener other than polyols. This can include stevia (Truvia), agave, sucralose (Splenda), saccharine (Sweet 'N Low), aspartame (Equal, NutraSweet)
OK to Eat	<ul style="list-style-type: none"> ✓ Honey substitutes: maple syrup in small amounts. 	<ul style="list-style-type: none"> ✓ Lactose free yogurt 	<ul style="list-style-type: none"> ✓ Garlic substitute: garlic-infused oils. 	Not Applicable
OK to Eat	Not Applicable	<ul style="list-style-type: none"> ✓ Hard cheese such as cheddar, 	<ul style="list-style-type: none"> ✓ Vegetables: Carrot, celery, corn, capsicum, eggplant, green 	Not Applicable

		asiago and parmesan.	beans, lettuce, pumpkin, tomato, bok choy, and bamboo.	
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What are probiotics and how can they be used along with the FODMaP diet?

We have both helpful and harmful bacteria in our guts. Probiotics are products that contain live bacteria or yeast. They can help create a better balance between the helpful and harmful bacteria in the gut. So far, research studies suggest that taking probiotics can be a helpful treatment for IBS.⁸ As we mentioned, some of the FODMaP foods are actually good “food” for healthy types of bacteria in our gut. Research studies are showing that the FODMaP diet does change which bacteria live in our gut.^{5,6} Taking a probiotic that supports healthy bacteria while also using the FODMaP diet might be helpful in treating IBS. This has been suggested by scientists but hasn’t been directly researched yet.⁷

Consider using one of the following strains (types) of probiotics for IBS. When using a probiotic for IBS, take it for at least two months in order to see the full effect of the treatment. It is reasonable to try a different strain or to try combining more than one strain if the first one you try does not help.^{8,9} ConsumerLab.com reviews manufacturers and their products. It is one place you can look to find a reliable brand of probiotic.

Strain (type) of probiotic and dose (CFU = colony-forming units)
<i>Lactobacillus rhamnosus GG</i> , 3 x 10 ⁹ (3 billion) CFU's twice daily
<i>Lactobacillus plantarum</i> , 10 x 10 ¹⁰ (100 billion) CFU's daily
<i>Bifidobacterium bifidum</i> , 1 x 10 ⁹ (1 billion) CFU's daily
<i>Bifidobacterium infantis</i> , 1 x 10 ⁸ (800 million) CFU's daily

For you to consider:

- As a baseline, start a log of your IBS symptoms, the date you had the symptoms, and what you ate that day. Notice if you see any patterns.
- What do you think about the FODMaP Diet? Is this something you would like to try using? When will you start?
- Do you want to try a probiotic? Which brand will you try?
- If you have any concerns about starting this diet or taking probiotics, contact your health care provider or a registered dietitian nutritionist to help guide you.



The information in this handout is general. **Please work with your registered dietitian nutritionist and/or health care team to use the information in the best way possible to promote your health and happiness.**

For more information:

ORGANIZATION	RESOURCES	WEBSITE
University of Wisconsin Integrative Health Program	A variety of Integrative Whole Health handouts on your surroundings	https://www.fammed.wisc.edu/integrative/resources/modules/

This handout was adapted for the University of Wisconsin Integrative Health Program from the original written for the Veterans Health Administration (VHA) by Jonathan Takahashi MD, MPH, Academic Integrative Health Fellow, Integrative Health Program, University of Wisconsin Department of Family Medicine and Community Health. It is based in part on a tool for clinicians, The FODMaP Diet, written by David Rakel MD. The handout was reviewed and edited by Veterans and VHA subject matter experts.

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