

Department of
Nutrition & Dietetics

Low FODMAPs Diet



What are FODMAPs?

FODMAPs (**F**ermentable **O**ligo-saccharides, **D**i-saccharides, **M**ono-saccharides and **P**olyols) are a group of carbohydrates that are not completely absorbed in our intestines.

Why Do I Need a Low FODMAPs Diet?

If you have a condition called Irritable Bowel Syndrome (IBS)*, your body cannot absorb FODMAPs completely. Eating food containing FODMAPs will cause symptoms such as cramping, bloating, diarrhea and / or constipation.

A low FODMAPs diet may help to improve your IBS symptoms. You should plan your low FODMAPs diet with your dietitian to ensure that you are getting enough nutrients. It is important to prevent malnutrition and unwanted weight loss.

Types of FODMAPs That Trigger IBS Symptoms

There are four main groups of FODMAPs:

1. Oligo-saccharides (fructans & galacto-oligosaccharides)
2. Di-saccharides (lactose)
3. Mono-saccharides (fructose)
4. Polyols (sorbitol & mannitol)

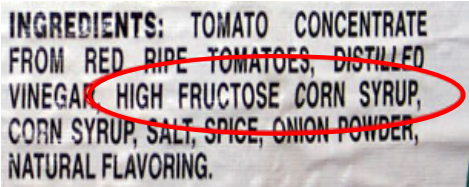
When you are on a low FODMAPs diet, you will be advised to eliminate all foods that contain high amounts FODMAPs for **three to six weeks**. You can **slowly re-introduce** foods containing FODMAPs to find out which foods are causing your IBS symptoms.

**IBS is a disorder that affects the colon.*

Sources of High FODMAPs Foods

Type of FODMAPs	Food Groups	Examples
Fructans and Galactooligosaccharides (GOS)	Vegetables	Artichokes, beetroot, garlic, goji berries (dried), leek, onion, green peas, snow peas, spring onions (white part), sweet corn (more than ½ cob)
	Fruit	Custard apple, grapefruit, nectarine, white peaches, persimmon, pomegranate, rambutan (more than three pieces), watermelon
	Bread / cereals / snacks	Food made with large amounts of barley, rye or wheat ingredients (e.g. bread, noodle, pasta, pastry, chapatti, naan, "bao"), muesli
	Beans/ legumes / nuts	Chickpeas, lentils, red kidney beans, baked bean, soya beans, silken tofu, cashews, pistachio
	Drinks / dessert	Coconut water, oolong tea, soymilk, drinks that contain inulin or fructooligosaccharides (FOS) *It is important to read the ingredient list to know whether your food / drinks contain inulin or FOS. Red bean soup/ green (mung) bean soup

Sources of High FODMAPs Foods

Type of FODMAPs	Food Groups	Examples
Lactose	Milk / dairy	<p>Condensed milk, cow's milk, custard, evaporated milk, goat's milk, yoghurt</p> <p>You should limit your intake to this serving size if you cannot absorb lactose:</p> <ul style="list-style-type: none"> • Ice cream – 2/3 scoop (30g) • Cheese <ul style="list-style-type: none"> - 2 tablespoons (40g) of cream cheese - 2 slices (40g) of haloumi - 2 tablespoons (40g) of ricotta
	<p>Fruit</p> <p>Vegetables</p> <p>Others</p>	<p>Apple, cherries, mango, pear, watermelon</p> <p>Asparagus, sugar snap peas</p> <p>Tropical juices, honey, high fructose corn syrup (HFCS) / glucose-fructose syrup, dessert wine, rum</p>
Fructose		 <p>INGREDIENTS: TOMATO CONCENTRATE FROM RED RIPE TOMATOES, DISTILLED VINEGAR, HIGH FRUCTOSE CORN SYRUP, CORN SYRUP, SALT, SPICE, ONION POWDER, NATURAL FLAVORING.</p> <p>Food Ingredients Label Showing High Fructose Corn Syrup <small>Photo retrieved from https://jillconyers.com/2012/11/menu-planning-and-hidden-high-fructose-corn-syrup/</small></p>

Sources of High FODMAPs Foods

Type of FODMAPs	Food Groups	Examples
Sorbitol	Fruit	Apple, apricot, avocado, blackberries, cherries, jam (mixed berries), longans, lychees, nectarines, peaches, pear, plums Coconut water
	Artificial sweeteners	Sugar-free mints, sugar-free candy Check your food ingredients label for sorbitol, mannitol, xylitol or isomalt.
Mannitol	Fruit	Watermelon
	Vegetables	Cauliflower, celery, mushrooms, snow peas You should limit your intake to this serving size if you cannot absorb mannitol: <ul style="list-style-type: none"> • ½ cup (75g) of sweet potato

Sources of Low FODMAPs Foods

The table below shows the list of common food sources with low FODMAPs content.

Meat and its alternatives (e.g. chicken, fish, meat and eggs) are high in protein and contain no or very little carbohydrates.

Grains & Alternatives			
Bread, gluten free	2 slices, 52g	Rice, brown/ white/ glutinous	1 cup (cooked)
Corn flakes, gluten-free	1 cup	Rice noodles	1 cup (cooked)
Pasta, gluten-free	1 cup (cooked), 145g	Rolled oats	½ cup 52g
Quinoa	1 cup (cooked), 155g	Vermicelli (noodle)	1 cup (cooked)
Vegetables			
Beansprouts	¾ cup	Chye sim	1 cup
Bok Choy	1 cup	Cucumber	½ cup
Broccoli	¾ cup	Eggplant	1 cup
Cabbage, common	¾ cup	Ginger root	1 teaspoon
Capsicum, red	¼ of 1 medium	Lettuce, all types	1 cup
Carrot	1 medium, 75g	Onion, spring, green tips	1 bunch
Chilli, red/ green	1 small	Potato	1 medium
Chives	1 tablespoon	Pumpkin, kent	½ cup

Sources of Low FODMAPs Foods

Radish	4 radish	Tomato	1 small, 119g
Seaweed, nori (processed)	2 sheets, 5g	Turnip	½ turnip
Spinach, baby	1 cup	Water chestnuts	½ cup
Nuts/ Seeds			
Chestnuts	20 nuts, 168g	Pumpkin seeds	2 tablespoons
Chia seeds	2 tablespoons, 24g	Sesame	2 tablespoons
Linseeds/ flax seeds	1 tablespoon, 15g (higher GOS if >15g)	Sunflower seeds	2 teaspoons
Peanuts	32 nuts, 28g		
Fruits			
Banana (unripe)	1 medium *Banana (ripe) is high in fructan	Mandarin orange	2 small
Dragon fruit	1 medium	Orange	1 medium
Durian	1 cup, 150g	Papaya	1 cup
Grapes	1 cup, 150g	Pineapple	1 cup, 140g
Guava, ripe	2 medium	Starfruit	1 medium
Kiwi fruit	2 small	Strawberry	10 medium
Vegetarian Substitutes			
Egg replacer	1 teaspoon	Tofu, plain/ firm	2/3 cup 160-170g
Tempeh, plain	1 slice, 100g		

Sources of Low FODMAPs Foods

Milk and dairy alternatives			
Milk, lactose-free	1 cup	Yoghurt, lactose-free	1 small tub
Spices			
Chilli powder	1 teaspoon	Curry leaves	1 cup
Cinnamon	1 teaspoon	Five spice	1 teaspoon
Cumin	1 teaspoon	Turmeric	1 teaspoon
Herbs			
Basil, Coriander, Parsley, Mint	1 cup	Tarragon, Thyme, Rosemary	1 cup
Spreads			
Butter	1 tablespoon	Marmalade	2 tablespoons
Jam, strawberry	2 tablespoons	Peanut butter	2 tablespoons
Sauces			
Barbeque sauce	2 tablespoons	Soy sauce	2 tablespoons
Chutney	1 tablespoon	Tomato sauce	2 sachets, 13g
Fish sauce	1 tablespoon	Vinegar, Apple cider	2 tablespoons
Mustard	1 tablespoon	Vinegar, Rice wine	2 tablespoons
Oyster sauce	1 tablespoon		

Sources:

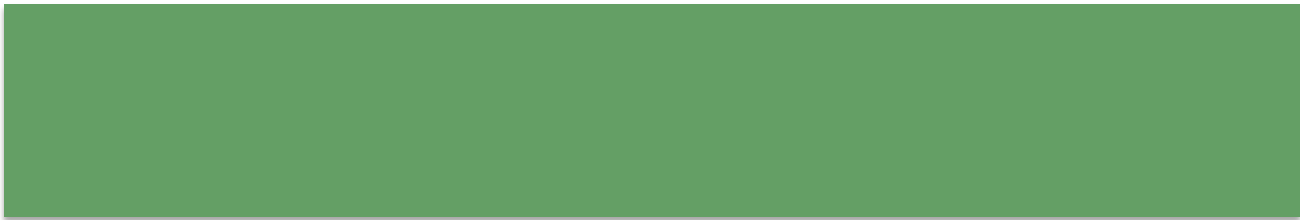
Monash University Low FODMAP Diet App.

Monash University Low FODMAP Diet Guide, edition 6, Department of Gastroenterology, Central Clinical School, Monash University.

What Should I Take Note of When Following a Low FODMAP Diet?

1. When you are on a low FODMAPs diet, you should **replace** food containing high amounts of FODMAPs with food containing low amounts of FODMAPs (refer to pages six to eight for suitable alternatives). This is not an “elimination diet”.
2. You should read food labels and look out for ingredients containing high amounts of FODMAPs. Common ingredients you should look out for are:
 - High fructose corn syrup (HFCS)
 - Honey
 - Sugar alcohol (e.g. sorbitol, mannitol)
 - Fructo-oligosaccharides (FOS)
3. You will need to follow your low FODMAPs diet closely for three to six weeks before you see an improvement in your symptoms. Continue working with your dietitian to reintroduce FODMAPs into your diet. You should not be on a low FODMAPs diet for life.





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