

## IBS and the Low FODMAP Diet

FODMAPs are short chains of carbohydrates or saccharides or sugars. But not all types of carbs or sugars cause the problems. Just a limited subset and these foods we call FODMAPs. We call them FODMAPs for short because it stands for Fermentable-Oligo-Di-Monosaccharides and Polyols.

1. FODMAPs cause osmosis, which means FODMAPs will pull water into the gut causing diarrhea. For example, lactose intolerance. Eating dairy in these folks will cause diarrhea because the lactose is not absorbed and causes water to come into the gut.
2. FODMAPs get fermented. The FODMAPs are not easily absorbed and this leads to them flowing into the lower GI track where the bacteria live and the bacteria will then eat and ferment the FODMAPs. And the product of fermentation is GAS! So this causes bloating, pain, and gas.

**But here is the deal, if you can remove foods that are high in FODMAPs then your symptoms can get much better!**

There are several main categories of FODMAPs:

- **Fructose** is in certain fruits, honey, high fructose corn syrup (HFCS)
- **Lactose** in dairy
- **Fructans** in wheat, onion, garlic. Fructans are also known as inulin or FOS, which are often found in protein shakes, probiotics and some pills. I think that most people have problem with bread and pasta etc because of the fructans and not only the gluten.
- **Galactans** (beans, lentils, all legumes including soy)
- **Polyols** are sweeteners containing sorbitol, mannitol, xylitol, maltitol, and also found in stone fruits such as avocado, apricots, and peaches.

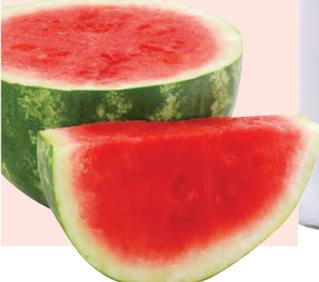
### Protocol for the low FODMAP diet:

1. Cut the FODMAP foods for at least 4 weeks.
2. If your symptoms improved then we know we are on the right track!
3. Then we can try reintroducing high FODMAP foods one at a time to see if they will cause symptoms.
4. Most people will continue to get symptoms from at least some of the FODMAP foods. Some though can cure themselves of the symptoms in just the 4 weeks by giving your gut the time it needs to get back to normal.
5. Most folks though will continue to have many symptoms with the FODMAP foods. In this case we may need to do additional stool testing and treatments to kill off some of the bacteria because you could have SIBO.

# Foods suitable on a low-fodmap diet

fruit	vegetables	grain foods	milk products	other
<p><b>fruit</b> banana, blueberry, boysenberry, canteloupe, cranberry, durian, grape, grapefruit, honeydew melon, kiwifruit, lemon, lime, mandarin, orange, passionfruit, pawpaw, raspberry, rhubarb, rockmelon, star anise, strawberry, tangelo</p> <p>Note: if fruit is dried, eat in small quantities</p> 	<p><b>vegetables</b> alfalfa, bamboo shoots, bean shoots, bok choy, carrot, celery, choko, choy sum, endive, ginger, green beans, lettuce, olives, parsnip, potato, pumpkin, red capsicum (bell pepper), silver beet, spinach, squash, swede, sweet potato, taro, tomato, turnip, yam, zucchini</p> <p><b>herbs</b> basil, chili, coriander, ginger, lemongrass, marjoram, mint, oregano, parsley, rosemary, thyme</p>	<p><b>cereals</b> gluten-free bread or cereal products</p> <p><b>bread</b> 100% spelt bread</p> <p><b>rice</b></p> <p><b>oats</b></p> <p><b>polenta</b></p> <p><b>other</b> arrowroot, millet, psyllium, quinoa, sorgum, tapioca</p> 	<p><b>milk</b> lactose-free milk*, oat milk*, rice milk*, soy milk*</p> <p>*check for additives</p> <p><b>cheeses</b> hard cheeses, and brie and camembert</p> <p><b>yoghurt</b> lactose-free varieties</p> <p><b>ice-cream substitutes</b> gelati, sorbet</p> <p><b>butter substitutes</b> olive oil</p>	<p><b>tofu</b></p> <p><b>sweeteners</b> sugar* (sucrose), glucose, artificial sweeteners not ending in '-ol'</p> <p><b>honey substitutes</b> golden syrup*, maple syrup*, molasses, treacle</p> <p>*small quantities</p> 

# Eliminate foods containing fodmaps

excess fructose	lactose	fructans	galactans	polyols
<p><b>fruit</b> apple, mango, nashi, pear, tinned fruit in natural juice, watermelon</p> <p><b>sweeteners</b> fructose, high fructose corn syrup</p> <p><b>large total fructose dose</b> concentrated fruit sources, large serves of fruit, dried fruit, fruit juice</p> <p><b>honey</b> corn syrup, fruisana</p> 	<p><b>milk</b> milk from cows, goats or sheep, custard, ice cream, yoghurt</p> <p><b>cheeses</b> soft unripened cheeses eg. cottage, cream, mascarpone, ricotta</p> 	<p><b>vegetables</b> artichoke, asparagus, beetroot, broccoli, brussels sprouts, cabbage, eggplant, fennel, garlic, leek, okra, onion (all), shallots, spring onion</p> <p><b>cereals</b> wheat and rye, in large amounts eg. bread, crackers, cookies, couscous, pasta</p> <p><b>fruit</b> custard apple, persimmon, watermelon</p> <p><b>miscellaneous</b> chicory, dandelion, inulin, pistachio</p>	<p><b>legumes</b> baked beans, chickpeas, kidney beans, lentils, soy beans</p> 	<p><b>fruit</b> apple, apricot, avocado, blackberry, cherry, longon, lychee, nashi, nectarine, peach, pear, plum, prune, watermelon</p> <p><b>vegetables</b> cauliflower, green capsicum (bell pepper), mushroom, sweet corn</p> <p><b>sweeteners</b> sorbitol (420) mannitol (421) isomalt (953) maltitol (965) xylitol (967)</p> 