

# LOW-FODMAP DIET

Irritable bowel syndrome is a common gastrointestinal disorder; it accounts for about 30% of all referrals to gastroenterologists. It is idiopathic, meaning there is no known pathology for the disorder. However there are some theories on diet and lifestyle factors that contribute to the disease. The good news is, it's a functional disorder; there is no actual tissue damage so patients are able to make a full recovery if they are willing and able to make changes.



A low-FODMAP diet has been proven to be beneficial not just for individuals suffering from IBS, but also those with Small Intestinal Bacterial Overgrowth (SIBO) or inflammatory bowel disease (IBD).

FODMAP stands for Fermentable oligosaccharides, disaccharides, monosaccharides and polyols.

FODMAPS are undigested until they reach the large intestine or colon, where they are then fermented by bacteria, leading to bowel discomfort such as gas and bloating.

## F

Fermentable: Undigestible carbohydrates which are fermented by gut bacteria and produce gases

## O

Oligosaccharides: Fructans in food such as wheat, rye, onions, garlic and legumes.

## D

Disaccharides: Lactose found in milk, soft cheeses and yogurts

## M

Monosaccharides: Fructose found in honey, apples, high fructose corn syrup, etc

## A<sub>nd</sub>

## P

Polyols: Sorbitol and Mannitol found in some fruits and vegetables and artificial sweeteners.

The low-FODMAP diet is **temporary** removal of high-FODMAP foods, anywhere from 3-6 weeks depending on when symptoms subside, followed by re-introduction to determine foods that are triggering and foods that are tolerable. <sup>1</sup>

## BENEFITS

- Strengthen cells in the gut – Low-FODMAP has shown to improve the density of the endocrine cells that in the gut. These cells are responsible for producing serotonin which plays a role in motility in digestion.
- Reduce risk of leaky gut – Studies show low-FODMAP may improve painful symptoms by altering gut microbiota and intestinal permeability and therefore, risk of leaky gut.
- Improve immune function – Individuals on the low-FODMAP diet have seen improvements in markers of immune system activation, specifically histamine. In the gut, histamine signals the immune system when there's harmful material introduced to the body. <sup>2</sup>



Food Category	HIGH FODMAP FOODS (avoid)	LOW FODMAP FOODS (eat!)
Vegetables	Artichoke, asparagus, cauliflower, garlic, green peas, leek, mushrooms, onion, sugar snap peas	Eggplant, green beans, bok choy, bell pepper, carrot, cucumber, lettuce, potato, tomato, zucchini
Fruit	Apples, apple juice, cherries, dried fruit, mango, nectarines, peaches, pears, plums, watermelon	Cantaloupe, grapes, kiwi, mandarin, orange, pineapple, strawberries
Dairy & Alternatives	Cow's milk, custard, ice cream, soy milk (made from whole soybeans), yogurt	Almond milk, brie/camembert cheese, feta, hard cheeses, lactose-free milk, soy milk (made from soy protein)
Protein Sources	Most legumes, some marinated meats/poultry/seafood, some processed meats	Eggs, firm tofu, plain cooked meats/poultry/seafood, tempeh
Bread & Cereal	Wheat/rye/barley based breads, breakfast cereals, biscuits	Corn flakes, oats, quinoa, rice, sourdough spelt bread, wheat/rye/barley free breads
Sweeteners	High fructose corn syrup, honey, sugar free confectionery	Dark chocolate, maple syrup, rice malt syrup, table syrup
Nuts and seeds	Cashews, pistachios	Macadamias, peanuts, pumpkin seeds, walnuts <sup>3</sup>

*Here is a wonderful resource if you are considering the low-FODMAP diet, they also have an inexpensive mobile app: <https://www.monashfodmap.com/>*

**References** 1. Anamaria Cozma-Petrut, Felicia Loghin, Doina Miere, Dan Lucian Dumitrascu. Diet in irritable bowel syndrome: what to recommend, not what to forbid to patients! World J Gastroenterol. 2017;23(21). 2. Beyond the Bacteria - 3 Benefits of the Low FODMAP Diet. Dr. Michael Ruscio, DC. <https://drruscio.com/benefits-low-fodmap-diet/>. Published November 2, 2017. Accessed March 15, 2019. 3. FODMAP food list | Monash FODMAP - Monash Fodmap. <https://www.monashfodmap.com/about-fodmap-and-ibs/high-and-low-fodmap-foods/>. Accessed March 13, 2019.