

Published by

Healthy Choices for Mind and Body

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FODMAP Frenzy

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December 2017

Bottom Line at the Top: Certain foods might trigger unpleasant gas, bloating, stool patterns and abdominal pain in people with Irritable Bowel Syndrome (IBS). Experimentation with foods to find personal triggers is reasonable, but obsessive elimination of any food type, especially FODMAPs, is unnecessary and never curative. One should completely eliminate only foods that cause true food allergies.

FODMAPs are Fermentable Oligo-, Di- and Monosaccharides And Polyols. In plain English, they are food sugars and short chains of sugars that gut bacteria can ferment. To do this the sugars must make it all the way through the small intestine to the colon without being absorbed into the body. FODMAPs are less digestible and absorbable than many other nutrients, so they are more likely to make it to the colon to be fermented.

Sue Shepherd PhD and Peter Gibson MD first proposed a low FODMAP diet in 2005 as a way to prevent or treat Crohn's disease, a chronic inflammatory condition of the intestine. They hypothesized that poorly digestible sugars passed into the colon, where bacteria feeding on them would multiply into an excessive bacterial load. This would make the wall of the intestine leaky, provoking the body's immune system to attack, creating inflammation. So far this is just a theory: There really is no strong data linking FODMAPs to any inflammatory bowel disease. As far as the general population goes, inflammatory bowel disease is uncommon, so the FODMAP-causinginflammation theory shouldn't apply to most people.

On the other hand, many people have irritable bowel syndrome (IBS), a collective term for illdefined, uncomfortable, non-inflammatory intestinal conditions. IBS is characterized by abdominal pain and one or more symptoms of constipation, diarrhea, bloating and passing excess gas. In most cases we don't know the cause, which varies from person to person and with type of symptoms, so it is highly unlikely that there is a one-size-fits-all treatment.

Because bloating and gas are common in IBS, doctors and nutritionists started to recommend a low FODMAP diet to reduce IBS symptoms. The idea is that fermentation of poorly digestible sugars produces loose stools and gas, which may distend the small intestine and colon. Even without inflammation, poorly digestible sugars may pass to the colon where bacterial fermentation may cause abdominal bloating, nausea, loose stools and pain from intestinal distention.

Everyone has normal gut bacterial fermentation, and it creates a healthy gut microbiome. Most of us feel nothing or just notice some mild gurgling, gas, bloating and/or softer than normal stool. IBS people, however, tend to be hypersensitive to bowel activity and distention, feeling pain with normal physiological activity that the rest of us don't feel.

By 2012 opportunists generalized the low FODMAP approach to anyone with unpleasant gastrointestinal symptoms. Shepherd and Gibson commercialized the FODMAP diet with a book that claims it is "A Revolutionary plan for Managing IBS and other Digestive Disorders." In 2017 Capalino extended FODMAP frenzy to those with a distorted body image: Her book claims that you can get a flat, basically non-female stomach, by eliminating FODMAPs. Not true.

FODMAP frenzy has changed the concept of *reduction* to elimination, which isn't healthy. Pain often makes people panic, as does a little bloating in someone with an eating disorder. They might latch

onto any possible 'cure' often taking it to an extreme.

To eliminate FODMAPs requires not eating most fruits, dairy foods, vegetables and grains. Those are exactly the foods that health professionals try to get people to eat. They contain fiber, proven long ago to reduce colon cancer risk. Rich in bioflavonoids, they reduce the body's oxidant damage, cancer risk and inflammation.

The mono-saccharide fructose is present to some degree in almost all fruits, juices, honey and syrup. Those are not unhealthy foods. Eliminating fruits containing fructose would limit us to eating only cumquats, grapefruit, lemons and limes. Some fruits, like prunes, pears and cherries, contain the FODMAP sorbitol, and their mild laxative effect can replace laxatives in those with constipation. (A pear farm in CA makes a cute T-shirt with the motto: Start a movement. Eat a pear.)

Other foods with FODMAPS are asparagus, artichokes, snap peas, beets, Brussels sprouts, broccoli, cabbage, fennel, garlic, leeks, okra, onions, peas, shallots, avocado, cauliflower, mushrooms, all dairy foods, wheat and rye foods, pistachios, beans, legumes, lentils and chickpeas. Anyone eliminating those foods is missing a lot of healthy nutrients.

Fructose is half of what we call sugar (white, brown, 'processed', beet, cane, turbinado, whatever). Reducing plain sugar, foods sweetened with high-fructose corn syrup, and FODMAP foods containing purified sugar-alcohol or polyol sweeteners like sorbitol, mannitol, xylitol, maltitol and isomalt is likely appropriate for reducing IBS symptoms. Even with those, there is not justification for complete elimination, since the small intestine will absorb some and the small amounts that do reach the colon would not stimulate significant distention and other symptoms.

FODMAPs aren't the only food that might aggravate IBS symptoms. Diarrhea in IBS is often provoked by meals larger than 500 calories from any source. Pain may follow eating fatty food. Allergies to select foods often cause IBS-like symptoms.

If poorly digestible sugars produce symptoms, what about *non*-digestible foods? Fiber from nuts, whole grains, legumes, fruits and vegetables is non-digestible but healthy for us, precisely because it feeds the colonic bacterial microbiome. Fiber also contributes to gut bacterial fermentation and gas. A fed, healthy microbiome boosts immunity and intestinal health. It's the reason people take probiotics. People also take prebiotics, which are non-absorbable substances (similar to FODMAPs!) which promote healthy gut bacteria.

Not everyone digests FODMAPs poorly. Genetic differences determine who will absorb fructose, lactose, sorbitol and oligo-saccharides poorly. We know that some people's intestines don't absorb fructose at all. Most non-Caucasians don't absorb lactose (milk sugar). Not every person who digests FODMAPs poorly eats enough of them to reach the colon where they might contribute excess fermentation. And not every person who digests FODMAPs poorly and eats a lot of them has IBS.

FODMAPs don't cause IBS, but they may trigger symptoms in people with IBS. FODMAP frenzy needs to stop and people with IBS symptoms need to be less obsessed with food elimination. A modest FODMAP reduction, particularly of high-fructose corn syrup and added sugar-alcohol and polyol sweeteners, is reasonable. Everyone needs to eat vegetables, whole grains and fruits – IBS people just need to find the ones that trigger symptoms the least. Since IBS symptoms can be triggered by anxiety, reducing anxiety over FODMAPs might help too.