



# Relationship of Diet to Functional GI Disorders

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The symptoms of functional GI disorders, such as abdominal pain, diarrhea, and constipation can be initiated or exacerbated by stress, hormones, drugs, and diet. Certain foods can induce symptoms that mimic certain functional GI disorders. Review of an individual's diet is important when dealing with functional GI symptoms.

## Abdominal Discomfort

One of the most common complaints associated with functional GI disorders is abdominal discomfort, including symptoms of pain, bloating, belching, and gas. However, a number of foods also can induce abdominal discomfort, including gas-producing foods such as beans, raw cruciferous vegetables like broccoli, and dairy products like milk, yogurt, and cheese. Abdominal discomfort may be experienced solely as pain, bloating, belching, or gas – or as a combination of these.

Gas in the GI tract is a normal phenomenon consisting of nitrogen, oxygen, and carbon dioxide. Many people with functional GI disorders seem to have a greater awareness or increased sensitivity to the presence of gas in the gut, and may experience symptoms even with “normal” amounts of gas. Tobacco use, excessive air swallowing from chewing gum, or poorly aligned teeth can lead to a bloating sensation.

## Diarrhea

Diarrhea is another common symptom of functional GI disorders. It can be triggered by eating things like beans and raw vegetables. Dairy products and highly fibrous foods can produce diarrhea in certain people. In contrast, constipation can result from a diet lacking in fiber and roughage.

## How Foods Cause Symptoms

Ingesting certain foods can normally increase the amount of gas in the GI tract. Carbonated beverages can increase the amount of carbon dioxide in the stomach. Foods high in carbohydrates can also increase gas since up to 20% of carbohydrates ingested remain unabsorbed. Instead, they pass into the colon where they are fermented by bacteria,

producing large quantities of gas. Foods known to produce gas include lentils, beans, broccoli, and cabbage.

Certain foods also alter the stomach's motility and cause gas to move back into the stomach, instead of passing into the colon. This causes bloating and belching. Stretching of the stomach can increase contractions at the end section of the colon and can lead to diarrhea.

## Food Intolerance

Some people have intolerances to certain foods; they are unable to absorb or metabolize certain nutrients. This can lead to symptoms of diarrhea, abdominal cramps, bloating, and gas. People with lactose intolerance – the inability to digest milk sugar – for example, often experience watery stool, abdominal cramps, and diarrhea after eating milk products.

A common sugar substitute called sorbitol can also lead to symptoms. As little as 10 mg. of sorbitol can trigger symptoms of carbohydrate malabsorption in up to half of the population. Many individuals also have an intolerance to fructose, a form of sugar found in fruits and fruit juice.

## Food Allergies

Although relatively rare, food allergies and hypersensitivity to certain foods can also mimic or exacerbate symptoms of functional GI disorders. Allergies can also lead to more generalized symptoms involving skin rashes, asthma, and swelling. With an allergy, the body's immune system produces antigens, substances that cause an allergic response.

Some foods commonly associated with an allergic reaction are fish and shellfish, cow's milk, eggs, legumes (peanuts, lentils, beans), cereal grains (wheat, rice, barley, sorghum, corn, oats, millet, rye), certain seeds (cottonseed, sesame seed, mustard), cabbage, and tomato.

Keeping a daily diary can help identify factors which aggravate your symptoms. IFFGD has a *Daily Diary* available which can help you monitor stressors and medications as well as foods which might be associated with your symptoms.

If you suspect you are intolerant to certain foods, or that you have a food allergy, talk to your physician or consult a

registered dietitian before making any drastic changes in your diet. You want to make sure you are maintaining proper nutritional balance in your diet and not disrupting your quality of life by needlessly eliminating certain beneficial foods.

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