

# Low Fructose Diet

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## What is fructose?

Fructose is a simple sugar found naturally in certain fruits, vegetables, and sweeteners. It is also added to some processed foods and is a component of regular table sugar (sucrose).

## What is fructose malabsorption?

Some people cannot completely absorb fructose in the small intestine. When fructose is not absorbed it is quickly consumed by the bacteria that normally live in the gut. The result is abdominal bloating, cramping, gas, diarrhea, and/or constipation. Fructose malabsorption can occur in people with Irritable Bowel Syndrome (IBS) and other gastrointestinal (GI) disorders. It is diagnosed with a fructose hydrogen breath test and the treatment is a low fructose diet.

## What foods should I avoid?

You do not have to avoid all foods that contain fructose, only those that are high in *excess* fructose listed below. Excess fructose means that the food has more than half of its natural sugar as fructose. Glucose is the other simple sugar found in these foods which helps absorb fructose in the small intestine. The more glucose than fructose in a food, the more “gut-friendly” it is.

### Avoid these high fructose foods:

- ⊙ **Fruit:** apple, pear, Asian pear, watermelon, fig, mango, cherries
- ⊙ **Vegetables:** artichokes, sugar snap peas, asparagus
- ⊙ **Sweeteners:** honey, agave, high fructose corn syrup (HFCS), fruit juice concentrate of the above fruits, and large amounts of sucrose (white or brown sugar)

- ⊙ **Beverages:** juices of the fruit listed above, regular soda and drinks that are sweetened with fructose or HFCS, rum

### **General guidelines:**

- Read labels and avoid products that contain fructose, crystalline fructose, HFCS, honey, agave, and fruit juice concentrates (i.e. apple or pear juice concentrate). Items to check include but are not limited to: sugary drinks, salad dressings, barbeque sauce, ketchup, sweets, and processed foods.
- Avoid eating *large quantities* of table sugar (sucrose) and low fructose fruits as this can also provoke gastrointestinal symptoms.
  - Limit fruit to one serving per meal or snack (1 serving =1 cup chopped fruit or 1 medium sized fruit). You can have several servings of fruit per day as long as they are spaced out.
  - Limit suitable juices such as orange juice to ½ cup per sitting
  - Minimize intake of added sugar (sucrose) by keeping sweets (cookies, candy, etc.) to 1 serving per meal
- Other acceptable sweeteners include pure maple syrup (up to 2 Tbsp per sitting) and artificial sweeteners (Splenda®, Equal®, Stevia®, aspartame, etc.)

### **FODMAPs:**

If you are sensitive to fructose, you may also be sensitive to other hard-to-absorb sugars in the diet. FODMAP is an acronym for **F**ermentable **O**ligo-saccharides, **D**i-saccharides, **M**ono-saccharides, **A**nd **P**olyols. This is a group of carbohydrates that may contribute to bloating, gas, abdominal pain, constipation and/or diarrhea. People with Irritable Bowel Syndrome, Inflammatory Bowel Disease, and Celiac disease are most at risk for having GI symptoms after eating FODMAP foods. Fructose is included in the FODMAP group. If following the low fructose diet does not resolve your symptoms,

schedule an appointment with a UMHS registered dietitian for help identifying other problematic foods in your diet.

To meet with a dietitian who can help you with your diet, please ask your doctor for a referral.

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