GRANGER
MEDICAL CLINIC

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LOW FRUCTOSE DIET

What is fructose?

Fructose is a naturally occurring simple sugar found in fruit, vegetables, and honey. Fructose intolerance can occur in people with irritable bowel syndrome and other GI disorders. Fruits and fruit juices with higher levels of fructose may cause, gas, bloating, abdominal cramping, and diarrhea. Glucose is also a naturally occurring sugar. The more glucose than fructose in a product, the more "intestinal friendly" the fruit or fruit juice may be.

High Fructose Corn Syrup (HFCS)*

HFCF is made of up almost half glucose and half fructose and may be absorbed just as well as sucrose (regular table sugar). Therefore, items with HFCS such as soft drinks, may be tolerated well when limited to 12oz per day and with a meal. HFCS can also be found in canned, baked or processed foods.

*In some patients, even a small amount of processed fruit juice or even foods with HFCS may cases as much malabsorption, and/or intestinal discomfort, as eating large quantities of fruit.

Sorbitol

Sorbitol or Sorbose is a sugar alcohol used as an artificial sweetener and found naturally in fruits and fruit juices. It can also be found in may "diet foods" such as diet soft drinks, sugarless gum, sugar-free jelly/jam, and liquid medications. Sorbitol often creates similar symptoms as fructose- especially when fructose and sorbitol are ingested together.

General Guidelines

- Eliminate products with ingredients that list fructose, crystalline fructose (not HFCS), hone, and sorbitol on the label.
- Avoid sugar alcohols which include sorbitol, isomalt, lactitol, maltitol, mannitol, xylitol, erythritol, and lactitol. These are often found in "diet or diabetic foods" such as diet drinks, ice cream, candy, processed goods, etc.
- Limit drinks with HFCS; if used, drink less than the recommended serving size, e.g., less than 12 oz of soda (may help to drink with a meal).
- Check medications for fructose and sorbitol. They are not always listed on the label, so check with your pharmacist or manufacturer.
- Keep in min the amount of fructose found in 2 apples or 2oz of honey is the same fructose in 1 can of soda.
- Follow guidelines below of fruits, vegetables, and other foods that are friendlier to your intestines.

Fruits:

- Serving size is ½ cup- recommend 1 to 2 cups per day.
- Fresh or fresh frozen fruit may be better tolerated than canned fruit.
- Keep in mind tolerance may depend on the amount you eat at one time
- The following recommended foods to avoid, should not be eaten because of their high fructose contest. There are otherwise healthy foods.

Intestine Friendly	Foods to Avoid	Questionable Foods/Limit
Pineapples, Strawberries, raspberries, blackberries, lemons, limes, avocado, bananas*, rhubarb, orange	Prunes, pears, cherries, peaches, apples, plums, applesauce, apple juice, pear juice, apple cider, grapes, dates	Other fruit juices or drinks Sugar-free jam/jelly Dried fruit Canned fruit in heavy syrup Other fruit

Vegetables:

- Serving size is ½ cup, 1 cup leafy green vegetables – recommend 1 ½ to 3 cups per day.
- Cooked vegetables may be tolerated best as cooking causes the loss of free sugars.
- Keep in mild tolerance may depend on the amount you eat at one time.

Intestine Friendly	Foods to Avoid	Questionable Foods/Limit
Asparagus, cauliflower*, green peppers*, Broccoli*, leafy greens, celery, mushrooms, white potatoes, shallots, spinach, pea pods, Cucumber*, beans*, other root vegetables	None	Tomatoes, corn, carrots, sweet potatoes

Other:

Intestine Friendly	Foods to Avoid	Questionable Foods/Limit
• All meats • All fats • All dairy • All eggs • All beans* • Aspartame (Equal and NutraSweet), Saccharin (Sweet ‘n Low) • Sucrose (table sugar)	• Honey • Flavorings with fructose or sorbitol • Desserts (ice cream, candy, cookies, bars) sweetened with fructose or sorbitol • Cereal or other processed foods with sorbitol or fructose on the label	• Sugar-free gum and mints • Limit products with HFCS if symptoms still continue

*Possible gas forming foods may need to be avoided