

28-DAY CLEANSE

HAPPY GUT

GUT C.A.R.E.™

by Dr. Vincent Pedre

The Low FODMAPs Diet

Symptoms of abdominal pain, gas, bloating, flatulence, burping, constipation and/or diarrhea are commonly present in various gastrointestinal disorders but are hard to treat and minimize symptoms. Often these symptoms are called Irritable Bowel Syndrome (IBS). If you have IBS or a constellation of chronic GI complaints for which no other disease or condition has been identified, consider a diet low in fermentable oligo-, di-, and monosaccharides and polyols (FODMAPs). This is a diet that limits, but does not eliminate, foods that contain:

- Lactose
- Fructose
- Fructans
- Galactans
- Sugar alcohols (polyols)

These compounds in food are poorly absorbed, highly osmotic and rapidly fermented by GI bacteria, leading to increased water and gas in the GI tract, which then leads to GI tract distention that causes changes in GI motility, bloating, discomfort and flatulence.

To assess your tolerance for these compounds, eliminate foods high in FODMAPs for 6-8 weeks and then gradually reintroduce foods to identify bothersome foods. Reintroduce one food every four days with a 2-week break between bothersome foods. The goal is to identify the threshold at which you are able to consume FODMAP containing foods without causing bothersome GI symptoms.

LACTOSE

Lactose is the carbohydrate found in cow's, sheep's, and goat's milk. Lactose intolerance is caused by partial or complete lack of the enzyme lactase which digests lactose. When lactose is not completely digested, it contributes to abdominal bloating, pain, gas, and diarrhea, often occurring 30 minutes to two hours following the consumption of milk and milk products.

Limit foods high in lactose such as yogurt, ice cream, milk, and ricotta and cottage cheeses. See FODMAPs in Food table.

FRUCTOSE

Fructose is a carbohydrate found in fruit, honey, high-fructose corn syrup (HFCS), and agave syrup, but not all fructose containing foods need to be limited on a low FODMAPs diet. Fructose malabsorption is similar to lactose intolerance, in that fructose is not completely digested in the GI tract due to the lack of an enzyme, but unlike lactose intolerance the absorption of fructose is dependent on another carbohydrate, glucose. Therefore, fructose-containing foods with a 1:1 ratio of fructose to glucose are generally well tolerated on the FODMAPs diet and conversely, foods with excess fructose compared with glucose, such as apples, pears, and mangos, will likely trigger abdominal symptoms.

Limit foods with excess free fructose, see FODMAPs in Food table.

FRUCTANS

Fructans are carbohydrates that are completely malabsorbed because the intestine lacks an enzyme to break their fructose- fructose bond. For this reason, fructans can contribute to bloating, gas, and pain. Wheat accounts for the majority of people's fructan intake.

Limit wheat, onions and garlic along with other vegetables high in fructans, see FODMAPs in Food table.

GALACTANS

Galactans are carbohydrates are malabsorbed for the same reason as fructans; the intestine does not have the enzyme needed to break down galactans. Consequently, galactans can contribute to gas and GI distress.

Limit beans and lentils. See FODMAPs in Food table.

POLYOLS

Polyols are also known as sugar alcohols. They are found naturally in some fruits and vegetables and added as sweeteners to sugar-free gums, mints, cough drops, and medications. Sugar alcohols have varying effects on the bowel.

Limit sugar alcohols, sorbitol, xylitol, mannitol and maltitol. See FODMAPs in Food table.

FODMAPS ELIMINATION AND CHALLENGE

Use the table below to guide your choices. Eliminate foods high in FODMAPs for 6-8 weeks. You should notice an improvement in your GI complaints within one week of following a low FODMAP diet. Follow a low FODMAP diet for a full 6-8 weeks before assessing its effectiveness and reintroducing foods high in FODMAPs. At that time you will work with your Nutrition Counselor to reintroduce one test food every four days; if you react to a food, do not test another food for two weeks.

Foods that are high in FODMAPs may aggravate your GI complaints but they are not causing an allergic reaction or an autoimmune reaction in your body. The foods high in FODMAPs that elicit GI symptoms are causing functional discomfort in your gut that result in gas, bloating, distention etc.

These are the test foods for each category:

- Lactose: 1/2 - 1 cup milk
- Fructose: 1/2 mango or 1-2 teaspoons honey
- Fructans: 2 slices wheat bread, 1 garlic clove or 1 cup pasta
- Galactans: 1/2 cup lentils or chickpeas
- Sugar alcohols (polyols): Sorbitol, 2-4 dried apricots; Mannitol, 1/2 cup mushrooms

You will work with your Nutrition Counselor to determine the order of challenge and which foods to use.

FODMAPs In Food

MILK

HIGH IN FODMAPS

Milk: Cow, Sheep, Goat, Soy
Creamy soups made with milk
Evaporated milk
Sweetened condensed milk

LOW IN FODMAPS

Milk: Almond, Coconut, Hazelnut, Hemp, Rice
Lactose free cow's milk
Lactose free keifer
Lactose free ice cream (non-dairy alternatives)
Purchase lactase enzyme to make your own evaporated or condensed milk if needed

YOGURT

HIGH IN FODMAPS

Cow's milk yogurt (Greek yogurt is lowest in FODMAPs)
Soy yogurt

LOW IN FODMAPS

Coconut milk yogurt

CHEESE

HIGH IN FODMAPS

Cottage cheese
Ricotta cheese
Marscapone cheese

LOW IN FODMAPS

Hard cheeses including cheddar, Swiss, brie, blue cheese, mozzarella, parmesan, and feta
No more than 2 tablespoons ricotta or cottage cheese
Lactose free cottage cheese

DAIRY-BASED CONDIMENTS

HIGH IN FODMAPS

Sour cream
Whipping cream

LOW IN FODMAPS

Butter
Half and half
Cream cheese

DAIRY-BASED DESSERTS

HIGH IN FODMAPS

Ice cream
Frozen yogurt
Sherbet

LOW IN FODMAPS

Sorbet from FODMAPs friendly fruit

FRUIT

HIGH IN FODMAPS

Apples, Pears
Cherries, Raspberries, Blackberries
Watermelon
Nectarines, White peaches, Apricots,
Plums, Peaches
Prunes
Mango, Papaya
Persimmon
Orange juice
Canned fruit
Large portions of any fruit

LOW IN FODMAPS

Banana
Blueberries, Strawberries
Cantaloupe, Honeydew
Grapefruit, Lemon, Lime
Grapes
Kiwi
Pineapple
Rhubarb
Tangelos
< 1/4 avocado
< 1 tablespoon dried fruit
Limit consumption to one low
FODMAPs fruit per meal Consume
ripe fruit; firm, less-ripe fruit contains
more fructose

VEGETABLES

HIGH IN FODMAPS

Artichokes
Asparagus
Sugar snap peas
Cabbage
Onions
Shallot
Leek
Onion and garlic salt powders
Garlic
Cauliflower
Mushrooms
Pumpkin
Green peppers

LOW IN FODMAPS

Bok choy, Bean sprouts
Red bell pepper
Lettuce, Spinach
Carrots
Chives, Spring onion (green part only)
Cucumber
Eggplant
Green beans
Tomato
Potatoes
Garlic infused oil; sauté onion and garlic in oil and then discard onion and garlic
Water chestnuts
< 1 stick celery
< 1/2 cup sweet potato, broccoli, Brussels sprouts, butternut squash, fennel
< 10 snow peas

LEGUMES

HIGH IN FODMAPS

Chickpeas, Hummus
Kidney beans, Baked beans
Edamame, Soy milk
Lentils

LOW IN FODMAPS

Tofu
Peanuts
< 1/3 cup green peas

GRAINS

HIGH IN FODMAPS

Wheat

Rye

Barley-large quantities

Spelt

LOW IN FODMAPS

Brown rice

Oats, oat bran

Quinoa

Corn

Gluten-free bread, cereals, pastas and crackers without honey, apple/pear juice, agave or HFCS

Namaste Food Perfect Flour Blend or King Arthur Gluten Free Multi-Purpose Flour

NUTS AND SEEDS

HIGH IN FODMAPS

Pistachios

LOW IN FODMAPS

10-15 max or 1-2 tablespoons

Almonds, Macadamia, Pecans, Pine nuts, Walnuts Pumpkin seed, Sesame seeds, Sunflower seeds

SWEETENERS

HIGH IN FODMAPS

Honey

Agave

High fructose corn syrup

Sorbitol, Mannitol, Xylitol, Maltitol
Splenda (may alter friendly gut flora)

LOW IN FODMAPS

Sugar

Glucose, Sucrose

Pure maple syrup

Aspartame

ADDITIVES

HIGH IN FODMAPS

Inulin

FOS (fructo-oligosaccharides) Sugar alcohols (see sweeteners)

Chicory root

LOW IN FODMAPS

ALCOHOL

HIGH IN FODMAPS

Rum

LOW IN FODMAPS

Wine, Beer

Vodka, Gin

Limit to one serving as all alcohol is a gastric irritant

PROTEIN-RICH FOOD

HIGH IN FODMAPS

LOW IN FODMAPS

Fish, Chicken, Turkey, Eggs, Meat

FAT-RICH FOOD

HIGH IN FODMAPS

LOW IN FODMAPS

Olive and canola oil

Olives

< 1/4 avocado

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Low FODMAP Menu Options

BREAKFAST

- Erewhon Corn Flakes or oats, with rice or almond milk, banana and 1 tablespoon sliced almonds
- McDonald's or Starbucks oatmeal with 1 tablespoon dried fruit and nuts
- Quinoa flakes with rice or almond milk, 1/2 cup strawberries and 1 tablespoon pecans

LUNCH

- Udi's white bread sandwich with sliced turkey, lettuce or spinach leaves, tomato, sliced cheddar cheese and Green Valley lactose-free vanilla yogurt, 1/2 cup blueberries and baby carrots
- Stir fry with brown rice or rice noodles, chicken, shrimp or beef, peppers and bok choy, ask for no onion or garlic and the sauce on the side
- Fruit salad with 1 cup (total) low FODMAP fruits, kiwi, strawberries and blueberries, spinach salad with lemon dressing and cherry tomatoes, and brown rice cakes with natural almond butter

SNACK

- Glutino pretzels or Blue Diamond Almond Nut thins and mozzarella string cheese
- Hard boiled egg and cherry tomatoes
- Pumpkin seeds
- Brown rice cakes with natural peanut butter
- Banana and handful almonds
- 1 stick celery with natural almond butter or,
- Carrots and red pepper dipped in tahini

DINNER

- Grilled chicken or salmon with baked sweet potato with olive oil or butter, sautéed spinach and red peppers seasoned with green parts of onion, salt, pepper, handful of pine nuts and olive oil, and a kiwi
- Wendy's baked potato and a side salad with chicken, bring your own homemade salad dressing that does not contain garlic or onion
- Sushi

Menu ideas adapted from Today's Dietitian, March 2012

ONLINE RESOURCES FOR MORE INFORMATION

www.katescarlata.com

www.ibsfree.net

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