Low FODMAP diet

What is FODMAP?

- **F** <u>fermentable</u> (bacteria like to eat these)
- **O** <u>o</u>ligosaccharides (fructans and galacto-oligosaccharides GOS)
- **D** <u>d</u>isaccharides (lactose, or milk sugar)
- M monosaccharides (fructose)
- **A -** <u>a</u>nd
- P polyols (sugar alcohols such as sorbitol)

This acronym is used to describe a specific group of carbohydrates that are poorly absorbed in the small intestine and can often cause symptoms such as excess gas, bloating, and diarrhea in certain individuals with Irritable Bowel Syndrome (IBS) and other functional bowel disorders.

Bacteria in the colon feed off the undigested carbohydrate, creating excess gas and more bloating. The extra water from the small intestine can result in diarrhea after passing through the colon.



Poorly absorbed carbohydrates draw water into the small intestine. This can cause: bloating, cramping, nausea.

FODMAP tolerance:



All FODMAPs have the potential to cause unwanted symptoms. Yet, the degree in which FODMAPs are tolerated varies from person to person. An individual's physical response to certain FODMAPs depends on their own personal level of sensitivity. Therefore, some FODMAP groups may trigger symptoms while others might not.

Think of the small intestine as a bucket. Each person has their own size bucket, or unique tolerance for FODMAP carbohydrates. FODMAPs have a cumulative effect. That is, the **amount**, not just the type of FODMAP consumed matters. When FODMAP intake exceeds the amount the "bucket" can hold (the small intestine's capacity for digestion and absorption), it overflows into the large intestine. This may lead to gas, bloating, and diarrhea.

Following the Diet

Is a low FODMAP diet right for you?

It is important to understand that IBS and other functional bowel disorders are not caused by eating FODMAPs, therefore eliminating FODMAPs from the diet will not cure a disease or disorder. A low FODMAP diet aims to minimize gastrointestinal symptoms by removing common high FODMAP foods and replacing them with low FODMAP alternatives. This diet may not be appropriate for everyone. It is intended to be a *short-term diet* and is usually followed for six weeks or less. It is *not* to be used as permanent diet solution. Before beginning a low FODMAP diet, first consult your healthcare provider to eliminate other causes of your symptoms. Low FODMAP diets have shown to be most successful for persons who have:

- □ An official diagnosis of Irritable Bowel Syndrome (IBS), Inflammatory Bowel Disease (IBD), or other functional bowel disorder with symptoms of excess gas, bloating, abdominal pain, diarrhea/constipation, etc.
- □ Tried and failed standard therapy (high-fiber diet, increased fluid intake, increased exercise, etc).
- □ Ruled out celiac disease as a possible diagnosis. This is important as restricting wheat from the diet will affect the accuracy of future celiac testing.
- □ Regular or irregular intake of high FODMAP foods.
- □ The desire and ability to modify their diet.

FODMAP Elimination diet:

A FODMAP elimination diet consists of three phases:

• Elimination phase: all FODMAPs are eliminated from the diet for approximately 2-6 weeks.

• **Challenge phase:** the body is challenged by reintroducing FODMAPs into the diet in an organized way. Symptoms are observed and problematic FODMAPs are identified.

• Final phase: problem FODMAPs are incorporated back into the diet as tolerated.

Enlist the help of a Registered Dietitian:

If it is determined that a low FODMAP diet would be beneficial to you, consulting a Registered Dietitian (RD) who specializes in gastrointestinal nutrition can increase the likelihood of your success. The RD will help to identify major FODMAP culprits in your diet and develop an individualized diet plan centered around your eating habits and food preferences to improve both symptoms and quality of life. Often times in an attempt to ease symptoms, individuals tend to be overly restrictive with their diet. This leads to nutritional deficiencies. The goal of the FODMAP approach is to manage symptoms while allowing for the most varied and nutritious diet possible.

The following lists indicate the FODMAP content of many foods.

- The foods under the "AVOID" category contain the highest amount of FODMAP and are more likely to cause gastrointestinal symptoms such as bloating, excessive gas, abdominal pain, constipation and/or diarrhea.
- The foods listed under the "LIMIT" category may have a smaller than typical portion size; be sure to follow these guidelines to keep your symptoms away when choosing these foods.
- The foods in the "ALLOWED" category contain the least amount or no FODMAPs and should make up the majority of your diet while in the elimination phase of this diet.

FRUIT	AVOID	LIMIT	ALLOWED - 1/2 cup only
	Apple	Avocado, 1/8th	Banana, firm
	Apricot	Blueberries, 1/4 cup	Cantaloupe
	Banana, ripe	100% cranberry juice, 4 oz	Clementine
	Blackberries		Cranberries, raw
	Boysenberry		Grapes
	Canned fruit		Honeydew melon
	Cherries		Kiwi
	Dried fruit		Lemon
	Fruit juice		Lime
	Fig		Mandarin orange
	Grapefruit		Orange
	Mango		Рарауа
	Nectarine		Pineapple
	Peach		Raspberries
	Pear		Rhubarb
	Persimmon		Strawberries
	Plum		Tangelo
	Pomegranate		
	Watermelon		

Content adapted from: University of Michigan Division of Gastroenterology and Hepatology; Monash University; & "IBS-Free At Last" Second Edition, by Patsy Catsos

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VEGETABLE	AVOID	LIMIT	ALLOWED
VEGETABLE	Artichoke	Broccoli, 1/2 cup	Alfalfa sprouts
	Asparagus	Butternut squash, 1/3 cup	Arugula
	Beets	Cabbage, 1/2 cup	Bamboo shoots
	Brussels sprouts	Celery, 1/4 stalk	Bean sprouts
	Cauliflower	Fennel, 1/2 cup	Bell pepper, any color
	Garlic	Leek, leaves only	Bok choy
		Okra, 6 pods	Carrots
	Green peas Mushrooms		
		Sweet corn, 1/2 cob	Cherry tomatoes
	Onion	Sweet potato, 1/2 cup	Chili pepper
	Sauerkraut	Tomato, canned, 1/2 cup	Collard greens
	Snow peas	Tomato juice, 1/2 cup	Cucumber
	Sugar snap peas	Zucchini, 1/3 cup	Eggplant
	Sun dried tomato		Green beans
	Tomato paste		Kale
			Lettuce, any variety
			Parsnip
			Pickle, dill or sour
			Potatoes
			Pumpkin
			Radish
			Seaweed/nori
			Scallion, green top
			Spinach
			Summer/yellow squash
			Swiss chard
			Tomato, fresh
			Turnip
			Water chestnuts

	AVOID	LIMIT	ALLOWED
GRAINS	All-purpose flour	Amaranth, 1/2 cup	Buckwheat flour
	Barley	Breakfast cereal made	Oat bran
	Baked goods made with	with rice, corn, 1/2 cup	Oat flour
	wheat flour	Oatmeal, 1/2 cup	Gluten-free bread*
	Bran flakes	Sourdough bread, 1 slice	Gluten-free cereal*
	Bread - white, wheat, rye		Gluten-free pretzels
	and multigrain		Gluten-free crackers*
	Bulgar wheat		Grits
	Cereals made with wheat,		Corn, rice or quinoa pasta
	rye and barley		Corn tortillas
	Couscous		Corn tortilla chips
	Crackers made with wheat		Cornmeal
	Enriched flour		Millet
	Graham flour		Polenta
	High fiber bread, cereal or		Popcorn
	granola bar made with		Potato
	chicory root/inulin		Potato chips
	Pasta		Quinoa
	Rye		Rice cakes
	Semolina flour		Rice (brown, white, wild)
	Sprouted wheat		Rice bran
	Wheat berries		
	White flour		*with appropriate
	Whole wheat flour		sweeteners
MEAT	AVOID	LIMIT	ALLOWED
	Meat with breading from		Beef
	wheat or rye		Buffalo
	Sauces and marinades		Chicken
	with		Duck
	agave syrup, fructose, high fructose corn syrup,		Egg
	honey, and molasses		Fish, any kind
	Meat seasoned with		Lamb
	onion and garlic powder		Pork
			Seafood/shellfish
			Turkey
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DAIRY	AVOID	LIMIT	ALLOWED
&	Buttermilk	American cheese, 1 oz	Cheese: brie, chambert
DAIRY	Cottage cheese	Goat cheese, 1 oz	cheddar, Colby, feta,
SUBSTITUTES	Cream cheese	Coconut milk, 4 oz	Havarti, mozzarella, Swiss
	Custard	Yogurt, Greek, 4 oz	parmesan
			Cottage cheese, lactose
	Dry milk solids	-	free
	Eggnog	-	Dry curd cottage cheese
	Evaporated milk	-	Kefir
	Half and half	-	Milk, lactose-free
	Ice cream	-	Almond milk
	Milk (cow, goat, sheep)		Rice milk
	Ricotta cheese		Yogurt, lactose-free*
	Sour cream		
	Sweetened condensed milk		*with appropriate
	Yogurt		sweetener
PLANT	AVOID	LIMIT	ALLOWED
PROTEINS	Baked beans	Chickpeas, 1/4 cup	Quorn
(Legumes)	Black beans	Lentils, canned, 1/2 cup	Tempeh
	Butter beans		Tofu, firm
	Fava beans		
	Kidney beans		
	Lima beans		
	Navy beans		
	Soy beans/edamame		
	Split peas		
	White beans		
NUTS	AVOID	LIMIT	ALLOWED
	Cashews	Almonds, 10 total	Almond butter
	Pistachios	Hazelnuts, 10 total	Macadamia nuts
			Peanuts
			Peanut butter*
			Pecans
			Pine nuts
			Seeds (chia, flax, pumpkin
			sesame, sunflower, Sunbutter)
			Walnuts
			*with appropriate sweetener
ontont adapted	from: University of Michigan	Division of Gastroenterology	

FATS/OILS	AVOID	LIMIT	ALLOWED
	Miracle Whip	Coconut cream, 1/2 cup	Butter
	Most commercial salad		Margarine
	dressing		Mayonnaise, real
			Oils: canola, coconut,
			olive, peanut, sesame,
			soybean, sunflower and
			vegetable
			Garlic-infused olive oil
BEVERAGES	AVOID	LIMIT	ALLOWED
	Chai tea (with chicory root)	Beer, 12 oz	Black tea
	Chamomile tea (w/ chicory root)	Chai tea, weak	Coffee
	Fennel tea	Coconut water, 4 oz	Espresso
	Oolong tea	Coconut milk, 4 oz	Green tea
	Rum	Dandelion tea, weak	Peppermint tea
	Soda, made with HFCS	Herbal tea, weak	White tea
	Soy milk	Spirits (gin, vodka, whiskey,	
		scotch), 1 shot	
		Wine, 4-6 oz	
SEASONINGS	AVOID	LIMIT	ALLOWED
	Chicory root, extract or fiber	Cocoa powder, 1 tbsp	Baking powder
	Chipotle chili, dried	Vinegar, balsamic, 1 tbsp	Baking soda
	Garlic salt and powder		Baker's yeast
	Hydrogenated starch		Cinnamon
	hydrolysates		Corn starch
	Inulin		Cumin
	Onion salt and powder		Dry mustard powder
			Fish sauce
			Five spice
			Ginger
			Ground chili powder
			Guar gum
			Herbs, fresh and dried

SWEETENERS

AVOID	LIMIT	ALLOWED
Agave syrup	Chocolate, dark, 1 oz	Baker's sugar
Carob powder	Chocolate, semi-sweet, 1 oz	Beet sugar
Erythritol	Jam/jelly*, 1.5 tablespoon	Brown sugar
Fructooligosaccharide (FOS)	Sorbet*, 1/2 cup	Brown rice syrup
Fructose		Cane sugar
Fructose solids		Cane syrup
Fruit juice concentrate		Confectioner's sugar
High fructose corn syrup		Corn syrup
Honey		Corn syrup solids
Isomalt		Dextrose
Lactitol		Glucose
Maltitol		Glucose syrup
Mannitol		Gluten-free baked goods*
Molasses		Golden syrup
Polydextrose		Granulated sugar
Sorbitol		Ice cream, lactose-free*
Sugar cane fiber		Maltodextrin
Xylitol		Maltose
		Palm sugar
	*with appropriate	Pure maple syrup
	sweetener	Raw sugar
		Sucrose

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LOW FODMAP MEALS

BREAKFAST

½ c. oatmeal ½ c. fresh berries 1-2 Tbsp walnuts Lactose-free milk

Cold cereal: Rice Krispies, Corn flakes, Corn or Rice Chex, Or Cheerios 1 medium banana Lactose-free milk

GF pancakes/waffles 2 Tbsp pure maple syrup 2 sausage patties Lactose-free milk

LUNCH & DINNER

Plain/salted potato chips

Mayonnaise

½ cup grapes

Sandwich: GF or sourdough bread,

Deli turkey, cheese, lettuce, tomato,

2 eggs GF or sourdough toast ½ c. cantaloupe Coffee or tea

GF or sourdough bread 2 Tbsp peanut butter Lactose-free yogurt 4 oz. 100% cranberry juice

Smoothie with: Lactose-free yogurt, ½ banana, ¼ c. strawberries ice cubes

Homemade chicken & rice soup Rice crackers ½ cup mandarin oranges Hashbrowns 1 orange

Egg omelet w/ cheese,

spinach, and tomatoes

Cream of rice cereal w/ 1 tsp brown sugar ¼ cup blueberries Coffee or tea

Quesadilla: corn tortilla chicken, cheese, tomato 2 Tbsp avocado Baby carrots

baked potato w/ butter

Grilled chicken

roasted carrots

Tossed salad with chicken/tuna, Cucumber, tomato, carrot, feta, Olive oil and balsamic vinegar Rice cakes 2 kiwi fruit Firm tofu sautéed with bok choy, carrots, red bell pepper, broccoli, green tops of scallion soy sauce and ginger white or brown rice

GF mac and cheese (made w/ Lactose-free milk) Sautéed spinach Baked pork chop ½ cup sweet potato tossed salad with tomato and Cucumber, olive oil/vinegar Grilled fish Quinoa w/ sautéed celery, broccoli, carrots

¹/₂ cup raspberries

LOW FODMAP PRODUCTS

CEREALS

- □ Cheerios (plain, multigrain)
- □ Chex (corn, rice)
- □ Erewhon (cinnamon, harvest)
- □ Kellogg's Rice Krispies
- KIND granola (maple, PB, banana nut)
- Nature's Path granola
- Nature's Path Envirokidz (Gorilla Munch, Panda Puffs)

GRAINS/PASTA

- Ancient Harvest quinoa pasta
- DeLallo GF potato gnocchi
- Gluten-free pasta
- Uncle Ben's Ready Rice
 (Basmati, brown and Jasmine)

SNACKS & SWEETS

- 88 Acres Dark Chocolate & Sea Salt bar
- Aleia's (almond cookie, PB cookie)
- Annie's Chewy chocolate chip bar
- Blue Diamond Almond Nut Thins
- Bobo bars (choc chip, banana)
- Go Macro bar (peanut butter, banana)
- Good Thins rice crackers
- Gum Chiclets, Double Mint and Juicy Fruit
- Justin's Dark Chocolate PB Cups
- Kettle Baked Potato Chips (sea salt)
- Lundberg Rice Chips (sea salt)
- Mary's Gone Crackers (original)
- Nature Valley Crunchy bars (pecan, peanut butter, maple brown sugar)
- Outshine frozen fruit bar
- Rice Cakes
 - Simply Gum (mint, cinnamon, ginger)
- Snyder's GF pretzels
- Tate's Bakeshop GF cookies (chocolate chip, ginger, double chocolate chip)
- Tostitos tortilla chips (plain)

CONDIMENTS & SAUCES

- □ Casa de Sante products
- Christo's Yasou Greek dressing
- Dijon mustard (French's, Grey Poupon)
- □ Hellman's mayonnaise
- Prego Sensitive marinara
- Rao's Sensitive marinara
- Texas Pete's Buffalo Wing sauce
- Wishbone Balsamic
 Vinaigrette

BEVERAGES

- Hansen's Natural soda
- Honest tea (lemon, half & half)
- □ LaCroix sparkling water
- Newman's Own lemonade
- R.W. Knudsen Just Cranberry juice
- Tazo Chai classic tea
- Simply Lemonade
- □ Silk Almond creamer
- Yoplait Lactose-free yogurt

ADDITIONAL ITEMS:

HELPFUL RESOURCES

Online help



Monash University phone app

University of Michigan Health System

http://www.myginutrition.com/fodmaps.html



Paperbacks



By: Sue Shepherd



By: Kate Scarlata



By: Danielle Capalino

Low FODMAP Food Companies



https://www.fodyfoods.com/



https://www.rachelpaulsfood.com/

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