



Abbreviated FODMAP Reintroduction

Congratulations! You've successfully completed the elimination phase of the SIBO Specific Diet. You are now ready to begin challenging the foods you've worked so hard to eliminate. Please read the following instructions to learn how to begin food challenge and reintroduction.

For reintroduction, **ONE** new food from only **ONE** carbohydrate category will be challenged for a period of 4 days total. The serving size of the challenged food will increase over two days. Dose dependent reactions may occur, so start with a moderate portion on day one and increase the portion size the next day. After the challenge, you will return to the green column for 2 days. This "washout period" between food challenges can help ensure symptoms are not a result of overlap between food categories. This period will also give your body a rest from any residual fermentation.

Again, only one food from each category needs to be chosen, as people will often respond similarly to foods in the same category. For example, both mushrooms and cauliflower are in the mannitol category, so if you respond poorly to mushroom, you will probably have a similar reaction to cauliflower and other mannitol-containing foods, like celery.

If you don't experience symptoms on the first day, that is good. Increase the amount you are testing the next day. After the second challenge day, wait and observe for symptoms for 2 days. If no reaction, proceed to the next FODMAP group. Regardless of a reaction, **do not** keep the tested food in your diet for the remainder of the reintroduction period (even if it did not cause you symptoms). This simply minimizes potential complications and "stacking" of FODMAPs during the process.

If you develop symptoms (i.e. diarrhea, gas, bloating, abdominal pain, etc) to a certain group at any point during the challenges, wait until you are symptom free for at least 3 days. Once feeling better, either reduce the serving size by half and re-challenge OR try another food from within the same FODMAP group to confirm the results of the first challenge. Alternatively, you may assume that FODMAP is a trigger for you and challenge the next FODMAP group of your choice, after symptoms resolve. You can always re-challenge the food that caused issues at a later time to confirm that it is a culprit for you.

NOTE: Fructans such as onions and garlic, may cause a buildup and cause severe symptoms if introduced consecutively. To avoid this, when introducing onions and garlic, **introduce them every other day over the course of a week**, instead of 4 days.

To summarize, you will challenge a FODMAP food group for 2 days and then wait for 2 days ("washout period") to observe for symptoms. The exception to this rule is garlic and onions, which need to be introduced every other day, over a week-long period. During the washout period, adhere to low FODMAP diet (green column). This will be repeated until all food groups have been tested. If you develop symptoms, continue a low FODMAP diet until you are symptom free. Then either re-challenge that same food in a smaller amount, challenge a different food in that food group, OR challenge a different food group.

Once all food groups have been successfully reintroduced, you can now consume normal serving sizes. However, if triggers were identified, please avoid these foods.

Tips for FODMAP Challenge

- Track your diet and symptoms in a journal during the challenge phase to help define your reactions to food.
- Test only one FODMAP subgroup at a time. Do not challenged multiple carbohydrate subgroups.
- Test the food you are challenging as part of a meal, as it may be tolerated better with other food rather than by itself. This can be done as long as there are no other FODMAPs in the meal.
- If a food contains two different FODMAP components, this should not be reintroduced until later. For example, pears contain high amounts of both fructose and polyols, so if they elicit symptoms you will not know if fructose or a polyol is an offending factor. Foods like apples and pears are not good choices for the first round of food challenges, as it will be too difficult to discern which category of foods is responsible for symptoms.
- Note that portion sizes are listed as raw food measurements, but you can serve them cooked. To do this, eat only the cooked raw amount. For example, if you want to challenge mannitol, start with ¼ cup raw portobello mushroom. If cooked, the mushrooms will reduce in volume, but only eat the cook amount that began as ¼ cup raw.
- If one food in a subgroup causes symptoms, it is possible that another food in that subgroup will as well. For example, if leeks cause symptoms, garlic and onions probably will too because they contain similar amounts of fructans.
- If you experience minor, but not painful symptoms (i.e. you feel a gas bubble), note this symptom in your journal. However, this symptom should not be considered as a failed FODMAP challenge. See below for symptoms of a failed challenge.
- When introducing fructans, introduce food every other day over the course of a week. For example, introduce on Monday, Wednesday, and Friday, and eat from the green column on Tuesday, Thursday, and Saturday.
- If you pass a food challenge, congrats! However, do not add that food or other foods in that subgroup until all challenges are complete. All challenge must be done while you remain on the low FODMAP diet, as FODMAPs are additive.
- Lastly, the large portion size stated on Day 2 of each challenge is meant to challenge your digestive system. However, if you typically do not eat that amount in one sitting, go ahead and challenge the largest amount you would eat in one sitting. For example, the large serving size for avocado is one whole avocado. However, that is a lot of avocado (and a lot of calories)! If the maximum portion size you would eat in one sitting is ½ avocado, go ahead and challenge that amount (1/2 avocado) for both days of the challenge.

What are symptoms of a failed challenge?

A failed FODMAP challenge consists of uncomfortable symptoms such as diarrhea, cramping, bloating, constipation, or a return of symptoms that you experienced prior to the elimination phase.

If when challenging these high FODMAP foods you experience undesirable symptoms, please let the Peak Nutritionist know immediately. In addition, stop the challenge and resume a low FODMAP (green column) diet until your symptoms subside and you have been symptom free for 3 days.

FODMAP Group Challenge Schedule

*Do not introduce a group if you know you have a sensitivity to that food OR you are avoiding that food. For example, grains and dairy. Unless otherwise stated, **only choose one of the foods** in each food group to challenge. Do not choose multiple foods unless it is otherwise stated. You may introduce in any order.*

Groups 1: Fructan Vegetables- Onion (Oligosaccharides)

- 1 tablespoon raw onion increasing to 3 tablespoons of onion, 3-day introduction

Groups 2: Fructan Vegetables- Garlic (Oligosaccharides)

- ½ clove of raw garlic increasing to 1 ½ clove of garlic, 3-day introduction

Group 3: Sorbitol (Polyols) - choose one

- 1/2 of an avocado increasing to a whole avocado **-or-**
- 5 blackberries increasing to 10-15 blackberries **-or-**
- ½ medium yellow peach increasing to 1 medium yellow peach

Group 4: Fructose - choose one

- 1 Tbsp honey increasing to 2 Tbsp honey **-or-**
- 1/2 of a medium-sized mango increasing to a whole medium-sized mango **-or-**
- 15 raw sugar snap peas increasing to 25 sugar snap peas

Group 5: Mannitol (Polyols) - choose one

- ½ cup raw cauliflower increasing to 1 cup of cauliflower **-or-**
- ½ cup sliced button mushrooms increasing to 1 cup sliced button mushrooms **-or-**
- ½ cup raw sweet potato increasing to 1 cup raw sweet potato

Group 6: Galactans (Oligosaccharides) - choose one

- ½ cup cooked kidney or black beans increasing to 1 cup cooked kidney or black beans **-or-**
- 15 almonds increasing to 25 almonds

Groups 7: Fructan Fruit (Oligosaccharides) - choose one

- ½ grapefruit increasing to 1 medium-sized grapefruit **-or-**
- 2 dried dates increasing to 4 dried dates **-or-**
- 1/3 cup pomegranate seeds increasing to ½ cup pomegranate seeds

Group 8: Lactose (Disaccharides) *Optional- Note: 3 day introduction*

- ¼ cup plain yogurt or milk increasing to 1 cup plain yogurt or milk
 - Note if you know you are sensitive to dairy, first challenge lactose-free yogurt to isolate the protein, A1 casein. Instructions are on the last page or see video on Client Center. If you do not have a history of dairy sensitivity, then challenge normal yogurt or kefir first.

Group 9: Fructan Cereal or Grain (Oligosaccharides) *Optional- challenge if you are approved to consume grains*

- ½ cup puffed rice cereal (Rise Krispies cereal) increasing to 1 cup puffed rice cereal **-or-**
- *Wheat bread may be challenged on a case by case basis- see challenge schedule*

Note: Foods do not have to be consumed raw, they may be cooked. If a raw serving size is stated, cook the raw amount specified (i.e. ½ cup raw sliced button mushrooms) and consume for the challenge.

Please see the next page for a simple breakdown of the FODMAP food groups. Use the Monash University App for a comprehensive list of FODMAP content.

FODMAP Subgroup Challenge Template

There is no particular order to reintroduction, you may introduce in any order you'd like.

Abbreviated Reintroduction Outline	
Day 1	Introduce a moderate FODMAP serving Consume a moderate FODMAP portion of the chosen FODMAP food. No symptoms: Proceed to the next day. If this serving gives you symptoms, do not proceed. Wait until symptoms clear, then either try a new FODMAP group OR introduce a different food in that same FODMAP category.
Day 2	Introduce a high FODMAP serving Consume a high FODMAP portion of the chosen FODMAP food. No symptoms: Great- you likely tolerate this food. Move on to the “washout” period. If this serving gives you symptoms, wait until symptoms clear and try reintroduction again OR move on to a new FODMAP group. If still symptomatic after 2 nd challenge, you may only tolerate small to medium portions of this group OR this food is a trigger.
Day 3	Washout Day Eat from the green column only! Take the day off to let your body recover, do not include any reintroduced FODMAP group, even if the challenge was successful.
Day 4	Washout Day Eat from the green column only! If you have been symptom free for at least 2 days, you can begin a new FODMAP group to challenge.
Day 5	*NEW FOOD* Introduce a moderate FODMAP serving Consume a moderate FODMAP portion of the chosen FODMAP food. No symptoms: Proceed to the next day. If this serving gives you symptoms, do not proceed. Wait until symptoms clear, then either try a new FODMAP group OR introduce a different food in that same FODMAP category.
Day 6	Introduce a high FODMAP serving Consume a high FODMAP portion of the chosen FODMAP food. No symptoms: Great- you likely tolerate this food. Move on to the observation period. If this serving gives you symptoms, wait until symptoms clear and try reintroduction again OR move on to a new FODMAP group. If still symptomatic after 2 nd challenge, you may only tolerate small to medium portions of this group OR this food is a trigger.
Day 7	Washout Day Eat from the green column only! If you have been symptom free for at least 2 days, you can begin a new FODMAP group to challenge.
Day 8	Washout Day Eat from the green column only! If you have been symptom free for at least 2 days, you can begin a new FODMAP group to challenge.

Abbreviated FODMAP Challenge Outline

Fructan Vegetable #1 Challenge *3 Day Challenge*		
Day 1	Day 2	Day 3
½ clove raw garlic	1 clove raw garlic	1 ½ clove raw garlic
Use food and symptom log to document reactions.		
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge.		
Fructan Vegetable #2 Challenge *3 Day Challenge*		
Day 1	Day 2	Day 3
1 Tbsp chopped raw onion	2 Tbsp chopped raw onion	3 Tbsp chopped raw onion
Use food and symptom log to document reactions.		
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge.		
Sorbitol Challenge		
Day 1		Day 2
½ avocado OR 5 blackberries		½-1 avocado OR 10-15 blackberries
Use food and symptom log to document reactions.		
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge.		
Mannitol Challenge		
Day 1		Day 2
1/2 cup cauliflower, ½ cup mushrooms, OR ½ cup sweet potatoes		1 cup cauliflower, 1 ½ cup mushrooms, OR 1 cup sweet potatoes cup cauliflower
Use food and symptom log to document reactions.		
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge.		
Fructose Challenge		
Day 1		Day 2
7 sugar snaps, ½ Tbsp honey, OR ¼ mango		25 sugar snaps, 2 Tbsp honey, OR 1 mango
Use food and symptom log to document reactions.		
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge.		
Fructan Fruit Challenge		
Day 1		Day 2
½ cup grapefruit, 1 date, or 1/3 cup pomegranate seeds		1 medium grapefruit, 4 dates, or ½ cup pomegranate seeds
Use food and symptom log to document reactions.		
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge.		
Galactan Challenge		
Day 1		Day 2
15 almonds OR ½ cup beans		20 almonds OR 1 cup beans
Use food and symptom log to document reactions.		
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge.		
Fructan Grain Challenge *Optional*		
Day 1		Day 2
½ cup puffed rice		1 cup puffed rice
Use food and symptom log to document reactions.		
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge.		

Optional Challenges

Wheat Challenge *Optional*

Wheat Challenge #1: Sourdough Bread *Isolates gluten*		
Day 1	Day 2	Day 3
1 slice of sourdough bread	2 slices of sourdough bread	2-3 slices of sourdough bread
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge. Wait 2-3 days before introducing the next challenge.		
Wheat Challenge #2: Wheat Bread		
Day 1	Day 2	Day 3
1 slice of wheat bread	2 slices of wheat bread	2-3 slices of wheat bread
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge. Wait 2-3 days before introducing the next challenge.		

*This challenge is not for everyone. Ask Peak Nutritionist if you should challenge wheat.

Dairy Challenge *Optional*

Dairy Challenge #1: Casein		
Day 1	Day 2	Day 3
¼ cup lactose free yogurt or kefir	½ cup lactose free yogurt or kefir	1 cup lactose free yogurt or kefir
If your symptoms are triggered after reintroducing lactose free yogurt. Challenge A2 milk in a separate challenge. As, this could mean that you are sensitive to the A1 protein. For the A2 milk challenge, follow the same instructions below, however, use A2 milk instead of yogurt/kefir. The portions are the same size.		
If you tolerate the lactose free yogurt, this means that you tolerate the A1 protein. Next, you'll need challenge normal yogurt (below) to test your tolerance to lactose. Wait 2-3 days before introducing the next challenge.		
Dairy Challenge #2: Lactose		
Day 1	Day 2	Day 3
¼ cup yogurt or kefir	½ cup yogurt or kefir	1 cup yogurt or kefir
If your symptoms are triggered after reintroducing normal yogurt- this means that you have a lactose intolerance and should avoid normal yogurt and other dairy that includes lactose. Opt for lactose-free dairy products instead.		
If you tolerate normal yogurt, can now incorporate yogurt/kefir in your diet.		

*Perform this challenge if dairy has been an issue for you in the past. This challenge will differentiate a sensitivity to lactase vs casein.

Note about Grains:

- Please ask guidance from Peak Nutritionist or Dr. Thomas about introducing grains. Grains may hinder the healing process of those with autoimmune diseases or metabolic disease (i.e. diabetes). Grains may also hinder weight loss.
- White rice, brown rice, quinoa, amaranth, millet, and other gluten-free grains may be introduced at any time. They are free of FODMAPs.
- Grains like puffed rice, oats (if more than ½ cup), rice cakes, buckwheat, and wheat are FODMAPs and should be introduced slowly over the course of a few days, as Group 9 states.
- Wheat contains gluten. If you are gluten-sensitive or have Celiac, you should avoid wheat. Ask for guidance from Peak Nutritionist if you have additional questions about wheat/gluten.

After Individual Challenges

After challenging individual FODMAP groups, you can now expand your diet and challenge even more foods. The purpose of this is to determine if you can tolerate multiple FODMAPs together. Remember, the overall goal is to get back to a normal, healthful diet. First, challenge foods that contain multiple fermentable carbohydrate groups. See below for an example of what foods to challenge. If you tolerate those foods- great! Then begin to add FODMAP foods together, such as pasta sauce with garlic and onion and pasta of your choice. Again, see below for more examples.

Next challenge foods that contain multiple FODMAP groups:

- Fructose and Sorbitol: apple, pear
- Fructans and Sorbitol: plum, prunes, apricots
- Fructans/GOS and Mannitol: snow peas
- GOS and Mannitol: butternut squash
- Fructans and Fructose: raisin toast, Jerusalem artichoke, watermelon, asparagus

Combined Sorbitol and Excess Fructose Challenge

Apple Challenge		
Day 1	Day 2	Day 3
½ medium apple	1 medium apple	1 ½ medium apple
Use food and symptom log to document reactions.		
If your symptoms are triggered after reintroducing the FODMAP, stop the challenge.		

*This challenge is to be performed after ALL FODMAP subgroups are tested.

Once you have challenged the above successfully, challenge two high FODMAP foods at a time to test tolerance:

- Apple with cashews
- Wheat or chickpea/lentil pasta with marinara sauce (with onions and garlic)
- Broccoli with garlic and onions
- Mushrooms with garlic

3) Based on results of these challenges, establish your modified FODMAP diet. Avoid any foods that you react to.

Tips for Maintenance:

- Limit your intake of high FODMAP foods prior to social events or eating out to better tolerate foods in those settings.
- As time goes on, be open to slight modifications in the diet as tolerance may change.
- Try to be calm. Fear associated with eating or reintroducing foods as that fear translates into anxiety, stress, and increase in digestive symptoms.
- Understand that some mild digestive symptoms are “normal” and may not require strategic dietary change. This includes mild bloating or gas after eating a big meal.
- If you ever develop symptoms of gas and bloating again, go back to the green column and eat from that column only until your symptoms subside.