

# The SIBO Bi-Phasic Diet<sup>©</sup>

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## 3 month treatment protocol to help restore the function of the small intestine

### WHAT IS SIBO?

Small intestine bacterial overgrowth is a condition where bacteria which are normally found lower in the large intestine have overgrown in the small intestine instead.



Health care disclaimer: This treatment protocol is not intended as medical advice and is best used with the guidance of a health care professional. Please ask your doctor if this protocol is appropriate for your condition before starting.

### Abnormal amounts of these bacteria cause a number of problems

1. **They damage the microvilli** — the absorptive surface of the small intestine. This can lead to malabsorption of nutrients. Microvilli are also responsible for the digestion of small starch molecules from food. When the microvilli are not working, the bacteria use these small starch molecules to cause fermentation. This bacterial fermentation produces methane and hydrogen gas. Not only is this uncomfortable, but causes further damage to the microvilli.  
  
Research has now shown that SIBO is a major cause of intestinal permeability, or ‘leaky gut’, a condition where partially digested food particles are absorbed through the lining of the small intestines where they can cause an immune reaction. Leaky gut also causes bacterial by-products to be absorbed — a major trigger for inflammation.
2. Leaky gut can also cause **malabsorption of nutrients** from your food which can cause a wide variety of symptoms such as restless legs at night, fatigue, skin rashes, muscle aching as well as a host of digestive symptoms.
3. The bacteria cause the **motility** of the small intestine to slow down or work improperly, causing further fermentation. Restoring proper motility in the small intestines is a major focus of eliminating SIBO for good and your practitioner is likely to prescribe a “prokinetic” supplement or medication.
4. Many people who test positive for SIBO will also have a co-infection with fungal organisms, a condition known as **SIFO** (small intestine fungal overgrowth) — the SIBO Bi-Phasic diet helps to address this as well.

Visit [www.TheSIBODoctor.com](http://www.TheSIBODoctor.com) for more information

## WHAT IS THE SIBO BI-PHASIC DIET?

This protocol of diet combined with specific gut healing and antimicrobial phases was created by Dr. Nirala Jacobi.

The diet is based on Dr. Allison Siebecker's SIBO Specific Food Guide (found at [www.siboinfo.com](http://www.siboinfo.com)), a therapeutic diet combining the low FODMAP (fermentable oligosaccharides, disaccharides, monosaccharides, and polyols), and Specific Carbohydrate Diet. The goal of the protocol is to help eliminate bacterial overgrowth from the small intestine.

The Bi-Phasic Diet Protocol uses a phased approach to diet and treatment which limits the side effects of bacterial and fungal "die-off". The die-off process occurs when bacterial and fungal endotoxins released by their elimination are absorbed and cause physical symptoms. Die-off can be intense for some people. Phasing the treatment through stages also aims to prioritise the repair of disturbed digestion over the use of antimicrobials. That means you'll feel better sooner!

The first phase of the diet eliminates all grains, legumes, dairy, sugar, and certain vegetables. Canned, processed, and fermented foods are to be avoided in Phase 1 but some will be introduced again in Phase 2.

It is important to note that fermentable fibres are an important part of a healthy diet as they feed our microbiome—the communities of organisms living in our gut which perform many vital functions for us. The goal of treatment is to eventually reintroduce these fibres again.

## WHAT ABOUT FOOD REACTIONS COMMONLY SEEN IN SIBO?

Chronic SIBO sufferers often find that they can be prone to food "reactions". Besides genuine food allergies, for these people, seemingly healthy food can cause reactions such as itching, hives, joint pain, and a host of other symptoms.

The most common culprits are Histamine, Oxalates, and Salicylates which are substances in foods that are normally tolerated but can cause problems when the digestive tract is inflamed and reactive.

Healing the small intestines can lead to resolution of these reactions. See the FOOD REACTIONS section.

## PHASE 1: REDUCE AND REPAIR (4-6 weeks)

### Reduce

The first phase of the diet focuses on reducing fermentable starches and fibres, which is necessary to starve bacteria of their preferred fuel so they will begin to die-off.

### Repair

Repairing the damage to the integrity of the intestinal lining, as well as repairing proper digestion, is a key element of this phase.

Your practitioner may prescribe digestive support, gut healing nutrients and targeted probiotics to repair the intestinal lining and digestive processes during this phase.

**This phase is divided into two groups to be able to adjust the strictness of the diet.**

- **Phase 1 restricted diet** – everyone starts with this diet. Some have to stay on this diet for the entire 6 weeks. How quickly you can move to the semi-restricted diet depends on how quickly your symptoms improve. If your symptoms are greatly improved after the first week, talk to your practitioner about moving into the semi-restricted diet. If at any point during treatment you suffer a relapse of symptoms, please go back to the restricted diet.
- **Phase 1 semi-restricted diet** – this diet builds on the restricted diet but allows for some starches such as rice and quinoa. Your practitioner may start you on this level if you are prone to rapid weight loss or need more energy from starches.

## PHASE 2: REMOVE AND RESTORE (4-6 weeks)

### Remove

Remove remaining overgrown bacteria and fungi from the small intestines: In this phase of the protocol, antimicrobials will be prescribed by your practitioner.

While still a low fibre diet, the protocol becomes a bit more lenient to allow for some bacterial growth so that antimicrobials are more successful.

### Restore

The restoration of the normal motility of the small intestines is important to prevent relapse of SIBO. In this phase your practitioner may prescribe prokinetic medication or supplements.

This phase builds on the allowable foods from Phase 1.

All listed quantities are per meal

## PHASE 1 REDUCE AND REPAIR (4–6 WEEKS)

	<b>RESTRICTED DIET</b>	<b>SEMI-RESTRICTED</b> Add (or increase) these foods from the Restricted Diet	<b>AVOID</b> until further notice
<b>PROTEIN</b>	Meat/Fish/Poultry/Eggs	Meat/Fish/Poultry/Eggs	All legumes
<b>DAIRY PRODUCTS</b>	Avoid	Avoid	Avoid
<b>VEGETABLES unlimited</b>	Alfalfa sprouts, Bamboo shoots, Bok choy, Capsicum, Carrot, Chives, Cucumber, Eggplant, Ginger, Kale, Lettuce, Olives, Radicchio, Radish, Rocket, Silverbeet (chard), Spring onion (green part only), Sunflower sprouts, Tomatoes/sundried, Witlof	Parsnip	Canned vegetables, Garlic, Mushrooms, Onions, Potato (sweet), Potato (white), Starch powder (arrowroot, corn, rice, tapioca)
<b>VEGETABLES one per meal</b>	Asparagus – 1 spear Artichoke hearts – 1/8 cup Beetroot – 2 slices Broccoli – 1/2 cup Brussels sprouts – 2 ea Cabbage – 1/2 cup Cabbage, savoy – 3/4 cup (wombok) Celery – 1 stick Celery root – 1/2 cup Chili – 11cm/28g (4.25in/1oz) Fennel bulb – 1/2 cup Green beans – 10 ea Peas (green) – 1/4 cup Pumpkin – 1/4 cup Snow peas – 5 pods Spinach – 15 leaves Zucchini – 3/4 cup	Asparagus – 2-3 spears Brussels sprouts – 1/2 cup Pumpkin – 1/2 cup Leek – 1/2 ea Spinach – >15 leaves/150g (5oz) Zucchini – 1 cup	
<b>FRUITS two serves per day</b>	Lemons, Limes	Avocado – 1/4 Banana – 1/2 Berries (all varieties) – 1/2 cup Cherries – 3 Citrus – 1 piece Grapes – 10 Honeydew – 1/4 cup Kiwi – 1 piece Lychee – 5 Passion fruit – 1 piece Paw paw – 1/4 cup Pineapple – 1/4 cup Pomegranate – 1/2 small or 1/4 cup of seeds Rhubarb – 1 stalk Rockmelon – 1/4 cup	Apple, Apricot, Blackberries, Canned fruit in fruit juice, Custard apple, Fig, Jam, Mango, Nashi, Nectarine, Peach, Pear, Persimmon, Plum, Watermelon – allowed after Phase 2 at discretion of practitioner
<b>GRAINS, STARCHES, BREADS AND CEREALS</b>	Avoid all – this includes all grains, breads, cereals, cakes, biscuits	Quinoa, White rice (basmati, jasmine only) – 1/2 cup cooked per serve	Avoid all grains, breads, cereals, cakes, biscuits, except rice, if approved by practitioner

ea = each tsp = teaspoon tbsp = tablespoon

All listed quantities are per meal

## PHASE 1 REDUCE AND REPAIR (4–6 WEEKS)

	<b>RESTRICTED DIET</b>	<b>SEMI-RESTRICTED</b> Add (or increase) these foods from the Restricted Diet	<b>AVOID</b> until further notice
<b>LEGUMES</b> Lentils, Beans	Avoid	Avoid	Avoid
<b>SOUPS</b>	Homemade broths: beef or lamb bone broths, chicken meat broths		Canned soups and soup bouillons, broths made from chicken frames
<b>BEVERAGES</b>	Coffee (black) – 1 cup per day, Tea (black), Tea (herbal), Water	Alcohol (clear spirits) – no more than 30ml twice weekly, Coffee (black) – 1 cup per day, Tea (black), Tea (herbal), Water	Beer, Energy drinks, Fruit juices, Liqueurs and spirits (dark), Soft drinks, Wine
<b>SWEETENERS</b>	Stevia (100% pure, no inulin)	Dextrose, Glucose, Organic honey (clear) – no more than 2 tbsp per day	Agave nectar, Artificial sweeteners, Maple syrup, Xylitol
<b>NUTS AND SEEDS</b>	Almonds – 10 ea OR Almond flour/meal – 2 tbsp Coconut (flour/shredded) – ¼ cup OR Coconut milk (without thickeners/gums) – ¼ cup OR Coconut cream – 2 tbsp Hazelnuts – 10 ea Macadamias – 20 ea Pecans – 10 ea Pine nuts – 1 tbsp Pumpkin seeds – 2 tbsp Sesame seeds – 1 tbsp Sunflower seeds – 2 tsp Walnuts – 10 ea	Almond milk (unsweetened, without added thickeners) – 1 cup Hazelnuts – 20 ea Pecans – 40 ea Walnuts – 10 ea	Chia seeds, Flaxseed, Peanuts
<b>CONDIMENTS</b>	Mayonnaise (sugarless), Mustard (without garlic), Tabasco, Vinegar (apple cider, distilled, white/red), Wasabi, All fresh and dried herbs and spices but not the spice blends. Turmeric and ginger are particularly beneficial as they are anti-inflammatory	Braggs liquid aminos, Coconut aminos, Fish sauce – 2 tbsp All fresh and dried herbs and spices but not the blends	Spice sachets or pre-mixes <b>READ LABELS!</b> No Maltodextrin, Starches, Sugar etc Asafetida, Balsamic vinegar, Chicory root, Garlic, Gums/carrageenans/thickeners, Onions, Soy sauce/tamari
<b>FATS/OILS</b>	Coconut, Infused (ie. garlic, chili), Flax (low lignin), Ghee, Grapeseed, MCT, Olive, Polyunsaturated vegetable, Pumpkin seed, Sesame, Sunflower, Walnut	Butter	Palm, Soyabean

ea = each tsp = teaspoon tbsp = tablespoon

All foods from Phase 1 allowed. Foods listed in **bold** are new in Phase 2

## PHASE 2 REMOVE AND RESTORE (4–6 WEEKS)

	PHASE 2 DIET	AVOID until further notice
<b>PROTEIN</b> organic	Meat/Fish/Poultry/Eggs	
<b>DAIRY PRODUCTS</b> organic	Butter, Cheese (aged 1 month or more eg. parmesan, pecorino), Yoghurt (homemade),	All other dairy products
<b>VEGETABLES</b> unlimited	Alfalfa sprouts, Bamboo shoots, Bok choy, Capsicum, Carrot, Chives, Cucumber, Eggplant, Ginger, Kale, Lettuce, Olives, Parsnip, Radicchio, Radish, Rocket, Silverbeet, Spring onion, Sunflower sprouts, Tomatoes/sundried, Witlof	Canned vegetables, Garlic, Mushrooms, Onions, Starch powder (arrowroot, corn, rice, tapioca),
<b>VEGETABLES</b> one–two serves per meal	Asparagus – 2-3 spears Artichoke hearts – ¼ cup Beetroot – 2 slices Broccoli – ½ cup Brussels sprouts – ½ cup Cabbage – ½ cup Cabbage, savoy – ¾ cup ( <i>wombok</i> ) Celery – 1 stick Celery root – ½ cup Chili – 11cm/28g (4.25in/1oz) Fennel bulb – ½ cup Green beans – 10 ea Leek – ½ each Peas (green) – ¼ cup <b>Potato</b> – ½ cup cooked Pumpkin – ½ cup Snow peas – 5 pods Spinach – >15 leaves/150g (5oz) Zucchini – ¾ cup	
<b>FRUITS</b> two serves per day	Avocado – ¼ Banana – ½ Berries (all varieties) – ½ cup Cherries – 3 Citrus – 1 piece Grapes – 10 Honeydew – ¼ cup Kiwi – 1 piece Lychee – 5 Passion fruit – 1 piece Paw paw – ¼ cup Pineapple – ¼ cup Pomegranate – ½ small or ¼ cup of seeds Rhubarb – 1 stalk Rockmelon – ¼ cup	Apple, Apricot, Blackberries, Canned fruit in fruit juice, Custard apple, Fig, Jam, Mango, Nashi, Nectarine, Peach, Pear, Persimmon, Plum, Watermelon – allowed after Phase 2 at discretion of practitioner
<b>GRAINS, STARCHES, BREADS AND CEREALS</b>	Quinoa – ½ cup Rice cakes (plain) – 2 Rice noodles – ½ cup cooked White rice (basmati, jasmine only) – ½ cup cooked	Avoid all grains, breads, cereals, cakes, biscuits, except rice, if approved by practitioner

ea = each tsp = teaspoon tbsp = tablespoon

All foods from Phase 1 allowed. Foods listed in **bold** are new in Phase 2

## PHASE 2 REMOVE AND RESTORE (4–6 WEEKS)

	PHASE 2 DIET	AVOID until further notice
LEGUMES cooked	Lentils (brown) – ½ cup, Lentils (green and red) – ¼ cup Lima beans – ¼ cup	All other legumes and beans
SOUPS organic	Homemade broths: beef or lamb bone broths, chicken meat broths	Canned soups and soup bouillons, broths made from chicken frames
BEVERAGES	Alcohol (clear spirits) – no more than 30ml every other day, Coffee (black) – 1 cup per day, Tea (black), Tea (herbal), Water	Beer, Energy drinks, Fruit juices, Liqueurs and spirits (dark), Soft drinks, Wine
SWEETENERS	<b>Cacao (raw)</b> – 1 tsp per day, Dextrose, Glucose, Organic honey (clear) – no more than 2 tbsp per day, Stevia,	Agave nectar, Artificial sweeteners, Maple syrup, Xylitol
NUTS AND SEEDS	Almonds – 10 ea OR Almond flour/meal – 2 tbsp OR Almond milk (without added thickeners) – 1 cup Coconut (flour/shredded) – ¼ cup OR Coconut milk (without thickeners or gums) – ¼ cup OR Coconut cream – 2-3 tbsp Hazelnuts – 10 ea Macadamias – 20 ea Pecans – 40 ea Pine nuts – 1 tbsp Pumpkin seeds – 2tbsp Sesame seeds – 1 tbsp Sunflower seeds – 2 tsp Walnuts – 10 ea	Chia seeds, Flaxseed, Peanuts
CONDIMENTS	<b>Fish sauce</b> , Mayonnaise (sugarless), <b>Miso</b> , Mustard (without garlic), Tabasco, <b>Tamari (fresh, not powdered)</b> Vinegar (apple cider, distilled, white/red), Wasabi All fresh and dried herbs and spices but not the spice blends. Turmeric and ginger are particularly beneficial	Spice sachets or pre-mixes. READ LABELS! No Maltodextrin, Starches, Sugar etc Asafetida, Balsamic vinegar, Chicory root, Garlic, Gums/carrageenans/thickeners, Onions, Soy sauce
FATS/OILS	Coconut, Infused (ie. garlic, chili), Flax (low lignin), Ghee, Grapeseed, MCT, Olive, Polyunsaturated vegetable, Pumpkin seed, Sesame, Sunflower, Walnut	Palm, Soyabean

ea = each tsp = teaspoon tbsp = tablespoon

## FOOD REACTIONS

(do not avoid unless you are sensitive to these foods)

In many cases of SIBO, other foods besides fermentable starches are problematic. Though there are a few more, the main ones that can cause problems are histamine, oxalates, and salicylates.

These are substances in certain foods which are relatively benign in many cases, but can cause symptoms in those with severely disrupted mucosal lining of the small intestines. As this lining repairs, these food reactions should become less common. Talk to your practitioner if you should avoid any the foods below in addition to the Bi-Phasic Diet. You can probably add them back in later on.

## FERMENTED FOODS

Fermented foods such as cultured vegetables, sauerkraut, kimchi, as well as miso and yogurt are wonderful for the digestive tract as they contain high amounts of probiotics, or beneficial bacteria.

This is helpful even in the case of SIBO but many people can react to the histamines in these foods. It is suggested to introduce them slowly towards the end of Phase 2.

## HISTAMINE

Histamine is a biogenic amine which is naturally high in certain foods.

Symptoms of histamine intolerance include headaches, bloating, cramping, insomnia, itching, and allergies. Histamine is found in a number of foods on the SIBO Bi-Phasic Diet but are particularly high in: **spinach, aged meats, bone broth which has been cooked for hours, tinned fish or meats.**

If these foods cause symptoms, you may want to ask your practitioner for a full list of histamine containing foods.

## OXALATES

Oxalates are natural molecules abundant in green leafy vegetables and certain other plant based foods. Well-known in their role in kidney stones, oxalates can also cause gut reactions by irritating the mucosal lining. They usually are not problematic in a healthy digestive tract. Symptoms of oxalate sensitivity include: joint pain, kidney stones, vulvar pain.

The ranges of oxalate content varies but high oxalate foods on the Bi-Phasic Diet are: **almonds, spinach, silver beet, beet root greens, rhubarb, quinoa, cacao.**

(If these foods cause symptoms, you may want to ask your practitioner for a full list of oxalate containing foods.)

## SALICYLATES

Salicylates are natural plant substances which help the plant defend itself against bacteria, fungi and other pests. Salicylates are toxic to everyone in very high doses, but with a salicylate sensitivity the threshold is much lower before a reaction occurs.

Symptoms of salicylate sensitivity include: itching, stomach pain/nausea, headaches, puffy or burning eyes, sinus congestion.

The range of salicylate content of foods varies, but foods in the SIBO Bi-Phasic Diet highest in salicylates are: **nightshade vegetables: tomato, eggplant, capsicum, chilli, as well as radish, zucchini, berries, avocado, coconut and olive oils.**

(If these foods cause symptoms, you may want to ask your practitioner for a full list of salicylate containing foods.)

## GENERALLY AVOID ALCOHOL

Alcohol is a known gut irritant and disrupter of the normal microbiome of the intestinal tract. It is strongly recommended to avoid all alcohol whilst on the Bi-Phasic Diet. Now we all know this is sometimes very difficult in social situations. In these instances, clear spirits like vodka or gin are much preferred over beer and wine as they do not contain sulfites and high yeast content. Please limit alcohol consumption even in these cases.

## SOME RECIPES TO GET YOU STARTED

Purchase the  
SIBO cookbooks at  
[theSIBOdoctor.com](http://theSIBOdoctor.com)



### Almond Pancakes

#### INGREDIENTS

2 tbsp almond meal  
2 tbsp Coconut flour  
1 organic free range egg  
1 organic or free range egg white  
¼ cup sparkling water  
Pinch of salt  
Coconut oil for cooking

#### METHOD

1. Mix all ingredients together in a bowl until there are no lumps
2. Use ¼ cup measure to spoon mixture into pan oiled with coconut oil
3. Look for bubbling or browning of the edges before flipping
4. Makes about 4 small pancakes



### Pumpkin Soup

#### INGREDIENTS

500gm (17 oz) pumpkin – skinned and cubed  
2 cups chicken broth  
1 tbsp ginger  
Salt n pepper to taste

#### METHOD

1. Place all ingredients in crock pot and mix
2. Set on low for about 8 hours or till pumpkin soft
3. Using a blender process mix... either puree or leave a bit chunky



### Thai Fish Cakes

#### INGREDIENTS

400gm (14 oz) boneless white fish – chopped  
1 tsp red chillies – chopped  
2 tsp fish sauce  
4 kaffir lime leaves – chopped  
½ cup green beans – finely sliced  
½ cup red capsicum – finely chopped  
Coconut oil – for frying

#### METHOD

1. Place fish, chillies, hone, fish sauce, kaffir lime leaves into a food processor and process til smooth.
2. Transfer mixture to a bowl and add beans, capsicum – mix through.
3. Heat pan. Divide mixture and shape into 8 balls.
4. Fry evenly on both sides for about 4 minutes until golden brown and cooked through.



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### Bone Broth

#### INGREDIENTS

Bones from raw or cooked meat (Avoid chicken frames)  
1/8 – 1/4 cup of apple cider vinegar  
Water: enough to cover the bones + a bit more

#### METHOD

- Using a crock pot
  - Bones size 6–12.5cm (2.5–5 inches)
1. Add in water and apple cider vinegar
  2. Simmer for 24 hours on low
  3. Remove bones, strain soup  
Marrow should fall off the bones



### Berry Smoothie

#### INGREDIENTS

1/2 cup fresh/frozen berries  
500ml filtered water  
2 tsp of coconut oil  
2 scoops Hydrolyzed Whey (if tolerated) or equivalent low fibre/ carbohydrate protein powder  
Ice

#### METHOD

1. Combine ingredients and blend
  2. Option - sprinkle nutmeg on top
- **Note: Berries have anti-inflammatory properties as well as being high in antioxidants.**



### Chicken Curry

#### INGREDIENTS

700gm chicken thighs – bite sized pieces  
1 tsp olive oil  
2 chillis – seeded & chopped (optional)  
1 tbsp ginger minced  
2 1/2 tsp curry powder  
2 med size tomatoes – chopped  
1/2 cup Coconut Milk  
1 1/2 cups water  
Salt to taste

#### METHOD

1. Saute salt, ginger, curry powder for 1-2 minutes, stirring to prevent sticking
2. Add tomatoes and mix well
3. Stir in chicken pieces, mixing it with the spices
4. Pour in water to cover the mixture
5. Cook on medium-low heat for 20-30 minutes or until chicken cooked through

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### Grilled Salmon and Spinach Frittata

#### INGREDIENTS

10 organic eggs, whisked  
1 large can salmon – drained  
12 fresh spinach leaves  
½ tsp dried thyme  
½ tsp dried basil  
½ tsp rosemary  
salt & pepper, to taste  
1 tbsp olive oil

#### METHOD

1. Preheat oven to 170°C degrees; prepare tray
  2. Mix eggs, salmon, herbs, salt and pepper.
  3. Pour into prepared tray
  4. Distribute spinach leaves evenly on top
  5. Bake for 18-20 minutes or until middle of frittata is completely cooked through
  6. Serve with topping, like a tomato
- **Serves: 4-6**



### Homemade Chicken Soup

#### INGREDIENTS

Drumsticks, thigh chicken pieces  
10 carrots, peeled only  
3 celery stalks  
Green tops of spring onions  
3 sprigs of parsley  
Pinch of celtic or Himalayan salt  
Water  
**All ingredients should be organic or free range**

#### METHOD

- Using a crock pot
1. ½ fill with chicken pieces
  2. Add in peeled carrots
  3. Add in onions, celery, parsley
  4. Fill pot with water
  5. Simmer for between 4-8 hours on high or 8-10 on low
  6. Strain soup, skim off layer of fat
  7. Remove onions, celery and parsley, do not consume these at this point
  8. Remove and puree carrots only and add back into the soup