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About the Author

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Meet Rachel Scheer

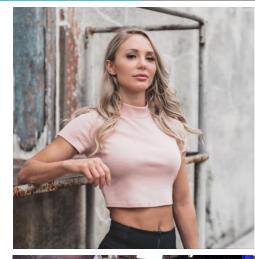
Rachel Scheer is a Functional Medicine Nutritionist who received her degree from Baylor University in Nutrition Science and Dietetics and became certified in functional medicine through the Kalish Institute.

Rachel's journey as a nutritionist began in bodybuilding and athletic performance, however, a couple years into her practice she began to suffer from severe gastrointestinal dysfunction (IBS.) After many false diagnoses, spending thousands of dollars on doctor visits and tests, and one doctor even suggesting the removal of her entire large intestine, Rachel decided to take her health into her own hands.

Rachel says "using a functional approach and focusing on the health of the gut microbiome saved [her] life. All disease begins and ends in the gut, so rather than putting a 'band-aid' over an issue I.e. medications/drugs/surgery, we need to get to the root cause and that's what functional medicine comes in. My gut issues came from a bacteria imbalance or gut dysbiosis, and once I was able to address that through diet, stress, supplements, and lifestyle changes I was able to heal my body, avoid surgery, and come off dozens of medications I was put on over the years."

Rachel's nutrition philosophy is one that looks at the total person to help them 'heal instead of just deal'. She uses functional lab testing to address the root cause of any imbalances in the body and uses a holistic (mind and body) approach for healing.

"I am the person people come to when nothing else has worked for them. I would love to offer you a free <u>30-minute</u> <u>phone consultation</u> with my team to see how we can help you" Rachel Scheer









Bloating...
Cramps...
Diarrhea...
Constipation...
Pain...

Awful as those sound, <u>about 60 million people</u>— 20% of Americans—deal with them daily in the form of Irritable Bowel Syndrome (IBS). They struggle with miserable, often disabling symptoms that result in debilitating physical and psychological effects and, in the end, a poor quality of life ($\underline{1}$).

Take it from me, because not long ago I was one of those victims.

Good news: IBS is treatable – curable, even – and you're about to get the simple secret to a happier, healthier gut. With diet. With discipline. And without invasive surgery or an over-crowded pill box.

IBS is not a diagnosis at all, but rather an accumulation of symptoms. It's an "irritable bowel." But when your doctors examine your colon during a colonoscopy, they don't necessarily see a problem. Everything looks normal. There are no structural issues, no tumors and, in turn, no obvious cause. This is usually when most doctors will slap you with a label of "IBS", tell you to add more fiber and send you on your (supposedly) merry way.

For those of you familiar with my story, this is exactly what happened to me. I went from gastroenterologist to gastroenterologist. I endured everything from an MRI to CT scan, endoscopy and colonoscopy, only to get the seemingly innocuous "IBS" diagnosis. But my symptoms, like many patients, eventually grew so severe that I was even ominously warned by one doctor that the only answer was to ... remove MY ENTIRE large intestine.

Thank God I sought another opinion. My own fact-based, researched, alternative opinion.

Doctors often tell their patients there is no cure for IBS. It's all in the patient's head. Just add more fiber. Or they even prescribe antidepressants, sedatives and other drugs that could potentially exacerbate the condition.

Maybe you've had a similar experience?

You've spent thousands of dollars on testing ... with no answers. You feel like doctors aren't taking you seriously. You're frustrated, fed up and, maybe, even depressed.

I know I was.

But that's not the answer, at all. To treat IBS, you need to address the **underlying cause** as to WHY your digestion is not working. That's where functional medicine comes in.

As a former sufferer of IBS and a degreed functional nutritionist, that's also where I come in.



What Causes IBS?

The cause of IBS may vary for each person. Some of the most common causes are:

- Gut dysbiosis (imbalance of the microbes in your gut)
- Low levels of digestive enzymes
- Allergies/food sensitivities
- Poor diet
- Stress

Sometimes, it can be one underlying cause. Or it could be multiple, overlapping issues. But once we can identify the ROOT CAUSE of your IBS, we can get to work on getting rid of the problem once and for all!

Once we know the right things to do, it's extraordinary how simple it is to alleviate the symptoms associated with IBS.

The GUT and IBS

Before we dive in, I think it's important to first talk about the importance of the gut microbiome and the role it plays in our health.

The gut microbiome contains over 100,000,000,000,000,000 (100 *trillion*) microorganisms. That's 10 times more bacteria than all the human cells in the ENTIRE body, and we have only just begun to understand the extent of the gut microbiome in health and disease (2).

And these microbes aren't just passively living their lives. Within the GI tract, gut bacteria promote peristalsis (the movement of food through the intestines), protect against infection, produce vitamins, and maintain a healthy gastrointestinal mucus layer.



Outside of the digestive tract, gut microbes influence other organs and tissues through neural networks and signaling molecules. The human gut microbiome controls 75% of our immune system and protects us from infection. It also regulates energy intake and metabolism, and even controls mood and neurotransmitter production in the brain (3,4).



When the gut microbiome is disrupted (gut dysbiosis), normal processes such as immunity and brain function become impaired. Ultimately, this could lead to the development of chronic conditions such as autoimmune disease, metabolic dysfunction and mental health issues.

What causes an imbalance in the gut microbiome?

There are many common lifestyle habits that can lead to gut dysbiosis, such as:

- Antibiotics and other medications, such as birth control and NSAIDs
- Diets high in refined carbohydrates, sugar and processed foods
- Diets low in fermentable fibers
- Dietary toxins such as wheat, gluten, industrial seed oils and vegetable oils that cause leaky gut
- Chronic stress and lack of sleep
- Chronic infections

The Gut Barrier is the Gatekeeper that Decides Who's In and Who's Out

When the gut lining becomes weakened due to some of the various causes listed above, we suffer from what is called intestinal permeability or "leaky gut." Large protein molecules escape into the bloodstream and the body produces an immune response to attack them. This aggressive internal action affects not only the gut itself, but also other organs and tissues, such as the skeletal system, pancreas, kidney, liver and brain.

But this is a crucial point to understand: **You do not have to have gut symptoms to have a leaky gut.** Leaky gut can manifest as skin problems, autoimmune conditions affecting the thyroid, mental illness, autism, depression and more.

Diagnosing a "Leaky Gut"

A protein named zonulin increases intestinal permeability in the gut. Thankfully, there are blood tests we can run in the lab to check the levels of zonulin and antizonulin in the bloodstream to see if there is any indication of leaky gut.

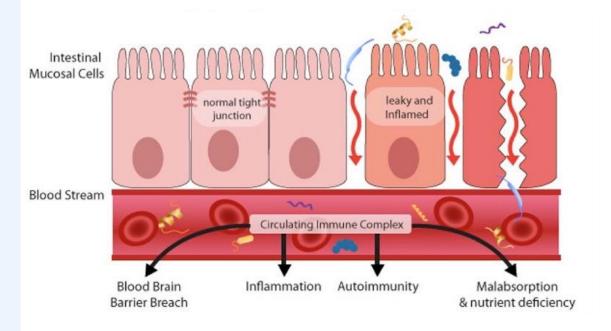
I often run this test in conjunction with a few other biomarkers when running labs specific to IBS.



Is it necessary to test for leaky gut?

While intestinal permeability is certainly connected to IBS and contributes to disease, it is almost always caused by something further upstream, such as food intolerances/sensitivities, SIBO, nutrient deficiencies, gut infections, stress, or immune dysregulation.

So, regardless of whether leaky gut is present or not, we still want to address the underlying cause. However, there are some people who are extremely motivated by an abnormal lab test result. For example, if you are not convinced that some of the foods you are eating are problematic or that your stress levels are impacting your gut health, testing for leaky gut may be useful, even motivating.





Addressing the ROOT Cause

Now that we have a foundation of knowledge about the importance the gut microbiome and gut barrier play in our health, let's find the root cause and begin the healing process.

In this book, we will be using the <u>3-R Protocol</u> to work on addressing the ROOT CAUSE of your IBS and repairing your gut.

The 3-R Gut Healing Protocol:

- 1. Remove:
 - a. Toxins
 - b. FODMAPS
 - c. Food sensitivities
- 2. Restore:
 - a. Whole food diet
 - b. Digestive Enzymes
 - c. Stomach Acid/ HCL
- 3. Repair:
 - a. Bacterial overgrowth/gut pathogens
 - b. Gut integrity
 - c. Micronutrients

PHASE 1 - REMOVE

The first step on the journey to a healthy gut is to remove the things that contribute to an imbalanced gut microbiome and damage the intestinal lining. Now, we don't always have control over every contributing factor – such as chronic infections or stress – so let's start by removing the factors we *can* control: Food.

- 1. Remove food toxins
- 2. Remove possible food sensitivities
- 3. Remove FODMAPS (follow a low FODMAP diet)



1. Remove Food Toxins

What is a toxin?

At the simplest level, a toxin is something capable of causing disease or damaging tissue when it enters the body.

The main food toxins that make up a big chunk of the modern diet are refined cereal grains, industrial seed oils, sugar and sugar substitutes, processed soy, processed foods, fried foods, and alcohol. Bread, pastries, muffins, crackers, cookies, soda, fruit juice, fast food and other "comfort foods" are all loaded with these toxins. And when the majority of what most people eat daily is toxic, it's not hard to understand why our health is failing.



Cereal Grains: The major cereal grains – wheat, corn, rice, barley, sorghum, oats, rye and millet – have become the staple crops of the modern human diet. If you say the phrase "whole grains" to most people, the first word that probably comes to their mind is "healthy." But cereal grains, especially those that are refined and processed, produce toxins that:

- Damage the lining of the gut
- Bind essential minerals, making them unavailable to the body
- Inhibit digestion and absorption of other essential nutrients, including protein

One of these toxic compounds is the protein **gluten**, which is present in wheat and many other popular cereal grains.

Gluten: Found in wheat, barley, rye, and spelt, it has been linked to more than 50 health

conditions. Common food sources of gluten are bread, pasta, yellow noodles, baked products and soy sauce. Gluten causes inflammation, is difficult to digest and wreaks havoc on blood-sugar levels. Some people react to it more strongly than others. To be safe, take a complete break from it. It can be hidden in packaged food, but during this protocol eat real food and avoid processed foods, whenever possible.

Common foods that regularly contain ingredients with gluten include:

- Pastas
- Breads
- Crackers
- Seasonings and spice mixes

In addition to pure wheat, all its sub-forms are also off-limits. This includes:

- Wheat starch
- Wheat bran
- Wheat germ
- Couscous
- Cracked wheat
- Durum
- Einkorn



- Emmer
- Farina
- Faro
- Fu (common in Asian foods)
- Gliadin
- Graham flour
- Kamut
- Matzo
- Semolina
- Spelt
- Barley
- Bulgur
- Rye
- Seitan
- Triticale and Mir (a cross between wheat and rye)

Gluten may also show up as an ingredient in:

- Barlev malt
- Chicken broth
- Malt vinegar
- Salad dressings
- Veggie burgers (if not specified gluten-free)
- Soy sauce
- Seasonings and spice mixes
- Soba noodles
- Condiments

Soy: Like cereal grains, soy is another toxin often promoted as a health food but that, in reality, is very inflammatory to the body. It's now ubiquitous in the modern diet, present in just about every packaged and processed food in the form of soy protein isolate, soy flour, soy lecithin and soybean oil. Most soy has been genetically modified, and the frequency with which it is used as a food additive has accelerated alarmingly.

Sugar and Sugar Substitutes:

Removing sugar will help balance blood sugar, reduce pathogenic bacteria in the gut, and keep your mood stable. This includes fake sugar (artificial sweeteners) like Splenda, Sweet 'n Low and Aspartame. Anything that says "diet" on the label it out of bounds (make sure to check protein powders or any other nonsugar sweetened food items.) Artificial sweeteners have been shown to have a toxic effect on gut bacteria, contributing to small intestinal bacterial overgrowth (SIBO) and symptoms such as bloating, cramps, constipation and/or diarrhea (5).





How sugars appear on package ingredient lists:

- Sugar
- Corn syrup
- High Fructose corn syrup
- Honey
- Glucose
- Dextrose
- Lactose
- Sucrose
- Maltose

Sugar substitutes approved by the Food and Drug Administration:

- Acesulfame
- Aspartame (NutraSweet/Equal)
- Luo han guo fruit extract (Monk Fruit)
- Neotame
- Saccharin (Sweet 'n Low)
- Stevia (multiple brands)
- Sucralose (Splenda)

Vegetable Oils and Industrial Seed Oils: High in Omega-6 fatty acids, which not only fuel your body's inflammatory pathways, but also reduce the availability of anti-inflammatory Omega-3 fatty acids in your tissues, resulting in more inflammation.

The following chart lists the Omega-6 and Omega-3 content of various vegetable oils and foods:

Oil	Omega-6 Content	Omega-3 Content	
Safflower	75%	0%	
Sunflower	65%	0%	
Corn	54%	0%	
Cottonseed	50%	0%	
Sesame	42%	0%	
Peanut	32%	0%	
Soybean	51%	7%	
Canola	20%	9%	
Walnut	52%	10%	
Flaxseed	14%	57%	
Fish*	0%	100%	

Processed and Refined Foods: Processed and refined foods are stripped of many of the life-giving nutrients of whole foods. Simply put, if it's not a whole food, it is a processed food (usually if it comes in a bag or a box with a list of ingredients.) Refined foods also contain an assortment of artificial chemicals and fillers, or gums which damage the gut lining and disrupt the microbiome (processed foods break down into compounds that the "bad guys" love to eat up, and if you feed them too much, it can lead to SIBO and gut dysbiosis.)



Fried Foods: Fried foods, especially the deep-fried variety, are of concern because frying oil undergoes a series of chemical changes when it is continuously exposed to high heat. Deep-fried oil consumption is associated with unfavorable changes in the microbiome.

Alcohol: Taxes the liver and feeds pathogenic bacteria in the gut, promotes inflammation, and increased intestinal permeability ($\underline{6}$).

2. Remove Food Sensitivities

Certain foods can irritate your bowel and digestive system. Not a true allergy such as peanut or shellfish, but rather a milk/food sensitivity that can cause negative symptoms. Food sensitivities are very common, led by gluten, dairy, soy, corn and eggs.

IgA and IgG immune mediated food intolerances are also thought to be related to increased gut permeability/leaky gut. Symptoms can range from allergy-like reactions such as rashes or asthma, or GI conditions such as constipation, diarrhea or even neurological symptoms like migraines (7).

A landmark paper, published in the prestigious British medical journal Gut, found that eliminating foods identified through delayed food allergy testing (IgG antibodies) resulted in dramatic improvements in IBS symptom ($\underline{8}$). Another article, an editorial in *The American Journal of Gastroenterology*, stated clearly that we must respect and recognize the role of food allergies and inflammation in IBS ($\underline{9}$).

But unlike a food allergy—IgE mediated response—IgA and IgG mediated responses can take days or even months to occur, which makes identifying them difficult ($\underline{10}$). This is where an elimination diet can be helpful to identify these triggers.

3. Remove FODMAPS

Functional gut disorders such as IBS affect one in five Americans, causing abdominal pain, inconsistent or excessive bowel movements, and even psychological

symptoms such as anxiety or depression. If you have experienced IBS, you know that these symptoms can be constant, painful, and can have a serious impact on quality of life.

There is a strategy that has recently become more popular and is gaining positive traction: It's a dietary approach that I have seen work well for many of my patients. It's known as the Low FODMAP Diet, a method that's demonstrated to reduce

functional gut disorder symptoms in approximately 75% of patients (<u>11</u>). Understanding how FODMAPs affect the gut and knowing how to eliminate them from your diet may be the key to getting your IBS symptoms under control.



The FODMaP Sugars

(the sugars that should be avoided)

${f F}$ ermentable Sugars

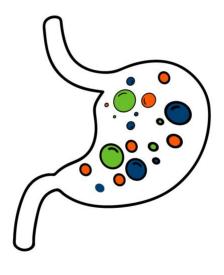
When in contact with gut microbiome, they lead to fermentation and gas production.

O ligosaccharides

These are fructans. They include wheat, rye, onion, garlic, beans, and some vegetables. (This is unfortunate because many of these foods are otherwise quite healthy.) Wheat is omitted for its sugar content, not for its proteins (e.g., gluten). However, a cross-over benefit may occur for people with gluten intolerance.

Disaccharides

An important example is lactose in milk and other dairy products.



Monosaccharides

This includes fructose in high fructose corn syrup, honey, and some fruits.

a nd

Polyol sweeteners

These include any sugar ending in -ol such as xylitol, sorbitol, etc. Be careful of sugarless chewing gums and any food containing artificial sweeteners.

What are FODMAPS? The acronym FODMAP stands for Fermentable Oligosaccharides, Disaccharides, Monosaccharides And Polyols. These short-chain carbohydrates are incompletely absorbed in the gastrointestinal tract and can be easily fermented by gut bacteria ($\underline{12}$). These sugars also exert an osmotic effect, increasing fluid movement into the large bowel ($\underline{13}$). The fermentation and osmosis caused by these undigested sugars are a cause of major IBS symptoms such as gas, pain, and diarrhea.

There are many common foods that are high in FODMAPs that can potentially contribute to IBS symptoms, even if they are considered healthy by most standards. Lactose from dairy products, fructose from certain fruit, coconut products, and sweeteners, fructans from fibrous vegetables, and polyols from fruit and sugar alcohols are all rich in FODMAPs and can be difficult to digest for people with functional gut disorders. These foods can cause serious and painful symptoms in those with IBS and Crohn's disease.

Now, while most IBS patients may be FODMAP intolerant and suffer exacerbated symptoms, consuming FODMAPS do not actually cause IBS $(\underline{14})$. Additionally, individuals differ in their amount of malabsorption of FODMAPs such as fructose, lactose, and fructans, and therefore are more or less sensitive to certain FODMAPs in particular than others.

So, what causes an intolerance to FODMAPS? The presence of pathogenic bacteria in the small intestine (SIBO) causes excessive fermentation of these carbohydrates, increasing gas production and allowing for the proliferation of uncontrolled gut bacteria. In other cases, certain individuals may lack adequate



enzymes to break down and absorb the fermentable sugars before they reach the colon, contributing to the osmolarity changes and bacterial fermentation that occurs in the large intestine.

(I recommend downloading the <u>Monash University FODMAP APP</u>, which will give you an easy guide to which foods are low and high in FODMAPS, access to a library of low FODMAP recipes of meals and snacks, and other educational tools.)



How can you treat FODMAP Intolerance? Eating a low FODMAP diet may help tremendously with reducing IBS symptoms, however, we still need to address the underlying cause: Intestinal bacteria overgrowth or dysbiosis, presence of pathogenic bacteria, worms or parasites, leaky gut, and chronic inflammation (will discuss more in depth in Phase 3-Repair).

PHASE 2 - RESTORE

Now that we have *removed* any foods, toxins, or sensitivities that can be damaging your gut or contributing to symptoms, let's focus on what we should focus on *adding* to our diet.

The goal is to seek out as much REAL, WHOLE FOOD as possible. This includes foods without health claims on the packages or, better yet, no packages at all. After you have mastered making proper food choices, it's important to begin looking at the quality of the items.



Whole Food List

^ = always buy organic due to high pesticides and herbicides in conventional products

BLUE = FODMAPS

Herbs and Spices

- Turmeric
- Ginger
- Pepper
- Parsley
- Fennel
- Coriander
- Dill
- Basil
- Oregano
- Mint
- Cayenne
- Cinnamon
- Cloves

Nuts and Seeds

(sprouted and raw are best)

- Almond butter
- Almonds
- Brazil nuts
- Cashews
- Pistachios
- Macadamia nuts
- Pecans
- Pumpkin seeds
- Sunflower seeds
- Walnuts

Fats and Oils

(See Fats & Oils Guide to details)

- Avocado
- Avocado oil
- Coconut oil
- Cold-pressed olive oil
- Ghee
- Sesame oil
- Walnut oil
- Macadamia nut oil

Beverages

- Unflavored coffee
- Green, Herbal, or white tea
- Mineral water
- Sparkling water

Vegetables

(Including but not limited to)

- Artichoke
- Asparagus
- Beets
- Bok choy
- Broccoli
- Brussels sprouts
- Cabbage
- Carrots
- Cassava
- Cauliflower
- Celery^
- Chard
- Collards^
- Cucumber
- Daikon
- Eggplant
- Endive
- Fennel
- Garlic
- Green beans
- Jicama
- Kale^
- Leeks
- Lettuce^
- Watercress
- Mushrooms
- Mustard greens
- Okra
- Onions
- Parsnip
- Peppers^
- Seaweed
- Shallots
- Snap peas
- Spinach
- Sweet Potato
- Squash
- Tomatillos
- Tomato
- Tam
- Yucca



Grains

- Jasmine white rice (if you have trouble keeping weight on)
- Quinoa
- Sprouted oats

Fruits

- Apples^
- Apricot
- Avocado
- Blackberries
- Blueberries^
- Cherries
- Cranberries
- Figs
- Grapefruit
- Grapes^
- Kiwi
- Lemon
- Lime
- Lychee
- Mango
- Melon
- Nectarines^
- Oranges
- Papaya
- Passionfruit
- Peaches^
- Pears
- Pineapple
- Plantain
- Plums
- Pomegranate
- Raspberries
- Strawberries^
- Tangerine
- Watermelon

Proteins

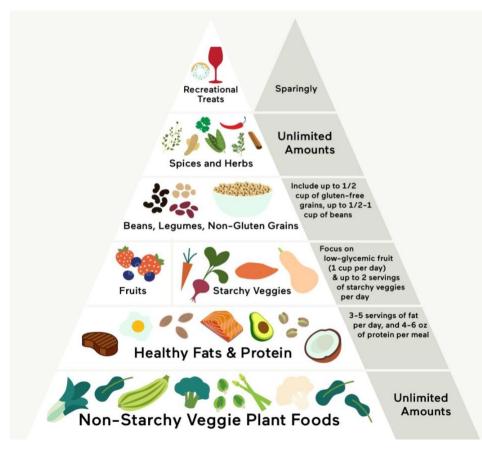
(See Guide to Food Quality)

- Meat Beef, lamb, veal, venison, lamb, pork
- Poultry chicken, turkey, duck, goose
- Fish salmon, trout, anchovies, tuna, mackerel
- Seafood lobster, crab, clams, squid, shrimp
- Eggs free range are best

Super Foods

(Offer the most nutrition for healing)

- Organ Meats liver, kidneys, heart, etc.
- Bone Broth homemade, not canned or boxed
- Fermented vegetables kombucha, sauerkraut, kimchi





Guide to Food Quality

Meat, Eggs and Dairy

Beef and Lamb:

Best: 100% grass-fed and pasture-raised

Good: organic

Baseline: commercial (hormone/antibiotic-

free)

Pork:

Best: pasture-raised

Better: free-range, organic

<u>Good</u>: organic <u>Baseline</u>: commercial

Poultry:

Best: pasture-raised

<u>Better</u>: free-range, organic <u>Good</u>: cage-fee, organic <u>Baseline</u>: commercial

Dairy:

Grass-fed

*Always buy FULL-FAT

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What the Labels Mean

Pasture-raised

Animals can roam freely in their natural environment where they are able to eat nutritious grasses and other plants or bugs/grubs that are part of their natural diet. There is no specific pasture-raised certification, though certified organic meat must come from animals that have

continuous access to pasture regardless of use.

Cage-free

"Cage-Free" means uncaged inside barns or warehouses, but they generally do not have access to the outdoors. Beak cutting is permitted. There is no third-party auditing.

Organic

Animals may not receive hormones/antibiotics unless in case of illness. They consume organic feed and have outdoor access, but may not use it. Animals are not necessarily grass-fed. Certification is costly and some reputable farms are forced to forgo it. Compliance is verified through third party auditing.

Natural

"Natural" means "minimally processed," and companies use this word deceivingly. All cuts are, by definition, minimally processed and free of flavorings and chemicals.

Free-range/Roaming

Poultry must have access to the outdoors at least 51% of the time, and ruminants may not be in feedlots. There are not restrictions regarding what the birds can be fed. Beak cutting and forced molting through starvation are permitted. There is no third-party auditing.

Naturally Raised

"Naturally Raised" is a USDA verified term. It generally means raised without growth-promoters or unnecessary antibiotics. It does not indicate welfare or diet.

No Added Hormones

It is illegal to use hormones in raising poultry or pork; therefore, the use of



this phrase on poultry or pork is a marketing ploy.

Vegetarian-fed

"Vegetarian Fed" implies that the animal feed is free of animal by-

Seafood

Best: wild-caught

Good: humanely harvested, non-

grain-fed

Baseline: farm-raised—not

recommended

Wild Fish/ Wild-Caught Fish

"Wild fish" indicated that the fish was spawned, lived in, and was caught in the wild. "Wild-caught fish" may have been spawned or lived some part of their lived in a fish farm before returned to the wild and eventually caught. The Monetary Bay Aquarium maintains a free list of the most sustainable seafood choices on their website.

Produce

Best: local, organic, and seasonal

<u>Better</u>: local and organic <u>Good</u>: organic or local <u>Baseline</u>: commercial

When to Buy Organic

Buy organic as often as possible, prioritize buying the Environmental Working Group's "The Dirty Dozen" as organic over "The Clean Fifteen."

SKUs

- Starts with 9 = organic. Ideal!
- Starts with 3 or 4 = conventionally grown

products but isn't federally inspected. Chickens are not vegetarians, so this label on chicken or eggs only serves to indicate that the chickens were not eating their natural diet.

 Starts with 8 = genetically modified (GMO) or irradiated. Avoid!

Fats and Oils

*See Choosing Healthy Fats

Best: organic, cold-pressed, and from well-

raised animal sources

<u>Better:</u> organic, cold-pressed <u>Good:</u> organic and conventional

Nuts and Seeds

Keep cold for freshness

<u>Best:</u> local, organic, kept cold <u>Better</u>: local and organic

Good: organic

Baseline: conventional



Guide to Fats and Oils

Buy the highest-quality fats and oils possible.

Fats and oils help build healthy hormones and cell membranes. Poor quality and, therefore, damaging fats and oils are the root of many health problems.

NEVER eat trans fats or "partially hydrogenated" fats, or highly refined oils like corn, canola or soybean as mentioned before. Eat these healthy, naturally occurring, minimally processed fats:

Saturated

Buy organic, unrefined forms:

- Coconut
- Coconut oil

Ideally from pasture-raised, grass-fed, organic sources:

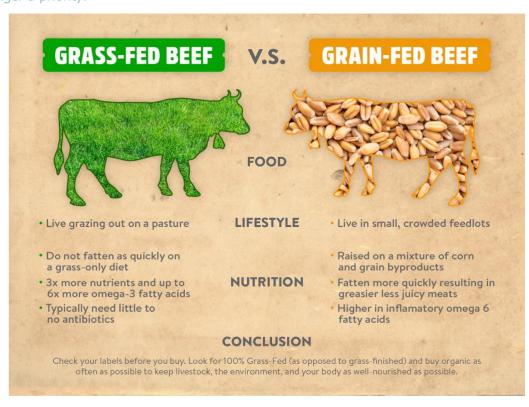
- Ghee, clarified butter
- Full-fat dairy
- Eggs, meat, and seafood*

*Buy lean cuts of conventional meats, organic if possible; If you are able to buy pastured or grass-fed, lean is no longer a priority.

Unsaturated

Buy organic, extra-virgin, cold-pressed forms:

- Olive oil
- Avocado
- Avocado oil
- Nuts & Seeds (look for spouted and soaked)





Super Foods

Fermented Vegetables

Fermented vegetables are probiotic foods (contain beneficial bacteria) that aid in healing the gut. They are also "pre-digested," making them easier to absorb for people with gut issues.

Although sauerkraut and kimchi are made from cabbage (which is considered to be high FODMAP), most people with gut issues can tolerate these fairly well due to the fermentation process breaking down the sugars.



NOTE: When purchasing fermented vegetables at the health food store, make sure it says "raw" and is in the refrigerated section. Sauerkraut in the condiments section has been pastoralized and won't have the same health benefits.

Organ Meats

Organ meats are referred to as "super foods" because they are between 10 and 100 times higher in nutrients than muscle meats and amazing for aiding in rebuilding the intestinal lining. For instance, beef liver contains 50 times as much vitamin B12 as steak and more folate and B vitamin than any other food on the planet. In fact, it's more densely packed with vitamins and minerals than kale, spinach and broccoli.

I will admit, when you first start eating organ meats the taste can take some getting used to. I recommend incorporating organ meats into your diet twice per week to start. You can also take an organ complex like this one here.



NOTE: To ensure to highest quality, it is important to make sure you are eating meat and organ meats that are pasture-raised and without hormones, antibiotics or grainfed.



Collagen, Gelatin, and Bone Broth

Collagen and gelatin are made from the bones, skin and connective tissues of animals and is very important for healing the gut and the immune system. Collagen and gelatin improve gut integrity and digestive strength by enhancing gastric acid secretion and restoring a healthy mucosal

lining in the stomach (15).

- Bone broth is the original gelatin source. If it turns into chicken or beef Jell-O when you stick it in the fridge, you know it's full of gelatin. Drink plain or add gelatin to soups.
- Roasts with lots of connective tissues will also produce meat and broth full of gelatin if you cook them long and slow, thanks to the breakdown of collagen in the meat.
- You can also easily add collagen or gelatin to your diet through supplementation. My favorite is <u>1st</u> <u>Phorm's Collagen</u>. Add to coffee, Matcha green tea, soups or shakes.





Healing Diet Guidelines Summary Table				
	Foods to Enjoy	Comments	Foods to Avoid	
Protein	Beef, pork, lamb, poultry (chicken, turkey, game hen) Fish Eggs	Meats: grass fed Poultry: eat both dark & white meats Fish: choose wild over farmed Eggs: cage free	Deep fried, breaded, or processed	
Carbohydrate Grains	Quinoa Sprouted Oats (if having trouble keeping weight on add Jasmine white rice)	Limit grains to sprouted, non-processed options and don't consume daily. Grains are very inflammatory to the body.	Cereals, breads, baked goods, crackers, pastas, boxed/snack items	
Carbohydrate Vegetables	Dark leafy greens, cruciferous, cucumber, celery, bell peppers, root vegetables	Eat vegetables cooked to aid in digestibility.	Canned vegetables	
Carbohydrate Fruits	Whole, fresh fruits in moderation	Choose seasonal, local fruits	Avoid dried fruits or fruit juice	
Fats/Oils	Extra virgin olive oil, sesame oil, unrefined coconut oil, real organic butter, avocado, flaxseed oil (do not heat flax)	Include good fats/oils with each meal Fish oils or cod liver oils good to supplement with	Margarine, spreads, hydrogenated & partially hydrogenated oils, canola, processed mayonnaise	
Drinks	Filtered water, Herbal teas, black coffee	Water is the best beverage to drink; it helps to optimize digestive function & elimination	fruit juices, beer (contains gluten), alcohol.	
Super foods	Bone broth, organ meats & fermented vegetables			



PHASE 3 - REPAIR

- 1. Work with a Functional Medicine provider to test for gut pathogens and gut dysbiosis
- 2. Add in supplements to repair and rebalance the gut
- 3. Focus on making positive lifestyle changes

1. Test and Treat Any Intestinal Pathogens

One of the main causes of IBS is gut dysbiosis, which is a change in the composition of the gut bacteria. Up to 83% of IBS patients have abnormal fecal biomarkers, and up to 73% have intestinal dysbiosis ($\underline{16}$). Specifically, those with IBS tend to have decreased levels of "good" bacteria, such as Lactobacilli and Bifidobacteria, and increased levels of harmful strains such as *E. coli* and Clostridia ($\underline{17}$, $\underline{18}$).

If you are experiencing symptoms of IBS (which I'm assuming you are since you're reading this book) I recommend working with a functional medicine provider to get some <u>testing</u> done to see if you have small intestinal bacteria overgrowth (SIBO), dysbiosis or gut infections/pathogens.

Knowing EXACTLY what you are dealing with will accelerate the process of treatment and protocol.

2. Supplements

Along with a healthy diet and exercise program, supplements can dramatically improve your gut health and reduce IBS symptoms. However, supplement brands are not all created equal.

Supplements are not regulated by the U.S. Food and Drug Administration (FDA). So it's important to know that the products you are buying contain the ingredients the label says, and that it has been manufactured properly and doesn't contain contaminants. It's also important to look for and avoid fillers, dyes and other additives that make supplements less optimally absorbed.

Some of my favorite companies I have used with my clients are Klaire Labs, Designs for Health, and Metagenics.

- <u>Food Grade/Store Grade</u>: Ingredients are suitable enough for people to eat. Many over-the-counter supplements are food grade, and ingredients don't have as rigorous a screening process as ingredients that are pharmaceutical grade.
- <u>Pharmaceutical Grade:</u> Ingredients are the highest quality, meet pharmaceutical standards, and go through third-party testing.



Recommended Supplements for Healing the Gut





L-Glutamine: L-Glutamine is the most abundant amino acid in blood and plays a vital role in the maintenance of the mucosal integrity of the gut (19). Traditionally termed as a "nonessential amino acid", it is now considered a "conditionally essential" amino acid. This amino acid is very important for the reproduction of cells, which is needed when suffering from chronic illness or stress on the body (20).

<u>High-Quality Multivitamin:</u> Multivitamins are supplemental sources of vitamins and minerals that help ensure your body gets the nutrition it needs but may not get from diet alone. <u>PhytoMulti</u> by Metagenics is the one I recommend, because not only does it provide vitamins/minerals it also contains a concentrated blend of plant extract rich in phytonutrients. Phytonutrients are high in antioxidants and support DNA stability. Phytonutrients also support healthy bacteria in the gut.

Omega-3 Fish Oil: Omega-3 fatty acids reduce inflammation within the body and can aid in the healing of intestinal permeability. Omega-3's reduce inflammation in two major ways: First, they prevent the formation of pro-inflammatory compounds named eicosanoids, which are formed from Omega-6 fatty acids. And second, they form several anti-inflammatory compounds that actively reduce inflammation.

There are three kinds of Omega-3 fatty acids that the human body needs: eicosatetraenoic acid (EPA), docosahexaenoic acid (DHA) and A-linolenic acid (ALA). The first two types are the most important, and are primarily found in cold-water fish like salmon and sardines. These two provide us with most of the health benefits attributed to Omega-3 fatty acids.

Metagenic's <u>OmegaGenics EPA-DHA 1000</u> features a concentrated, purified source of Omega-3 fatty acids in triglyceride form, from sustainably sourced, cold-water fish. Each softgel provides a total of 710 mg EPA and 290 mg DHA.

<u>Digestive Enzymes</u> and <u>HCL</u>: As mentioned in Phase -1, I recommend adding some digestive enzymes and HCL to each meal.

Probiotics: Adding in healthy microbes such as *bifidobacteria, lactobacillus* and *saccharomyces boulardii* can aid in rebalancing your gut flora by crowding pathogenic bacteria, producing natural antibacterial substances, inhibiting bacteria translocation, strengthening the immune system, reducing inflammation and increasing gut motility.

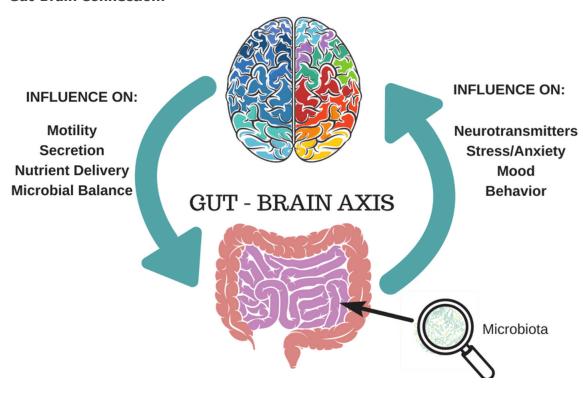
Start slowly and observe how the probiotics affect your gut. When you first start taking probiotics, you might notice some uncomfortable symptoms like gas and



bloating. If the symptoms persist for more than a few days, you may need to delay probiotics until your gut is more intact. For example, if you're dealing with what's called small intestinal bacteria overgrowth (SIBO), you might not be able to tolerate probiotics until your gut becomes more acclimated to the other changes you are implementing.

3. LIFESTYLE CHANGES

Gut-Brain Connection:



Our gut microbiome is highly interconnected with the brain and neurobehavior via the gut-brain axis, a network of neurons that signal molecules linking the enteric nervous system of the gut with the central nervous system. Yes, the brain can easily affect gut function.

Beyond diet, stress plays a major role in the health of our gut. The gut is especially vulnerable to the presence of chronic stress, demonstrating stress-induced changes in gastric secretion, gut motility, mucosal permeability and barrier function, visceral sensitivity and mucosal blood flow (21). Not only does stress have a physiological effect on the gut, it actually changes the composition of the microbiota (22).

Studies have shown that chronic stress may lead to the development of a variety of gastrointestinal diseases such as gastroesophageal reflux disease (GERD), peptic ulcer disease, IBD, IBS, and even food allergies (23). Experimental studies have shown that psychological stress slows normal small-intestinal transit time, encourages overgrowth of bacteria, and even compromises the intestinal barrier (24).



There are many ways to mitigate the impact of stress, including meditation, yoga, exercise, deep breathing and spending some time in nature. Learning to reduce stress will relax your central nervous system, which will decrease inflammation, and reduce symptoms associated with IBS.

Exercise:

Exercise is not a luxury. It's a necessity when it comes to preventing almost all chronic diseases. I encourage 30-45 minutes of exercise at least 5-6 days per week, with an emphasis on strength training to build muscle and reduce body-fat composition.

However, there are many people who take their fitness to an extreme level. Although exercise is essential, we want to avoid overtraining, which will actually put more stress on the body. Too much intense exercise can further disrupt the gut microbiome and contribute to leaky gut.

So, work out, but not too much? And not too hard? I know it sounds contradictory, but the key is to really listen to your body. If you are feeling ill or fatigued, losing muscle mass, gaining fat and constantly exhausted, these can be signs of too much exercise. This is counterproductive to healing your gut, and it's a good idea to take a rest or engage in lower intensity workouts, such as yoga or walking.

Sleep:

Poor sleep quality, or circadian rhythm disruption, has been shown to alter the rhythms of gut microbe and has been linked to metabolic changes such as insulin resistance and obesity (25).

Many people may overlook the importance of sleep and stress reduction, but here's the thing: You can eat a perfect diet and take all the right supplements, but if you're not sleeping well and managing stress, all bets are off. It just won't work.

Tips to improve sleep:

- a. Reduce your exposure to artificial light.
 - i. Don't use a computer for 2 hours before going to bed. No staying up late on Facebook and Twitter!
 - ii. Use blackout shades to make your bedroom completely black.
 - iii. Cover your digital alarm clock or get an analog clock.
 - iv. Turn off all digital devices that glow or give off any type of light.
 - v. If you can't do these things for some reason, use a sleep mask.
- b. Don't be too full—or too hungry
 - i. Some people sleep better after eating a light dinner. This is especially true for those with digestive issues.
- c. Go to bed earlier
 - i. When you fall asleep, you go through a 90-minute cycle of non-REM sleep followed by REM sleep. But the ratio of non-REM to REM sleep within those 30-minute cycles changes across the night. In the early part of the night (11pm 3am), the majority of those cycles are composed of deep non-REM sleep (stages 3 and 4) and very little REM sleep. In the



- second half of the night (i.e. 3am 7am) this balance changes, such that the 90-minute cycles are comprised of more REM sleep (the stage associated with dreaming) as well as a lighter form of non-REM sleep (stage 2).
- ii. Stages 3 and 4 are where our body **regenerates** and **repairs** tissue. If we don't get enough sleep, we can't heal the gut properly.



PUTTING IT ALL TOGETHER

There's no question that healing digestive issues can be a confusing and time-consuming process. In my vast professional experience, it usually takes 3-6 months to unravel a chronic digestive issue—sometimes longer. This may not be the news you were looking for but setting realistic expectations will help you stick with a therapeutic approach long enough for it to work.

Follow my tips throughout this book and, just like I did, you too can permanently shelve the nasty symptoms associated with IBS and become a happier, healthier you!



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