



Step by Step Guide II

How to Improve Your Gut Microbiota Naturally



“Rome was not built in a day” – Neither was our gut microbiota

Dr. Norm Robillard
Founder, Digestive Health Institute



Guest speaker at

- [The Microbes and Mental Health Summit](#)
- [Digestion SOS Documentary Series](#) by Shivan Sarna
- [Integrative SIBO Conference](#) by Synergy
- [JJ Vergin Podcast](#)
- [Primal BluePrint Podcast](#)
- [Dr. Micheal Ruscio Podcast](#) and many more



[Dr. Norm Robillard – Fast Tract Diet](#)

In our modern Western lifestyle, it's all but impossible to avoid:

- Food poisoning
- Antibiotics and other drugs
- Chemicals
- Preservatives
- Food additives
- Junk food

Many people are also impacted by:

- Caesarean births
- Formula feeding
- Poor diet choices
- Over or under eating
- Other illnesses that negatively affect the health of our gut microbiota

Given the challenging environment we live in, it's more important than ever to take good care of our gut microbes, especially when/after they have been impacted.

It's a simple fact that a diverse gut microbe population is more resistant and resilient to environmental impacts.

As a group, humans have between one and two thousand different species of bacteria in our gut. This diversity is often compared to a rainforest. But you might be surprised that **we only have around 250 different species in our gut as individuals.**

This makes it critical that we care for these little creatures as we have a very important arrangement with them that our health and their health depend on. After all, these bacteria and archaea (as well as fungi and protozoa to a lesser extent) in our gut collectively:

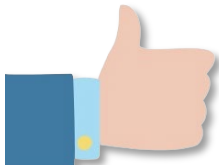
- **Protect us against pathogenic intruders** such as C. diff., Salmonella, Campylobacter, Shigella, invasive E coli, Yersinia, and many others
- **Help maintain the integrity of the intestinal barrier**, preventing the entry of undigested food particles, bacteria, toxins, and other harmful substances into the bloodstream
- **Assist in the breakdown of undigested carbohydrates** and fibers as well as some proteins and fats
- **Produce short-chain fatty acids (SCFAs), vitamins, and other molecules** that can be absorbed and used by our body for energy and metabolism
- **Support the development and regulation of our immune system**
- **Help regulate appetite, fat storage, and bile pool levels**
- **Influence brain function** through the production of neuroactive substances and play a role in mental health conditions, such as anxiety, depression, dementia/Alzheimer's, and Parkinson's
- **Influence the metabolism and efficacy of certain medications**
- **Together, our microbes process up to ½ of the vegetative matter** we consume

When gut bacteria ferment carbohydrates and, to a lesser extent, fats and proteins, they produce short-chain fatty acids, vitamins, and other end products that nourish us, hence providing our ancient survival advantage.

Now, the question is... how to protect and nurture this symbiotic relationship between our body and gut microbes, especially for people like me who are susceptible to GERD/LPR, IBS, SIBO, and/or other forms of gut dysbiosis?

Here is the good news!

There are evidence-based action steps you can take right now to minimize the risk by protecting and re-populating your healthy gut microbes while improving your digestion and controlling SIBO/dysbiosis-related symptoms. **So, let's get started!**



WHAT TO DO

1. Consume whole foods that are low in fermentable carbohydrates.

Some examples include:

- Green, leafy, and lower-carb veggies
- Fatty fish
- Head-to-tail animals
- Low or no lactose dairy in moderation
- Low [FP](#) fruits in small amounts
- Nuts in small amounts
- Lots of healthy fats (animal, fish, and seafood, as well as butter, cream, cold-pressed olive, coconut, and other nut oils)

Limiting fermentable carbs is the key to controlling bacterial overgrowth and gut dysbiosis, a condition involving lower diversity and an increase in unhealthy strains.

For many people, including both omnivores and vegetarians, excessive fermentable carbohydrates can be a huge problem. I provide specific and customized guidance and alternatives through [my consultation program](#).

2. Include polyphenol-rich foods in your diet

Berries, herbs (cloves, peppermint, oregano, pomegranate, etc.), olives, coffee and tea are some examples. But watch out for the higher-carb options.

- [Beneficial Effects of Dietary Polyphenols on Gut Microbiota](#)
- [Dietary Polyphenol, Gut Microbiota, and Health Benefits](#)
- [Healthy Foods High in Polyphenols](#)

3. Consume a variety of fresh vegetables and herbs - also eat some raw

While cooked vegetables are easier to digest, it's important to consume some raw vegetables and herbs if you can. This is because the skins of veggies, as well as the stems and leaves of plants, contain a wide variety of microorganisms that will help repopulate your gut.

It's important to challenge and support your gut microbes with different macro and micronutrients from a variety of different plants and animals that support the diverse needs of your microbiota.

Some organisms may be present at low levels in our gut until they receive a boost from specific nutrients, which they excel at breaking down!

Do limit the serving size of plant-based foods because consuming too many/too much fermentable carbs will have an adverse effect on people with functional GI issues.

These are some of the veggies and fruits I grow in my own organic garden that form a significant part of our summer/fall diet. I am also including the [FP \(Fermentation Potential\)](#) points per serving. FP is a measure (in grams) of fermentable material per serving. For more information, refer to the [Fast Tract Diet Mobile App](#).

Veggies & Fruit	Serving Size	FP
Cilantro	¼ cup	0
Dill	¼ cup	0
Basil	¼ cup	0
Parsley	¼ cup	1
Mint	¼ cup	1
Lettuce	1 cup	1
Spinach	1 cup	1
Kale	1 cup	1
Pepper	1 small	2
Zucchini	1 cup	2
Picking cukes	1 cup	2 (Less after pickling)
Tomatoes	1 small	3
Strawberries	½ cup	4
Raspberries	¼ cup	6

Sulfoquinovose:

Another benefit we get from green leafy plants is access to a little-known but important nutrient called **sulfoquinovose (SQ)**.

Green leafy plants such as **spinach, kale, broccoli, cabbage, and many others** produce 10 billion tons of SQ per year. SQ is the only sugar identified to date which contains sulfur!

The amazing thing about SQ is that it [specifically feeds key healthy gut bacteria](#) (including an important strain of E coli) that **helps maintain the gut lining and prevent colonization by bad bacteria.**

Only bacteria possessing a key enzyme called YihQ can use SQ. In other words, unhealthy bacteria attempting to take up residence in our gut have one more disadvantage to contend with.

If we lost our bacteria possessing this key enzyme, we could not access the energy (SQ is also a sugar) or sulfur from plant based SQ and would be less able to fend off pathogenic strains.

This discovery also describes an important mechanism for getting sulfur from plants into our bodies. Sulfur is critical for many processes, including making the key amino acids methionine and cysteine used to synthesize proteins.

4. Select ripe fruits and veggies

Ripe fruits and veggies have fewer complex carbs and more simple sugars that are easier to digest. Regarding fruits, berries, lemons, and limes are the lowest in fermentable carbs. In all cases, limit the serving sizes, especially for higher-carb fruits and vegetables.

5. Eat slowly and chew well

Chew each bite 25-30 times as much as you can. Why? Because this will not only break food into small pieces that are easier to digest but will also give the amylase enzyme in your saliva more time to break down starches.

Depending on where each of us evolved on the planet, some of us have many gene copies for the salivary amylase enzyme, while others (likely myself included) have fewer gene copies and much less amylase in our saliva, making us more intolerant to starch.

Eating slowly and chewing well gives the amylase we do have more time to work on digesting starches.

6. Supplement with digestive enzymes

Another way to aid digestion not only for starches but also for fats and proteins is a digestive enzyme that mirrors the enzymes naturally produced by the pancreas, which contains lipase, protease, and, most importantly, amylase.

[Now Foods Pancreatin](#) is a good example (I am not affiliated with the product or company). If you consume higher lactose-containing dairy, you might also try a [lactase](#) enzyme supplement.

If the enzymes help, great. If they don't (after several weeks), chances are that pancreatic enzyme deficiency is not your issue, and you can stop taking the supplements.

7. Fast intermittently

Fasting helps to prevent excessive fermentation and bacterial overgrowth/dysbiosis.

[This study](#) shows that fasting reduces IBS symptoms, while another [pilot study](#) (obese, non-IBS subjects) links fasting with greater diversity and increases in anti-inflammatory and gut lining associated strains *Faecalibacterium prausnitzii* and *Akkermansia mucinophila*.

Note: Fasting may not be appropriate for children, women who are pregnant or breastfeeding, type 1 diabetics (without adjusting insulin doses), people who are underweight, have eating disorders, certain liver diseases (although fasting [may be helpful for Non-alcoholic fatty liver disease](#) (NAFLD)), advanced kidney disease, or people who are ill or need to take medications with food. Check with your doctor.

8. Hydrate

Drinking an adequate amount of water is essential for overall health and facilitates the movement of nutrients through our digestive tract. It also supports the proper functioning of our digestive system. Not surprisingly, the [type and amount of water we consume impacts our microbiome](#).

9. Exercise regularly, but don't push it too hard

Moderate to high-intensity exercise for 30–90 min ≥3 times per week can improve the diversity of our microbiota and increase the abundance of beneficial microbial species.

However, very high intensity exercise for long periods (≥2 hours at 60% VO₂max) may have a negative effect, increasing gut permeability, impairing gastric emptying, slowing of small intestinal transit and increasing malabsorption leading to a condition called exercise-induced gastrointestinal syndrome.

10. Get out into nature

The outside environment (biosphere) is home to a huge variety of microorganisms, many of which will find their way into our digestive tract.

Most will pass through harmlessly, and some can cause disease, but many will find a home in our gut and increase our microbiota diversity.

11. Work the soil / Start composting

Soil is essential for life, and composting is the best way to return nutrients (food scraps, yard clippings) to the soil.

We use soil to grow our food and feed our livestock, yet it's being lost at an alarming rate (cities and erosion). By gardening and composting, we can help slow its demise and improve our health all at the same time.

Soil is composed of minerals, water, organic material (decaying plants), and insects. It also contains lots of microbes, including:

- Bacteria
- Fungi
- Protozoa
- Archaea

You might be surprised that each gram of compost contains up to **1 billion** bacteria and **1 million** fungal cells.

Even though composting* and digestion** are unique processes, [16 S rRNA gene sequencing](#) shows that many of the phylogenetic groupings of microbes in our gut are also represented in compost, including:

- Bacteroidetes
- Firmicutes
- Actinobacteria
- Proteobacteria
- Verrucomicrobia
- Fusobacteria
- Euryarchaeota (archaea)
- Fungi

Since compost is used to enrich the soil for growing, it should be no surprise that the bacteria, archaea, and fungi in compost end up on the plants we consume. Thus, compost represents a great reservoir of microbes that can support the continued repopulation of our gut, so long as we eat at least some veggies raw, unpeeled, and not over-washed.

Another benefit of enriching the nutrient content and health of our soil with compost is using **fewer [pesticides](#)** and **less fertilizer**.

For my own garden, I only use organic pesticides such as neem oil, Captain Jack's Dead Bug, and BT, and only when there is an insect problem. Last year, I did soil testing, and the results showed that my garden only required some supplemental nitrogen. So, I avoided adding excess magnesium, potassium, and phosphate, which would have ended up in our waterways.

* mostly aerobic (depending on how much you mix it) with pockets of anaerobic environments

** mostly anaerobic with a bit of oxygen in the S.I. and close to the mucosal membrane

12. Wash your hands when you get home

While contact with healthy people can improve our microbiota, not all people have the healthiest microbiome. Also, some people may be sick.

13. Travel sanitization

Carry some alcohol-containing sanitary wipes when staying at hotels, airplanes, and cruise ships. Give all the touch points (faucets, flush handle, seat, doorknobs, light switches, etc.) a wipe-down before settling in.

14. Take steps to avoid food poisoning

Avoid restaurants where there are any questions about their sanitation. If these questions arise, it would be best to leave rather than to be sorry later.

This is particularly important during recovery from GI issues due to the lack of control over cooking methods or added ingredients, [increased risk of bacterial or viral illness due to improper food handling or storage](#), young employees with little training in food safety, staff turnover, and working while ill due to lack of health benefits or paid sick leave.

Eat well-cooked food and drink bottled beverages if you are traveling to developing countries.



What Not to Do
(* Whenever You can)

1. ***Avoid antibiotics and other chemicals (insecticides, herbicides, preservatives, etc.) as much as possible**

Have discussions with your doctor/dentist and inquire if the antibiotic is necessary for what you are dealing with. Some people still take antibiotics for viral infections. Antibiotics won't help a cold or flu. If you are not severely immunocompromised, you likely don't need antibiotics for dental procedures.

Shop organic whole foods at farmers' markets and/or grocery stores. Also, start your own organic garden and compost pile if you can – it's therapeutic and rewarding.

If you can't avoid antibiotics, consider steps to take before and after taking them. Before taking them, consider [banking your own poop for an autologous FMT](#). This type of self-FMT quickly restores your original microbiota.

After taking antibiotics, [resist the urge to take common probiotics](#), which make it more difficult for your microbiome to return to its natural state.

From the study, **the probiotic-treated group still had dysbiosis 5 months after antibiotics.**

On the other hand, **doing nothing after antibiotics allowed the microbiome to recover within 21 days**, and taking **a self-FMT (your own banked poop) restored the microbiome in as little as one day.**

2. ***Avoid hospitals, nursing homes, and doctor's offices when possible**

We will all need to visit these places for various reasons. But they are frequently hotbeds of pathogenic bacteria and viruses, including *C. difficile*.

C. diff is an ever more common infection, particularly for people with:

- Weakened immune systems
- Taking antibiotics
- Taking proton pump inhibitors

Make sure to wash your hands with soap and water after leaving these facilities. Hand sanitizers can help with a variety of pathogens, though they're not a complete solution for C. diff. as this bacterium produces alcohol-resistant spores.

3. Don't consume too many/much fermentable carbohydrates

Limit the following foods as much as possible:

- Pasta
- Legumes
- Breads, cakes, crackers
- Sugary drinks
- Commercially made desserts
- Hard-to-digest starches (based on [FP](#) points)

[The Fast Tract Diet](#) provides alternative foods with less fermentable carbs, including some more easily digestible pasta, breads, rice, potatoes, and desserts. But when in doubt, it's best to limit foods from these groups.

The key is to increase fats (to a higher degree) and protein (to a lesser degree) in your diet when you cut carbs. Here are three excellent articles on ways to add more fat ([Here](#) & [Here](#)).

The more you can limit fermentable carbohydrates, the sooner your symptoms will subside and the sooner you can gradually expand your diet.

*“Once your symptoms are under control **but not before**, you can experiment with adding some fermentable carbs back into your diet **gradually in small servings**.”* This is what I tell my clients.

Keep in mind that you are still feeding your microbiota. **They are not starving and are cross-fed with mucins (complex glycoproteins) your body makes.** You are simply putting them on a diet.

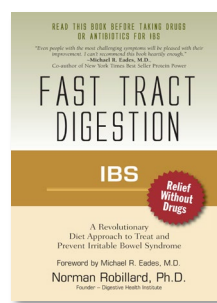
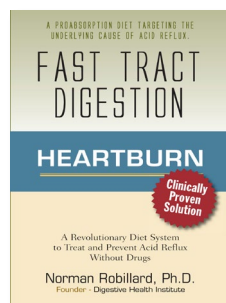


Start Small & Create Healthy Habits

It might be overwhelming to start putting all these suggestions into action. So, start small and create a habit of taking one or two actions at a time. Improving our health vis a vis our gut microbes' is a lifelong process.

Healing and improving digestion takes time. Sometimes, it's months or even years. But over time, with improved dietary and behavioral practices as well as identifying and addressing underlying causes unique to each person, you should expect more tolerance and the ability to enjoy foods that used to give you a problem.

For more information about how to address acid reflux, GERD, LPR (silent reflux) and SIBO/dysbiosis naturally, refer to [the Fast Tract Digestion Heartburn book](#). For IBS and SIBO/dysbiosis, refer to [the Fast Tract Digestion IBS book](#).



Ready for action? Use the Fast Tract Diet app available at [Apple](#) and [Google Play](#).



Remember that “*Rome was not built in a day.*” Neither was our gut microbiome. So be consistent, persistent, and patient!

For inspiration, you may want to read [the personal experiences of Jaeme, Judy, Amy, Michele, and Jane with the Fast Tract Diet](#) and [clients’ testimonials](#).

Compliance is the #1 key for successfully implementing the Fast Tract Diet for relief and recovery. Lastly...

How do you know if your microbiota has been impacted?

Functional GI conditions, obesity, and a variety of other health issues are linked to various types of dysbiosis. To determine if you have dysbiosis and to learn more about the nature of dysbiosis, you may consider a couple of diagnostics.

1. **Breath testing:**

This type of testing can determine if your microbes are producing unusual amounts of gases, including hydrogen, methane, or hydrogen sulfide. The results can determine which gases are being produced, as well as the amounts and, in some cases, the location in the digestive tract (large or small bowel).

2. Comprehensive stool testing:

This type of testing provides a highly detailed gut health check. It includes both culture and molecular testing for:

- Pathogens (fungal, parasite, bacterial)
- General commensal microbe populations
- Inflammatory and Immune markers
- A measure of leaky gut
- Detects pancreatic insufficiency
- Includes measures of digestive efficiency

When evaluating comprehensive stool testing results, I follow a process that considers various elements. For more information about my analysis, please visit [the Analysis of Stool Test Results page](#).

If you are looking for science-based integrative solutions for your specific case of digestive and overall health issues, [Let's talk](#).



[Interested in working with Dr. Norm?](#)

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Appointment or Call +1 (844) 495-1151 US**

Book Now



Dr. Norm's 4 Pillar Approach



**Diet &
Digestion**



**Root Cause
Analysis**

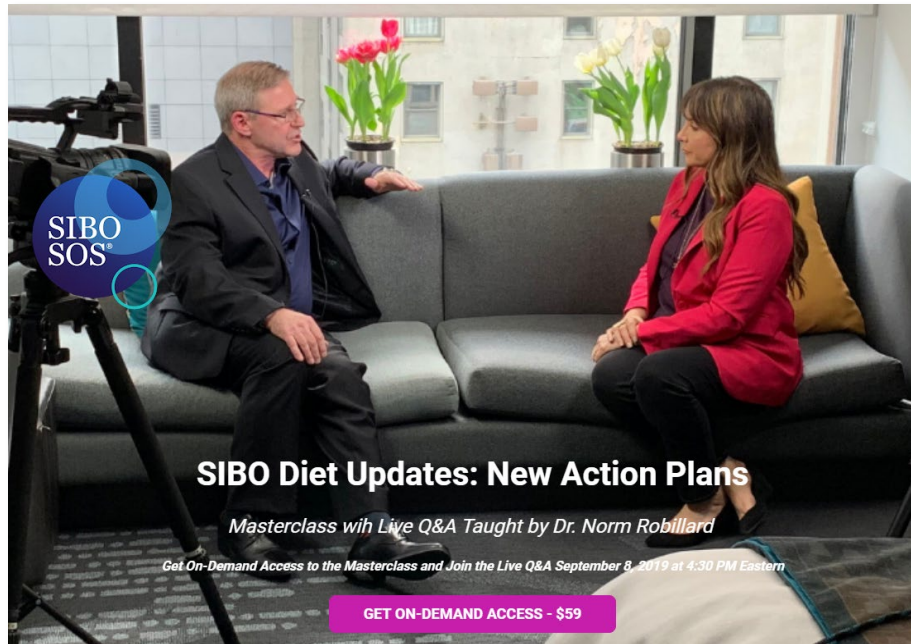


**Gut Friendly
Practices**



**Science-based
Supplementation**

- Heartburn / Acid Reflux / GERD
- Laryngopharyngeal Reflux Disease (LPR)
- Irritable Bowel Syndrome (IBS) / Small Intestinal Bacterial Overgrowth (SIBO)
- Small Intestinal Fungal Overgrowth (SIFO)
- Intestinal Methane Overgrowth (IMO)
- Leaky gut and Autoimmunity
- Celiac and Crohn's disease
- Diverticulitis
- Histamine / Mast Cell issues
- Weight loss and weight gain
- Asthma
- Rosacea
- Other issues related to digestive health



SIBO SOS™ Master Class: SIBO Diet Updates

Regardless of whether you choose to take drugs or antibiotics (pharmaceutical or herbal), dietary and behavioral changes must be part of the SIBO solution.

If your case is properly and adequately addressed, you almost certainly can skip the drugs and antibiotics.

Update your knowledge based on the latest scientific research and take the necessary action steps to address your SIBO and functional GI issues **NATURALLY.**

>> **Special Bonus: 2 master classes for the price of 1**