



The Ultiself Definitive Guide to Gut Health

20 Key Habits to Optimize your gut and gut-brain connection



ultiself.com



Intro



Eating well is crucial for your overall health and well-being. Developing healthy eating habits may protect you from obesity, cardiovascular disease, high blood pressure, and even cancer.



When your diet contains lots of minerals, vitamins, fiber, and other essential nutrients, it can improve your mood and may prevent you from anxiety and depression and improve your mental sharpness and productivity.

In addition to vitamins, minerals and macronutrients you need to pay attention to your gut microbiome and your overall gut health. The bacterial balance in your gut is one of the main factors that affects your health and quality of life. Not only does gut-friendly bacteria help your body digest food, but it also supports various metabolic processes, your immune system and it even affects your ability to think clearly.







Your Gut - Brain Connection



Did you ever notice that overeating can make you tired? Also when your stomach is out of balance did you notice how you can become easily frustrated?

This is due to the fact that your gut produces almost 90 percent of your serotonin. This important neurotransmisor is responsible for your mood, energy and your level of happiness. It also influences the ability of the hypothalamus to control emotional behavior. [12] Your stomach has neurons just like your brain. The Vagus Nerve connects your gut and your brain. Therefore, it's not surprising that your gut may significantly influence the way you think and affect your emotions for better or for worse. [12]

Conversely, the way you feel and think impacts your gut. Your gastrointestinal tract (GI) is highly sensitive to your emotions. That explains why stress may cause diarrhea and why you rush to eat or lose your appetite when you are angry or sad. You may also feel other digestive issues such as bloating, gas, or constipation after having an uncomfortable conversation during a meal.



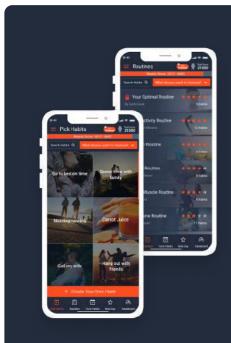


To maintain good stomach health and take advantage of the gut brain connection to upgrade your mood and productivity you need to adopt certain habits.



For example there are actual <u>mood boosting probiotics</u> that you can take.

Not only will these improve your gut health, but also they may actually improve your mood. Pick the right gut health habits for you and in addition to improving your gut health, you may also improve your immunity, mood and mental sharpness.



Please remember, we are all different. You need to identify which gut improving habits work best for you. And how various foods affect your gut, mood, energy levels and cognitive performance. This can be done by keeping a food journal and of course using the <u>Ultiself biohacking app</u> to optimize your eating regimen.



Here are 20 KEY HABITS to upgrading your gut health and improving your mood, mental sharpness and motivation through the gut-brain connection.





Optimize your mental state for a healthy gut

1. MEDITATE



Meditation may help you relax and cool down your mind. Numerous studies have shown the beneficial effects of meditation on your stress level. [6] Some studies have shown that meditation can be actually a good way to deal with IBS. [3], [4], [5] It helps you not to react automatically to anxiety about your pain and to avoid catastrophic thoughts about pain management. It also teaches you to understand the symptoms as internal signals that do not really threaten your well-being.

Finally, it helps you disconnect your attention from bowel sensations and avoid obsessive thoughts about bowel function [4]



You can try many kinds of meditation including <u>guided</u> <u>meditation</u> with an app, <u>transcendental meditation</u> and even breathing exercises such as <u>box breathing</u>.

Mindfulness is even more important. It requires you to stay present and aware of the world around you. You engage all your senses and it usually positively affects your mind. By practicing mindfulness, you may feel that you tend to worry less, which decreases anxiety and depression. As a result, this practice usually has soothing effects on your gut, too. [3], [4], [5]





2. EXERCISE



The benefits of regular <u>exercise</u> are well documented. A study from 2018 has shown that people who live sedentary lifestyles improved their gut microbiome after just 6 weeks of exercising. [13] But, when they stopped physical activity, their microbiome turned back to previous levels.

Exercise reduces inflammation in the gut. Research on a link between gut health and irritable bowel disease (IBD) has shown that moderate exercise helps with symptoms. Moreover, studies have shown beneficial effects on inflammation in general. [14] They demonstrated that regular exercise positively impacts the autonomic nervous system. It activates and stimulates the vagus nerve.



Having in mind that the vagus nerve is responsible for communication between gut and brain cells, its activation may decrease stress, reduce inflammation, help with anger, and keep anxiety under control. This stimulation helps you relax and may soothe the sensitivity of your gut.



3. GO FOR WALKS



Spending time in nature actively is good for your overall health and your gut health. Taking walks is the most natural way to enjoy the outdoors. Just feeling the fresh air and warm sunlight makes you feel good. This has calming effects and reduces the symptoms of anxiety and depression. As we learned mitigating stress is essential to good gut health.



Additionally, going for walks outside has anti-inflammatory and improves your gut flora. This supports your immune system and improves peristalsis, the motility process in the gastrointestinal tract.

Peristalsis is the contraction and expansion in your intestines and digestive tract that allows food to circulate and waste to come out [17]. Too put it in simple terms walking can make it easier to go to #2:)





Optimize your Gut and Gut Brain Connection

4. CUT SUGAR AS MUCH AS POSSIBLE



The typical Western diet consists of processed foods, refined carbohydrates, and sugar. Too much sugar in a diet usually wreaks havoc in your body and causes spikes in your blood sugar level. Periods of sugar spikes are often followed by sudden low in sugar. These fluctuations trigger your body to crave more sugar or unhealthy foods.



Because of that, cut sugar as much as you can and get used to reading labels. The reason is simple — manufacturers put different types of sugar in your favorite food and their names are left hidden in the list of ingredients. Pay attention to names like dextrose, fructose, fruit juice concentrates, glucose, invert sugar, maltose, and of course high fructose corn syrup.





5. GET ENOUGH VITAMIN D



As we all know, vitamin D can be obtained from the sun and helps us feel better [1]. But did you know that exposure to sunlight promotes the diversification of good bacteria in our gut?

These bacteria aid in the metabolism of nutrients. This helps you get the most from the food you eat, strengthen the immune system and protect the function of the gastrointestinal tract [18].



In addition to sunlight Vitamin D can also be obtained from certain foods, which we should consume more.

Among them are: egg yolks, and salmon.





6. OPTIMIZE YOUR STOMACH PH



One of the key factors that may impact your gut flora and your overall health is the pH value of your stomach. It determines whether your gut environment is mainly acidic or alkaline. While your upper GI tract has a pH value from 4 to 6.5, your lower stomach is mainly acidic. Its pH value ranges from 1.5 to 3.5. However, when you age, your stomach acidity may become off balance and you most definitely want to maintain an optimal pH. [16]

Having a balanced diet with lots of fresh fruits, vegetables, healthy fats, and whole-grain helps you keep stomach pH at its optimum. Just be sure that you avoid eating processed foods. As already stated, these foods contain lots of added sugar and other foods mentioned below can decrease the pH of your gut below its healthy level and promote unhealthy gut bacteria.

If you are having stomach acid problems here are some foods that you want to avoid: red meat, carbonated drinks, alcohol, tobacco, tomatoes, dairy products, smoked meats and cheeses, and all kinds of sugary foods and desserts.



Most people love coffee for its great taste and energy boost. But, Caffeine is acidic and can increase your stomach acid so don't go too crazy with coffee.







Foods that can reduce your stomach acidity - Apple cider vinegar is a good choice when looking for pH balance. Apple cider vinegar optimizes your stomach acidity, and also promotes the growth of bacteria beneficial to the digestive process.

In addition to apple cider vinegar foods like leafy green vegetables, licorice, fennel seeds may help decrease your stomach acidity. Lime is also great to reduce acidity and alkalize the body. A great practice is to drink 2-3 glasses of water with lime when you wake up in the morning.

Occasionally it is appropriate for your stomach to consume foods that lower the pH, making it more acidic. An example of this is grapefruit. Maintaining a strictly alkaline diet can cause a deficit of certain vitamins and proteins.

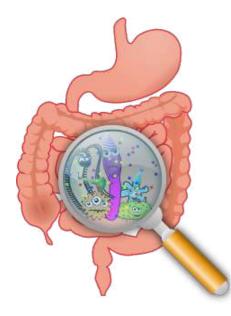


Water PH - The pH level of drinking water may influence your gut, too. When water pH value is below 6.5 or above 8.5, it may do more harm than good. This water might be highly acidic or too alkaline. To drink healthy water, you may use some of the pH treatment methods at home such as applying neutralizing filters or using water softeners to eliminate the hardness from your drinking water. Try to drink high quality water that has a PH between 7.5 and 8. Evian is a great example of such water.



Minimize Antacids - If your stomach acid and acid reflux become too hard to control you can consider taking antacids. But be very careful they are a quick fix and can have negative effects in the long run.

Acids also have functions in our digestion, such as helping to digest proteins and some foods, and act as a barrier to some intestinal infections.



Continued use of antacids can create an imbalance in the intestinal pH, which interferes with the digestive process and the absorption of nutrients. They can also alter the intestinal flora, weaken the immune system and create greater vulnerability to intestinal infections [19], [20].

Of course always ask for advice of your doctor before stopping or starting any medication. The content in this guide should not supersede the advice of your physician.







7. TAKE A PROBIOTIC



A growing body of studies [8] has shown that taking probiotics is good for your health. These beneficial bacteria may help your gut combat bad bacteria, digest food better, and stay healthy. Keeping your gut flora well-balanced makes your immunity strong, alleviate digestive issues, and reduce the symptoms of allergic reactions. The best food sources of probiotics are yogurt, kimchi, sauerkraut, tempeh, miso, kombucha, fermented, vegetables, and so on.











The probiotics market offers a plethora of products that claim to have beneficial bioactive compounds to fix your digestive problems. To find out the right probiotic for you, you need to delve a little deeper to understand their effects. You may want to research what probiotics brand relies heavily on studies that back up the benefits of their supplements. Again you can use the ULTISELF HABIT TRACKING APP to help you with this process.



Start with a supplement that contains the strains of live bacteria such as Lactobacillus or Bifidobacterium that may improve your gut microflora. Their positive effects have been already well-documented.





8. MAKE SURE YOU AND GETTING ENOUGH OF A PREBIOTICS



<u>Prebiotics</u> are the non-digestive fiber that feeds your good bacteria. Without prebiotics, beneficial bacteria couldn't survive. They accelerate the growth of live bacterial colonies, making your gut strong and healthy.

You may find prebiotics in foods that you eat every day. These foods are high in fiber that ferments in your intestines. This process is essential for the spreading of beneficial bacteria to your gut microflora. **Take more natural prebiotics such as leeks, dandelion root, artichoke, chicory root, etc., to make your probiotics effective.**











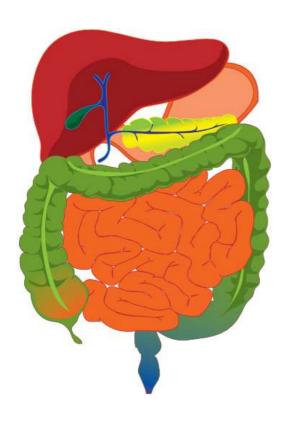




9. STRENGTHEN YOUR DIGESTIVE TRACT



L-glutamine is a powerful amino-acid that improves your digestive health. However, its effects go far beyond digestion. One of the main benefits of this amino acid is reducing the symptoms of leaky gut, when the internal barrier that covers our intestine is damaged and allows the passage of harmful substances or microorganisms. The symptoms may range from mood swings to autoimmune diseases and other chronic illnesses.



Even though L-glutamine is produced by the body, you may benefit by taking a glutamine supplement. If you suffer from digestive issues, especially leaky gut or irritable bowel syndrome, adding L-glutamine in your diet may improve intestinal permeability.



10. DRINK HEALTHY TEA SUCH AS OOLONG AND GREEN TEA



<u>Drinking oolong</u> and <u>green tea</u> doesn't just feel good. Both types of tea are abundant in antioxidants, especially polyphenols that help the body fight free radicals. They improve metabolic processes and help people with obesity to lose weight.



One of the remarkable benefits of drinking oolong and green tea is the better gut microbiome. Regular intake of these two teas increases the presence of good bacteria in your stomach. They populate your small intestines with Lactobacillus and your colon with Bifidobacterium. Both bacteria provide strong protection against many diseases.

Just don't overdo it as the caffeine can raise your stomach acidity.





11. GET YOUR OMEGA 3 FATTY ACIDS



A recent study [9] has revealed that people who eat a diet rich in omega 3 have better gut health. A high level of omega 3 improves the diversity of their gut microbiome. When gut flora is populated with different beneficial bacteria, it makes the stomach strong.





12. GET YOUR B VITAMINS



Your body produces B vitamins naturally. When your gut flora is strong, your body may make lots of these important nutrients. On the other hand, gut microbiome overpopulated with bad bacteria leads to a deficiency of B vitamins and contributes to diseases such as Crohn's disease or ulcerative colitis.

<u>Vitamin B complex</u> plays an important role in the digestive process, and also in the production of substances that enhance food processing. For example, vitamin B3 helps generate gastric juices and bile, so that fats can be properly digested.



Make sure you are getting enough B vitamins. Especially Vitamin B12 and if you are not you may want to supplement.





13. EAT THE RIGHT SEEDS



Eating more seeds may improve your gut health. When you have more sesame seeds in your diet, you'll get more tyrosine, an essential amino acid responsible for the production of hormones. Whether you eat them as seeds, pasta, or ground sesame seeds, taking more tyrosine may boost your metabolism. It also protects you from depression and cognitive impairment.



Certain seeds have anti-parasitic effects. These Include caraway seeds, pumpkin seeds. Make sure to add these types of seeds to your diet to minimize parasites in your system.





14. DON'T EAT BEFORE BED



It is recommended that we eat during our most active hours, which means during the day, that way we can facilitate metabolism. When we eat late at night, we can begin to accumulate more body fat and our body composition is altered.

In addition, this bad habit can worsen the symptoms of gastroesophageal reflux and generate other metabolic disorders. Eating just before going to sleep can also interfere with circadian rhythms and alter the quality of sleep [21], [22].



It is best to avoid eating for 2 hours or more before bed. This will help you sleep better, get more from your sleep and mitigate stress on your gut.





15. TRACK YOUR EATING



Keeping track of eating habits can serve multiple purposes. It can certainly improve your gut health. You can start by keeping a daily record of what you eat, with as many details as possible. You can also record how much you eat and when you eat.

By recording what you eat you can identify how various foods and eating habits affect your gut, mood and mental performance. For example you can notice that eating late may have a negative affect or intermittent fasting can have a positive affect.

Using the Ultiself habit tracking app can be great here because it can simplify and automate the process for you and help you identify how various eating habits affect your gut health.

The food you eat can make you feel happy, stressed, or depressed. Eating a healthy diet may boost your mood. Good fats such as medium chain triglycerides (MCT) can improve your mental performance and make you feel happy and enthusiastic. When you track the consumption of these types of food as a habit in Ultiself the AI logic of the app will be able to identify which foods and supplements have the greatest impact on the quality of your days. And this is powerful information because you will be able to cut the stuff that makes you feel bad and add more of the stuff that makes you feel good and productive.





16. IF YOU ARE HAVING GUT ISSUES TRY A FODMAP DIET



If you are really struggling with gut health and IBS you can try a A <u>FODMAP diet</u>. This diet may help you with digestive problems, especially if you suffer from irritable bowel syndrome (IBS).



The FODMAP diet is an elimination diet that addresses the most common foods responsible for the hypersensitivity of your gut. It stands for fermentable oligosaccharides, disaccharides, monosaccharides, and polyols. In other words, it eliminates fermentable foods that may cause bloating and pain in your bowel [15].

Then you can add certain foods one by one to identify which ones have the worst effects on you specifically.

Here is a great article we put together that will show you exactly how to follow a FODMAP diet.



17. DON'T EAT TOO HEALTHY?



There is a saying "you have to be healthy to eat healthy". Although this is not completely true there are certain healthy foods that are simply hard to digest. You may think that you are eating very healthy but in reality you are not feeling good because your stomach is working overtime to process this food.

For example if you eat kale, broccoli, garlic, onions, quinua, flax seeds, and nuts all day it will be really rough on your stomach. You may experience gas and bloating and your quality of life may diminish even though you think you are eating healthy.

As with anything, balance and moderation is key. Don't just eat something because it's healthy. Pay attention to how the food you eat affects your gut health. In this guide we will show you how.



Additionally we will show you how to optimize your gut so that it can boost your mental performance, mood and even your ability to deal with stress.





18. EXPERIMENT WITH CBD FOR YOUR GUT



<u>CBD</u> or cannabidiol is extracted from marijuana, but in pure form it does not contain tetrahydrocannabinol (THC), the substance that causes the psychoactive effect.

In recent research, CBD showed promise for improving the digestive process. Specifically, CBD helps improve the barrier of our intestine and protects it from infection. It also may help regulate gut bacteria, and has great potential to reduce inflammation [23].

You can find CBD in oil or capsules. Try it and follow product recommendations. Get some medical advice before using it if you are under some pharmacological treatment.







19. AVOID DAIRY



The negative effects of dairy go beyond simple stomach upset.

Given their composition, these products produce inflammation that can be chronic. Dairy products are difficult to digest and therefore have a negative influence on the metabolism. According to one study [24], countries with higher dairy consumption have higher rates of inflammatory bowel diseases and colorectal cancer.



In people with irritable bowel syndrome, the symptoms may be more intense. When avoiding dairy, make sure you get calcium from another source such as broccoli.



20. SQUAT VERSUS SIT ON THE TOILET



This gut health hack may seem a bit funny but there is actually some science behind it. In fact the company that created a product for this issue went on Shark Tank. They were able to get a deal on the show and have built a massively successful business around a product that helps with this issue.

Some research [27], [28] suggests that the position in which we defecate can affect bowel health. By sitting conventionally, we put more effort into emptying our bowels and it takes much longer. This is because the anorectal canal is not straight. This can cause constipation, irritable bowel, hemorrhoids, and hernias.

It is advisable to defecate in a squatting position. This way the anorectal canal takes on a straighter position and makes the defecation process easier. To facilitate this process, <u>Squatty Potty</u> has created a small and easy-to-use device that can help you take the squatting position more comfortably. Thus, you avoid the risk of the above-mentioned bowel problems.

The main idea here is if you can get more waste out of your system quicker it is good for you as there is no need to carry it around and going to the bathroom in a squatted position allows you to do that.





Conclusion

More and more research is coming out about the gut brain connection. In addition to being a critical component to your overall health your gut affects your mood, brain function and productivity.

This guide has provided you with many suggestions to great gut health. Here are the some of the key ones:

- 1 Mitigate stress through mindfulness, exercise and being in nature.
- 2 Optimize your gut PH. by drinking the right type of water, avoiding highly acidic foods and eating acid neutralizing foods.
- 3 Make sure you have enough good gut bacteria with probiotics and prebiotics
- 4 And last but not least MITIGATE SUGAR!

We are all different. So the key is to find out which gut and gut-brain improving habits will work best for you.

Set specific goals and implement your gut improving habits gradually. Start making changes one-by-one and keep track of them. Tracking may help you with persistence because every bit of progress you make will have long-term effects on your motivation. The Ultiself app will certainly help you optimize your gut and gut-brain quicker and easier.







Sources

- 1. https://www.cambridge.org/core/journals/the-british-journal-of-psychi-atry/article/vitamin-d-deficiency-and-depression-in-adults-systematic-review-and-metaanalysis/F4E7DFBE5A7B99C9E6430AF472286860
- 2. https://onlinelibrary.wiley.com/doi/abs/10.1002/mnfr.201500620
- 3. A one year follow-up of relaxation response meditation as a treatment for irritable bowel syndrome. https://www.ncbi.nlm.nih.gov/pubmed/12038646
- **4.** Mindfulness training reduces the severity of irritable bowel syndrome in women: results of a randomized controlled trial. https://www.ncbi.nlm.nih.gov/pubmed/21691341
- Association of participation in a mindfulness programme with bowel symptoms, gastrointestinal symptom-specific anxiety and quality of life.
 https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2036.2011.04
 731.x
- 6. https://www.healthline.com/nutrition/12-benefits-of-meditation
- 7. https://www.youtube.com/watch?v=qlBV_CDvuYs
- 8. https://www.healthline.com/nutrition/gut-brain-connection#section4
 https://draxe.com/gut-brain-connection/
 https://www.healthline.com/health/probiotics-and-digestive-health





- Impact of Omega-3 Fatty Acids on the Gut Microbiota. 9. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5751248/
- 10. https://www.screencast.com/t/zMxC5xrxT
- 11. Orthorexia Nervosa: An Obsession With Healthy Eating https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6370446/
- 12. Gut feelings: How food affects your mood. https://www.health.harvard.edu/blog/gut-feelings-how-food-affects-y our-mood-2018120715548
- 13. Exercise Alters Gut Microbiota Composition and Function in Lean and Obese Humans. https://www.ncbi.nlm.nih.gov/pubmed/29166320
- 14. Exercise in patients with inflammatory bowel diseases: current perspectives. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5743119/
- 15. Try a FODMAPs diet to manage irritable bowel syndrome. https://www.health.harvard.edu/diet-and-weight-loss/a-new-diet-to-m anage-irritable-bowel-syndrome
- 16. Stomach pH. https://www.sciencedirect.com/topics/immunology-and-microbiology /stomach-ph
- 17. Exercise Modifies the Gut Microbiota with Positive Health Effects. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5357536/#B21





18. Skin Exposure to Narrow Band Ultraviolet (UVB) Light Modulates the Human Intestinal Microbiome. https://www.frontiersin.org/articles/10.3389/fmicb.2019.02410/full

- 19. Antacid use dramatically reduces healthy gut microbial flora.

 https://www.umcg.nl/EN/corporate/News/Paginas/Antacid-use-dramatically-reduces-healthy-gut-microbial-flora.aspx
- **20.** Do PPIs have long-term side effects?

 https://www.health.harvard.edu/staying-healthy/do-ppis-have-long-term-side-effects
- 21. Time for Food: The Intimate Interplay between Nutrition,
 Metabolism, and the Circadian Clock.

 https://www.sciencedirect.com/science/article/pii/S0092867415003

 025
- **22.** Avoid eating just before your bedtime, study recommends. https://www.nhs.uk/news/food-and-diet/avoid-eating-just-your-bedtime-study-recommends/
- 23. Cannabinoids and the Microbiota-Gut-Brain Axis: Emerging Effects of Cannabidiol and Potential Applications to Alcohol Use Disorders. https://onlinelibrary.wiley.com/doi/abs/10.1111/acer.14256
- **24.** Lactose Intolerance, Dairy Avoidance, and Treatment Options. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6316316/#sec5-nutrients-10-01994title</u>
- **25.** Antinutritional properties of plant lectins. <u>https://www.ncbi.nlm.nih.gov/pubmed/15302522</u>





- **26.** Lectin-Free Diet: Benefits, Risks, Food Choices, and More. <u>https://www.everydayhealth.com/diet-nutrition/lectin-free-diet/</u>
- **27.** Influence of Body Position on Defecation in Humans. https://www.ncbi.nlm.nih.gov/pubmed/26676214
- 28. Implementation of a Defecation Posture Modification Device. Impact on Bowel Movement Patterns in Healthy Subjects.

 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6382038/

