

Gut Inflammation

DNA Health Report

REPORT CATEGORIES —



INFLAMMATION &
AUTOIMMUNITY



GUT HEALTH

Sample Client

Report date: 03 September 2025

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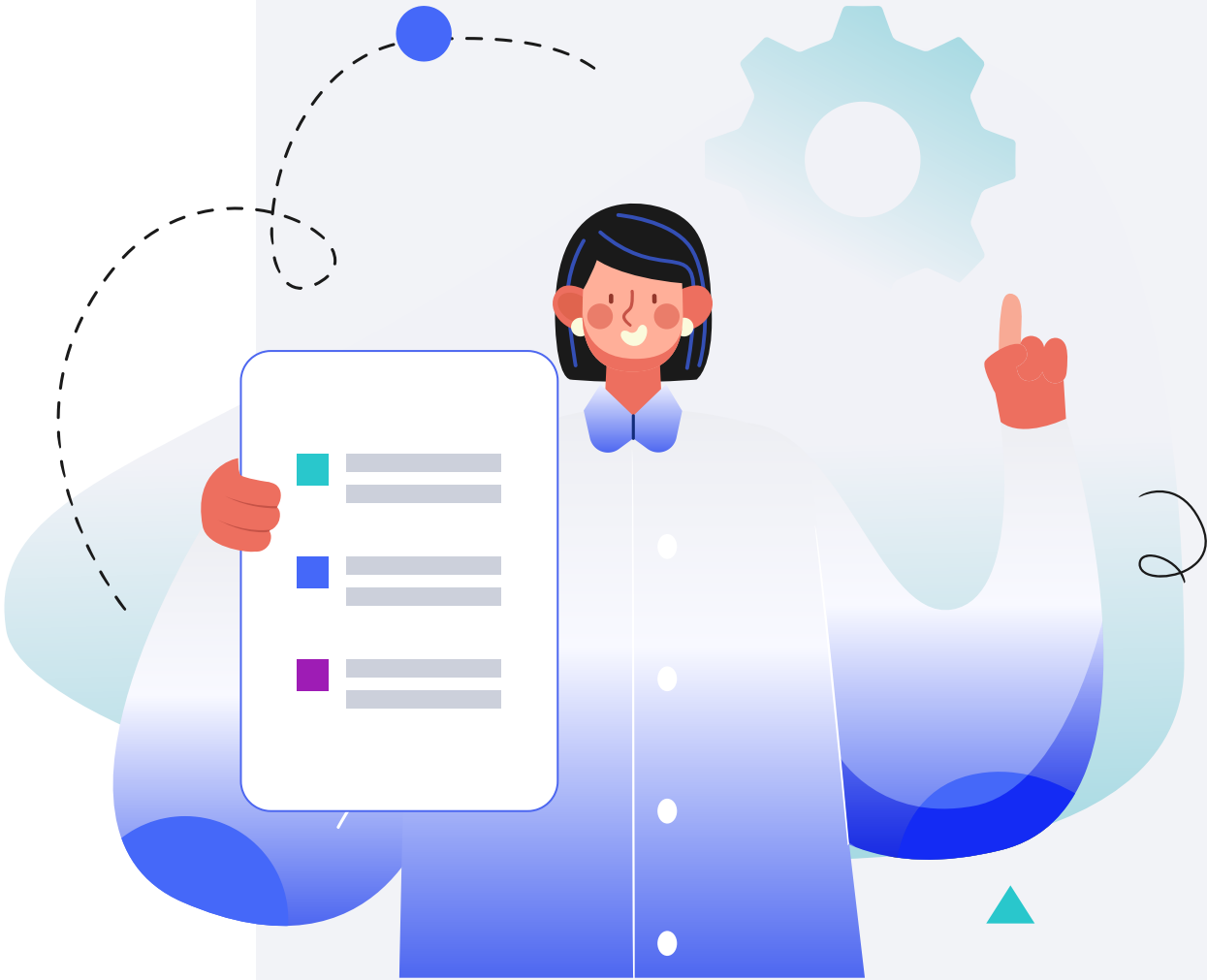
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Personal information

NAME	
Sample Client	
SEX AT BIRTH	
Male	
HEIGHT	
5ft 9"	175.0cm
WEIGHT	
165lb	75.0kg

DISCLAIMER

This report does not diagnose this or any other health conditions. Please talk to a healthcare professional if this condition runs in your family, you think you might have this condition, or you have any concerns about your results.



Introduction

IBD can have a big impact on your life, no matter who you are. In fact John F. Kennedy, the 35th US president, lived with one of the two major forms of IBD: ulcerative colitis [\[R\]](#).

Whether you’re the president of the US or an average Joe, **the best complementary approach to IBD is to identify your triggers and eliminate them**. At least, that’s the advice you will receive from most doctors.

However, there may be more you can do to lower your risk of a flare-up.

Some portion of your risk of IBD is linked to environmental factors like your diet or lifestyle. But there is increasing evidence that **when it comes to IBD, your genes also play a role!**

Our understanding of the underlying genetic connections to IBD continues to grow. In 2007, there were just 8 genes thought to play a role in IBD. By 2012, this number had grown to more than 160 genes. More recently, scientists have identified more than **240 genetic variants linked to IBD** [\[R\]](#), [\[R\]](#).

Ultimately, the true cause of **IBD is likely to be a combination of both your environment and your genes**.

A great example of this is smoking. Smoking can not only increase your risk of Crohn’s disease, but also increase the severity of the disease. This is a fact, regardless of your genetics. But, if you happen to smoke and also carry a particular variant of the [IL23R](#) gene, the risk of Crohn’s disease may increase by up to 9 times [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#)!

This is just one example in which genes and lifestyle can interact to impact IBD. Read on to find out more about:

- **How your genetics play a role in IBD**
- **Your genetic risk score based on over 42,000 genetic variants**
- **Personalized recommendations based on your genetics**

About Gut Inflammation

Key Takeaways:

- Up to **75%** of differences in people's chances of developing IBD may be due to genetics.
- Risk factors include being under age 30, European ancestry, and smoking.
- IBD may cause: diarrhea, fatigue, abdominal pain, bloody stool, weight loss, inflammation, liver damage, and colon cancer.
- IBD only affects about **3 in 1000** people worldwide. So, even with high genetic risk, your overall risk is actually low.
- Click the **Recommendations** tab for potential dietary and lifestyle changes and **next steps** for relevant labs.

Our intestines do much more than absorb food. They can impact our immune system, mood, and more [\[R\]](#)!

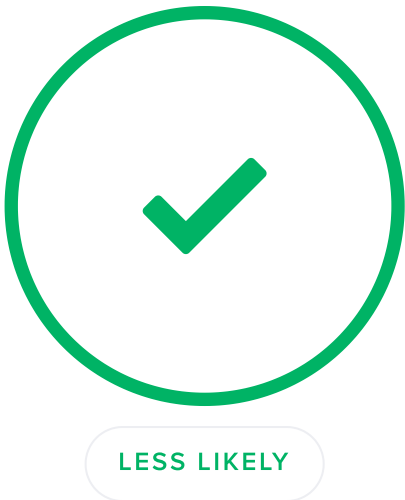
[Inflammatory bowel disease](#) (IBD) is a group of gut diseases affecting **about 0.3% of people worldwide**. It's most common in North America, Europe, and Australia [\[R\]](#).

The exact causes of IBD are unknown. Possible risk factors include [\[R\]](#):

- Age (most people develop IBD before the age of 30)
- European ancestry
- Cigarette smoking
- **Genetics**

There are two major types of IBD: [ulcerative colitis](#) and Crohn's disease. Ulcerative colitis involves [inflammation](#) in the large intestine, while Crohn's disease often affects both the large and small intestines [\[R\]](#), [\[R\]](#), [\[R\]](#).

In both types of IBD, the immune system reacts to normal gut bacteria as if they're dangerous. These immune



Less likely to have IBD based on 1,671 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
FCGR2A	rs1801274	AA
ATG16L1	rs2241880	GG
STAT3	rs744166	AA
SLC22A5	rs12521868	TT
JAK2	rs10758669	CA
ADO	rs10761659	AG
HNF4A	rs6017342	CC
IL23R	rs11465804	TT
IL23R	rs11209026	GG
HLA-DQA2	rs2395185	TG
IL23R	rs10889677	CA
IRGM	rs1000113	TC
ATG16L1	rs10210302	TT
PPM1M	rs5743836	GG
TNFSF15	rs6478108	TC
IL23R	rs76418789	GG
IRGM	rs10065172	TC
NKX2-3	rs10883365	GG
TNF	rs1799724	TC
AGT	rs5051	TT

reactions cause inflammation and damage to the gut lining [\[R\]](#).

This gut damage can cause signs and symptoms like [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Diarrhea
- Fatigue
- Abdominal [pain](#) and cramping
- Blood in the stool
- Low appetite
- [Weight loss](#)

Untreated IBD can have serious complications, including [\[R\]](#):

- Skin, eye, and joint inflammation
- Bile duct and liver damage
- Blood clots
- Colon cancer

People with IBD typically need anti-inflammatory medications to control their disease [\[R\]](#), [\[R\]](#).

Many people with IBD take supplements because their damaged guts have trouble absorbing certain nutrients. Some people may need to adhere to special diets as well [\[R\]](#), [\[R\]](#).

IBD can be a disabling condition, and many turn to alternative and complementary strategies to help them manage their symptoms. Your DNA may help determine which of these strategies is likely to work best for you.

Up to 75% of differences in people's chances of developing IBD may be attributed to genetics. Genes involved in IBD may influence [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Inflammation ([JAK2](#), [TNFSF15](#), [SLAMF8](#))
- Immune response ([TLR9](#), [UBE2L3](#), [BCL3](#))

Moreover, genetically high betaine levels may be causally associated with a high risk of Crohn's disease. In contrast, genetically high levels of omega-3s may be causally associated with a lower risk [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

GENE	SNP	GENOTYPE
STAT3	rs4796793	CC
CUL1	rs7807268	GG
STAT3	rs2293152	GC
IL23R	rs11805303	CT
CLEC4G	rs4804803	GG
PTPN22	rs2476601	GG
TNFSF8	rs6478109	GA
GLYCTK	rs352140	TT
IRGM	rs4958847	AG
NLRP3	rs10754558	CG
IRGM	rs13361189	CT
ATG16L1	rs3828309	GG
LRRK2	rs11175593	TC
IL23R	rs7517847	TT
GLYCTK	rs352139	CC
STAT3	rs9891119	AA
PDGFB	rs2413583	CC
NKX2-3	rs11190140	TT
PTGER4	rs1992660	TC
IL19	rs1800872	GG
IRF5	rs4728142	GA
NKX2-3	rs4409764	TT
ZNF365	rs7076156	AG
TNFSF15	rs4263839	GA
KLF6	rs6601764	CC
SLC22A5	rs2188962	TT
NRIP1	rs2823286	GG
TNFSF15	rs3810936	CT
IRF8	rs10521318	CC
LRRK2	rs11564258	AG

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Your Recommendations

Your recommendations are prioritized according to the likelihood of it having an impact for you based on your genetics, along with the amount of scientific evidence supporting the recommendation.

You'll likely find common healthy recommendations at the top of the list because they are often the most impactful and most researched.

DOSAGE		DOSAGE			
1	Probiotics	10 billion	2	Low-FODMAP Diet	
3	VSL#3 Probiotic		4	Avoid Food Triggers	
5	Phosphatidylcholine	420 mg	6	Mindfulness	30 minutes
7	Maintain Optimal Vitamin D Levels	1000 iu	8	Avoid Processed Foods	
9	Hyperbaric Oxygen Therapy	90 minutes	10	Dietary Iron	
11	Fruits And Vegetables		12	Methylfolate	400 mcg
13	Limit Red Meat Intake		14	Mediterranean Diet	
15	Prebiotics	125 mg			

1



Probiotics

IMPACT4 / 5

EVIDENCE3 / 5

How to implement

Take a probiotic supplement containing 10 billion or more live cultures once daily, preferably with a meal or as directed by the packaging or a healthcare provider.

TYPICAL STARTING DOSE

10 billion

Description

Probiotics are live beneficial bacteria and yeasts that can support gut health and digestive function when consumed as supplements or found in fermented foods like yogurt and sauerkraut. They may be beneficial to gut health, immune function, blood sugar, and mood.

[Probiotic bacteria](#) are “good” bacteria found mainly in the large intestine. They support your body and mind by [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Maintaining gut health
- Supporting a healthy immune system
- Improving your mood
- Helping to maintain healthy blood sugar

Prebiotics are certain types of fiber and other complex carbs that serve as food for gut bacteria. **They support gut health by helping boost the activity and growth of “good” bacteria** [\[R\]](#), [\[R\]](#).

Prebiotics are also added to foods and supplements. Common prebiotic ingredients are [\[R\]](#), [\[R\]](#):

- Oligo-fructose
- Oligo-galactose
- [Inulin](#)

Mixtures of probiotics and prebiotics are known as **synbiotics** [\[R\]](#).

How it helps

According to experts, probiotics may be helpful for some people with IBD. This is because people with IBD often lack “good” gut bacteria [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Probiotic supplements that contain *Lactobacillus*, *Bifidobacterium*, and *Streptococcus* species may support gut health in people with ulcerative colitis [\[R\]](#), [\[R\]](#), [\[R\]](#).

Probiotics may be less effective for Crohn's disease [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Please note: *Talk to your doctor before taking probiotics* [\[R\]](#).



PERSONALIZED TO YOUR GENES

The AGT gene helps make angiotensinogen, a protein that helps control inflammation, wound healing, and scarring in the gut [R, R, R].

Your genotype for this SNP has been associated with higher rates of Crohn’s disease [R, R].

Probiotics may reduce AGT-related inflammation [R, R, R].

Your *IL23R* gene variant is linked to IBD. It likely increases the activity of IL-23, an inflammatory protein. Probiotics may reduce gut inflammation by blocking IL-23 [R, R, R, R].

YOUR GENETIC VARIANTS

GENE

AGT

SNP

rs5051

GENOTYPE

TT

EVIDENCE



GENE

IL23R

SNP

rs11209026

GENOTYPE

GG

EVIDENCE



2



Low-FODMAP Diet

IMPACT4 / 5

EVIDENCE3 / 5

How to implement

Eliminate foods high in FODMAPs (fermentable oligosaccharides, disaccharides, monosaccharides, and polyols) from your diet for 4 to 6 weeks. This includes certain fruits, vegetables, dairy products, grains, and sweeteners. After the elimination phase, gradually reintroduce foods one at a time to identify triggers.

Description

The low FODMAP diet is used to manage symptoms of irritable bowel syndrome (IBS) and other gastrointestinal disorders. It involves restricting certain fermentable carbohydrates to reduce digestive discomfort and improve gut health.

FODMAPs are a group of carbs that are hard to digest. Rather than being absorbed by the intestines, these carbs are fermented by your gut bacteria. A product of fermentation is gas [\[R\]](#), [\[R\]](#).

FODMAPs also pull fluid into your gut. This may promote diarrhea [\[R\]](#).

Foods high in FODMAPs include [\[R\]](#):

- High-fructose corn syrup
- Artificial sweeteners
- Apples
- Corn
- Dairy
- Beans

A [low-FODMAP diet](#) limits the intake of **FODMAPs**. Some health experts recommend it for IBS and other digestive issues [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Experts suggest a low-FODMAP diet to help with some symptoms of IBD. This is because FODMAPs tend to irritate the gut [\[R\]](#), [\[R\]](#).

For example, fructans may worsen pain, bloating, gas, and bathroom urgency in people with IBD. Other FODMAPs such as [sorbitol](#) may not have the same effects [\[R\]](#).

Following a low-FODMAP diet for 1-2 months may improve IBD symptoms. It may decrease pain, bloating, flatulence, and diarrhea [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

A low-FODMAP diet may also reduce inflammation and boost “good” gut bacteria. However, the evidence is mixed [\[R\]](#), [\[R\]](#), [\[R\]](#).



PERSONALIZED TO YOUR GENES

The IL23R gene encodes one part of the receptor for IL-23, a cytokine involved in gut inflammation and IBD [R, R, R].

Your genotype for this SNP has been associated with increased IL-23 receptor activity, and may contribute to gut inflammation. It has also been associated with relatively increased rates of ulcerative colitis [R, R, R].

A “low-FODMAP diet” eliminates foods that can trigger gut inflammation by increasing IL-23 levels [R, R, R].

The JAK2 gene creates a protein that activates the growth, development, and activity of immune cells in response to signals from cytokines [R, R, R, R, R].

Your genotype for this SNP has been associated with somewhat higher rates of ulcerative colitis and Crohn’s disease [R, R].

Dietary FODMAPs may cause gut irritation in people with IBD, in part by activating the JAK2 pathway [R, R, R, R, R].

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
IL23R	rs10889677	CA	
GENE	SNP	GENOTYPE	EVIDENCE
JAK2	rs10758669	CA	

3



VSL#3 Probiotic

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Take one capsule of VSL#3 probiotics daily, preferably on an empty stomach, at least 30 minutes before a meal. For best results, continue this supplementation for at least one month.

Description

VSL#3 is a specific probiotic supplement containing a combination of beneficial bacterial strains, including Bifidobacterium and Lactobacillus species. It is used to support digestive health and manage conditions such as irritable bowel syndrome (IBS) and inflammatory bowel disease (IBD).

How it helps

A meta-analysis of 23 trials and 1,763 participants with ulcerative colitis found that the VSL#3 probiotic increases remission rates by 74%. According to another meta-analysis, VSL#3 increases response rates by 2.4x. Another meta-analysis found VSL#3 safe and effective at increasing response and remission rates when used as an add-on to conventional therapy [\[R, R, R\]](#).

Interestingly, 3 meta-analyses analyzing the effects of all types of probiotics on IBD only found benefits for VSL#3 [\[R, R, R\]](#).

VSL#3 may help by restoring the balance of good bacteria in the gut, which may reduce inflammation.

 PERSONALIZED TO YOUR GENES

The AGT gene helps make angiotensinogen, a protein that helps control inflammation, wound healing, and scarring in the gut [\[R, R, R\]](#).

Your genotype for this SNP has been associated with higher rates of Crohn’s disease [\[R, R\]](#).

Probiotics may reduce AGT-related inflammation [\[R, R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
AGT	rs5051	TT	

4



Avoid Food Triggers

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Identify foods that trigger negative reactions in your body, such as digestive issues, allergies, or headaches, and eliminate them from your diet entirely. This may require keeping a food diary for a few weeks to observe patterns and might involve cutting out common triggers like dairy, gluten, soy, or certain additives. Continuously monitor and adjust your diet to avoid these triggers as long as the symptoms persist.

Description

Food triggers are specific substances or ingredients in one's diet that can exacerbate or induce adverse reactions, such as allergies, sensitivities, or digestive issues, often leading to symptoms like inflammation, bloating, or discomfort.

A "trigger" is something that prompts or worsens the symptoms of a health condition.

Food triggers can lead to a wide range of symptoms in people who are sensitive to them. These may include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Gut problems
- Skin problems
- Migraines

How it helps

Experts agree that limiting certain foods can help manage some symptoms of IBD. However, they urge people to eat a healthy and varied diet [\[R\]](#), [\[R\]](#), [\[R\]](#).

The most common food **triggers for IBD** include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Hot and spicy foods (like mustard and wasabi)
- Fatty and fried foods
- Dairy (lactose)
- High-fiber foods (like raw vegetables)
- Nightshades (like tomatoes and potatoes)
- Sweets and sugary drinks
- Coffee and alcohol

Increased intake of some foods is linked to higher odds of IBD. These include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Margarine and cooking oils with omega-6 fatty acids
- Animal protein, especially red and processed meat
- Cheese
- Alcohol

If you have IBD, your doctor may advise you to avoid certain foods to see if symptoms improve. Please work with a healthcare professional to find the best diet to manage the condition.



PERSONALIZED TO YOUR GENES

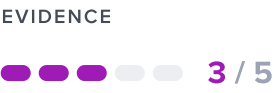
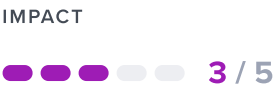
Mushrooms may worsen the symptoms of Crohn’s disease in people with your [SLC22A4](#) gene variant [R].

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
SLC22A4	rs1050152	TC	



Phosphatidylcholine



How to implement

Take 420-900 mg of phosphatidylcholine supplement daily, ideally with meals to enhance absorption. Continue this regimen for at least 3 months to evaluate its effects on your health.

TYPICAL STARTING DOSE

420 mg

Description

Phosphatidylcholine is a crucial phospholipid found in cell membranes throughout the body, particularly in the brain. It plays a vital role in cognitive function and liver health, supporting processes like cell signaling and fat metabolism.Phosphatidylcholine can be derived from soybeans and other sources, and it is often used as a dietary supplement to promote brain health and liver function.

[Phosphatidylcholine](#) is a key component of cells [R].

It helps [R, R, R, R, R, R, R]:

- Maintain cell structure
- Protect the lungs, gut, liver, and nerves
- Break down fats

Because [choline](#) is needed to make phosphatidylcholine, low choline levels can limit its production [R].

How it helps

Delayed-release phosphatidylcholine (2-6 g/day for 12 weeks) may improve the symptoms of ulcerative colitis. It may also promote its remission [R, R, R, R, R].

Please note: *Delayed-release phosphatidylcholine is a drug, and it should only be taken under medical supervision.*

Please note: *some studies suggest that phosphatidylcholine may interfere with iron absorption in the gut. If you have anemia, consult your healthcare provider before using phosphatidylcholine supplements.*

6

Mindfulness

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Set aside 5-10 minutes each day to practice mindfulness meditation. Find a quiet place, assume a comfortable seated position, close your eyes, focus on your breathing, and observe your thoughts and sensations without judgment.

TYPICAL STARTING DOSE

30 minutes

Description

Mindfulness involves paying focused and non-judgmental attention to the present moment. It can reduce stress, improve emotional regulation, and enhance overall mental clarity and well-being.

Mindfulness is the practice of being aware of the present moment. When practicing mindfulness, a person acknowledges their thoughts, feelings, and sensations without any judgment [R].

Mindfulness and other types of [meditation](#) may improve [R]:

- Weight and anxiety
- Low mood
- Sleep disturbances
- Pain
- High blood pressure

How it helps

Mindfulness-based stress management improved IBD quality of life in patients with IBS-type symptoms in a non-placebo-controlled trial of 66 people. Similarly, a breath-body-mind workshop combining breathing, movement, and meditation improved physical and psychological symptoms, quality of life, and CRP levels in a non-placebo-controlled trial of 29 IBD patients [R, R].

A meta-analysis of 8 studies found mindfulness-based interventions effective at reducing stress (in the long and short term), depression (in the long term), and quality of life (in the long term) but not anxiety or physical symptoms in people with IBD [R].

7



Maintain Optimal Vitamin D Levels

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Check your vitamin D levels, they should ideally be in the 30-66 ng/mL range. If your levels are lower than that, take a vitamin D supplement, 1000-4000 IU daily, to reach an optimal range.

TYPICAL STARTING DOSE

1000 iu

Description

Vitamin D, often referred to as the "sunshine vitamin," can be synthesized by the skin when exposed to sunlight, as well as being found in fish, eggs, and fortified milk. It helps regulate calcium absorption, promoting strong bones and a healthy immune system. Vitamin D deficiency can lead to conditions like rickets in children and osteoporosis in adults.

Your body needs [vitamin D](#) for strong bones. Vitamin D also plays a role in [\[R\]](#):

- Mood
- Immunity
- Heart health
- Blood sugar control

[Sunlight](#) is our main source of vitamin D. Experts recommend getting at least **5-15 minutes of midday sun, 2-3 times per week**. People with darker skin and those living at high latitudes may need longer periods of sun exposure [\[R, R\]](#).

Foods like fish, eggs, and fortified milk provide small amounts of vitamin D. **People lacking vitamin D should consider taking a supplement** [\[R\]](#).

How it helps

Experts recommend **vitamin D supplements (800 IU/day)** to some people with IBD. This is because IBD may interfere with nutrient absorption. In addition, people with IBD who follow a limited diet may not be getting enough vitamins from the food they eat [\[R, R\]](#).

Unsurprisingly, **IBD has been linked to vitamin D deficiency**. Those with low vitamin D may have worse IBD symptoms and reduced quality of life. They may also have more flare-ups [\[R, R, R\]](#).

Vitamin D supplements may boost the levels of this vitamin and prevent IBD flare-ups [\[R, R\]](#).

Vitamin D may support gut health by helping to [\[R, R, R\]](#):

- Repair and maintain the gut barrier
- Balance the immune response

Genetically predicted lower vitamin D levels may be causally associated with an increased risk of ulcerative colitis and Crohn's disease [\[R\]](#).

Please note: *Experts recommend getting 600-800 IU of vitamin D per day. Medical bodies recommend against taking more than 4,000 IU per day* [\[R\]](#).



PERSONALIZED TO YOUR GENES

The IRF5 gene promotes Th1 and Th17 inflammatory responses, and suppresses the activity of the anti-inflammatory cytokine IL-10 [R].

Your genotype for this SNP has been associated with increased IRF5 expression, as well as relatively increased rates of ulcerative colitis [R].

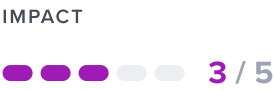
Vitamin D may inhibit the Th1 response and increase IL-10 [R, R, R, R].

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
IRF5	rs4728142	GA	



Avoid Processed Foods



How to implement

Eliminate foods such as packaged snacks, sugary drinks, ready-made meals, and anything with ingredients you can't pronounce from your daily diet. Focus on consuming whole foods like fruits, vegetables, lean meats, and whole grains instead.

Description

Processed foods often contain high amounts of sugar, fat, and salt, which can lead to diseases like obesity and heart problems. They also have fewer nutrients than fresh foods. It's healthier to eat fresh fruits, vegetables, and lean proteins instead. This improves our overall health by giving our body the nutrients it needs.

How it helps

A meta-analysis of 9 studies associated eating a Western diet (one of whose features is the abundance of processed foods) with a 92% higher risk of IBD. This diet increased the risk of both Crohn's disease (by 72%) and ulcerative colitis (by 115%). In line with this, a meta-analysis of 5 studies and over 1M participants associated high consumption of ultra-processed foods with a 75% higher risk of Crohn's disease, but not ulcerative colitis [R, R].

9



Hyperbaric Oxygen Therapy

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Schedule and attend sessions in a hyperbaric oxygen therapy chamber as your doctor prescribes, typically for about 60 to 90 minutes per session. The exact number of sessions required can vary based on the condition being treated, but it often ranges from 20 to 40 sessions, which may be conducted daily or a few times a week.

TYPICAL STARTING DOSE

90 minutes

Description

Hyperbaric oxygen therapy increases the amount of oxygen in the blood and tissues, which can help to improve circulation, reduce inflammation, and promote healing.

How it helps

Two meta-analyses (the largest one with 19 studies and 809 patients) found that hyperbaric oxygen therapy causes remission rates of 83.2-87% for ulcerative colitis, 81.9-88% for luminal Crohn’s disease, 60% for perianal Crohn’s disease, 31% for pouch disorders, 92% for pyoderma gangrenosum, and 65% for perianal sinus/metastatic Crohn’s disease, and healing rates of 47.64% (complete healing) and 34.29% (partial healing) of fistulas. However, the authors warned about the low quality of the included studies [\[R\]](#), [\[R\]](#).

Hyperbaric oxygen therapy may help by reducing tissue swelling and promoting the healing of the damaged intestinal wall.

Please note: Hyperbaric oxygen therapy is a potentially dangerous procedure that should only be performed under medical supervision. People with pneumothorax or congestive heart failure are at especially high risk of adverse effects. Because highly concentrated oxygen can easily catch on fire, avoid potential fire sources around hyperbaric oxygen chambers, oxygen gas cylinders, tanks, and concentrators [\[R\]](#), [\[R\]](#).

10



Dietary Iron

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate iron-rich foods into your daily meals, such as red meat, chicken, turkey, fish, beans, lentils, tofu, cooked spinach, and fortified cereals. Aim for at least 18 mg of iron per day for adult women and 8 mg per day for adult men. It's also beneficial to pair these foods with vitamin C-rich foods like oranges, strawberries, or bell peppers to enhance iron absorption.

Description

Iron (Fe) is an essential mineral. It helps make [hemoglobin](#), a protein that carries oxygen to cells. In this way, iron **increases energy** and supports **brain and immune system function** [\[R, R, R\]](#).

Foods rich in iron include [\[R\]](#):

- Oysters
- White beans
- Beef
- Chocolate
- Spinach
- Fortified cereals

Women should be getting **8-18 mg** of iron per day, while **men** should be getting **8 mg** [\[R\]](#).

Groups at risk of iron deficiency include [\[R\]](#):

- Menstruating women
- Children
- Vegetarians
- Routine blood donors

How it helps

Experts say that 1 in 3 people with IBD may not be getting enough iron. This is because IBD can reduce nutrient absorption in the gut. In addition, people with IBD may follow diets that limit iron intake [\[R, R\]](#).

People with IBD often become anemic. In these cases, doctors usually prescribe iron supplements. Because iron supplements may worsen gut inflammation when taken by mouth, your doctor may prescribe intravenous iron [\[R, R, R, R, R\]](#).

It is best to get iron only from foods, unless a supplement is recommended by your doctor [\[R, R, R, R\]](#).

Please note: *A high dose of iron can be toxic. In addition, oral iron supplements have the potential to worsen ulcerative colitis. Talk to your doctor before taking iron supplements* [\[R, R\]](#).

Please note: *Increased iron intake from meat is linked to higher odds of diabetes and heart disease. Try to find a balance between plant and animal iron sources* [\[R, R, R, R\]](#).

11



Fruits And Vegetables

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Increase your intake of fruits and vegetables to at least five servings per day, aiming for a variety of types and colors to ensure a broad range of nutrients. Each serving size should roughly be the amount you can fit in one hand. Try to incorporate at least one serving of fruits or vegetables into every meal and snack throughout the day.

Description

A diet rich in fruits and vegetables provides essential nutrients, antioxidants, and dietary fiber. This combination supports overall health, helps maintain a healthy weight, and reduces the risk of chronic diseases such as heart disease and certain cancers.

How it helps

Two meta-analyses (the largest one with 14 studies) found that a high intake of fruits reduces the risk of Crohn's disease (by 75-112%) and ulcerative colitis (by 45%), while vegetables reduce the risk by 92-177% (especially in Europeans) and 40-78%, respectively [\[R\]](#), [\[R\]](#).

A diet high in fruits and vegetables provides fiber and antioxidants that support gut health and may help reduce inflammation.

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Methylfolate

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take an L-methyl folate supplement (400-800 micrograms daily), ideally with a meal, to improve absorption. This dosage is recommended for adults, including pregnant women, to support overall health, especially to reduce the risk of neural tube defects in developing fetuses. Continue daily use as part of your regular supplement routine.

TYPICAL STARTING DOSE
400 mcg

Description

Folate, a B-vitamin, is crucial for DNA synthesis, cell growth, and the formation of red blood cells. Adequate folate intake supports overall health and reduces the risk of neural tube defects during pregnancy.

[Vitamin B9](#) (*folate*) plays an essential role in [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Making DNA
- Metabolism
- Energy production

SelfDecode recommends L-methylfolate as the preferred folate supplement for those who need one. It is superior to folic acid because it doesn’t require activation, but the research is still ongoing [\[R\]](#), [\[R\]](#).

How it helps

An umbrella review of 57 meta-analyses identified high levels of folate among the protective factors for IBD. Similarly, a meta-analysis of 12 studies associated folate deficiency with IBD [\[R\]](#), [\[R\]](#).

In a placebo-controlled trial of 24 patients with ulcerative colitis in remission, supplementation with folinic acid (15 mg/day) for 3 months regulated rectal cell proliferation, possibly helping prevent colorectal cancer [\[R\]](#).

Genetically higher folate levels may be associated with reduced ulcerative colitis risk [\[R\]](#).

Folate assists in repairing the gut lining by promoting cell growth and division, which can help reduce inflammation.

13

Limit Red Meat Intake

IMPACT

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EVIDENCE

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How to implement

Limit your red meat consumption to no more than three portions per week, with each portion being about 3-4 ounces (85-113 grams), roughly the size of a deck of cards. Opt for leaner cuts of meat and consider replacing some red meat meals with poultry, fish, or plant-based protein sources.

Description

Limiting red meat intake involves reducing the frequency and portion sizes of beef, pork, and lamb in your diet. The recommendation encourages choosing alternative protein sources such as poultry, fish, beans, and legumes. It emphasizes moderation to improve health outcomes--including lower risks of heart disease and cancer--and promotes a balanced and varied diet.

How it helps

Studies suggest that red meat consumption is associated with an increased risk of developing IBD, specifically ulcerative colitis and Crohn's disease, and may also be linked to higher mortality and flare occurrence in IBD patients [\[R, R, R, R, R\]](#).

PERSONALIZED TO YOUR GENES

The FCGR2A gene codes for a receptor that binds IgG antibodies and signals the inflammatory response against pathogens [\[R, R, R, R\]](#).

Your genotype for this SNP has been associated with increased receptor activity, as well as with relatively higher rates of ulcerative colitis [\[R, R, R\]](#).

In people with this variant, high intake of iron from animal foods increases the risk of ulcerative colitis [\[R, R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
FCGR2A	rs1801274	AA	

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Mediterranean Diet

IMPACT

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EVIDENCE

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How to implement

Incorporate a variety of primarily plant-based foods, such as fruits, vegetables, whole grains, nuts, and legumes, into every meal. Choose healthy fats, like olive oil, over saturated fats and consume fish and poultry at least twice a week. Limit red meat to a few times a month and include a moderate amount of dairy products. Opt for water and red wine in moderation as your beverages.

Description

The [Mediterranean diet](#) is based on the traditional cuisine from the Mediterranean regions. It moderates the intake of red meat and dairy, while being rich in fruits and vegetables, whole grains, and healthy fats ([olive oil](#)).

The [Mediterranean diet](#) focuses on traditional cuisine from the Mediterranean regions. It’s rich in [\[R\]](#):

- [Olive oil](#)
- Fruits and vegetables
- Whole grains
- Nuts and seeds
- Fish

This type of diet may **reduce inflammation and protect the brain and heart** [\[R, R, R, R\]](#).

Limited intake of animal products, saturated fat, and refined sugar likely contribute to the health benefits of the Mediterranean diet [\[R\]](#).

How it helps

People who follow the Mediterranean diet may be at a **58% lower risk of Crohn’s disease**. However, this diet may not help prevent ulcerative colitis [\[R\]](#).

The Mediterranean diet is high in fish and other sources of [omega-3 fatty acids](#). A diet high in fish and omega-3s may help prevent IBD [\[R\]](#).

In people with IBD, following the Mediterranean diet may improve [\[R, R\]](#):

- Quality of life
- Flare-ups
- Nutrition

The Mediterranean diet may help with IBD by reducing inflammation [\[R, R, R, R\]](#).



PERSONALIZED TO YOUR GENES

The ITLN1 gene codes for intelectin-1, a protein that reduces inflammation, combats pathogens, and supports metabolism [R, R, R].

Your genotype for this SNP has been associated with relatively reduced ITLN1 expression, and has been correlated with higher rates of Crohn’s disease [R, R].

A Mediterranean diet rich in olive oil may combat gut inflammation by increasing intelectin-1 levels [R, R, R, R].

In people with your *FADS1* gene variant, the Mediterranean diet may help reduce gut inflammation [R, R, R, R].

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
ITLN1	rs2274910	CC	
FADS1	rs174556	CC	

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Prebiotics

IMPACT

3 / 5

EVIDENCE

2 / 5

How to implement

Take 125 mg of a prebiotic supplement daily. Consistent daily intake is key for maintaining gut health.

TYPICAL STARTING DOSE

125 mg

Description

Prebiotics are primarily plant-based sources of dietary fiber that provide nourishment for beneficial gut bacteria. These foods, like garlic, onions, and asparagus, promote a healthy gut microbiome, support digestion, and enhance nutrient absorption.

Prebiotics are certain fibers and other complex carbs that serve as food for gut bacteria. **They support gut health by helping boost the activity and growth of “good” bacteria** [\[R, R\]](#).

Some natural sources of prebiotics include [\[R, R\]](#):

- Whole grains
- Bananas
- Onions
- Soybeans

Prebiotics are also added to foods and supplements. Common prebiotic ingredients are [\[R, R\]](#):

- Oligo-fructose
- Oligo-galactose
- [Inulin](#)

Combined mixtures of probiotics and prebiotics are known as **synbiotics** [\[R\]](#).

How it helps

Prebiotics may improve quality of life in people with IBD. They may reduce stomach cramps, improve diarrhea and boost “good” gut bacteria [\[R, R, R, R, R, R\]](#).

Studied prebiotics include:

- **Germinated barley foodstuff:** 20-30 g/day for 1-6 months [\[R, R, R\]](#)
- **Psyllium seeds:** 20 g/day for 12 months [\[R\]](#)
- **Psyllium husk:** 7 g/day for 2 months [\[R\]](#)
- **Oligofructose-enriched inulin:** 12 g/day for 2 weeks [\[R\]](#)

Prebiotics may help with IBD by reducing inflammation [\[R, R\]](#).

Please note: *People with IBD who follow a [low-FODMAP diet](#) should avoid some fiber-based prebiotics. Consult your doctor or dietitian for more information* [\[R, R\]](#).



PERSONALIZED TO YOUR GENES

Your [IL10](#) gene variant is linked to IBD. It likely reduces the levels of IL-10, an anti-inflammatory protein. Prebiotics may reduce gut inflammation by increasing IL-10 levels [[R](#), [R](#), [R](#), [R](#)].

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
IL19	rs3024505	AG	