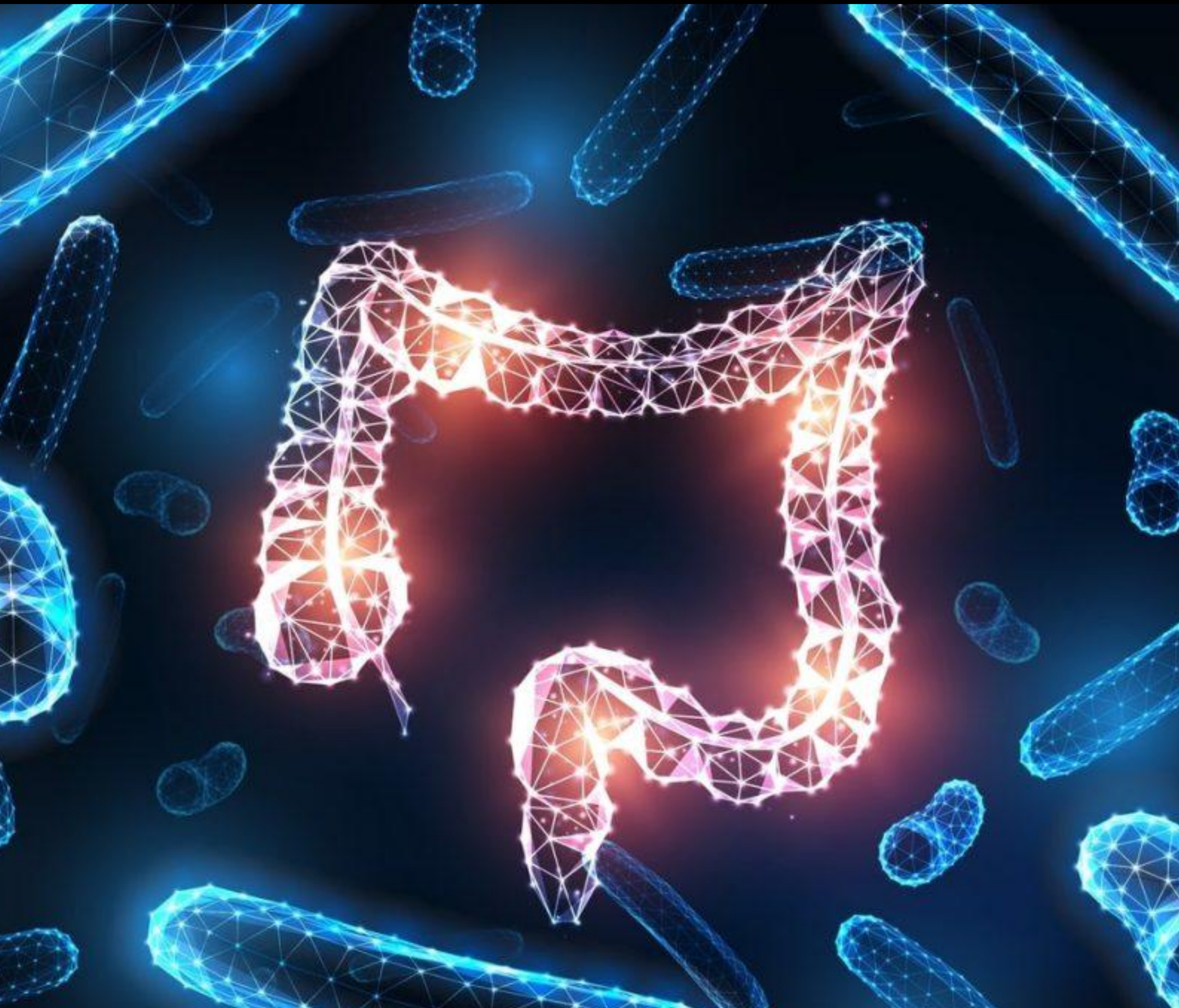
John Doe

Example

Your Gut Health Report



Message from Your Genes

Welcome and Congratulations on completing Your Gut Microbiome test

A genetic gut microbiome test provides valuable insights into the composition and functionality of gut microorganisms, helping to identify imbalances linked to digestive issues, immune health, and chronic diseases. It enables personalized nutrition and lifestyle recommendations, supports mental health through the gut-brain axis, and optimizes metabolism and weight management. The test guides the effective use of probiotics and prebiotics, tailors treatment plans, and enhances overall well-being by addressing gut-related issues like food sensitivities and post-antibiotic recovery. By linking gut microbiota with genetic factors, it offers a comprehensive approach to improving health, preventing disease, and supporting personalized medicine strategies. A gut microbiome test can help you make informed decision about your health and wellbeing.

Your Gut Microbiome test examines 35 microbes (bacteria, viruses and fungi) found in your gut. Together these microbes contribute to your health. This test explains how these 35 microbes affects 40 traits (health and well-being). In addition, this report will provide you with solutions to improve your health and well-being profile.

Contents

Summary Table of Gut microbes found in Your body

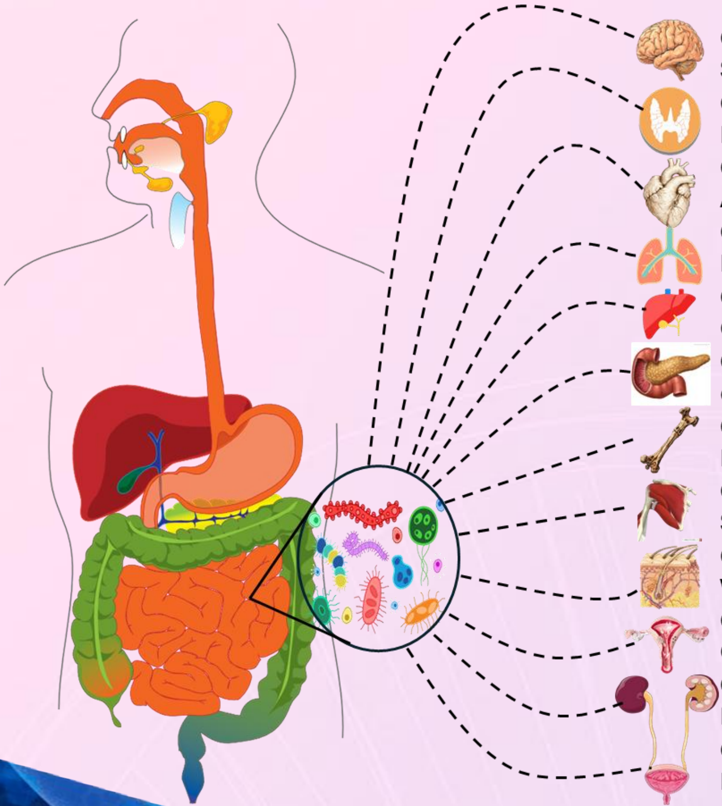
		Microbe	Information	Your Results
Good	1	Akkermansia muciniphila	Supports gut barrier and anti-inflammatory effects.	🙂🙂
	2	Bifidobacterium bifidum	Key probiotics; support digestion and immune health.	🙂
	3	Bifidobacterium breve	Key probiotics; support digestion and immune health.	🙂
	4	Bifidobacterium genus	Key probiotics; support digestion and immune health.	🙂🙂
	5	Bifidobacterium lactis	Key probiotics; support digestion and immune health.	🙂🙂🙂
	6	Bifidobacterium longum	Key probiotics; support digestion and immune health.	🙂
	7	Faecalibacterium prausnitzii	Anti-inflammatory and butyrate producer.	🙂
	8	Lactobacillus acidophilus	Probiotics; improve gut health and reduce inflammation.	🙂
	9	Lactobacillus gasseri	Probiotics; improve gut health and reduce inflammation.	😐
	10	Lactobacillus genus	Probiotics; improve gut health and reduce inflammation.	☹️
	11	Lactobacillus helveticus	Probiotics; improve gut health and reduce inflammation.	☹️
	12	Lactobacillus paracasei	Probiotics; improve gut health and reduce inflammation.	🙂
	13	Lactobacillus plantarum	Probiotics; improve gut health and reduce inflammation.	😐
	14	Lactobacillus reuteri	Probiotics; improve gut health and reduce inflammation.	🙂
	15	Lactobacillus rhamnosus	Probiotics; improve gut health and reduce inflammation.	😐
	16	Roseburia hominis	Butyrate producer; anti-inflammatory.	🙂🙂
	17	Streptococcus thermophilus	Probiotic; supports digestion.	☹️☹️
Core	18	Bacteroides fragilis	Beneficial but can be pathogenic in dysbiosis.	🙂
	19	Escherichia coli	Includes commensal and pathogenic strains.	🙂
	20	Prevotella genus	Diet-dependent role; beneficial or inflammatory.	😐
	21	Bacteroides genus	Beneficial or neutral depending on species and context.	☹️
Bad	22	Candida albicans	Opportunistic yeast causing infections.	☹️
	23	Clostridium difficile	Causes severe gut infections and colitis.	🙂
	24	Enterococcus faecalis	Opportunistic pathogen; causes infections.	🙂
	25	Haemophilus influenzae	Respiratory pathogen; rare in the gut.	🙂
	26	Klebsiella pneumoniae	Associated with dysbiosis and infections.	🙂
	27	Staphylococcus aureus	Opportunistic pathogen; rare in the gut.	🙂
	28	Streptococcus pneumoniae	Respiratory pathogen; not a core gut microbe.	🙂
	29	Campylobacter spp.	Pathogen - Gastroenteritis, reactive arthritis	🙂
	30	Clostridioides difficile	Opportunistic Pathogen - Antibiotic-associated diarrhea	🙂
	31	Plesiomonas shigelloides	Pathogen - Acute diarrhea	☹️
	32	Salmonella spp.	Pathogen - Gastroenteritis, typhoid fever	🙂
	33	Yersinia enterocolitica	Pathogen - Yersiniosis, reactive arthritis	🙂
	34	Vibrio spp.	Pathogen – (V. parahaemolyticus / V. vulnificus / V. cholerae)	🙂
	35	Enteropathogenic E. coli (EPEC)	Pathogen - Infantile diarrhea	🙂
	36	Enteroaggregative E. coli (EAEC)	Pathogen - Persistent diarrhea	🙂
	37	Enterotoxigenic E. coli (ETEC)	Pathogen - Traveler's diarrhea	🙂
	38	Shiga-like E. coli (STEC)	Pathogen - Bloody diarrhea, HUS toxin-producing	🙂
	39	Shigella/ E. coli (EIEC)	Pathogen – Shigellosis - Enteroinvasive	🙂
	40	Cryptosporidium	Pathogen - Cryptosporidiosis	🙂
	41	Cyclospora cayetanensis	Pathogen - Cyclosporiasis	🙂
	42	Entamoeba histolytica	Pathogen - Amoebic dysentery	🙂
	43	Giardia lamblia	Pathogen - Giardiasis	🙂

🙂 - Microbes at optimum levels 😐 - Microbes at moderate levels ☹️ - Microbes at detrimental levels

Good – These microbes serves as probiotics and assists with good health; **Core** – neutral microbes that can change based on your health; **Bad** – microbes that may lead to diseases.

Gut and Disease Associations

The **gut microbiome** interacts with various tissues and organs through interconnected pathways known as **gut-tissue axes**. These axes facilitate communication between the gut and distant organs, influencing immunity, metabolism, and overall health. Disruption in the gut microbiome (**dysbiosis**) can contribute to disease development across multiple body systems.



Gut-Brain Axis: Stress, Anxiety, Depression, IBS, Schizophrenia, Cognitive Decline, Autism

Gut-Endocrine Axis: Regulatory, Metabolic, Behavioural and Hormonal Disorders

Gut-Heart Axis: Cardiovascular Disease, Atherosclerosis, Thrombotic events, Hypertension

Gut- Lung Axis: Chronic Obstructive Pulmonary Disease

Gut-Liver Axis: Liver Inflammations , Hepatocellular Carcinoma, Non- Alcoholic Fatty Liver

Gut-Pancrease Axis: Diabetes, Pancrease cell inflammation

Gut-Bone Axis: Bone Demineralization, Osteoporosis

Gut-Muscle Axis: Muscle Impairment, Frailty, Sarcopenia

Gut-Skin Axis: Acne, Psoriasis, Atopic Dermatitis, Wrinkles, Aging

Gut-Reproductive Axis: Infertility, Ovarian Dysfunction, Ovarian cancer, Postmenopausal Osteoporosis

Gut-Kidney Axis: Chronic Kidney Disease, Acute Kidney Injury/Inflammation, Nephrolithiasis, Nephropathy

Gut- Bladder Axis: Urinary Tract Infection, Overactive/Painful Bladder

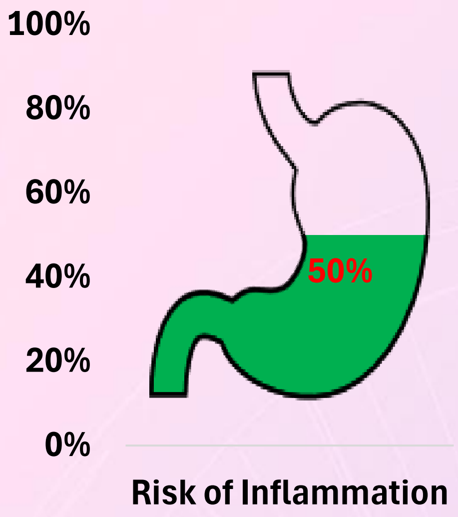
Based on the gut microbes found within your body the table below shows some of the conditions that could affect you

Group	Disorder	Your Gene Result
Autoimmune	1. Allergic rhinitis	🙂
	2. Allergy	😐
	3. Asthma	😐
	4. Eczema	🙂
	5. Immune disorder	🙂
	6. Inflammation	😐
	7. Multiple sclerosis	🙂
	8. Rheumatoid arthritis	😐
	9. Systemic Lupus Erythematosus (SLE)	🙂
	10. Type 2 diabetes	☹
Cancer	11. Colorectal cancer	🙂
	12. Liver Cancer	☹
	13. Prostate cancer	😐
Neurological Disorders	14. Autism	🙂
	15. Depression	🙂
	16. Insomnia/ poor sleep quality	😐
	17. Parkinson Disease	🙂
	18. Schizophrenia	🙂
	19. Stress and anxiety	☹
Cardiovascular diseases	20. Coronary Artery Disease	☹
	21. Hypertension	☹
Gastrointestinal (GI) tract	22. Constipation	🙂
	23. Crohn's disease	🙂
	24. Diarrhoea	😐
	25. Excessive lipopolysaccharides	☹
	26. Inflammatory bowel diseases	🙂
	27. Overweight	☹
	28. Ulcerative colitis	😐
Other Diseases	29. Chronic kidney diseases	☹
	30. Chronic liver diseases	🙂
	31. Chronic respiratory diseases	☹
	32. Gout	🙂
	33. Osteoporosis	🙂
	34. Polycystic Ovary Syndrome (PCOS)	🙂
	35. Skin Conditions (e.g., Acne, Rosacea)	😐

6. Inflammation

The gut microbiome plays a central role in regulating inflammation throughout the body. An imbalance in gut microbes, known as dysbiosis, can trigger or exacerbate inflammation, contributing to various chronic diseases such as autoimmune disorders, metabolic syndrome, cardiovascular disease, and neuroinflammatory conditions. Conversely, a healthy gut microbiome can help resolve inflammation through the production of beneficial metabolites and the regulation of immune responses.

The gut lining acts as a physical and immune barrier. Beneficial microbes (e.g., Faecalibacterium prausnitzii and Akkermansia muciniphila) strengthen the gut lining by supporting tight junctions. Dysbiosis can lead to a "leaky gut," allowing harmful substances like lipopolysaccharides (LPS) to enter the bloodstream, triggering systemic inflammation.



A total of **6 gut microbes**, which contribute to **Inflammation**, were studied within your sample for the presence and quantity. Based on these microbes your risk for getting **Inflammation** are calculated.

Factors contributing to the risk of Inflammation

- An imbalance of beneficial and harmful microbes disrupts the gut barrier, leading to a "leaky gut."
- Microbial endotoxins like lipopolysaccharides (LPS) enter the bloodstream, triggering systemic inflammation.
- Low levels of anti-inflammatory bacteria (e.g., Faecalibacterium prausnitzii, Akkermansia muciniphila) and high levels of pro-inflammatory microbes (e.g., Escherichia coli, Clostridioides difficile) are linked to chronic inflammation.
- Psychological stress activates the hypothalamic-pituitary-adrenal (HPA) axis, increasing cortisol levels.
- Chronic stress dysregulates the immune system, leading to increased production of inflammatory cytokines.
- Sleep deprivation impairs immune function and increases pro-inflammatory markers.
- Circadian rhythm disruption can negatively affect gut microbiota, contributing to inflammation.
- Tobacco smoke contains pro-inflammatory chemicals that damage tissue and increase systemic inflammation.
- Chronic alcohol use impairs the gut barrier and promotes inflammatory pathways.

Reducing Risk for Inflammation

1. **Probiotics**: Supplementing with beneficial bacteria can restore gut balance, reduce inflammation, and support immune function, particularly in conditions like IBD, allergies, and autoimmune diseases.

2. **Prebiotics**: Diets rich in prebiotics (fiber, resistant starch) promote the growth of beneficial bacteria, helping to maintain a healthy microbiome and reduce inflammation.

Dietary Modifications: Anti-inflammatory diets rich in fruits, vegetables, omega-3 fatty acids, and polyphenols can support gut health, reduce microbial imbalance, and manage chronic inflammation.

Food recommendations for people with Inflammation:

1. **Anti-inflammatory foods:** Include


Salmon


Mackerel


Olive oil


Turmeric

2. **Fruits and Vegetables**: Eat a variety of colourful, antioxidant-rich produce


Berries


Leafy Greens


Fruits


Vegetables

3. **Probiotics**: Incorporate foods to support gut health


Yogurt


Kefir


Kimchi

4. **Whole grains**: Choose quinoa, brown rice, and oats for fibre


Quinoa


Brown rice


Oats

Disclaimer and Limitations

The results of genetic tests are intended for informational purposes only and should not be considered a substitute for professional medical advice, diagnosis, or treatment. DNA-based predisposition is NOT a diagnosis of a disease or condition. Predisposition risk or likelihood is a statistical measure based on the latest advances in genomics science and is provided as an additional layer of information for wellness decision-making. Genetic testing may provide insights into genetic predispositions, but it cannot determine your overall health or guarantee specific outcomes.

Interpretation of test results should always be performed by a qualified healthcare professional. It is important to discuss any findings with a doctor or genetic counsellor who can provide guidance tailored to your individual health context.

Additionally, genetic testing may have implications for family members. Results may reveal information about heritable conditions that could affect relatives. Therefore, it is recommended to consider familial implications before proceeding with testing.

By undergoing genetic testing, you acknowledge and accept these limitations and understand that the field of genetics is continually evolving. Always consult a healthcare professional with any questions or concerns regarding your health or the results of genetic testing.

Our recommendations fall within general guidelines for wellness and do not constitute medical advice. Consult with your general physician, dermatologist, personal trainer or other certified experts before making any major changes to your routines.

Hou, Kaijian, et al. "Microbiota in Health and Diseases." Signal Transduction and Targeted Therapy, vol. 7, no. 1, 2022, pp. 1-28, https://doi.org/10.1038/s41392-022-00974-4.