AMILI

Advancing Human Health Through Microbiome Science

# Gut Microbiome Profile

| Report Number: B2DB-HFX6-YASE | Prepared For: Test User 95 | Sample Received Date: 07-03-2024 |
|---|---|---|

## Thank you for choosing the AMILI Gut Health Test!

Did you know that our bodies host 100 trillion microbes, many of which reside in the gut, collectively known as the gut microbiome? This vast ecosystem holds 2-3 million genes — compared to just 23,000 in the human genome — revealing a remarkable complexity that far exceeds human genetics.

The gut microbiome, which can weigh up to 2-3 kilograms (Yes, 2-3% of your body weight is microbial!), was once thought to be mainly involved in digestion. However, we know now because of advances in genetic analysis and computing power that the microbiome plays a critical role in many areas of health, including mental well-being, cardiovascular health, immune function, and the risk of chronic diseases. For example, identical twins with different microbiome profiles may experience 8-10 times difference in blood sugar responses to the same foods.

At AMILI, we are committed to advancing gut microbiome science and translating these findings into clinically meaningful insights. We hope you find this report valuable and encourage you to retest every 3-6 months to track changes in your microbiome over time.

Thank you for placing your trust in AMILI's expertise and commitment to scientific excellence.

Dr Jeremy Lim
Chief Executive Officer

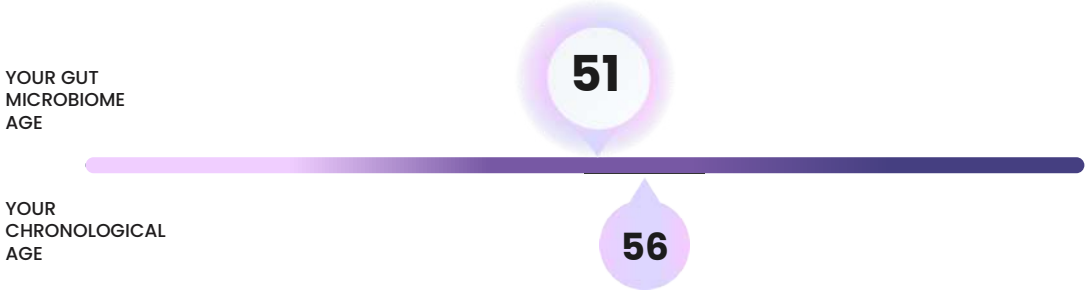
This report is for research use only and is not a diagnostic evaluation. Please consult your healthcare provider for any questions regarding the diagnosis, treatment, mitigation, or prevention of any disease, medical condition, or health impairment.

# Your Microbiome Health

A snapshot of your gut microbiome health

# + Your Gut Microbiome Age

Your Gut Microbiome Age is estimated based on the types of bacteria found in your gut, which naturally shift as we age. While your chronological age reflects the number of years you've lived, this measure provides insight into how your gut health may relate to your biological aging process. [1]




Your gut is **5 years younger** than your chronological age.

**LOW BIOLOGICAL AGE ▼**
Suggests your gut profile resembles that of a younger individual. This may reflect healthier aging patterns and beneficial microbial activity.

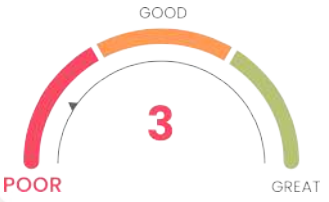
**HIGH BIOLOGICAL AGE ▼**
Indicates your gut profile is more similar to that of an older individual. This may be influenced by inflammation, chronic health conditions, or lifestyle factors.

This is not a medical diagnosis. Results are based on gut microbiome patterns from a healthy Asian population and may vary for individuals with medical conditions or different backgrounds.

# + Your AMILI Functional Scores

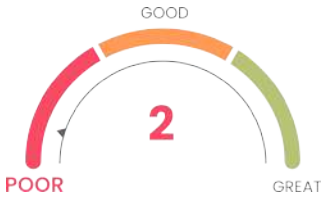

**Gut Brain Axis**

Examines gut microbial processes that impact sleep, mood, focus and mental performance.




**Immunity & Metabolism**

Focuses on microbes supporting heart, liver, pancreas and immune health.




**Digestion**

Tracks how food is digested by the microbiome to improve nutrient absorption and overall digestive health.

AMILI Functional Scores are calculated from bacterial abundances and key functions, and are measured on a scale from 1 to 10.

# + Your Diversity Indicator

Measures the overall diversity of bacterial groups in your microbiome and reflects the richness and evenness of all bacterial species. [2]


**POOR** ▼
May suggest fewer species of gut bacteria are present, hence leading to increased risks of health conditions. This imbalance may arise from lifestyle or medical conditions.

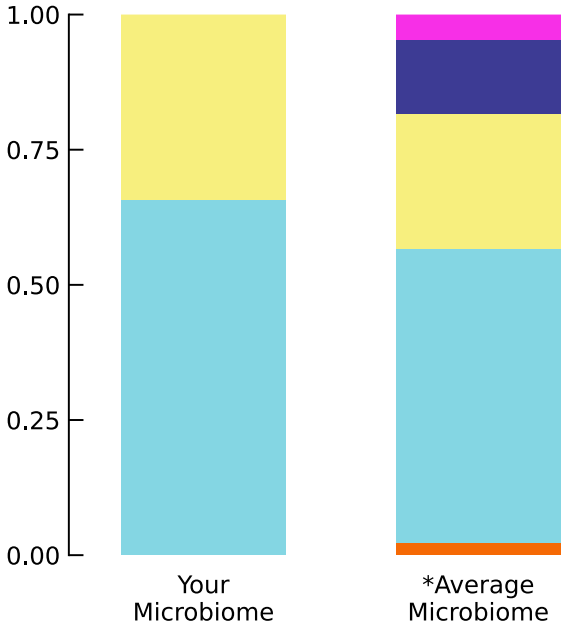
**GOOD** ▼
Indicates a healthy, resilient gut with a variety of beneficial bacteria.

**GREAT** ▼
Indicates a balanced gut microbiome that supports healthy metabolism and reduces risks associated with both obesity and inflammation.

# + Your Microbiome Composition

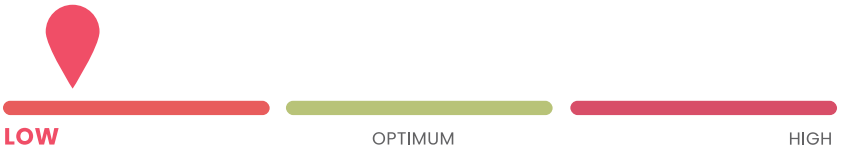
These key bacteria populations help us understand how your gut health may impact overall well-being.

- **Proteobacteria:** Elevated levels are linked to inflammation and obesity. [3]
- **Actinobacteria:** Contribute to gut microbial balance and are associated with aging-related shifts in gut composition. [4]
- **Bacteroidetes:** Play a key role in digestion and support weight management by aiding nutrient metabolism. [5]
- **Firmicutes:** Protect the gut lining and facilitate energy and fat absorption, potentially impacting weight and metabolism. [6]
- **Fusobacteria & Others:** High levels can produce toxins contributing to inflammation. [7]




*Calculated based on healthy individuals in AMILI's multi-ethnic asian database.

## + Your Firmicutes to Bacteroidetes Ratio




**LOW RATIO** ▼
Linked to inflammation risk (more Bacteroidetes, fewer Firmicutes).

**OPTIMUM RATIO** ▼
Indicates a balanced gut microbiome that supports healthy metabolsim and reduces risk associated with both obesity and inflammation. [8]

**HIGH RATIO** ▼
Linked to higher obesity risk (more Firmicutes, fewer Bacteroidetes).

## + Your Microbiome Balance Indicator

Evaluates the abundance of beneficial to potentially harmful bacteria, helping to identify whether your microbiome is resilient or at risk of dysbiosis. [9]


**POOR** ▼
Your gut shows an imbalance, with reduced beneficial bacteria and a higher proportion of diseased associated bacteria, which may impact gut health and overall resilience.

**GOOD** ▼
Your gut has a balanced abundance of beneficial to harmful bacteria, indicating no major signs of microbial imbalance.

**GREAT** ▼
Your gut has abundant beneficial bacteria compared to harmful ones, reducing the risk of dysbiosis and supporting overall well-being.

# Your Dietary Recommendations

These recommendations are personalised based on your unique needs and your **AMILI Functional Scores**. We highlight foods to help improve lower-scoring pathways and maintain those already in good shape. With a lower **Gut-Brain Axis, Immunity & Metabolism, Digestion** score, do prioritise incorporating these foods into your diet to help improve your gut health outcomes.

## Gut-Brain Axis

- Mood Regulation
- Sleep Quality
- Cognitive Performance

**2**

POOR

Alfalfa

Almond

Anchovies

## Immunity & Metabolism

- Inflammation Control
- Heart Health
- Energy Optimisation

**3**

POOR

Acai Bowl

Apple

Apple Cider Vinegar

## Digestion

- Nutrient Absorption
- Gut Barrier Integrity
- Vitamin Biosynthesis

**2**

POOR

Achar

Artichoke

Avocado

# Your Precision Probiotics


### Amili Probiotics Formulation 2

Designed to improve your overall physical and mental well-being. The formulation supports heart health, bile acid metabolism, mood, sleep, and stress. [10]

For more information, please refer to:
Our Probiotics Details page.

# Your Detailed Report

A breakdown of microbial functions that contribute to your health.

# Gut-Brain Axis

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The gut-brain axis is the communication network linking the gut and brain through nerves, hormones, and microbial signals. It plays a key role in regulating digestion, mood, and overall health.

These metabolites play a key role in regulating the Gut-Brain Axis.

# Gut-Brain Axis

## Key Metabolities:

GABA | Serotonin | Tryptophan | Glutamate


There may be an **imbalance** in your gut bacteria or weak communication between your gut and brain, which could contribute to issues like poor stress response, mood swings, or digestive discomfort.

## Stress Management


**Your Result: POOR**

GABA

- GABA is a neurotransmitter that helps the brain and body communicate, playing a key role in calming the nervous system, influencing mood, sleep, and stress levels. [11]

- Abundance of bacterial groups associated with GABA production is low, resulting in a **poor** score.
- Reduce GABA levels can **increase anxiety**, **impair sleep regulation**, and **elevate stress.**

# Gut-Brain Axis

## Mood Regulation


**Your Result: GOOD**

**Serotonin**

- Serotonin regulates mood, sleep, appetite, and digestion, promoting happiness, calm, focus, better sleep, and stress management.[12]

- Abundance of bacterial groups associated with serotonin production is moderate, resulting in a **good** score.
- Moderate serotonin levels **support gut function**, **mood regulation**, and **emotional stability** through neural signaling.

## Cell Communication

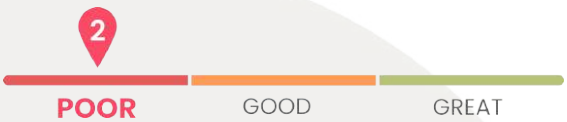

**Your Result: POOR**

**Tryptophan**

- Tryptophan is an essential amino acid that your body uses to produce serotonin, a neurotransmitter involved in regulating mood, sleep, and overall well-being.[13]

- Abundance of bacterial groups associated with tryptophan production is low, resulting in a **poor** score.
- Reduced tryptophan levels can **impair serotonin synthesis**, **disrupting mood regulation** and **emotional well-being**.

## Brain Signalling




**Your Result: POOR**

**Glutamate**

- Glutamate is a key neurotransmitter, playing a central role in facilitating learning, memory formation, and communication between nerve cells (neurons).[14]

- Abundance of bacterial groups associated with glutamate production is low, resulting in a **poor** score.
- Reduced glutamate levels can **impair gut-brain communication**, **limiting cognitive processes** and **memory**.

# Immunity & Metabolism

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Immunity, metabolism, and gut health are closely connected through the gut microbiome. The gut-immune axis helps regulate immune responses, while the gut also influences metabolism by producing short-chain fatty acids (SCFAs) that support energy balance, insulin sensitivity, and fat storage.

These metabolites are essential for regulating Immunity and Metabolism.

# Immunity & Metabolism

## Key Metabolities:

TMAO | Imidazole Propionate | Glutathione Pathways | Histamine | Cysteine & Derivatives | Glycine & Butanoate | Short Chain Fatty Acids | L-citrulline | Indole & Derivatives


There may be an imbalance in your gut bacteria, which could contribute to issues pertaining to immune, energy and metabolic functions.

## Heart Health


**Your Result: GOOD**

TMAO

- TMAO (trimethylamine N-oxide) is produced by gut bacteria from red meat, eggs, and dairy, affecting cholesterol metabolism and increasing the risk of atherosclerosis and cardiovascular disease. [15]

- Abundance of bacterial groups associated with TMAO production processes is moderate, resulting in a **good score.**
- Moderate TMAO production suggests **moderate cardiovascular risk,** as these metabolites **contribute to atherosclerosis.**

# Immunity & Metabolism

## Glucose Regulation


**Your Result: GOOD**

**Imidazole Propionate**

- Imidazole propionate, derived from histidine in protein-rich foods, can disrupt the gut microbiome, increase inflammation, and contribute to metabolic issues.[16]

- Abundance of bacterial groups with imidazole propionate production is moderate, resulting in a **good** score.
- Suboptimal imidazole propionate **suggests dysregulated glucose metabolism** and **impaired metabolic regulation.**

## Oxidative Stress Management


**Your Result: GOOD**

**Glutathione Pathways**

- Glutathione neutralizes free radicals, reducing oxidative stress, inflammation, supports the barrier, and promotes beneficial bacteria, linking antioxidant defense to gut health.[17]

- Abundance of bacterial groups associated with glutathione pathways is moderate, resulting in a **good** score.
- Moderate glutathione metabolism **neutralizes reactive oxygen species, reducing oxidative stress** and **cellular damage.**

## Allergy


**Your Result: GOOD**

**Histamine**

- Histamine is a chemical involved in immune responses, especially during allergic reactions, causing symptoms like itching and swelling. It also regulates stomach acid and the sleep-wake cycle.[18]

- Abundance of bacterial groups associated with production of histamine is moderate, resulting in a good score.
- Moderate histamine levels indicate **a balanced immune response, proper digestion,** and **regulation of sleep** and **allergic reactions.**

# Immunity & Metabolism

## Inflammation Management


**Your Result: POOR**

**Cysteine & Derivatives**

- Cysteine supports protein and glutathione production, aiding immunity, cell protection and maintains microbiome balance. Its derivatives, NAC and cystine, promote lung, liver, and skin health.[19]

- Abundance of bacterial groups responsible for cysteine production is low, resulting in a **poor** score.
- Insufficient cysteine production by the gut microbiome **impair inflammation regulation, collagen synthesis,** and **tissue integrity.**

## Anti-Inflammation


**Your Result: POOR**

**Glycine & Butanoate**

- Glycine, an amino acid involved in protein synthesis, supports the gut barrier by aiding in tissue repair and reducing oxidative stress, which helps maintain a stable gut environment. Butyrate, a short-chain fatty acid produced by gut bacteria during fiber fermentation, serves as a primary energy source for intestinal cells, strengthens the gut lining, and reduces inflammation.[20]

- Abundance of bacterial groups associated with glycine and butanoate metabolism is low, resulting in a **poor** score.
- **Reduced production of anti-inflammatory compounds** in the gut and **impaired inflammation regulation** indicates **an increased risk of gut inflammation.**

# Immunity & Metabolism

## Intestinal Health


**Your Result: POOR**

**Short Chain Fatty Acids**

- Short-chain fatty acids (SCFAs) are produced by gut bacteria during fiber fermentation. They fuel intestinal cells, strengthen the gut lining, reduce inflammation, and support beneficial bacteria. [21]

- Abundance of bacterial groups associated with production of SCFAs is low, resulting in a **poor** score.
- **Reduced short-chain fatty acids** indicate **potential dietary fiber deficiency,** which may **compromise gut barrier integrity** and **impair gastrointestinal health.**

## Intestinal Permeability


**Your Result: POOR**

**L-citrulline**

- L-citrulline is an amino acid that supports gut health by protecting the intestinal lining and promoting nutrient absorption. [22]

- Abundance of bacterial groups associated with L-citrulline metabolism is low, resulting in a **poor** score.
- **Low citrulline levels impair the intestinal barrier, increasing permeability** and **allowing harmful substances to enter the bloodstream, causing systemic inflammation** and **exacerbating digestive disorders..**

## Gut Lining Protection


**Your Result: GOOD**

**Indole & Derivatives**

- Indole, produced from tryptophan and found in foods like broccoli, supports gut health by strengthening the intestinal lining, promoting beneficial bacteria, and reducing inflammation. [23]

- Abundance of bacterial groups responsible for indole production is moderate, resulting in a **good** score.
- Adequate indole production **supports intestinal barrier integrity** and **suppresses bacterial virulence, promoting gut health.**

# Digestion

+

Digestion and gut health are interconnected, with the microbiome supporting nutrient breakdown, absorption, and gut lining integrity. A balanced microbiome is essential for efficient digestion, metabolic health, and overall gut function.

These metabolites support and regulate healthy digestion.

# Digestion

## Key Metabolities:

Fibre | Bile Acids Deconjugation | Fat | Protein | Branched Chain Amino Acids | Carbohydrate | Vitamin B1 Biosynthesis | Vitamin B2 Biosynthesis | Vitamin B6 Biosynthesis | Vitamin B7 Biosynthesis | Vitamin B9 Biosynthesis | Vitamin B12 Biosynthesis | Vitamin K Biosynthesis


There may be an imbalance in your gut bacteria, which may be inefficiently digesting and absorping nutrients.

## Fibre Digestion


**Your Result: POOR**

Fibre

- The body relies on gut bacteria to digest fiber from foods like fruits, vegetables, and whole grains. In the large intestine, bacteria ferment fiber into short-chain fatty acids (SCFAs), which strengthen the gut lining, reduce inflammation, and fuel gut cells. Fiber also supports beneficial bacteria, promotes regular digestion, and maintains a healthy gut microbiome. [24]

- Abundance of bacterial groups involved in fibre fermentation is low, resulting in a **poor** score.
- **Reduced fiber fermentation** in the gut microbiome **lowers SCFA production, compromising intestinal barrier integrity** and **gut health.**

# Digestion

## Fat Emulsification


**Your Result: GREAT**

**Bile Acids Deconjugation**

- Bile acid deconjugation occurs in the gut when specific bacteria break down bile acids produced by the liver for fat digestion. This process shapes the gut microbiome by promoting beneficial bacteria, maintaining microbial balance, and reducing inflammation, highlighting its role in supporting digestive and microbiome health. [25]

- Abundance of bacterial groups responsible for bile acid deconjugation is high, resulting in a **great** score.
- **Optimal bile acid deconjugation enhances lipid emulsification, facilitating efficient absorption** and **metabolism of fat-soluble vitamins** and **essential nutrients.**

## Fat Digestion


**Your Result: GOOD**

**Fat**

- Fat digestion breaks down fats from foods like oils, nuts, and dairy into fatty acids for energy, hormones, and cell health. Healthy fats, like omega-3s, support beneficial gut bacteria and reduce inflammation, promoting a balanced microbiome and overall gut health. [26]

- Abundance of bacterial groups associated with fat digestion is moderate, resulting in a **good** score.
- **Suboptimal fat digestion and metabolism hinder energy extraction, lipid oxidation,** and **metabolic homeostasis.**

# Digestion

## Protein Digestion


**Your Result: POOR**

**Protein**

- Protein digestion breaks down proteins into amino acids for muscle building, tissue repair, and essential functions. In the gut, undigested protein is fermented by bacteria, producing beneficial compounds like SCFAs and indoles that strengthen the gut lining, reduce inflammation, and support a healthy microbiome. [27]

- Abundance of bacterial groups associated with protein digestion is low, resulting in a **poor** score.
- **Inefficient protein digestion and amino acid absorption** can **impair muscle repair, recovery,** and **growth.**

## Muscle Growth & Repair


**Your Result: POOR**

**Branched Chain Amino Acids**

- Branched-chain amino acids (BCAAs)—leucine, isoleucine, and valine—support gut health by maintaining the intestinal lining, reducing oxidative stress, and fueling intestinal cells. They also promote beneficial bacteria, linking protein metabolism to a healthy microbiome. [28]

- Abundance of bacterial groups associated with the digestion and utilisation of BCAAs low, resulting in a **poor** score.
- The gut microbiome's **reduced ability to metabolise branched-chain amino acids** may **impair protein synthesis, muscle repair,** and **intestinal barrier health.**

# Digestion

## Carbohydrate Digestion


**Your Result: POOR**

Carbohydrate

- Carbohydrate digestion breaks down carbs into sugars for energy, with undigested fiber reaching the large intestine. Gut bacteria ferment this fiber, producing short-chain fatty acids (SCFAs) that strengthen the gut barrier, support beneficial bacteria, and promote a healthy microbiome. [29]
- The body uses carbohydrate to derive energy and when undigested by the gut, causes gas and bloating.

- Abundance of bacterial groups associated with carbohydrate digestion is low, resulting in a **poor** score.
- **Inefficient carbohydrate metabolism** leads to **suboptimal energy extraction, impairing energy utilisation** and **increasing the risk of nutrient deficiencies.**

## Vitamin B1 Biosynthesis


**Your Result: POOR**

Vitamin B1 Biosynthesis

- Vitamin B1 (thiamine) is essential for converting food (carbohydrates) into energy and supporting the nervous system, digestion, and gut health. [30]
- Thiamine helps maintain a strong gut lining and balanced bacteria.

- Abundance of bacterial groups involved in Vitamin B1 production is low, resulting in a **poor** score.
- **Insufficient vitamin B1 production** by the gut microbiome may **impair carbohydrate metabolism, energy production,** and **metabolic health.**

# Digestion

## Vitamin B2 Biosynthesis


**Your Result: GOOD**

Vitamin B2 Biosynthesis

- Vitamin B2 (riboflavin) is vital for energy production, metabolism, and overall health, and it also plays an important role in supporting gut health by maintaining the gut lining, promoting the growth and function of beneficial bacteria, and reducing inflammation. [30]

- Abundance of riboflavin-producing bacterial groups is moderate, resulting in a **good** score.
- **Suboptimal vitamin B2 production** by the gut microbiome may **disrupt microbial balance, gut function,** and **efficient energy production.**

## Vitamin B6 Biosynthesis


**Your Result: POOR**

Vitamin B6 Biosynthesis

- Vitamin B6 (pyridoxine) plays a crucial role in protein metabolism, energy production, and brain function, while also influencing gut health by reducing inflammation, boosting immunity, and promoting the growth of beneficial bacteria. [30]

- Abundance of bacterial groups associated with vitamin B6 production is low, resulting in a **poor** score.
- **Decreased vitamin B6 production** by the gut microbiome may **disrupt amino acid metabolism, red blood cell production, neurotransmitter synthesis,** and **gut function.**

# Digestion

## Vitamin B7 Biosynthesis


**Your Result: POOR**

Vitamin B7 Biosynthesis

- Vitamin B7 (biotin) plays a key role in converting food into energy and supports healthy skin, hair, nails, and the nervous system while maintaining a healthy gut lining and supports a balanced microbiome by promoting beneficial bacteria. [30]

- Abundance of bacterial groups associated with vitamin B7 production is low, resulting in a **poor** score.
- **Reduced vitamin B7 production** by the gut microbiome may **impair carbohydrate and fat metabolism, affect skin, nail,** and **hair health,** and **disrupt liver** and **nervous system function.**

## Vitamin B9 Biosynthesis


**Your Result: POOR**

Vitamin B9 Biosynthesis

- Vitamin B9 (folate) is essential for DNA synthesis, red blood cell production, and cell growth while supporting gut health by maintaining the gut lining, promoting beneficial bacteria, and reducing inflammation. [30]

- Abundance of bacterial groups associated with vitamin B9 production is low, resulting in a **poor** score.
- **Low vitamin B9 production** by the gut microbiome may **impair red** and **white blood cell formation, cellular processes,** and **DNA synthesis, affecting overall health.**

# Digestion

## Vitamin B12 Biosynthesis


**Your Result: POOR**

Vitamin B12 Biosynthesis

- Vitamin B12 (cobalamin) is essential for energy production, red blood cell formation, DNA synthesis, and nervous system health while maintaining the gut lining and supports the growth and function of beneficial gut bacteria. [30]

- Abundance of bacterial groups associated with vitamin B12 production is low, resulting in a **poor** score.
- **Reduced vitamin B12 production** by the gut microbiome may **impair neurological function, hinder red blood cell production,** and **cause fatigue** and **gastrointestinal disturbances.**

## Vitamin K Biosynthesis


**Your Result: GOOD**

Vitamin K Biosynthesis

- Vitamin K supports blood clotting, bone health, and gut health by maintaining the integrity of the gut lining and promoting the growth of beneficial bacteria. [31]

- Abundance of bacterial groups associated with vitamin K synthesis is moderate, resulting in a **good** score.
- **Suboptimal vitamin K production** by the gut microbiome may **affect bone health regulation** and **disrupt vitamin K-dependent processes,** including **blood clotting, calcium metabolism,** and **cardiovascular health.**

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# Your Health Trajectory

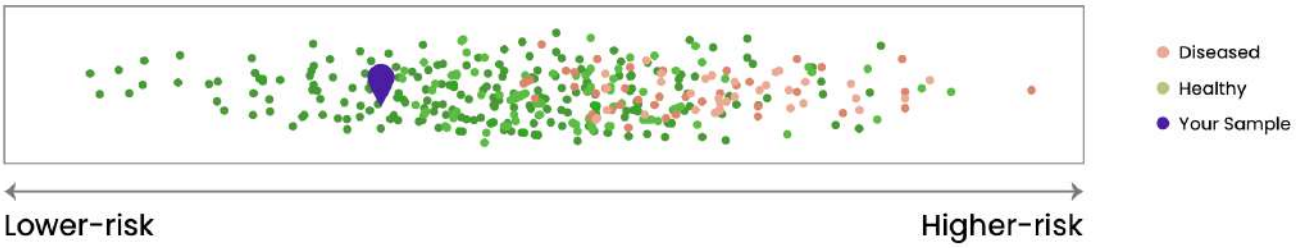
An analysis on how your gut microbiome correlates with key health outcomes

# + How to Interpret Your Results

The graphs in your report provide insights into how your gut microbiome composition may impact your health trajectory. Here's how to understand them:

**Graph Position:**

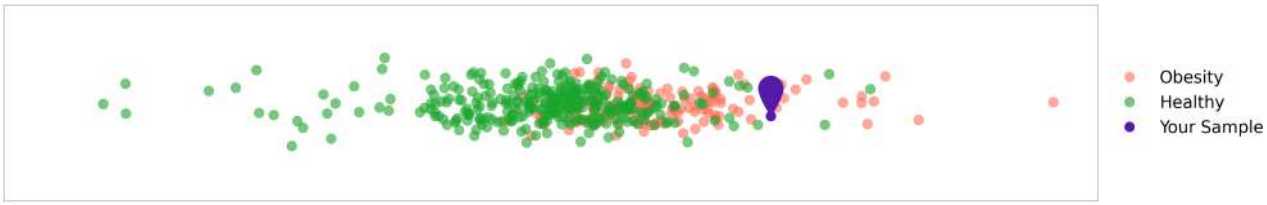
If your result ( ) is closer to the left, your microbiome profile more closely aligns with healthier profiles.
If your result is further to the right, it suggests a microbiome composition more commonly associated with higher-risk profiles.




**Understanding Anomalies:**
It's normal for individuals with overall good health to occasionally fall into higher-risk ranges. These results are not diagnostic but instead highlight possible trends for further discussion with your healthcare provider.

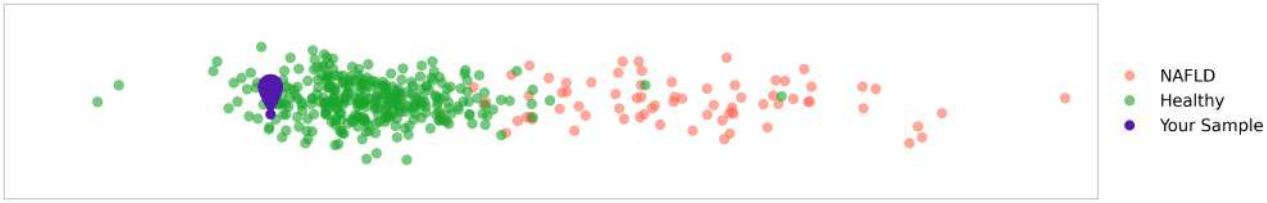
**Key Takeaway:**
These graphs reveal correlations between your gut microbiome and various health risks. Use this information as a guide to better understand your health and discuss proactive steps with your healthcare provider.

# Obesity & Gut Health




- **Obesity:** Linked to excess body fat, which can impact health.
- **Gut Imbalance (Dysbiosis):** An unhealthy gut microbiome may increase obesity risk.
- **Low Bacterial Diversity:** Reduces metabolic efficiency, making weight management harder.

# Non-Alcholic Fatty Liver Disease (NAFLD)

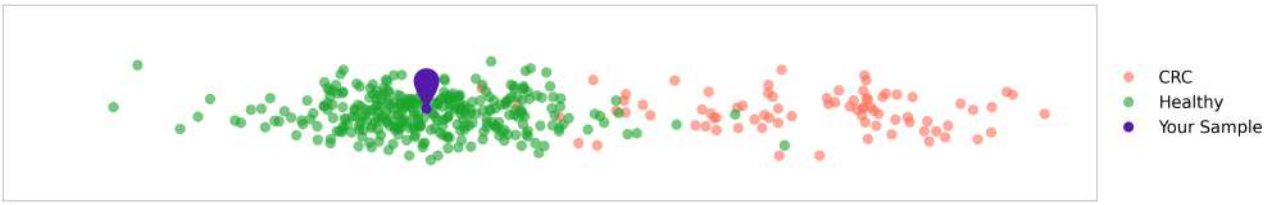



- **NAFLD (Non-Alcoholic Fatty Liver Disease):** Caused by fat build-up in the liver.
- **Liver Inflammation:** Fat can trigger inflammation and damage liver cells.
- **NASH (Non-Alcoholic Steatohepatitis):** A severe form of NAFLD that can lead to liver scarring and cirrhosis.

# Inflammatory Bowel Disease (IBD)

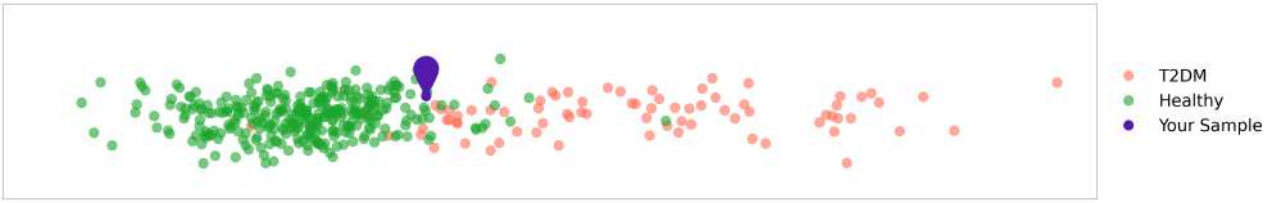

- **IBD (Inflammatory Bowel Disease):** Refers to chronic inflammation of the digestive tract.
- **Ulcerative Colitis:** Causes persistent inflammation and ulcers in the colon and rectum lining.
- **Crohn's Disease:** Involves inflammation of the digestive tract lining, often extending into deeper tissues.

# Colorectal Cancer (CRC)




- **Colorectal Cancer(CRC):** Includes cancers of the bowel, colon, and rectum.
- **Genetic Risk:** 75-95% of cases have little to no underlying genetic risk.
- **Risk Factors:** Age, diet, obesity, smoking, and red meat consumption.

# Type 2 Diabetes Mellitus (T2DM)




- **T2DM (Type 2 Diabetes Mellitus):** Defined by high blood glucose, insulin resistance, and insufficient insulin production.
- **Prevalence:** Accounts for nearly 90% of diabetes cases worldwide.
- **Causes:** Linked to a combination of lifestyle and genetic factors.

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# Our Probiotics Details

# + Our Probiotics Details

## Formulation 2 - Complete Health


**Delayed-release capsules:** Ensures **targeted delivery to the intestine**

1 month supply of 30 **veggie capsules**

Our **Formulation 2** helps to improve your digestive function and physical well-being.

### Key benefits:

- Supports heart health and bile acid metabolism.
- Enhances mood, sleep and stress management.
- Reduces inflammation and improves physical performance.

21 billion CFU

### Probiotics Strains:

- **L. plantarum:** Reduces inflammation, enhances glucose metabolism, supports fat oxidation, and promotes better sleep quality. [32]
- **B. longum:** Improves gut microbiota diversity and supports liver and kidney health. [33, 34]
- **B. breve:** Strengthens intestinal integrity and reduces neuroinflammation. [35]
- **L. Rhamnosus:** Enhances physical performance with improved locomotor activities and enhances muscle strength. [36]

### Prebiotics Strains:

- **Fructooligosaccharides (FOS) | 30mg:** Promotes growth of good gut bacteria and increases mineral absorption. [37]
- **Citrus Aurantium L. (Orange Peel Extract) | 60mg:** Promotes Short-Chain Fatty Acid (SCFA) production, enhancing digestive health. [38]
- **Guar Gum | 20mg:** Regulates immune response and reduces inflammation. [39]

### Postbiotics Strains:

- **S. salivarius ssp. thermophilus:** Regulates immune response and reduces inflammation. [40]

## Enhanced Gut Health through Synbiotics

**AMILI Probiotics** contain **synbiotic** blends of probiotics (beneficial bacteria) and prebiotics (non-digestible fibers) to enhance gut health.

Synergistic Effects | Strengthened Gut Barrier | Short-Chain Fatty Acid (SCFA) Production | Balanced Microbiome

- **Probiotics** plays a role in improving digestion, nutrient absorption, metabolism and immunity.
- **Prebiotics** act as food for probiotics, boosting their survival and function.
- As synbiotics, they **reinforce the gut barrier**, combat inflammation, and protect against harmful pathogens.
- Stimulates **short-chain fatty acid production**, supporting colon function and reducing metabolic disease risks
- Restores **gut balance**, promoting optimal digestive health and immunity.

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# Your Dietary Details

# Your Dietary Details

## Whole Grains

**Barley**

Barley is high in soluble fiber that helps lower cholesterol and improve gut health. It also supports immune function through its effect on the microbiome. [41]

**Black Rice**

High in fiber and anthocyanins, black rice supports digestion, regularity, and helps reduce inflammation and oxidative stress. [42]

**Brown Rice**

Brown rice promotes mental focus, boosts your body's defenses, and helps keep digestion smooth with its natural fiber and nutrients. [43]

## Fruits & Vegetables

**Acai Bowl**

Açaí berries are rich in antioxidants that support blood vessel function, heart rhythm, and overall cardiovascular health. [44]

**Apple**

Apples' fiber supports gut health and immunity by feeding good bacteria, aiding metabolism, and promoting heart and mental wellbeing. [45]

**Artichoke**

Artichokes promote digestion and reduce bloating. Their fiber supports regular bowel movements and gut health. [46]

## Plant-based Proteins

**Alfalfa**

Alfalfa contains plant compounds that support immunity, aid digestion, and boost metabolism by improving gut health and reducing inflammation. [47]

**Almond**

Almonds support heart, metabolic, and mental health. Their fiber aids gut health and immunity, promoting a balanced microbiome linked to improved mood and wellbeing. [48]

**Beancurd Skin**

Beancurd skin is high in protein and contains isoflavones, which help regulate digestive function and may reduce inflammation. [49]

▲ Most Associated with: | Gut Brain Axis | Immunity & Metabolism | Digestion

# Your Dietary Details

## Herbs & Spices

**Basil**

Basil's antioxidants, flavonoids, and vitamin K help ease inflammation, support the gut-brain axis, and may reduce stress and mental fatigue. [50]

**Bay Leaves**

Bay leaves aid digestion by stimulating enzymes, reducing gas, and offering anti-inflammatory and antimicrobial support for a healthy gut. [51]

**Black Tea**

Theaflavins in black tea reduce inflammation and may support focus, memory, and brain health by influencing the gut-brain axis. [52]

## Probiotic & Fermented Foods

**Achar**

Achar provides probiotics for gut health. Its spices help stimulate digestion and support a healthy gut microbiome. [53]

**Apple Cider Vinegar**

Apple cider vinegar may help regulate blood sugar and digestion. Its acetic acid supports gut health and weight control. [54]

**Cheddar**

Cheddar cheese provides protein and calcium that support immune health and may positively influence gut microbiome composition and overall gut health. [55]

## Animal-based Proteins

**Anchovies**

Anchovies are rich in omega-3 and minerals, making them a brain-boosting superfood. Diets with oily fish like anchovies may support mood and mental wellbeing. [56]

**Barramundi**

Barramundi is rich in omega-3 fatty acids, supporting heart health and reducing inflammation. It's also a lean source of protein that promotes muscle health and metabolic function. [57]

**Clam**

Clams are packed with iron and zinc for immunity, plus high-quality protein and omega-3s that support heart and brain health. [58]

▲ Most Associated with: | Gut Brain Axis | Immunity & Metabolism | Digestion

Your recommendations are personalised to your survey-delcared health conditions — fewer suggestions may appear due to dietary or health-related filters.

# Your Gut-Friendly Lifestyle Guide

Did you know that, like all healthy ecosystems, a **diverse community of microbes** is a hallmark of a healthy gut? Beyond food, habits like movement, sleep, and stress management all play a role in supporting it.

Scan the QR to explore in-depth advice, gut-friendly meal ideas, and more lifestyle habits that support your microbiome!

amili.asia/lifestyle

## Diet

Your gut thrives on a variety of fibre-rich plant foods — not just vegetables, but also legumes, whole grains, nuts, and seeds. Aim for **30+ different plant foods a week** to boost microbial diversity. Focus on **whole foods, less oil**, and **less sugar**, and try to **avoid processed foods**. These habits support the growth of beneficial bacteria that produce SCFAs, which improve digestion and help regulate inflammation and metabolism. [59]

## Exercise

Just **30 minutes** of movement a day — whether walking, stretching, or cycling — can increase beneficial bacteria and support SCFA production. Regular activity reduces inflammation and improves digestion, contributing to better **Immunity & Metabolism** and **Digestion** scores. [60]

## Stress

Chronic stress disrupts the gut-brain connection, reducing beneficial bacteria and increasing gut permeability. Even **10 minutes** of breathing exercises or mindfulness can help lower cortisol and restore microbial balance — supporting both **Digestion** and your **Gut-Brain Axis**. [61]

## Sleep

Less than 6 hours of sleep has been linked to reduced microbial diversity and increased inflammation. Aim for **7–9 hours** of quality sleep to allow your microbiome to recover and support both your **Gut-Brain Axis** and **Immunity & Metabolism**. [62]

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# Appendix

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Note: This microbiome test is a non-diagnostic evaluation, and intended to be a wellness and lifestyle assessment.