SelfDecode™

Bifidobacterium

Biohacker Report

REPORT CATEGORY

GUT HEALTH

Sample Client

Report date: 15 January 2026

Powered by omicsedge

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Personal information

NAME

Sample Client

SEX AT BIRTH

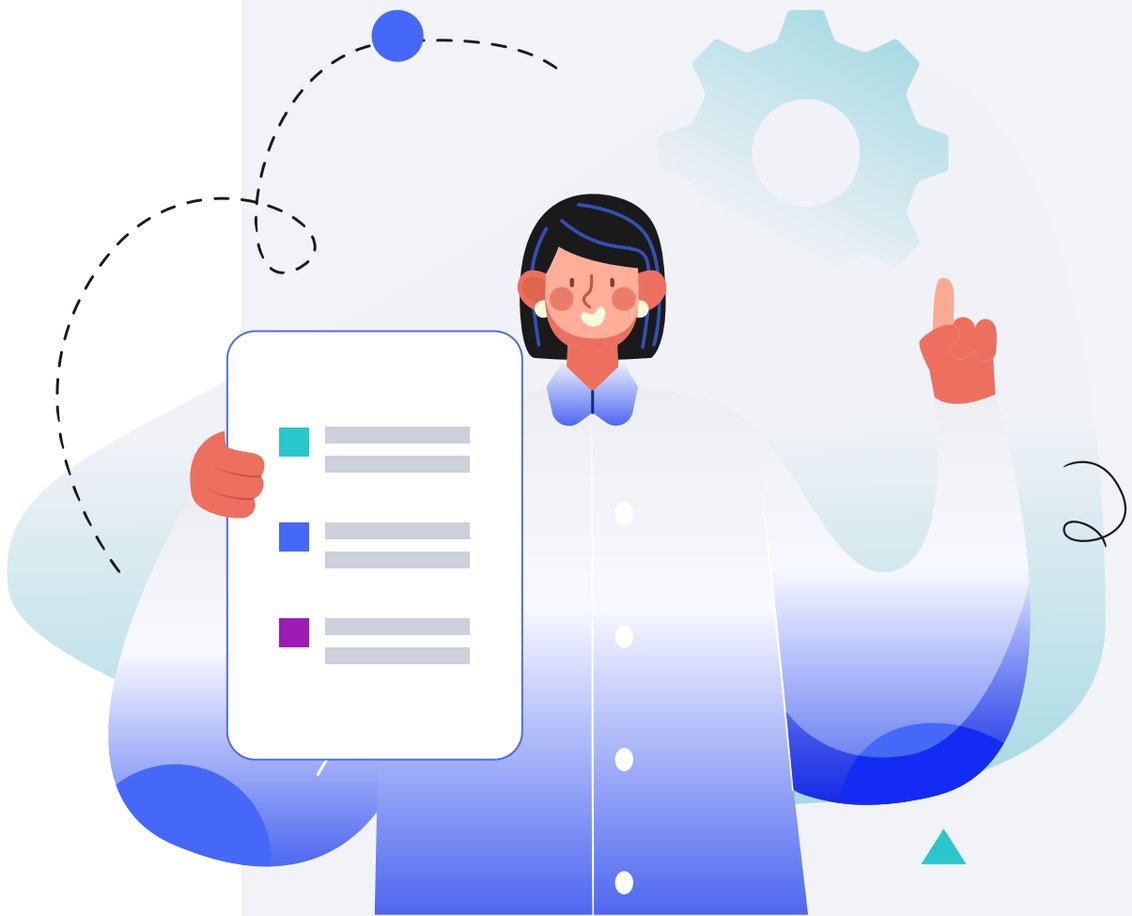
Male

HEIGHT

5ft 5" 165cm

WEIGHT

137lb 62kg

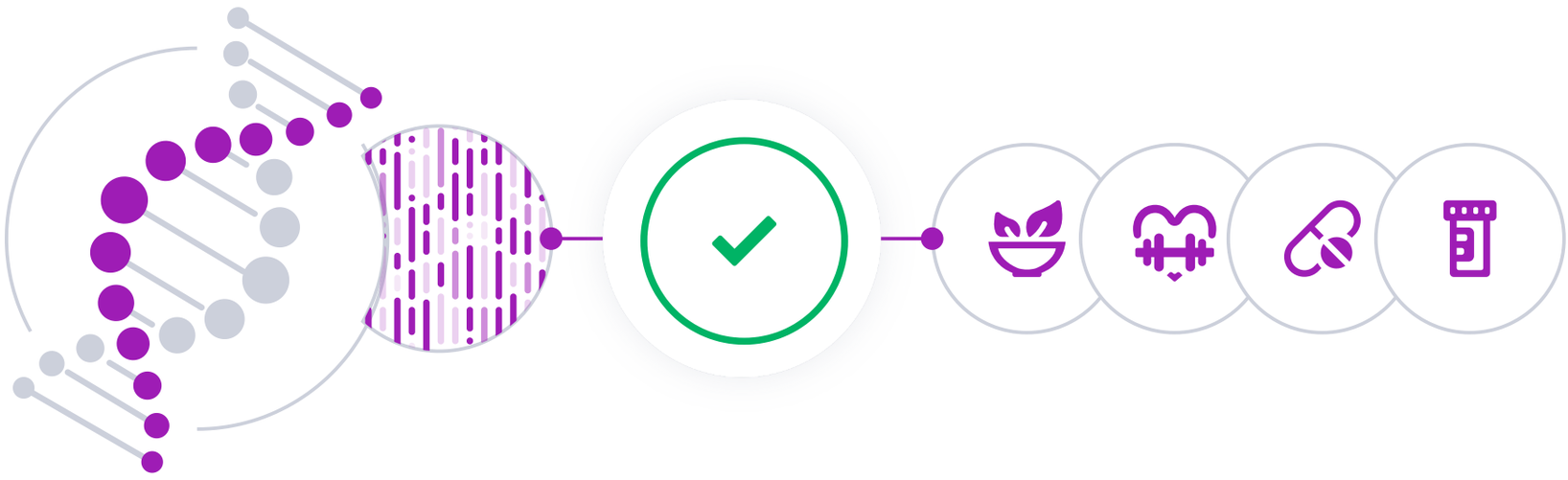


DISCLAIMER

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.

How this works

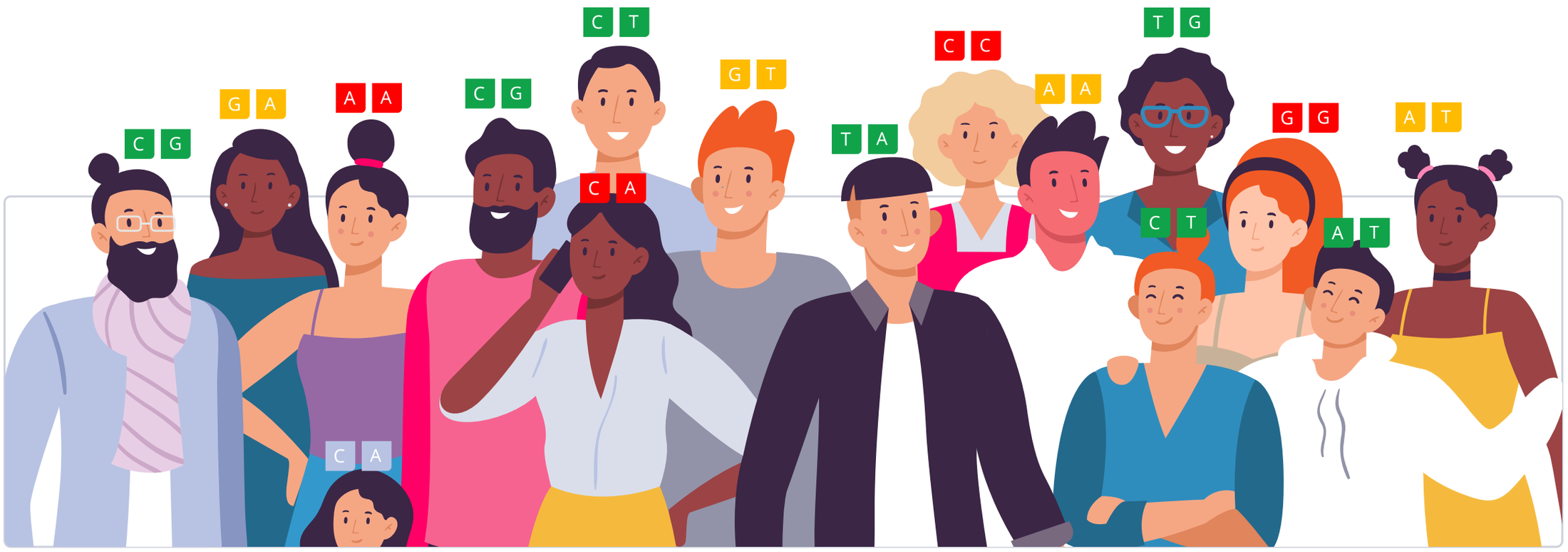
Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



Similarly, our Trait Reports look at how your DNA influences your traits.

Your DNA is like an instruction manual — it contains a lot of information.
You can think of it as a blueprint for your body.

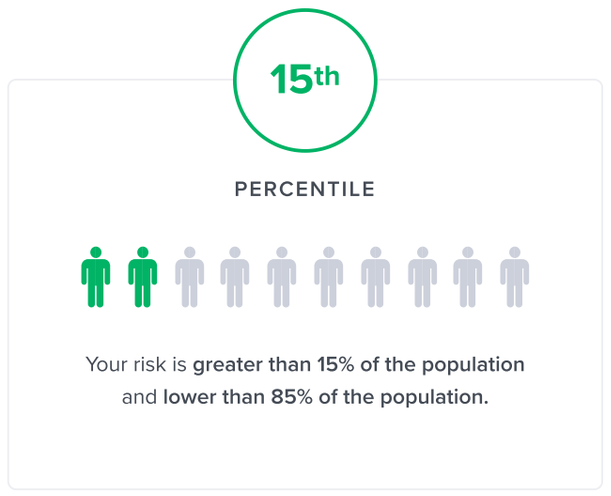
Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



We use artificial intelligence and machine learning to analyze all this information. We then summarize your results as a risk score or display it on a gauge.

When we give a risk score, the risk icon tells you if you are at a higher or lower risk compared to other people:

In total, we analyze up to 83 million genetic variants.



Genotype color info: AA You don't have any risk alleles | AA You have 1 risk allele | AA You have 2 risk alleles

Your risk is also displayed as a percentile. This will tell you how your risks compare to our sample population. The lower your percentile number, the lower your risk. The "50th percentile" would be an average risk.

Similarly, the gauge tells you your relative risk score compared to our sample population, or it indicates a specific trait or haplotype you are more likely to have based on your genetic variants.

When applicable, we also list top evidence-based recommendations that may help lower your risk. The focus is on recommendations that may be of benefit to you, based on your genetics.

Our recommendations come in four categories: lifestyle, diet, supplements and drugs.
The following icons tell you which category a recommendation falls into:

Our team of scientists also ranks each recommendation.
We rank based on impact and the strength of evidence in the medical literature.

Impact shows how strongly a recommendation will affect your health in a certain area.
Evidence is how much scientific support there is for the recommendation. Rankings are from 1 to 5 (low to high):

Impact

Impact scores range from 1-5. These scores reflect how much of an effect each recommendation can have. An impact score of 5 predicts the biggest effect.

When a recommendation affects something we can measure, we use those measurements to assign the impact score. For example, a recommendation that decreases cholesterol by 20% will have a higher impact score than one that decreases it by 5%.

Some recommendations affect things that we cannot directly measure, like stress or mood. For these, the impact score is based on how well they work relative to other recommendations and standard treatments. The best ones get the highest scores.

If there is a lot of research that shows a recommendation works especially well for your genotype, the impact score gets increased.

Recommendation Evidence

5 / 5

Recommendations that are considered effective and generally recommended by experts and medical bodies.

4 / 5

Recommendations that are considered likely effective and that have multiple independent meta-analyses and a great many studies supporting them.

3 / 5

Recommendations that are considered possibly effective and have many studies supporting them

2 / 5

Recommendations that have insufficient evidence, with two or several clinical trials supporting them, or many studies but with ambiguous results.

1 / 5

Recommendations that have insufficient evidence, with a single clinical trial, or with many studies most of which didn't find support for the recommendation.

0 / 5

No evidence in humans.

Genotype-specific Evidence

High-quality

Direct evidence that a recommendation helps more in people with your gene variant (many clinical trials, afew large clinical trials, or a meta-analysis).

Medium-quality

Direct evidence that a recommendation helps more in people with your gene variant (a few clinical trials or one large clinical trial).

Low-quality

Direct evidence that a recommendation helps more in people with your gene variant (a single clinical trial or more trials with inconsistent results).

Indirect

A recommendation may help more in people with your gene variant because it targets a specific gene or protein affected by your variant (e.g., MTHFR, dopamine).

In theory

A recommendation may help more in people with your gene variant because it targets a specific mechanism affected by your variant (e.g., inflammation, oxidative stress).

Some things to keep in mind:

- Genetics doesn’t play a considerable role in a condition or a trait.
- There is not enough research available to estimate a genetic predisposition.
- There are technical limitations to estimating or presenting a genetic predisposition.
- The topic is sensitive, and a genetic predisposition should only be estimated and presented by a healthcare professional.

Introduction

Bifidobacterium is a type (genus) of friendly bacteria that lives in our gut. These bacteria are often considered "good" because they help digest food, support our immune system, and protect us from harmful bacteria.

Having a healthy balance of *Bifidobacterium* is good for overall health. If you think you might have an imbalance in your gut bacteria, you can consider eating a balanced diet, taking probiotics, or consulting a doctor for more personalized advice.

Contributing Factors

The following factors play a role in *Bifidobacterium* abundance in your gut flora:

- **Diet**: Foods rich in fiber, like fruits, vegetables, and whole grains, can increase Bifidobacterium. On the other hand, diets high in sugar and processed foods might reduce their numbers.
- **Age**: As we get older, *Bifidobacterium* levels in our gut can decrease.
- **Medications**: Some medicines, especially antibiotics, can reduce the number of these bacteria in our gut.
- **Illnesses**: Certain gut-related diseases, like irritable bowel syndrome (IBS), can change the levels of *Bifidobacterium*.
- **Probiotics**: These are supplements that contain live beneficial bacteria, often including *Bifidobacterium*. Taking them can increase the number of these bacteria in the gut.
- **Birth Method**: Babies born through natural birth tend to have more *Bifidobacterium* compared to those born through C-section. This is because they get exposed to their mother's beneficial bacteria during birth.
- **Genetics**: Some people may be genetically prone to a higher or lower abundance of *Bifidobacterium* in their gut flora.

TYPICAL LEVELS

Predisposed to typical Bifidobacterium levels based on 11,526 genetic variants we looked at

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
1	Pentadecanoic Acid (C15:0)	
2	Bifidobacterium Bifidum	10 billion CFU
3	Bifidobacterium Longum	10 billion CFU
4	Synbiotics	
5	Bifidobacterium Animalis Subsp. Lactis	10 billion CFU
6	Prebiotics	125 mg
7	Bifidobacterium Breve	10 billion CFU
8	Probiotics	30 billion CFU

1

Pentadecanoic Acid (C15:0)

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

While there is no officially recommended daily intake for pentadecanoic acid, research suggests that **20–50 mg per day** may support health benefits such as improved metabolism, reduced inflammation, and enhanced cellular health. You can achieve this through a balanced diet rich in full-fat dairy and fatty fish or by taking supplements as directed. Always consult with a healthcare professional before starting supplementation, especially if you have specific health conditions or dietary restrictions.

Description

Pentadecanoic acid, also known as C15:0, is a 15-carbon saturated fatty acid that belongs to the group of odd-chain fatty acids. It is naturally found in full-fat dairy products (e.g., milk, butter, and cheese), certain fish, and some plant sources. Unlike even-chain fatty acids, pentadecanoic acid has unique biological properties that are being increasingly studied for its potential health benefits.

Supplementation with pentadecanoic acid has shown promise in supporting metabolic health by improving cholesterol levels, enhancing insulin sensitivity, and reducing inflammation. It may also promote cellular health by stabilizing cell membranes and improving mitochondrial function. Additionally, C15:0 has been linked to better immune system regulation, neuroprotection, and potentially reducing the risk of chronic diseases like diabetes and cardiovascular conditions. As an emerging "essential fatty acid," it is gaining attention for its role in promoting long-term health and wellness.

How it helps

In a placebo-controlled trial of 88 Chinese women with NAFLD, eating a Mediterranean diet supplemented with pentadecanoic acid for 12 weeks increased the abundance of *Bifidobacterium adolescentis* better than a Mediterranean diet alone [R].

2

Bifidobacterium Bifidum

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take a bifidobacterium bifidum supplement according to the manufacturer's instructions, usually once or twice daily with a glass of water and potentially with meals. Supplement duration varies; some may use it continuously for ongoing gut health support, while others might take it for a specific period, such as 4-8 weeks, especially during or after antibiotic treatment.

TYPICAL STARTING DOSE

10 billion CFU

Description

Bifidobacterium bifidum is a probiotic strain that can help support digestive health and maintain a balanced gut microbiome.

Bifidobacterium bifidum is a probiotic bacterium naturally present in the human gastrointestinal tract. This species is the second most abundant one in breast-fed infants, but its levels decrease during adulthood [R].

People take *B. bifidum* to help with [R]:

- Digestive issues
- Eczema
- Infections

How it helps

Bifidobacterium Bifidum is known to boost the immune system and improve gut health by colonizing the intestines and supporting a healthy balance of microbiota.

3

Bifidobacterium Longum

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take a Bifidobacterium longum supplement daily, with a typical dosage around 10 billion colony-forming units (CFUs). It can be consumed any time of day, but taking it with a meal might improve its absorption and effectiveness. Continue this regimen for at least 4 weeks to assess its benefits on digestive health.

TYPICAL STARTING DOSE

10 billion CFU

Description

Bifidobacterium longum is a beneficial probiotic strain known for its potential to support digestive health and boost the immune system.

Bifidobacterium longum is a probiotic bacterium naturally present in the human gastrointestinal tract. Its subspecies *B. longum subsp. infantis* is one of the earliest bacteria to colonize the infant gut [R].

People take *B. longum* to enhance immunity against infections and support gut health [R, R, R].

How it helps

Bifidobacterium Longum supports gut health by enhancing the immune response and improving the balance of beneficial bacteria in the gut.

4

Synbiotics

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take a synbiotic supplement that combines both prebiotics and probiotics daily, ideally with a meal. The specific dosage depends on the product, but generally ranges from 1 to 10 billion CFUs for probiotics. Consult the product's label for exact dosing instructions and continue use for at least 4 weeks to assess effectiveness.

Description

Synbiotics are dietary supplements that combine probiotics (beneficial bacteria) and prebiotics (fiber) to support gut health. They help maintain a balanced gut microbiome and digestive well-being.

How it helps

Synbiotics are combinations of probiotics and prebiotics that can promote the growth of beneficial bacteria in the gut, including bifidobacterium. They can improve digestive health and boost the immune system.

5

Bifidobacterium Animalis Subsp. Lactis

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take a supplement containing Bifidobacterium animalis subsp. lactis at a dose of 10 billion colony-forming units (CFU) daily, with or without food. Joe's preferred strain is *B lactis* HN019 (10B CFU). Continue this regimen daily for at least 2 weeks to 4 weeks to observe potential benefits.

TYPICAL STARTING DOSE

10 billion CFU

Description

Bifidobacterium animalis lactis is a specific strain of probiotic bacteria known for its potential to support digestive health and immune function.

Bifidobacterium animalis is a probiotic bacterium that can be found in the healthy gut of most mammals, including humans. *B. lactis* was previously considered to be a separate species but was shown to be a subspecies of *B. animalis* [R, R].

People mainly take *B. animalis* to support gut health [R, R, R, R, R, R].

How it helps

This specific strain of Bifidobacterium helps improve gut health by enhancing the balance of gut flora and supporting digestion.

6

Prebiotics

IMPACT 0 / 5

EVIDENCE 0 / 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 are compounds that promote the growth of beneficial gut bacteria such as Bifidobacterium. By feeding these bacteria, prebiotics help improve gut health and overall digestion.

7

Bifidobacterium Breve

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take a Bifidobacterium breve supplement according to the product's specific instructions, usually 1-2 capsules daily with water, ideally before meals for better absorption. This regimen should be followed for at least 2-4 weeks to start observing benefits.

TYPICAL STARTING DOSE

10 billion CFU

Description

Bifidobacterium breve is another probiotic strain that can contribute to digestive health and support a balanced gut microbiome. People use *B. breve* as a supplement to improve skin health and combat allergies and infection.

Bifidobacterium breve is a probiotic species found in human breast milk and the gastrointestinal tracts of infant and adult humans. As an individual ages, the total population of B. breve within their gut decreases [R].

People use *B. breve* as a supplement to improve skin health and combat allergies and infections [R, R, R].

How it helps

Bifidobacterium Breve helps maintain a healthy gut barrier, improve digestion, and may reduce symptoms of irritable bowel syndrome.

8

Probiotics

IMPACT 0 / 5

EVIDENCE 0 / 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

30 billion CFU

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

Probiotics are live bacteria that can provide health benefits when consumed. Specific probiotic supplements can contain strains of Bifidobacterium, which can directly increase their population in the gut and enhance digestive health.