Bristle identifies and quantifies the bacteria in your saliva related to oral health and disease. Your overall scores are based on which bacteria were present in your sample and their association with each condition.
We detected a total of **53 bacterial and fungal species** in your oral microbiome.
The scores below provide a summary of how these species may affect your oral and overall health.

Oral Health Insights

Needs Improvement
Beneficial
Score: 1.8/10

Average
Gum Inflammation
Score: 3/10

High Risk
Tooth Decay
Score: 9.8/10

YOU HAVE

- an average abundance of bacteria that cause gum inflammation.
- an extremely high abundance of bacteria that cause tooth decay.
- a low abundance of beneficial bacteria.

GUM INFLAMMATION

Your microbiome is not balanced, but your risk of having issues related to gum disease and inflammation is still relatively low. Increasing your beneficial microbes can help prevent potential issues with gum disease and inflammation. If you have symptoms of gum disease, they are most likely not driven by your oral bacteria.
Your clinical symptoms will determine if any major treatment or changes to your oral care are needed.

TOOTH DECAY

Given the levels of beneficial bacteria and bacteria that cause tooth decay, any early cavities **are much more likely to progress quickly to irreversible decay, and should be treated before decay worsens.**

Additional Health & Wellness Insights

Optimal
Halitosis (Bad Breath)
Score: 0.6/10

The Halitosis score measures the levels of oral bacteria that cause bad breath by producing foul smelling chemicals in the mouth. **Your halitosis score is optimal.**
If you experience bad breath, the root-cause may be originating outside of your mouth (e.g., throat, gut).

Undetected
Gut Impact
Score: 0/10

The Gut Impact score measures the bacteria and fungi in the mouth that can cause issues in the gut. These microbes have been associated with conditions including IBS, IBD, Crohn's, and colorectal cancer.
Your Gut Impact score is optimal, indicating your oral bacteria are likely not causing gut health issues.

Optimal
Nitric Oxide
Score: 7.6/10

Certain species of oral bacteria help metabolize nitrate from our diets into nitric oxide, which is crucial for heart, brain, and immune health.
The Nitric Oxide score captures your oral microbiome's ability to metabolize nitrate into nitric oxide, and **yours is optimal**.

Within Range
Diversity
Score: 1.5/10

The Diversity score accounts for the total number of species and their abundance levels.
Your Diversity is within range and no action is recommended.

Beneficial

Commensal microbes, also known as beneficial microbes, are essential to a healthy oral microbiome. This score summarizes the abundance of commensal microbes in your oral microbiome. The oral commensal microbes are critically responsible for oral microbiome stability and homeostasis. People with a lower commensal scores may be more prone to changes in the oral microbiome, which can lead to dysbiosis. By contrast, people with high commensal scores may have more stable microbiomes, preventing new pathogenic microbes from invading the niches in the mouth and causing disease.

High commensal scores can help balance out other scores. For example, the commensal species Streptococcus gordonii and sanguinis directly compete with the cavity-causing Streptoccocus mutans. Similarly, high levels of commensal bacteria can help dampen the immune response to periodontal pathogens, preventing gum inflammation. People with low commensal scores may have worse symptoms than those with high commensal scores.

Click here to learn more about how to interpret this score.

Needs Improvement

Beneficial
Score: 1.8/10

NAME	Score ↓	ATTRIBUTES
Rothia mucilaginosa	9.5/10	Gram positive | Rod | Aerobic | Insensitive
Streptococcus sanguinis	9.5/10	Gram positive | Chained Cocci | Facultative | Insensitive
Streptococcus salivarius	8.7/10	Gram positive | Chained Cocci | Facultative | Insensitive
Haemophilus haemolyticus	7.2/10	Gram negative | Rod | Facultative | Insensitive
Streptococcus parasanguinis	6.6/10	Gram positive | Chained Cocci | Facultative | Insensitive
Haemophilus parainfluenzae	4/10	Gram negative | Variable | Facultative | Insensitive
Streptococcus mitis	2.5/10	Gram positive | Chained Cocci | Facultative | Insensitive
Veillonella atypica	1.6/10	Gram negative | Cocci | Anaerobic | Insensitive
Streptococcus infantis	0.4/10	Gram positive | Chained Cocci | Facultative | Insensitive

Gum Inflammation

Specific species in the oral microbiome cause gum inflammation, and these species contribute to the gum inflammation score. The microbes cause inflammation in a number of different ways. First, some species can cause damage to your gum and tooth tissues. Second, microbes can produce molecules, such as virulence factors, that promote inflammation. Some symptoms of gum inflammation may include red, sore, or bleeding gums.

The gum inflammation score can indicate the severity of gum inflammation, and also how quickly it can progress. In general, healthy people have 4-6 unique gum inflammation species, while people with gum disease have more than 6. You can read more about the data behind this score at our blog here.

Average

Gum Inflammation
Score: 3/10

Click here to learn more about how to interpret this score.

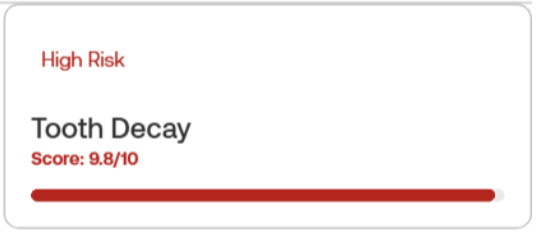
NAME	Score ↓	ATTRIBUTES
Streptococcus constellatus	8.6/10	Gram positive | Chained Cocci | Facultative | S. salivarius sensitive
Parvimonas micra	7.9/10	Gram positive | Cocci | Anaerobic | S. salivarius sensitive

Tooth Decay

The tooth decay score is calculated from the abundance of species in the oral microbiome that are known to be acid producers, or can influence the microbes that create acid. These bacteria ferment sugar (usually leftover from your diet), which results in acid production. The tooth decay score is an indicator of how quickly cavities can worsen if left alone.

For instance, an early stage cavity that has not penetrated beyond the enamel layer may be reversible through remineralization. However, once the cavity grows past the enamel into the dentin, it cannot be reversed and must be filled to prevent infection. Pathogenic cavity-causing bacteria can thrive in these early cavities. People with a high tooth decay score may progress to a severe cavity more quickly than those with a lower score.

Click here to learn more about how to interpret this score.



NAME	Score ↓	ATTRIBUTES
Scardovia wiggsiae	9.9/10	Gram positive | Rod | Anaerobic | Insensitive
Bifidobacterium dentium	9.2/10	Gram negative | Rod | Anaerobic | Insensitive
Propionibacterium acidifaciens	8.8/10	Gram positive | Variable | Anaerobic | Insensitive
Prevotella denticola	8/10	Gram negative | Rod | Anaerobic | Insensitive
Lactobacillus gasseri	7.7/10	Gram positive | Rod | Facultative | Insensitive
Candida albicans	2.4/10	None | Cocci | Facultative | L. reuteri sensitive
Candida sp	1.2/10	None | Cocci | Facultative | L. reuteri sensitive

Halitosis (Bad Breath)

The Halitosis score measures the levels of oral bacteria that cause bad breath by producing foul smelling chemicals in the mouth. **Your halitosis score is optimal.**

If you experience bad breath, the root-cause may be originating outside of your mouth (e.g., throat, gut).

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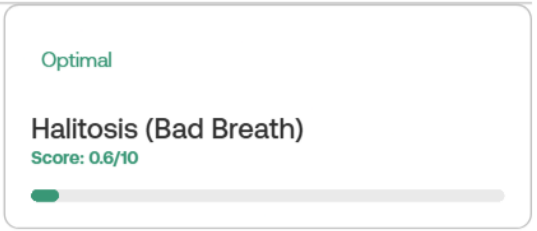

Halitosis type: **Non-inflammatory**

9.8% of Bristle users share your halitosis type.

Your halitosis is mostly driven by non-inflammatory bacteria that live at your gum line. Fortunately, these are not the same bacterial species that cause gum inflammation. These microbes are strongly associated with halitosis, and biochemical tests have shown that they are capable of causing bad breath by metabolizing protein and sugar in your diet into foul smelling chemicals like volatile sulfur or cadaverine.

NAME	Score ↓	ATTRIBUTES
Selenomonas flueggei	9.5/10	Gram negative | Curved Rod | Anaerobic | Insensitive
Solobacterium moorei	8.1/10	Gram positive | Rod | Anaerobic | S. salivarius sensitive
Prevotella denticola	8/10	Gram negative | Rod | Anaerobic | Insensitive
Atopobium parvulum	2.9/10	Gram positive | Rod | Anaerobic | S. salivarius sensitive
Candida albicans	2.4/10	None | Cocci | Facultative | L. reuteri sensitive
Granulicatella adiacens	2.2/10	Gram negative | Rod | Facultative | Insensitive
Candida sp	1.2/10	None | Cocci | Facultative | L. reuteri sensitive
Candida dubliniensis	0.8/10	None | Cocci | Facultative | L. reuteri sensitive
Candida glabrata	0.7/10	None | Cocci | Facultative | L. reuteri sensitive

Gut Impact

The Gut Impact score measures the bacteria and fungi in the mouth that can cause issues in the gut. These microbes have been associated with conditions including IBS, IBD, Crohn's, and colorectal cancer.

Your Gut Impact score is optimal, indicating your oral bacteria are likely not causing gut health issues.

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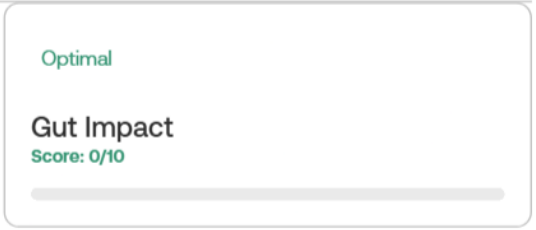

NAME	Score ↓	ATTRIBUTES

Nitric Oxide

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The Nitric Oxide score captures your oral microbiome's ability to metabolize nitrate into nitric oxide, and **yours is optimal**.

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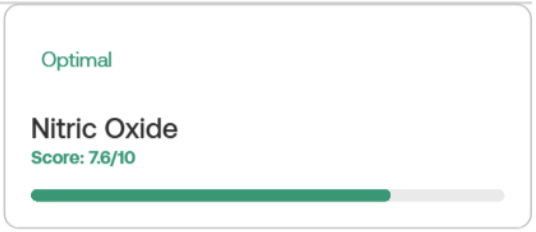

NAME	Score ↓	ATTRIBUTES
Rothia mucilaginosa	9.5/10	Gram positive | Rod | Aerobic | Insensitive
Haemophilus parainfluenzae	4/10	Gram negative | Variable | Facultative | Insensitive
Veillonella atypica	1.6/10	Gram negative | Cocci | Anaerobic | Insensitive

Diversity

The Diversity score accounts for the total number of species and their abundance levels.

Your Diversity is within range and no action is recommended.

Click here to learn more about how to interpret this score.

Within Range

Diversity
Score: 1.5/10

NAME	Score ↓	ATTRIBUTES
Streptococcus oralis	10/10	
Veillonella parvula	10/10	
Streptococcus intermedius	9.9/10	
Scardovia wiggsiae	9.9/10	Rod | Anaerobic | Gram positive | Insensitive |
Prevotella buccae	9.8/10	

[redacted] Kit ID: **BHL7H228** Report date: **02/04/2025**

My primary goal: Reduce cariogenic bacteria

>90% of people who followed these recommendations for 6 months saw improvement in their microbiome.

Phase One: Reset

Reset your oral microbiome by removing harmful bacteria through the following daily routine. Follow phase 1 for 2 weeks, then move onto the next phase.

Daily routine

Brush twice per day

Brush in the morning and evening with an electric toothbrush

Tongue scrape at least every other day

Scraping your tongue can help clear space to allow new commensal species to grow.

No probiotics are recommended

No probiotics are recommended during phase 1 of your care plan.

Floss once per day

Remove pathogens that live between the teeth and gumline.

Use mouthrinse with xylitol once per day

Mouthrinse with xylitol reduces acid production by cariogenic bacteria.

Diet & supplements

Nitrate

Nitrate is a powerful pre-biotic that can improve the oral microbiome and reduce gum inflammation.

Arginine

Take one arginine supplement after each meal.

Xylitol

Xylitol can help improve and balance the oral microbiome.

Products

Cocofloss

Bristle Oral Health Probiotic

CariFree

BasicBites

Tom's of Maine Rapid Relief

Fygg Toothpaste

My primary goal: Reduce cariogenic bacteria

>90% of people who followed these recommendations for 6 months saw improvement in their microbiome.

Phase Two: Improve

Re-establish a healthy microbiome by building a robust foundation and maintaining healthy habits. Follow phase 2 for at least 12 weeks, then re-test to monitor your improvements.

Daily routine

Brush twice per day

Brush in the morning and evening with an electric toothbrush

Tongue scrape at least every other day

Scraping your tongue can help clear space to allow new commensal species to grow.

Use oral probiotics once per day

Oral probiotics can help establish and maintain a healthy oral microbiome.

Floss once per day

Remove pathogens that live between the teeth and gumline.

Do not use mouthrinse

Mouthrinses can kill beneficial bacteria in the oral microbiome.

Diet & supplements

Nitrate

Nitrate is a powerful pre-biotic that can improve the oral microbiome and reduce gum inflammation.

Arginine

Take one arginine supplement after each meal.

Xylitol

Xylitol can help improve and balance the oral microbiome.

Products

Cocofloss

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