



Newsletter Articles

Quit buggin' me! - why the bacteria you cultivate in your mouth matters to your oral and dental health.



Quit Buggin' Me! – Why the Bacteria You Cultivate in Your Mouth Matters to Your Oral and Dental Health: Oral Probiotics and How They Can Be of Benefit

By Paul Ansell - Dentist

For starters, don't think you can just take a tablet or chew and all your dental problems will be resolved. It's not that easy, but incorporating probiotics may complement existing oral health measures to rebalance your oral environment.

Beneficial gut bacteria have been known to the health-conscious for a long time. The benefits to digestion, mood, and well-formed stools are well-recognised. Respecting our tiny allies and avoiding practices that harm them, like spicy food, alcohol, and excessive antibiotic use, is now popular. It follows logically that you don't want to welcome predatory bacteria into your mouth.

Most oral health professionals (dentists, oral health therapists, and hygienists) know that bad bacteria cause most gum disease and tooth decay, leading to significant negative health impacts. The pain, gum disease, and cost of repair work are things most people want to avoid, so let's explore the oral microbiome.

Bad bacteria and other microorganisms thrive in an oral environment influenced by lifestyle, diet, health, and oral hygiene habits. These microorganisms are transmitted via saliva, meaning sharing utensils, toothbrushes (eww!), kissing, and oral sex are all ways to get and give both bad and beneficial bacteria.

Getting the right bacteria and a stable, harmonious mouth is crucial for great dental health. It's complex yet simple at the same time.

The most notorious bacteria for causing tooth decay is *Streptococcus mutans*, and for advanced gum disease, it's *Porphyromonas gingivalis*.

So it makes sense to change the playing field, eliminate these bad guys, and introduce friendlies who can keep the riff-raff away.

A professional dental clean that gets below the gumline, and using mouth rinses for a short term after, is the most effective way of creating that initial disruption. Bacteria are adept at creating protective homes, especially gum disease-causing ones that live beyond the reach of your brush.

Most mouth rinses cause collateral damage, can be over-drying, and create long-term issues, so their use **should be short-term only** – think of it as a course of antibiotics for your mouth where you are trying to reduce the amount of harmful species.

Speaking of antibiotics, you likely know their effect on your digestive system by wiping out good bacteria. But can we help to restore a healthy oral microbiome using probiotics, prebiotics, and postbiotics? A recent meta-analysis of the benefits of probiotic use as they relate to oral health says... maybe. A small number of studies showed a suppressive effect on known bad bacteria associated with dental disease and some improvements in bad breath and gum inflammation.

Let's go over some terminology and examples

Prebiotics – Nutrient and food sources for beneficial bacteria (e.g., fibrous foods, apples, onions, greens). Excessive sugar and refined carbohydrates are generally not good. Probiotics added to

dental products include arginine, inulin, and urea. Notably, cheese, which helps neutralise pH after meals and contains calcium, also contains casein proteins which act as a prebiotic. As a bonus, cheese regularly contains *Lactobacillus* species, meaning there is a probiotic benefit also.

Probiotics – Live, functioning bacteria that we hope will colonise and benefit us by maintaining an ideal oral pH and keeping bad bacteria at bay. A common strain is deactivated *Lactobacillus salivarius*, which inhibits decay-causing bacteria. Other strains in commercial products target gum disease.

Postbiotics – Useful by-products and inactive bacteria that reduce acid in plaque and interfere with bad bacteria, helping to reduce dental decay.

Two examples of dental probiotics available in Australia are ‘Oh My Gob’ and ‘Biome Dental Probiotic’ from Activated Probiotics.

Oh My Gob comes as a chewable pastille flavoured with elderberry (yes, they exist!). It’s recommended for twice-daily chewing and costs \$58 RRP for a month’s supply of 60. Chewing anything sugar-free stimulates saliva, and probiotics can be a useful tool for improving oral health.

Biome Dental uses a once-daily soluble powder delivered directly into the mouth or added to water. It’s part of a range targeting various health issues.

These are not silver bullets, but they are another method of improving your oral microbiome. However, again it must be noted that by doing the basics of regular brushing, using existing proven dental care products and maintaining a healthy oral environment.

To sum up, here are four things that can help create a healthy mouth with good bacteria:

- 1. If you have an unhealthy oral microbiome, reduce bad bacteria, with a professional clean and short-term mouthwash use, then encourage or introduce good bacteria.**
- 2. Feed them the right foods - including cheese, fibrous fruits and vegetables.**
- 3. Clean your mouth effectively by brushing, cleaning between your teeth and cleaning your tongue. Avoid prolonged regular antimicrobial mouthwash use unless directed by your dental professional.**

4. Maintain the oral environment, ensuring good hydration, reduced mouth breathing minimising sugar and acid.

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