

# The Oral Microbiome

The oral microbiome is located within the oral cavity and plays a key role in protecting against the colonisation of extrinsic (harmful) bacteria that could impact your systemic health.

The oral microbiome consists of a community of microorganisms, predominantly bacteria, which inhabit the oral cavity and other unique habitats, including the saliva, tongue, teeth, gums, buccal mucosa, and palate in humans. In microbial terms, the oral microbiome has the second largest and most diverse community of microorganisms after the gut, with over 700 different species. The distinct environment within the mouth, with its stable pH of 6.5–7.0 of saliva, moisture, and its temperature of an average of 37°C creates a favorable setting for the growth of specific microorganisms. As a result, the oral microbiome has unique characteristics, which sets it apart from the microbiomes found in the gut, skin and vagina.

## Health & The Oral Microbiome

The mouth is the first point of exposure to the external world making it vulnerable to the effects of environmental factors. Every time we breathe, eat, and drink we open ourselves to attack from external pathogens and the oral microbiome is therefore the body's first line of defence. Maintaining a healthy, balanced oral microbiome through good oral hygiene practices and a healthy diet is essential for preventing oral diseases and promoting general well-being. The healthful commensal microorganisms that reside there play a crucial role in maintaining oral health as well as wider systemic health:

- **Digestive health:** The oral microbiome is the entry and start point of the digestive system.
- **Dental health:** Imbalances in the oral microbiome can lead to gum inflammation and oral diseases.
- **Respiratory Health:** Oral bacteria can be aspirated into the respiratory system, potentially leading to or exacerbating existing respiratory conditions.
- **Immune system modulation:** A balanced and diverse oral microbiome is thought to contribute to overall immune system health.

## Diet & Nutrition

The balance of microorganisms in the oral microbiome is influenced by diet. Maintaining a healthy diet and avoiding excessive consumption of ultra-processed sugary foods and drinks can play a role in supporting a healthy oral microbiome. BANT nutrition practitioners assess and identify potential nutritional imbalances to understand their impact on an individual's symptoms and provide personalised nutrition and lifestyle plans to help optimise oral health and prevent disease.

