**Oral Mucosal Interactions: High Througput screening and Mechanisms**

Oral health and disease depend on the interplay between the host and the oral microbiome. Commensal microorganisms usually co-exist peacefully with the host. They provide the host with essential nutrients, help maintain a functional immune system and prevent pathogenic microorganisms from attaching to, colonizing and damaging healthy tissue. However, when the balance (or homeostasis) between the microbiota and the host is lost, a subset of species can evade the host's innate immune response and initiate disease. The current approach to reduce the health burden of oral infections has been focused in slowing down the progression and treatment of oral disease. However, little is known on the biological processes involved in maintenance of good oral health. This project embarks on a new approach where focus is given to understanding, maintaining and promoting the healthy status of the oral cavity, including the beneficial role of the oral microbiota, salivary components and dietary compounds. Understanding the molecular interactions of these components with buccal cells will provide novel opportunities for industries to develop products that actively promote oral health. This project is part of the "Oral Health" theme of the Top Institute of Food and Nutrition ([TIFN](http://www.tifn.nl/webdb/xpRE.xsp?page=project&projectcode=OH001&key=OH001)) in collaboration with TNO Quality of Life and Academisch Centrum Tandheelkunde Amsterdam ([ACTA](http://www.acta.nl/en/index.asp)).

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