

Have you got the guts to lose teeth?

Presenter: Dr Simona Gatej

Periodontitis is a complex, multifactorial condition of the supporting soft and hard tissues of the teeth associated with specific microorganisms. Current treatments for periodontitis more specifically, subgingival debridement together with the use of antimicrobial mouthwashes, lead to a temporary reduction of the pathogenic bacterial load and associated inflammation that has not been proven sufficient to control the disease.

Probiotics are live microorganisms, most often bacteria, which, when consumed, confer beneficial effects to the host. A literature review supported the notion that there was a place for probiotics in the treatment of periodontitis.

The role of the probiotic *Lactobacillus rhamnosus* GG (LGG) on bone loss and local and systemic inflammation was investigated in an *in vivo* mouse model of induced periodontitis. Changes in the gut physiology and the influence of different probiotic administration methods were also investigated. Therapy with LGG effectively suppressed bone loss and local inflammation for all probiotic treated groups when compared with disease irrespective of the mode of administration. Additionally, pre-treatment with LGG exerted a protective effect against intestinal and systemic inflammation and had a significant influence on the composition of the gut microbiome, promoting beneficial bacteria in the intestines of treated mice.

Clinically, in the future, LGG may offer a low-risk, easy to use treatment option for the management of periodontitis.