**The performance of probiotics in the management of periodontal diseases**

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**‌ Statement of Problem**: Periodontitis is one of the important problems of public health and one of the most common diseases all over the world. In the early stages, it causes inflammation of the gingival, which begins with bleeding when touching or brushing teeth. Also, periodontitis is an important risk factor for many systemic diseases in the later years of life. Along with other periodontitis treatments and as an alternative to antibiotics, the use of probiotic bacteria has been suggested. Probiotics may helpful for prevention of oral infectious diseases or microbial dysbiosis, and periodontal diseases may be a suitable target for such treatments .

**Research Purpose:** In the study, we evaluate the current state of research on probiotic species that support periodontal health and their regulatory effects, also the performance of probiotics in the management of periodontal diseases is discussed.

**Research Method:** The search in reputable scientific sites and journals with suitable keywords.

**Results and Conclusion:** Taken together, the use of probiotics is a promising approach for prevention and treatment periodontal diseases.Studies show that probiotics can inhibit periodontitis through different mechanisms including modulating effects on host immune response and periodontal microbiota. In general, the best inhibitor of periodontal pathogens in recent studies was *Lactobacillus* *reuteri* ATCC PTA 5289. Studies have shown a significant reduction in several indicators of periodontitis, such as periodontal pocket depth (PPD) after adjunctive treatment with this bacterium. Nevertheless, their practical use for periodontal health needs further research.

**Keywords:** probiotics, periodontitis,periodontopathogen, immunoregulation