

Short-term effect of chewing gums containing probiotic *Lactobacillus* reuteri on the levels of inflammatory mediators in gingival crevicular fluid

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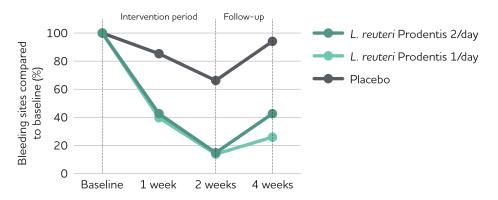
Acta Odontol Scand. 2009;67:19-24

Demonstrates that L. reuteri Prodentis reduced bleeding and inflammation in two weeks

Results

- Bleeding on probing and volume of gingival crevicular fluid (GCF) were significantly reduced in both groups supplemented with *L. reuteri* Prodentis (p<0.05). No significant changes were observed in the placebo group
- ullet Levels of TNF-lpha and IL-8 were significantly reduced in the group receiving two L. reuteri Prodentis chewing gums daily

L. reuteri Prodentis reduced bleeding on probing by 85%



Conclusion

 The study provides the first indication of a significant dose-dependent effect of Lactobacillus reuteri Prodentis on the oral immune response and the results support previous beneficial clinical results on gingival health

Facts

- Study design: randomized, double blind, placebo-controlled clinical trial
- Subjects: 42 adults with gingivitis
- Dosage: 3 treatment groups (daily dose): 2 active gums (4x10⁸ CFU/day), 1 active gum + 1 placebo gum (2x10⁸ CFU/day), 2 placebo gums
- Duration: 2 weeks + 2 weeks follow-up
- \bullet Primary endpoints: bleeding on probing, amount of gingival crevicular fluid (GCF) and levels of IL-1 β , TNF- α , IL-6, IL-8 and IL-10 in GCF

Further reading

- Schlagenhauf U et al. Regular consumption of Lactobacillus reuteri-containing lozenges reduces pregnancy gingivitis: an RCT. J Clin Periodontol. 2016;43:948–954
- Krasse P et al. Decreased gum bleeding and reduced gingivitis by the probiotic Lactobacillus reuteri. Swed Dent J. 2006;30:55-60

