

## Clinical evaluation of the oral probiotic *Streptococcus salivarius* K12 in the prevention of recurrent pharyngitis and/or tonsillitis caused by *Streptococcus pyogenes* in adults

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### Abstract

**BACKGROUND:** *Streptococcus salivarius* K12 has been shown to inhibit the growth of *Streptococcus pyogenes* due to bacteriocins release. Because of its ability to colonize the oral cavity, we have tested the strain K12 for its efficacy in preventing streptococcal pharyngitis and/or tonsillitis in adults.

**METHODS:** Forty adults with a diagnosis of recurrent oral streptococcal pharyngitis were enrolled in the study. Twenty of these subjects took for 90 days a tablet containing *Streptococcus salivarius* K12 (Bactoblis®). The other 20 subjects served as untreated controls. A 6-month follow-up was included to evaluate any persistent protective role.

**RESULTS:** The 20 adults who completed the 90-day course of Bactoblis® showed a reduction in their episodes of streptococcal pharyngeal infection (about 80%). The 90 days treatment was also associated with an approximately 60% reduction in the incidence of reported pharyngitis in the 6-month period following use of the product. The product was well tolerated by the subjects with no treatment-related side effects or drop-outs reported.

**CONCLUSION:** Prophylactic administration of *Streptococcus salivarius* K12 to adults having a history of recurrent oral streptococcal pathology reduced the number of episodes of streptococcal pharyngeal infections and/or tonsillitis.

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