

"A comparative study of streptococcus mutans and lactobacilli in mothers and children with severe early childhood caries (SECC) versus a caries free group of children and their corresponding mothers"

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## Abstract

*Early childhood caries (ECC) is recognized as an infectious disease. The first step in its development is primary infection by the bacterium *S. mutans* which has been identified as the primary etiologic factors in dental caries. Lactobacilli were also found to play a role in the progression of disease. However, the underlying mechanism of immune response to caries is still unclear.*

*The purpose of this study was to assess the level of cariogenic bacteria namely *S. mutans* and lactobacilli in caries free children, and children with SECC and their corresponding mothers. The study also aims at correlating the children's levels to their mothers'.*

*Sixty children and their mothers attending the dental clinic in King Abdulaziz University participated in our study. Their age ranged from 3-5 years. The study groups consisted of thirty children with SECC and a control group comprising of thirty caries free children.*

*Children together with their mothers were examined and their caries level was recorded. Stimulated saliva was collected from each participant for bacterial, immunological assessment, and Lactobacilli counts in each sample were determined<sup>^</sup> using the Dento cult methods*

*Children with SECC had higher levels of *S. mutans* and Lactobacilli than caries free children. The mothers of children with SECC had a statistically higher count of Lactobacilli than caries free children's mothers. However, the difference was not statistically significant with respect to their *S. mutans* counts. A significant relationship exists among the mother-child pair in the SECC group with respect to *S. mutans* level in saliva*