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## Bacteriological evaluation of mutans streptococci using modified mitissalivarius-bacitracin (MSB) agar medium in primary dentition period

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**Abstract** Mutans streptococci considered causative agents of dental caries are indigenous to the oral cavity. Modified mitis-salivarius-bacitracin (MSB) agar medium was supplied by BML. This media has characters to grow mutans streptococci very well and to inhibit of non-mutans streptococci. However, little is known about studies using this medium. In this study, we assessed the utility of modified MSB medium and discuss the relation between mutans streptococci and dental caries in primary dentition period. Modified MSB medium was found to be a suitable medium to isolate and quantify mutans streptococci since it could permit selective growth of mutans streptococci. Moreover, this medium inhibited to non-mutans streptococci (*S.anginosus* and *S.intermedius*), completely. The detection rate of *Streptococcus mutans* and *Streptococcus sobrinus* increased in proportion to the severity of dental caries in the nursery children. From these results, modified MSB agar medium is useful in the judgment to detect the mutans streptococci.

**Key words** Dental caries, Modified mitis-salivarius-bacitracin (MSB) agar medium, Polymerase chain reaction (PCR), *Streptococcus mutans*, *Streptococcus sobrinus* 





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