Dental caries is accepted as the most important oral disease. Although the incidence of dental caries decreases day by day as a result of the many preventive treatments, it is still an important health problem especially in developing countries. The formation of dental caries depends on several factors and the most important microorganism, S. mutans. Detailed oral microflora studies for adults have been performed and there are publications that indicate similar oral microflora on pediatric patients. However, there are still some deficiencies with regard to this subject in children. Difficulties on studying on children and changes depending on growth and development may regarded as reasons for the deficiencies.

Space maintainers are typically used in pediatric dentistry to preserve the spaces left by primary teeth requiring extraction prior to their exfoliation time. Although, it is well known that the maintenance of these spaces prevents later complications such as crowding, ectopic eruption, impaction of successor teeth and malocclusion, the use of space maintainers has also been shown to result in an increased plaque accumulation, which can lead to dental caries and periodontal disease. In the studies, an increase in the incidence of S. mutans in children using space maintainer has been detected.