

Young people with asthma run a greater risk of developing caries

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Children and adolescents with asthma have somewhat more caries and suffer more often from gingivitis (gingival inflammation) than people of similar age without asthma. This is the conclusion of a thesis presented at the Sahlgrenska Academy.

The work presented in the thesis has examined children, [adolescents](#) and young adults in the age groups 3, 6, 12-16 and 18-24, with and without asthma. The first study revealed that 3-year-olds who suffer from asthma have more caries than 3-year-olds without asthma. "The children with asthma had a greater tendency to breathe through the mouth; they became dry in the mouth and were therefore given [sugary drinks](#) more often. This may have contributed to them developing higher cariesprevalence", explains Malin Stensson, dental hygienist and researcher at the Department of Cariology, Institute of Odontology at the Sahlgrenska Academy.

These children were then followed in a study from age 3 years to age 6 years. It became clear that the 3-year-olds with asthma subsequently developed more caries than children without asthma. The scientists have also compared the oral health of adolescents aged 12-16 years who had long-term moderate or severe asthma with that of adolescents of the same age without asthma. "Only 1 out of 20 in the asthma group was cariesfree, while 13 out of 20 were cariesfree in the control group. One factor that may have influenced the development of caries is somewhat lower level of saliva secretion, which was probably caused by the medication taken by those with asthma. Adolescents with asthma also

suffered more often from gingivitis than those without asthma", says Malin Stensson.

The work presented in the thesis also examined the oral health of [young adults](#) aged 18-24 years, with and without asthma. The results from this age group were nearly identical with those in the group of 12-16-year-olds, although the differences between those with asthma and those without were not as large.

Malin Stensson points out that the numbers of participants in the studies were relatively small, and it may be difficult to generalise the results. What is interesting, however, is that young people with asthma have more caries than those without asthma, even for this participants who come from an area with relatively good oral health. "The study is particularly reliable because the groups are homogenous with respect to age and area of residence. Further, the participants with asthma had all been accurately diagnosed by a specialist. One of the studies is longitudinal, and this gives extra strength to the results", says Malin Stensson.

She emphasises how important it is that young people with asthma receive extra dentalcare early, and that a preventive [oral health](#) programme be established between the health care system and the dental care system. "Medical and dental personnel and the parents of children with asthma should be aware of the connection between [asthma](#) and oral hygiene."

More information: Stensson M, Wendt L-K, Koch G, Nilsson M, Oldaeus G, Birkhed D. Oral health in pre-school children with asthma – followed from 3 to 6 years. Int J Paediatr Dent 2010;20:165-172. Link to article: www.ncbi.nlm.nih.gov/sites/entrez?d&list_uids=20409196 PMID: 20409196 [PubMed - indexed for MEDLINE]

Stensson M, Wendt L-K, Koch G, Oldaeus G, Lingström P, Birkhed D. Caries-related factors and plaque-pH response in adolescents with long-term asthma. Caries Res 2010; 44:540-546. Link to article: content.karger.com/ProdukteDB/...oi=10.1159/000321566 PubMed ID 21051892

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