**Health and risk factors in caries**

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**Dentistry would rather prevent cavities than drill them away. But risk assessing who is most likely to develop caries is complex and involves many widely varying factors. More knowledge is needed.**

How can dental care better detect those at risk of developing caries? And what can you do yourself to strengthen your dental health? Gunnel Hänsel Petersson and Marie Nordström want to create better evidence around this with their research at Malmö University. They are interested in both risk and health factors, two perspectives that are important in caries development. There are a number of factors that influence the caries process itself: such as the presence of microorganisms, sugar and other carbohydrates, defense factors, the composition of saliva, oral hygiene and fluorides.

But there are also things that indirectly affect caries, even if these have nothing to do with the teeth. It can be about socio-economic conditions, attitude to dental care, education or fear of dental care, explains Gunnel Hänsel Petersson, senior dentist in cariology and researcher at Malmö University.

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**SO YOU CAN REDUCE THE RISK OF CAVITIES IN THE TEETH**

* Eat regular meals. Drink water or unsweetened beverages.
* Avoid snacking between meals. Let your teeth rest!
* Brush your teeth with fluoride toothpaste every morning and night.
* Take extra fluoride supplements if your dentist or dental hygienist deems it necessary.

Risk assessment for caries is, like many diseases, complex.
- We have seen in our studies that among young people between the ages of 19 and 23 who smoke tobacco regularly, there is an increase in caries. But it's an indirect factor, you don't get cavities because you smoke. However, one can speculate whether it may reflect something about diet, oral hygiene or other lifestyle factors, says Gunnel Hänsel Petersson.

**Much in common with lifestyle diseases**

The researchers highlight that caries has common risk factors with many other lifestyle diseases. A poor diet is, for example, a risk factor for obesity as well as cardiovascular diseases and caries.
- Take sugar as an example. Many have learned that sugar intake increases the risk of caries. The sugar feeds bacteria in the mouth, which in turn convert the sugar into acid that can dissolve the tooth substance and then caries can occur. Fluorides can be compared to a brake drug that can compensate for the damage the sugar does. But giving up or keeping down sugar can promote both the teeth and the heart, says Gunnel Hänsel Petersson.

**Why do some not develop caries?**

There is starting to be more and more research into health factors, so-called salutogenic factors. Sense of context, so-called KASAM, is one such area. KASAM consists of meaningfulness, manageability and comprehensibility. Psychosocial factors also contribute to how we feel and how we maintain good habits.
- Studies have shown that people who have a higher sense of context generally have healthier behaviour. But most of these studies are not conducted among people in vulnerable groups, says Marie Nordström, PhD student at Malmö University.

Now Marie Nordström wants to find out how things are with health factors in individuals in these groups.
- We have planned to interview young adults in Skåne who come from socio-economically vulnerable groups, but who do not develop caries. We want to investigate more about what keeps them healthy. Unfortunately, due to the corona pandemic, the project is delayed, but we hope to get started as soon as possible, says Marie Nordström.