Causes Of Tooth Decay

Tooth decay is caused over time by bacterial plaque forming on the teeth and/or the presence of acid in the diet.

Diet:

- Frequent snacking or sipping on acid or sugary drinks increases the time that acids are in contact with the surface of the tooth and are the biggest contributor to tooth decay. Length of exposure is very important and detrimental in this process. Eat your starchy, sugary, and acid food and drinks quickly, do not sip or graze all day as this accelerates the process and advancement of dental decay.
- Eating food and drinks high in sugars and refined carbohydrates, particularly between meals, increases the length of exposure.
- Tooth decay is often associated with sweet and sticky foods that stay on your teeth for a long time, as well as certain drinks. Such items include chocolate, sweets, sugar and fizzy drinks. Starchy foods, such as chips, white bread, pretzels and biscuits, also contain high levels of carbohydrates and, if left on your teeth for any length of time, will contribute significantly to quickly advancing tooth decay.
- Acidic foods and drinks, such as juices and soda and surprisingly even diet drinks and coffee, can be very acidic and cause tooth decay even when there is no sugar, starch, or bacterial plaque present. This is especially likely if you sip or graze on them for long periods of time during the day.
Poor oral hygiene habits:

- Leaving bacterial plaque on your teeth because of a lack of a daily brushing and flossing routine.
- Insufficient use of topical fluorides, especially if you have a history of dental decay. Use toothpastes containing fluoride.
- Consumption of non-fluoridated water early in life can leave your teeth less able to resist dental decay, as you get older.
- Lack of dental office visits and routine checkups, which can identify small spots of decay before you even feel them, can result in large cavities and deep areas of decay. This is because most patients do not "feel" symptoms of decay until the caries have advanced far into the tooth.

Smoking and use of tobacco products:

- Besides increasing your risk of oral cancer exponentially, the use of tobacco products increases the risk of developing tooth decay. Tobacco interferes with the production of saliva, which helps keep the surface of your teeth clean and dilutes any acid that has formed.

Gum Tissue Recession:

- Results in loss of the protective gum tissue that exposes the root of the tooth below the more protective and harder enamel surface of the crown. This exposed root surface is easier to decalcify and dissolve than enamel and has an increased risk of developing root caries at or around the neck of the tooth. This is especially true in geriatric populations.

Dry mouth, also called Xerostomia:

People who have lower levels of saliva in their mouth are at higher risk of developing tooth decay, because this saliva helps keep the surface of their teeth clean and dilutes any acid that might be present in the mouth. Medicines and medical treatments such as chemotherapy and radiation can lower the amount of saliva in your mouth. Again, this is especially more likely to happen, as we get older.
Dry Mouth Syndrome

Dry mouth syndrome is also known as xerostomia. It is a condition where the mouth becomes very dry due to the lack of saliva production.

Health risks associated with xerostomia:

- Reduced saliva flow results in a lower pH level in the mouth, making it more acidic. This increases the risk of tooth decay, gum disease and oral infection.
- Production of saliva helps with the chewing, swallowing and digesting of food. Over time, chronic dry mouth may make it difficult to eat and speak, and cause sores on the oral soft tissue.
- Saliva helps protect our teeth from tooth decay by diluting and washing away food debris, sugars and the acids produced by bacteria.

Dry mouth and tooth decay:

Patients who suffer from dry mouth are at great risk for tooth decay. Saliva is important for the protection of the teeth, regulating the mouth’s pH value and diluting the acids produced by the bacterial plaque.

Dry mouth symptoms:

- A sticky dry feeling in the mouth and tongue.
- Difficulty chewing, swallowing, tasting, and talking.
- Mouth sores & cracked lips.
- Sore throat and frequent bad breath.
- Metallic or bad taste in the mouth.

Causes of dry mouth:

- Dry mouth can be a side effect of prescription drugs and medications that reduce saliva flow. Medications used to treat high blood pressure; Parkinson’s disease, depression/anxiety and antihistamines used to treat allergies have been shown to increase symptoms.
- Smoking and use of tobacco products.
- Systemic conditions that affect the salivary glands, such as Sjogren’s syndrome and diabetes.
- Cancer treatments: radiation therapy and chemotherapy.
Dry mouth remedies and treatment:

- Drink fluids frequently throughout the day and night to help keep tissues moist.
- Avoid drinks with caffeine such as coffee, tea and sodas.
- Avoid use of tobacco products and alcohol.
- Avoid use of rinses and mouthwashes that contain alcohol or peroxide.
- Use over the counter moisturizing toothpaste and tooth gels specially formulated to help aid in temporary relief of dry mouth.
- Daily use of a fluoridated toothpaste and mouth rinse along with Xylitol products to help prevent tooth decay. Use of custom-made fluoride trays from your dentist is also encouraged.
- Chew sugar free gum and gum containing Xylitol to help stimulate saliva flow.
- A prescription for an artificial saliva substitute may be given depending on the cause of the dry mouth.
Baby Bottle Tooth Decay

What is baby bottle tooth decay?

Also known as nursing bottle syndrome, it is a form of severe early childhood caries associated with frequent or prolonged consumption of liquids containing fermentable carbohydrates. It may also be referred to as nursing bottle tooth decay. This type of decay is commonly seen in children who fall asleep with a bottle or continuously nurse from their mother.

What causes nursing bottle syndrome?

As the baby nurses on drinks from a bottle, the liquid accumulates first on the outside surface of the upper teeth and under the upper lip. Prolonged exposure causes the outside surface of the upper teeth to decay first, and then the rest of the upper teeth will decay. Eventually, the decay progresses to the lower back teeth.

Infants are at high risk of suffering from nursing bottle syndrome when sweetened liquids are given to them for long periods of time, as well as before or during sleep. Bacteria in the mouth use sugar as food, producing harmful acid that begins to attack and break down the enamel. Over a long period of time, this will cause tooth decay. During sleep, the saliva production in the mouth is reduced, increasing the risk of tooth decay.

Commonly, early nursing bottle caries first appear at the gum line of the upper anterior teeth as subtle, white, decalcified streaks. Later, brown spots appear along the gum line. The upper front teeth are usually the first affected. Without proper treatment, the crowns of the teeth will get completely destroyed.

Preventing baby bottle tooth decay:

Nighttime breast-feeding should be avoided after the first baby teeth begin to erupt.

Give the bottle to the baby only during feeding. Don't leave the bottle to the child during sleep. Do not fill the bottle with sugar water, juice or soft drinks.

Encourage children to drink from a cup as they approach their first birthday.

Never use the bottle as a pacifier or give a pacifier dipped in sweet liquids.
After each feeding, wipe the baby's gums with a clean, damp washcloth. Start brushing the child's teeth once the first tooth begins to erupt.

Babies and toddlers are most often infected with the oral bacteria associated with early childhood caries by their parents. Parents or caretakers should never put the baby's pacifiers or bottle nipples in their own mouth.

Establish and maintain routine exams with the dentist. This will help the child become comfortable in the dental atmosphere as they grow.