

## Nutritional Strategies to Reduce Caries and Support Oral Health



- ❑ Consume foods rich in calcium, vitamin D and C, magnesium, phosphorus, and boron: milk, vegetables, whole grains, fruits, and fibers.
- ❑ Consume antibacterial foods such as garlic mint, and ginger.
- ❑ Use Xylitol-containing products.
- ❑ Limit access to soft drinks such as soda sports drinks, powdered beverages, food that contain high levels of sugar and that are acidic.
- ❑ Drink fluoridated water, brush regularly with a fluoride toothpaste, and use a fluoride mouthrinse.

## Role of the Dental Hygienist

### 1. Preventive treatments

- ❑ Dental sealants
- ❑ Fluoride treatment
- ❑ Dental cleaning and regular check ups

### 2. Awareness

- ❑ Making sure that the patients are aware of what dental caries are and how to prevent it.
- ❑ Making sure that the patients are aware on how diet plays a role in their oral health.

### 3. Educate

- ❑ Teaching the patients proper oral home care such as brushing twice a day or after eating and flossing daily.
- ❑ Patients should visit the dentist regularly (every 6 months).
- ❑ Educate parents to bring their children to the dentist when the first tooth erupts (no later than their first birthday).

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# CCC Preventing Caries Through



Does **DIET** affect  
your **TEETH**? Do  
not be **PUZZLED**



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## Tooth Decay (Dental caries)?



It is an infectious disease process that causes damage to the structure of teeth. Dental decay is due to the irreversible solubilization of tooth mineral by acid produced by certain bacteria that adhere to the tooth surface in bacterial communities known as dental plaque.

- ❑ The mouth is colonized by 500 to 700 bacterial species, but only a limited number of these species participate in dental decay (caries). Streptococcus mutans is the main cause of dental decay. Various lactobacilli are associated with progression of the lesion.
- ❑ All the food we eat and the drinks we consume change the pH of saliva. Mouth pH can fluctuate wildly, from the strong acidity of citrus fruits, juices, and wines (pH 2.2 or lower) to the alkaline pH of chicken soup and salty nuts (pH 8.5 or higher).
- ❑ Low pH selects for acidogenic organisms, such as S mutans and lactobacilli, which (especially S mutans) store polysaccharide and continue to secrete acid long after the food has been swallowed.
- ❑ Acid demineralizes tooth structure, it will form a cavity in the enamel and then progress deeper into the tooth causing discomfort, difficulty eating and speaking, and a need for fillings or root canal treatment.



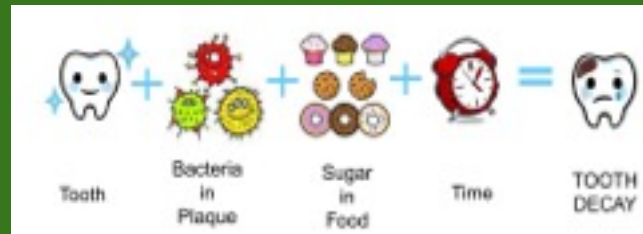
- ❑ The good news is that tooth decay (also called caries) is completely preventable.



There are contributing factors we can implement to prevent tooth decay.

- ❑ Diet, plays an important role in the prevention of caries and it is extremely important to start encouraging healthy dietary habits at an early age.

## What Causes Tooth Decay?




- ❑ Certain foods and drink increase the risk of dental caries and cling to your teeth for a long time such as milk, ice cream, honey, sugar, soda, dried fruit, cookies, hard candy, breath mints, dry cereal, and chips are more likely to cause decay than foods that are easily washed away by saliva.



- ❑ Frequent snacking or sipping increases the risk of tooth decay. Constantly snacking on foods or sipping drinks

Sugar gives the bacteria in your mouth more fuel to produce acids that wear down your teeth. In addition, sipping soda or other acidic drinks exposes your teeth to more acid, which resolves the enamel.



- ❑ Not consuming enough fluoride has been scientifically proven to have the ability to prevent cavities and even reverse tooth damage. Not only is fluoride a common ingredient in toothpastes and mouthwashes, but many public water plants add fluoride into the tap water.
  - ❑ Eating sugars or other fermentable carbohydrates. Dental caries occurs due to the demineralization of enamel and dentine by organic acids which are formed by bacteria in dental plaque through the anaerobic metabolism of sugars derived from the diet.
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- ❑ Deficiencies of Vitamins A and D, along with protein energy malnutrition have been associated with enamel hypoplasia.
  - ❑ Sharing food between parent and child. Caries is a transmittable disease that can be passed from parent to child; that's why it's important to separate utensils.