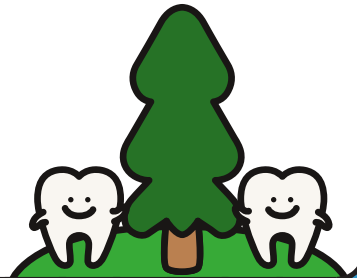


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Nutritional Information In Treating Children's Dental Needs



IF YOU WANT TO PREVENT CAVITIES, HOW OFTEN YOU EAT CAN BE JUST AS IMPORTANT AS WHAT YOU EAT.

Eating cookies with dinner will do less harm to your teeth than eating them in the middle of the afternoon as a separate snack. Of course, overall poor nutrition can contribute to oral disease. Learning how food affects your oral health is the first step toward mouthhealthy eating.



CHANGES BEGIN IN YOUR MOUTH THE MINUTE YOU START TO EAT CERTAIN FOODS.

Bacteria in your mouth may cause dental plaque become more acidic, and the acid starts the process that can lead to cavities. These acids dissolve minerals inside the tooth enamel in a process called demineralization. Teeth also regain minerals in a natural process called remineralization. Saliva helps this process, and so does fluoride as well as foods high in calcium, phosphate and arginine. Dental decay begins inside the tooth enamel when minerals are being lost faster than they are being regained.



HOW DOES THIS HAPPEN?

All carbohydrate foods eventually break down into simple sugars: glucose, fructose, maltose and lactose. Some foods, called fermentable carbohydrates, break down in the mouth, whereas others don't break down until they move further down the digestive tract.

It's the fermentable carbohydrates that work with bacteria to begin the decay process. They include the obvious sugary foods, such as cookies, cakes, soft drink and candy, but they also include less obvious foods, such as bread, crackers, bananas and breakfast cereals.

Certain bacteria on your teeth use the sugars from these foods and produce acids.

The longer food stays near the bacteria on the tooth, the more acids will be produced. So sticky carbohydrates, such as fruit snacks, can do more acid damage. But other foods that pack into crevices can also cause decay. Potato chips are a terrific example. Eat a handful of chips and see how long you have to work to get all the stuck bits out from between your teeth. Teeth with a lot of nooks and crannies, such as molars, are more likely to trap food and are more susceptible to decay.

To make matters worse, tooth-unhealthy foods don't create acids on your teeth only while they are being eaten. The acids stick around for the next half-hour!



People who sip sugary drinks throughout the day or who eat many small sweet or carbohydrate snacks provide a sugar source for the bacteria to produce acid almost constantly. And because acid damage is cumulative, decay is more likely. Studies have shown that those who eat sweets as snacks between meals have higher incidences of decay than those who eat the same amount of sweets with their meals.

WHAT FOODS PROMOTE MOUTH HEALTH?

On the brighter side, some foods actually help to protect teeth from decay because they increase saliva flow and neutralize the acids produced by bacteria, making the enamel less likely to be demineralized. For example, cheese eaten immediately after other food helps buffer the acid. Yogurt and milk can also buffer acid. Foods high in arginine can be helpful as well. These are nuts, especially sunflower seeds, edamame, seafood and spinach. Grape Seed extract and green tea extract are also high in arginine. Chewing sugarless gums also can help protect your teeth against cavities. Xylitol, an ingredient in some sugarless gums, has been shown to reduce the amount of bacteria in the mouth and help buffer the teeth against the effect of acid. Most sugarless gums and sugarless candies increase the flow of saliva, which has natural antibacterial properties.

SO WHAT SHOULD YOUR CHILD EAT?

The current and best recommendation for overall good nutrition is to follow the Dietary Guidelines for Americans, developed by the U.S. Department of Agriculture and the Department of Health and Human Services. These guidelines encourage:

- **Eating whole grains daily, such as brown rice, oatmeal and whole wheat bread instead of refined grains, such as white bread and white rice.**
- **Eating vegetables, including dark green and orange vegetables.**
- **Eating a variety of fruits.**
- **A diet with plenty of grain products, fruits and vegetables.**
- **Providing fish, beans, nuts and seeds for some of your child's protein needs.**
- **Providing beverages and foods to moderate your child's intake of sugars.**

To prevent tooth decay, you should follow a few additional guidelines to keep the amount of acid created by the bacteria on your child's teeth to a minimum. Here are some tips:

1. Limit between-meal snacking and provide snack foods that are low in fermentable

Best choices- Cheese, chicken or other meats, nuts or milk. These foods may actually help protect tooth enamel by counteracting acidity or by providing the calcium and phosphorus needed to remineralize teeth.

Moderate choices- Firm fruits like apples and pears and vegetables. Although firm fruits contain natural sugars, they have a high water content that dilutes the effects of the sugars and they stimulate the flow of saliva, which has antibacterial factors and helps protect against decay. Vegetables do not contain enough carbohydrates to be dangerous.

Worst choices- Candy, cookies, cakes, crackers, breads, muffins, potato chips and pretzels. These foods provide a source of sugar for certain bacteria on the teeth to produce acid.

2. Limit the amount of juice, soft drinks or any other sugar-containing drinks. Even 100% fruit juice has fermentable sugars that are damaging to your child's teeth.

Better choices- Milk and water, especially fluoridated water. Tea also has fluoride, which can strengthen tooth enamel and milk can also help deter decay. Water helps flush away food debris and can dilute the sugar acids.

3. Avoid hard candies as much as possible.

4. Very acidic foods (such as citrus fruits) can make the mouth more acidic and may contribute to tooth demineralization and erosion. These are acceptable in moderation.

5. If possible, brush your child's teeth after eating to remove the plaque bacteria that create the destructive acids. If they cannot brush after every meal, have them swish some water or chew sugarless gum after meals.

6. Chewing sugarless gum that contains xylitol can help reduce the risk of cavities. It not only helps dislodge some of the food stuck to your teeth, it also increases saliva flow to help buffer the acids.

