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Tooth Decay Prevention

The best defense to help prevent tooth decay is to remove plaque and bacteria before problems can occur. It is important to remove the harmful plaque and bacteria on a daily basis to stop the breakdown of tooth enamel. Proper tooth brushing and flossing techniques help eliminate the cause of tooth decay and strengthen the teeth's defense against dental caries.

- **Homecare:** Control dental plaque. Brush your teeth at least twice a day and ideally after each meal. Floss daily or use an inter-dental cleaner to help remove plaque from between the teeth. If you can't brush after eating, try to rinse your mouth with water to help remove bacteria and food debris.
- Maintain routine dental check ups and professional dental cleanings. Your dentist and dental hygienist can help prevent problems or spot them early so they can be treated easily.
- Reduce frequent consumption of sugars and fermentable carbohydrates. Avoid frequent snacking and sipping. Limit the length of exposure and time harmful food and drinks are left on the tooth enamel. Sipping all day even on healthy drinks can cause extreme tooth decay.
- Eat a well balanced diet. Some foods and beverages are better for your teeth than others. Avoid foods that get stuck in grooves and pits of your teeth for long periods, such as chips, candy or cookies. Eat foods that help protect your teeth, such as cheese, along with fresh fruits and vegetables, which increase saliva flow, as well as unsweetened coffee, tea and sugar-free gums and mints containing xylitol, which helps wash away food particles.

- Fluoride therapy: May help strengthen and protect teeth from decay by replacing lost minerals. Use of a fluoridated toothpaste and mouth rinse are easy ways to deliver fluoride to the teeth on a daily basis.
- Prescription antibacterial mouth rinses may be recommended to help reduce bacteria in the mouth.
- Pit and fissure sealants: Sealants are effective in helping to prevent tooth decay on the biting surfaces of molar and premolars teeth. Sealants are beneficial to both children and adults.

Relationship Of Nutrition And Dental Health

Nutrition plays an important role in maintaining not only good general health but also good dental health. A well balanced diet is essential for helping prevent tooth decay. What we eat has a direct effect on our oral health. Vitamin deficiencies can have a large impact on the condition of the tissues in the mouth, the teeth and the gums. Poor nutrition impacts the entire body and immune system response, making it less effective in helping to protect you and fight off disease. This can lead to incomplete tooth development and cavities at a young age.

The relationship between nutrition and dental health includes more factors than just sugar's relationship to caries. Dietary habits and patterns, frequency and duration of food/drink consumption, exposure to fluoride and general health conditions are also important.

Good nutrition starts during pregnancy when the child is developing. Mineralization of the primary or baby teeth starts during the third or fourth month of pregnancy.

Good dietary and nutrition habits start the first day of life and begin with the parent or care taker. If the child is encouraged to have healthy habits and establish good nutrition at a young age, they will have a greater chance of maintaining good health for the rest of their life.

Healthy Nutrition Tips For Good Oral Health

For healthy nutrition of your teeth, it is important to pay attention to not only what you eat but also when you eat it. Ideally, you should consume sweets only at main meals and avoid eating them between meals. During meals, saliva production is increased, which neutralizes most of the acids that can cause tooth decay and makes them less hazardous. If you do snack on sweets, they should be eaten quickly.

An acid attack can last up to 20 minutes before being neutralized. The more you eat sugary snacks during the day, the more acid attacks the enamel. Ongoing acid exposure will weaken the tooth enamel over time, resulting in tooth decay. For example, one Tic Tac candy kept in the mouth all day can cause much more damage than a candy bar or soda that is consumed quickly.

The structure of the food is also important for dental health:

- Wet food act on the teeth for only a limited amount of time.
- Soft and sticky foods are dangerous because they attach and can get between the teeth, providing a better environment for harmful bacteria and dental plaque.
- Tough foods are the safest because they help increase salivary production and self-cleaning of the teeth.

Daily use of topical fluoride can help strengthen and prevent tooth decay. Be sure to brush with fluoridated toothpaste and check drinking water for quantities of fluoride.

Along with following these healthy nutrition tips, remember to:

- Practice good homecare. Brush your teeth twice a day, rinse your mouth with water between meals and floss at least once daily.
- Choose sugary foods less often
- Avoid sweets between meals but, if you must, keep the length of exposure time short.
- Eat a well balanced diet with a variety of foods.

Smart Snacking For Healthy Teeth

Eating the right foods can help protect you from tooth decay and other diseases. Healthy teeth depend on a balanced diet that includes a variety of food groups. Choose snacks that:

- Contain little or no sugar.
 - Do not stick to teeth.
 - Do not last long in the mouth or take a long time to chew.
1. Limit snacking between meals. Fewer snacks produce less acid exposure for your teeth. When choosing a snack, choose foods that are not fermentable carbohydrates.
 - **Best choices:** Cheese, plain yogurt, meats, & nuts. These foods help protect tooth enamel by neutralizing acid. They provide high calcium, vitamin D and phosphorus needed to put minerals back in the teeth, helping rebuild enamel.
 - **Moderate choices:** Firm fruits such as apples and pears and vegetables. Firm fruits contain natural sugars. The high water content dilutes the effects of the sugars. These fruits also stimulate the flow of saliva, which fights bacteria and helps protect against decay.
 - **Worst choices:** Candy, cookies, cakes, crackers, breads, muffins, potato chips, french fries, pretzels, bananas, raisins and other dried fruits. These foods are a source of sugar that certain bacteria use to produce acid. They may also stick to tooth and get caught between them.
 2. Limit the amount of soft drinks and other drinks that may contain sugar. Fruit juices are a healthy choice, but also contain natural sugars that can cause tooth decay. Remember to limit the amount of time drinks remain in the mouth. Avoid sipping drinks throughout the day. A can of soda that you finish with a meal exposes the teeth to acids for a shorter period of time than sipping on soda for two hours.
 - **Better choices:** Water (fluoridated), unsweetened tea (green & black). Water will help flush away food debris and dilute sugar acids.

3. Avoid sucking on hard candies or mints. Choose sugar free gums, mints, and hard candies that contain Xylitol. The mechanical action of chewing may help break up loose food particles. They also increase saliva flow to help neutralize the acids in the mouth.
4. Limit very acidic foods, such as citrus fruits and juices. They make the mouth more acidic and may contribute to mineral loss in the teeth.
5. Rinse your mouth with water to help remove plaque and bacteria after eating or drinking acidic or sugary snacks. Maintain a daily brushing routine of twice a day and flossing once daily to clean between teeth.

Foods That May Cause Tooth Decay

Simple rules on how to identify a bad food for teeth that can help promote tooth decay are as follows:

- Foods and drinks with a high concentration of sugar.
- Acidic foods and drinks with a low pH value.
- Sticky and chewy foods that remain in the mouth and are not easily washed away by saliva.

Foods to avoid:

1. Sugary candies and sweets that stay in your mouth such as lollipops, caramels, jelly beans, fruit snacks and hard candies make it difficult for saliva to wash the sugar away. Snacks like cookies, cakes or other desserts contain a high amount of sugar, which can promote tooth decay.
2. Starchy, refined carbohydrates such as chips, white breads, pasta or crackers can be just as harmful to teeth as candy. Starches made from white flour are simple carbohydrates. They can linger in your mouth and break down into simple sugars.
3. Carbonated soft drinks contain a high amount of sugar. Both regular and diet sodas also contain phosphorous and carbonation, which wear away the enamel on your teeth. Many energy drinks and bottled iced teas and lemonades also contain high amounts of sugar and may contain acids that wear away tooth enamel.
4. Fruit and fruit juices are an important part of a healthy diet but can cause tooth problems. Juices have a high concentration of natural sugars and sometimes have sugars added to them, which can be even more damaging to enamel. Diluting fruit juice does not decrease the risk for tooth decay. The sugar and acid combination still help produce harmful bacteria that promote tooth decay. Lemons, citrus fruits and other acidic foods are ok to eat but avoid keeping them in your mouth for a long period of time. The acidic juice in these foods can erode enamel. Citrus fruits and foods high in acid such as tomatoes (including pizza, soup and pasta sauce), pickles and wine can all be damaging to your teeth if they are consumed too often or held in the mouth for too long.
5. When choosing milk and dairy products, avoid sweetened options and flavored milks such as chocolate and strawberry. Milk is important for good bone health and teeth, but naturally contains a high concentration of sugar. Milk should

only be given with meals. Do not give your child a bottle of milk at night or breast feed throughout the night.

6. Natural sugar alternatives, such as honey, molasses, brown sugar, and syrups, also react with bacteria and produce acid that promote tooth decay, just as refined table sugar does.

Proper Tooth Brushing Techniques

To properly brush your teeth, use short, gentle strokes, paying extra attention to the gumline, hard-to-reach back teeth and areas around fillings, crowns or other restoration. Never use a scrubbing motion or brush aggressively. Brushing interval should last for at least two minutes, twice daily. Use a soft bristled nylon, round-ended toothbrush that will not scratch and irritate teeth or damage gums.

Place bristles along the gumline at a 45-degree angle. Bristles should contact both the tooth surface and the gumline.



Gently brush the outer tooth surfaces of 2-3 teeth using a vibrating back & forth rolling motion. A rolling motion is when the brush makes contact with the gumline and is moved downward toward the chewing surface. Move the brush to the next group of two to three teeth and repeat.



Maintain a 45-degree angle with bristles contacting the tooth surface and gumline. Gently brush using back, forth, and rolling motions along all of the inner tooth surfaces.



Tilt brush vertically behind the front teeth. Make several up & down strokes using the front half of the brush.



Place the brush against the biting surface of the teeth & use a gentle back & forth scrubbing motion. Brush the tongue from back to front to remove odor-producing bacteria.



Remember to replace your toothbrush every three to four months or when your toothbrush begins to show signs of wear. It is also important to change your toothbrushes after you've had a cold or have been sick. Bristles and toothbrush handles can collect germs that can lead to re-infection.

The Toothbrush

When choosing the best toothbrush to provide you with adequate teeth cleaning consider the following:

Adult size toothbrushes:

- The head size. The toothbrush should feel comfortable in your mouth and allow you to reach comfortably to the back teeth.
- A head design that helps with cleaning at all teeth surfaces. Helping to reach in difficult areas or spaces between the teeth.
- The toothbrushes handle design and size.
- Always choose a soft grade toothbrush with rounded nylon bristles to help protect the gum tissues.

Child size toothbrushes:

- A smaller head size that is flexible.
- Large and anatomic grip for easier handling.
- Soft grade bristles to protect the child's teeth and gums.
- Attractive designs and colors may help encourage tooth brushing.

When to change your toothbrush:

- Over time the bristles of the toothbrush wear out. After time they no longer provide adequate cleaning and may be harmful to the gum tissue.
- Change your toothbrush every 3-4 months or when you start to see signs of wear of the bristles. They will start to flare and lose their natural position.
- After being sick.

How to store your toothbrush:

- Properly storing your toothbrush will help keep it in good shape and reduce the risk of bacterial contamination.
- After brushing wash and rinse the toothbrush to remove any remaining toothpaste, food debris and bacteria.
- Store in an upright position in a well ventilated area to help dry the toothbrush.
- Never cover the toothbrush head. The moisture that remains on the toothbrush will increase the risk of bacterial growth.
- If your toothbrush is stored in the same area or holder with another person's toothbrush keep them separated to avoid cross contamination.
- Toothbrushes are strictly an individual item and should never be shared with anyone else. This can increase the risk of bacteria and infection transmission.

Electric Toothbrushes

An electric toothbrush is a toothbrush that uses electric power to move the brush head, based on oscillating/rotating, vibrating, or ultrasonic technology.

Types of Electric Toothbrushes:

The electrical toothbrush designs are categorized by the brush head's shape and movement of the bristles.

- Rotary toothbrushes: A design with a circular head that is rotating in one direction.
- Counter-rotational toothbrushes: Different tufts of bristles rotating in opposite directions.
- Rotating-oscillating toothbrushes: A circular head spins back and forth in quick bursts.
- Oscillating-pulsating toothbrushes: A pulsating motion enhances the cleaning action.
- The Sonic toothbrush: The newest type of electric brush. It has a conventionally shaped head that vibrates in very high speed (>30.000 strokes per minute).

Benefits of an Electric Toothbrush:

- Less brushing force is required for effective plaque removal. Some electric toothbrushes have pressure sensors that regulate the speed of the brush to avoid damaging the teeth and gums. This type is recommended especially if you use too much pressure while brushing or you have signs of enamel abrasions caused by over aggressive brushing habits.
- The use of a built in timer helps to control duration of the brushing period. Patients tend to brush longer with a power toothbrush, resulting in better plaque removal and oral hygiene.
- The novelty of a power toothbrush can help motivate and encourage patients to give more importance to their daily dental hygiene routine (especially those who like gadgets or with children).
- May help clean better around orthodontic brackets and wires.
- Wide variety of designs.
- Help in the aid of patients who lack manual dexterity. A minimal skill level is needed to brush properly with an electric brush. Patients with arthritis or the elderly may find an electric brush to be helpful.

Remember to always choose a soft grade toothbrush with rounded bristles and replace your brush head every 3 months or when the bristles start to show signs of wear.