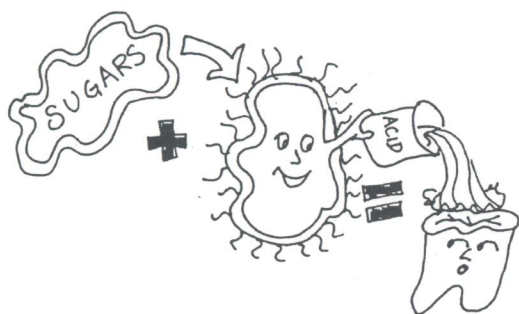


Food Choices for Good Oral Health: The Basics



The presence of food in the mouth can greatly increase the activity of cavity-causing bacteria. Foods that contain carbohydrates as sugars or starch are the preferred fuel for the bacteria, and promote their growth and acid production. These acids dissolve and weaken tooth enamel. The longer this bacterial acid remains in the mouth, the greater the damage to tooth enamel.

The carbohydrates in food can be naturally occurring, as in fruits and milk, or might be added in processing, as with pre-sweetened cereals and crackers.

Carbohydrate-containing foods, such as whole grains, milk, fruits and vegetables, provide vitamins and other valuable nutrients and are a part of healthful eating.



Xylitol has special qualities that block growth of cavity-forming mouth bacteria. See page 20 in this manual for more information.

“Non-nutritive sweeteners” or artificial sweeteners can be naturally occurring, such as xylitol or sorbitol, or made from naturally occurring substances, such as aspartame or sucralose. Some are truly synthetic, such as saccharin. If cavity-causing bacteria feed on them at all, they do so slowly. The bacteria do

not grow and produce much enamel-dissolving acid. All are either free of calories or contain very few calories. Therefore, reducing one’s sugar intake is one way to reduce calories and cavities. However, heavy use of artificial sweeteners does not always benefit health.

For more detail about good food choices, see A Healthy Mouth for a Lifetime: Oral Health for Everyone, pages 1.7-1.11.

Food Choices for Good Oral Health For Various Groups

Healthful food choices promote the health of the whole body, not just in the mouth. Food contains the nutrients required for:



- normal growth and development;
- maintenance of body structures such as blood cells, bones and muscles; and
- body functions such as vision and movement.

Wisely selected, foods provide substances that can help reduce the risks for health problems such as heart disease, stroke or cancer. Throughout the life span, a well-chosen diet will promote good oral health and good overall health.

Pregnant Women

The expectant mother should eat foods rich in the nutrients that support normal growth and development, including protein, calcium and folic acid. Folic acid helps to reduce birth defects such as cleft palate.

Sticky-sugary food items such as dried fruit or sticky-starchy products such as crackers enable decay-causing bacteria to grow well. Rinsing with water or eating raw vegetables and fruits helps clear food debris from the mouth.



The need for fluid is tremendous for a healthy pregnancy. Options for beverages include water; caffeine-free items such as herb tea; nutrient-rich, low-fat milk or unsweetened fruit juice. Alcoholic drinks should be avoided.

Infants



Infants given sufficient breast milk or formula do not need to have fruit juice, but only water as an additional source of fluid. Some infant nutritionists and physicians recommend that fruit juice not be introduced to a child until age six months and then, to limit the juice to four ounces a day in a cup. The pediatrician should be consulted regarding recommendations.



At no time should children be given a bottle with milk or other sugar-containing liquid for sleep time, nor should they be allowed to nurse at will through the night. This promotes tooth decay.

Encourage foods that are low in sticky sugars or sticky starches, such as soft cheese, cooked fruit, cooked vegetables and cooked cereals. Be cautious about the size and texture of food pieces; young children are especially prone to choking. Honey can be a source of infantile botulism poisoning and should be avoided through age one year.

Sound "bites" for infants:

- *only formula, breast milk or water in the bottle*
- *no sleeping at the breast or with bottle*
- *limited juice and no honey*
- *foods low in sugars and sticky starches such as soft cheese, cooked vegetables and fruit, cooked cereals*
- *purees or small soft pieces of food*

A wide variety of foods should be offered to youngsters, to help establish good eating habits at an early age. Additionally, caregivers need to follow nutritious eating patterns to set a good example.



Toddlers

The good habits started with infants should be continued with toddlers. As the children now have all or nearly all of their primary teeth, they will be able to handle more firm pieces of food. However, risks for choking are still high, and caregivers should cut round or firm items such as grapes. Avoid hard items such as popcorn, nuts, and crusty bread.

The American Academy of Pediatrics (AAP) recommends that young children have

snacks no more than four times a day, to limit the frequency that teeth are exposed to cavity-causing acid and the risk of obesity.



Childhood obesity is a major health concern. Because the very young cannot eat a large amount of food at any one time, the foods offered should be rich in nutrients, but moderate in fat and low in sugars, with the exception of fruits. Nutritionists also recommend limiting milk intake so that the child has enough appetite to eat other healthful foods.

Better bets for toddlers:

- *no more than four snacks daily*
- *small pieces soft food*
- *thirsty? Water, not juices*
- *low-fat cheese, fresh soft fruit, cooked vegetables and other nutrient-rich foods that are moderate in fats and low in sugars*
- *limited juice and no sodas*
- *sticky sugars and sticky starches, such as raisins and crackers, at mealtime*

Healthful options include low-fat cheese, fresh soft fruit and cooked vegetables. Water is good throughout the day and preferred to juice. If juice is offered, it should be a product with no added sugar; fruit-flavored drinks are primarily sugar and water.

The AAP further recommends that children ages one through six years of age be limited to four to six ounces of juice daily. Sugary beverages, such as juice, or sticky sweets, such as raisins, should be offered at meals to help limit the time they are left on teeth.

AAP recommendations for juice consumption to limit sugar and calories:

- Introduce juice into the diet of infants after 6 months of age.
- Offer juice to infants only in a cup, not in a bottle. Children should not be allowed to carry a bottle, cup or box of juice throughout the day.
- Limit intake of fruit juice to 4-6 oz. per day for children 1-6 years old.
- For children 7-18 years old, limit fruit juice to 8-12 oz. per day.
- Encourage children to eat whole fruits to meet recommended daily fruit intake.
- Read food labels to be certain the product is 100% fruit juice; avoid fruit-flavored drinks which are mostly sweeteners and flavoring.

School-Age Children

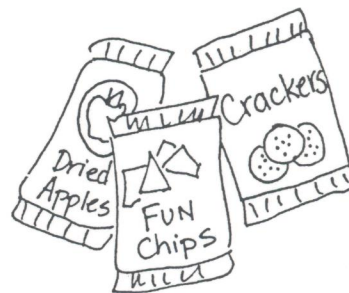
As children get older, they continue to need the nutrients that support normal growth and development. Healthful options include:

- whole grains,
- lean meats, poultry and seafood,
- unsweetened fruits,
- vegetables and
- low-fat dairy products.

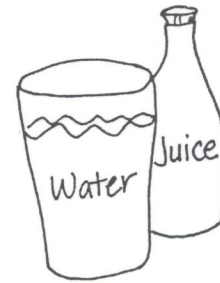


Unless eaten with other foods that would help clean the teeth, limit dried fruit, ready-to-eat cereal,

chips, crackers and other sources of sticky sugars and starches. School-age children are often in situations where they can choose their own foods and beverages; youngsters who have been raised with healthful options tend to select more nutritious foods.



Peer pressure and advertising have great influence on this age group as seen in the high consumption of sodas and candy. Often, schools have vending machines that sell mostly sugary drinks and snacks. Reduce the negative effects from these messages by establishing limits on the frequency and amounts of high-sugar items that are eaten. Encourage youngsters to rinse their mouths with water or eat crunchy-juicy fruits or vegetables to clear the mouth of food debris when brushing is not possible.



Teens

Teenagers, already prone to hormonally stimulated gingivitis and the anxiety of emerging adulthood, often find themselves at odds with basic good oral health care. However, teens place great value on their appearance and social acceptability. Point out that the foods that promote healthy teeth and gums will also maintain healthy skin and hair. Unfortunately, teens might choose many foods that are low in fat but high in sugar, in the interest of weight control.

Healthful options include lean meats, poultry and fresh produce, and for snacks, unsweetened nuts or popcorn. Low-fat string cheese and low-fat yogurt provide important calcium and protein for growing bones and for reducing risks of osteoporosis. Regular and diet sodas should be limited because of the phosphoric acid content that can damage tooth enamel. Many teens indulge in highly caffeinated coffee drinks and energy beverages, unaware of the drinks' high sugar content. Drinking water should be encouraged.



Teens are also at high risk for developing eating disorders. Anorexia nervosa, bulimia nervosa and compulsive overeating can promote general malnutrition that will affect the health of oral tissues by depressing body defenses against illness and promoting gum disease. Additionally, some anorexic or bulimic individuals will choose to suck hard candy or cough drops for "non-fat nourishment" or to mask odors

from vomiting. However, the sugar increases the incidence of tooth decay. Self-induced vomiting can promote loss of enamel (enamel erosion). The weakened enamel is more prone to decay, breakage and hypersensitivity.



Teens:

- **more** prone to gum disease and **less** likely to practice good oral health care....
- grow nearly as fast as infants and need foods rich in protein, calcium, iron and vitamins but low in sugars and fats, with the exception of fruits

Adults

All adults, young and old, are role models for the youngsters in their environment. To encourage positive oral health habits in the young, adults need to show their commitment to regular oral hygiene, tobacco-free living and nutrient-rich diets. Adults of the household are usually the “gatekeepers” of food and can make available healthful options while limiting access to items that promote dental disease.

Older Adults

Foods low in fermentable carbohydrates and rich in nutrients also help reduce the risks for chronic diseases such as diabetes, heart disease, osteoporosis and cancer. Healthful choices include items lower in sodium such as fresh fruits and vegetables (not canned), foods low in saturated fats such as lean poultry, nuts and seafood; and foods high in calcium such as low-fat milk. These same choices can help manage chronic diseases to maintain a good quality of life.

Other Factors Affecting Oral Health

Daily oral care and food choices play a significant role in oral and total health. However, there are other factors that affect oral health, including tobacco, alcohol, drugs, herbal remedies and oral embellishment.



Tobacco

Tobacco products, both smoked and smokeless, increase the risk of oral cancer, periodontal disease and dental caries. Smoked tobacco products include cigarettes, cigars and pipes.

Smokeless tobacco products (“spit” tobacco, “chew” or snuff) are chewed, sucked on or applied directly between the cheek and gum.