Dietary Factors

Diet is critical to developing good teeth because the carious process depends primarily on fermentable sugars, especially sucrose, and other carbohydrates. Refined table sugar, honey, molasses, corn syrup, and dried fruits (such as raisins) are highly cariogenic. Complex carbohydrates, such as breads, potatoes, and pasta, also contribute to caries because they lower the plaque pH. Beverages that are commonly consumed by children and adolescents and snacks are also highly cariogenic and may contribute to the incidence of overweight and obesity (American Academy of Pediatric Dentistry, 2014d).

Ideally, highly cariogenic foods, especially those containing complex sugars, should be eliminated. However, because this is impractical, some suggestions can be helpful. First, *the frequency with which sugar is consumed is more important than the total amount eaten.* Therefore, when sweets are eaten, they are less damaging if consumed immediately after a meal rather than as a snack between meals. When sweets are served as the dessert, the teeth can be cleaned afterward, decreasing the amount of time the sugar is in the mouth.

Second, the form of sugar (sucrose) is important. The more cariogenic foods are those that are sticky or hard because they remain in the mouth longer. Consequently, sucking on lollipops is more cariogenic than eating a chocolate bar. Sometimes the source of the sugar is "hidden," as in numerous prescription and nonprescription drugs and in many popular cereals, including the "all-natural" variety. Reading food labels is essential in eliminating sources of sucrose.

Some snacks do not contribute to tooth decay. Aged cheeses, such as cheddar, may alter the pH and delay bacterial growth. Sugarless gum chewed after eating may actually protect against cavities by stimulating saliva that neutralizes acid.

A special form of tooth decay in children between 18 months and 3 years old is **early childhood caries (ECC)** (historically called *nursing caries* or *baby bottle tooth decay*) (Fig. 11-8). This often occurs when a child is routinely given a bottle of milk or juice at naptime or bedtime or uses the bottle as a pacifier while awake. Frequent nocturnal breastfeeding for prolonged periods also leads to extensive destruction of the teeth. The practice of coating pacifiers