If there are six feedings per day, then about 20 minutes of sucking at each feeding provides for oral gratification.

Propping the bottle during infant feeding is discouraged because:

- It denies the infant the important component of close human contact.
- The infant may aspirate formula into the trachea and lungs.
- It may facilitate the development of middle ear infections. If the infant lies flat and sucks, milk that has pooled in the pharynx becomes a suitable medium for bacterial growth. Bacteria may then enter the eustachian tube, which leads to the middle ear, causing acute otitis media.
- It encourages continuous pooling of formula in the mouth, which can lead to nursing caries when the teeth erupt (see Chapter 12).

Commercially Prepared Formulas

The analysis of human and whole cow's milk indicates that the latter is unsuitable for infant nutrition. Whole cow's milk has a high protein content and low fat and lipid content, and it may cause intestinal bleeding and lead to iron-deficiency anemia in infants. Questions have also been raised regarding the unmodified protein content of whole cow's milk, which may trigger an undesired immune response and thus increase the incidence of allergies in children at an early age.

Commercially prepared formulas are cow's milk based and have been modified to resemble the nutritional content of human milk. These formulas are altered from cow's milk by removing butterfat, decreasing the protein content, and adding vegetable oil and carbohydrate. Some cow's milk–based formulas have demineralized whey added to yield a whey-to-casein ratio of 60 to 40. The standard cow's milk–based formulas, regardless of the commercial brand, have essentially the same compositions of vitamins, minerals, protein, carbohydrates, and essential amino acids with minor variations, such as the source of carbohydrate, nucleotides to enhance immune function; and long-chain polyunsaturated fatty acids (LCPUFAs), DHA and AA. DHA and AA are both found in large quantities in human milk but until recently were not present in most infant formulas. Studies suggest both preterm and full-term infants receiving formula supplemented with DHA and AA have