

## Chapter 3

# Nutrition Education for Preschool Children

### SCOPE

This chapter includes nutrition education provided directly to children from age 2 through prekindergarten in school, at home, through the mass media, and from other sources. It also includes all nutrition education provided to parents of preschoolers, specifically targeting nutritional messages relevant to preschoolers only. In this case, preschoolers themselves do not need to be provided with direct nutrition education.

### GOALS OF NUTRITION EDUCATION

Consumption of a healthy diet by young children is essential to provide for normal growth and development and to prevent a variety of nutrition-related health problems, such as anemia, growth retardation, malnutrition, compromised cognitive achievement, obesity, dental caries, and chronic diseases in later life. Children are the nation's most important resource and thus deserve the best possible education for their present and future health.<sup>1</sup> Research evidence suggests that children are not born with the innate ability to choose a nutritious diet; instead, their food habits are learned through experience and education.

The official nutrition education goals of Head Start and the Nutrition Education Training program, programs to be described later, provide a guide for nutrition education for preschool-aged children.<sup>2,3</sup> These goals include:

- Creating a positive attitude toward food;
- Encouraging acceptance of a variety of healthful foods;
- Improving children's values and attitudes related to acceptance of a variety of nutritious foods;
- Fostering the development of healthful food habits in children;
- Promoting an understanding of the relationship between food and health;
- Providing foods that contain adequate, but not excessive, amounts of energy nutrients;
- Improving parents', teachers', administrators', and food-service personnel's knowledge of the principles and practices of nutrition; and
- Developing, promoting, disseminating, and/or evaluating nutrition education curricula and materials.

### THEORETICAL FRAMEWORKS

The educational strategies used in most of the studies reviewed here were based on two kinds of approaches.

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This chapter is based on the technical report titled "Nutrition Education for Preschool Age Children: A Review of Research" by Susan Sharaga Swadener, Ph.D., R.D.

Interventions traditionally thought of as nutrition education were based largely on the information dissemination model, where knowledge is assumed to lead to a change in attitude, which, in turn, leads to a change in behavior. This is often assumed to represent a knowledge-attitude-behavior (KAB) model. The other approach is behavioral, where various behavioral strategies are used, usually without didactic teaching about nutrition content.

**Child development research.** This research, particularly Piagetian-based research, provides evidence that, while preschool children are becoming less dependent on their direct sensorimotor actions for direction of behavior, they are not yet very well developed cognitively. They are becoming increasingly able to think, but their reasoning is somewhat unsystematic and does not readily lead to abstract generalizations or formation of logical concepts.<sup>4,5</sup> Preschool children learn by manipulation of the environment, rather than by passive listening, and by exploring, questioning, comparing, and labeling. In addition, language is developing very quickly. Physical manipulation skills are being developed when children touch, feel, look, mix up, turn over, and throw. Emotionally, exploration and the need to test independence seem to dominate during this time. Children take on more initiative, are more purposeful, and are eager to learn, usually from other people; they observe parents, teachers, and other children, they role play, and they start to accumulate and process information.<sup>6</sup>

**Research on children's thinking about nutrition.** What preschool children can understand at different ages about food and nutrition specifically has been the subject of a few studies. Gorelick and Clark<sup>7</sup> have noted that 3 to 5 year olds can easily identify foods. Contento and Michela<sup>8,9</sup> found that 5- to 6-year-old children do not truly understand that food is transformed in the body into nutrients to have an effect and that they classify foods based on observable qualities and functions, rather than by nutritional similarities. Lee et al.,<sup>10</sup> on the other hand, found that children were able, upon instruction using cards that displayed pictures of a food, its name in large type, and color-coded bar graphs for vitamins A and C, iron, and calcium, to develop some understanding of the concepts of nutritive value, nutrient function, and the impact of nutrition on health. Singleton et al.,<sup>11</sup> in a study with 60 children, found that 4 to 7 year olds can comprehend concepts such as energy, a strong heart, that "good foods keep germs out of the body," and that a low-fat diet keeps the heart healthy. They also found that a nutrition education intervention significantly increased the children's perception that health and nutrition are related concepts. Thus, preschoolers are developing