

Q How can we as nutrition professionals foster healthier eating habits in children?

A We can foster healthier eating habits in children by helping parents understand the many influences on young children's food choices and eating habits. As infants and toddlers develop and the types and amounts of foods offered to them change, they begin to indicate, verbally and behaviorally, likes and dislikes for certain foods (1, 2). Children who reject certain types of foods or groups of food and are unwilling to try unfamiliar foods may be labeled as "picky eaters," problem feeders or food neophobics (3, 4). Their food dislikes may result in avoidance of particular foods or groups of foods, thus limiting dietary variety (5) and, potentially, major sources of essential nutrients (1, 6). Moreover, consistent avoidance of foods may result in lifelong unhealthy food habits. Young children's acceptance of unfamiliar foods is influenced by many factors, including parents and siblings in the home, (7, 8) peers, (9) parental feeding styles (6, 10) and the social climate of the eating environment (10). The media and advertising may also affect how children view and select certain foods (11).

Availability, Accessibility and Repeated Exposure

Children choose to eat foods they are served most often and tend to prefer foods that are acceptable and available in the home (12). For example, when fruits and vegetables are typically available, children are more likely to eat them than when they are not usually available (13-15). In addition to availability, foods need to be accessible (15). When foods are easily accessible and ready to eat, children are more likely to eat them.

Exposure to foods is key to developing preferences (16-19) and repeated exposure can often overcome food dislikes. As many as eight to ten separate exposures to a new food may be needed before a young child develops an acceptance for that food (20).

The Family: The Social Context of Meals

For young children, parents or caregivers, for the most part, control when foods are offered to the child, who eats with the child and where meals are eaten ... this changes as children become more independent. Children fare better nutritionally with more structured family meals. Children who eat meals with

other family members eat more healthy, nutrient-dense foods. Further, children who have companionship at mealtimes tend to eat more servings of foods from the basic food groups (21, 22). Changing social patterns and socioeconomic factors influence whether meals are cooked and served in the home, and how frequently this occurs. Today's parents are working longer hours, and many children have either single-parent families or two parents working outside the home. Thus, parents increasingly rely on convenience foods or home meal replacements, including those from restaurants. Time spent preparing meals has declined more than 10% from 1994 to 1999 (23). Eating out has increased from 16% of all eating occasions in 1977-1978 to more than 30% now (24-26). Increasing reliance on convenience foods and meals consumed outside the home is associated with higher intake of dietary fat and calories and with lower intake of fruits, vegetables and dairy foods (27). This could result in lower intakes of fiber, calcium, iron and other nutrients that are important for children's growth and development.

What Parents Think and What Parents Do

Children learn about food within a social context. Parental preferences, beliefs (e.g., which foods are healthy) and attitudes toward food shape their children's food-related knowledge, attitudes, beliefs, preferences and consumption (28, 29).

In addition to their own experiences, children learn about eating by watching others (30). Mothers and their children show similar patterns of food acceptance and preferences (31, 32). For example, children's intake of fruit and vegetables is positively related to parents' intake of fruit and vegetables, (33, 34) and parents' modeling of healthful eating behaviors is associated with lower dietary fat intake (35). Children are more likely to sample an unfamiliar food after they have seen an adult eating the food, and they are more likely to eat it if they see their mother eating it rather than a stranger (36).

Parents' feeding styles are also associated with children's food habits. Feeding styles represent parents' approaches to maintain or modify children's behaviors with respect to choosing and/or eating foods.

- **Permissive feeding** is characterized by a lack of structure in child feeding—the child is simply allowed to eat whatever he or she wants in whatever quantities he or she wants and choices are limited only by what is available. Permissive feeding has been associated with drinking less milk and lower consumption of all nutrients except fat (37).

- **Authoritarian feeding** is characterized by attempts to control the child's eating with little regard for the child's choices and preferences. Authoritarian feeding includes behaviors such as restricting the child from eating certain foods and forcing the child to eat other foods. In the long-term, authoritarian feeding has been associated with lower intake of fruit, juices and vegetables (37). Parents employing stringent controls during mealtimes may influence their child's preference for high fat, energy dense foods, and inhibit their preference for a variety of healthy foods (38). Parents who describe their children as "picky eaters" are more likely to use negative and coercive instructions, negative prompting and negative eating-related comments (3, 10). Mothers frustrated by "picky eaters" tend to cater to their children's demands by bribing them to eat, spoon-feeding or playing games to increase intake (39). Authoritarian behaviors adversely affect children's preferences and consumption of foods.
- **Authoritative feeding** represents a balance of authoritarian and permissive feeding and sets the stage for children to make healthful eating choices in the future. Adults determine which foods are offered and children determine which foods (and how much) are eaten. Authoritative practices include: asking the child to make decisions about the type of food eaten, giving small portions when introducing a new food, involving the child in discussions about new foods, explaining the health benefits of foods perceived as healthy and praising the child for eating healthy foods. Authoritative feeding is associated with greater fruit and vegetable availability, higher intake of fruits and vegetables and lower intake of foods with less nutritive value (40).

Implications

Because diet plays such an influential role in shaping a child's future health status, it is important that parents understand how food choices develop. The feeding context in early childhood may be critical to establishing lifelong healthy eating habits. For children, the most profound influence is their immediate environment: the family. Family structure and family life influence children's eating habits. Understanding how the family influences children's preferences and consumption is key if we want to promote more healthful eating behaviors in early childhood, at a time when it may make the most difference.

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