



Nutrition for Family Living

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July, 2001 Topics

- Parental role modeling and dietary intake in African-American parents
- Acculturation of Mexican-American mothers influences child feeding strategies
- Girls' dietary fat intake and mothers' child feeding practices
- Mothers' sources of information about feeding young children
- Nutrition accuracy in popular magazines
- Food insecurity and overweight in women
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Parental role modeling and dietary intake in African-American parents

Parents serve as important role models for their children's behavior, especially eating behavior. This study examined relationships between the frequency that parents reported modeling healthy eating behaviors, and their own healthy eating habits.

Four hundred fifty-six African-American parents of varied socioeconomic status participated in a dietary change study as part of a national parenting education group. The primary goal of the parenting group, Parents as Teachers, is to help parents empower themselves by improving parent-child interactions, strengthening family relationships, and increasing parents' knowledge of how to stimulate their child's development. A focus of the program is on parents as role models. The concept of modeling is a powerful motivator for parents, who learn that children mirror their parents' behavior. This concept may be particularly relevant in the African-American community, where family is especially important.

Parental modeling is defined as a process of observational learning where the parent's behavior stimulates similar behavior in the child. There are four ways in which this can happen:

- Observational learning – for example, the child sees the parent eating a certain food, and as a result, the child tries that food
- Disinhibiting or inhibiting behavior – the child sees negative or positive consequences of the model's behavior, which strengthens or weakens their intent to perform that behavior. For example, if the child sees the parent eating and enjoying vegetables, they may be more likely to try them.
- Facilitating similar responses – the model's behavior affects the timing or frequency of the observer's behavior. If the parent eats breakfast every morning, the child will be more likely to eat breakfast every morning.
- Setting cognitive standards for recognition – providing standards for the observer to judge their performance. If the parent decides to eat five fruits and vegetables per day, the child may learn to measure their fruit and vegetable intake by that standard.



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This study found that in general, African-American parents believe they often model healthful dietary behaviors for their children. However, they model some behaviors more often than others. The most frequent modeling behaviors are sitting with their children at meals, and eating foods they want their children to eat. The least reported modeling behaviors were eating low-fat snacks, and setting rules about how many fruits and vegetables their children should eat. Parents who more frequently modeled healthy dietary behavior reported more low-fat dietary patterns. Despite this, a majority of parents consumed more than 30% of calories from fat and fewer than five servings of fruits and vegetables per day.

Applications:

- Parental modeling may be an especially powerful way to encourage dietary change in the African-American community by building on and recognizing strengths in the family and family networks.
- Educators can discuss the effects of modeling and inform parents how their behavior can influence their child's food intake and eating habits.
- Educators can teach parents strategies for improving their own eating behavior, for their own benefit as well as their child's.
- Educators can provide specific strategies for becoming good role models as part of dietary change programs.

Tibbs T et al. The relationship between parental modeling, eating patterns, and dietary intake among African-American parents. *J Am Diet Assoc.* 2001;101:535-541.



Acculturation of Mexican-American mothers influences child feeding strategies

Acculturation is a long-term process where individuals simultaneously learn a new culture and modify their culture of origin. In low-income Hispanic adults, acculturation is associated with dietary and lifestyle changes that may increase the risk of obesity and chronic disease. These changes include increased fat intake, decreased fiber intake, altered meal patterns with more snacking, and less physical activity.

This study involved 238 parents of preschoolers to examine the influence of the mother's acculturation on child feeding practices, and on growth measurements of the child. The sample was recruited from low-income families of primarily Mexican descent. Compared with more-acculturated mothers, less-acculturated mothers were more likely to offer their children other foods when they refuse to eat. Less-acculturated mothers were also more likely to view bribes, threats, and punishment as effective ways to encourage eating and were less likely to give vitamin supplements. Compared with more recent immigrants, mothers who had spent a greater portion of their lives in the United States were less likely to scold their children for not eating or to take them out to eat as a reward for good behavior. Mother's acculturation was not related to weight for height, height for age, or body mass index of the children. Prevalence of overweight and obesity was high in both less- and more-acculturated groups. These authors comment that Mexican-American parents tend to be ambivalent about the need to limit child-led snacking, but some are beginning to see connections between snacking, inactivity, poor appetite at meals, and overweight.

Understanding the links among acculturation, child feeding practices, food patterns, and growth in Mexican-American children is critical for more effective nutrition programs. Educators can help parents find ways to bring their children to meals ready to eat, so that bribes, threats and punishment are unnecessary. This may involve transitioning from child-led snacking to more structured meals and snacks, as well as increasing physical activity.

Kaiser L et al. Acculturation of Mexican-American mothers influences child feeding strategies.
J Am Diet Assoc, 2001;101:542-547.



Girls' dietary fat intake and mothers' child feeding practices

This study examined relationships between 5-year-old girls' fat intake, their weight status, and their mothers' nutrient intake and child-feeding practices. One hundred ninety-two girls and their mothers were divided into two groups based on whether girls consumed more than 30% of calories from fat, or between 20-30% of calories from fat as recommended by the American Association of Pediatrics (AAP).

Girls with high-fat diets consumed fewer fruits, more meat, and more fats and sweets than girls in the low-fat group. Mothers of girls in the high-fat group had higher fat intakes than mothers of girls in the low-fat group. Mothers of girls in the high-fat group reported restricting snack foods more often and pressuring their daughters to eat healthy food. Girls in the two groups had the same average BMI, but girls in the high-fat group showed greater increases in body fat and body mass index between age 5 and 7 years.

These authors comment that total dietary fat intake may be an important factor in the development of overweight in childhood. Mothers and daughters had similar dietary patterns. Previous research has shown that restricting foods can make them more attractive to children and pressuring children to eat can make them less interested in the desired foods. Since the mothers in the high-fat group were making more of an effort to restrict high-fat snacks and pressure their daughters to eat healthy food, and the girls were still consuming more than the recommended amount of fat, it appeared that daughters' intake was more closely related to what mothers were doing, than what they were saying. The authors caution that the results of this study of white, middle-class children may not be generalizable to other racial or socioeconomic groups with different dietary patterns and child-rearing practices.

Educators can use this information when discussing child feeding with parents. Educators can remind parents that it is more important to be good role models for healthy eating than to restrict or pressure children to eat certain foods.

Lee Y et al. Diet quality, nutrient intake, weight status, and feeding environments of girls meeting or exceeding recommendations for total dietary fat of the American Academy of Pediatrics. . *Pediatrics* 2001;107(6).
<http://www.pediatrics.org/cgi/content/full/107/6/e95>.



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Mothers' sources of information about feeding young children.

Mothers of infants and young children were interviewed at intervals during the first 4-1/2 years of their child's life to investigate their sources of information about nutrition and feeding. These middle and upper-class mothers received information concurrently from multiple sources which changed over time. Professionals were a major source of information and advice during the first three years. Books and magazines were cited but there was a change in the type of magazine over time, from parenting magazines to family/home magazines. Relatives and friends were an important source of information, especially about infant feeding and introducing new foods. The child's maternal grandmother was cited frequently while husbands were mentioned infrequently.

The authors remind educators that there is the potential for conflict among the sources of information and the information they provide. They recommend that educators consider the extended families of white, middle-class mothers to be a potential target for education in much the same way extended families are included in educational efforts with other racial and ethnic groups.

Carruth BR and Skinner JD. Mothers' sources of information about feeding their children ages 2 months to 54 months. *JNE* 33:143-147, 2001.



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Nutrition accuracy in popular magazines

The American Council on Science and Health (ACSH) has found that, as a group, consumer-oriented and homemaking magazines outrank other types in the quality of their nutrition reporting. The eighth ACSH survey of nutrition reporting by popular magazines ranked 14 of 20 surveyed magazines as “excellent” or “good” sources of nutrition information.

Four experts in nutrition and/or food science rated ten randomly selected articles from each of 20 popular magazines on the basis of (1) provision of factual information, (2) objective presentation of information, and (3) presentation of sound nutritional recommendations.

Three magazines – *Parents*, *Cooking Light*, and *Good Housekeeping* -- topped the list with ratings of 90% or more, which earned them a rating of “excellent.”

Eleven publications (*Consumer Reports*, *Self*, *Shape*, *Glamour*, *Health*, *Woman’s Day*, *Better Homes and Gardens*, *Reader’s Digest*, *Runner’s World*, *Ladies’ Home Journal*, and *Men’s Health*) ranked between 80 and 89%, to place them in the “good” category.

Cosmopolitan, *Fitness*, *Redbook*, *Mademoiselle*, *Muscle & Fitness*, and *Prevention* were ranked from 70 to 79%, designated “fair.” All had plenty of room for improvement.

For the first time in the eighteen years that ACSH has been evaluating popular magazines’ nutrition coverage, no magazine was ranked “poor.”

Full text of the report and a press release from ACSH can be found at the ACSH website.

Meister, K. Nutrition Accuracy in Popular Magazines (January 1997-December 1999).
American Council on Science and Health, June 2001. www.acsh.org



Food insecurity and overweight in women

Researchers analyzing the Continuing Survey of Food Intakes by Individuals (CSFII) have found that the prevalence of obesity increases among women as their household income nears the poverty line. The complete research article can be found in this month's Journal of Nutrition and a press release related to the article can be found at the Nature Science Update website <http://www.nature.com/nsu/010621/010621-1.html>. A summary will be included in the next issue of NutriNet News, the Wisconsin Nutrition Education Network newsletter, which can be found online at <http://www.nutrisci.wisc.edu/nutrinet/nutrinetnews.html>.

Townsend MS et al. Food insecurity is positively related to overweight in women. *Journal of Nutrition* 131, 1738-1745 (2001).

Compressed video: Current Issues in Maternal Nutrition

Dear Colleagues,

I would like to invite you all to the following compressed video at a downlink site near you:

Date: July 19, 2001

Time: 9:00-11:00 AM

Title: **Current Issues in Maternal Nutrition**

Content: Topics will include weight retention, vitamin A, folic acid and iron. Also included will be the mystery of hidden hunger and how it might affect birth outcome, and information on breast-feeding needs.

Come with a learning attitude! You may want to invite your partners. I gave an abbreviated version of this at the annual WIC conference, June 27th, which would mean a bit of repetition for those who attended (1-hour versus 2-hour program).

Registration deadline is July 5th!

Hope to see you there!

With warm regards,

Sherry T.