

# Beyond Knowledge in Nutrition Education

Findings from the Texas Child Feeding Study<sup>1</sup>

## How is nutrition knowledge related to food intake?

### Background

The prevalence of child overweight is increasing among young children in the U.S.

Nutrition Education programs, such as those associated with the WIC program, have the opportunity to impact eating habits.

Behavioral theories suggest that information alone is not an effective means of producing behavior change.

### What did we ask?

- 10 multiple choice nutrition knowledge questions related to fruit and vegetable intake, milk, juice, iron, vitamin A, calcium, and portion sizes
- How often do you check Nutrition Facts on food labels when shopping for food?
- How important is nutritional content (calories, vitamins, fat, sugar) when deciding what to feed your child for his/her main meal?
- 8-item scale measuring parents' confidence to prepare and offer fruits and vegetables (self-efficacy)

### What did we learn?

**For all respondents, nutrition knowledge was low.** See Table 1.

- Parents' level of education was not consistently associated with nutrition knowledge.

**Nutrition information (e.g., the Nutrition Facts label) was less important to parents than price when shopping for food. Nutritional content (e.g., calories, vitamins, fat sugar) was less important than child preference when choosing what to feed their children.**

- 66% of respondents reported that they often or always compare prices when shopping for food; 34% often or always check nutrition facts.
- 79% of respondents reported that child preference was very important when deciding what to feed their children; 32% reported that nutritional content was very important.

Table 1.  
PERCENT OF CORRECT ANSWERS ON NUTRITION KNOWLEDGE QUESTIONS

Question	Correct Response	% Correct
Which mineral helps build strong bones?	Calcium	85%
Is a typical restaurant serving size too big, too small, or just right?	Too big	59%
What is the maximum amount of 100% fruit juice that is recommended for a child each day?	4-6 oz.	49%
Which of the following foods is a good source of iron?	Beef	48%
Why is it important for your child to eat enough iron-rich foods?	Brain development	46%
Foods that are rich in Vitamin A are usually which color?	Orange	39%
At what age should a child switch from whole milk to low fat or fat free milk?	2 years	30%
How much milk is recommended for a child (ages 1-5) to drink daily?	2 cups	27%
Which nutrient helps your body absorb iron from foods?	Vitamin C	14%
How many servings of fresh, canned, or jarred fruits and vegetables should a child eat every day?	5-9 servings	14%

Continues on back.



## What did we learn? (continued)

**Many parents who were aware of nutrition recommendations did not follow them.** See Figure 1.

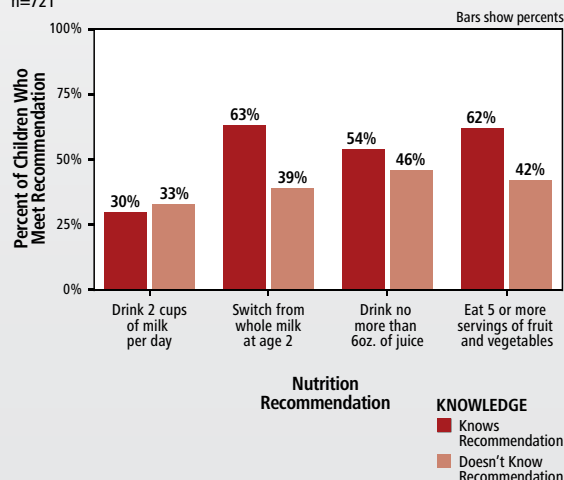
- 58% of parents who knew that their children should drink 2 cups of milk per day reported that their children drink more than 2 cups of milk per day. 12% reported that their children drink 1 cup of milk per day.
- 34% of parents who knew their children should switch from whole milk to low-fat milk at age 2 reported that their children over age 2 drink whole milk.
- 46% of parents who knew that the maximum amount of juice intake is 4-6 ounces per day reported that their children drink more than 6 ounces of juice per day.
- 37% of parents who knew that their children should eat at least 5 servings of fruits and vegetables each day reported that their children eat fewer than 5 servings.

**Parental self-efficacy (confidence) for preparing and serving fruits and vegetables was the strongest predictor of a child's eating 5 or more servings of fruits and vegetables per day.**

## Implications for WIC Nutrition Educators

- Nutrition information is an important component of nutrition education, but alone may not result in behavior change.
- Work to build parents' self-efficacy for making healthy choices by setting small, achievable goals with clients, providing opportunities for hands-on learning, modeling healthy habits, and providing positive reinforcement and encouragement.
- Remind parents about the power of role modeling. Encourage parents to make healthy eating a priority for themselves as well as for their children.
- Address the challenges to making healthy choices and develop strategies to overcome them.
- Provide information and tools that are culturally relevant and relevant to clients' needs.

**Figure 1.**  
MILK, JUICE, AND FRUIT AND VEGETABLE INTAKE BY KNOWLEDGE OF NUTRITION RECOMMENDATIONS  
n=721



<sup>1</sup> Results from the Texas Child Feeding Study, conducted by the University of Texas at Austin Nutrition Education Team, in conjunction with the Texas Dept. of State Health Services. Seven hundred and twenty-one (721) Texas households were surveyed. Households had at least one child between the ages of 1 and 5 years and were grouped into the following categories: WIC households (n=241); low-income, non-WIC households (n=274); middle to high-income households (n=203). For more information on the study, contact Shellie Shores at: shellie.shores@dshs.state.tx.us.

For more information about this study series, please visit:

[www.dshs.state.tx.us/wichd/nut/riskreport-nut.shtm](http://www.dshs.state.tx.us/wichd/nut/riskreport-nut.shtm)

