## **Smart School Snacks**

# A Comprehensive Preschool Nutrition Education Program



THREE YEARS AGO THE SNACKS SERVED at the Nova Southeastern University preschool center, which houses 12 classrooms with 250 three- to five-year-old children, had gone the way of the world. Each day teachers served children sugary foods with little nutritional value. At the same

time evidence was mounting that the children of the United States faced a multitude of serious health consequences due to unhealthy diets. The simultaneous circumstances led to thoughtful examination of these issues by early childhood educators at the Mailman Segal Institute for Early Childhood Studies at Nova Southeastern University and the development of an effective preschool nutrition education program—Smart School Snacks. Smart School Snacks was designed to inform early childhood teachers, young children, and families about the foundations of healthy eating.

In creating Smart School Snacks, early childhood educators collaborated with nutritionists to combine knowledge of effective early childhood teaching practices with what children need to know about nutrition now and in the future. Several research pieces helped shape, guide, and

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Photos courtesy of the authors.

validate the Smart School Snacks program and format. For example, a position statement published by the American Dietetic Association (ADA) titled "Nutrition Standards for Child-Care Programs" validated the need for constructing an effective preschool nutrition education program and the idea that this could potentially benefit many children beyond our own preschool population (Briley & Roberts-Gray 2003). The

position statement reports that 60 percent

of the nation's young children are in child

care—"that is three of every five children

aged five years and younger"—

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and the number is climbing (p. 1). "Therefore, the implementation of high standards for nutrition and nutrition education in child care settings today will have a major impact on the health of Americans in the future" (Briley & Roberts-Gray 2003, 1).

A literature review published by the University of Florida titled "The Benefits of Healthful Snacking" (Bobroff 2005) convinced us that using school



snacks as the venue to teach nutrition lessons was appropriate. According to the review, research shows the importance of focusing nutrition education on away-from-home food consumption and snacking. The review goes on to state that times away from home are when most teenagers



make independent food selections (Bobroff 2005). "Teens need to know how to balance low-nutrient-dense meals with meals and snacks rich in vitamins, minerals, and phytochemicals from whole grains, fruits, vegetables, and legumes" (Bobroff 2005, 5). Instilling nutrition concepts at an early age can influence a lifetime of food choices and balance.

In an interview, Sheah Rarback, director of nutrition at the Mailman Center for Child Development in Miami, recommended, "Preschool children should be offered a variety of simple nutritious snack foods daily in a pleasant and noncoercive eating environment." Administrators and teachers at the center put this thought into action by changing the typical whole group snack time to an independent choice snack center. Rarback also noted that along with healthy food selections, choosing appropriate portions is an important component of healthy eating. In "Climbing the New Food Pyramid," Rarback detailed her point: "Most people do not know what an appropriate serving size is. We live in a supersized world and have received our education about serving

size from the local drive-through" (2005, 90).

Teachers and administrators used the online resources at www.mypyramid.gov/kids/index.html, including the 2005 MyPyramid for Kids (see p. 22), as the Smart School Snacks program guides for nutrition concepts such as healthy food choices, food grouping, balanced meals, and appropriate food portioning. They also read the article "The Food Guide"



Pyramid" on the KidsHealth for Parents Web site for further clarification. To educate young children about these important nutrition concepts, Smart School Snacks teaches "We live in a super-sized world and have received our education about serving size from the local drive-through."

meaningful content through interrelated hands-on activities.

#### Smart School Snacks—A program description

The Smart School Snacks program is organized in four main categories: The Learning Environment, Teacher-Made Classroom Materials, Family Involvement and Education, and Teacher Education and Support. Smart School Snacks is intentionally designed to be flexible, so that teachers or











facilities can use any section of the program, or modify parts of it, to fit the nutrition education of the children in their care, accommodate different preschool or classroom circumstances, and respect cultural influences. All materials are teacher made.

## The learning environment—The classroom snack center

Objectives for the learning environment include establishing healthy independent eating habits, hand washing, appropriate food portioning, social eating skills, self-monitoring, and self-help skills. Snack is offered during classroom activity time. The snack center consists of a table and chairs set up for four to six children. To facilitate self-service, cups, plates, napkins, and utensils are easily reached. Food is easily accessible, presented either preportioned in cups or in small store-bought packaging, or presented with pictorial serving directions. Children learn the healthy snacking routine of serving themselves and eating one portion of each food item that appeals to them. They consider whether they need another helping before cleaning up and moving on to another choice of activities.

The snack center is treated like any other classroom learning center. There are clear behavior expectations and

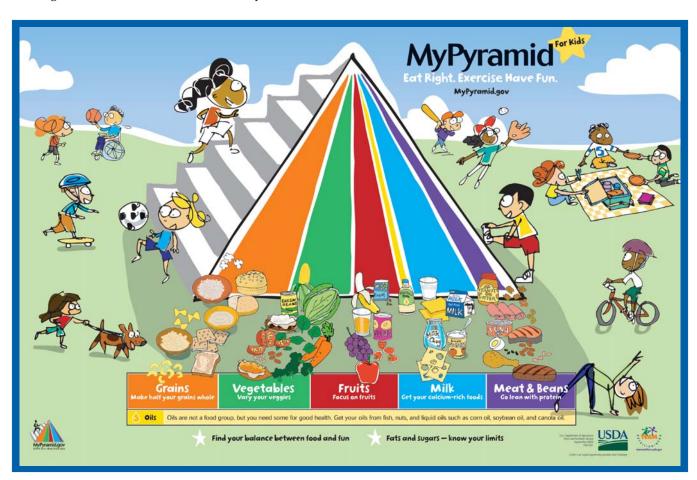
center procedures. At the beginning of the school year, the teacher establishes a healthy snack center routine.

She instructs the students to wash their hands, serve themselves appropriately, eat socially, and clean up as they leave.

Snacking is an individual choice during morning and afternoon activity time. Generally children who are friends or playing together will go to the snack table together and socialize naturally as they eat in pairs or small groups. Parents who bring in snack and volunteer in the classroom may sit at the snack table, socializing

The cards give children a visual awareness of healthy food choices and reinforce the concept that words have meaning.

with children as they come and go. Teachers or aides may take a moment to chat with children individually or in small groups. The environment is intentionally set up for successful independent snacking, building self-help confidence. Snacks are simple, not elaborate, and arranged to be easily monitored.





#### **Teacher-made classroom materials**

Teacher-made materials provide meaningful content through interrelated activities. All materials are color-coded using the same colors for food groups that are used in the 2005 *MyPyramid for Kids*. The same foods that are pictured on the Food Cards are listed in the Suggested Snack Shopping List for Parents.

Food cards emphasize healthy food choices and strengthen



literacy skills. Each three-by-five inch index card (with a velcro tab on the back for use with the sentence strip described below) includes a picture of a healthy food glued in the center and the name of that food printed under the picture. An equal number of examples represent each of the four groups—fruits, vegetables,

grains, and dairy—and are color-coded with dot stickers. (Smart School Snacks does not address the meat and beans group.)

The cards give children a visual awareness of healthy food choices and reinforce the concept that words have meaning. The cards can be used for matching to real foods brought in for snack or matching to pretend foods, sorting foods by color code, grouping foods that start with the same letter, or making a shopping list, and other activities.

**Snacks-in-a-box** is a decorated index card file box with color-coded label dividers for each of the four food groups. Children can file the food cards in the correct food groups. Through the color-coded filing system, children increase their understanding of food groupings, visually identify-



ing foods and then categorizing them by food group. This activity helps strengthen children's literacy skills.



The sentence strip is a school supply sentence strip or teacher-made long strip of posterboard or tagboard (about two feet long and four inches wide) with four Velcro pieces lined up horizontally and evenly spaced on the front.

Each velcro piece is color-coded using the same colored dot stickers used on the food cards. Children match the color-coded food cards to the sentence strip. We have two sentence strips so children can do the activity at the same time. This activity gives children a concrete, clearly defined space to create comprehensive balanced snacks—a combination of food items from each food group—in a "readable" form and strengthens literacy skills.













The classroom recipe book is a three-ring binder decorated by the teacher. Every family signs up to bring a healthy snack once a month. As each child brings in a

healthy school snack for the class, the teacher takes a photo of the child with the snack. The teacher then creates a page for the recipe book using the photo, the child's name, and a list of the food items in his or her healthy snack. This book documents the classroom nutrition program and personalizes the experience for each child.

### Family involvement and education

Family involvement is critical to the success of the nutrition education program. Smart School Snacks includes and educates families in several ways.



**The snack family cooperative** asks each child's family to sign up to bring a healthy snack once a month. Teachers inform family members of any student food allergies. Parents are asked to portion foods before they bring them to the center.

The suggested shopping list of healthy fruits, vegetables, grains, and dairy products is to be used as a guide by families bringing in a complete and nutritious snack for the class. Teachers encourage parents to use the shopping list with their child at the grocery store to practically and naturally extend nutrition and literacy lessons from school to home.

**Nutrition tidbits** are health-related facts or activities that are included in each weekly classroom newsletter.

**Family workshops** are offered at the beginning of the school year to give family members specific information about the center's nutrition education program and its goals. During the workshop, teachers set up the snack center for family members in the same manner as it is set up for the children during the school year.

#### **Teacher education and support**

In the final analysis, teachers make or break the success of the nutrition program. They have to be convinced that nutrition lessons are important for young children and therefore worthy of their effort and class time.

A nutrition workshop for teachers is conducted before school begins by a nutrition expert who explains the importance of establishing good health and nutrition habits at an early age. During the workshop, teachers receive materials from which they create their food cards, decorate their file boxes, make their sentence strips, and set up



their classroom snack books. Doing these activities together unifies and strengthens our schoolwide nutrition program and supports the center's health conscious philosophy.

**Teacher meetings** throughout the year intermittently focus on the Smart School Snacks program; this provides ongoing support for teachers in their nutrition education efforts. During these meetings

teachers and administrators ask and answer questions, share problems and discuss solutions, and then modify the program to suit individual classroom needs.

**Classroom materials** such as nutrition games, activities, and books are supplied to teachers to enhance their nutrition curriculum.

The teachers at our center have witnessed a positive, healthy change in attitude about nutritious snacks.

#### **Conclusion**

Through implementation of the Smart School Snacks program, administrators and teachers at our center have witnessed a positive, healthy change in attitude about nutritious snacks. Simple healthy snacks have become the norm in our center. This is evi-

denced by the snack foods that are voluntarily contributed each day by families and welcomed by teachers. Our preschool children now eat appropriately portioned, well-balanced snacks that include inviting fresh fruits, vegetables, whole grains, and low-fat dairy products—and they like it!

#### References

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