



# Nutrition & Your Child

CHILDREN'S NUTRITION RESEARCH CENTER • 1100 BATES • HOUSTON, TEXAS 77030 • No. 2, 2000

## CONSIDER NUTRITION WHEN CHOOSING DAY CARE

Selecting the perfect preschool care is more than evaluating storytime and playtime activities. Although often overlooked, mealtime is equally important.

"Child-care centers have a real impact on the nutritional quality of children's diets and can significantly influence developing eating habits,"

said Dr. Theresa Nicklas, a CNRC research nutritionist and a Baylor College of Medicine professor of pediatrics.

According to Nicklas, parents should consider a center's overall nutrition program, including meals and snacks, its nutrition education program, and the mealtime environment.

**Meals and snacks:** Food should be offered to children at least every three hours. Children who are in day-care for eight hours or more should receive at least one meal and two snacks.

Nutritionally sound meal and snack menus provide a variety of foods from every group of the Food Guide Pyramid and have selections that change often. Other positive center practices include consulting with a registered dietitian for menu planning and offering children plenty of water to drink throughout the day.

**Nutrition education:** In addition to good food safety and sanitation practices, look for child-care centers that provide staff training in nutrition and the promotion of healthy eating habits. Centers should also promote good hand-washing habits and involve children in fun food- and nutrition-related activities such as tending a vegetable garden.

**Mealtime environment:** Mealtime and snacktime should be positive, unhurried events led by child-care

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## SPANISH-SPEAKING VOLUNTEERS FILL BREASTFEEDING SUPPORT GAP

An innovative program that trains Houston-area hospital volunteers in the basics of breastfeeding support is helping Spanish-speaking mothers and their newborns.

"Breastfed babies tend to be healthier both in infancy and later in life, which is why physicians encourage new mothers to breastfeed," said Dr. Judy Hopkinson, a CNRC lactation physiologist and Baylor College of Medicine assistant professor of pediatrics.

Unfortunately, tight budgets and nursing shortages make it difficult for public hospitals to provide the confidence-building, one-on-one breastfeeding assistance that many new mothers need. Language barriers also compound the problem.

Many new mothers doubt their ability to breastfeed, which can cause them to abandon exclusive breastfeeding if no one steps in to help.

"An unhurried bed-side visit from a knowledgeable and supportive volunteer who can answer questions in Spanish and assist with breastfeeding technique can make all the difference in the world," said Hopkinson, who is collaborating with the Harris

County Hospital District on the program.

The training program is part of an intervention study Hopkinson is conducting in cooperation with Episcopal Health Charities and the Texas Department of Health. The study, Baby-Friendly Neighborhoods (Leche de Vida), is designed to improve infant health in Houston's predominantly Spanish-speaking East End neighborhoods by increasing the rate of exclusive breastfeeding during early infancy.

The hospital-based breastfeeding volunteers provide assistance to all Spanish-speaking new mothers at Ben Taub hospital. The program also offers additional at-home breastfeeding support via the telephone or personal visits to Spanish-speaking new mothers living in this pilot program's geographic area. This includes Houston-area zip codes 77003, 77011, 77012, 77020, 77023, and 77029.

Spanish-speaking women, as well as those with limited knowledge of Spanish, are needed for the hospital-based breastfeeding support program. To learn more about becoming a volunteer, call Rosa, (713) 798-7194 or Judy, (713) 798-7008. ❖

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# VOLUNTEERS

Houston-area volunteers are needed to participate in the following studies.

*Transportation/parking is available. For more information call the CNRC volunteer hotline, (713) 798-7002.*

## Fun, Food and Fitness

African-American 8- and 10-year-old girls and their parents are needed for discussion groups aimed at understanding how to help girls learn skills that keep them active and eating healthy as they grow. Call LaTroy or Judy, (713) 798-7082.

## Baby-Friendly Neighborhood

Moms-to-be and new moms living in Houston-area zip codes 77003, 77011, 77012, 77020, 77023, and 77029 are eligible for a study that monitors infant feeding behavior during the first year of life. Free breastfeeding consultations/information in Spanish or English. Call Daisy, (713) 926-3372.

## Breastfeeding Support Volunteers

Women with some knowledge of Spanish are needed at Ben Taub and LBJ hospitals to help new mothers and their babies learn to breastfeed. Training/parking. Call Rosa, (713) 798-7194 or Judy, (713) 798-7008.

## Breastfeeding

Pregnant women in their last trimester, who plan to breast-feed their infants for at least three months, or new mothers currently breastfeeding infants between the ages of 2 weeks and 2 months, are needed for a new study. Call Shannon, (713) 798-7083.

## Formula Studies

Infants less than 8 months of age are needed for studies involving commercial infant formulas. Free formula. Call DeeDee (713) 798-7085 or Betty, (713) 798-7064.

## Diet and Metabolism

Girls, ages 6 to 9 and 13 to 16, needed for studies on the impact of diet on metabolism. Call Leah, (713) 798-7083.

## Biological Diversity of Growth

Children, up to 18 years of age, who have previously participated in CNRC studies involving body measurements, as well as Hispanic, African-American and Caucasian children between the ages of 2 and 5, and African-American and Hispanic males, 5 to 10 year of age, are needed for a study on growth. Stipend. Call Marilyn, (713) 798-7002. ❖

## GENETIC DIFFERENCES INFLUENCE CALCIUM ABSORPTION

**G**enetic variations in a gene that helps regulate the body's response to vitamin D has given researchers new insight into why some children have higher bone densities.

"We found that variations in the receptor gene for vitamin D could predict differences in calcium absorption and bone density in healthy children," said Dr. Steven Abrams, a professor of pediatrics at Baylor College of Medicine who studies mineral metabolism in children at the CNRC. A major function of vitamin D is to promote the absorption of calcium from the intestines.

Abrams studied the relationship between three genetic variations of the vitamin D receptor gene at a site called *Fok1* and markers of calcium status in 72 healthy, 7- to 12-year-old Caucasian, African- and Mexican-American children. Abrams was interested in *Fok1* because one variation, called the ff genotype, has been associated with lower bone mass in adults and children. The other two variations are known as FF and Ff genotypes.

The study found that children who had the FF genotype absorbed over 40 percent more calcium from their diets than those with the ff genotype, and 17 percent more than those whose genotype was Ff. The children with the FF genotype also had significantly greater bone density measurements.

A child's bone density is important because peak bone mass, which occurs in early adulthood, is considered a significant determinant of osteoporosis risk later in life.

Abrams cautioned that many factors, including diet and exercise, affect bone density. "Further studies are needed to determine how the gene-related differences in calcium absorption and bone density found in this study affect osteoporosis risk," he said.

"This study provides evidence that genetic factors can lead to identifiable changes in the way the body uses calcium, which is a step towards understanding why some groups appear more likely to develop osteoporosis," he said. ❖

## Food Guide Pyramid for Young Children

**T**he USDA has created a "child-friendly" Food Guide Pyramid to help parents and caregivers teach young children about healthy food choices.

Customized to meet the specific needs of young children ages 2-6, the Food Guide Pyramid for Young Children emphasizes variety and physical activity and includes serving size guidelines.

The tyke-size pyramid and an accompanying booklet of tips can be downloaded from the USDA's Center for Nutrition Policy and Promotion web site, [www.usda.gov/cnpp](http://www.usda.gov/cnpp), or ordered on-line from USDA Team Nutrition [www.fns.usda.gov/tn/Resources/NTISform/ntisform.htm](http://www.fns.usda.gov/tn/Resources/NTISform/ntisform.htm), or through the Government Printing Office, (202) 512-1800. ❖

## PINT-SIZED PORTIONS CUT MEALTIME STRESS

**S**caled-back portions can help parents sidestep mealtime battles with finicky tykes.

“Poor eaters can be overwhelmed by adult-size portions,” said Dr. Karen Cullen, a CNRC behavioral nutrition researcher. Pint-sized portions also allow for positive mealtime interactions when toddlers ask for more.

According to Cullen, a good serving size rule-of-thumb is one tablespoon of vegetables, fruit or meat per year of life for children under 6 years of age.

Cullen advises parents to adopt a “big picture” attitude. “It’s what a child eats over several days, not at single meal, that’s important,” she said. Allowing young children to listen to their bodies’ hunger cues could also help them avoid overeating and weight problems later in life.

For children who are routinely not hungry at mealtime, Cullen suggests keeping an eye on snacks. Too much fruit juice or snacks too close to meals can ruin small appetites. Also consider limiting beverages to one-half cup at the beginning of meals, serving more once a child begins eating.

If children who refuse to eat at mealtime complain of hunger an hour later, Cullen advises parents to hold their ground and avoid becoming short-order cooks. “Offer some fruit or vegetables with dip, but avoid preparing a meal. The child won’t starve and limits need to be learned,” Cullen said. ❖

## FINGER-Food Safety

**T**oddlers delight in feeding themselves. However caution is advised to help prevent food from lodging in small airways. CNRC nutritionists provide the following advice on finger foods for children less than 3 years of age:

- Check baked goods for nuts, which are the number one food-related choking hazard for young children.
- Avoid giving hard or difficult-to-chew foods like raw carrots or other crunchy vegetables, hard candy, jelly beans, nuts, and lollipops. Spread thick and sticky peanut butter very thinly.
- Modify the shape and texture of firm and round foods. Cook carrots, potatoes, and other hard vegetables until soft, then cut into small pieces. Cut grapes into quarters and hot dogs into fine lengthwise sticks. Dice meats. Chop apples and firm fruits into very small pieces.
- Keep an eye on small children when they are eating. They might eat in a hurry, stuff too much food in their mouths, or chew their food inadequately.
- Feed small children in a relaxed atmosphere and only when they are seated. Do not allow children to run or play with food while chewing.
- Train toddlers to chew food thoroughly before swallowing or trying to speak.

CNRC experts also advise that child caretakers receive appropriate emergency training, including how to perform the Heimlich maneuver on children and cardiopulmonary resuscitation techniques (CPR). ❖

## Nutrition in Day Care

*(Continued from page 1)*

providers who are good role models. Providers should sit with children during meal periods, eat the same foods the children do, offer choices, and give children an opportunity to serve themselves. They should also engage children in cheerful food-related conversations, offer positive comments about nutrition and encourage, but not require, children to taste all foods. Undesirable provider behaviors include forcing children to “clean their plates” or using food as a reward, punishment, or pacifier.

“Day-care centers should provide the nutrition growing children need and promote healthy eating habits that can help them sidestep diet-related problems later in life,” Nicklas said. ❖

## Child-Care Resources

**C**ounty cooperative extension service offices are excellent resources for child-care information and nutrition educational materials. Some larger offices also provide assistance with staff training. For more information, contact your local county extension office (listed under local government in most telephone directories).

### National Network for Child Care

[www.nncc.org](http://www.nncc.org)

### Nutrition Training Course for Child-Care Providers

[www.ianr.unl.edu/ianr/nerec/childcare.htm](http://www.ianr.unl.edu/ianr/nerec/childcare.htm)

### Child Care Nutrition Resource System

[www.nal.usda.gov/childcare](http://www.nal.usda.gov/childcare)

### Healthy Child Care America Campaign

[www.aap.org/advocacy/hcca/materials.htm](http://www.aap.org/advocacy/hcca/materials.htm)

### Nutrition Standards for Child-Care Programs

[www.eatright.org/adap0899.html](http://www.eatright.org/adap0899.html)

### Making Food Healthy and Safe for Children

[www.ncemch.georgetown.edu/pubs/default.html#childcare](http://www.ncemch.georgetown.edu/pubs/default.html#childcare)

### The ABCs of Safe and Healthy Child Care

[www.cdc.gov/ncidod/hip/abc/abc.htm](http://www.cdc.gov/ncidod/hip/abc/abc.htm)

### National Resource Center for Health and Safety in Child Care

[nrc.uchsc.edu/welcome.htm](http://nrc.uchsc.edu/welcome.htm)

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# NUTRITION TIDBITS

## Q

*Is a pickle an appropriate "vegetable" for children?*

## A

Pickles are cucumbers that have been cured in brine, so technically they are vegetables. But, nutritionally

speaking, there are better choices.

Pickles and cucumbers consist mainly of water with just a small amount of calcium, a trace of iron, a few calories and no protein. Because they offer little nutritional value, they are not considered a "vegetable choice" in the School Lunch Program.

Although pickles are nutritional lightweights, they make a fun, tasty, fat-free, low-calorie condiment or snack. But, do keep in mind that one large dill pickle provides over 1700 milligrams of sodium, or 70 percent of an adult's suggested daily supply.

## Q

*Do kids need sports drinks?*

## A

Although children may request sports drinks, they offer little advantage over cool water.

Sports drinks are designed to benefit athletes engaged in continuous, high-intensity aerobic workouts that last for 90 minutes or more.

But, if the availability of sports drinks encourages your kids to drink, consider making your own. Combine caffeine-free herbal tea, a little sugar, a pinch of salt and a few ounces of orange juice. Chill in individual bottles.

Active kids need to fill up on fluids to prevent dehydration. Children should be encouraged to drink before heading outside and every 15 to 30 minutes during playtime activities. ❖

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