

## HOLIDAY GAME PLAN CAN TACKLE UNHEALTHY HABITS

If Thanksgiving kicks off non-stop noshing and sports-channel surfing at your house, you might want to call a pre-season time-out.

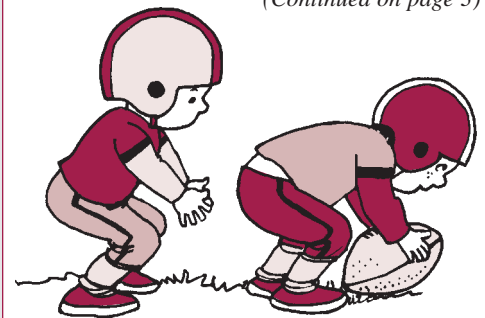
"Families who engage in too little exercise and too many high-calorie snacks are setting their kids up to

become overweight, sedentary adults prone to cardiovascular disease, diabetes and hypertension," said Becky Gorham, a CNRC research dietitian.

To help parents develop a strong defense against these unhealthy habits, she offers these tips:

- > Call interference on excessive television, video, and computer time that keeps kids inactive. Hold a team meeting to negotiate limits.
- > Break up boredom by sending kids outside to play, helping them make holiday gifts, cards, and wrapping paper, or inviting them into the kitchen to help prepare meals.
- > Negotiate tradeoffs involving free-time activities. Trade participation in family touch football games, 20-minute walks or other physical activities for extra time to view those must-see football games.
- > Build "team spirit" by asking the kids to help plan holiday activities, decorate the yard, or prepare homemade gifts. Take turns being the "tour guide" for after-dinner walks past neighborhood

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## BENEFITS OF FRUITS, VEGETABLES CONTINUE TO 'CROP' UP

It's a nutritional rags-to-riches story: Fruits and veggies, once almost an after-thought in the meat-centered American diet, are gaining nutritional superstar status.

"Fruits and vegetables top of the list of foods associated with a lower risk of chronic diseases, such as cancer and cardiovascular disease," said Janice E. Stuff, Ph.D. a registered dietitian, epidemiologist and Baylor Assistant Professor of Pediatrics.

According to Stuff, the vitamins, minerals, fiber, and protective substances called phytochemicals found in fruits and vegetables help kids grow and develop properly. Also, they help kids and their families:

### Keep body weight under control.

Snacking on low-calorie, fiber-rich fruits, and vegetables helps keep both calories and hunger in check.

**Maintain cardiovascular health and avoid hypertension.** In addition to helping hold the line on body weight, fruits and vegetables are naturally low in sodium, potassium rich and virtually fat free. Also, many provide a healthy dose of folate, a vitamin important for controlling homocysteine levels. A build-up of homocysteine, a by-product of protein metabolism, is considered to be an independent risk factor for cardiovascular disease. Research also suggests that the fiber, antioxidant vitamins and

phytochemicals found in fruits and vegetables also help prevent blood vessel damage.

**Reduce cancer risk.** Folate, a vitamin found in asparagus, spinach, broccoli and citrus fruits, helps prevent cancer damage at the molecular level. Selenium, vitamin C and other antioxidant phytochemicals, such as the dark green and orange pigments called carotenoids, help prevent cancer by neutralizing harmful by-products of metabolism inside cells, while other phytochemicals appear to help detoxify carcinogens and block cancer growth. According to a report by the American Institute for Cancer Research, if everyone consumed a diet rich in fruits and vegetables, 20 percent or more of all cases of cancers could be prevented.

### Live a longer and healthier life.

A diet rich in fruits and vegetables is associated with a lower risk of stroke, cataracts and a painful bowel disease called diverticulosis, as well as improved blood lipid levels and a longer, healthier life overall.

Because nutrition scientists do not yet know which of the over 100,000 substances found in fruits and vegetables are most beneficial, Stuff advises families to select fruits and vegetables, not supplements, to get the benefit of these potentially powerful protective compounds. ♦

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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.*

### NEW! Fun, Food, and Fitness

African-American 8-year-old girls and their parents are invited to participate in discussion groups aimed at understanding how to help young girls eat healthy and be active as they grow. Call Janice, (713) 798-6763.

### 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. Mothers will receive free breastfeeding consultations and information in Spanish or English. Call Daisy, (713) 926-3372.

### Body Composition Study

African-American, Hispanic and Caucasian young adults, 18 to 22 years of age, are needed for an on-going body composition study that measures how ethnicity influences muscle, fat and

bone development. The study takes four hours and can be completed Monday through Sunday. Stipend provided. Call Marilyn Navarrete, 798-7002.

### Fruit Juice

Babies, 10 to 16 months of age, are needed for a study that compares how well the sugars found in apple juice and orange juice are absorbed and measures how juice affects iron absorption. Stipend/transportation provided. Call Linda, (713) 798-7080.

### 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 two weeks and two months, are needed for a new study. Call Shannon, (713) 798-7083.

### Formula Studies

Healthy, full-term, formula-fed infants less than 8 months of age are needed for

studies of infant formulas. Free formula provided for all studies. Call Marilyn, (713) 798-7002.

### Project: Healthy Bones

African-American and Caucasian girls, 9 to 13 years old, are needed for a calcium study. Physical exam/nutrition consultations/stipend provided. Call DeeDee, (713) 798-7085.

### Planning a Pregnancy?

Women planning to become pregnant within a year are needed for a study examining weight changes, strength and physical fitness, energy expenditure, and physical activity. Call Marilyn, (713) 798-7002.

### Diet and Metabolism

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

## FORTIFIED BREAST MILK BEST FOR PREMATURE INFANTS

**P**remature infants fed breast milk fortified with extra nutrients fare better than those receiving special preterm formulas, according to results of a large-scale CNRC study conducted at Texas Children's Hospital.

The study involved 108 infants born between 11 and 13 weeks premature and weighing less than two and one-half pounds each. The preemies were fed either special preterm formula or fortified breast milk, depending on parental wishes. Within each group, milk feedings were initiated at different times and the tube-feeding method was varied to determine an optimal feeding regimen.

"Of all the feeding strategies tested, the factor that influenced premature infant health the most was

fortified human milk," said Richard J. Schanler, M.D., a Baylor Professor of Pediatrics.

"The infants who received fortified human milk graduated from intravenous to milk feedings faster and had fewer of the complications common in premature infants. They experienced less sepsis, or infections in the blood, and had fewer cases of necrotizing enterocolitis, an intestinal inflammation that often requires surgery," said Schanler. Also, they needed less medication to control spitting up and were discharged from the hospital an average of two weeks sooner than their formula-fed counterparts.

"Breast milk contains antibodies and other important substances that encourage the growth of 'good' bacteria in an infant's intestinal tract and also inhibit the growth of harmful

ones that can invade an infant's system and cause problems," Schanler said.

But, before human milk can be fed to premature infants it must be fortified with additional protein and minerals like calcium and phosphorus. Before these extra nutrients were routinely added to formulas or incorporated into fortifiers for human milk, premature infants grew poorly and developed bones that fractured easily.

"Although fortified human milk feedings might also need to be supplemented with preterm formula in some cases, all efforts by a mother to provide her milk should be supported," Schanler said. "Every teaspoon of human milk contains important protective benefits." ❖

## BEHAVIOR STRATEGIES SIDESTEP NUTRITION BARRIERS

**W**ant your kids to eat more fruits and vegetables? Make them kid-friendly, fast, and easy, say behavioral nutritionists at the USDA/ARS Children's Nutrition Research Center at Baylor College of Medicine in Houston. "Much of our team's work involves understanding the factors that keep kids from eating more fruits and vegetables and learning

how to best overcome those barriers," said Janice Baranowski, a registered dietitian, Baylor assistant professor of pediatrics and an investigator with the CNRC's behavioral nutrition team.

According to Baranowski, the team has identified three main barriers to kids' eating more fruits and vegetables: availability, accessibility, and preference.

The Barrier	The Problem	Strategy
<b>Availability</b>	If fruits and vegetables are not in the house, kids can not eat them.	Keep the kitchen stocked with 100 percent juice and canned, fresh or frozen fruits and vegetables. Include them in your menu planning.
<b>Accessibility</b>	On-the-go kids will not remember fruit and vegetables stored in the crisper or take time out for washing or peeling.	Make ready-to-eat fruits and vegetables an obvious choice for grab-and-go snacks. Stock refrigerator shelves with easy-to-reach 100 percent juice boxes and ready-to-eat fruits and vegetables, along with a favorite low-fat dip.
<b>Preference</b>	Kids like the sweet taste of fruit, but getting them to eat vegetables can be a struggle.	Don't give up. Kids can learn to like vegetables—it's simply a matter of taste and experience. Remember that some kids need to taste a new food up to 14 times before they accept it.

Baranowski suggests also that parents:

- Make the "5-a-day" concept more manageable by encouraging kids to set a goal of one serving of fruit, juice or vegetable at each meal and two servings for snacks.
- Allow kids to decide which fruit or vegetable will be eaten at each meal or snack period.
- Involve kids in recipe selection, produce shopping and

preparation of mealtime fruit and vegetable dishes. "We find that kids usually eat the dishes that they help select and prepare, and parents, sometimes out of sheer love, will eat them, too," Baranowski said.

"The key to overcoming healthy eating barriers is to keep nutritious choices like fruit and vegetable so visible, so easy and so appealing that kids hardly notice they're eating healthier," she said. ❖

## Holiday Game Plan

(Continued from page 1)

holiday displays. Plan a family weekend tree-cutting excursion, get kids involved in organizing a neighborhood Turkey Trot or Jingle Bell Run, lead a canned food drive or host a holiday skating party.

- Stock up on nutritious snacks such as air-popped popcorn, whole-wheat crackers, low-fat cheeses, flavored hummus dip, small bottles of water, low-fat ranch-style dip, ready-to-eat vegetables, homemade cereal and nut mixes, dried and canned fruit, ready-to-eat fresh fruit wedges, and peanut butter.
- Stick to a game plan of balance and moderation for family meals and activities. Kids and their parents need to maintain some routine and structure, especially during the busy holiday season.

"Parents can't expect a couch-potato kid to grow up miraculously to be a healthy, active adult. But, by setting a good example, tackling poor eating behaviors and encouraging an active lifestyle, parents can help kids develop winning habits that are likely to stay with them as they grow," Gorham said.

For more ideas and information on helping kids eat healthy and stay fit, see the Summer 1998 issue of *Nutrition & Your Child* or visit our web site, [www.bcm.tmc.edu/cnrc](http://www.bcm.tmc.edu/cnrc). ❖

## 'Fun, Food, and Fitness'

**A**frican-American 8-year-old girls and their parents are invited to shape a new program called "Fun, Food and Fitness." The program will be geared toward helping girls eat healthy and stay active as they grow.

"Getting kids and their parents to talk about what matters to them is key to planning a program that can actually help kids adopt healthier behaviors," said Dr. Tom Baranowski, a CNRC behavioral scientist and Baylor Professor of Pediatrics.

"Their ideas and comments will help us make Fun, Food and Fitness interesting and engaging enough that young girls will want to participate in the program and do the planned activities," he said.

To get involved in a discussion group, call Janice, (713) 798-6763 or e-mail, [jbaranow@bcm.tmc.edu](mailto:jbaranow@bcm.tmc.edu). ❖

## Nutrition & Your Child

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# NUTRITION TIDBITS

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**What's a child's portion for fruits and vegetables?**

A

A good rule-of-thumb for fruit and vegetable serving sizes is "one tablespoon per year of life" for kids 1 to 6 years of age, says Dr. Debby Demory-Luce, a registered dietitian with the CNRC. For older kids and adults, serving sizes based on the Food Guide Pyramid are:

- > 1/2 cup juice
- > 1 cup raw leafy vegetables
- > 1/2 cup chopped raw, canned or cooked fruit or other vegetable

According to Demory-Luce, the "5-A-Day" recommendation includes at least one vitamin A-rich and vitamin C-rich fruit or vegetable serving each day. Vitamin A is found in apricots, papaya, mangos and cantaloupe, as well as

green leafy vegetables, broccoli, carrots, Brussels sprouts and sweet potatoes. High vitamin C foods include citrus fruit, cantaloupe, papaya, mangos, peaches, kiwi, strawberries, bell pepper, broccoli, tomatoes, sweet potatoes, and potatoes with skin. ❖

## A HARVEST OF FRUIT- AND VEGGIE-FRIENDLY WEBSITES

[www.5aday.com/](http://www.5aday.com/) from the nonprofit organization, Produce for Better Health Foundation.

[www.dole5aday.com/](http://www.dole5aday.com/) from Dole.

[www.5aday.gov/](http://www.5aday.gov/) from the National Cancer Institute and the Centers for Disease Control.

[www.healthyfood.org/](http://www.healthyfood.org/) from the American Frozen Fruit Institute

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