



# Nutrition & Your Child

CHILDREN'S NUTRITION RESEARCH CENTER • 1100 BATES • HOUSTON, TEXAS 77030 • No. 4, 2004

## WHAT'S THE BEST DIET FOR KIDS?

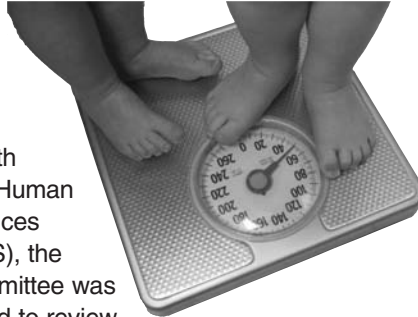
Where can parents find practical, scientifically sound nutrition advice?

"The Dietary Guidelines for Americans provide the best science-based advice available regarding what to eat to promote health and reduce the risk of chronic diet-related disease," said Dr. Theresa Nicklas, a CNRC researcher and Baylor College of Medicine professor of pediatrics.

Nicklas was one of 13 scientists who recently served on the Dietary Guidelines Committee. Convened by the U.S. Departments of Agriculture (USDA) and

Health and Human Services (HHS), the Committee was asked to review and recommend changes to the 2000 Dietary Guidelines. Their recommendations will form the foundation for the new 2005 Dietary Guidelines to be released early next year.

"A new committee of experts is convened every five years to review and update the guidelines to ensure they remain relevant and reflect the most up-



### Key Scientific Findings of the 2005 Dietary Guidelines Committee

- ◆ Consume a variety of foods within and among the basic food groups while staying within energy needs.
- ◆ Control calorie intake to manage body weight.
- ◆ Be physically active every day.
- ◆ Increase daily intake of fruits and vegetables, whole grains, and nonfat or low-fat milk and milk products.
- ◆ Choose fats wisely for good health.
- ◆ Choose carbohydrates wisely for good health.
- ◆ Choose and prepare foods with little salt.
- ◆ If you drink alcoholic beverages, do so in moderation.
- ◆ Keep food safe to eat.

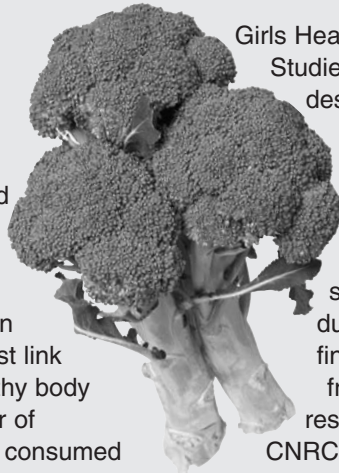
## STUDY LINKS EATING VEGGIES TO HEALTHIER BODY WEIGHT IN GIRLS

In the food-fight brewing over kids growing waistlines, the guys in 'white hats' might very well be green....and red....and yellow....and orange, say CNRC scientists.

"Our study with young African-American girls found the strongest link between diet and healthy body weight was the number of servings of vegetables consumed each day," said Dr. Karen Cullen, a CNRC behavioral scientist. "The more vegetables, other than French fries, a girl reported eating, the more likely she was to be at a healthier weight."

Other studies have shown a similar relationship between healthy weights in children and fruit intake.

Cullen's study is part of a multi-year NIH-sponsored project called the



Girls Health Enrichment Multisite Studies (GEMS). GEMS is designed to identify effective ways to prevent excess weight gains among 8- to 10-year-old African-American girls, who as a group appear particularly susceptible to this problem during childhood. Cullen's findings, as well as those from other GEMS researchers working at the CNRC, the University of Memphis, University of Minnesota and Stanford University, were recently published in a September supplement to the journal *Obesity Research*.

"Vegetables and fruit are high in fiber, which makes them 'filling,' and they tend to be low in calories," said Cullen, also

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to-date information available on the role of diet in health," Nicklas said. CNRC director, Dr. Dennis Bier, served on the 1990 Committee.

Reviewing the guidelines on a regular basis also ensures that they address current nutritional challenges.

"Our recommendations specifically advise eating more fruits, vegetables, whole grains, and low-fat milk products because recent research shows that these health-promoting foods are poorly

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## VOLUNTEERS

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

Transportation/parking available. For more information, visit the CNRC website: <http://www.kidsnutrition.org>

### New! Mighty Minerals Study

Healthy toddlers, 12 to 48 months of age, are needed for a new study of toddler nutritional needs. Email Keli, [keli@bcm.tmc.edu](mailto:keli@bcm.tmc.edu), or call 713-798-7085.

### Fitness Zone

14- and 15-year old boys and girls are needed to give their opinions about a new computer program designed to help teens get active. Stipend. Call Jennifer, 713-798-7075 or email [jld@bcm.tmc.edu](mailto:jld@bcm.tmc.edu)

### Super Tasters Study

Healthy Caucasian children, 9 years of age and younger, and their mothers are needed for a study aimed at understanding how children's food likes and eating habits change with age. Call 713-798-0425.

### Breast-Feeding: Pump Up the Volume

Breastfeeding mothers with babies less than 8 weeks old may be eligible. Mothers will receive an electric breast pump of their choice (~\$250 value) and free consultation with a certified lactation consultant. The study will compare the effectiveness of different breast pumps and strategies used to increase milk production. Sandra, 713-798-6779

### Food, Fun & Fitness

African-American girls, 8 to 10 years of age, are needed for a study that tests internet-based programs to promote healthy eating and physical activity. No meetings to attend. The entire study will be conducted over the program website. Girls must have

a computer at home with internet access and an email address. Contact Ashanti, 713-798-0504 or [acanada@bcm.tmc.edu](mailto:acanada@bcm.tmc.edu).

### Calcium Absorption in Infancy

Healthy, full term infants, from birth to 2 months of age, are needed for a new study comparing calcium absorption from breast milk versus a new formula. Breast-feeding mothers will receive free use of an electric breast pump; mothers of formula fed infants will receive free formula. Mothers may enroll before or after delivery. Call 713-798-7085.

### Beef Study: Beef Eating Enhances Fe (Iron)

Children 4 to 8 years of age are needed for a new study investigating how iron and zinc affect the absorption of each other in the body. In order to participate, children should like to eat Frito chili pie. Study requires 2 visits. Stipend. Call Paz, 713-798-7125.

### Hypertension Prevention Using Soy

Normal weight, post-menopausal women, 40 to 65 years of age, with systolic blood pressure between 130 and 160 mmHg and diastolic blood pressure between 80 and 100 mmHg, and who are not on any hypertensive medication or hormone replacement therapy, are needed for a 6-week study evaluating the benefits of soy isoflavones in hypertension prevention. Call 713-798-6783.

### Babies First Study

Breast-fed and bottle-fed infants, 2 to 11 months of age, and their mothers are needed for a study on infant eating patterns, food preferences, and growth. Stipend. Call 713-798-6740.

### Metabolism Studies

Normal-weight children ages 6 to 9 and 13 to 17, and obese teens ages 13 to 17, are needed for metabolism studies. Children should be healthy, not on medications and not have a diabetic parent or sibling. Study includes 12 weeks of supervised exercise with an exercise physiologist. Stipend. Call Amy, 713-798-7083.

### Breast-Feeding Study

New mothers, 18-35 years old, healthy, not taking birth control and non-obese who are exclusively breast-feeding infants less than 10 weeks of age are needed for a study investigating factors that affect breast milk production. Participants should not have parents or siblings with diabetes. Stipend. Call Amy, 713-798-7083.

### New! FLOW Study

Houston-area children, ages 10 to 15, and their parents are invited to join a new study designed to test whether a well-designed, family-oriented 12-week 'self-help' program is as effective as an intensive 12-week instructor-led program in helping families adopt healthier habits.

To learn more, call the FLOW Program hotline: 713-798-5769.

## EATING VEGGIES LINKED TO HEALTHIER WEIGHT IN GIRLS *(Continued from page 1)*

an associate professor of pediatrics at Baylor College of Medicine in Houston. This one-two punch means that kids who regularly choose vegetables and fruits instead of higher calorie foods end up 'filling up' on fewer calories, which in turn, makes it easier for them to avoid problematic weight gains.

For her study, Cullen compared the height and weight (BMI) measurements of 114 girls enrolled in GEMS to the findings from the girls' dietary recall records

and to the girls' and their parents' responses on dietary questionnaires.

In addition to the link between vegetable consumption and body weight, Cullen also found that the girls who ate more meals and snacks each day consumed more calories and that those who snacked more often consumed more sweetened beverages, including soda, fruit drinks, sweet tea, and sport drinks. She also noted that parents who practiced more fat-

lowering food preparation techniques, such as removing the skin from chicken, choosing lower-fat foods, and baking rather than frying foods, had daughters with fat intakes closer to recommended levels.

"This research suggests that adopting simple healthy habits, like eating more fruits and vegetables, choosing wiser snacks, and reducing fat in meal preparation, can help keep kids' weight gains in check,"

## WITH KIDS, UNHEALTHY HABITS “HANG OUT” TOGETHER

In a second GEMS study, CNRC researcher Dr. Russell Jago examined the relationship between young girls' dietary behavior and activity levels.

Jago used sensitive activity monitors to collect three days of physical activity data from two hundred 8- to 10-year-old African-American girls enrolled in the multi-center GEMS project. He then compared three measurements of physical activity recorded by the monitors to the girls' dietary recall records, which detailed their intake of fruits, vegetables, fat, calories, and sweetened beverages. The girls' heights, weights, age, and information related to their family's economic status were also collected.

“We found that the less active girls had diets that contained more fat,” said Jago, also an instructor in the

department of pediatrics at Baylor, “While those who ate more carbohydrates were also more active.”

Inactive girls also had higher BMI values, suggesting that physical activity helped to prevent weight gain. Jago's findings were also published in a September supplement to the journal *Obesity Research*.

Why girls who are less active tend to consume diets higher in fat is unclear.

“Perhaps girls who are

more health-conscious in general also choose to be more active and select healthier diets,” Jago said. “Or, perhaps high-fat diets make girls feel sluggish, which makes physical activity less attractive.” ❖



## WHAT'S THE BEST DIET FOR KIDS? (continued from page 1)

represented in the American diet,” Nicklas said.

The committee also tackled the fad-diet craze, emphasizing that no matter the source—whether carbohydrate, fat or protein—calories do count when it comes to weight management.

“The best way to attain and maintain a healthy weight is to stay within your energy needs by choosing foods wisely from within all food groups and to be physically active at least 30 minutes every day,” she said.

They also evaluated the latest science regarding the effect of different types of fats on health.

“We recommended that Americans limit *trans* fats, which increase cardiovascular disease risk, to one percent or less of total calories and that most adults consume at least two servings of fish high in omega-3 fatty acids per week,” she said. Omega-3 fatty acids, which have been shown to protect the heart, are also found in soybeans, canola, flaxseeds, and walnuts.

“The guidelines continue to be the best science-based advice available for Americans over the age of 2 on what and how to eat for health,” Nicklas said.

**Editor's Note:** In addition to providing consumers with sound and current dietary guidance, the Dietary Guidelines for Americans form basis for national health objectives, federal nutrition policies, nutrition-monitoring surveys, nutrition research, and food labeling standards. The new guidelines will also be reflected in the updated version of the Food Guide Pyramid, which is currently under development by the USDA.

To read the Committee's recommendations or learn more about the Dietary Guidelines for Americans, see <http://www.health.gov/dietaryguidelines/>

To learn about proposed changes to the Food Guide Pyramid, see <http://www.usda.gov/cnpp/pyramid-update/>. ❖

## ‘WEIGHING’ THE EFFECT OF SCHOOL SNACK-BAR PORTIONS

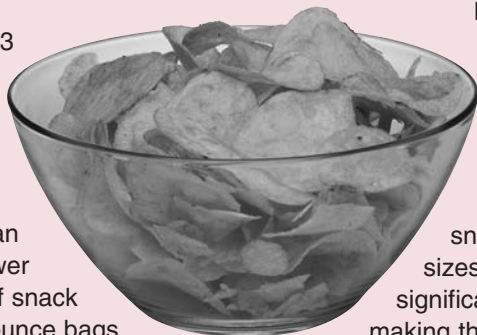
CNRC research Dr. Karen Cullen recently calculated the potential calorie-saving effect of scaling back middle school snack-bar portion sizes to ‘pre-supersize’ levels.

Using actual sales data from 23 Texas middle school snack bars, Cullen determined that students would have consumed an average of 45 fewer calories per day if snack bars had sold 1-ounce bags of chips instead of 3.75-ounce bags and 12-ounce cans of sweetened

beverages rather than 20-ounce bottles. This daily “calorie savings” is equivalent to preventing up to two pounds of excess weight gain per child over the school year. She presented

her work at the North American Association for the Study of Obesity Conference in November.

“Reducing snack-food portion sizes is an easy but significant step toward making the school eating environment healthier for children,” Cullen said.



## Nutrition & Your Child

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# NEW STUDY TESTS HEALTHY LIFESTYLE PROGRAMS FOR FAMILIES

**H**ouston-area children, ages 10 to 15, and their parents are invited to join a new study designed to test whether a well-designed, family-oriented 'self-help' program is as effective as an intensive instructor-led program in helping families adopt healthier habits.

"We hope to find the best way to help parents and kids overcome the problems and habits that prevent them from eating healthier and being more active, which we feel is the key to keeping kids' weight gains on track," said Dr. Chermaine Tyler, an instructor in the department of pediatrics at Baylor College of Medicine.

After an initial evaluation, families enrolled in the one-year FLOW Prevention Program will be randomly assigned to either a 12-week 'self-help' or 12-week instructor-led program. The instructor-led program will be provided at the new YMCA on Stella Link near the Medical Center, while the self-help arm of the project will provide a step-by-step program for parents to conduct at home. Both programs are being provided entirely free of charge to study participants and their families.

To learn more, call the FLOW Program hotline: 713-798-5769.

Find hundreds of articles on topics ranging from breast-feeding to vegetarian teens, links to great food and nutrition web sites, and back issues of *Nutrition & Your Child* on the CNRC website. Go to:

<http://www.kidsnutrition.org>

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