

WEBSITES LEAD SCOUTS TO BETTER HEALTH

Houston-area Boy Scouts are learning to eat healthy and be more physically active—while playing on the internet to earn achievement badges.

“Our *5-A-Day* and *Fit for Life* Achievement Badge programs are an exciting way for Boy Scout Troop leaders to promote healthy habits among their Scouts,” said Dr. Tom Baranowski, a Professor of Pediatrics and Behavioral Nutrition at Baylor College of Medicine.

Baranowski's team, which conducts behavior-change research, developed the two badge programs in cooperation with Houston-based Sam Houston Area Council of Boy Scouts of America.

“Most of the badge activities are completed through interactive web sites created specifically for each program,” he said.

Scouts enrolled in the *5-A-Day* badge program learn about fruits, 100-percent fruit juice, and veggies while setting and accomplishing behavioral goals to earn points toward their badge. Behavior goals include such activities as making a recipe at home or eating at least one more serving of fruit or vegetable at a specific meal or snack.

Scouts enrolled in the *Fit for Life* program learn about physical activity while setting and achieving activity goals, such as playing basketball or walking for a specific length of time, to earn their badge.

In addition to the web site activities, Scouts participate in short badge-related

activities led by Baranowski's research staff during eight regular troop meetings.

According to Baranowski, nearly 175 Houston-area Boy Scouts from more than 15 troops have

earned a *Fit for Life* or *5-A-Day* badge over the past year. The boys' troops also benefited from participating in the programs, with each receiving a

check for \$1,000 upon completion of the program.

Encouraged by the results, Baranowski is opening the program to an additional 26 Houston-area troops for the Fall of 2003.



(Continued on page 2)

SUN-BLOCKING BABIES LEADS TO NEED FOR VITAMIN D

The lack of sunshine exposure in many babies and small children has led to an upsurge in vitamin D deficiency and rickets.

“Since we don't want infants and children unprotected in the sun, we are now recommending vitamin D drops for all babies,” said Dr. Steven Abrams, Professor of Pediatrics at Baylor College of Medicine in Houston. “In addition, there is increasing recognition that maintaining adequate vitamin D intake is important for all ages, from infants to the elderly.”

The American Academy of Pediatrics recently revised its guidelines to recommend that all infants from 2 months of age,

children, and adolescents receive 200 IU of vitamin D per day. The previous recommendation was supplementation for exclusively breastfed infants at risk for developing rickets, a soft-bone disease.

Infant formulas and cow's milk are fortified with vitamin D at the levels needed by infants and toddlers. However, breast milk does not contain enough vitamin D for some babies, especially those with dark skin who have limited sunshine exposure.

Once called the “sunshine vitamin,” vitamin D is a hormone required for proper calcium absorption and bone mineralization.

“The body can make all the vitamin D it needs when the skin is

(Continued on page 2)

Deadline for new troop enrollment is Aug. 15, 2003. Additional information and troop leader application forms can be found at <http://www.kidsnutrition.org/boyscouts> or call 713-798-6737.

INSIDE THIS ISSUE

<i>Volunteer Opportunities</i>	2
<i>Study Aims To Understand Teen Inactivity</i>	3
<i>Savvy Snack Bar Marketing Could 'Ad' Up To Better Nutrition For Kids</i>	3
<i>Nutrition Tidbits</i>	4



VOLUNTEERS

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

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

Breastfeeding Study

Mothers with babies less than 8 weeks old may be eligible for a new study evaluating the effectiveness of different breast pumps. Call Cynthia, 713-798-7005.

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. Mothers may enroll before or after delivery. Call 713-798-7085.

Beef Eating Enhances Fe (Iron)

Children 4 to 8 years of age are needed for a new study investigating how soy and beef proteins affect iron and zinc absorption in the body. In order to participate, children should like to eat Frito chili pie. Stipend. Call Keli, 713-798-7085.

Osteoporosis Prevention Study

Normal weight, post-menopausal women between the ages of 40 and 60 are needed for a study evaluating the benefits of soy isoflavones in the prevention of bone loss. Call 713-798-6783.

Hypertension Prevention Study

Normal weight, post-menopausal women, 40 to 60 years of age with systolic blood pressure between 130 and 160 and diastolic blood pressure between 80 and 100 are needed for a study evaluating the benefits of soy isoflavones in hypertension prevention. Call 713-798-6783.

Baby's 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.

Boy Scout Programs

Boy Scouts ages 11 to 14 and their troops are invited to participate in two new internet-based badge programs that focus on healthy eating and physical activity. Contact Call 713-798-0509 or 713-798-7140, or visit www.kidsnutrition.org/boyscouts

Breast Engorgement Study

New mothers are needed for a study of breast engorgement. The study is designed to compare different breast pumps and strategies used to treat engorgement. Mothers may enroll before or after delivery. Call Cynthia, 713-798-7005.

BoneMax

Boys and girls ages 9 to 12 are needed for a one-year calcium-metabolism study. Stipend. Call Keli, 713-798-7085, or Holly, 713-798-7166.

Viva la Familia

Hispanic families with children 4 to 18 years of age are needed for a study aimed at understanding the factors causing childhood obesity. Stipend. Call Marilyn, 713-798-7002.

Breast-Feeding Study

Pregnant women in their last trimester who plan to breast-feed for at least three months and new mothers currently breast-feeding infants between 2 weeks and 2 months of age are needed for a study of breast-milk sugar production. Stipend. Call Andrea, 713-798-7083.

Biological Diversity of Growth

Children who have previously participated in any CNRC studies involving body composition measurements and are presently less than 22 years old, as well as Hispanic, African-American, and Caucasian young adults 19 to 22 years of age are needed for this study. Stipend. Call Marilyn, 713-798-7002. ❖

SUN BLOCKING/VITAMIN D *(Continued from page 1)*

exposed to sunlight," said Abrams, also a researcher at the Children's Nutrition Research Center at Baylor. "However, the dangers of skin cancer have caused us to recommend that everyone, including young infants, be protected with a sunblock when exposed to sunlight. That sunblock also prevents the production of vitamin D."

Vitamin D is not easily obtained through diet. Certain types of fish are good sources, and some soy beverages, fruit juices, and ready-to-eat cereals are fortified with the vitamin. Checking food labels is the

best way to see if vitamin D has been added.

While the emphasis on vitamin D's benefits has focused on its role in calcium absorption and strengthening bones in children, Abrams said more evidence is pointing to the health benefits of the vitamin throughout life.

"It may have a role in preventing some diseases, like cancer," he said. "And adults who take calcium without taking vitamin D may not be getting the most benefit from the calcium." ❖

WEBSITES LEAD SCOUTS TO BETTER HEALTH

(Continued from page 1)

Once the local testing is completed, Baranowski hopes to roll out the programs nationwide through the Boy Scouts of America organization.

"We know that simply telling kids that eating fruits and vegetables and being physically active will prevent obesity, cancer, heart disease, and diabetes won't motivate them to make healthier choices," Baranowski said.

"We believe that programs that link healthy behaviors to something that kids already want—like achievement badges for Boy Scouts, and that delivers the message in a fun, interactive way, like playing on the internet, will." ❖

STUDY AIMS TO UNDERSTAND TEEN INACTIVITY

Simply thinking they're "just not athletic" could be keeping "couch-potato" kids rooted to the sofa.

"People tend to limit their activity level based on how they see themselves athletically," said CNRC behavioral scientist Dr. Cheryl Braselton Anderson. "To do vigorous exercise, like running, swimming, or cycling, or any type of physical activity, you have to see yourself as a person who does these things."

Anderson believes that the tendency to be active (or inactive) is maintained by a feedback loop, with people's "athletic identity" determining what activities they do, and the activities they do influencing how they see themselves.

"People who develop a positive athletic identity are more likely to stay active over the years, while having a poor athletic identity is related to

inactivity," said Anderson, an Assistant Professor of Pediatrics at Baylor College of Medicine.

Anderson also believes that individuals who have a positive athletic identity likely developed it in childhood or adolescence.

To test her theories, Anderson is launching a four-year study, which will follow over 900 middle school students as they make the transition to high school. Research shows this period tends to coincide with a marked drop in kids' level of physical activity. The study will measure whether the teens' athletic self-perceptions change over time and if so, what influences this.

The study is being funded by a \$1.2 million grant from the National Cancer Institute/National Institutes of Health, where increasing physical activity and decreasing sedentary behavior has become a research priority.

Anderson hopes the study's findings will eventually lead to more school and community-based programs that help less athletically talented children develop more positive athletic identities.

"To change ingrained identities like 'I'm a poor student' or 'I'm not athletic,' kids need the opportunity to have positive experiences," she said. "Although I'm a big supporter of team and individual competitive sports, not everyone can be on the 'A team' or the 'B team'. We have to make a place for all kids."

Anderson also believes that children need to know they can be physically active without being a star athlete. "Kids have to know it's OK to run slow and OK to be the last one," she said. "They don't have to be Lance Armstrong to ride a bicycle." ❖

SAVVY SNACK BAR MARKETING COULD 'AD' UP TO BETTER NUTRITION FOR KIDS

CNRC behavior scientists are taking a page out of the food marketers' handbook to entice middle school students to eat healthier.

In a study involving more than 10,000 sixth, seventh, and eighth graders, marketing research strategies commonly used by food companies to sell snacks like soda and chips are being used to make school snack bar offerings healthier and increase students' fruit and vegetable consumption.

"Figuring out how to get kids to buy healthy foods like fruits and vegetables with their lunch money is as much a marketing challenge as it is a health issue," said Karen Cullen, Ph.D., an Assistant Professor of Pediatrics at Baylor College of Medicine.

According to Cullen, kids' consumption of fruits and vegetables slides significantly between elementary and middle school, a time when they begin having access to snack bars. Snack bars, favored for their convenience, tend to offer foods like pizza, burgers, fries, and chips—but no fruit or low-fat vegetables.

All 30 full-color, 11X17 posters developed for this study can be viewed/downloaded from the CNRC website: www.kidsnutrition.org. Click on "Posters" under Nutrition News & Tools.

"The experience of foodservice managers is that kids won't buy fruits or low-fat vegetables at the snack bar," she said. "We decided to see whether we could change that."

Cullen's team put on their "marketing caps" to kick off the study. Their goal: learn what middle school students—their target market—thought.

"A basic tenet of marketing is the need to understand your customer," she said. "We needed to hear from students what fruits and vegetables they liked and what they thought they would buy—and why."

Through focus groups and written surveys, the team gained important marketing insights, such as kids who liked apples and oranges wouldn't buy a whole

piece of fruit because it was hard to eat or messy. On the other hand, apple slices offered with a small side of caramel dip got enthusiastic approval.

Armed with this knowledge, Cullen's team crafted a two-pronged marketing plan. First, the team worked with foodservice managers to develop healthy kid-friendly products, such as salad "shakers," veggie and dip "grab bags," and bananas with a small side of chocolate dip, for the snack bars.

Then they launched an "advertising campaign," consisting of poster ads and cafeteria table tents. "The ads connected eating the new snack bar fruit and vegetable products with the things that kids told us they want most, like friends, being cool, and having fun," Cullen said.

These are the same feelings that snack food companies tap into so effectively with ads for high fat/high sugar foods aimed at kids.

"Marketing is used to sell everything from shoes to sodas to kids. Why shouldn't it be used to sell healthy foods at school snack bars, too?" she said. ❖

Nutrition & Your Child

Baylor College of Medicine
USDA/ARS Children's Nutrition Research Center
Office of Public Affairs
One Baylor Plaza, Room 176B
Houston, Texas 77030

Non-Profit Org.
U.S. Postage
PAID
Houston, Texas
Permit 1492

NUTRITION TIDBITS

Q Any tips for getting my teens to eat healthier this summer?

A Stock the kitchen with healthy, easy-to-eat foods that your kids like, say CNRC nutritionists. They offer these tips:

- Let kids help shop for healthy mid-day meal and snack foods.
- Stock the refrigerator with individual cartons of 100 percent fruit juice, small cans of fruit with pop-top lids, and pre-cut fruits and vegetables to partner with a favorite dip. Freeze grapes and slices of bananas for bite-size "cool" treats and fruit juice "cubes" to float in mineral water.

- Keep healthy crunchy snacks on hand, such as pretzels, breadsticks, whole-wheat crackers, ready-to-eat cereals, baked chips, and low-fat microwave popcorn.
- Think grab 'n' go for lunchtime fixin's. Stock up on whole wheat bread, low-fat deli meats, and peanut butter for sandwiches; flour tortillas and low-fat cheeses for microwavable quesadillas; ready-to-eat salad mixes and pre-cooked chicken breasts for salads; and low-fat yogurt and granola to top off fruit snacks.
- Don't forget the healthy thirst quenchers. Good choices include 100 percent fruit juice, bottled water, mineral water, and low-fat flavored milk. ❖

Nutrition & Your Child is published quarterly by Baylor College of Medicine as a research and information update for Center volunteers and supporters.

Send comments or change of address information to Joan Clark, RD/LD, MBA, Children's Nutrition Research Center, 1100 Bates Street, Houston, TX 77030-2600.

E-mail: cnrc@bcm.tmc.edu
URL: <http://www.kidsnutrition.org>

Center Director

Dennis M. Bier, M.D.

Newsletter Advisors

Judy M. Hopkinson, Ph.D.
Janice E. Stuff, Ph.D., R.D., L.D.
Karen Konzelmann, M.S., CHES
Karen Hirschi, Ph.D., R.D.
Debby Demory-Luce, Ph.D., R.D., L.D.
Janice Baranowski, M.P.H., R.D.

Editor

Joan Carter Clark, M.B.A., R.D., L.D.



The Children's Nutrition Research Center is operated by Baylor College of Medicine, in cooperation with Texas Children's Hospital, for the Agricultural Research Service of the United States Department of Agriculture.

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