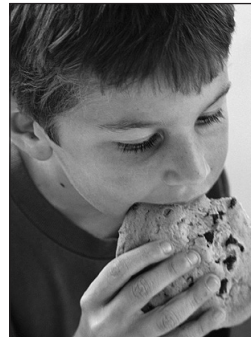


BIG STEPS NEEDED TO REVERSE CHILDHOOD OBESITY

At the rate many overweight kids are downing excess calories, they'll need to walk three miles or more a day to just prevent further weight gain, say CNRC researchers.

"Although weight loss is recommended for overweight children, we found that many are continuing to gain weight at alarming rates," said Dr. Nancy Butte, a professor of pediatrics at Baylor College of Medicine. A child is considered overweight if his or her BMI is at or above the 95th percentile for age and gender.

Butte, the director of the CNRC's energy metabolism unit, measured body composition changes among 337 Hispanic children ages 5 to 19 years over a one-year period. She found that most overweight children were even more overweight one year later, with average weight gains equaling 16 pounds. Children who



had a BMI below the 95th percentile at the beginning and end of the year gained less, averaging 9 pounds, while those whose BMI jumped above the 95th percentile during the year gained an average of 15 pounds.

From these findings, Butte determined that 90 percent of these overweight children would need to experience a caloric deficit of at least 260 calories per day to simply prevent further weight gain.

A 260 calorie deficit is equivalent to a three-mile or 60-minute walk.

"Halting the epidemic of childhood obesity will take much more than helping children make small changes in diet and physical activity," Butte said. "It will require a significant and concerted societal effort to change the way our children are eating and to increase their physical activity." ♦

TOO MUCH COUCH-TIME ZAPS THE ENERGY OF TIRED STUDENTS

Wearry students may want to head for the couch on spring break, but doing so could zap their energy level even more.

"Regular physical activity makes people feel healthier and more energetic, not less," said Dr. Cheryl Braselton Anderson, a researcher with

the CNRC's behavioral nutrition and physical activity section and an assistant professor at Baylor College of Medicine. "But, because this isn't intuitive, parents often need to help kids make the connection. It can be challenging, but once kids get it, they're more likely to enjoy being active."

Anderson said that participating in activities together is one of the best ways to encourage family fitness without a "boot camp" mentality.

"Take your kids and their friends to a skating rink or golf course, or organize a basketball game in the driveway or at a neighborhood court," she said. "Parents give their children the best kind of support when they do things with them."

Anderson offers these additional tips to help families get and stay moving:

- Buddy up. Ask a child to be your morning or afternoon 'walking buddy.' Walking together is more fun and can be a special 'together



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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/studies>

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

Breast Engorgement Study

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

Iron Absorption From Rice Cereal Study

Healthy, 15- to 18-month-old toddlers are needed in a new study comparing two forms of iron used to fortify infant rice cereal. The study requires four 1-hour visits to the CNRC. Stipend. Call Paz, 713-798-7166.

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. There are no meetings to attend. The entire study will be conducted over the Internet, on the program web site. To participate, girls must have a computer at home with internet access and an email address. Contact Ashanti, 713-798-0504 or 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. Breastfeeding 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 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 Using Soy (OPUS)

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

Hypertension Prevention Using Soy

Normal weight, post-menopausal women, 40 to 60 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, 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, overweight teens ages 13 to 16, and normal-weight, healthy adults ages 18 to 35 are needed for metabolism studies. Stipend. Call Amy, 713-798-7083.

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 Amy, 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. ♦

TOO MUCH COUCH-TIME ZAPS THE ENERGY OF TIRED STUDENTS

(Continued from page 1)

- time' for parent and child.
- Focus on fun. Any activity that gets the family up and moving is worthwhile, even a trip to the zoo or dancing in the kitchen.
- Be creative. When walking, toss a Frisbee, bounce a ball back and forth, sing songs, or take turns telling tales that make each other laugh.
- Set goals. Buy inexpensive pedometers and have everyone tally their steps for one week. Challenge them to increase their steps by 10 percent each week.
- Track results. Post a chart on the refrigerator to track progress, such as steps per week or the number of days/hours spent doing some type of physical activity.

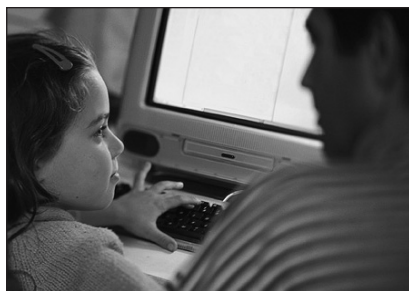
"Family activities make positive family memories," Anderson said. "Kids will always remember those nightly walks around the neighborhood or the great laugh they had when Mom or Dad fell on their rears at the skating rink," she said.

WEB PROGRAM PROMOTES HEALTHY EATING, PHYSICAL ACTIVITY

Cartoons and computer games, and the sedentary lifestyle they promote, have long been blamed for weight gain trends among children — Yet they could end up the very weapons researchers need to fight the epidemic of obesity among high-risk kids.

“We want to understand how we can best use e-health, or electronic, interactive media, to influence behavior and health habits of children,” said Dr. Deborah Thompson, a CNRC behavioral nutrition researcher.

Thanks to a grant from The Robert Wood Johnson Foundation, Thompson will soon be examining the effectiveness of an interactive program designed to promote healthy eating and physical activity among young African-American girls — a group that statistics show is at



an increased risk for becoming overweight.

“We believe that healthier behaviors set in place while young may

help African-American females avoid excessive weight gains,” said Thompson.

Baylor was one of 18 sites chosen by RWJF through its \$4.8 million Health e-Technologies

Initiative to look at how interactive technologies can be better used to help improve health behavior and disease management. The Robert Wood Johnson Foundation is the nation’s largest philanthropy devoted exclusively to health and health care.

For enrollment information, call Ashanti Canada, the study’s recruiter, at 713-798-0504. ♦

INTERNATIONAL PROGRAM AIMS TO DEVELOP HEALTHIER CROPS

CNRC plant scientist focused on increasing the amount of key nutrients in staple foods in developing countries will play an important role in a new international research program called HarvestPlus.

“The HarvestPlus biofortification program is bringing together plant scientists and nutrition experts to develop crops with higher nutritional value in an effort to battle malnutrition in developing countries,” said Dr. Michael A. Grusak, a USDA plant physiologist with the CNRC and associate professor of pediatrics at Baylor. The program is being spearheaded by the International Center for Tropical Agricultural Research and the International Food Policy Research Institute.

For the project, Grusak and other experts from several US and foreign academic institutions, industry, and national and international plant breeding centers will be working to increase the

levels of key micronutrients in six major staple foods — rice, maize, wheat, bean, sweet potato and cassava. Grusak’s work will focus on using molecular tools to develop crop varieties that are richer in iron, zinc, and provitamin A carotenoids, and can thrive in specific regions.

Chronic deficiencies of iron, zinc, and vitamin A affect millions of children and adults in developing countries and can lead to impaired immune function, severe anemia, blindness and death.

“We know that people in many developing countries are not getting enough of these nutrients and that fortification and supplementation programs have not been sustainable,” said Grusak. “By developing nutritionally enhanced plants that are specific to certain soil types, environmental conditions and disease pressures, there can be a greater, long-term impact on a population.” ♦

SUPPLEMENT COULD HELP TINIEST NEWBORNS

Giving the tiniest newborn infants more glutamine, a nutrient that plays an important role in intestinal health, might help them avoid serious gastrointestinal complications, say CNRC researchers.

“We are studying whether glutamine supplementation can help prevent two very serious intestinal complications that primarily afflict very-low-birth-weight infants,” said Dr. Carlos Lifschitz, a CNRC pediatric gastroenterologist. Very-low-birth-weight infants are those born weighing less than one and one-half pounds.

The project is being conducted at two hospitals in Johannesburg, South Africa that have an extraordinary high number of very-low-birth-weight deliveries each year. Lifschitz’ team is teaching researchers there how to measure the effect of glutamine on the infants’ intestinal health, while Dr. Sarika Peters from the Meyer Center of Texas Children’s Hospital is training them to evaluate the babies’ neurodevelopment. The project is being supported by a three-year grant from the Gerber Foundation.

No one knows why very-low-birth-weight infants are prone to such severe GI complications, although theories suggest that the immaturity of the infants’ intestinal system might be the culprit. Recent studies also suggest that a shortfall of glutamine can increase the intestine’s susceptibility to damage.

“Very-low-birth-weight infants are under a great deal of stress, both developmentally and physically, which we believe could compromise their ability to produce enough glutamine to meet their needs,” Lifschitz said.

Nutrition & Your Child

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NUTRITION TIDBITS

Q

My friend said I shouldn't give my 2-month-old daughter bottles of water. Don't babies need water?

A

Your friend is right. According to CNRC pediatrician Dr. William Heird, healthy babies do not need, nor should they be given, bottles of water or any other liquid except breast milk or iron-fortified infant formula during the first year of life. The reason is that a baby's stomach is quite small and if she 'fills up' on water she might not drink enough formula or breast milk to get all the nutrition she needs to stay healthy and

grow. So don't worry, as long as your daughter is feeding well, she is getting all the "water" or "liquid" she needs from the breast milk or iron-fortified infant formula she's consuming.

The exception to this "rule" is when a baby is sick and losing water from his or her body through excessive sweating or diarrhea. However, a sick baby should ALWAYS be seen by a doctor who will make suggestions to ensure that the baby recovers and does not become dehydrated during the illness. Of course, well babies need to see their doctor on a regular basis, too. ♦

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:

<http://www.kidsnutrition.org>

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