

TV EATING UP FAMILY MEALTIME

A generation of "TV-dinner" kids might be learning their eating habits from Homer Simpson, according to a recent CNRC survey of children's eating habits.

Survey data showed that 42 percent of time that Houston-area middle-school children ate dinner at-home, they were parked in front of the "tube."

Nearly 300 fourth- through sixth-graders took part in the one-week survey.

"Eating an occasional meal while watching television can be a fun treat for families," said Dr. Karen Cullen, a CNRC behavioral nutritionist and Baylor Assistant Professor of



LESS SUGAR WORKS GREAT FOR TINY NEWBORNS

Tiny premature infants can rev up their "metabolic engines" to produce their own blood glucose using intravenous fats and amino acids provided during the first days of life.

These CNRC research findings suggest that the amount of glucose routinely provided via intravenous feedings can be safely reduced, which could lower the risk of complications for some infants.

"Healthy, full-term infants begin converting their glycogen, fat and protein stores into glucose to feed the brain as soon as the umbilical cord is cut," said Dr. Agneta Sunehag, a CNRC researcher and Baylor Assistant Professor of Pediatrics. "But, very premature infants are born before these stores develop and are too young to suckle. So, they are given intravenous nutrition immediately after birth, including glucose at high infusion rates, to prevent a brain-damaging drop in blood glucose levels and provide important calories."

However, some preemies are unable to handle high glucose infusion rates and develop high blood glucose levels, a condition called hyperglycemia, Sunehag said. When this happens, precious sugar, water and salts are lost through the urine, which can lead to dehydration and electrolyte imbalances.

Excess glucose also affects the amount of carbon dioxide produced, which can exacerbate lung problems.

"But, if we knew that premature infants could produce their own glucose from fat and amino acids, we could substitute these fuels for some of the glucose in IV solutions. This would help us avoid hyperglycemia, while providing enough calories to prevent increasing the risk of hypoglycemia, or low blood sugar," she said.

To test the metabolic prowess of her 5-day-old charges, Sunehag slowly cut back glucose infusion rates while providing amino acids and a fat emulsion.

Non-radioactive "tracers" confirmed that the infants were able to use intravenous amino acids and fats to keep their blood glucose levels stable, even when the glucose infusion rate was cut by 75 percent.

Sunehag is now working to determine the optimal mix of amino acids, fats and glucose for intravenous feedings.

"Just 10 years ago, life for the tiniest of premature infants was so precarious that little thought was given to nutrition. Now, medical advances help 90 percent survive. So, we must learn how to help them not only survive, but thrive and grow healthy and strong," she said. ❖

Pediatrics. "But keep in mind that family mealtime is extremely important for children from both a nutritional and a developmental standpoint."

Survey results suggest that concern over these "TV-dinner" kids might be warranted. Overweight children reported eating nearly 50 percent more dinners while watching television than their normal-weight peers.

"We know there's a link between the number of hours children watch television and weight problems," Cullen said. "We also know that people who watch television while eating tend to tune out their natural hunger and satiety cues, which encourages overeating."

Escalating TV-time can also increase the influence of television

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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: www.bcm.tmc.edu/cnrc/volunteer.htm.

NEW!! Viva La Familia

Hispanic families with children 4 to 18 years of age are needed for a new Health and Nutrition Study. Stipend. Call Marilyn, 713-798-7002.

Baby-friendly Neighborhoods

Moms-to-be and new moms living in Houston-area zip codes 77003, 77011, 77012, 77020, 77023, and 7029 are needed for a study monitoring infant feeding behavior during the first year of life. Free breastfeeding consultations and information in Spanish or English. Call Sandra, 713-926-3372.

Breastfeeding Peer Counselor Program

Bilingual (Spanish/ English) women can receive training to become peer counselors who provide breastfeeding assistance to new mothers and babies. Training/parking provided. Call Judy, 713-798-7008.

Breastfeeding Study

Pregnant women in their last trimester who plan to breastfeed for at least three months and new mothers currently breastfeeding infants between 2 weeks and 2

months of age are needed for a study of breast-milk sugar production. Stipend. Call Andre, 713-798-7083.

Formula Composition Study

Formula-fed infants, birth to 4 weeks of age, are needed for a study to help determine whether infant formulas containing more of an essential fat thought to help regulate energy metabolism is beneficial. Formula/baby portraits provided. Call Betty, 713-798-7064.

Infant Formula for Newborns

Formula-fed and previously breast-fed infants, up to 4 weeks of age, are needed to help determine if a formula developed specifically for newborn infants is beneficial. Formula/stipend/infant portraits provided. Call Betty, 713-798-7064.

Formula for Weaning Babies

Formula-fed and previously breastfed infants, 3 to 6 months of age, are needed for a study to determine whether an infant formula specifically designed for use during the weaning period is advantageous. Formula/stipend/infant portraits provided. Call Betty 713-798-7064.

Biological Diversity of Growth

Hispanic, African-American, and Caucasian young adults, 19 to 22 years of age, as well as any child up to 22 years of age who has ever participated in CNRC studies involving body composition measurements, are needed for a study on growth. Stipend. Call Marilyn, 713-798-7002.

GEMS (GIRLS HEALTH ENRICHMENT MULTI-SITE STUDY)

African-American girls, 8 to 10 years of age, who like to share their opinion and earn a little money, are needed for a one-hour focus group. Call Judy, 713-798-7126.

Dietary Carbohydrates and Sugar Metabolism

Overweight teens, 13 to 16 years of age, are needed for a study designed to determine whether overweight children metabolize sugar differently than their lean counterparts. Stipend. Call Andrea, 713-798-7083. ❖

MALNUTRITION MORTALITY STUDIED

Correcting a critical shortage of glutathione (GSH), the body's main antioxidant, could help reverse a life-threatening malnutrition syndrome that affects millions of Third-World children each year, say CNRC scientists.

Their research could also help solve a nutritional mystery that has puzzled scientists for more than 30 years: Why do food shortages trigger two very different malnutrition syndromes—one often lethal, the other easy-to-treat—among children living in famine-stricken areas?

"About half the children who suffer severe protein-calorie malnutrition develop a syndrome called marasmus," said Dr. Farook Jahoor, a Baylor Professor of Pediatrics. "Although these children have the stick-thin appearance many associate with severe malnutrition, they are quite easy to treat because they have few complications and nearly always survive."

In contrast, malnourished children who develop a syndrome known as kwashiorkor, can suffer edema, an enlarged liver, poor immune function, and sometimes, even congestive heart failure. Although edema often masks their physical wasting, these children are seriously ill, slow to recover and can suffer death rates as high as 25 percent.

Jahoor suspected that many of the complications associated with kwashiorkor could stem from oxidative cell damage caused by a shortage of GSH.

"Without the neutralizing effect of glutathione, cell membranes are vulnerable to free-radical damage, the immune system can't function properly and harmful toxins build up, which could be linked to fatty deposits in the liver and other symptoms seen in kwashiorkor," he said.

A study conducted at the Tropical Metabolism Research Unit, University of the West Indies, in Jamaica confirmed his suspicions.

"Children hospitalized with kwashiorkor had much lower GSH synthesis rates and blood levels, and higher levels of compounds that signal oxidative cell damage than those with marasmus," he said.

Jahoor traced the GSH shortfall to low blood levels of two amino acids: cysteine, which the body needs to make GSH, and methionine, which can be converted into cysteine.

During the second phase of the study, children hospitalized with kwashiorkor are being given cysteine supplements to improve their GSH status. Although preliminary results are promising, Jahoor cautions that the real test will be whether the therapy speeds the children's recovery and improves survival rates.

"Every year, more than 200 million children are affected by food shortages. Until the factors causing world famines are resolved, we hope our work will help ease the suffering and reduce deaths among the children," he said. ❖

TIPS CUT MEAL-PREP STRESS

With a little planning, a home-cooked meal can be on the table in about 30 minutes—less time than a pizza delivery. To help shift meal-prep into high gear, CNRC nutritionists offer these tips:

Get Organized

- Start a list of family favorites, categorized by preparation time.
- Stock up on frequently used non-perishables. Keep quick-to-heat/prepare frozen meals on hand for nights when meal-prep time is tight.
- Make a weekly meal plan. Check family members' schedules before deciding which nights to cook. Asking each family member to pick and schedule a family meal helps increase family involvement.
- Keeping a running grocery list. Categorize lists to streamline shopping and reduce last-minute trips to the store.

Work Smart

- Think like a chef. While tonight's dinner is cooking, start on tomorrow's. Having vegetables peeled and chopped can cut prep time in half.
- Capitalize on convenience. Time-savers include pre-packaged salad greens, tomato sauces, individually quick-frozen chicken pieces, bake-and-serve rolls, and pre-cut, canned and frozen fruits and vegetables.
- Cook once, eat twice. Double favorite recipes, freezing extra servings in easy-to-thaw portions. Freeze extra cooked chicken breasts for quick salads, quesadillas, enchiladas, and soup.
- Invest in quality. The right tools, like a large, non-stick skillet, sharp knives and a large cutting board, make meal-prep faster and easier.

Be Flexible

- Dinner does not have to be meat-and-potatoes. Consider making breakfast for dinner or schedule a soup/salad/sandwich night. ❖

TABLE-TALK STRATEGIES

After a busy day, family members are often tired and hungry—hardly the frame of mind for great conversation.

To help jump-start dinnertime table talk, Dr. Tom Baranowski, a CNRC psychologist and Baylor Professor of Pediatrics, offers the following tips:

- If family dinners are not now common, begin by scheduling just one per week, choosing a night when everyone can be present.
- Keep conversations interesting. Reciting a litany of work-woes or reviewing chore lists does little to build family ties or expand a child's view of the world.
- Create rituals. For example, have each family member plan to share a statement about something interesting they recently did or learned. To help children feel more comfortable expressing their thoughts and feelings, parents should offer their statements first.
- Keep comments positive and supportive. Suggest an after dinner talk if children bring up problematic issues. This allows the child to save face and keeps the dinner table a safe place for children to bring up difficult topics. ❖

Mealtime *(Continued from page 1)*

programming on children's food preferences.

According to Cullen, food commercials are designed to sell product. As a result, they tend to tie the use of a food to positive feelings, such as fun, physical attractiveness or popularity, rather than hunger or health. They also rarely show how the food fits into a healthy diet.

"Studies show that children tend to request those foods most frequently advertised on television," she said. "Unfortunately, the foods most heavily advertised tend to be low in nutritional value."

On the other hand, family-focused meals tend to have a positive influence on children's eating habits.

"Children whose families keep the TV off during mealtimes tend to consume more fruits and vegetable, less saturated fat and more of several key nutrients," Cullen said.

Families that tune into each other instead of the TV during meals also gain an opportunity to talk and connect.

"Positive family mealtime conversations build children's self-esteem and foster trusting relationships, which can help families talk through tough issues when they arise," she said.

Research agrees. According to the White House Council of Economic Advisers, the more meals that teens eat with their families, the less likely they are to smoke or use alcohol or drugs.

"Family meals are key to helping children learn healthy eating and life skills," Cullen said. "Parents need to turn off the television during meals and engage their children." ❖

Related Links

Delicious Decisions

www.deliciousdecisions.org/

Busy Cooks

www.busycooks.about.com

Meals For You.com

www.mealsforyou.com/

YMCA Parent - Teen Survey

www.whitehouse.gov/WH/EOP/First_Lady/html/teens/survey.html

Nutrition & Your Child

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TIDBITS

Neonatal Nutrition Conference

Houston — March 4-7

For health care professionals. For more information on the conference visit the web site www.neonate.net/nutritionconference or, e-mail Diane M. Anderson, Ph.D., R.D., dianea@bcm.tmc.edu.

Children's Nutrition Expo 2001

Houston—March 3

Houston-area families are invited to join local nutrition professionals in a fun-filled National Nutrition Month celebration at the Museum of Health and Medical Science, March 3, from 11 a.m. to 4 p.m. ❖

Subscriber Alert!

Although *Nutrition and Your Child* will soon switch to an E-mail/internet-only newsletter, the "hard-copy" format will still be available for downloading via PDF (Adobe Acrobat) files on the CNRC website.

To avoid missing out on valuable news and advice from CNRC researchers, get future issues delivered right to your desktop! Go to the CNRC homepage, www.bcm.tmc.edu/cnrc, and click on "Sign up now for our FREE Nutrition Newsletter." It's that easy! ❖

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

Comments or changes of address information should be sent to Nutrition Information Service, Children's Nutrition Research Center, 1100 Bates St., Houston, Texas 77030-2600, (713) 798-7017.

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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.