The WIC Wire

Utah Department of Health • WIC Program

VOLUME 10, ISSUE 5 MAY 2016

eWIC Design Contest Extended

We are both excited and anxiously waiting for eWIC (aka EBT) to arrive soon. One of the fun parts has been organizing a design contest to come up with ideas for our eWIC card. In order to give more of you an opportunity to participate in the contest, we have extended the deadline to June 30th. See details below. We are excited to review your submissions!

Help us design our new eWIC card!
This card will replace the paper checks.

eWIC design contest

Open to all WIC staff!

Guidelines:

The word "WIC" and/or WIC logo may not be used.

Images used must be: public domain, an image which can be purchased, or an image you created or own.

The image must fit on a standard credit card size.

Please email your design to pvelez@utah.gov by **June 30, 2016.**

A panel of local and state judges will be selected to review entries and announce the winner in the summer.

The winner will be recognized in the WIC Wire and will receive a $50 gift card!

The first 5 submissions will receive a $10 gift card.

The winning staff submission will be considered among the final card designs.

QUESTIONS? CALL 1-801-273-2991

INDEX

Sleep Disruption and Obesity 2

Infant BMI 3

Nutrition Service Standard 4

CHILREN'S NUTRITION RESEARCH CENTER RESEARCHERS FIND LINK BETWEEN SLEEP DISRUPTION AND OBESITY IN MICE

Disruption to regular sleep cycles may contribute to the dramatic increase in obesity in the United States, but the biological mechanism underlying this has remained a question.

In a recent study, researchers at the USDA/ARS Children's Nutrition Research Center at Baylor College of Medicine have found that disruption of circadian rhythm, or sleep disruption, affects regulation of a hormone called leptin – a key hormone involved in weight regulation. The study appeared in the journal *Cell Metabolism*.

"Our findings uncover a mechanism by which circadian disruption may promote obesity even in people who are eating a healthy diet," said Dr. Loning Fu, assistant professor of pediatrics at the CNRC. "They suggest that avoiding frequent disruption of the sleep cycle may be important for avoiding obesity and maintaining a normal body weight."

Researchers found that frequent sleep disruption leads to changes in how the brain senses leptin – a so-called "neuroendocrine dysfunction." In particular, it disrupts the proper levels of leptin in the blood. Leptin is produced by fat tissue, and its levels increase when fat storage increases (i.e. in obesity). Additionally, like many other hormones, its levels vary over the normal 24-hour circadian cycle. Leptin normally interacts with a brain center called the arcuate nucleus, where it acts to decrease food intake and stimulate energy expenditure. Thus, leptin decreases fat mass, in a normal feedback loop that helps to maintain stable body weight.

If the brain loses its sensitivity to leptin, the brake on fat storage is lost and excess fat accumulates. This is called leptin resistance, which is a hallmark of obesity in humans.

This study showed that frequent disruption of circadian rhythm in mice inhibits leptin function in the arcuate nucleus, even when blood leptin levels are very high. This results in an increase in fat storage and the development of obesity, even in mice eating a normal healthy diet, Fu said.

"Previous reports have described the phenomenon of leptin resistance in obese humans and mice, and also have found that circadian disruption causes weight gain in both species. Our study is one of the first to connect these very different observations by showing that circadian disruption directly causes leptin resistance," she said.

This points to the importance of our body's internal function in weight control, in addition to external variables like diet and physical activity.

"Current diet and exercise programs for overweight individuals, especially for school children, are often inefficient for maintenance of long-term weight loss because the role of endogenous physiology in weight control is not taken into consideration," Fu said. "Our discovery may lead to the design of more efficient programs for body weight control by decreasing the risk of both external and internal obesity risk factors for all age groups. However, adolescents may benefit most from our discovery because, compared to adults, adolescents experience a higher risk of lacking of hormonal stability and often experience sleep disruption."

Others who contributed to this study include Nicole Kettner, Sara Mayo and Jack Hua, all of the CNRC; David Moore, of the department of molecular and cellular biology at Baylor College of Medicine; and Choogon Lee of Florida State University.

Support for the research came from the National Institutes of Health and the U.S. Department of Agriculture.

Infant BMI is good predictor of obesity at age two

BMI at two months is more accurate than measuring weight-for-length

Date: April 22, 2016

Source: Children's Hospital of Philadelphia

Summary: Babies with a high body mass index (BMI) at age two months are at risk for obesity at age two years, say pediatric researchers. The authors say that BMI better predicts early childhood obesity than weight-for-length, the current standard measurement.

"An important factor in preventing obesity in adults is identifying at-risk individuals as early as possible, when interventions may have the greatest effect--even during infancy," said lead author Sani Roy, M.D., a pediatric endocrinology fellow at The Children's Hospital of Philadelphia (CHOP). "However, there is no currently accepted definition for excess body weight below age two."

Roy added that the American Academy of Pediatrics currently recommends using weight-for-length (WFL) as a standard measurement during infancy, and that WFL is also predominantly used worldwide.

BMI is widely used in children over age two years to identify those at risk for health complications of excess weight or future obesity. BMI charts are available from birth to age two, but are generally not used in clinical care. Unlike BMI charts, the more widely used WFL charts, do not have an age component; therefore, children with similar WFL may differ greatly in age. Because gains in weight and length occur at different rates during infancy, it is important to account for both age and length when evaluating excess weight gain.

In the current research, the study team analyzed medical records of nearly 74,000 full-term infants seen during their first two years at well-child visits in the CHOP pediatric network from 2006 to 2011.

The authors found it remarkable that 31 percent of two-month-old babies with BMI at or above the 85th percentile were obese at age two, compared to 23 percent of two-month-olds at the 85th percentile by WFL. At the 97.7th percentile for BMI at age two months, 47 percent of babies were obese at age two years compared to 29 percent by WFL.

"To our knowledge, this was the first study to compare BMI to WFL in predicting future obesity risk in a large, diverse cohort of full-term infants," said senior author Babette S. Zemel, Ph.D., the director of CHOP's Nutrition and Growth Laboratory. "We found that while BMI and WFL agreed after age six months, high BMI at age two months was a better predictor of obesity at two years of age than WFL. We recommend that clinicians consider measuring BMI in early infancy."

Updated protocol on use of antidepressants during lactation

Breastfeeding Medicine published a revised protocol from the Academy of Breastfeeding Medicine about the use of antidepressants during lactation. The guideline suggests trying psychological or cognitive behavioral therapy if the symptoms are mild to moderate, and to monitor the results. If that is not effective, antidepressant medications are suggested. Both psychological/cognitive behavioral therapy and medications are recommended for women with moderate to severe symptoms or those with stressors or interpersonal issues. An individualized risk-benefit analysis must be made for each case.

Full Article: http://online.liebertpub.com/doi/full/10.1089/bfm.2015.29002

Updates

Breastfeeding Aids (Serialized and Non Serialized)

P&P Nutrition Services-Breastfeeding/Breastfeeding Promotion and Support/Breastfeeding Aids, pg 4:

XII. Each agency must maintain a log documenting issuance of all breastfeeding aids, including:

a. Participant name and WIC ID number

b. Supply issued/reason

c. Instructions provided

d. Date issued

XIV. Appropriate documentation for issuance of this item must be completed. This includes:

a. Complete the BF Equipment panel under the participant's record for nonserialized or serialized item(s) provided (including supply issued, date issued, reason(s) issued).

b. Upon return of the serialized item, complete information under Serialized Inventory Item Disposition.

c. Document instructions provided under Nutrition Education, Nutrition Education Covered: Breastfeeding: Instructions for BF Equip/Pump/Aids. Follow up must be completed and may be included in the care plan, comments section or other participant record location.

d. The participant must provide an electronic signature.

Standard 9. Breastfeeding Peer Counseling
The State and local agency establish standardized breastfeeding peer counseling program policies and procedures and task-appropriate trainings for staff on the breastfeeding peer counseling program that are consistent with the Loving Support Model for a Successful Peer Counseling Program.

Remember that orientation and trainings based on *FNS Loving Support through Peer Counseling* have been given to clinic staff and include the roles, responsibilities, trainings, and referral procedures of peer counselors, clinic staff, and managers. Some of those roles and responsibilities in their scope of practice are to promote nutrition services, breastfeeding, and give education and support. Participant needs are the most important so these need to be our main priority. We should have goals and objectives that are consistent with the Loving Support Model, a written scope of practice for peer counselors and provide the appropriate training, and ensure that peer counselors meet required qualifications of providing support. Best practices also include that peer counselors are available to participants outside of normal hours, can counsel by telephone, and refer participants to the WIC - Designated Breastfeeding Expert. State and local agencies will review the peer counseling program periodically. State will monitor and evaluate peer counseling services to ensure compliance with the Loving Support Model. It is the job of the local agency to assess staff and protocol.

UTAH | WOMEN, INFANTS & CHILDREN

Utah WIC Program
Box 141013
Salt Lake City UT 84114-1013
www.health.utah.gov/wic

WIC Wire is published monthly by the State Office of the Utah WIC Program.

Christina Perry, Editor