

# NUTRI-NET NEWS

APRIL 1998

## MEDIA MATTERS

This newsletter is a service of the Nutrition Education Network of Wisconsin, funded by a grant from the Food Stamp Program, Food and Nutrition Service, United States Department of Agriculture, and administered through the University of Wisconsin-Madison. It is designed to enhance coordination and communication among agencies and organizations that educate Wisconsin's low income individuals and families about nutrition and food.

*Nutri-Net News* shares brief information about programs and materials that support healthful and enjoyable eating.

### More on Folic Acid...

In 1992, the Public Health Service (PHS) recommended that all women of childbearing age who are capable of becoming pregnant consume 400 ug of the B vitamin folic acid daily. Folic acid can prevent neural tube defects when taken daily before conception and during early pregnancy. To obtain this recommended amount of folic acid, women need to either take a folic acid supplement daily, eat a fortified breakfast cereal containing 100% of the daily value of folic acid, or increase their consumption of foods naturally rich in folates (e.g., orange juice and green vegetables) and foods fortified with folic acid (e.g., cereal, bread, rice, and pasta). (See **Grains Get Folate**, *Nutri-Net News*, January 1998).

In 1997, the March of Dimes contracted the Gallup Organization to conduct a telephone survey of a national sample of over 2,000 U.S. women aged 18-45 years to assess knowledge about folic acid and their use of vitamin supplementation. Below are some of the major findings from this survey found in the February 27, 1998 issue of the *Morbidity and Mortality Weekly Report*:

- Less than one third (32.2%) of women of childbearing age con-

sume a daily supplement containing folic acid. Vitamin use was lowest among women in minority groups and among those with the lowest incomes.

- Among the 67.8% of women who did not take a folic acid-containing supplement daily, approximately half (32.2%) used a supplement but either did not take one daily or took a supplement that **did not contain** folic acid.
- 57.8% of women who did not take supplements daily reported that they needed more information about vitamin and mineral supplements. This opinion was more common among Hispanics and women of races other than white.
- 59.8% of women who did not take supplements daily reported that cost

### Subscription Information

*Nutri-Net News* is published quarterly. It can be sent to you by mail or e-mail.

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may be the reason for not taking vitamins (71.9% of women with incomes less than \$25,000 per year versus 46.4% with incomes greater than or equal to \$50,000).

## Implications for Nutritional Interventions:

- 1.) Because 64.4% of women of childbearing age are already taking some form of vitamin supplementation, they could be easily persuaded to use a daily folic acid-containing supplement.
- 2.) The finding that most women wanted more information about supplements highlights the need for more health education about the role of folic acid and multivitamins in preventing birth defects.

The full MMWR issue containing the above summarized article may be accessed on CDC's web page at <http://www.cdc.gov/epo/mmwr/mmwr.html>.

## Nutritional Concerns in American Indian and Alaska Native Children

An article in the *Journal of the American Dietetic Association* (February 1998 issue) reviews the current nutritional health of American Indian and Alaska Native children, the changes that have occurred in the past 30 years, the nutrition transition to increasing obesity and diabetes that is seen in American Indians, and future directions to improve the health of American Indian and Alaska Native children.

The nutritional health of American Indian children has changed significantly over the past 30 years. Undernutrition was a major health issue until the mid-1970's. This was greatly reduced by public health programs, increased food availability, improved transportation, sanitation and health care. Now American Indian children and adults are experiencing an alarming increase in obesity rates. Although dietary intake data are lacking for both American Indian youth and adults, several dietary practices that may contribute to obesity have been identified. These include the wide use of butter, lard, whole milk, fry bread, and fried meats; the generous use of fats in the preparation of beans; and

high consumption of sugared beverages. The increase of fast-food restaurants and convenience stores on or near reservations also encourages the consumption of high-fat, high-sugar foods. In addition, many of the commodity foods that are used on reservations are high in fat.

Many of the current health problems of American Indians are related to obesity. Type 2 diabetes mellitus, which was uncommon among American Indians until the 1930's, is now found in epidemic proportions in American Indian populations and is largely attributable to the increasing prevalence of obesity. Diabetes and its complications are major contributors to adult morbidity and mortality in all Native American populations except isolated Arctic groups whose lifestyles remain relatively unchanged. Although Type 2 diabetes mellitus has been considered rare in the pediatric population, researchers have reported a striking increase in the number of diagnoses of type 2 diabetes mellitus linked to obesity in American Indian children and adolescents.

The authors note that obesity prevention programs beginning early in childhood are needed if the epidemics of obesity and diabetes are to be reversed. School and community-based interventions are recommended to encourage lifelong healthful eating and regular physical activity. These interventions need to include behavioral change strategies with environmental resources and support, and solid evaluation components. To be effective, the authors suggest that interventions be grounded in cultural traditions and values that promote health and well-being and developed with participation of the American Indian communities. An example of such an intervention is the Pathways project. It is a school-based primary prevention obesity study that is designed to determine if a "culturally appropriate intervention" involving physical activity, foodservice, classroom instruction, and family involvement will result in a lower percent body fat in American Indian children at the end of a 3-year period. Other programs such as WIC and Head Start were also suggested as potential avenues for reaching parents and children about healthful eating and physical activity.

## TOOLS OF THE TRADE

### Marketing Research On Food Stamp Population

The Missouri Nutrition Network conducted focus groups and interviews with adult females (ages 16-40) and children of both genders (ages 7-9) from an urban and a rural county in their state. Seventy African Americans, 29 Caucasians, and 2 Asians completed interviews at the Department of Family Services (DFS) food stamp offices while waiting for agency services. The research findings were published in a final report in August 1997. The following bullets highlight some of the principal findings from this research.

#### A. Findings From Adult Food Stamp Recipients

- Almost all adult participants were aware of nutrition issues (e.g., eat more fruits and vegetables, eat less fat, avoid sugar snacks), but the majority reported family meals with high fat content. Frying was the most common cooking method.
- Nearly all participants stated that food purchasing was guided primarily by the food preferences of their children.
- Menu cards were the most popular nutrition materials identified by food stamp recipients. Participants preferred 5x7 cards with pictures of food, portion sizes (especially portion sizes for children), nutrition tips, menu variations, preparation time (no longer than 35 minutes), and shopping lists.
- Tip sheets were also popular nutrition materials. Food stamp recipients preferred tip sheets with extensive white space, bright colors, attractive illustrations, large type, information put in boxes or columns (not in paragraphs); lists of healthy foods divided into easily recognized categories (e.g., fruit group or milk group), and clear indications of appropriate portion sizes for children.

## TOOLS OF THE TRADE

#### B. Findings From Children

- When asked what foods were healthy, children easily listed fruit and vegetables. Their concept of "being healthy" meant that they were not sick and that a person was in shape.
- When children were asked if they use what they know about good foods when they decide what snack to eat, they said no or sometimes. They reacted as if the two concepts were not connected.
- The message "a family will be happier if they eat...meals together" was received with a negative response. One statement was "they boss me around and tell me what to eat" and another child indicated that siblings take food off of her plate and that upsets her. They did not report pleasant experiences eating with their families. ☹
- Children participating in interviews were enthusiastic about the activity book by Team Nutrition and the Purdue cookbook (92%). Tipsheets and posters with bright colors and pictures of food were liked by all children, e.g., Team Nutrition Tips. Comic books were least favorite.

### Preschoolers' Nutrient Intakes Improve With Food Stamps, WIC

Researchers at the U.S.D.A.'s Economic Research Service, Cornell University, and Mathematica Policy Research studied 500 nonbreast-feeding children aged one to five years for intake of 15 nutrients: energy, protein, vitamin A, vitamin E, vitamin C, thiamin, riboflavin, niacin, vitamin B6, folate, calcium, phosphorus, magnesium, iron, and zinc. The percentage of calories from fat, saturated fat and the milligrams of cholesterol per 1,000 kcal were also studied.

The researchers found that WIC had a greater impact on nutrient intake than participation in

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the food stamp program or an increase in cash income. WIC had significant positive effects on intakes for 10 of the 15 nutrients studied. For iron, the WIC effect was about six times greater than food stamps and over 12 times greater than the cash income effect. Per dollar of WIC benefit, iron intake rose 1.33 percentage points of the recommended dietary allowance (RDA). Zinc intake increased .85 RDA percentage points per dollar of WIC benefit.

Food stamps had notable positive impacts on five of the 15 nutrients studied. Participation in the program increased preschoolers' iron RDA .22 percent, an impact twice that of cash income. Zinc intake rose .16 RDA percentage points per dollar of benefit, over twice the impact of cash income.

The researchers reported that the positive impacts on iron and zinc intake are particularly significant, since iron deficiency is the most prevalent nutritional deficiency and the cause of serious health conditions such as anemia. The researchers also noted that zinc intakes are low in certain segments of the population and previous studies have suggested a relationship between zinc and growth retardation. Neither WIC or the food stamp program increased the percentage of calories that young children receive from fat, saturated fat, and cholesterol.

The full article, **Household Participation in the Food Stamp and WIC Programs Increases the Nutrient Intakes of Preschool Children**, is found in the *Journal of Nutrition*, March 1998, Vol.128, p.548-555. It can also be accessed at the following address:

<http://www.nutrition.org>

## Network Update

### Network Update

The Wisconsin Nutrition Education Network is working to facilitate local collaborative planning. This includes an assessment of some successful collaboratives that provide nutrition education for low-income audiences. Thirty six plans of the Wisconsin Nutrition Education Program (WNEP) were studied. In addition, the community development specialist for the sixteen TAHL (Transforming Anti-Hunger Leadership) communities and the nutrition specialist of the Hunger Grant Board of Wisconsin's Community Hunger Prevention Grants were consulted to assist in the assessment of community collaboratives. Four communities out of many excellent examples were identified for interviews.

A protocol for the interviews has been developed and piloted to identify key elements of successful collaboratives and assist the Network in determining what it can do from a state perspective to encourage local collaborative planning. These interviews will be completed the last week of April. Findings and recommendations from the interviews will be summarized, reviewed, and consolidated into a report.

Key elements in successful local collaborative planning, Stages of Change (The Transtheoretical Model), Social Marketing Theory, and/or WNEP's Needs Assessment, Planning, and Evaluation tools will be shared at regional and statewide conferences and meetings beginning this fall.

### OUR MISSION:

The Nutrition Education Network of Wisconsin facilitates collaborative planning of nutrition education programs at the state and local levels. We promote healthful and enjoyable eating so that Wisconsin's low income individuals and families receive consistent, positive, relevant, accurate, and effective nutrition messages.

*Nutri-Net News* is one way that the Network shares information and resources to accomplish this mission.