



Nutrition for Family Living

Susan Nitzke, Nutrition Specialist; susan.nitzke@ces.uwex.edu
Sherry Tanumihardjo, Nutrition Specialist; sherry.tan@ces.uwex.edu
Amy Rettammel, Outreach Specialist; arettamm@facstaff.wisc.edu

July, 2004 Topics

Findings from national surveys

GAO Report says USDA nutrition education programs need stronger linkages

Findings from national surveys

Several recent analyses of national survey data are relevant to community-based nutrition education programs.

Overweight/obesity rates. The most recent update on prevalence of overweight and obesity in American children, adolescents and adults shows that levels of overweight and obesity continue to be alarmingly high. Overall, 65.1% of adults were overweight or obese in 1999-2002, 30.4% were obese, and 4.9% were extremely obese. For children ages 6-19, 31.0% were at risk for overweight or overweight and 16.0% were overweight. Disparities by sex and race/ethnicity continue to persist. The Family Living fact sheet and powerpoint presentation on *Weight and Health* (<http://www.uwex.edu/ces/flp/demographics/weight.cfm>) have more information on what these figures mean and recommendations for individuals, families and communities. (Source: Hedley AA et al. Prevalence of overweight and obesity among US children, adolescents, and adults, 1999-2002. *JAMA*. 2004;291:2847-2850. <http://jama.ama-assn.org/cgi/content/abstract/291/23/2847>.)

Fruit/vegetable spending patterns. According to economists at USDA Economic Research Service, the average low-income household spent \$3.59 per person per week on fruits and vegetables in 2000, while higher income households spent \$5.02. Statistical models of household spending show that when low-income families have small increases in income, they are less likely than higher-income households to use part of that additional money to buy more fruits and vegetables. (Source: <http://www.ers.usda.gov/publications/AER833/>.)

Fruit and vegetable consumption. Mary Serdula and others from the U.S. Centers for Disease Control and Prevention (CDC) examined trends over time (1994-2000) in data from a brief (only 6 items) questionnaire on fruit and vegetable consumption that is part of the nationwide telephone-based Behavioral Risk Factor Surveillance System (BRFSS). They found that the percent of respondents who consumed fruits and vegetables 5 or more times per day did not change, nor were there any notable changes in most socio-demographic subgroups. One subgroup, 18-24 year olds, did show an increase of 3 percentage points. (Source: Serdula MK et al. Trends in fruit and vegetable consumption among adults in the United States: Behavioral Risk Factor Surveillance System, 1994-2000. *Am J Public Health* 2004; 94:1014-1018.)

Walking. In another study by CDC, self-reported BRFSS data on walking and other activity were examined. For men, the prevalence of walking increased from 26.2% in 1987 to 30.1% in 2000 and the prevalence of walking increased from 40.4 to 46.9% for women during the same time period. There was no change in the prevalence of walking three times a week for 30 minutes duration. The largest increases occurred in Hispanic women, non-Hispanic black women, and non-Hispanic black men. Walking was the most frequently reported activity among adults who met the national recommendations for regular physical activity (defined as five or more times a week for at least 30 minutes per session). (Source: Simpson ME et al. Walking trends among U.S.



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adults: the Behavioral Risk Factor Surveillance System, 1987-2000. *American Journal of Preventive Medicine*. 2003;25:95-100.)

Food sources of energy/calories. Gladys Block from the University of California School of Public Health examined dietary data from the 1988-94 and the 1999-2000 National Health and Nutrition Examination Surveys (NHANES) and found that soft drinks were the number 1 contributor of energy intake in both time periods, providing 7.1% of energy in 1999-2000 and 6.0% of energy in 1988-94; followed by cake, sweet rolls, doughnuts and pastries which provided 3.6% of total energy in 1999-2000 and 3.9% of energy in 1988-94. When she did further analysis by broader food groupings, she found that most Americans get at least ¼ of their calories from foods that provide large amounts of sugar and fat and few micronutrients, especially snack foods and beverages. She concludes, and we agree, that “Ways must be found to help people, given the lifestyle they have, to eat fewer energy-dense nutrient-poor foods.” (Source: Block G. Foods contributing to energy intake in the US: data from NHANES III and NHANES 1999-2000. *J Food Composition and Analysis* 2004;17:439-447.)

Working mothers. Researchers from Abt Associates (a consulting group) and the USDA Economic Research Service compared diet records for children of non-working mothers and children with mothers who have full-time or part-time jobs. They found that children of full-time working mothers have lower overall diet quality (Healthy Eating Index scores based on the Dietary Guidelines) and higher intake of soda and fried potatoes. The differences were most dramatic for 5-8 year olds. Differences in soda intakes were especially high in single adult households. Furthermore, children of working mothers were more likely to skip breakfast, rely more on away-from-home food sources, and spend more time watching TV and videos. Data on weight were only available for children over age 12; those older children with working mothers were at greater risk of overweight than children whose mothers are not in the labor force. The news for children with working moms wasn't all bad. Children in child care facilities that were part of the Child and Adult Care Food Program (CACFP) that subsidizes nutritious meals and snacks had better diets than children cared for by their own mothers who did not work outside the home. This difference was due mainly to greater consumption of fruit and milk and lower total fat intake of CACFP participants. (Source: Crepinsek MK, Burstein NR. Maternal employment and children's nutrition, volumes I and II.

<http://www.ers.usda.gov/publications/efan04006/efan04006-1/> and
<http://www.ers.usda.gov/publications/efan04006/efan04006-2/>.)

Implications for Extension educators: One way low-income households economize is by spending less money on fruits and vegetables. Education targeting barriers to fruit/vegetable consumption is critical for maintenance of dietary quality for all families, especially those with limited food budgets. Convenient access to high-calorie snacks and beverages throughout the day appears to reduce dietary quality and increase the tendency of many Americans to overeat. This may be especially true for children with working mothers. When combined with low levels of physical activity, low intakes of fruits and vegetables and overconsumption of soft drinks, pastries, chips, dessert items and other sweets may contribute to increasing rates of overweight/obesity in adults and children. Parents and child care providers need practical and motivating information to improve the quality of food and beverages they provide for children, as well as to improve the quality of their own food and beverage choices.



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GAO Report says USDA nutrition education programs need stronger linkages

USDA provides nutrition education through five major programs – Food Stamps, WIC, National School Lunch, Child and Adult Care Food, and EFNEP. The U.S. Senate Committee on Agriculture, Nutrition and Forestry asked the U.S. General Accounting Office (GAO) to recommend ways that USDA can increase the likelihood of success in nutrition education. GAO responded by recommending that the Secretary of Agriculture develop a unifying strategy for USDA’s nutrition education efforts. They recommended improved coordination among nutrition education programs and improved monitoring and evaluation. GAO found that USDA programs faced similar challenges in the form of limited resources and systems for providing nutrition education and competing program requirements that took time or resources away from nutrition education (such as providing information on drug/alcohol counseling in WIC). They noted that “most of the programs – with the exception of EFNEP—did not systematically collect data at the federal level on the types of nutrition education services provided and who received the services.” GAO recommended that USDA develop a unifying strategy for nutrition education and explore options to collect reliable data on services and recipients, identify and disseminate lessons learned, and consider a longer-term evaluation strategy.

Specific GAO recommendations include:

- Responsible officials need to set clear program goals, identify specific target populations, and develop strategic plans that outline how the program will achieve its goals.
- Nutrition educators should assess target population nutritional and learning needs and appropriately tailor services to meet those needs. They should deliver services with appropriate frequency and duration to insure sufficient content to meet program goals.
- Consistent messages should come through multiple channels of communication, which can reinforce positive nutritional behavior.
- During program monitoring and evaluation, officials should monitor the services and who receives them, assess program outcomes, and evaluate whether the program has had the desired impact.
- Officials should be conscious of environmental factors such as food availability and advertising that can affect the results of nutrition education.

(Source: U.S. General Accounting Office. *Nutrition education: USDA provides services through multiple programs, but stronger linkages among efforts are needed.* GAO-04-528. April 2004. <http://www.gao.gov/new.items/d04528.pdf>.)

Implications for Extension educators: As overweight/obesity rates continue to rise and nutrition education expenditures increase, federal, state and local governments are giving more careful scrutiny to nutrition education programs. The importance of identifying high-priority target audiences, assessing target audience needs, delivering behaviorally-oriented programs, evaluating effectiveness, reporting accomplishments and coordinating with other agencies continues to increase each year. The USDA is seriously considering how these recommendations should be implemented in the scope and focus of nutrition education programs. Watch for new policies, goals and guidelines that affect nutrition education programs as a result of this GAO report.