



Nutrition for Family Living

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January, 2008 Topics

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Changes to WIC food package

By Gayle Coleman

The U.S. Department of Agriculture recently released the new WIC food package rules and regulations. The changes to the WIC food package will be implemented over the next 18 months. These changes make the WIC food package a better fit with the Dietary Guidelines for Americans, allow greater flexibility for cultural food preferences, further encourage breastfeeding and expand support for medically-fragile participants. Although details of the WIC food package in Wisconsin will not be announced until a number of issues are resolved, the general changes to WIC food packages follow.

- Fresh, frozen, canned and dried fruits and vegetables will be included in food packages for older infants, children and women.
- Whole grain bread and more whole grain cereal choices will be included in food packages. Whole wheat tortillas, rice and other whole grains may be substituted for whole grain bread.
- Canned beans may be substituted for dry beans and peanut butter.
- Full-fat (whole) milk will be provided for children between the ages of 12 months and 2 years but only reduced-fat, low-fat and fat-free (skim) milk will be provided for children over 2 and women.
- Calcium-fortified soy milk and tofu may be substituted for milk.
- The amounts of juice, eggs and cheese will be reduced to accommodate increases in other foods.

Implications for Extension Educators: Implementing the new WIC food package will be most successful when Extension Educators work with WIC Educators to help participants understand how to choose and use foods available through WIC. Coordination of local education will be especially important as WNEP Coordinators develop their plans and agreements for fiscal year 2009.

Source: U. S. Department of Agriculture Food and Nutrition Service. *Federal Register*, 2007:72:68965-69032, Special supplemental Nutrition Program for Women, Infants and Children (WIC): Revisions in the WIC Food Packages. Available online:

<http://a257.g.akamaitech.net/7/257/2422/01jan20071800/edocket.access.gpo.gov/2007/pdf/E7-2303.pdf>.

Food Research and Action Center (FRAC) summary, <http://www.frac.org/WIC/index.html>



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Adults were more active in 2005 than in 2001 but there's more to be done.

By Susan Nitzke

The U.S. Centers for Disease Control and Prevention (CDC) analyzed self-reported data from phone interviews that were gathered as part of the Behavioral Risk Factor Surveillance System (BRFSS) in 2001 and 2005. In 2005, 49.7% of men and 46.7% of women reported engaging in regular physical activity, with the largest increases among non-Hispanic black women and men. The percentage of adults reporting regular physical activity increased 8.6% for women (from 43.0% to 46.7% from 2001 to 2005) and 3.5% (from 48.0% to 49.7%) among men. The following table breaks down the percentages by age, race/ethnicity and education levels and shows which changes over time were statistically significant.

TABLE. Estimated age-adjusted percentage of persons aged ≥ 18 years who reported meeting the *Healthy People 2010* objective for regular physical activity,* by sex, age group, race/ethnicity, and education level — Behavioral Risk Factor Surveillance System, United States, 2001 and 2005

Characteristic	Men			Women		
	2001 % (95% CI) [†]	2005 % (95% CI)	% change from 2001 to 2005	2001 % (95% CI)	2005 % (95% CI)	% change from 2001 to 2005
Age group (yrs)						
18–24	60.5 (58.5–62.5)	62.0 (59.9–64.0)	2.5	50.6 (48.8–52.3)	52.7 (51.0–54.4)	4.2
25–34	51.4 (50.0–52.9)	51.5 (50.1–52.9)	0.2	47.7 (46.6–48.8)	50.5 (49.4–51.6)	5.9 [§]
35–44	47.8 (46.5–49.1)	49.6 (48.4–50.8)	3.8	46.2 (45.0–47.3)	49.7 (48.8–50.6)	7.6 [§]
45–64	43.3 (42.3–44.4)	46.5 (45.6–47.3)	7.4 [§]	40.6 (39.8–41.5)	45.5 (44.8–46.2)	12.1 [§]
≥ 65	43.1 (41.6–44.6)	44.5 (43.4–45.6)	3.3	32.2 (31.2–33.2)	36.3 (35.5–37.1)	12.7 [§]
Race/Ethnicity						
White, non-Hispanic	50.6 (50.0–51.2)	52.3 (51.8–52.9)	3.4 [§]	46.0 (45.5–46.6)	49.6 (49.2–50.1)	7.8 [§]
Black, non-Hispanic	40.3 (38.3–42.4)	45.3 (43.3–47.3)	12.4 [§]	31.4 (30.0–32.9)	36.1 (34.8–37.5)	15.0 [§]
Hispanic	42.0 (39.4–44.6)	41.9 (39.8–44.0)	-0.2	36.3 (34.5–38.1)	40.5 (38.8–42.1)	11.6 [§]
Other race	43.1 (40.5–45.8)	45.7 (43.4–48.1)	6.0	41.2 (38.6–43.8)	46.6 (44.4–48.9)	13.1 [§]
Education level						
Less than high school graduate	35.8 (33.9–37.9)	37.2 (35.4–39.0)	3.9	34.2 (32.5–35.9)	37.1 (35.5–38.7)	8.5 [§]
High school graduate	46.0 (44.9–47.1)	47.9 (46.9–48.9)	4.1 [§]	40.3 (39.5–41.2)	43.2 (42.4–44.0)	7.2 [§]
Some college	50.3 (49.1–51.4)	50.3 (49.2–51.4)	0.0	44.3 (43.4–45.2)	47.9 (47.2–48.7)	8.1 [§]
College graduate	52.6 (51.5–53.7)	54.6 (53.6–55.6)	3.8 [§]	49.1 (48.1–50.1)	53.3 (52.5–54.1)	8.6 [§]
Total	48.0 (47.3–48.6)	49.7 (49.2–50.3)	3.5[§]	43.0 (42.5–43.5)	46.7 (46.2–47.1)	8.6[§]

* At least 30 minutes a day of moderate-intensity activity on 5 or more days a week, or at least 20 minutes a day of vigorous-intensity activity on 3 or more days a week, or both.

[†] Confidence interval.

[§] Statistically significant change ($p < 0.05$ by χ^2 test).

Data. The numbers in the table above reflect answers to the question of whether the person does “moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes some increase in breathing or heart rate” in a usual week, how many days per week, and the amount of time. A similar question was asked about vigorous activities such as running and aerobics. People who reported getting at least 30 minutes a day of moderate-intensity activity on 5 or more days a week or at least 20 minutes a day of vigorous activity on 3 or more days a week or both were considered to be engaging in regular physical activity as stated in the national policy objectives of *Healthy People 2010*.

Disparities. Despite small increases in overall prevalence of physical activity among minorities between 2001 and 2005, disparities are still evident. Among men and women, non-Hispanic whites had higher prevalence rates of regular physical activity than people in other racial/ethnic groups. Percentages of adults meeting minimal recommendations for physical activity also tended to be lower for people with less education. Factors such as unaffordable facilities and unavailable childcare, high crime rates, fear for personal safety and culturally inappropriate activities have been shown to be barriers to physical activity for some ethnic/racial minorities. Positive factors include social support from family, peers, communities and healthcare providers (Seefeldt, 2002).



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Implications for Extension Educators. Since regular physical activity is associated with decreased risk for obesity, heart disease, hypertension, diabetes, certain cancers, and premature mortality, the Dietary Guidelines emphasize balancing food and physical activity. It is important to promote physical activity by providing relevant information and encouraging learners to set personal goals that fit their lifestyles and family situations. Other factors can be addressed by supporting the work of community partners such as local obesity prevention coalitions to help remove barriers and make physical activity more accessible to all, such as promoting safe routes to school.

References and Resources.

U.S. Centers for Disease Control and Prevention. Prevalence of regular physical activity among adults: United States, 2001 and 2005. *MMWR* 2007;56:1209-1212. Available online: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5646a1.htm> (accessed December 4, 2007).

Seefeldt V, Malina RM, Clark MA. Factors affecting levels of physical activity in adults. *Sports Med.* 2002;32:143-168.

Stepping up to a healthy lifestyle lesson plans and supporting materials from the Wisconsin Nutrition Education Network.

<http://www.nutrisci.wisc.edu/UWextension/nutrinet/SUmaterials.html>

Wisconsin Nutrition and Physical Activity Program website with links to local nutrition and physical activity coalition project inventory reports and coalition websites

<http://dhfs.wisconsin.gov/health/physicalactivity/>



Fruit and vegetable evaluation tool sensitive to change

By Gayle Coleman

To be useful, a tool designed to evaluate an intervention should be reliable, valid and sensitive to change. However, a tool's sensitivity to change is not measured or reported as often as reliability and validity. Marilyn Townsend and Lucia Kaiser, Nutrition Specialists with the University of California Extension, conducted a study to assess the sensitivity of a psychosocial fruit and vegetable evaluation tool for use by the Expanded Food and Nutrition Education Program (EFNEP) and Food Stamp Nutrition Education (FSNE). Previous research by these individuals established reliability and validity of this psychosocial evaluation tool.

Psychosocial factors related to change in fruit and vegetable behaviors include a person's perceived benefits to change, perceived control over change, self-efficacy for eating fruits and vegetables, readiness to eat more fruit and vegetables, and perceived diet quality. The psychosocial evaluation tool used in this study addressed these 6 factors. Theoretically, change in the psychosocial factors impacts change in behavior, and change in behavior leads to change in food/nutrient intake and biomarker status.

This study used a sample of 93 English-speaking women from a larger randomly controlled trial. The women were eligible to receive food stamps and had at least one child. They were assigned to 6 weekly nutrition education classes or a "delayed intervention" control group. The nutrition education classes emphasized fruits and vegetables, food shopping, menu planning, and food-preparation skills using the *Eating Right is Basic* curriculum.

Evaluation was done at baseline (pre intervention) and 8 weeks later (post intervention.) The women completed 24-hour dietary recalls, behavioral assessments and psychosocial assessments. A randomly selected subsample (55) of these women had their blood drawn for serum analysis of carotenoids which are highly correlated with women's fruit and vegetable intakes. Sensitivity to change was estimated by comparing serum carotenoids, selected micronutrients, fruit/vegetable servings, and fruit/vegetable behaviors.

Changes in the enabling (self-efficacy for eating fruit and vegetables) and intention (readiness to eat more fruits and vegetables, and perceived diet quality) domains were positively associated with change in self-reported fruit and vegetable behaviors, $r=0.30$, $P=0.004$ and $r=0.42$, $P<0.0001$ respectively. Overall scores of participants' perceptions of psychosocial predictors of fruit and vegetable behaviors were moderately consistent with their reported changes in fruit and vegetable behaviors, $r=0.28$, $P=0.01$. Overall score ($r=0.31$, $P=0.02$) and the intention domain ($r=0.33$, $P<0.01$) were positively associated with the change in serum carotenoids.

These results suggest that the brief psychosocial tool used in this study will be useful for evaluation of programs with low-intensity interventions such as short series of lessons in EFNEP and FSNE.

Implications for Extension Educators: Documenting the impact of Extension programs continues to be important. This study contributes to our understanding and appreciation of developing and using high-quality evaluation tools. The specific tools described in this study might be available for Extension educators in Wisconsin and other states to use in the future.



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Source:

Townsend MS, Kaiser LL. Brief Psychosocial Fruit and Vegetable tool is Sensitive for the US Department of Agriculture's Nutrition Education Programs. *J Am Diet Assoc.* 2007;107:2120-2124.