

Data Points

RESULTS FROM THE CALIFORNIA WOMEN'S HEALTH SURVEY

Federal food and nutrition assistance such as the Food Stamp Program (FSP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) share a goal to “ensure the health of vulnerable Americans by providing access to a nutritionally adequate diet”.¹ Daily consumption of the recommended amounts of fruits and vegetables is an important component of a nutritionally adequate diet.

In 2004, the California Department of Health Services' Cancer Prevention and Nutrition Section (CPNS) sponsored the following question in the California Women's Health Survey (CWHS)— *About how many servings of fruits and vegetables do you usually eat or drink on an average day? A serving is about 1/2 cup of vegetables or fruit, 6 ounces of 100 percent fruit or vegetable juice, a medium piece of fruit, or 1 cup of green salad.* Respondents who reported consuming 15 or more servings a day (only 13 observations) were excluded from the analysis for a total sample size of 4,509 with women ranging from 18 to 97 years of age.

The survey collected additional information about participation in food and nutrition assistance programs over the preceding 12 months. Because fruit and vegetable intake tends to increase at higher income levels, the analysis was restricted to the 786 surveyed women who would be income eligible for the FSP by virtue of reporting a gross income less than 130 percent of the federal poverty level. In the preceding 12 months, 16.0 percent of these low-income women had participated in the FSP only, 20.4 percent in WIC only, 13.7 percent in both FSP and WIC, and 49.9 percent in neither FSP nor WIC although they were income eligible for the FSP and WIC since they had either had a child under five or were pregnant. A six-item U.S. Department of Agriculture

(USDA) food security scale was also used to classify women into three groups: 1) food secure (i.e., having access, at all times, to enough food for an active healthy life), 2) food insecure without hunger, or 3) food insecure with hunger.

- Mean servings of fruits and vegetables varied significantly by women's food security status.² The mean number of fruit and vegetable servings on an average day was 3.3 for women who were food secure, 2.9 servings for women who were food insecure without hunger, and 2.7 for women who were food insecure with hunger.

Almost half of the WIC recipients were either pregnant or one-year post-partum, compared with only 27.0 percent of the FSP recipients. Women are often more cognizant of the need for healthy diets when they are pregnant or breastfeeding. WIC recipients were also significantly younger,³ had more individuals in their household,⁴ and were more likely to be married than the FSP sample.⁵ Multivariate analysis controlling for these differences was used for the comparisons between food assistance groups.

- The mean number of fruit and vegetable servings on an average day was 2.8 for women who were income eligible for the FSP but who were not receiving food stamps or WIC benefits. Food stamp-only recipients had a mean intake of 2.3 servings compared with 2.9 for WIC-only recipients and 2.6 for women participating in both the FSP and WIC (see graph). However, after controlling for income, age, race/ethnicity, number of children, and pregnancy and post-partum status, low-income women's mean consumption did

Belief and Practice to Eat Five or More Fruit and Vegetable Servings per Day Among Low-Income California Women Receiving Nutrition Assistance, 2004

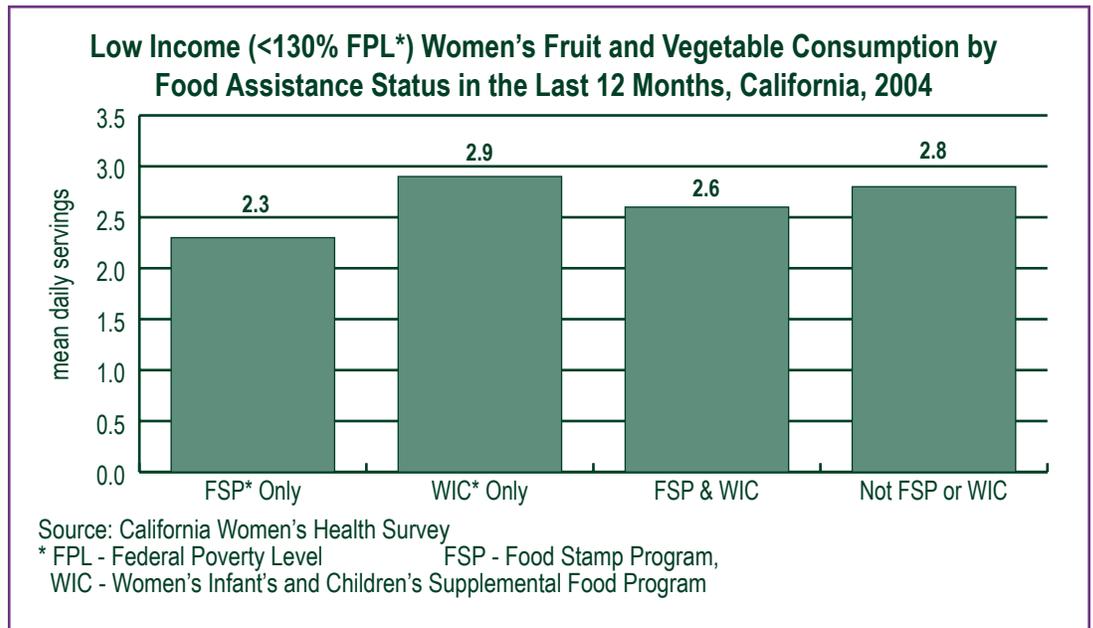
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Public Health Message: *California women who are food insecure and who are income eligible for federal nutrition assistance, especially women participating in the Food Stamp Program, consume far less than the recommended servings of fruit and vegetables. Limited belief about the recommendation indicates the need for increased educational efforts. However, even women who believe they should consume the recommended amount consume much less, indicating the possible need for additional policy, programmatic, and environmental efforts to improve fruit and vegetable access, availability, opportunity, and incentive for consumption.*

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not differ significantly by food assistance program participation.

FSP-only recipients,⁷ and 44.5 percent of women not participating in either program.⁸

- Among women income eligible for the FSP, those who participated both in the FSP and WIC were significantly more likely to believe they should eat five servings or more per day for good health, 59.5 percent compared with 47.1 percent of the WIC-only recipients,⁶ 42.0 percent of the
- Even among low-income women who believed they should eat five or more fruit and vegetable servings for good health, consumption was only on average 3.4 fruit and vegetables servings in an average day.

1 Fox MK, Hamilton W, Lin BW. 2004. Effects of food assistance and nutrition programs on nutrition and health. Executive Summary of the Literature Review. United States Department of Agriculture, Economic Research Service. Food Assistance and Nutrition Research Report, 4:19-4.
2 ANOVA p<.0001.
3 p<.001.
4 p=.01.
5 chi square, p<.001.
6 chi-square p=.05.
7 chi-square p=.009.
8 chi-square p=007.

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For additional copies of CWHS 2003-2004 Data Points please contact the Office of Women's Health:

Download copies at the Office of Women's Health website www.dhs.ca.gov/director/owh or contact OWH staff at P.O. Box 997413, MS 0027, Sacramento, CA 95899-7413 or call (916) 440-7626.