

Background

Data from the National Health and Nutrition Examination Survey (NHANES 1999-2004) provide a comprehensive picture of the nutrient intakes, diet quality, and food choices of Food Stamp Program (FSP) participants.

Data are presented for FSP participants, income-eligible nonparticipants, and higher income nonparticipants, broken out by age and gender. In general, there are more similarities than differences across the three groups. Where differences occur, they tend to fall along income lines: Food Stamp participants and low income nonparticipants differed more from higher income individuals than each other.

Nutrient Intakes

This study examined intakes of 18 essential vitamins and minerals, macronutrients (protein, carbohydrates, and fat) as a percentage of energy, and the percentage of energy consumed as solid fats, alcoholic beverages, and added sugars (SoFAAS).

- FSP participants and income-eligible nonparticipants were about as likely to have adequate usual intakes for all vitamins, minerals, and macronutrients. However, both groups were less likely to have adequate intake of vitamins and minerals than higher income individuals.
- FSP participants obtained a larger share of their energy from SoFAAS than both low income nonparticipants and higher income individuals, although this pattern was more pronounced among adults.

Weight Status

This study used measures of Body Mass Index (BMI) and BMI-for-age (for children) to assess the appropriateness of usual daily energy intakes. Differences in overweight varied by age and by gender.

- Fewer than 3 percent of all persons had a BMI below the healthy range.

- Female FSP participants were more likely to have a BMI above the healthy range than either low income nonparticipants or higher income females.
- Male children showed a pattern similar to females. Both low income groups of boys were less likely to have healthy weights and more likely to be overweight than higher income boys. However, low income adult and older adult males were less likely to have a BMI above the healthy range than higher income adult men.

Overall Diet Quality

This report used two measures to assess overall diet quality. The Healthy Eating Index-2005 (HEI) was used to assess compliance with the Dietary Guidelines for Americans. In addition, a composite measure of the nutrient density of meals and snacks was used to assess the nutrient contribution of foods relative to their energy contribution. “Nutrient-dense” foods were defined as low-fat forms of food in each food group and forms free of added sugar.

The diets of all groups fell far short of the Dietary Guidelines for Americans. The overall average score on the HEI-2005 was 58 out of a possible 100. FSP participants scored slightly lower than income-eligible and higher income nonparticipants (52 points versus 56 and 58 points, respectively).

All three groups had very low intakes of whole grains, dark green and orange vegetables, and legumes. All three groups also had high intakes of saturated fat and discretionary calories from SoFAAS.

Overall diets of FSP participants and income-eligible nonparticipants were comparable in nutrient density. Among children, there was little difference in nutrient density. Higher income adults and older adults had overall diets that were higher in nutrient density than those of their lower income counterparts.

Food Choices

This report used two measures to assess food choices: the percentage of individuals who consumed any

foods from 10 broad food groups and the choices made within these groups; and the percentage of foods consumed by individuals based on nutritional characteristics – foods recommended for frequent, selective, or occasional consumption.

FSP participants were less likely to consume fruits or vegetables than nonparticipants. Among adults, both low income groups were less likely to consume foods from 8 out of 10 food groups. There were fewer differences among children than among adults.

Over half of all foods consumed by food stamp participants and the two nonparticipant groups came from foods that should be consumed only occasionally. FSP participants were somewhat more likely than both nonparticipant groups to consume foods recommended for occasional consumption and somewhat less likely to consume foods recommended for selective or frequent consumption.

Implications for FSP Nutrition Education

This analysis revealed a number of issues that could be useful targets for nutrition education efforts among FSP participants:

- **Replacing whole milk with reduced-fat or nonfat milk.** In all age groups, FSP participants were more likely than nonparticipants to consume whole milk and less likely to consume reduced-fat or nonfat milk. Whole milk contributes more calories

from saturated and solid fat than reduced- or nonfat milk.

- **Increasing consumption of dairy products.** Both low income groups consumed fewer dairy products than higher income nonparticipants, resulting in lower calcium intakes.
- **Increasing consumption of whole fruits.** Both low income groups consumed less whole fruits than higher income individuals; and, among adults, this difference also extended to fruit juices.
- **Reducing consumption of regular sodas.** Total consumption of sodas among all groups was similar, but both low income groups were more likely to consume regular sodas and less likely to consume sugar-free sodas.
- **Increasing consumption of vegetables, whole grains, and oils, and increasing the variety of vegetables.** Low consumption was a problem for all participant, age, and income groups.

For More Information

Cole, Nancy, and Fox, Mary Kay (2008). *Diet Quality of Americans by Food Stamp Participation Status: Data from the National Health and Nutrition Examination Survey*. Prepared by Abt Associates, Inc., for the Food and Nutrition Service (available online at www.fns.usda.gov/fns).

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