

THE DIET QUALITY OF AMERICAN INDIANS: Evidence From the Continuing Survey of Food Intakes by Individuals

INSIGHT 12

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The diet of American Indians (including Alaskan Natives) has not been extensively studied. To shed more light on the overall diet quality of American Indians, this *Nutrition Insight* examines their diet by using the Healthy Eating Index (HEI). The HEI, computed on a regular basis by the U.S. Department of Agriculture (USDA), is a summary measure of people's overall diet quality. Data used to compute the Index are from the 1994-96 Continuing Survey of Food Intakes by Individuals, a nationally representative survey containing information on people's consumption of foods and nutrients and the most recent data available to compute the HEI.

Although the sample size of American Indians in the survey is small (107 people) and does not include American Indians in all States, this Insight serves as an initial indication of the diets of this group. The diets of American Indians vary by tribe (Lakota vs. Navajo) and by personal characteristics (young vs. old). The sample size, however, prevented more detailed analysis by such factors. Survey weights were used in the analysis.

The average age of American Indians in the survey is 31, and the average household size is 2.6. There is an approximate even split between males and females. Household income averages \$21,800. These characteristics of American Indians are similar to those of the rest of the U.S. population, with the exception of income, which is significantly lower. American Indian households are much more likely to report "sometimes or often not [having] enough food to eat," compared with other households (9 vs. 2 percent). Analysis of the Food Security Supplement of the 1995 Current Population Survey confirmed this result.

Healthy Eating Index Components

The Healthy Eating Index score is the sum of 10 components, each representing different aspects of a healthful diet:

- **Components 1-5 measure the degree to which a person's diet conforms to the USDA's Food Guide Pyramid serving recommendations for the five major food groups: Grains (bread, cereal, rice, and pasta), vegetables, fruits, milk (milk, yogurt, and cheese), and meat (meat, poultry, fish, dry beans, eggs, and nuts).**
- **Components 6 and 7 measure total fat and saturated fat consumption, respectively, as a percentage of total food energy (calorie) intake.**

- **Components 8 and 9 measure total cholesterol and sodium intake, respectively.**
- **Component 10 measures variety in a person's diet (the number of different foods that a person eats in a day).**

Each component of the Index has a maximum score of 10 and a minimum score of zero. Intermediate scores were computed proportionately. The maximum overall score for the 10 components combined is 100. High component scores indicate intakes close to recommended ranges or amounts; low component scores indicate less compliance with recommended ranges or amounts. An HEI score above 80 implies a good diet; an HEI score between 51 and 80 implies a diet that needs improvement; and an HEI score less than 51 implies a poor diet.

Healthy Eating Index for American Indians

The mean HEI score for American Indians is 65. Only 10 percent of American Indians have a good diet (fig. 1). Sixteen percent of American Indians have a poor diet, and 74 percent have a diet that needs improvement. There is no statistically significant difference in the overall diet quality of American Indians and the rest of the U.S. population. For example, 11 percent of White Americans have a good diet; 73 percent, a diet that needs improvement; and 16 percent, a poor diet.

Figure 1. Healthy Eating Index rating for American Indians, 1994-96

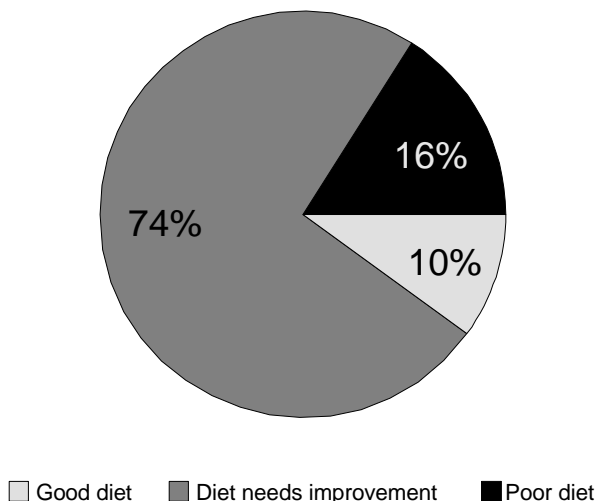
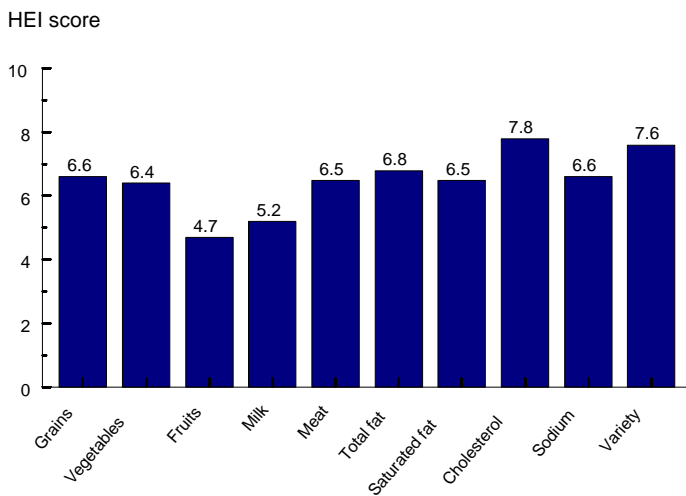


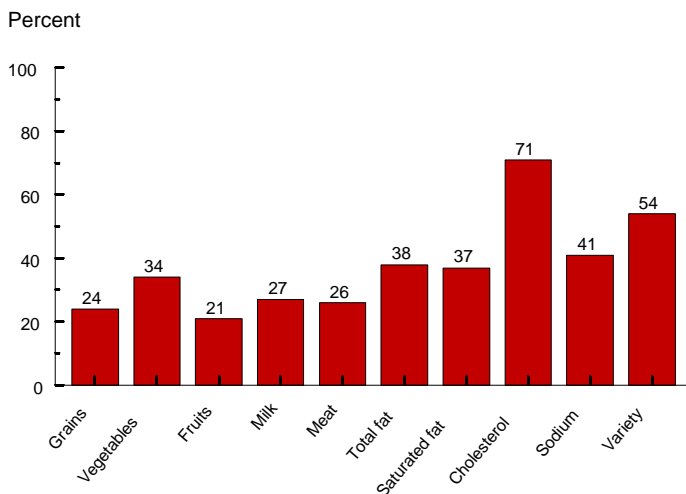
Figure 2. Healthy Eating Index: Component mean scores for American Indians, 1994-96



American Indians score best or highest on the cholesterol component of the HEI, compared with other components (fig. 2). American Indians' cholesterol score averages 7.8 on a scale of zero to 10. (High component scores indicate intakes close to recommended ranges or amounts.) American Indians' variety score is their second highest score (7.6). The fruits component of the HEI has the lowest mean score (4.7) for American Indians, and the milk component has the second lowest score (5.2). Other HEI component scores are generally between 6 and 7, a pattern similar to that of the rest of the U.S. population.

Less than 50 percent of American Indians have a maximum score for 8 of the 10 HEI components—that is, they meet the dietary recommendations (fig. 3). For fruits, only 21 percent of American Indians meet the dietary recommendation on a given day; for grains, 24 percent; and for milk products, 27 percent. For cholesterol, 71 percent of American Indians meet the dietary recommendation. For each of the HEI components, there is no statistically significant difference in scores between American Indians and the rest of the U.S. population.

Figure 3. Percentage of American Indians meeting the dietary recommendations for each component of the Healthy Eating Index, 1994-96



Summary

Based on the sample of American Indians used in this analysis, the results suggest that their diet needs improvement—as does the diet of the rest of the U.S. population. American Indians particularly need to improve their consumption of fruit and milk products. There likely is variation in the diets of American Indians by tribe and by personal characteristics. Future survey efforts to increase the sample of American Indians would permit a more detailed portrayal of this population. Nutrition professionals could use these results in nutrition education and promotion activities to help improve the diets of American Indians.

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Note: For more details on the Healthy Eating Index and how it is computed, the reader should see Bowman, S.A., Lino, M., Gerrior, S.A., and Basiotis, P.P. 1998. *The Healthy Eating Index: 1994-96*. U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. CNPP-5.

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