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Quality of Diets of Older Americans

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The diets of most older Americans need to improve, as indicated by the 1999-2000 Healthy Eating Index (HEI). This is of concern given the link between diet and chronic disease even for older people. In addition, less than optimal diets, as well as inactivity among older Americans, are key factors affecting the degree to which people are overweight. Overweight and obesity can result in a number of adverse conditions.

To assess the status of Americans' diets and to monitor changes in these patterns, the U.S. Department of Agriculture's (USDA) Center for Nutrition Policy and Promotion (CNPP) developed the HEI, the only instrument computed on a regular basis by the Federal Government that gauges the overall quality of the population's diet. This report presents the HEI for older Americans (age 65 and over) for 1999-2000—the most recent period for which nationally representative data are available to compute the HEI. It also examines the diet quality of older Americans over time (1999-2000 vs. 1989-90). Data used for analysis are from (1) the Centers for Disease Control and Prevention's 1999-2000 National Health and Nutrition Examination Survey, a nationally representative survey containing information on the diets of 8,070 people, including 1,392 people age 65 and over and (2) the USDA's 1989-90 Continuing Survey of Food Intakes by Individuals, a nationally representative survey containing information on the diets of 7,463 people, including 1,181 people age 65 and older.

How the Healthy Eating Index Is Computed

The HEI is a summary measure of the quality of people's diets. The HEI, consisting of 10 components (each representing different aspects of a healthful diet), provides an overall picture of the type and quantity of foods people eat, their compliance with specific dietary recommendations, and the variety in their diets.

- Components 1-5 measure the degree to which a person's diet conforms to serving recommendations of the five major food groups of the Food Guide Pyramid: grains (bread, cereal, rice, and pasta), vegetables, fruits, milk (milk, yogurt, and cheese), and meat (meat, poultry, fish, dry beans, eggs, and nuts).

- Component 6 measures total fat consumption as a percentage of total food energy (calorie) intake.
- Component 7 measures saturated fat consumption as a percentage of total food energy intake.
- Components 8 and 9 measure total cholesterol intake and total sodium intake, respectively.
- Component 10 measures the degree of variety in a person's diet.

Each component of the HEI has a maximum score of 10 and a minimum score of 0. Intermediate scores are computed proportionately. Whereas high component scores indicate intakes close to recommended ranges or amounts, low component scores indicate less compliance with recommended ranges or amounts.

The maximum combined score for the 10 components is 100. From this combined score, CNPP devised three ratings that imply how well Americans' diets meet dietary standards.

- A score above 80—a good diet.
- A score between 51 and 80—a diet that needs improvement.
- A score less than 51—a poor diet.

Most Older Americans Have a Poor Diet or One That Needs Improvement

During 1999-2000, the diets of most older people needed improvement (table 1). Only 20 percent of people age 65 to 74 and 19 percent of people over 75 had a good diet in 1999-2000 while 18 percent and 26 percent, respectively, had a good diet in 1989-90; 14 percent of people age 65 to 74 and 13 percent

Table 1. Healthy Eating Index rating for people age 65 and over

	1989-90			1999-2000		
	Good diet	Needs improvement	Poor diet	Good diet	Needs improvement	Poor diet
	<i>Percent</i>					
65-74 yrs	18	74	8	20	66	14
75+ yrs	26	66	8	19	68	13

of people over 75 had a poor diet in 1999-2000, up from 8 percent in 1989-90. The diet of older Americans was better than that of their younger cohorts. For example, in 1999-2000, only 11 percent of people age 45 to 64 had a good diet and 19 percent had a poor diet (data not shown).

The mean HEI score for older people was 67.6 in 1999-2000 (table 2). The highest mean HEI component score for older Americans was for variety (8.2 on a scale of 10) followed by cholesterol (8.1). Overall, 59 percent of older people had a maximum score of 10 for variety and 73 percent had a maximum score of 10 for cholesterol; that is, they met the dietary recommendation. (The percentages of people with maximum scores are not shown in the tables.)

Older people had the lowest mean scores for fruits (5.5) and milk (5.9). Less than 30 percent of people age 65 and over met the dietary recommendations for fruits and milk. Average scores for the other HEI components were between 6.4 and 7.1. In general, older people could improve on all aspects of their diets.

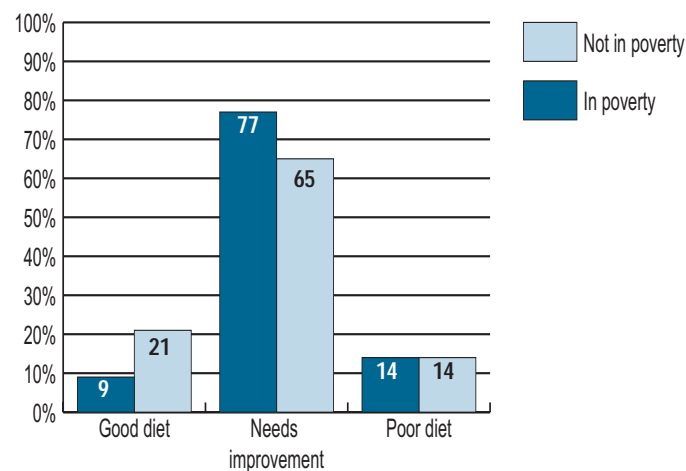
Table 2. Healthy Eating Index scores, overall and component, for people age 65 and over

	1989-90	1999-2000
Grains	6.3	6.4
Vegetables	6.8	6.4
Fruits	5.5	5.5
Milk	6.2	5.9
Meat	7.4	6.4
Total fat	6.8	6.9
Saturated fat	6.3	6.9
Cholesterol	8.5	8.1
Sodium	7.9	7.1
Variety	7.4	8.2
Total HEI	69.1	67.6

Healthy Eating Index Scores Varied by Poverty Status

HEI scores significantly varied by the poverty status of older Americans (fig. 1). In 2000, the poverty threshold for a single older person was \$8,259 and \$10,419 for an older couple. In 1999-2000, 21 percent of people age 65 and over who were not in poverty had a good diet, compared with 9 percent of people age 65 and over who were in poverty. Older people in poverty had significantly lower HEI component scores on cholesterol, compared with people not in poverty (data not shown).

Figure 1. Healthy Eating Index rating for people age 65 and over, by poverty status, 1999-2000



Trends in the Healthy Eating Index: A Decade

How has the quality of older people's diet changed over time? The overall HEI score of people age 65 and over has not changed appreciably since 1989-90 (the first years the Index was calculated, table 2). In 1989-90, the HEI for older Americans was 69.1 and in 1999-2000 it was 67.6, a change that was not statistically significant. Over this time, HEI component scores for older people significantly declined for meat, cholesterol, and sodium; component scores significantly increased for saturated fat and variety (table 2).

These findings provide a better understanding of the types of dietary changes needed to improve older Americans' eating patterns. The HEI is an important tool that can be used to provide guidance to target and design nutrition education and public health interventions.

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Note: For more details on the Healthy Eating Index and how it is computed, see Basiotis, P.P, Carlson, A., Gerrior, S.A., Juan, W.Y., and Lino, M. (authors in alphabetical order) (2002). *The Healthy Eating Index: 1999-2000* (CNPP-12). U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. Also available at www.cnpp.usda.gov.



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