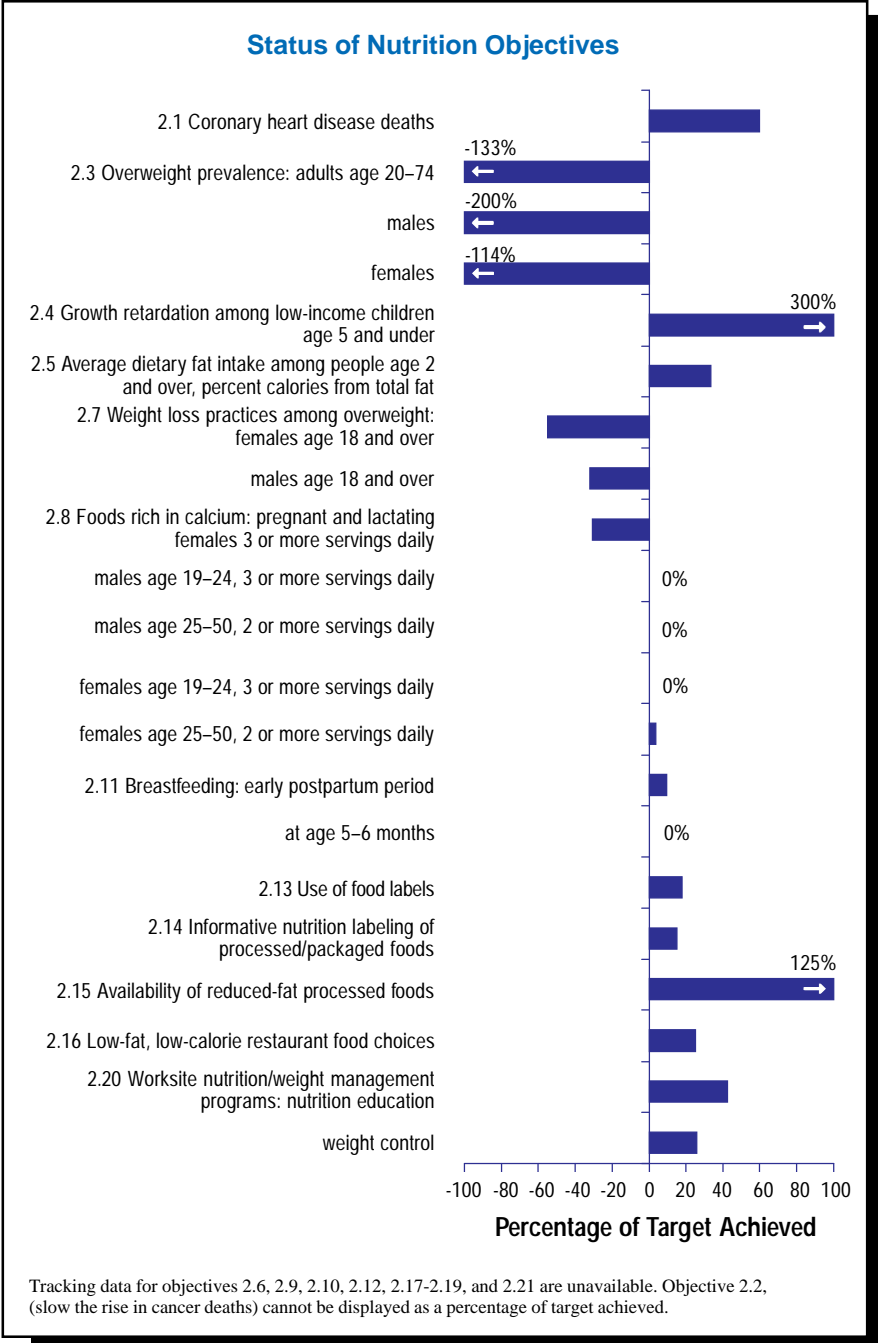


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Nutrition



Lead Agencies: *National Institutes of Health*
Food and Drug Administration

NUTRITION

One in three adults (34 percent)¹ and one in five adolescents (21 percent)² in the United States are overweight. The data from 1988–91 indicate that the prevalence of overweight has increased over the last decade for adults and adolescents. Overweight is especially prevalent among certain racial and ethnic groups; for example, nearly half of black women and Mexican-American women are estimated to be overweight. To reverse these overweight trends, actions are needed in both the nutrition and physical activity arenas to help people reduce their fat consumption, increase their fruit and vegetable intake, and pursue more physical activity.

Because dietary practices that are learned at a young age may be carried into adulthood, establishing healthy dietary patterns at an early age is important. The Nation's schools and child care centers play an important role in complementing and reinforcing efforts at home to educate children about nutrition principles in the *Dietary Guidelines for Americans*,³ to provide meals consistent with these principles, and to offer opportunities for daily physical activity. Key elements of the Nation's primary prevention strategy against obesity and chronic diseases are provision of proper nutrition that ensures appropriate growth and development of children and adolescents and the maintenance of a healthy diet and healthy weight throughout a person's lifetime.

In addition to the *Dietary Guidelines*, the U.S. Department of Agriculture (USDA) and the Department of Health and Human Services' *Food Guide Pyramid*⁴ is an educational tool for informing children and adults about healthy dietary patterns and the number of recommended servings per day from each food group. Introduced in 1992, the *Food Guide Pyramid* emphasizes the importance of consuming many servings of grains, vegetables, and fruits and of choosing few high-fat foods.

New food labeling helps people make healthy food choices. Under the Nutrition Labeling and Education Act, information about fat and other nutrient content must be provided on a "Nutrition Facts" panel for most processed packaged foods sold in supermarkets.⁵ Now the challenge is ensuring that consumers understand and use this information to make food selections.

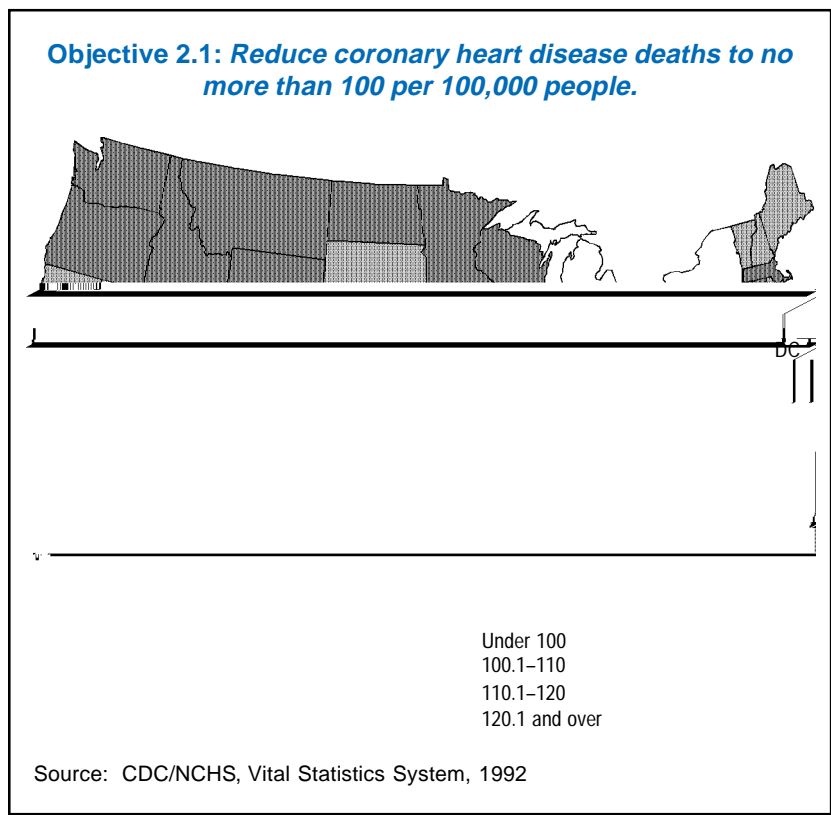
Standardized serving sizes for food products can also help the consumer. These sizes reflect the amounts customarily consumed. Uniform definitions are provided for nutrient content claims on food labels such as "low in fat" or "good source of dietary fiber," and certain health claims are authorized on food labels that describe the relationship between a nutrient or food and a disease (e.g., calcium and osteoporosis, fat and cancer, sodium and hypertension). The nutrition labeling requirement for most foods and the desirability of marketing foods with claims about nutrient content has influenced manufacturers to increase the availability of food products with less fat.

The new food label, the *Dietary Guidelines*, and the *Food Guide Pyramid* provide tools to help people select healthy diets today. Tools for the future will come from basic and applied research seeking to advance the understanding of the role of nutrition in health. Dietary factors that may mitigate the risk of developing a disease or the effects of a disease condition continue to be clarified and discovered, as are biochemical defects and their markers for such health conditions as obesity. Research also continues into gender, age, and cultural differences in food and nutrient intakes and in educational approaches that are effective with different population groups. In addition, research will further the base of knowledge about the role that diet plays in health compared to other lifestyle factors such as physical activity and the role of genetics.

Review of Progress

Breastfeeding is important for giving infants a good nutritional start in life. The proportion of women who breastfeed their babies has shown some positive change for the early postpartum period over a 5-year period, according to the Ross Laboratories Mothers Survey. In 1988, 54 percent of women breastfed their babies; that percentage increased to 56 percent in 1993. The proportion who continue breastfeeding until their babies are 5 to 6 months old was 21 percent in both 1988 and 1992. Among special population groups, there has been considerable progress in the percentage breastfeeding during the early postpartum period, thereby narrowing the gap between special populations and the total population. Between 1988 and 1993, the number of low-income women breastfeeding increased from 32 to 38 percent; black mothers, from 25 to 31 percent; Hispanics, from 51 to 56 percent; and American Indian/Alaska Native mothers, from 47 to 51 percent.

The recommendations in the *Dietary Guidelines* aimed at limiting fat consumption, increasing consumption of grains, vegetables, fruits, and calcium-rich foods, and maintaining a healthy weight are directed at the general population aged 2 and older. Results from the most current (1988–91) national food consumption surveys show some improvement from prior years' data for fat—the



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diets of people aged 2 and older are composed, on the average, of about 34 percent of calories from total fat and 12 percent of calories from saturated fat.⁶ However, only about one-fifth (21–22 percent) of the population has achieved the average daily goal of no more than 30 percent calories from fat, and a similar proportion (21 percent) have met the goal of less than 10 percent calories from saturated fat.

Based on a 1989–91 estimate of intake of fruits and vegetables, the average intake for people aged 2 and older was four servings per day. However, additional analyses of these data indicate that less than one-third of the population consumed the average daily goal of five or more servings per day. Of special note, a majority of people consumed less than one serving of fruit per day.

The Produce for Better Health Foundation, with support from the National Cancer Institute, has undertaken a nationwide campaign to encourage and assist Americans in eating five or more servings of fruits and vegetables a day as a part of a low-fat, high-fiber diet. Known as the 5-A-Day program, this partnership involves grocers, produce suppliers, and Federal and State health agencies. The program has developed a curriculum on nutrition for children aged 5–10 and reached into other community settings such as churches and the workplace. A survey of Americans, undertaken as a part of the project, indicated that only about one-quarter of the population is aware of this dietary recommendation.¹ People who are aware that they should eat at least five servings a day consumed more fruits and vegetables than those who thought two or fewer servings are adequate. Thus, awareness is a good predictor of consumption.

Based on 1989–91 estimates of intake of grain products, the average daily intake for people aged 2 and older was 5.8 servings. Forty percent of people met the average daily goal of six or more servings per day.

Since the mid-1980s, the available data suggest little change in intake of calcium-rich foods. In 1989–91, about half of children aged 2–10 met the average daily goal of two or more servings of milk and milk products. Only about one-fifth of pregnant and lactating women and people aged 11–24 met the average daily goal of three or more servings of milk and milk products. The same proportion of people aged 25 and older met the average daily goal of two or more servings.

Data from the USDA Continuing Survey of Food Intakes by Individuals (CSFII) show that 43 percent of main meal preparers did not use salt in food preparation in 1989–90 and that 60 percent of individuals never or rarely used salt at the table during a similar time period (1989–91). The 1993 National Health Interview Survey indicated that 37 percent of adults regularly purchase foods low in sodium.

Despite some positive changes in the American diet, such as the small decline in fat consumption, overweight prevalence has increased. Between 1976–80 and 1988–91, the percentage of the adult population considered to be overweight increased from 26 to 34 percent.¹ Among all ethnic and age subgroups of the population, there were

increases in overweight. Comparisons of self-reported overweight data with actual measurements of height and weight show that people tend to underreport their weight. Therefore, the need for actual measurements of weights and heights to assess the prevalence of overweight takes on even greater importance.

Fewer overweight people appear to be taking steps to control their weight by consuming fewer calories and exercising more. Despite concern about these trends in weight-loss practices and overweight prevalence, there is optimism in this emerging message: even modest reductions in weight can confer health benefits and enhance a person's sense of well-being. For example, weight loss that occurs as a result of diet and increased physical activity will help lower blood pressure and blood cholesterol levels and improve insulin sensitivity and glucose homeostasis or control.

Settings such as schools, supermarkets, restaurants, the workplace, and health care offices are targets for several of the HEALTHY PEOPLE 2000 nutrition objectives. According to a National Restaurant Association survey, the proportion of restaurants offering low-fat, low-calorie food choices increased from 70 percent in 1989 to 75 percent in 1990. Also, more processed food products that are reduced in fat are available in supermarkets. Data from the Nielsen Company National Scantrack showed 2,500 such products in 1986, compared with more than 5,600 in 1991. There was a small increase in food label use by adults from 74 percent in 1988 to 76 percent in 1990 according to the Health and Diet Survey. The 1993 National Health Interview Survey showed 66 percent of adults read food labels for calories, fat, and/or cholesterol.

Efforts to provide school meals consistent with the *Dietary Guidelines* are falling short of the target set for objective 2.17. Only 1 percent of schools offered lunches providing an average of 30 percent or less of calories from fat. To improve school meals, USDA mounted a comprehensive *School Meals Initiative for Healthy Children* in June 1994. Work is underway to update nutrition standards and menu planning in school programs by 1998. A school-based health promotion program developed by the National Heart, Lung, and Blood Institute provided materials and training for food service staff to meet the objectives for school meals established by USDA. This effort involved some 5,000 students in 96 schools in four States.

The proportion of worksites offering nutrition education has increased from 17 percent in 1985 to 31 percent in 1992. The proportion with weight control programs increased from 15 to 24 percent over this 7-year period.

Health professionals are a source of nutrition education and counseling, helping all individuals become aware of and implement the *Dietary Guidelines* and helping those with certain health conditions undertake therapeutic diets. In addition, providers such as obstetricians, pediatricians, and nurse practitioners can educate women of childbearing age on choosing healthy diets, new mothers about breastfeeding their infants, and children on healthful food choices to support growth and development. The 1992 Primary Care Providers Survey indicates that inquiries about diet and

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nutrition were highest among pediatricians (53 percent) and nurse practitioners (46 percent) and lowest among family physicians (19 percent) and obstetricians/gynecologists (15 percent).

For older adults, objective 2.18 measures the percent of people 65 and older who receive home food services because they have difficulty in preparing their own meals or are otherwise in need of home-delivered meals. According to the 1991 National Health Interview Survey, only 7 percent of this population is being reached.

No data were available to update progress on the objectives for iron deficiency (2.10), baby bottle tooth decay (2.12), and the proportion of schools offering nutrition education (2.19).

1995 Revisions

In addition to measuring average fat intake by the U.S. population, objective 2.5 has been supplemented with a measure of the proportion of people who meet the average daily goals of the *Dietary Guidelines* for fat and saturated fat intake as a percentage of calories. The year 2000 target of at least 50 percent of the population aged 2 and older meeting these recommendations is established based on data indicating that 21 to 22 percent of the population met each of the average daily goals.

With the revision of the population group to include people aged 2 and older, objective 2.6 becomes consistent with the *Dietary Guidelines* and *Food Guide Pyramid*. The baseline data have been revised to reflect results from the 1989–91 USDA CSFII, which used an improved method for measuring the number of servings that also considers the intake of fruits, vegetables, and grain products as ingredients in mixed dishes.

In addition to measuring average intake of fruits/vegetables and grain products by the population, objective 2.6 has been supplemented with a measure of the proportion of people who meet the average daily goals of the *Dietary Guidelines* for the number of servings of these products.

The year 2000 target of at least 50 percent of the population meeting the recommendation of five or more daily servings of fruits and vegetables is based on about 30 percent of the population meeting the recommendation. The year 2000 target for the percent of the population meeting the recommendation of six or more daily servings of grain products is established at 50 percent (baseline data from the 1989–91 CSFII showed 40 percent).

To cover more completely the target population for the recommendations in the *Dietary Guidelines* and *Food Guide Pyramid*, objective 2.8 has been supplemented with a measure of consumption of calcium-rich foods by people aged 2–10. Another revision to this objective, a change to people aged 11–24, is consistent with the age

grouping for the Recommended Dietary Allowance for calcium of 1,200 mg.⁷ Because adolescent and young adult females, in particular, should increase food sources of calcium in order to decrease risk of osteoporosis in later life, a special population target is established for females aged 11–24.

The original baseline for this objective was calculated from 1-day dietary data, and the dairy product category did not consider milk and milk products from some food mixtures such as pizza and macaroni and cheese. The revised baseline estimates the number of servings of milk and milk products according to the *Food Guide Pyramid*, including milk and milk products in food mixtures, and is based on multiple days of dietary data (3 days).

The 1995 revisions also include the addition of special population targets for objectives to reduce cancer deaths, to reduce overweight prevalence, to increase the adoption of appropriate weight-loss practices, and to adopt infant feeding practices to reduce baby bottle tooth decay.

Six objectives from other priority areas have been added to the Nutrition priority area, recognizing that diet can contribute to the prevention of these diseases. Other midcourse revisions were made to the nutrition objectives and accompanying text to identify baseline data where previously lacking and to define measurements for certain objectives.

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