

**Midcourse
Review**



**Nutrition and
Overweight** **19**

Co-Lead Agencies:

Food and Drug Administration
National Institutes of Health

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Goal: Promote health and reduce chronic disease associated with diet and weight.

Introduction*

Dietary factors are associated with 4 of the 10 leading causes of death—coronary heart disease, some types of cancer, stroke, and type 2 diabetes.^{1,2} In addition, dietary factors are linked to high blood pressure, osteoporosis, iron deficiency anemia, and other conditions.² Overweight and obesity are also associated with the leading causes of death, identified above, as well as with a range of other negative outcomes, such as gallbladder disease, respiratory dysfunction, gout, and osteoarthritis.²

Continued national action and community involvement are essential to promote healthful diets among all Americans and to reverse the trend in increased overweight and obesity.³ The prevalence of overweight among Americans increased from 1988–94 to 1999–2002 due to imbalances in caloric intake and energy expenditure.² By 1999–2002, nearly one in three adults was obese. The estimated cost of obesity to the United States was \$117 billion in 2000.⁴

Slight progress was made in increasing food security. Available data suggested little or no progress for the other Healthy People 2010 objectives aimed at promoting healthful diets and reducing iron deficiency and anemia.

One of the two overarching goals of Healthy People 2010 is to increase quality and years of healthy life. Poor nutrition and lack of physical activity have myriad negative effects on an individual's health. The second Healthy People 2010 goal is to eliminate health disparities by race and ethnicity, gender, socioeconomic status, disability status, and other characteristics. Disparities in the focus area of nutrition and overweight continue to persist for overweight and obesity, anemia in low-income pregnant women, and food security in the household.

Modifications to Objectives and Subobjectives

The following discussion highlights modifications, including changes, additions, and deletions, to this focus area's objectives and subobjectives as a result of the midcourse review.

As stated in *Healthy People 2010*: “Most developmental objectives have a potential data source with a reasonable expectation of data points by the year 2004 to facilitate setting 2010 targets in the mid-decade review. Developmental objectives with no baseline at the midcourse will be dropped.” Accordingly, at the midcourse review some developmental objectives and subobjectives were deleted due to lack of a data source. However, the U.S. Department of Health and Human Services (HHS) and the agencies that serve as the leads for the Healthy People 2010 initiative will consider ways to ensure these public health issues retain prominence despite their current lack of data.

* Unless otherwise noted, data referenced in this focus area come from Healthy People 2010 and can be located at <http://wonder.cdc.gov/data2010>. See the section on DATA2010 in the Technical Appendix for more information.

At the beginning of the decade, 16 measurable objectives and 2 developmental objectives comprised this focus area. Following the midcourse review, one developmental objective was deleted; the other was retained.

Monitoring and improving the dietary quality of meals and snacks consumed at school is important. However, the developmental objective regarding the proportion of children and adolescents aged 6 to 19 years whose intake of meals and snacks at school contributes to good overall dietary quality (19-15) was dropped due to lack of an appropriate data source capable of providing within the decade two sets of nationally representative estimates of what children eat during the school day.

Iron deficiency anemia among pregnant females (19-14) was retained as a developmental objective. The National Health and Nutrition Examination Survey (NHANES) was identified as the data source with the potential to provide at least two sets of nationally representative estimates by 2010.⁵

Progress Toward Healthy People 2010 Targets

The following discussion highlights objectives that met or exceeded their 2010 targets; moved toward the targets, demonstrated no change, or moved away from the targets; and those that lacked data to assess progress or that were assessed in alternative ways. Progress is illustrated in the Progress Quotient bar chart (see Figure 19-1), which displays the percent of targeted change achieved for objectives and subobjectives with sufficient data to assess progress.

Data to measure progress toward the 2010 targets were available for the following objectives and subobjectives: healthy weight in adults (19-1), obesity in adults (19-2), overweight or obesity in children and adolescents (19-3a, b, and c), growth retardation in children (19-4), iron deficiency in young children aged 1 to 2 years (19-12a) and females of childbearing years (19-12c), anemia in low-income pregnant females (19-13), nutrition counseling for medical conditions (19-17), and food security (19-18).

Objectives that met or exceeded their targets. No objectives in this focus area met or exceeded their targets.

Objectives that moved toward their targets. Food security (19-18) was the only objective that moved toward its target for which the change was statistically significant. “Food security” is defined as household members having access at all times to enough food for an active, healthy life.⁶ This objective aims to increase food security among U.S. households from a baseline of 88 percent in 1995 to a target of 94 percent in 2010.

In 2003, 89 percent of American households were food secure throughout the entire year. The typical food-secure household in the United States spent 34 percent more on food than did the typical food-insecure household of the same size and household composition.⁶ Just over half of the food-insecure households reported previous-month participation in one or more of the three largest Federal food assistance programs—National School Lunch Program; Food Stamp Program; and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).

Of the three subobjectives for iron deficiency in young children and in females of childbearing age (19-12), only one moved toward its target: children aged 1 to 2 years (19-12a). The prevalence of iron deficiency moved toward the target of 5 percent, from 9 percent in 1988–94 to 7 percent in 1999–2000.

Objectives that demonstrated no change. Growth retardation among children under age 5 years in low-income families (19-4) showed no movement toward or away from its target. This objective remained static at 6 percent through 2003, with the target at 4 percent. Optimal nutrition is important to reducing the growth retardation among low-income children.

Objectives that moved away from their targets. The data for three Healthy People 2010 objectives on the weight status of adults and youth showed a trend away from the 2010 targets.⁷ During the survey periods from 1988–94 to 1999–2002, the age-adjusted proportion of adults aged 20 years and older at a healthy weight (19-1) decreased from 42 percent to 33 percent, while the proportion of adults who were obese (19-2) increased from 23 percent to 30 percent. The targets for objectives 19-1 and 19-2 are 60 percent and 15 percent, respectively. Between 1988–94 and 1999–2002, the prevalence of overweight and obesity among children and adolescents aged 6 to 19 years (19-3c) increased from 11 percent to 16 percent, moving away from the target of 5 percent. Identical trends were observed among children aged 6 to 11 years (19-3a) and adolescents aged 12 to 19 years (19-3b).

The challenges in addressing the increase in overweight and obesity are many. Food is abundant, portion sizes have increased, and society has become increasingly sedentary.^{4,8} Because the contributing factors to overweight and obesity are complex—including genetic, metabolic, behavioral, environmental, cultural, and socioeconomic components—reversing the epidemic will take concerted action by all sectors of society. A supportive environment with accessible and affordable healthy food choices and opportunities for regular physical activity can facilitate individual behavior change.⁴ In addition, for obese adults, even modest weight loss (for example, 10 pounds) has health benefits.²

Promoting healthy weight is a principal component of the *HealthierUS* initiative and the *Steps to a HealthierUS (Steps)* initiative.⁹ A centerpiece of *Steps* is the 5-year cooperative agreement programs between the Federal Government and States, cities, and Tribal entities. These groups receive funds to implement prevention efforts to reduce the burden of disease attributable to obesity, diabetes, heart disease, stroke, and asthma. Another cooperative effort is a memorandum of understanding (MOU) between the U.S. Departments of Education, Agriculture (USDA), and HHS. The MOU establishes a framework for the departments to work together to encourage youth to adopt healthy eating and physical activity.¹⁰ These initiatives are a sampling of the collaboration among agencies and the public-private sector directed at reversing the overweight and obesity epidemic.

For the subobjective that addresses iron deficiency in nonpregnant females aged 12 to 49 years (19-12c), the prevalence increased from 11 percent to 12 percent, moving away from the target of 7 percent. In addition, the prevalence of anemia among low-income pregnant females in the third trimester (19-13) increased from 29 percent in 1996 to 30 percent in 2003, moving away from the target of 20 percent. For females of childbearing age, iron deficiency may be prevented by screening, appropriate treatment, and dietary counseling. Dietary counseling includes encouraging the consumption of foods that are good sources of iron (for example, red meat, spinach, and iron-fortified breakfast cereals) and foods with an enhancer of iron absorption such as vitamin C. The WIC program is an important and wide-reaching Federal initiative to reduce iron deficiency and anemia. The initiative offers nutrition counseling and iron-rich foods to low-income pregnant, post partum, and breastfeeding women and to infants and children at nutritional risk.¹¹

Nutrition counseling for medical conditions (19-17) moved away from its target. This objective aims to increase the proportion of physician office visits made by patients with a diagnosis of cardiovascular disease, diabetes, or hyperlipidemia that include ordering or providing dietary counseling to 75 percent by 2010. From 1997 to 2000, the proportion declined from 42 percent to 40 percent.

Objectives that could not be assessed or were assessed in alternative ways. Nine objectives and one subobjective did not have available data at the midcourse review. Some had other measurements that were useful in assessing progress.

No data were available to assess reducing the prevalence of iron deficiency among children aged 3 to 4 years (19-12b) or increasing the proportion of worksites that offer nutrition or weight management classes or counseling (19-16). However, data sources have been identified, and these objectives are anticipated to have data to assess progress by the end of the decade.

Seven objectives are aimed at encouraging healthful eating patterns. They address fruit, vegetable, and grain product intake (19-5, 19-6, and 19-7), saturated and total fat intake (19-8 and 19-9), and total sodium and calcium intake (19-10 and 19-11). Data were not available to provide updated estimates on the proportion of the population that meets intake recommendations for these objectives but will be available for final review. The assessment of progress in relation to the targets was not possible for this report because a second day of diet recall data on survey respondents was not available from the most recent national dietary intake survey, the 1999–2002 NHANES.

However, 1-day diet recall data were available from the baseline data sources and the 1999–2002 NHANES, and were used to estimate average intakes of fruits, vegetables, whole grains, total and saturated fats, and sodium (but not calcium). These data provide useful information on trends in food and nutrient consumption but are not included in Figure 19-1, because they do not represent the same measurement used to create the initial baselines.

Objective 19-5 aims to increase the proportion of the population aged 2 years and older who consume at least two daily servings of fruit. The average intake by persons aged 2 years and older remained the same from 1994–96 to 1999–2002 (1.6 servings). Progress was also not apparent for two objectives: to increase Americans' consumption of total vegetables with at least one-third being dark green or orange (19-6) and to increase consumption of total grain products with at least three being whole grain (19-7). During this same time period, average vegetable consumption for persons aged 2 years and older declined from 3.4 to 3.2, with no noted change in the daily consumption of dark green or orange vegetables (0.3 servings). Average total grain product consumption, originally at 6.8 servings per day, also did not change. Whole grain consumption decreased from 1.0 to 0.8 servings per day.

Increasing consumption of fruits, vegetables, and whole grains in the United States presents a range of challenges. For example, consumers weigh attributes such as taste, convenience, availability, price, and perceived health benefits.^{12, 13} The *2005 Dietary Guidelines for Americans (Dietary Guidelines)*² provides a basis for renewed efforts to promote daily consumption of whole grains and of a variety of fruits and vegetables.² One framework for such efforts is the 5 A Day for Better Health Program, a large-scale partnership between the fruit and vegetable industry and the Federal Government to identify and implement strategies to increase fruit and vegetable consumption.¹⁴

The data suggested that little or no progress was achieved in decreasing the Nation's consumption of saturated fat (19-8) or total fat (19-9). Between 1988–94 and 1999–2002, the average intake for persons aged 2 years and older remained at 33 percent of calories for total fat and at 11 percent of calories for saturated fat. The *Dietary Guidelines* recommends total fat intake as a percentage of calories between 30 percent and 35 percent for children aged 2 to 3 years, 25 percent and 35 percent for children and adolescents aged 4 to 18 years, and 20 percent and 35 percent for adults.² The *Dietary Guidelines* also recommends that Americans 2 years of age and older consume less than 10 percent of calories from saturated fat while keeping *trans* fatty acid consumption as low as possible. Processed foods and oils provide most of the *trans* fats in the diet.²

For the objective aimed at decreasing total sodium intake (19-10), 1999–2000 data suggested that average intake by persons 2 years of age and older remains well above the *Dietary Guidelines*' recommendation to consume less than 2,300 milligrams daily.² Most of Americans' sodium intake comes from salt added by manufacturers to processed and prepackaged foods rather than from the natural salt content of foods or salt shakers used at the table or in cooking.² With respect to objectives 19-8, 19-9, and 19-10, consumers need access to information about the fat (including saturated fat and *trans* fat) and sodium content of the foods they eat, both at home and away from home.

Progress Toward Elimination of Health Disparities

The following discussion highlights progress toward the elimination of health disparities. The disparities are illustrated in the Disparities Table (see Figure 19-2), which displays information about disparities among select populations for which data were available for assessment.

NHANES is used to monitor the majority of population-based objectives in this focus area, including three weight-related objectives (19-1, 19-2, and 19-3), seven dietary intake objectives (19-5 through 19-11), and one objective on iron deficiency (19-12). Although the Continuing Survey of Food Intakes by Individuals (CSFII) was the baseline data source for five dietary intake objectives (19-5 through 19-9), NHANES is the data source for updates for these objectives after the dietary component of these two surveys merged. In general, NHANES can be used to monitor disparities by gender, income, and race and ethnicity for the white non-Hispanic, black non-Hispanic, and Mexican American populations. The CSFII provided baseline estimates by gender, income, and race and ethnicity for the white non-Hispanic, black non-Hispanic, and Hispanic populations.

As shown in Figure 19-2, the weight status objectives and subobjectives (19-1, 19-2, and 19-3) demonstrated disparities within race and ethnicity, gender, income, and disability. White non-Hispanic persons had the best rates in 1999–2002 for all the weight-related objectives and subobjectives (19-1, 19-2, and 19-3), compared with other racial and ethnic groups with data available.

Although the trend toward increasing obesity in adults (19-2) occurred among all three racial and ethnic groups for which Healthy People 2010 data were available, the increase was more pronounced for the black non-Hispanic population (30 percent to 39 percent) and the white non-Hispanic population (22 percent to 30 percent) than for the Mexican American population (29 percent to 31 percent). Disparity in adult obesity between the Mexican American and the white non-Hispanic (best) populations declined. Despite the decrease in disparity, the obesity prevalence for both groups increased and moved away from their targets.

Between 1988–94 and 1999–2002, the disparity in overweight or obesity for children aged 6 to 11 years (19-3a) between Mexican American and black non-Hispanic populations declined. Among persons aged 6 to 19 years (19-3c), the prevalence was at least 50 percent higher in the Mexican American and black non-Hispanic populations than in the white non-Hispanic population.

Between 1988–94 and 1999–2002, the prevalence of obesity (19-2) among males aged 20 years and older increased from 20 percent to 27 percent; for females, it increased from 25 percent to 33 percent. Among persons aged 20 years and older (19-2), males had a lower prevalence of obesity than females, but among persons aged 6 to 19 years (19-3c), females had a lower prevalence of overweight or obesity than males.

Among persons aged 20 years and older, people without disabilities had better rates for healthy weight (19-1) and obesity (19-2) than people with disabilities. The higher income population had better rates for healthy weight in persons aged 20 years and older (19-1), obesity in persons aged 20 years and older (19-2), and overweight or obesity in persons aged 6 to 19 years (19-3c). The disparity decreased between lower and higher income adolescents who are overweight or obese (19-3b), but this decrease did not reflect progress because both groups moved away from the target. Additional data analyses are needed to fully estimate differences in associated health risks in relationship to body mass index disparities.

Data from the Centers for Disease Control and Prevention’s (CDC’s) Pediatric Nutrition Surveillance System were available to monitor disparities in growth retardation among low-income children under 5 years of age (19-4), by race, ethnicity, and gender for the white non-Hispanic, black non-Hispanic, Hispanic, American Indian or Alaska Native, and Asian or Pacific Islander populations. In 2003, the American Indian or Alaska Native population had the best rate for growth retardation (5 percent). From 1997 to 2003, the disparity between the Asian or Pacific Islander and the American Indian or Alaska Native populations decreased. Female children had a better rate than male children.

Disparities in baseline dietary intake estimates for seven objectives (19-5 through 19-11) were also present. The Hispanic population had the best rates in 1994–96 for three objectives: fruit intake (19-5), saturated fat intake (19-8), and total fat intake (19-9). The Mexican American and black non-Hispanic populations had the best rates in 1988–94 for sodium intake (19-10). The white non-Hispanic population had the best rate in 1994–96 for grain intake (19-7) and in 1988–94 for calcium intake (19-11). Higher income persons had better rates for all the dietary intake objectives except sodium.

Disparities were monitored in objectives and subobjectives dealing with iron deficiency and anemia (19-12 and 19-13). Data from NHANES indicated that lower income nonpregnant women had a higher prevalence of iron deficiency (19-12c) than higher income women. Data from CDC’s Pregnancy Nutrition Surveillance System indicated that for anemia in low-income pregnant women in their third trimester (19-13), the Asian or Pacific Islander population had the best rate (24 percent). The prevalence of anemia among the black non-Hispanic population was at least 50 percent higher than that of the Asian or Pacific Islander population.

Data from the Food Security Supplement to the Current Population Survey were also available to assess disparities by race or ethnicity for the white non-Hispanic and black non-Hispanic, Hispanic, Asian or Pacific Islander, and American Indian or Alaska Native populations and by income for food security (19-18). In 2003, white non-Hispanic households had the best rate for food security (92 percent). Food insecurity among black non-Hispanic, Hispanic, and American Indian or Alaska Native households was nearly three times that of white non-Hispanic households. The proportion of lower income households that experienced food insecurity was more than four times that of higher income households. Although the disparity between lower and higher income households declined between 1995 and 2003, both income groups moved away from the target.

Opportunities and Challenges

Collective national action and community involvement are essential to promote healthful diets among all Americans and to reverse the trend in increased overweight and obesity. The *Dietary Guidelines* provides a focus for many of these efforts by identifying eating and physical activity patterns that can help Americans manage weight and reduce risk of chronic disease. Two examples of balanced eating plans consistent with the *Dietary Guidelines* are the revised Food Guidance System “MyPyramid”¹⁵ and DASH (the Dietary Approaches to Stop Hypertension) Eating Plan.¹⁶ The food label is another tool that can help consumers construct healthful diets.¹⁷

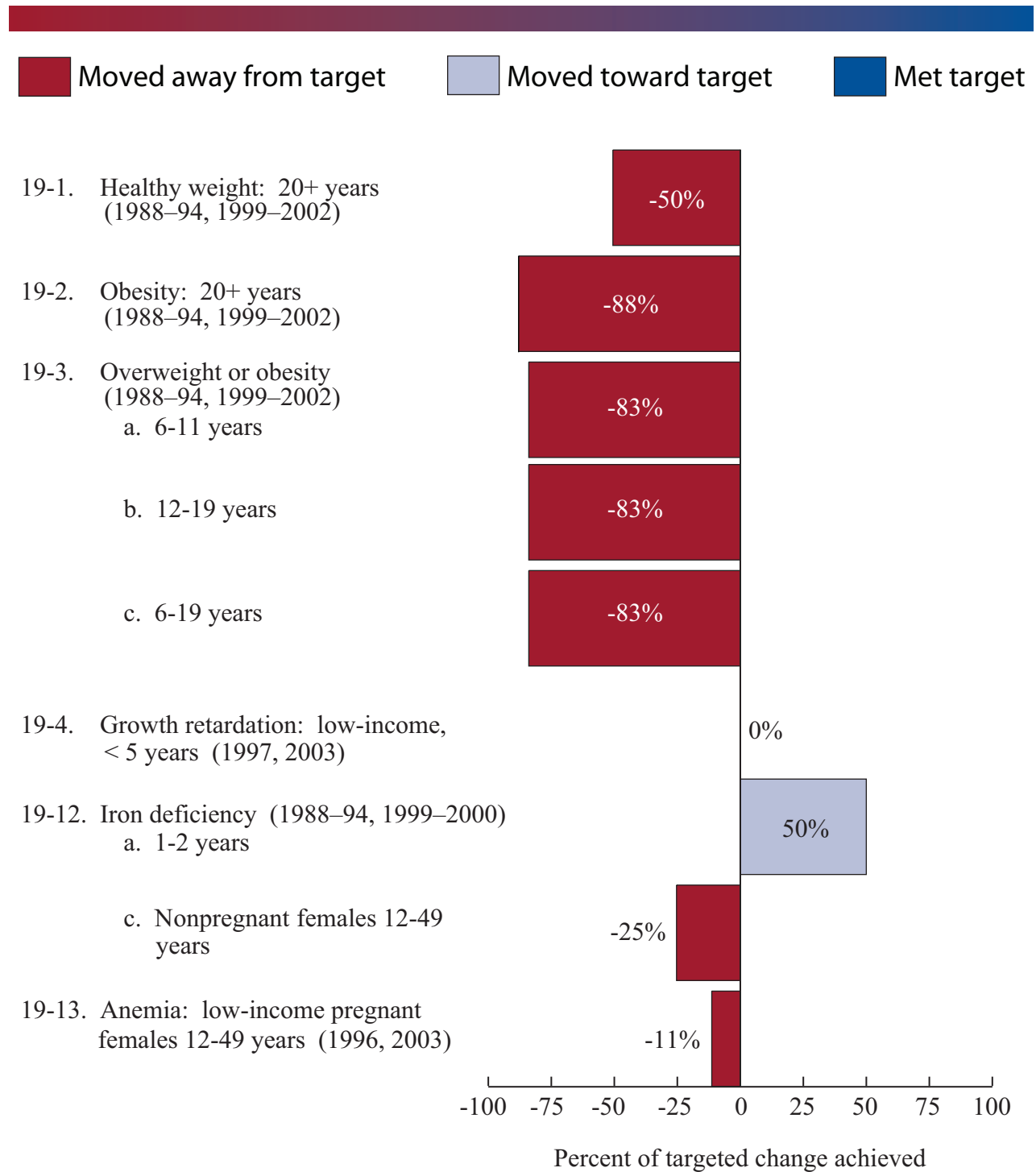
Policies and programs that foster healthy behaviors in youth may be especially important to further progress in the prevention of obesity and diet-related disease in the United States.¹⁸ The Coordinated School Health Program sponsored by HHS through CDC in partnership with USDA, helps to support States and communities as they develop school wellness policies.¹⁹ Schools are also a focal point of the USDA Team Nutrition initiative, which provides training to food service professionals as well as nutrition education.²⁰ The classroom offers another opportunity to foster healthy behaviors in children and adolescents. While some classroom curricula address a range of topics on nutrition and physical activity,²¹ others focus on specific topics such as the scientific principles of energy balance within the body or on high blood pressure prevention.^{21, 22, 23} Still other efforts to promote healthy eating and fitness among youth are directed at afterschool programs or at parents and caregivers.^{24, 25}

Emerging Issues

With increased obesity and its associated comorbidities, newly developed pharmaceuticals²⁶ and increased use of bariatric surgery²⁷ are likely to be considered as treatment options. Appropriate monitoring, such as efficacious data collection, medical care, and quality assurance, is needed to evaluate the benefits and risk of these and other therapies.

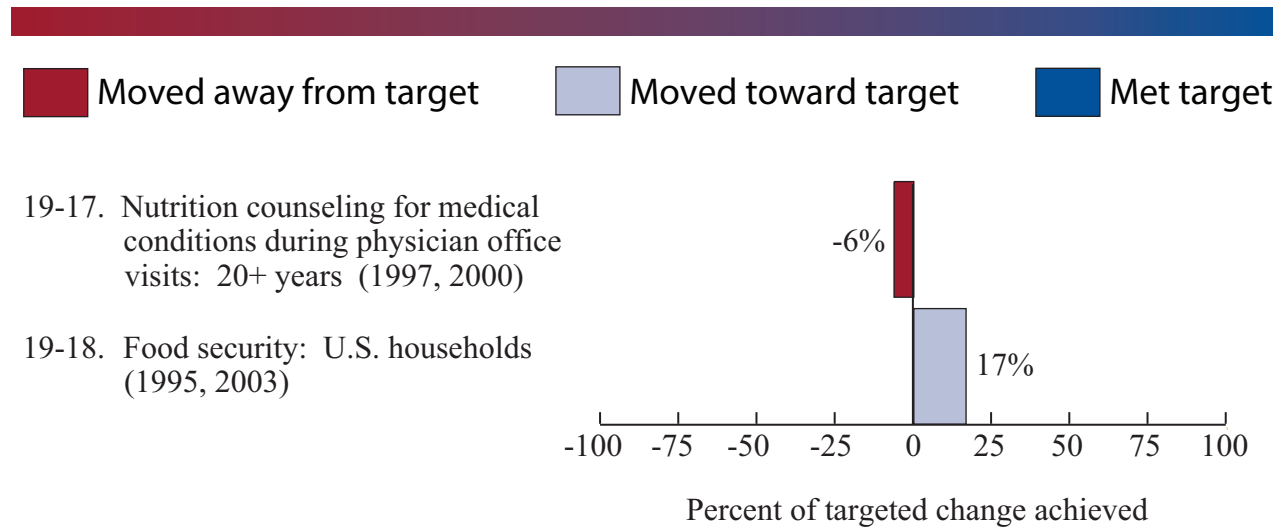
Nevertheless, prevention rather than treatment may hold the highest potential in reversing the trend in increased obesity in the United States. In addition, the concerted efforts of all sectors of society, together with conscious actions by individuals, may offer the greatest hope for improved health among Americans and substantial progress on all of the nutrition and overweight objectives by 2010.

Figure 19-1. Progress Quotient Chart for Focus Area 19: Nutrition and Overweight



See notes at end of chart. (continued)

Figure 19-1. (continued)



Notes: Tracking data for objectives 19-5 through 19-11, 19-12b, 19-14, and 19-16 are unavailable. Objective 19-15 was deleted at the midcourse.

Years in parentheses represent the baseline data year and the most recent data year used to compute the percent of the Healthy People 2010 target achieved.

$$\text{Percent of targeted change achieved} = \left(\frac{\text{Most recent value} - \text{baseline value}}{\text{Year 2010 target} - \text{baseline value}} \right) \times 100$$

Figure 19-2. Disparities Table for Focus Area 19: Nutrition and Overweight

Disparities from the best group rate for each characteristic at the most recent data point and changes in disparity from the baseline to the most recent data point.

| Population-based objectives | | Characteristics | | | | | | | | | | | | | |
|-----------------------------|--|----------------------------------|-------|---|-------------------|--------------------|--------------------|--------------------|---------------|--------|---------------------|--------------------|---------------------|---------------------------|------------------------------|
| | | Race and ethnicity | | | | | | | Gender | | Income ¹ | | Disability | | |
| | | American Indian or Alaska Native | Asian | Native Hawaiian or other Pacific Islander | Two or more races | Hispanic or Latino | Black non-Hispanic | White non-Hispanic | Summary index | Female | Male | Lower income level | Higher income level | Persons with disabilities | Persons without disabilities |
| 19-1. | Healthy weight: 20+ years (1988-94, 1999-2002) * | | | | | 2 | B | | B | | | B | | B | |
| 19-2. | Obesity: 20+ years (1988-94, 1999-2002) * | | | | | ↓ ² | B | ↓ | | B | | B | | B | |
| 19-3a. | Overweight or obesity: 6-11 years (1988-94, 1999-2002) * | | | | | ↓ ² | B | b | | | | | | | |
| 19-3b. | Overweight or obesity: 12-19 years (1988-94, 1999-2002) * | | | | | 2 | B | | B | | ↓↓ | B | | | |
| 19-3c. | Overweight or obesity: 6-19 years (1988-94, 1999-2002) * | | | | | 2 | B | | B | | | B | | | |
| 19-4. | Growth retardation: low-income, < 5 years (1997, 2003) † | B | | ↓ ³ | | | | | B | | | | | | |
| 19-5. | Fruit intake: 2+ servings/day, 2+ years (1994-96) * | | | | | B | | | | | | B | | | |
| 19-6. | Vegetable intake: 3+ servings/day with 1/3+ dark green/orange, 2+ years (1994-96) * | | | | | | | | | | | B | | | |
| 19-7. | Grain intake: 6+ servings/day with 3+ whole grain, 2+ years (1994-96) * | | | | | | B | | | | | B | | | |
| 19-8. | Saturated fat intake: < 10 percent of caloric intake, 2+ years (1994-96) * | | | | | B | | | | | | B | | | |
| 19-9. | Total fat intake: ≤ 30 percent of caloric intake, 2+ years (1994-96) * | | | | | B | | | | | | B | | | |
| 19-10. | Sodium intake: ≤ 2,400 mg/day, 2+ years (1988-94) * | | | | | B ² | B | | | | B | | B | | |
| 19-11. | Calcium intake: ≥ mean requirement, 2+ years (1988-94) * | | | | | 2 | B | | | | | B | B | | |
| 19-12a. | Iron deficiency: 1-2 years (1988-94, 1999-2000) * | | | | | 2 | | | | | | | | | |
| 19-12b. | Iron deficiency: 3-4 years (1988-94, 1999-2000) * | | | | | 2 | | | | | | | | | |
| 19-12c. | Iron deficiency: nonpregnant females 12-49 years (1988-94, 1999-2000) * | | | | | 2 | | | | | 4 | B ⁴ | | | |
| 19-13. | Anemia: low-income pregnant females, third trimester, 12-49 years (1996, 2003) † | | | B ³ | | | | | | | | | | | |
| 19-17. | Nutrition counseling for medical conditions during physician office visits: 20+ years (1997, 2000) † | | | | | | 5 | B ⁵ | | B | | | | | |
| 19-18. | Food security: U.S. households (1995, 2003) * | | | b ³ | | | B | | | | ↓ | B | | | |










(continued)

Figure 19-2. (continued)

Notes: Data for objectives 19-14 and 19-16 are unavailable or not applicable. Objective 19-15 was deleted at the midcourse.

Years in parentheses represent the baseline data year and the most recent data year (if available).

Disparity from the best group rate is defined as the percent difference between the best group rate and each of the other group rates for a characteristic (for example, race and ethnicity). The summary index is the average of these percent differences for a characteristic. Change in disparity is estimated by subtracting the disparity at baseline from the disparity at the most recent data point. Change in the summary index is estimated by subtracting the summary index at baseline from the summary index at the most recent data point. See Technical Appendix for more information.

| | | | | | | | | |
|--|---|--|---|--|---|--|---|---------------------|
| The best group rate at the most recent data point. |  B | The group with the best rate for specified characteristic. |  b | Most favorable group rate for specified characteristic, but reliability criterion not met. |  | Best group rate reliability criterion not met. | | |
| Percent difference from the best group rate | | | | | | | | |
| Disparity from the best group rate at the most recent data point. |  | Less than 10 percent or not statistically significant |  | 10-49 percent |  | 50-99 percent |  | 100 percent or more |
| Increase in disparity (percentage points) | | | | | | | | |
| Changes in disparity over time are shown when the change is greater than or equal to 10 percentage points and statistically significant, or when the change is greater than or equal to 10 percentage points and estimates of variability were not available. | | | ↑ 10-49 | ↑↑ 50-99 | | | ↑↑ 100 or more | |
| | Decrease in disparity (percentage points) | | | | | | | |
| | | | | ↓ 10-49 | | | ↓↓ 100 or more | |
| Availability of data. |  | Data not available. |  | | | | Characteristic not selected for this objective. | |

* The variability of best group rates was assessed, and disparities of $\geq 10\%$ are statistically significant at the 0.05 level. Changes in disparity over time, noted with arrows, are statistically significant at the 0.05 level. See Technical Appendix.

† Measures of variability were not available. Thus, the variability of best group rates was not assessed, and the statistical significance of disparities and changes in disparity over time could not be tested. See Technical Appendix.

¹ Lower: $\leq 130\%$ of poverty threshold. Higher: $> 130\%$ of poverty threshold.

² Data are for Mexican Americans.

³ Data are for Asians or Pacific Islanders.

⁴ Baseline data only.

⁵ Data include persons of Hispanic origin.

Objectives and Subobjectives for Focus Area 19: Nutrition and Overweight

Goal: Promote health and reduce chronic disease associated with diet and weight.

As a result of the Healthy People 2010 Midcourse Review, changes were made to the Healthy People 2010 objectives and subobjectives. These changes are specific to the following situations:

- Changes in the wording of an objective to more accurately describe what is being measured.
- Changes to reflect a different data source or new science.
- Changes resulting from the establishment of a baseline and a target (that is, when a formerly developmental objective or subobjective became measurable).
- Deletion of an objective or subobjective that lacked a data source.
- Correction of errors and omissions in *Healthy People 2010*.

Revised baselines and targets for measurable objectives and subobjectives do not fall into any of the above categories and, thus, are not considered a midcourse review change.¹

When changes were made to an objective, three sections are displayed:

1. In the Original Objective section, the objective as published in *Healthy People 2010* in 2000 is shown.
2. In the Objective With Revisions section, strikethrough indicates text deleted, and underlining is used to show new text.
3. In the Revised Objective section, the objective appears as revised as a result of the midcourse review.

Details of the objectives and subobjectives in this focus area, including any changes made at the midcourse, appear on the following pages.

¹ See Technical Appendix for more information on baseline and target revisions.

Weight Status and Growth

NO CHANGE IN OBJECTIVE

19-1. Increase the proportion of adults who are at a healthy weight.

Target: 60 percent.

Baseline: 42 percent of adults aged 20 years and older were at a healthy weight (defined as a body mass index [BMI] equal to or greater than 18.5 and less than 25) in 1988–94 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

NO CHANGE IN OBJECTIVE

19-2. Reduce the proportion of adults who are obese.

Target: 15 percent.

Baseline: 23 percent of adults aged 20 years and older were identified as obese (defined as a BMI of 30 or more) in 1988–94 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

NO CHANGE IN OBJECTIVE

19-3. Reduce the proportion of children and adolescents who are overweight or obese.

Target and baseline:

| Objective | Reduction in Overweight or Obese Children and Adolescents* | 1988–94 Baseline | 2010 Target |
|---------------|--|------------------|-------------|
| | | <i>Percent</i> | |
| 19-3a. | Children aged 6 to 11 years | 11 | 5 |
| 19-3b. | Adolescents aged 12 to 19 years | 11 | 5 |
| 19-3c. | Children and adolescents aged 6 to 19 years | 11 | 5 |

* Defined as at or above the gender- and age-specific 95th percentile of BMI based on the revised CDC Growth Charts for the United States.

NO CHANGE IN OBJECTIVE (*continued*)

Target setting method: Better than the best.

Data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

NO CHANGE IN OBJECTIVE (Data updated and footnoted)

19-4. Reduce growth retardation among low-income children under age 5 years.

Target: 4¹ percent.

Baseline: 6² percent of low-income children under age 5 years were growth retarded in 1997 (defined as height for age below the fifth percentile in the age-gender appropriate population using the 2000 CDC growth charts; not age adjusted).

Target setting method: Better than the best.

Data source: Pediatric Nutrition Surveillance System, CDC, NCCDPHP.

¹ Target revised from 5 because of baseline revision after November 2000 publication.

² Baseline revised from 8 after November 2000 publication.

Food and Nutrient Consumption

NO CHANGE IN OBJECTIVE

19-5. Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit.

Target: 75 percent.

Baseline: 28 percent of persons aged 2 years and older consumed at least two daily servings of fruit in 1994–96 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: Continuing Survey of Food Intakes by Individuals (CSFII) (2-day average), USDA.

NO CHANGE IN OBJECTIVE

19-6. Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables.

NO CHANGE IN OBJECTIVE *(continued)*

Target: 50 percent.

Baseline: 3 percent of persons aged 2 years and older consumed at least three daily servings of vegetables, with at least one-third of these servings being dark green or orange vegetables in 1994–96 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: Continuing Survey of Food Intakes by Individuals (CSFII) (2-day average), USDA.

NO CHANGE IN OBJECTIVE

19-7. Increase the proportion of persons aged 2 years and older who consume at least six daily servings of grain products, with at least three being whole grains.

Target: 50 percent.

Baseline: 7 percent of persons aged 2 years and older consumed at least six daily servings of grain products, with at least three being whole grains in 1994–96 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: Continuing Survey of Food Intakes by Individuals (CSFII) (2-day average), USDA.

NO CHANGE IN OBJECTIVE

19-8. Increase the proportion of persons aged 2 years and older who consume less than 10 percent of calories from saturated fat.

Target: 75 percent.

Baseline: 36 percent of persons aged 2 years and older consumed less than 10 percent of daily calories from saturated fat in 1994–96 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: Continuing Survey of Food Intakes by Individuals (CSFII) (2-day average), USDA.

NO CHANGE IN OBJECTIVE

19-9. Increase the proportion of persons aged 2 years and older who consume no more than 30 percent of calories from total fat.

Target: 75 percent.

Baseline: 33 percent of persons aged 2 years and older consumed no more than 30 percent of daily calories from total fat in 1994–96 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: Continuing Survey of Food Intakes by Individuals (CSFII) (2-day average), USDA.

NO CHANGE IN OBJECTIVE

19-10. Increase the proportion of persons aged 2 years and older who consume 2,400 mg or less of sodium daily.

Target: 65 percent.

Baseline: 21 percent of persons aged 2 years and older consumed 2,400 mg or less of sodium daily (from foods, dietary supplements, tap water, and salt use at the table) in 1988–94 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

NO CHANGE IN OBJECTIVE (Data updated and footnoted)

19-11. Increase the proportion of persons aged 2 years and older who meet dietary recommendations for calcium.

Target: 74¹ percent.

Baseline: 45² percent of persons aged 2 years and older were at or above approximated mean calcium requirements (based on consideration of calcium from foods, dietary supplements, and antacids) in 1988–94 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

**NO CHANGE IN OBJECTIVE (continued)
(Data updated and footnoted)**

Data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

¹ Target revised from 75 because of baseline revision after November 2000 publication.

² Baseline revised from 46 after November 2000 publication.

Iron Deficiency and Anemia

NO CHANGE IN OBJECTIVE

19-12. Reduce iron deficiency among young children and females of childbearing age.

Target and baseline:

| Objective | Reduction in Iron Deficiency* | 1988–94 Baseline | 2010 Target |
|----------------|---|---------------------|----------------|
| | | <i>Percent</i> | |
| 19-12a. | Children aged 1 to 2 years | 9 | 5 |
| 19-12b. | Children aged 3 to 4 years | 4 | 1 |
| 19-12c. | Nonpregnant females aged 12 to 49 years | 11 | 7 |

* Iron deficiency is defined as having abnormal results for two or more of the following tests: serum ferritin concentration, erythrocyte protoporphyrin, or transferrin saturation. Refer to *Tracking Healthy People 2010* for threshold values.

Target setting method: Better than the best.

Data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

NO CHANGE IN OBJECTIVE

19-13. Reduce anemia among low-income pregnant females in their third trimester.

Target: 20 percent.

Baseline: 29 percent of low-income pregnant females in their third trimester were anemic (defined as hemoglobin <11.0 g/dL) in 1996.

Target setting method: Better than the best.

Data source: Pregnancy Nutrition Surveillance System, CDC, NCCDPHP.

NO CHANGE IN OBJECTIVE

19-14. (Developmental) Reduce iron deficiency among pregnant females.

Potential data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

Schools, Worksites, and Nutrition Counseling

OBJECTIVE DELETED

19-15. *(Objective deleted due to lack of a suitable data source that would provide at least two sets of nationally representative estimates this decade)*
(Developmental) Increase the proportion of children and adolescents aged 6 to 19 years whose intake of meals and snacks at school contributes to good overall dietary quality.

NO CHANGE IN OBJECTIVE (Data updated and footnoted)

19-16. Increase the proportion of worksites that offer nutrition or weight management classes or counseling.

Target: 84¹ percent.

Baseline: 54² percent of worksites with 50 or more employees offered nutrition or weight management classes or counseling at the worksite or through their health plans in 1998–99.

Target setting method: 55 percent improvement.

Data source: National Worksite Health Promotion Survey (NWHPS), Partnership for Prevention and OPHS, ODPHP.

¹ Target revised from 85 because of baseline revision after November 2000 publication.

² Baseline revised from 55 after November 2000 publication.

NO CHANGE IN OBJECTIVE

19-17. Increase the proportion of physician office visits made by patients with a diagnosis of cardiovascular disease, diabetes, or hyperlipidemia that include counseling or education related to diet and nutrition.

Target: 75 percent.

NO CHANGE IN OBJECTIVE (*continued*)

Baseline: 42 percent of physician office visits made by patients with a diagnosis of cardiovascular disease, diabetes, or hyperlipidemia included ordering or providing counseling or education on diet and nutrition in 1997 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS.

Food Security

NO CHANGE IN OBJECTIVE

19-18. Increase food security among U.S. households and in so doing reduce hunger.

Target: 94 percent.

Baseline: 88 percent of all U.S. households were food secure in 1995.

Target setting method: 6 percentage point improvement (50 percent decrease in food insecurity; consistent with the U.S. pledge to the 1996 World Food Summit).

Data source: Food Security Supplement to the Current Population Survey, U.S. Department of Commerce, Bureau of the Census.

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Related Objectives From Other Focus Areas

1. Access to Quality Health Services

- 1-3. Counseling about health behaviors

2. Arthritis, Osteoporosis, and Chronic Back Conditions

- 2-9. Cases of osteoporosis

3. Cancer

- 3-1. Overall cancer deaths
- 3-3. Breast cancer deaths
- 3-5. Colorectal cancer deaths
- 3-10. Provider counseling about cancer prevention

4. Chronic Kidney Disease

- 4-3. Counseling for chronic kidney failure care

5. Diabetes

- 5-1. Diabetes education
- 5-2. New cases of diabetes
- 5-6. Diabetes-related deaths

7. Educational and Community-Based Programs

- 7-2. School health education
- 7-5. Worksite health promotion programs
- 7-6. Participation in employer-sponsored health promotion activities
- 7-10. Community health promotion programs
- 7-11. Culturally appropriate and linguistically competent community health promotion programs

10. Food Safety

- 10-4. Food allergy deaths and illness
- 10-5. Consumer food safety practices

11. Health Communication

- 11-4. Quality of Internet health information sources

12. Heart Disease and Stroke

- 12-1. Coronary heart disease (CHD) deaths
- 12-7. Stroke deaths
- 12-9. High blood pressure
- 12-11. Action to help control blood pressure
- 12-13. Mean total blood cholesterol levels
- 12-14. High blood cholesterol levels

16. Maternal, Infant, and Child Health

- 16-10. Low birth weight and very low birth weight
- 16-12. Weight gain during pregnancy
- 16-15. Spina bifida and other neural tube defects
- 16-16. Optimum folic acid levels
- 16-17. Prenatal substance exposure
- 16-18. Fetal alcohol syndrome
- 16-19. Breastfeeding

18. Mental Health and Mental Disorders

- 18-5. Disordered eating behaviors

22. Physical Activity and Fitness

- 22-1. No leisure-time physical activity
- 22-2. Moderate physical activity
- 22-3. Vigorous physical activity
- 22-6. Moderate physical activity in adolescents
- 22-7. Vigorous physical activity in adolescents
- 22-9. Daily physical education in schools
- 22-13. Worksite physical activity and fitness

26. Substance Abuse

- 26-12. Average annual alcohol consumption

