19
Nutrition and Overweight

Weight Status and Growth

Food and Nutrient Consumption

Iron Deficiency and Anemia

Schools, Worksites, and Nutrition Counseling

19-15 Meals and snacks at school

19-16 Worksite promotion of nutrition education and weight management

19-17 Nutrition counseling for medical conditions

Food Security

19-18 Food security

Weight Status and Growth

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

National Data Source	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP. (See Comments.)
Healthy People 2000 Objective	Not applicable.
Measure	Percent (age adjusted—see Comments).
Baseline	42 (1988–94).
Numerator	Number of persons aged 20 years and older with a BMI equal to or greater than 18.5 and less than 25.0.
Denominator	Number of persons in the survey population aged 20 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual, beginning with 1999 data.
Comments	The NHANES obtains measured weights and heights without shoes. BMI is calculated by dividing weight in kilograms by the square of height in meters. The selection of a BMI cut-point to establish the healthy weight range is based on the relationship of overweight or obesity to disease or death. A BMI of less than 25 has been accepted by numerous groups as the upper limit of the healthy weight range, because more disease occurs in most populations at or above this cut-point.[1, 2, 3, 4] The lower cut-point for the healthy weight range (BMI of 18.5) was selected to be consistent with national and international recommendations.[1, 3, 4] Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.

State-level data on self-reported heights and weights are collected annually in BRFSS for adults aged 18 years and older. This data source enables States to estimate the proportion of the population that reports heights and weights in the healthy range and to track trends, although the method of measurement (through telephone interview) differs from the national measures. Body weight prevalence estimates derived from self-reported heights and weights tend to be lower than those derived from measured height and weight.

See Part C for a description of NHANES and Appendix A for focus area contact information.

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

National Data Source	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP. (See Comments.)
Healthy People 2000 Objective	Adapted from 2.3 (Nutrition) (also 1.2, 15.10, 17.12).
Leading Health Indicator	Overweight and Obesity.
Measure	Percent (age adjusted—see Comments).
Baseline	23 (1988–94).
Numerator	Number of persons aged 20 years and older with a BMI at or above 30.0.
Denominator	Number of persons in the survey population aged 20 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual, beginning with 1999 data.
Comments	NHANES obtains measured weights and heights without shoes. BMI is calculated by dividing weight in kilograms by the square of height in meters.

BMI will be used as a proxy for overweight and obesity in adults until a better measure of body fat is developed. In 1997, a Consultation on Obesity convened by the World Health Organization recommended standardizing the classification of overweight and obesity.[5] Overweight was defined as a BMI of 25.0 or greater and obesity was defined as a BMI of 30.0 or greater. Further classification of obesity was made as follows: 30.0-34.9 was defined as Class I obesity, 35.0-39.9 as Class II, and 40.0 or greater as Class III.

The Expert Panel on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults, convened by NIH, recently adopted general concepts of the World Health Organization classification system[1, 5] and it has now been endorsed by more than 50 professional medical societies, consumer groups, and government agencies. For this objective, therefore, a BMI cutoff point of 30.0 was chosen for adults aged 20 years and older. Since 1960, essentially all of the increased prevalence of overweight and obesity in adults in the United States has occurred at a BMI greater than or equal to 30.0.[1, 5, 6]

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.

State-level data on self-reported heights and weights are collected annually in BRFSS for adults, but are not comparable to the national statistics. These data enable States to estimate the proportion of the population that reports heights and weights in the obese range and to track trends, although the method of measurement (through telephone interview) differs from the national measures. Body weight prevalence estimates derived from self-reported heights and weights tend to be lower than those derived from measured height and weight.

This objective differs from Healthy People 2000 objective 2.3 (Nutrition), which defined overweight as a BMI greater than or equal to 27.8 for men and 27.3 for women. The values used for Healthy People 2000 corresponded with the gender-specific 85th percentile of the 1976–80 NHANES II reference population 20 to 29 years of age and were not age adjusted.

This objective is one of the measures used to track the Overweight and Obesity Leading Health Indicator. See Appendix H for a complete list.

See Part C for a description of NHANES and Appendix A for focus area contact information.

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

19-3a. Children aged 6 to 11 years.

National Data Source	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.3 (Nutrition) (also 1.2, 15.10, 17.12).
Measure	Percent.
Baseline	11 (1988–94).
Numerator	Number of children aged 6 to 11 years with a BMI at or above the gender- and age-specific 95th percentile from the CDC Growth Charts: United States.
Denominator	Number of children in the survey population aged 6 to 11 years.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual, beginning with 1999 data.

Comments

The NHANES obtains measured weights and heights without shoes. BMI is calculated by dividing weight in kilograms by the square of height in meters.

BMI will be used as a proxy for overweight and obesity in children and adolescents until a better measure is developed.[7] There is a prepubertal increase in subcutaneous fat that is lost during adolescence in boys, while in girls fat deposition continues. There also is a differential increase in muscle (or lean body mass) by gender during puberty. Thus, without measures of sexual maturity, measures of body fat and body weight are equally difficult to interpret in preadolescents and adolescents.

In 2000, the 1977 NCHS Growth Charts were revised to consider additional large, nationally representative samples of children aged 2 to 20 years from the 1976–80 NHANES and the 1988–94 NHANES and to provide BMI for age in lieu of weight for age.[8] When extrapolated to age 20 years, the gender- and age-specific 95th percentile of BMI from the Revised CDC Growth Charts approximates a BMI of 30. Thus, the 95th percentiles of BMI for children aged 6 to 11 years and for adolescents aged 12 to 19 years were chosen to estimate the prevalence of overweight and obesity for this objective. The CDC Growth Charts can be found on the Internet at http://www.cdc.gov/growthcharts.

In addition to the revised measure, this objective differs from Healthy People 2000 objective 2.3, which did not track overweight in children aged 6 to 11 years.

See Part C for a description of NHANES and Appendix A for focus area contact information.

19-3b. Adolescents aged 12 to 19 years.

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

State Data Source Not identified.

Healthy People 2000 Objective	Adapted from 2.3 (Nutrition) (also 1.2, 15.10, 17.12).
Measure	Percent.
Baseline	11 (1988–94).
Numerator	Number of adolescents aged 12 to 19 years with a BMI at or above the gender- and age-specific 95th percentile from the CDC Growth Charts: United States.
Denominator	Number of adolescents in the survey population aged 12 to 19 years.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual, beginning with 1999 data.
Comments	State-level data on self-reported heights and weights are collected biennially in the Youth Risk Behavior Surveillance System (YRBSS) for adolescents in grades 9 through 12. This data source enables States to estimate the proportion of this population that reports heights and weights in the overweight and obese ranges and to track trends, although the methods of measurement differ from the national measure. Body weight prevalence estimates derived from self-reported heights and weights tend to be lower than those derived from measured height and weight. See Comments provided with objective 19-3a for more information on the methods of calculation. This objective differs from Healthy People 2000 objective 2.3, which defined overweight for adolescents based on modified age- and gender-specific 85th percentile values of the 1976–80 NHANES II. For adolescents, overweight was defined as a BMI equal to or greater than 23.0 for males aged 12 to 14 years, 24.3 for males aged 15 to 17 years, 25.8 for males aged 18 to 19 years, 23.4 for females aged 12 to 14 years, 24.8 for females aged 15 to 17 years, and 25.7 for females aged 18 to 19 years.

See Part C for a description of NHANES and Appendix A for focus area contact information.

19-3c. Children and adolescents aged 6 to 19 years.

National Data Source	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.3 (Nutrition) (also 1.2, 15.10, 17.12).
Leading Health Indicator	Overweight and Obesity.
Measure	Percent.
Baseline	11 (1988–94).
Numerator	Number of children and adolescents aged 6 to 19 years with a BMI at or above the gender- and age-specific 95th percentile from the CDC Growth Charts: United States.
Denominator	Number of children and adolescents in the survey population aged 6 to 19 years.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual, beginning with 1999 data.
Comments	See Comments provided with objective 19-3a for more information on methods of calculation and see objective 19-3b for more information on State-level data.

This objective differs from Healthy People 2000 objective 2.3, which defined overweight for adolescents based on modified age- and gender-specific 85th percentile values of the 1976–80 NHANES II. For adolescents, overweight was defined as a BMI equal to or greater than 23.0 for males aged 12 to 14 years, 24.3 for males aged 15 to 17 years, 25.8 for males aged 18 to 19 years, 23.4 for females aged 12 to 14 years, 24.8 for females aged 15 to 17 years, and 25.7 for females aged 18 to 19 years.

This objective is one of the measures used to track the Overweight and Obesity Leading Health Indicator. See Appendix H for a complete list.

See Part C for a description of NHANES and Appendix A for focus area contact information.

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

National Data Source	Pediatric Nutrition Surveillance System (PedNSS), CDC, NCCDPHP.
State Data Source	Pediatric Nutrition Surveillance System (PedNSS), CDC, NCCDPHP.
Healthy People 2000 Objective	2.4 (Nutrition).
Measure	Percent.
Baseline	8 (1997) (preliminary) (selected sites—see Comments).
Numerator	Number of low-income children under age 5 years who are below the 5th percentile of height for age.
Denominator	Number of low-income children under age 5 years.
Population Targeted	Selected sites—see Comments.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.

Comments

For the preliminary baseline estimates, growth retardation is defined as height for age below the 5th percentile in the age-gender-appropriate reference population using the 1977 NCHS Growth Charts (that is, data from the Fels Research Institute and the 1971–74 NHANES).[9]

The 1997 baseline estimates were obtained from PedNSS, which collects annual data from participating States on growth retardation among low-income children. These data are collected from low-income, high-risk infants and children who participate in publicly funded health, nutrition, and food assistance programs such as WIC; the Early Periodic Screening, Diagnosis, and Treatment program; and clinics funded by Maternal and Child Health Program Block Grants.

In 1997, 44 States, the District of Columbia, and five Tribal governments provided data for tracking growth retardation nationally. Data can also be analyzed at clinic, county, and State levels. Estimates from PedNSS are not based on a nationally representative sample. Participation in publicly funded programs in a State can vary from year to year and can be affected by fluctuating resources. Further, the number of participating States and Tribal governments in PedNSS has varied from year to year. The fluctuations in the scope of surveillance can affect the representation and comparability of estimates.

The final national estimates used to track this objective will differ from Healthy People 2000 objective 2.4 because they will be based on the revised CDC Growth Charts and not the 1977 NCHS Growth Charts.

See Appendix A for focus area contact information.

Food and Nutrient Consumption

Objectives 19-5 to 19-11 address the proportion of the population that consumes specified levels of foods (fruit, vegetables, grain products) and nutrients (fat, sodium, and calcium), based on the recommendations of the 2000 *Dietary Guidelines for Americans*.[4] Recommendations for food and nutrient intake are not intended to be met every day, but rather on average over a span of time. However, the national surveys used to track these objectives have, in recent years, collected no more than 2 days of dietary data. Accordingly, the baseline estimates for these dietary intake objectives reflect either 2-day averages or the use of statistical adjustment procedures to estimate usual intake for population groups. It is also important to track and report mean intakes by different population groups. Estimates of mean intakes provide a measure of central tendency that is not conveyed by the proportion meeting the objective and tend to be more stable. Optimally, tracking data should also include an assessment of trends with regard to at-home versus away-from-home eating.

For the food intake objectives, the 1994–96 CSFII was chosen to provide baseline estimates because it contained the most recent national survey data available for intake estimates that account for the contribution of foods used as ingredients in mixtures. This survey was also chosen to provide baseline estimates for the fat and saturated fat intake objectives because it provided the most recent national estimates. In contrast, the 1988–94 NHANES was chosen to provide baseline estimates for the sodium and calcium objectives because it provides total nutrient intake estimates that account for the contribution of dietary supplements as well as other nonfood sources of these nutrients.

In the early 2000s, the dietary components of CSFII and NHANES will be merged into one National Food and Nutrition Survey (NFNS). This survey will be used to provide update estimates for all of the food and nutrient consumption objectives, with the potential for annual updates for larger population segments and multiyear updates for smaller segments.

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

National Data Source	Continuing Survey of Food Intakes by Individuals (CSFII), USDA, ARS.
State Data Sources	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP and Youth Risk Factor Surveillance System (YRBSS), CDC, NCCDPDP. (See Comments.)
Healthy People 2000 Objective	Adapted from 2.6 (Nutrition) (also 16.8).

Measure	Percent (age adjusted—see Comments).
Baseline	28 (1994–96).
Numerator	Number of persons aged 2 years and older who report consuming two or more servings of fruit daily (based on a 2-day average).
Denominator	Number of persons in the survey population aged 2 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1994–96 Continuing Survey of Food Intakes by Individuals: The 1994–96 CSFII included the collection of 2 nonconsecutive days of dietary data through in-person 24-hour recalls.[10] Each respondent was asked to recall the kinds and amounts of foods eaten at home and away from home during the previous day. Amounts of foods reported in household measures were then converted to gram amounts.
Expected Periodicity	Annual.
Comments	The definitions for fruit and for serving sizes were derived from the 1995 Dietary Guidelines,[11] the Food Guide Pyramid (http://www.usda.gov/cnpp;pyramid2.htm), and related documentation, and estimates were calculated using the USDA Pyramid Servings Database. The intakes of fruit servings were modified for children aged 2 to 3 years. The modification was accomplished by multiplying their daily servings intake by 1.5, equivalent to estimating that their requirement is two-thirds that of persons over age 3 years. Fruit ingredients from mixtures are included in the total, and fractions of servings are counted.[12] Pregnant or lactating women and breast-fed children are excluded from the numerator and denominator. Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.

State-level data on fruit and vegetable consumption are collected biennially by BRFSS for persons 18 years and older and YRBSS for adolescents in grades 9 through 12. No State-level data for younger children are available from these surveillance systems. These data enable States to track (1) the proportion of the population that consumes five or more servings of fruits and vegetables daily, (2) mean intakes and trends in consumption, and (3) consumption of selected fruit and vegetable items. However, the food items and dietary data collection methods used in these surveillance systems differ from those used by CSFII to track Healthy People 2010 objective 19-5.

This objective differs from Healthy People 2000 objective 2.6, which only tracked the proportion of the population that consumed five or more daily servings of fruits and vegetables and the mean number of servings consumed, with a few exclusions of fruit and vegetable products. Also, Healthy People 2000 estimates were not age adjusted.

See Part C for a description of CSFII and Appendix A for focus area contact information.

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 of them being dark green or orange vegetables.

National Data Source	Continuing Survey of Food Intakes by Individuals (CSFII), USDA, ARS.
State Data Sources	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP and Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP. (See Comments.)
Healthy People 2000 Objective	Adapted from 2.6 (Nutrition) (also 16.8).
Measure	Percent (age adjusted—see Comments).
Baseline	3 (1994–96).

Numerator	Number of persons who report consuming three or more servings of vegetables daily, of which at least one-third are dark green or orange vegetables (based on a 2-day average).
Denominator	Number of persons in the survey population aged 2 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	See Questions Used To Obtain the National Data provided with objective 19-5.
Expected Periodicity	Annual.
Comments	The definitions for dark green and orange vegetables and for serving sizes were derived from the 1995 Dietary Guidelines (http://www.health.gov/dietaryguidelines),[11] the Food Guide Pyramid (http://www.usda.gov/cnpp/pyramid2.htm), and related documentation, and estimates were calculated using the USDA Pyramid Servings Database. The goal of one-third of servings from dark green or orange vegetables was based on an assessment of the variety of vegetable consumption needed to obtain nutrient adequacy in the development of the Food Guide Pyramid. The intakes of vegetable servings were modified for children aged 2 to 3 years. The modification was accomplished by multiplying their daily servings intake by 1.5, equivalent to estimating that their requirement is two-thirds that of persons over age 3 years. Vegetable ingredients from mixtures are included in the total, and fractions of servings are counted.[12] Pregnant or lactating women and breast-fed children are excluded from the numerator and denominator. Two component measures will also be tracked: (1) age-adjusted percent of persons that report consuming three or more servings of vegetables daily (based on a 2-day average), and (2) age-adjusted percent of persons that report consuming at least one-third of their vegetables as dark green or orange vegetables (based on a 2-day average).

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.

State-level data on fruit and vegetable consumption are collected biennially by BRFSS for persons 18 years and older and YRBSS for adolescents in grades 9 through 12. No State-level data for younger children are available from these surveillance systems. These data enable States to track (1) the proportion of the population that consumes five or more servings of fruits and vegetables daily, (2) mean intakes and trends in consumption, and (3) consumption of selected fruit and vegetable items. However, the food items and dietary data collection methods used in these surveillance systems differ from those used by CSFII to track Healthy People 2010 objective 19-6.

The objective differs from Healthy People 2000 objective 2.6, which tracked only the proportion of the population that consumed five or more servings daily of fruits and vegetables and the mean number of servings consumed, with a few exclusions of fruit and vegetable products. Also, Healthy People 2000 estimates were not age adjusted.

See Part C for a description of CSFII and Appendix A for focus area contact information.

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.

National Data Source	Continuing Survey of Food Intakes by Individuals (CSFII), USDA, ARS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.6 (Nutrition) (also 16.8).
Measure	Percent (age adjusted—see Comments).
Baseline	7 (1994–96).

Numerator	Number of persons aged 2 years and older who report consuming six or more servings of grain products per day, including three or more servings of whole-grain products (based on 2-day average).
Denominator	Number of persons in the survey population aged 2 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	See Questions Used To Obtain the National Data provided with objective 19-5.
Expected Periodicity	Annual.
Comments	The definitions for grain products and for serving sizes were derived from the 1995 Dietary Guidelines (http://www.health.gov/dietaryguidelines),[11] the Food Guide Pyramid (http://www.usda.gov/cnpp/pyramid2.htm), and related documentation. Estimates were calculated using the USDA Pyramid Servings Database, which provided data on total and whole grain consumption.[12, 13] The goal of three servings from whole-grain products was based on an assessment of the variety of grain product consumption needed to obtain nutrient adequacy in the development of the Food Guide Pyramid. The intakes of grain servings were modified for children aged 2 to 3 years. The modification was accomplished by multiplying their daily servings intake by 1.5, equivalent to estimating that their requirement is two-thirds that of persons over age 3 years. Grain ingredients from mixtures are included in the total, and fractions of servings are counted. Pregnant or lactating women and breast-fed children are excluded from the numerator and denominator. Two component measures will also be tracked: (1) age-adjusted percent of persons who consumed six or more servings of grain products per day (based on 2-day average), and (2) age-adjusted percent of persons who consumed three or more servings of whole-grain products (based on 2-day average).

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.

This objective differs from Healthy People 2000 objective 2.6, which tracked the proportion of the population who consumed six or more servings of grain products daily and the mean number of servings consumed, with no exclusions. Also, Healthy People 2000 estimates were not age adjusted.

See Part C for a description of CSFII and Appendix A for focus area contact information.

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

National Data Source	Continuing Survey of Food Intakes by Individuals (CSFII), USDA, ARS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.5 (Nutrition) (also 15.9 and 16.7).
Measure	Percent (age adjusted—see Comments).
Baseline	36 (1994–96).
Numerator	Number of persons aged 2 years and older who report consuming less than 10.0 percent of calories from saturated fat (based on 2-day average).
Denominator	Number of persons in the survey population aged 2 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1994–96 Continuing Survey of Food Intakes by Individuals:

CSFII included the collection of 2 nonconsecutive days of dietary data through in-person 24-hour recalls.[10] Each respondent was asked to recall the kinds of amounts of foods eaten at home and away from home during the previous day. Amounts of foods reported in household measures were then converted to gram amounts, and saturated fat intake estimated with the use of food composition files.

Expected Periodicity Annual.

Comments This objective tracks the proportion of the population that meets recommendations for saturated fat consumption in the 2000 Dietary Guidelines for Americans.[4] Additional tracking of saturated fat intake expressed in grams may also help in interpreting how much progress has been made, since a decrease in saturated fat intake as a percentage of calories may not reflect a decrease in grams of saturated fat if, for example, carbohydrate intake has increased.

Pregnant or lactating women and breast-fed children are excluded from the numerator and denominator.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.

This objective differs from Healthy People 2000 objective 2.5, which tracked the proportion of the population who consumed less than 10 percent of calories from saturated fat, as well as the mean saturated fat intake of population groups; the tracking data were not age adjusted.

See Part C for a description of CSFII and Appendix A for focus area contact information.

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

National Data Source Continuing Survey of Food Intakes by Individuals (CSFII), USDA, ARS.

State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.5 (Nutrition) (also 15.9 and 16.7).
Measure	Percent (age adjusted—see Comments).
Baseline	33 (1994–96).
Numerator	Number of persons aged 2 years and older who report consuming less than or equal to 30 percent of calories from total fat (based on 2-day average).
Denominator	Number of persons in the survey population aged 2 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	See Questions Used To Obtain the National Data provided with objective 19-8.
Expected Periodicity	Annual.
Comments	This objective tracks the proportion of the population that meets recommendations for total fat consumption in the 2000 Dietary Guidelines for Americans.[4] Additional tracking of fat intake expressed in grams may also help in interpreting how much progress has been made, because a decrease in fat intake as a percent of calories may not reflect a decrease in grams of fat if, for example, carbohydrate intake has increased. Pregnant or lactating women and breast-fed children are excluded from the numerator and denominator. Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5. This objective differs from Healthy People 2000 objective 2.5, which tracked the mean fat intake of population groups and the proportion of the population who consumed 30 percent or fewer calories from fat; the tracking data were not age adjusted. See Part C for a description of CSFII and Appendix A for focus area contact information.

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

National Data Source	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.9 (Nutrition).
Measure	Percent (age adjusted—see Comments).
Baseline	21 (1988–94).
Numerator	Number of persons aged 2 years and older who report consuming less than or equal to 2,400 mg of sodium daily.
Denominator	Number of persons in the survey population aged 2 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1988–94 National Health and Nutrition Examination Survey: Foods: NHANES included the collection of 1 day of dietary data for all respondents through in-person 24-hour recalls[14] and 2-day dietary data on a small subset through telephone 24-hour recalls. Each respondent was asked to recall the kinds and amounts of foods and beverages consumed at home and away from home during the previous day (midnight to midnight). Amounts of foods and beverages reported in household measures were then converted to gram amounts, and sodium intake from foods and beverages estimated with the use of food composition files. Additional questions used to assess total sodium intake include: Dietary supplement use: ➢ *Has (Person) taken any vitamins or minerals in the past month? Please include those that are prescribed by a doctor or dentist and those that are not prescribed.* ➢ *Has (Person) taken or used any medicines for which a doctor's or dentist's prescription is needed, in the past month? This includes any products which cannot be obtained without a doctor's or dentist's prescription. Include those medicines you may have already mentioned.*

[If yes:]

- *May I see the containers for all of the (vitamins and minerals/prescription medicines) (Person) took in the past month?*

Enter complete name of vitamin/mineral from label, or probe respondent.

Container seen
Container not seen
Product furnished by respondent
Product name not on container
Enter manufacturer's or distributor's name and address (city and State)

- *How often did (Person) take (product) in the past month?*
- *How much (product) did (Person) take each time (Person) took it?*

Number of capsules, tablet/pills; teaspoons; tablespoons; fluid ounces/ounces; drops/droppers; packets/packs/packages; ml.; wafers; other.

- For how long has (Person) been taking this type of product?

Tap water:

- *How much plain drinking water do you usually drink in a 24-hour period? Include only plain tap or spring water.*

Number of glasses or cups
Number of ounces per glass or cup

- *Does your home drinking water have a water softening or conditioning system?*

Salt use at the table:

- *What type of salt (do you/does Person) usually add to (your/his/her) food at the table?*

None
Ordinary salt
Lite salt
Salt substitute

- *How often (do you/does Person) add (type of salt) to (your/his/her) food at the table? Is it rarely, occasionally, or very often?*

Expected Periodicity Annual, beginning with 1999 data.

Comments The baseline estimates include consideration of several sources of sodium intake: foods, dietary supplements, tap water, and salt use at the table but do not include sodium intake from antacids and other medications. In addition, a statistical procedure was

used to remove the within-person variation in daily sodium intakes from food,[15] and thus provide better estimates of usual intake of sodium with the use of dietary data per individual (that is, 1 day of dietary data for all NHANES respondents and 2-day dietary data for a subset).

It is possible that update estimates for certain population segments may be available annually for this objective, whereas estimates for smaller subgroups will require multiyear data.

Regarding salt use at table, sea salt, flavored salts such as garlic, onion, and celery salt, and seasoning salts were counted as ordinary salts. Lite salt was labeled as such and has a reduced sodium content. Salt substitutes do not contain sodium. To obtain a daily amount for each person, the amount of sodium depending on salt type was multiplied by the frequency value. (Sodium in type of salt x frequency amount of sodium from table salt added per day.)

Type of salt: A zero sodium value was assigned for "none" and "salt substitute." For "ordinary salt," 290 mg (for "very often" code) was assigned for persons aged 2 to 19 years, and 580 mg was assigned for persons aged 20 years and older. For "lite" salt, 145 mg was assigned for persons aged 2 to 19 years, and 290 mg was assigned for persons aged 20 years and older. For missing values, a default of "ordinary salt" was assigned.

Frequency of salt use: for "rarely," sodium value was multiplied by 1/4; for "occasionally," sodium value was multiplied by 1/2; for "very often," sodium value was multiplied by 1; for missing values, "occasionally" was used as the default.

Drinking water: If home drinking water had a water softening or conditioning system, ounces of water consumed were multiplied by 3 mg per fluid ounce; otherwise, water was counted as unsoftened; 1 mg per fluid ounce was used for "regular" municipal water based on the USDA food composition database. To get daily sodium from drinking water, the mg of sodium per fluid ounce was multiplied by the number of fluid ounces.

Dietary supplements: Sodium from dietary supplements reported in the survey was calculated. If supplement data were missing, then it was assumed

that no sodium was provided by supplements but the individual was kept in the calculation.

Breast-feeding children aged 2 years and older were excluded from the analysis.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.

This objective differs from Healthy People 2000 objective 2.9, which also tracked individual behaviors associated with the reduction of salt and sodium intake. The measures included avoidance of salt use in food preparation at home, avoidance of salt use at the table, and regular purchase of foods modified in sodium, but did not measure actual sodium intake. The Healthy People 2000 tracking data were not age adjusted.

See Part C for a description of NHANES and Appendix A for focus area contact information.

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

National Data Source	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.8 (Nutrition).
Measure	Percent (age adjusted—see Comments).
Baseline	46 (1988–94).
Numerator	Number of persons aged 2 years and older who report calcium intake at or above approximated mean requirements.
Denominator	Number of persons in the survey population aged 2 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1988–94 National Health and Nutrition Examination Survey:

Foods:

The NHANES included the collection of 1 day of dietary data for all respondents through in-person 24-hour recalls and 2-day dietary data on a small subset through telephone 24-hour recalls. Each respondent was asked to recall the kinds and amounts of foods and beverages consumed at home and away from home during the previous day (midnight to midnight). Amounts of foods and beverages reported in household measures were then converted to gram amounts, and calcium intake from foods and beverages was estimated with the use of food composition files. Additional questions used to assess total calcium intake include:

[Dietary supplement use:]

- *Has (Person) taken any vitamins or minerals in the past month? Please include those that are prescribed by a doctor or dentist and those that are not prescribed.*
- *Has (Person) taken or used any medicines for which a doctor's or dentist's prescription is needed, in the past month? This includes any products which cannot be obtained without a doctor's or dentist's prescription. Include those medicines you may have already mentioned.*

  [If yes:]

  - *May I see the containers for all of the (vitamins and minerals/prescription medicines) (Person) took in the past month?*

  Enter complete name of vitamin/mineral from label, or probe respondent.

  Container seen
  Container not seen
  Product furnished by respondent
  Product name not on container
  [Enter manufacturer's or distributor's name and address (city and State)]

  - *How often did (Person) take (product) in the past month?*
  - *How much (product) did (Person) take each time (Person) took it?*
    Number of capsules, tablet/pills; teaspoons; tablespoons; fluid ounces/ounces; drops/droppers; packets/packs/packages; ml.; wafers; other.
  - *For how long has (Person) been taking this type of product?*

[Antacid use:]

Enter complete name of antacid from label or probe respondent:

Antacid seen
Antacid not seen. Product name furnished by respondent

- *How often did you take (antacid) in the past month?*
- *How much (antacid) did you take each time you took it?*
- *For how long have you been taking this antacid?*

Expected Periodicity

Annual, beginning with 1999 data.

Comments

Approximated mean calcium requirements are defined as 77 percent of the recommendations by the Institute of Medicine for adequate intakes for calcium.[16, 17] The prepublication recommendations for adequate intakes of calcium are 500 mg per day for children aged 1 to 3 years, 800 mg for children aged 4 to 8 years, 1,300 mg for adolescents aged 9 to 18 years, 1,000 mg for adults aged 19 to 50 years, and 1,200 mg for adults aged 51 years and older.[17]

Persons were classified as consuming calcium at or above the approximated mean requirements if the total daily calcium intake was within this range. To determine total calcium intake, several sources of calcium were considered, including foods, dietary supplements, and antacids, but not including calcium from drinking water.

A statistical procedure was used to remove the within-person variation in daily calcium intakes from food[15] and thus provide better estimates of usual intake of calcium with the use of a limited number of days of dietary data per individual (1 day of dietary data for all NHANES respondents and 2-day dietary data for a subset).

Calcium from calcium-containing antacids reported as taken 24 times or more was used in the calculation. If antacids data were missing, it was assumed that no calcium was provided by antacids, but the individual was kept in the calculation.

Breast-feeding children aged 2 years and older were excluded from the analysis.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.

State-level data on self-reported consumption of milk are collected biennially by the Youth Risk Behavioral Surveillance System (YRBSS), for adolescents in grades 9 through 12.

This objective differs from Healthy People 2000 objective 2.8, which only tracked the proportion of the population who consumed the recommended number of servings of milk and milk products; the 2000 objective did not consider calcium intake from other foods, dietary supplements, and antacids. Given that significant sources of calcium are not limited to milk products and not all persons choose to consume them, the Healthy People 2010 objective aims to increase total calcium intake. However, because consumption of milk products is low relative to recommendations for adolescents and other groups who would especially benefit from increased consumption of calcium-rich foods, it is still often desirable to track milk product consumption at the national and State levels as supplementary data, as well as to track the contribution of other sources of total calcium intake. The Healthy People 2000 tracking data were not age adjusted.

See Part C for a description of NHANES and Appendix A for focus area contact information.

Iron Deficiency and Anemia

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

19-12a. Children aged 1 to 2 years.

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

State Data Source Not identified (see Comments).

Healthy People 2000 Objective	Adapted from 2.10 (Nutrition).
Measure	Percent.
Baseline	9 (1988–94).
Numerator	Number of children aged 1 to 2 years with abnormal results for two or more of the following tests: serum ferritin, free erythrocyte protoporphyrin, or transferrin saturation.[18, 19]
Denominator	Number of children in the survey population aged 1 to 2 years.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual, beginning with 1999 data.
Comments	Blood was collected by phlebotomy. Transferrin saturation was calculated by dividing serum iron by total iron binding capacity. Serum iron and total iron binding capacity were measured colorimetrically (by Alpkem RFA analyzer, Clackamas, OR), and 1 percent thiourea was added to complex copper to prevent copper interference.[20] Free erythrocyte protoporphyrin was measured via fluorescence extraction,[21] and serum ferritin was measured with the BioRad Quantimmune IRMA kit (BioRad Laboratories, Hercules, CA).

Iron deficiency is defined as abnormal results for two or more of the following tests: serum ferritin, free erythrocyte protoporphyrin, or transferrin saturation. The basis of the use for two of three abnormal tests was the finding that populations with only one abnormal test of these three had scarcely more anemia than those with all normal test results. The prevalence of anemia was substantially elevated in those who had two or three abnormal tests.[19, 22] The selection of threshold values for abnormal results were based on those derived for the previous NHANES (1976–80) by an expert panel,[19, 23] except where (1) evidence existed for changes in assay methods or in changes in other confounding factors like blood lead; and (2) an evaluation of the iron status indicator distribution in a reference group of healthy persons from the 1988–94 NHANES supported a change in the 1976–80 NHANES thresholds.[18]

Threshold values for abnormal results on iron tests vary by age. Abnormal values for serum ferritin concentration are defined as less than 10 µg/L for children aged 1 to 4 years and less than 12 µg/L for females aged 12 to 49 years. Abnormal values for free erythrocyte protoporphyrin are greater than 1.42 µmol/L for children aged 1 to 2 years (80 µg/dL of red blood cells), and greater than 1.24 µmol/L (70 µg/dL of red blood cells) for other persons. Abnormal values for transferrin saturation are less than 10 percent for children aged 1 to 2 years, less than 12 percent for children aged 3 to 4 years, less than 14 percent for females aged 12 to 15 years, and less than 15 percent for females aged 16 years and older.

The terms anemia, iron deficiency, and iron deficiency anemia are often used interchangeably, but are not equivalent. Anemia can be caused by many factors other than iron deficiency, including other nutrient deficiencies, infection, inflammation, and hereditary anemias. When the prevalence of iron deficiency is high, such as during the third trimester of pregnancy, anemia is a good predictor of iron deficiency. When the prevalence of iron deficiency is low, such as among white, non-Hispanic children aged 3 to 4 years in the United States, the majority of anemia is due to other causes.

No comparable data source is available to measure iron deficiency at the State level. The Pediatric Nutrition Surveillance System is used to monitor the percent of anemia (low hemoglobin or hematocrit) among low-income children aged 1 to 4 years participating in public health programs.

Anemia is used for monitoring risk of iron deficiency at the State and local levels because of its cost and feasibility for use in the clinic setting. Changes in the prevalence of anemia over time at the State and local levels can be used to evaluate the effectiveness of programs to decrease the prevalence iron deficiency.

This objective differs from Healthy People 2000 objective 2.10, which defined iron deficiency as abnormal results for two or more of the following tests: mean cell volume, free erythrocyte protoporphyrin, and transferrin saturation. For Healthy People 2010 objective 19-12, serum ferritin replaces mean cell volume in the definition of iron deficiency. Serum ferritin is a more sensitive measure of iron deficiency.[24]

See Part C for a description of NHANES and Appendix A for focus area contact information.

19-12b. Children aged 3 to 4 years.

National Data Source	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source	Not identified (see Comments).
Healthy People 2000 Objective	Adapted from 2.10 (Nutrition).
Measure	Percent.
Baseline	4 (1988–94).
Numerator	Number of children aged 3 to 4 years with abnormal results for two or more of the following tests: serum ferritin, free erythrocyte protoporphyrin, or transferrin saturation.[18, 19]

Denominator	Number of children in the survey population aged 3 to 4 years.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual, beginning with 1999 data.
Comments	See Comments provided with objective 19-12a for more information on the measurement of this objective. See Part C for a description of NHANES and Appendix A for focus area contact information.

19-12c. Nonpregnant females aged 12 to 49 years.

National Data Source	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.10 (Nutrition).
Measure	Percent.
Baseline	11 (1988–94).
Numerator	Number of females aged 12 to 49 years with abnormal results for two or more of the following tests: serum ferritin, free erythrocyte protoporphyrin, or transferrin saturation.[18, 19]
Denominator	Number of females in the survey population aged 12 to 49 years.
Population Targeted	U.S. civilian noninstitutionalized population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual, beginning with 1999 data.
Comments	See Comments provided with objective 19-12a for more information on the measurement of this objective.

See Part C for a description of NHANES and Appendix A for focus area contact information.

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

National Data Source	Pregnancy Nutrition Surveillance System (PNSS), CDC, NCCDPHP.
State Data Source	State Pregnancy Nutrition Surveillance System (PNSS), CDC, NCCDPHP.
Healthy People 2000 Objective	Adapted from 2.10e (Nutrition).
Measure	Percent.
Baseline	29 (1996) (Selected sites—see Comments).
Numerator	Number of pregnant females participating in public programs in their third trimester with abnormal results for either hemoglobin (less than 11 g/dL) or hematocrit (less than 33 percent).[25]
Denominator	Number of pregnant females participating in public programs in their third trimester.
Population Targeted	Selected sites—see Comments.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	PNSS is used to monitor anemia among low-income women participating in public health programs. In 1996, 21 States, the District of Columbia, and two Tribal governments participated.[25, 26] The threshold for anemia during pregnancy is based on clinical studies of European women who had taken iron supplementation during pregnancy.[27, 28, 29, 30, 31] This threshold is advocated by CDC[25] and the World Health Organization.[32]

See the Comments section with iron deficiency objective 19-12 for a discussion of the differences between iron deficiency and anemia. Nationally representative data are unavailable for monitoring the percent of iron deficiency during pregnancy.

This objective differs from Healthy People 2000 objective 2.10e, which targeted black, low-income pregnant females only.

See Appendix A for focus area contact information.

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

Comments

An operational definition could not be specified at the time of publication.

A proposed national data source is the National Health and Nutrition Examination Survey (NHANES).

See Appendix A for focus area contact information.

Schools, Worksites, and Nutrition Counseling

19-15. (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.

Comments

An operational definition could not be specified at the time of publication.

Proposed national data sources are the Continuing Survey of Food Intakes by Individuals (CSFII), USDA, ARS; the National Food and Nutrition Survey, USDA, ARS and CDC, NCHS; or the National Health and Nutrition Examination Survey (NHANES), CDC, NCHS. A proposed State data source for adolescents (students in grades 9 through 12) is the Youth Risk Behavior Surveillance System (YRBSS).

This objective is adapted from Healthy People 2000 objective 2.17, which tracked the proportion of schools offering breakfasts and lunches with 30 percent or less of calories from total fat, the proportion of schools offering breakfasts and lunches with less than 10 percent of calories from saturated fat, and the proportion of schools with initiatives to reduce fat.

See Appendix A for focus area contact information.

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

National Data Source	1999 National Worksite Health Promotion Survey (NWHPS), Association for Worksite Health Promotion (AWHP) and OPHS, ODPHP.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.20 (Nutrition).
Measure	Percent.
Baseline	55 (1998–99).
Numerator	Number of worksites with 50 or more employees that offered nutrition or weight management classes or counseling at the worksite or through their health plans.
Denominator	Number of worksites with 50 or more employees in nongovernmental organizations.
Questions Used To Obtain the National Data	From the 1999 National Worksite Health Promotion Survey: ➢ *During the last 12 months, did you offer [see below] to your employees at the worksite?* *1) Nutrition or cholesterol education* *2) Weight management classes or counseling* ➢ *During the last 12 months, did you offer [see below] to your employees through one of your health plans?* *1) Nutrition or cholesterol education* *2) Weight management classes or counseling*
Expected Periodicity	Periodic.

Comments

Responses to the two questions on nutrition or cholesterol education and weight management classes or counseling are combined for tracking this objective.[33]

This objective differs from Healthy People 2000 objective 2.20, which was tracked with three surveys that differed in sponsors and the questions asked and did not provide comparable data. The 1995 data were from the CDC-sponsored Worksite Benchmark Survey.[34] This survey asked about provision of nutrition or cholesterol group classes, workshops, or lectures and weight management group classes, workshops, or lectures. Classes and counseling provided by health plans offered by the employer were not included.

See Part C for a description of NWHPS and Appendix A for focus area contact information.

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.

National Data Source	National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	Adapted from 2.21 (Nutrition).
Measure	Percent (age adjusted—see Comments).
Baseline	42 (1997).
Numerator	Number of visits by ambulatory patients to non-Federal physicians in office-based practice with diagnosis of cardiovascular disease (ICD-9-CM codes 391-392.0, 393-398, 401, 402, 404, 410-416, 420-429), diabetes mellitus (ICD-9-CM code 250), or hyperlipidemia (ICD-9-CM codes 272.0-272.4), in which diet and nutrition counseling or education was ordered or provided.

Denominator	Number of visits by ambulatory patients to non-Federal physicians in office-based practice with diagnosis of cardiovascular disease, diabetes mellitus, or hyperlipidemia (as defined above).
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1997 National Ambulatory Medical Care Survey patient record: [Item 16:] ➢ *Physician's diagnoses for this visit - as specifically as possible, list diagnoses related to this visit including chronic conditions (e.g., depression, obesity, asthma, etc.)* [Up to three diagnoses may be reported.] [Item 18:] ➢ *Therapeutic and preventive services - check all ordered or provided at this visit. Exclude medications:* [Under the subheading "Counseling/education" a check box is provided for "Diet/Nutrition."]
Expected Periodicity	Periodic.
Comments	Because certain questions are rotated, update estimates may be available on a periodic rather than an annual basis. Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5. This objective differs from Healthy People 2000 objective 2.21, which was measured by the 1992 Primary Care Provider Survey and the 1997–98 Prevention in Primary Care Study. These surveys addressed the proportion of primary care providers who provided nutrition assessment and counseling to their patients. Referral to qualified nutritionists or dieticians, although part of the Healthy People 2000 objective, was never measured. See Part C for a description of NAMCS and Appendix A for focus area contact information.

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

National Data Source	Food Security Supplement to the Current Population Survey (CPS), DOC, U.S. Census Bureau.
State Data Source	Food Security Supplement to the Current Population Survey (CPS), DOC, U.S. Census Bureau.
Healthy People 2000 Objective	Not applicable.
Measure	Percent.
Baseline	88 (1995).
Numerator	Number of U.S. households that did not report experiencing food insecurity over a 12-month period. A proposed supplemental data source is the National Food and Nutrition Survey (NFNS), HHS and USDA, beginning in 2001. The NFNS questions will be identical to those asked by the Food Security Supplement to CPS. Although the NFNS will have a smaller sample size than the CPS Supplement, it will allow greater opportunities to explore relationships between food security and additional variables such as body mass index and specific diseases and health conditions.
Denominator	Number of U.S. households during a 12-month period.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used to Obtain the National Data	From the 1995 Food Security Supplement to the Current Population Survey: ➢ *(I/we) worried whether our food would run out before (I/we) got money to buy more. Was that often, sometimes, or never true for you in the last 12 months?* ➢ *The food that I/we bought just didn't last, and (I/we) didn't have money to get more. Was that often, sometimes or never true for you in the last 12 months?* ➢ *(I/we) couldn't afford to eat balanced meals. Was that often, sometimes, or never true for you in the last 12 months?*

- *(I/we) relied on only a few kinds of low-cost food to feed the children because I/we were running out of money to buy food. Was that often, sometimes, or never true for you in the last 12 months?*
- *In the last 12 months, did you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?*

  [If yes:]

  - *How often did this happen - almost every month, some months but not every month, or in only 1 or 2 months?*
- *(I/we) couldn't feed the children a balanced meal because (I/we) couldn't afford that. Was that often, sometimes, or never true for you in the last 12 months?*
- *In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money to buy food?*
- *The children were not eating enough because (I/we) just couldn't afford enough food. Was that often, sometimes, or never true for you in the last 12 months?*
- *In the last 12 months, were you ever hungry but didn't eat because you couldn't afford enough food?*
- *Sometimes people lose weight because they don't have enough to eat. In the last 12 months, did you lose weight because there wasn't enough food?*
- *In the last 12 months, did you ever cut the size of any of the children's meals because there wasn't enough money for food?*
- *In the last 12 months, did you or other adults in your household ever not eat for a whole day because there wasn't enough money for food?*

  [If yes:]

  - *How often did this happen - almost every month, some months but not every month, or in only 1 or 2 months?*
- *In the last 12 months, were the children ever hungry but you just couldn't afford more food?*
- *In the last 12 months, did any of the children ever skip a meal because there wasn't enough money for food?*

  [If yes:]

  - *How often did this happen - almost every month, some month but not every month, or in only 1 or 2 months?*

- *In the last 12 months, did any of the children ever not eat for a whole day because there wasn't enough money for food?*

Expected Periodicity Annual.

Comments The 1995 Food Security Supplement to the Current Population Survey is a set of questions developed by an interagency working group led jointly by USDA's Food and Nutrition Service and HHS's National Center for Health Statistics.[35, 36] All of the indicators of food insecurity in the Supplement focus explicitly on food insufficiency and hunger, at adult and child levels, resulting from inadequate household resources. Other sources of food insecurity, such as child abuse/neglect or loss of function or mobility (particularly relevant to the elderly population) are not distinguished by the measure.

The Food Security Supplement questions were asked of about 45,000 households as part of the 1995 Current Population Survey (a nationally representative sample selected and interviewed by the Census Bureau). This supplement was fielded for the first time in April 1995 and repeated in September 1996, April 1997, August 1998, and April 1999.

A statistical analysis of the survey responses identified a set of 18 core questions that were used to identify households with food insecurity.[37] Two separate measurement scales were developed: one for food insecurity during a 12-month period and another for insecurity for the past 30 days. The 12-month scale, which covers a broader range of food insecurity, was used for this objective. Households were classified as food secure if fewer than three of the questions were answered affirmatively or if only one or two questions were answered affirmatively. Otherwise, the household was classified as food insecure. An affirmative answer included "yes," "often," or "sometimes."

The Food Security Supplement also provides State-level estimates of food insecurity, which generally will be reported by the USDA based on 2- or 3-year averages.[38] The prevalence of hunger can also be tracked at the national and State levels.

See Appendix A for focus area contact information.

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