Nutrition and Overweight

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PROGRESS REVIEW

In the 19th session in the second series of assessments of *Healthy People 2010*, Assistant Secretary for Health Joxel Garcia chaired a Progress Review on Nutrition and Overweight. He was assisted by staff of the co-lead Agencies for this *Healthy People 2010* focus area, the Food and Drug Administration (FDA) and the National Institutes of Health (NIH). Also participating in the review were representatives from other Agencies and offices within the U.S. Department of Health and Human Services (HHS) and from the U.S. Department of Agriculture, the U.S. Department of Defense, the U.S. Department of Education, and the Federal Trade Commission. ADM Garcia opened the meeting by stating that ensuring good nutrition and controlling the trend toward overweight were critical to the well-being of the Nation. Not only the health and life expectancy of the people, but also the productivity of the country, are affected. ADM Garcia stressed the importance of the situation with the statement that we, as adults, may be the first generation that will be burying our children if we do not reverse the increasing prevalence of overweight and obesity.

The complete November 2000 text for the Nutrition and Overweight focus area of *Healthy People 2010* is available online at **www.healthypeople.gov/document/html/volume2/19nutrition.htm**. Revisions to the focus area chapter that were made after the January 2005 Midcourse Review are available at **www.healthypeople.gov/data/midcourse/html/focusareas/fa19toc.htm**. For comparison with the current state of the focus area, the report on the first-round Progress Review (held on January 21, 2004) is archived at **www.healthypeople.gov/data/2010prog/focus19/2004fa19.htm**. The meeting agenda, tabulated data for all focus area objectives, charts, and other materials used in the Progress Review can be found at a companion site maintained by the Centers for Disease Control and Prevention's (CDC's) National Center for Health Statistics (NCHS): **www.cdc.gov/nchs/about/otheract/hpdata2010/focusareas/fa19-nutrition2.htm**. That site has a link to **wonder.cdc.gov/data2010**, which provides access to detailed definitions for the objectives in all 28 *Healthy People 2010* focus areas and periodic updates to their data.

Data Trends

In his overview of data for the focus area, NCHS Director Edward Sondik first focused on the increasing prevalence of overweight and obesity in children and adolescents. According to national data from the period 2003–2006, the proportion of young people aged 6–19 years who were overweight or obese was 17 percent. This is an increase from 11 percent in the period 1988–1994. Dr. Sondik also noted that improved State-level data collection on the prevalence of child and adolescent overweight and obesity is in place. He emphasized the importance of taking advantage of the window of opportunity to establish healthful behaviors in youth that could then be continued over their lifetime as adults. Other serious health problems associated with

diet include heart disease, stroke, some cancers, type 2 diabetes, and osteoporosis. Diet-related conditions can contribute to reduced quality of life, premature death, substantial medical costs, and lost productivity. Of the 19 objectives and subobjectives remaining in the focus area after the *Healthy People 2010* Midcourse Review for which there are data to assess progress, only 2—calcium intake and food security—have made significant progress toward their targets. Seven show little or no progress, and 8 have moved away from their targets. Two other objectives either have only baseline data or are without data. Dr. Sondik noted that all objectives related to overweight and obesity are moving away from their targets. A more detailed examination of some of the objectives in the focus area follows.

(Obj. 19-1): The age-adjusted proportion of adults aged 20 years and older whose weight is in the healthy range was 32 percent in the period 2003–2006, a decrease from 42 percent in the period 1988–1994. The 2010 target is 60 percent. Healthy weight is defined in terms of a body mass index (BMI) of between 18.5 and 24.9. This downward trend in healthy weight carries across all demographic groups for whom data were collected, including Mexican American, non-Hispanic black, and non-Hispanic white. The trend also prevails across genders and income levels.

(Obj. 19-2): The age-adjusted proportion of adults aged 20 years and older who are obese—that is, have a BMI of 30 or above—was 33 percent in 2003–2006. The 1988–1994 baseline was 23 percent, and the target is 15 percent. Increases in this proportion were evident in all racial and ethnic groups for whom data were collected, including Mexican American (rising from 29 percent to 35 percent over that period), non-Hispanic blacks (from 30 percent to 45 percent), and non-Hispanic white (from 22 percent to 32 percent). Gender differences were most apparent for Mexican Americans—42 percent of females were obese, compared with 29 percent of males—and non-Hispanic blacks—53 percent of females were obese, compared with 35 percent of males.

(Objs. 19-3a, -3b, -3c): Overweight and obesity in children aged 6 to 11 years increased from 11 percent in 1988–1994 to 17 percent in 2003–2006. In adolescents aged 12 to 19 years, the increase over the same period was from 11 percent to 18 percent. The target for both children and adolescents is 5 percent. The proportion of children and adolescents who are overweight or obese increased for all racial and ethnic groups surveyed—from 15 to 22 percent among Mexican Americans, from 14 to 22 percent among non-Hispanic blacks, and from 10 to 15 percent among non-Hispanic whites.

(Objs. 19-5, 19-6, 19-7): The proportion of people aged 2 years and older (age-adjusted) who ate at least two servings of fruit per day increased slightly from 1994–1996 (39 percent) to 2003–2004 (40 percent). The target is 75 percent. In 2003–2004, the proportion of the population that met the *Healthy People 2010* criteria for vegetable intake—at least three daily servings with at least one-third being dark green or orange—was the same as in 1994–1996, 4 percent. The target is 50 percent. In 2003–2004, dark green or orange vegetables represented about 7 percent of the total vegetable consumption by children and adolescents aged 2 to 19 years. For adults, the proportion was 11 percent in 2003–2004. Current dietary guidance recommends that Americans consume at least half their grains from whole grain. The proportion of people who ate at least six daily servings of grain products with at least three being whole grains was 3 percent in 2003–2004, a decrease from 4 percent in 1994–1996. In 2003–2004, whole grains represented 7 percent of total grain product intake by children and adolescents and 10 percent of total grain product intake by adults. The target is 50 percent.

(Obj. 19-10): The age-adjusted proportion of people meeting the *Healthy People 2010* criterion for total daily sodium intake, i.e., 2,400 mg or less, was 13 percent in 2003–2004, compared with 15 percent in 1988–1994. The target is 65 percent.

(Obj. 19-11): Total calcium intake is one objective for which the data show improvement. The age-adjusted proportion of people whose total calcium intake was at or above 100 percent of the Institute of Medicine (IOM) adequate intake (AI) values was 42 percent in 2003–2004, compared with 31 percent in 1988–1994. The target is 74 percent.

Key Challenges and Current Strategies

Representatives from FDA and NIH made presentations on the principal themes of the Progress Review, which centered on focus area objectives that aim to promote healthy weights among children and adolescents and healthy eating among all Americans. The presenters were Stephen Sundlof, Director, Center for Food Safety and Applied Nutrition (CFSAN)/FDA, and Raynard Kington, Deputy Director, NIH. Their statements and Progress Review briefing materials prepared by an interagency workgroup identified a number of barriers to achieving the objectives, as well as activities under way to meet these challenges, including the following.

Barriers

- Surveys such as What We Eat in America (WWEIA)/ National Health and Nutrition Examination Survey (NHANES) play a crucial role in tracking the progress of objectives in this focus area. However, the increasing cost of conducting the WWEIA/NHANES survey has challenged its capability to continue in this tracking role. Modifications in methodologies and technologies present other tracking challenges. Furthermore, national data from WWEIA/NHANES are not meant to be representative of the States and local communities, and State and local data are not always comparable to national data.
- "Away from home" foods—full meals and single ready-to-eat items purchased at restaurants, prepared-food counters at grocery stores, institutional foodservice settings, and other outlets—play an important role in the increasing prevalence of overweight and obesity. Healthy eating is a challenge at restaurants that offer a limited choice of healthful foods.
- Many factors influence development of inappropriate weight gain, and not all factors contribute equally for all people. It is important, therefore, to understand which factors are more important for which individuals and for population groups.
- In the *Dietary Guidelines for Americans,* 2005, it is estimated that about 75 percent of the salt content in food comes from salt added by manufacturers. Data from 2003–2004 showed that salt use at the table contributed a small but not inconsequential amount to the total, with very little sodium being contributed by tap water or dietary supplements.
- Getting people to sustain the necessary behavioral changes to maintain lifelong weight management can be extremely difficult.
- Although individuals who have calcium intakes at or above the IOM AI values have a low probability of inadequacy, a limitation of these reference values is that they cannot be used to assess the proportion of a population who have inadequate intakes.
- Besides limiting daily sodium intake, another dietary measure to lower blood pressure is to consume a diet rich in potassium. However, data from

2003–2004 showed that few Americans had intakes above the AI values established by the IOM.

- Federal nutrition assistance programs designed to improve access to healthful foods for low-income families are not uniformly aligned with the *Dietary Guidelines for Americans,* 2005.
- Although States and local communities have the authority to set standards for all foods and beverages sold in schools outside of school meal programs, as in vending machines, for example, many jurisdictions have not taken action.

Activities and Outcomes

- The *Dietary Guidelines for Americans,* 2000 document was updated in 2005, and the focus continues to be on helping Americans manage weight and reduce their risk for chronic diseases. The guidelines encourage consumption of a variety of fruits and vegetables, whole grains, and calcium-rich foods, while staying within the limits of daily calorie needs. The value of exercise also is stressed. These guidelines are one example of the importance of interagency collaboration in establishing dietary recommendations and monitoring the Nation's progress in their implementation. The HHS Childhood Overweight and Obesity Prevention Council is another example of such collaboration.
- The Nutrition Facts label on packaged foods is another important tool in helping consumers construct healthful diets. FDA is seeking ways to improve the label's information about nutrients, calories, and serving size. The Agency has updated nutrition information for the voluntary labeling of raw fruits, vegetables, and seafood.
- FDA is involved in collaborative efforts to promote healthy weights and eating among youth. *Spot the Block* is a partnership with the Cartoon Network that aims to increase use and understanding of the nutrition facts label. *The Power of Choice* is an afterschool program developed in collaboration with U.S. Department of Agriculture's (USDA's) Food and Nutrition Service. Both programs are directed at "tweens" (i.e., children and adolescents aged 9 to 13 years). FDA also has partnered with the National Science Teachers Association to provide teachers with training and tools to help children use the Nutrition Facts label.
- USDA has contracted with the IOM to provide recommendations to update the meal patterns and nutrition requirements for both the National School Lunch Program and the School Breakfast Program. In December 2007, USDA also published an interim final rule revising the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) food packages to increase access and availability of fruits, vegetables, and whole grains and decrease provision of higher fat dairy products to low-income families and children.
- NIH supports a variety of research studies—basic, clinical, and translational—on various aspects of nutrition and overweight. Studies endeavor to increase understanding of biologic pathways that control appetite and energy use, genetic factors that predispose people to weight gain, and behavioral and environmental factors that can contribute to weight problems.
- The Dietary Approaches to Stop Hypertension (DASH) study showed that a healthy eating plan can reduce the risk for developing high blood pressure and can lower elevated blood pressure. The DASH eating plan is a model diet within the *Dietary Guidelines for Americans,* 2005 and is a program initiated through support from NIH.
- NIH's National Heart, Lung, and Blood Institute, National Institute of Diabetes and Digestive and Kidney Diseases, National Institute of Child Health and Human Development, and National Cancer Institute collaborated on the *We Can! (Ways to Enhance Children's Activity and Nutrition)* initiative in 2005. *We Can!* is a national, community-based

education and outreach program designed to help prevent childhood obesity.

- NIH has established a strategic plan to coordinate and enhance development of new obesity research efforts among NIH Institutes, Centers, and Offices.
- Effecting behavioral change is considered integral to the mission of NIH, which supports research on emerging bio-behavioral science and on problem behaviors that fall within the scope of individual Institutes. NIH research in the area of behavior change includes the Health Maintenance Consortium, a 5-year study begun in 2003 that intends to increase understanding of long-term maintenance of behavior change. Also included is the Science of Behavior Change, a roadmap pilot study set to begin in 2008 that is intended to establish the groundwork for a unified science of behavior change.

Approaches for Consideration

Participants in the Progress Review made the following suggestions for public health professionals and policymakers to consider as steps to enable further progress toward achieving the objectives for Nutrition and Overweight:

- Support and strengthen NHANES and other data monitoring activities with dedicated Federal funding.
- Increase public awareness of overweight and obesity at the individual and population levels.
- Place greater emphasis on the importance of scientific understanding to the achievement of sustained behavioral change and long-term lifestyle modification.
- Improve communications with the public to convey the message that there are recommended actions that can be effective in weight management.
- Integrate efforts of multiple public–private sector partners to address nutrition and overweight as *Healthy People 2020* begins, and include nontraditional partners in these activities.
- Use emerging technologies, such as interactive videogaming technology, to direct efforts at youth and other targeted audiences.
- Support and strengthen efforts to identify and share weight control and reduction interventions that work.
- Make a special effort to address high-risk populations and health disparities in childhood obesity through additional mechanisms to provide community support programs and community participation in research efforts.
- Provide greater support for school health and physical education programs.
- Use Federal nutrition assistance programs to increase access to and availability of fruits, vegetables, and whole grains and decrease provision of higher fat dairy products to low-income families and children.
- Support efforts to change the way foods are marketed to children and to improve the nutritional profile of those foods.

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[Signed July 1, 2008]

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