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United States General Accounting Office  
Washington, DC 20548

Resources, Community, and  
Economic Development Division

B-285079

May 8, 2000

The Honorable Russell Feingold  
United States Senate

Subject: Food Stamp Program: Information on the Costs of Special Diets

Dear Senator Feingold:

Low-income households are considered to be at a higher risk for, and have a higher prevalence of, nutrition-related health problems. A primary purpose of the U.S. Department of Agriculture's (USDA) \$18 billion Food Stamp Program, the nation's largest food assistance program, is to help low-income households obtain more nutritious diets. Food stamp benefits are based on the net income of a household and the number of household members. To obtain a higher level of benefits, recipients can deduct certain expenses, including some medical expenses, to lower their household's net income. However, the costs of special diets, such as those for hypertension or diabetes, are excluded from the allowable medical expense deduction by federal statute. Concerned that some food stamp recipients may not be able to afford medically prescribed dietary regimes, you asked us to obtain information about (1) the number of food stamp recipients whose special dietary costs exceed the maximum food stamp benefit and (2) the costs of recipients' special diets compared with the maximum food stamp benefit.

In summary, the federal government does not have the information to determine the number of food stamp recipients whose special diets exceed the maximum food stamp benefit. While two federal government surveys provide some information about the number of food stamp recipients with special diets, no information is collected about the costs of these diets or the degree to which the special dietary needs of food stamp recipients are unmet due to their limited financial resources. The costs of recipients' special diets can vary, according to USDA officials. They explained that the costs of some of these diets can fall within the maximum food stamp benefit, or they can exceed it. But they do not know how frequently special dietary costs exceed the maximum or to what extent the maximum is exceeded. They were, however, able to identify situations in which the maximum benefits could fail to meet special dietary needs. For example, they cited diets that require cans of oral nutritional supplements, which can each cost about half of the maximum daily benefit of \$3.51. Moreover, our comparison of the weekly costs of one special diet

for hypertension showed that its costs were 41 percent more than the food stamp benefit. Hypertension was the primary reason that food stamp recipients reported changing their diets in a prior 12-month period.

## **Background**

USDA's Food and Nutrition Service (FNS) administers the Food Stamp Program through state agencies. In fiscal year 1999, the program provided benefits to about 18 million low-income recipients. Most benefits go to households with children or elderly persons. More than half of the food stamp recipients are age 17 or younger, while more than 15 percent of the recipients are elderly or disabled. On average, food stamp households have more than two persons.

In the Food Stamp Program, benefits are based on the average needs of households rather than of individuals. A household consists of people who live, buy food, and prepare meals together. The amount of benefits depends on the number of people in a household and the amount of monthly income left after certain deductions are subtracted. Allowable deductions include a standard deduction, 20 percent of earned income, dependent care expenses, and high shelter costs. In addition, elderly or disabled members of a household may deduct their monthly medical expenses in excess of \$35. The costs of special diets cannot be included as a medical expense. Thirty percent of the income remaining after these deductions (or net income) is assumed to be available for food purchases.

FNS determines the maximum food stamp benefit using the Thrifty Food Plan, which was developed by USDA's Center for Nutrition Policy and Promotion. The Thrifty Food Plan is used to establish a minimal cost of preparing nutritious meals at home. Under the Thrifty Food Plan, the Center assumes all individuals are healthy and moderately active, and it establishes average minimal monthly food costs for individuals in 12 different age and gender groups. To establish the maximum food stamp benefit, FNS calculates the average food costs for a household that consists of one adult male, one adult female, and two children. This composition of the "reference" household is mandated by federal statute. Maximum benefits for individuals in smaller and larger households are calculated by adjusting the costs for the reference family. For example, in fiscal year 2000, one-fourth of the four-person reference household's maximum benefit is \$106. But for a one-person household, an individual would be entitled to one-fourth of the reference household's benefit (\$106) plus an additional 20 percent, or \$127 per month. This additional amount takes into account that it is not always possible to buy foods in small quantities, such as portions of a loaf of bread. Conversely, for a household with seven or more members, the maximum monthly benefit per person would be \$95, or one-fourth of the reference household amount (\$106) less 10 percent. In this larger household, the benefit is reduced to account for the lower prices that can be obtained from buying food in bulk quantities.

Actual household food benefits are determined by subtracting 30 percent of a household's net income from the maximum benefit allowed for the given household size. For fiscal year 2000, the average food benefits were \$73 per person per month.

Diet, in combination with medical care, plays an important role in preventing or controlling many diseases or conditions. Diet is a significant risk factor for the three leading causes of death in the United States—coronary heart disease, certain types of cancer, and stroke. Moreover, it plays a major role in the development of diabetes (the seventh leading cause of death), hypertension, and excessive weight gain. These six health conditions result in considerable medical expenses, lost work, disability, and premature deaths—even though a significant portion of these conditions is believed to be preventable through improved diets.

Special diets address a variety of specific health needs. A physician, registered dietician, or nutritionist typically prescribes or recommends special diets. These diets are based on a set amount of nutrients to meet an individual's specific daily needs, such as no more than 2,000 milligrams of sodium a day. Examples of special diets include a low-fat or low-cholesterol diet for heart disease, a low-sodium diet for hypertension, and a low-calorie diet for weight reduction. The American Dietetic Association has established dietary guidelines (referred to as medical nutrition therapy protocols) for 24 medical conditions and is in the process of developing more. These guidelines cover a range of illnesses and conditions. (See enc. I for a list of these conditions.)

#### **The Number of Food Stamp Recipients With Special Diets Whose Costs Exceed the Maximum Benefit Is Unknown**

The federal government does not collect data to determine the number of food stamp recipients whose special diets exceed the maximum food stamp benefit. It does conduct two national surveys to gather information about the dietary and nutritional status of the U.S. population, including food stamp recipients. While these surveys provide limited information about recipients' special dietary needs, no information is available on the costs of recipients' special diets. Therefore, the number of recipients with special diets that exceed their food stamp benefits cannot be determined. Moreover, it is not known to what degree these recipients are not meeting their special dietary needs because of their limited financial resources.

USDA's Continuing Survey of Food Intakes by Individuals measures the kinds and amounts of foods eaten by the U.S. population. In addition, it has questions about individuals' weight loss and other health-related diets. According to this survey, for food stamp recipients of all ages, about 5 to 8 percent have had a doctor or dietician prescribe or suggest different types of diets. For recipients who are age 17 and over, about 10 to 16 percent have such diets. Food stamp recipients most frequently reported the following types of diets: low-fat, low-cholesterol, low-salt or -sodium, diabetic, sugar-free or low-sugar, and weight-loss or low-calorie. While the survey asked about the types of diets that had been prescribed or suggested, it did not obtain any more information about the diets or the number of people actually following them.

A second survey, the National Health and Nutrition Examination Survey (NHANES), is administered by the Centers for Disease Control and Prevention. This survey collects information about the health and diet of people in the United States. It asks respondents about dietary changes made during the past 12 months and the medical reasons or conditions for those changes. According to this survey, about 16 to 20 percent of food stamp recipients, age 17 or over, had changed their diet within the prior 12 months because of various medical conditions.<sup>1</sup> For the food stamp recipients who responded, the most frequently reported reasons for changing diets were high blood pressure (hypertension), high cholesterol, obesity, diabetes, and heart disease. While this survey obtains information about people who have actually changed their diets, it identifies only those who have made a change in the prior 12 months. It does not provide information about the total number of recipients who have changed their diets for a health-related reason.

### **The Costs of Special Diets Vary**

While limited information is available about food stamp recipients' special dietary needs, no information is collected on the costs of these diets. USDA officials believe that in some cases the cost of a special diet exceeds the maximum food stamp benefits, while in other cases it does not. As an example of the latter, an individual on a weight-loss diet could spend less than the maximum food benefit, assuming that the individual could purchase less but comparably priced nutritious foods to meet a lower-calorie diet than the standard benefit supports.<sup>2</sup> In other instances, USDA officials identified diets that could exceed the cost of the maximum benefit. These include diets that

- Exceed the average calorie level upon which benefits are based. USDA officials explained that the approach used to calculate maximum food benefits allows for a maximum daily amount of 2,900 calories for a healthy individual.<sup>3</sup> Therefore, recipients who require more than 2,900 calories would not receive enough benefits to cover their additional food costs. For example, individuals with malabsorption problems may require additional calories to obtain sufficient nutrients.
- Include cans of oral nutritional supplements. These supplements can be purchased with food stamps in a grocery store and are used for a variety of dietary needs. However, they cost around \$1.50 a can, or about half of the maximum daily food stamp benefit for one person in the reference four-person

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<sup>1</sup>These questions were not asked of respondents under 17 years of age.

<sup>2</sup>It is also possible that a recipient's weight-loss diet could cost more than the maximum benefit allowed—if it required food choices that have a higher average cost.

<sup>3</sup>This amount (2,900 calories) applies to the reference household member with the highest average daily calorie needs—an adult male, 20 to 50 years of age.

household (\$3.51).<sup>4</sup> This specific situation was mentioned in 2 of the 12 letters that FNS has received in the past few years from food stamp recipients mentioning the high costs of special diets. One person was to drink three to four cans of oral supplements daily.

- Require meeting the recommended sodium levels. The Thrifty Food Plan does not meet the recommended daily sodium intake requirement (2,400 milligrams or less) in following the Food Pyramid guidelines.<sup>5</sup> This limitation is because of the significant amounts of sodium in grain and cereal products and the number of required servings in this food group. According to USDA's Center for Nutrition Policy and Promotion officials, the plan could not meet the sodium recommendation even with a 25-percent increase in the cost of the Thrifty Food Plan. For sodium, the plan was fixed at no more than actual average consumption levels, which are higher than those recommended by the National Academy of Sciences.

Since no information was available about the costs of recipients' special diets, we asked USDA's Center for Nutrition Policy and Promotion to price the weekly costs for one diet used to treat hypertension.<sup>6</sup> This diet, the Dietary Approaches to Stop Hypertension (DASH), was the result of a research study supported by the National Heart, Lung, and Blood Institute. In this study, researchers compared three different diets: (1) one similar to what many Americans consume, (2) another similar to what Americans consume but higher in fruits and vegetables, and (3) the DASH diet—which is lower in total fat, saturated fat and cholesterol; rich in fruits, vegetables, and low-fat dairy foods; and high in fiber.<sup>7</sup> The results showed that the DASH diet was the most effective of the three diets in reducing hypertension. In fact, the study showed that the DASH diet can significantly lower blood pressure and do so quickly, within 2 weeks of starting the diet.

Our comparison of the weekly food costs for one person showed that the sample menus for the DASH diet cost 41 percent more than the Thrifty Food Plan, which is the basis for calculating food stamp benefits. USDA's Center for Nutrition Policy and Promotion priced the weekly DASH diet at \$34.76 and the Thrifty Food Plan at \$24.60.<sup>8</sup> Center officials said the key factors accounting for the price difference are the DASH diet's more costly food choices for snacks (such as dried fruits and nuts

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<sup>4</sup>As previously mentioned, an individual's food stamp benefits could range from 20 percent more to 10 percent less of the amount, depending on the number of household members.

<sup>5</sup>The sodium recommendation is the only recommended daily allowance that the Thrifty Food Plan does not meet.

<sup>6</sup>We selected this diet because (1) hypertension was the most frequent medical reason that food stamp recipients in the NHANES survey gave for changing their diets and (2) the diet could be easily quantified with national average food price data by USDA's Center for Nutrition Policy and Promotion.

<sup>7</sup>During the research project, DASH menus had a daily average of 3,000 milligrams of sodium, which exceeds the recommended daily allowance of 2,400 milligrams.

<sup>8</sup>See footnote 4.

rather than fruit juice), grain bread product (with more whole-grain food choices), and the additional servings and higher cost choices of fruits and vegetables. (See enc. II for tables that show 7 days of sample meal plans for DASH and the Thrifty Food Plan.)

### **Agency Comments**

We provided USDA with a draft of this report for its review and comment. We met with officials from the Food and Nutrition Service, including the Director of the Program Development Division, Food Stamp Program, and the Center for Nutrition Policy and Promotion. USDA agreed with the information in our report and provided minor technical clarifications, which we incorporated as appropriate. However, USDA officials told us that there is great uncertainty about the appropriate response to situations where the maximum food stamp benefit fails to meet special dietary needs. In particular, they noted that many federal, state, and local policymakers and program administrators would be concerned about attempts to remedy this problem that could further increase the administrative complexity of program rules. They urged that any future discussions of this issue consider the administrative feasibility and potential cost of policy options in addition to the benefits for people with special needs.

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We performed our work in accordance with generally accepted government auditing standards from December 1999 through April 2000. We did not verify the accuracy of data from USDA and the Centers for Disease Control and Prevention, but both surveys have been conducted for years and are used extensively by organizations in and out of government for many purposes, including tracking the relationship between nutrition and health. (For more details on our scope and methodology, see enc. III.)

As arranged with your office, unless you publicly announce its contents earlier, we will make no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies of this report to the congressional committees responsible for the Food Stamp Program; the Honorable Dan Glickman, Secretary of Agriculture; the Honorable Shirley Watkins, Under Secretary for Food, Nutrition, and Consumer Services; and the Honorable Samuel Chambers, Administrator, Food and Nutrition Services. We will also make copies available upon request.

B-285079

If you or your staff have any questions about this report, please contact me or Cathy Helm, Assistant Director, at (202) 512-5138. Key contributors to this report were Natalie Herzog and Paul Pansini.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Lawrence J. Dyckman". The signature is fluid and cursive, with a large initial "L" and "D".

Lawrence J. Dyckman  
Director, Food and Agriculture  
Issues

**Medical Conditions Covered by American Dietetic Association's  
Medical Nutrition Therapy Protocols**

Anorexia and Bulimia Nervosa  
Cancer (Medical)  
Cancer (Radiation oncology)  
Chronic Obstructive Pulmonary Disease  
Congestive Heart Failure  
Cystic Fibrosis (Children/adults)  
Diabetes Mellitus – Type 1  
Diabetes Mellitus – Type 2  
Enteral/Parenteral Nutrition Support (Tube/intravenous feeding)  
Gestational Diabetes Mellitus (Adolescents/adults)  
HIV/AIDS (Adults)  
HIV/AIDS (Children/adolescents)  
Hyperlipidemia (High cholesterol levels)  
Hyperemesis Gravidarum (Severe morning sickness)  
Hypertension (High blood pressure)  
Irritable Bowel Syndrome  
Pneumonia  
Pre-End-Stage Renal Disease  
Prenatal, High-Risk (Adolescents/adults)  
Pressure Ulcer (Older adults)  
Prevention of Unintentional Weight Loss (Older adults)  
Functional Health Status Instruments for Older Adults  
Pediatric Failure to Thrive  
Weight Management



Enclosure II

**Table 1: The 1-Week DASH Meal Plans Used for Cost Comparison**

Meal	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Breakfast	Apple juice; bran cereal with raisins and fat-free milk; whole wheat bread; soft margarine	Prune juice; oatmeal; whole wheat bread; soft margarine; fat-free milk; banana	Orange juice; corn flakes; whole wheat bread; soft margarine; fat-free milk	Orange juice; English muffin; marmalade; soft margarine; fat-free milk	Orange juice; fat-free yogurt; low-fat fruit granola bars; fat-free milk; banana	Orange juice; bran cereal; whole wheat bread; soft margarine; fat-free milk; banana	Grape juice; bran flakes cereal; banana; whole wheat bread; soft margarine; fat-free milk
Lunch	Chicken sandwich with reduced fat American cheese, lettuce, tomato, whole wheat bread; apple	BBQ beef sandwich; boiled potatoes; salad; cranberry juice	Lean, low-sodium ham sandwich with reduced-fat cheese, lettuce, tomato, mustard on whole wheat bread	Tuna sandwich with lettuce, tomato on whole wheat bread; carrot and celery sticks; broccoli; reduced-fat cheddar cheese; cranberry juice cocktail	Turkey sandwich with lettuce, tomato on whole wheat bread; carrots; fresh orange	Chicken salad sandwich with tomato on whole wheat pita bread; apple	Tuna sandwich with lettuce on whole wheat bread; apricot nectar; apple
Dinner	Spaghetti with vegetarian sauce and Parmesan cheese; green beans; spinach salad; dinner roll; low-fat frozen yogurt	Baked trout; brown rice; three-bean salad; corn muffin; soft margarine; spinach	Chicken with Spanish rice; green peas; corn muffin; melon balls; fat-free milk	Chicken breast; brown rice; stewed tomatoes; lima beans; spinach; dinner roll; soft margarine; fat free milk	Spicy baked fish; brown rice; spinach, zucchini; dinner roll; soft margarine; fat-free milk; melon balls	Lean roast beef; dinner roll; baked potato; soft margarine; green beans; frozen peaches; fat-free milk	Zucchini lasagna; spinach salad with oil and vinegar salad dressing; dinner roll; soft margarine
Snacks	Orange juice; banana	Orange; dried fruit mixture	Dried apricots; almonds; orange	Mixed nuts; dried apricots; pretzels; orange	Peanuts; dried apricots	Almonds; low-fat yogurt; orange juice	Almonds; raisins; fat-free yogurt
Cost*	\$4.24	\$4.73	\$6.04	\$5.13	\$5.40	\$5.10	\$4.12

Note: The average weekly per person cost of the DASH diet is \$34.76 (or \$4.97 per day).

\*The cost information is from the U.S. Department of Agriculture's Center for Nutrition Policy and Promotion. The Center used its Food Price Database. The prices have been adjusted for a four-person household in June 1999, which are the prices used to establish the fiscal year 2000 food stamp benefit levels.

Source: The menus are from the National Institute of Health's National Heart, Lung, and Blood Institute, The DASH Diet. They are for a 2,000-calorie daily diet.

**Table 2: The 1-Week Thrifty Food Plan Menus Used for Cost Comparison**

Meal	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Breakfast	Orange juice; ready-to-eat cereal; English muffin; 1% low-fat milk	Orange juice; banana; bagel; margarine; 1% low-fat milk	Orange juice; cooked rice cereal; <sup>a</sup> bagel; margarine	Orange juice; scrambled eggs; hash brown potatoes; 1% low-fat milk	Orange juice; ready-to-eat cereal; English muffin; margarine; 1% low-fat milk	Orange juice; baked French toast <sup>a</sup> with cinnamon-sugar topping; 1% low-fat milk	Orange juice; baked potato cakes; <sup>a</sup> white toast; 1% low-fat milk
Lunch	Turkey patties <sup>a</sup> on hamburger bun; orange juice; coleslaw; 1% low-fat milk	Crispy chicken; <sup>a</sup> potato salad; <sup>a</sup> orange gelatin salad; <sup>a</sup> canned peaches; rice pudding <sup>a</sup>	Turkey chili; <sup>a</sup> macaroni; peach-apple crisp; <sup>a</sup> 1% low-fat milk; orange juice	Turkey ham sandwich; baked beans; <sup>a</sup> banana slices; oatmeal cookies; <sup>a</sup> orange juice; 1% low-fat milk	Potato soup; <sup>a</sup> low-salt snack crackers; tuna pasta salad; orange slices; oatmeal cookies; <sup>a</sup> 1% low-fat milk	Potato soup; <sup>a</sup> low-salt snack crackers; apple orange slices; rice pudding; <sup>a</sup> 1% low-fat milk	Baked fish sandwich; crispy potatoes; <sup>a</sup> macaroni salad; <sup>a</sup> melon; orange juice; 1% low-fat milk
Dinner	Beef noodle casserole; <sup>a</sup> lima beans; banana orange salad; 1% low-fat milk	Turkey stir-fry; <sup>a</sup> steamed rice; white bread; peach-apple crisp; <sup>a</sup> 1% low-fat milk	Baked cod with cheese; <sup>a</sup> scalloped potatoes; <sup>a</sup> spinach; margarine; chocolate pudding	Beef pot roast; <sup>a</sup> egg noodles; peas and carrots; orange slices; biscuits; margarine; rice pudding; <sup>a</sup> 1% low-fat milk	Beef pot roast; noodles; green beans; lettuce; rice pudding; <sup>a</sup> 1% low-fat milk	Saucy beef pasta; <sup>a</sup> white bread; canned pears; orange juice; 1% low-fat milk	Turkey-cabbage casserole; <sup>a</sup> orange slices; white bread; chickpea dip; <sup>a</sup> 1% low-fat milk
Snacks	White bread; chickpea dip; <sup>a</sup> lemonade	Orange juice	Crispy potatoes <sup>a</sup>	Lemonade	Biscuits; margarine; lemonade	Lemonade	<sup>b</sup>

Note: The average weekly per person cost of the Thrifty Food Plan is \$24.60 (or \$3.51 per day).

<sup>a</sup>These items have recipes that food stamp recipients are to use in preparing them.

<sup>b</sup>There is no snack for this day.

Source: U.S. Department of Agriculture's Center for Nutrition Policy and Promotion, Preparing Nutritious Meals at Minimal Cost, Sept. 1999. This report describes a sample of menus and recipes based on the Thrifty Food Plan, 1999. The menus and recipes are for nutrition professionals to use in teaching food stamp recipients to follow the Thrifty Food Plan. They are designed for a healthy four-person family and not planned for infants, toddlers, pregnant or nursing women, or for others with special health or nutritional needs. The calorie levels are 9,143 each day for four persons (or 2,286 per person daily).

SCOPE AND METHODOLOGY

To identify the number of food stamp recipients whose special dietary costs exceed the maximum benefit, we spoke with officials from the U.S. Department of Agriculture (USDA), the Centers for Disease Control and Prevention (CDC), the National Academy of Sciences, the American Association of State Food Stamp Directors, the American Dietetic Association, and others. We identified two federal government surveys that could provide nationally projectable estimates about the diets of food stamp recipients and used the most recently available data from each survey: USDA's 1994-96 Continuing Survey of Food Intakes by Individuals and CDC's National Health and Nutrition Examination Survey (1988-94). We reported survey results at the 95-percent confidence level. We also learned that no information was available about the costs of these recipients' special diets.

To compare the costs of one special diet to the maximum food stamp benefit, we selected the DASH diet because (1) hypertension was the most frequently cited medical reason that surveyed food stamp recipients gave for changing their diets and (2) the diet could be easily quantified with national average food price data from the Center for Nutrition Policy and Promotion's Food Price Database. To demonstrate the cost differences between the Thrifty Food Plan and the DASH plan, we asked the Center to calculate 1-week's meal costs for the DASH diet using the sample menus provided as part of this diet. We then compared the cost differences between the two and discussed the reasons for these differences with USDA officials. In addition, we reviewed all of the letters from food stamp recipients and others who had written to USDA between October 1996 and February 2000 and who had made a reference to special diets (30 in total). Food and Nutrition Service officials identified these letters by electronically searching their file of response letters for those with the words "special diet."

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