Contract No.: 53-3198-0-046
MPR Reference No.: 7964-130

MATHEMATICA
Policy Research, Inc.

National Study of the Adult Component of the Child and Adult Care Food Program (CACFP) Volume 1: Results

Final Report

October 15, 1993

Michael Ponza
John Burghardt
Rhoda Cohen
James C. Ohls
Valarie Piper
Barbara M. Posner
Linda Rosenberg

Editor: Joanne Pfleiderer

Submitted to:

U.S. Department of Agriculture
Food and Nutrition Service
Office of Analysis and Evaluation
3101 Park Center Drive, 2nd Fl.
Alexandria, VA 22302

Project Officer:
Leslie Christovich

Submitted by:

Mathematica Policy Research, Inc.
P.O. Box 2393
Princeton, NJ 08543-2393
(609) 799-3535

Co-Project Directors:
John Burghardt
Michael Ponza

Survey Director:
Rhoda Cohen

ACKNOWLEDGMENTS

The authors would like to thank the many people who have helped with this study. At the U.S. Department of Agriculture, Food and Nutrition Service (FNS), Leslie Christovich and Susan Batten provided continued valuable direction and advice. FNS regional offices and the CACFP administering agencies in the 50 states and District of Columbia generously provided assistance in data collection both at the state and center level.

Advisory panel members Linda Crossman, Kathryn Katz, and Judith Lane provided advice on adult day care in the formative stages of this project and reviewed the center and client surveys. Rick Zawadski, under contract to Mathematica Policy Research, Inc., (MPR) developed an expanded database of adult day care centers for use in the survey of non-CACFP centers. Johnnie Morgan of Nutrition Consulting Enterprises provided the food portion visual for the dietary data collection. Members of the Education and Information Advisory Committee of the Council of Chief State School Administrators expeditiously reviewed drafts of the data collection plans and instruments.

Special thanks go to several members of the National Council on the Aging, National Institute on Adult Daycare (NIAD). Continued support and encouragement were provided by Mary Ann Outwater, past chair, and her successor, Bonnie Walson. Tanya Hart served as liaison between NIAD and the MPR project team. At-large delegates and regional delegates of NIAD facilitated participation in the study by adult day care centers.

The state-level data collection was conducted by Valarie Piper, Linda Rosenberg, and Charles Nagatoshi, who not only interviewed officials in each state by telephone but also performed an extensive review of documents submitted by the states. The mail survey of centers could not have been completed without the able coordination of Steven Rioux and the assistance of telephone interviewers and their supervisor, Janis Salpeter. Patti Rossi supervised the quality control work for the center survey and assisted her staff of editors.

The client-level data were obtained using a challenging survey of CACFP clients. Sharon De Leon superbly managed the day-to-day operations of the client survey, which included securing the cooperation of adult day care centers throughout the United States. The survey effort could not have been successful without the dedication of 44 field interviewers. The field interviewers were trained by the entire project staff, including Steven Rioux, Sharon De Leon, and Cindy Parvesse of MPR and Mary Henderson, Patrice Barnes, and Stephanie Walker of Booz, Allen & Hamilton (BAH). Monica Brown and Rina Cohen facilitated training and start-up of field operations.

Special thanks are extended to the adult day care centers, their directors, staffs, and kitchen personnel who took part in the mail center survey. These persons and food vendors are also thanked for facilitating the collection of data during a two-day site visit. A debt of gratitude is owed to the adult day care center clients who allowed us to observe them at the centers and interact with them and their families to collect dietary and client characteristics data.

Cindy Parvesse ably supervised the staff of MPR editors for the client-level data collection. Data entry and nutrition-related coding work were performed by MPR's subcontractor, Booz, Allen & Hamilton. Bob Dresser managed the overall subcontract for BAH, and Mary Henderson oversaw the production of the data files.

Susan Stephens and Steven Rioux were responsible for data collection design work during the initial phase of the study. John Hall, Chuck Metcalf, and Peter Forbes provided important technical advice on sampling design issues. Programming assistance was provided by Linda Bandeh, Sandra Barone, Katherine Condon, Barbara Kolln, Jenny Minier, and Liz Schaefer. Excellent production support for data collection instrumentation was patiently provided by Lynne Beres, Monica Capizzi, Stephanie Collins, Denise Dunn, Gloria Gustus, Tiki Heil, Nancy Hennessey, Debra Jones, and Isa Pierre. Joey Cerf, Johanna Patch, Valarie Piper, and Amy Zambrowski expertly organized the project management activities. Joanne Pfleiderer edited and Isa Pierre, Debra Jones, Monica Capizzi, Cindy Castro, and Marjorie Mitchell produced the final report.

CONTENTS

CONTENTS *(continued)*

CONTENTS *(continued)*

TABLES

TABLES *(continued)*

TABLES *(continued)*

TABLES *(continued)*

FIGURES

EXECUTIVE SUMMARY

In 1968, Section 17 of the National School Lunch Act authorized the Child Care Food Program (CCFP) to provide federal funds for meals served to children in nonresidential day care facilities. In 1987, P.L. 100-175 amended the Older Americans Act to mandate that the CCFP be expanded to allow eligible adult day care centers to participate. The Child Nutrition and WIC Reauthorization Act of 1989 (P.L. 101-147) changed the name of the program to the Child and Adult Care Food Program (CACFP) to reflect the two different populations served and allow two separate state agencies to administer the program (one for the child care and one for the adult day care component).

The Food and Nutrition Service of the U.S. Department of Agriculture (USDA) sponsored a national study of the adult component of the CACFP between 1990 and 1993. This report presents the findings of the study.

FINDINGS ON THE CHARACTERISTICS OF CENTERS PARTICIPATING IN THE ADULT COMPONENT OF THE CACFP

Approximately 2,837 adult day care centers were operating in the United States in 1991. Overall, 31 percent participated in the CACFP; an estimated 43 percent of centers *eligible* for the program participated.

The majority (55 percent) of centers participating in the CACFP are located in the South. Twenty-two percent are located in the Northeast region, 14 percent are in the Midwest, and just 9 percent are in the West. One partial explanation for the high participation in the South appears to be the greater prevalence of state licensing in the South than in other regions. Formal state licensing facilitates meeting the licensing/ "approval" requirement for CACFP eligibility. Also, state CACFP administering agencies in the South appear to conduct more intensive outreach than state agencies in other regions, based on reports of state agency respondents about their outreach activities.

Centers participating in the CACFP are licensed or certified nonprofit facilities operating under the auspices of a parent organization, usually a social service or health agency; CACFP centers rely heavily on funding from client fees, Medicaid, and state governments.

Virtually all adult day care centers participating in the CACFP (96 percent) are either licensed or certified. CACFP centers typically are nonprofit programs (93 percent), operating under the auspices of a parent organization (78 percent), which is usually a social service or health agency. Seventy-two percent charge clients fees (average, $30 per day), 67 percent receive funding from Medicaid, and 52 percent receive funding from state governments. Twenty-five percent receive funding from Title XX Social Service Block Grants; just 15 percent receive Title III Older Americans Act funds.

A typical CACFP center operates virtually all year, five days a week, nearly eight hours per day, and provides a variety of health and social services to approximately 30 clients per day.

Services provided by at least 50 percent of CACFP centers include nutritional counseling, exercise, recreation, art/music therapy, training in Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL), health care by a registered nurse or licensed practical nurse, individual or group counseling, services for client families, and transportation between a client's home and the adult day care center. A substantial proportion also provide health care by a doctor (42 percent) and physical, occupational, and speech therapies (approximately 50 percent each).

CACFP centers provide approximately three meals and snacks per day. The most frequently provided meal patterns are breakfast, lunch, and afternoon snack (27 percent); morning snack, lunch, and afternoon snack (20 percent); and lunch only (18 percent).

The typical CACFP center serves 318 meals and snacks per week, or about 11 meals and snacks per week per attending client. Most centers prepare at least one meal on site. However, preparation methods vary by meal. Breakfasts are generally prepared on site by center staff; most lunches are prepared off site by either an affiliated or sponsoring organization or nonaffiliated contractor. Most CACFP centers serve meals restaurant style, where clients are seated at dining tables and preportioned servings are brought to them.

FINDINGS ON THE CHARACTERISTICS OF ADULTS ATTENDING CACFP CENTERS

Most clients attending CACFP centers are elderly, female, and white. Yet the program clientele is diverse, as evidenced by the substantial percentages of men and nonelderly and nonwhite clients.

Over 40,000 adults are enrolled in day care centers participating in the CACFP. Sixty-two percent of enrolled clients are female, 54 percent are age 60 and older, and 57 percent are white. Participating centers serve a substantial proportion of younger, functionally impaired adults--32 percent are between the ages of 18 and 45. The program also serves a substantial percentage of racial/ethnic minorities--35 percent of CACFP clients are black, and seven percent are Hispanic.

Clients attending CACFP centers have low incomes.

Eighty-four percent of adults attending CACFP centers have incomes of less than 130 percent of the U.S. poverty threshold. Reflecting their low incomes, substantial proportions participate in the Supplementary Security Income (SSI) and Medicaid programs. Fifty-seven percent receive SSI, and 68 percent participate in the Medicaid program. Approximately 30 percent of Food Stamp Program (FSP) eligible CACFP clients participate in the FSP. This relatively low FSP participation rate is similar to the low rate observed for elderly people nationwide.

Substantial minorities of adults attending participating centers have functional, emotional, or mental impairments.

On average, CACFP clients are only slightly dependent in basic self-care tasks (as measured using an ADL index); just 20 percent are unable to perform one or more of the eight ADLs (feeding oneself, maintaining continence, bathing, dressing, getting in or out of bed or chair, getting around inside the house, grooming, and making needs understood). Clients are much more dependent in tasks related to independent living (as measured by an index of IADLs). Sixty-two percent are unable to perform one or more of the seven IADLs (using the telephone, traveling beyond walking distance, shopping, preparing meals, doing housework, taking medications, and managing finances). Thirty-nine percent are unable to perform four or more IADLs. Virtually all CACFP adult participants have at least one chronic health condition; multiple conditions are common. The most prevalent conditions are mental disorders, arthritis, hypertensive disease, heart conditions, and vision impairments.

A substantial proportion of adults attending CACFP centers have dietary restrictions.

Forty-four percent of CACFP clients have one or more dietary restrictions. The most common dietary restrictions are low-salt, diabetic diets, and low-cholesterol diets. The substantial majority (80 percent) of participating centers accommodate special dietary needs by providing low-salt, diabetic, low-sugar, low-fat, low-cholesterol, and other special meals.

FINDINGS ON CENTER PARTICIPATION IN THE CACFP, VARIETY OF FOODS OFFERED, AND CLIENT NUTRIENT INTAKE FROM PROGRAM REIMBURSABLE MEALS

The typical CACFP center claims reimbursement for two eating occasions daily. The meal patterns most commonly claimed for reimbursement are breakfast, lunch, and an afternoon snack (24 percent) and lunch only (23 percent).

Centers participating in the CACFP receive cash reimbursement for meals and snacks served to eligible clients. Reimbursement can be claimed for a maximum of two meals and one snack (or two snacks and one meal) daily for each eligible participant. Reimbursement rates are greater for main meals than snacks; reimbursements for lunches and suppers are larger than those for breakfasts. Reimbursements are also larger for meals and snacks served to eligible clients with lower incomes. The typical CACFP center claims two reimbursable eating occasions; however, 41 percent claim three. In a typical week, the average center claims reimbursement for a total of 293 meals and snacks. Of these, 239 are free, 19 are reduced price, and 35 are full price.

The number and pattern of meals claimed for CACFP reimbursement differ somewhat from the number and pattern of meals provided by participating centers because centers may not claim all meals that they provide. About one-third of CACFP centers provide at least one unclaimed meal per week; however, it is the case that a minority of the centers account for the majority of unclaimed meals. Centers may not be claiming all the meals and snacks for CACFP reimbursement for the following reasons: (1) they are at the claiming limit in terms of the number of meals and snacks provided daily to each client; (2) the reimbursement rate for an eating occasion may not be worth the paperwork involved in order to receive the reimbursement; (3) the center may be receiving reimbursement from other meal programs (e.g., Title III); (4) some clients attending a center may not be eligible to receive reimbursable meals; and (5) the center may claim CACFP reimbursement

for all meals it provides, but the number of reimbursed meals may be less than the number provided because of reporting error.

Relatively few CACFP centers report that they use USDA commodities to prepare center meals or snacks, preferring the cash-in-lieu feature instead.

Just nine percent of CACFP centers use USDA commodities. Centers participating in the commodities component use various commodities, depending on availability. The most common ones are peanut butter, flour, butter, pasta, and canned fruit. Directors at centers not receiving commodities mentioned four reasons for not participating: administrative burden, no interest in or need for commodities, commodities are not appropriate for clients, and commodities are not available from the state. State agency respondents reported that centers preferred cash-in-lieu of commodities because: (1) it is hassle free--centers do not have to worry about delivery, inventory, or storage space; (2) it allows centers to buy foods appropriate for their population; and (3) it augments regular reimbursement.

The CACFP interim meal pattern is providing clients with diverse menus.

The present study was conduced when the adult component was operating under an *interim meal pattern* which essentially adapted to adults the existing meal pattern from the child component for children age 12 and older. Under the interim pattern, the typical CACFP center serves seven menu items for lunch. Most centers serve at least 5 items, and a few serve more than 10. The numbers of foods served for meals other than lunch tend to be lower, as expected. The most common food item served in a typical week is fluid milk, which constitutes about 13 percent of all lunch items served. Vegetables constitute the single most common meal component category during lunch in a typical week, accounting for 24 percent of all servings. Grain products, most importantly breads and rolls, comprise the second largest category, with about 17 percent of servings. Meat products and fruits each make up approximately 12 percent. To examine lunch menu diversity, we computed the numbers of *different* items served throughout the week at lunch. The typical CACFP center serves 24 different items at lunch during a five-day week, an average of about 5 different items per day, indicating considerable diversity.

Effective August 1993, the adult component will operate under a new meal pattern developed to meet the specific needs of elderly and impaired adults. The difference between the new and interim meal pattern is that under the new meal pattern: (1) the bread/bread alternative requirement has doubled in each of the breakfast, lunch, and supper meal patterns (for example, the number of slices of bread is increased from 1 to 2 slices); (2) the vegetable and/or fruits requirement has increased from 3/4 cup to 1 cup total for both the lunch and supper meal pattern; (3) the vegetable and/or fruit or full-strength vegetable or fruit juice has decreased from 3/4 cup to 1/2 cup for snacks; (4) milk is no longer a component for supper; (5) yogurt can be used to satisfy the meat and meat alternatives requirement for snacks; and (6) the estimated caloric level of the full day adult pattern has increased from 1,785 kilocalories to 1,934 kilocalories.

The adult component of the CACFP is attaining its objective of supplying lunches that provide at least one-third of the Recommended Dietary Allowances (RDA) to participants.

The typical CACFP client consumes at least one-third of the RDA for most of the nutrients studied and more for many of them. The typical client consumes 32 percent of the RDA for food energy in a CACFP reimbursable lunch and 61 percent of the RDA for protein. Most intake levels for all other nutrients exceed 40 percent of the RDAs.

The program regulations do not target percentages of the RDAs expected to be met by CACFP reimbursable breakfasts or snacks. The typical client consumes 12 percent of the food energy RDA and 15 percent of the protein RDA for breakfast; breakfast consumption levels in relation to RDAs range from a low of 7 percent for zinc to a high of 45 percent for vitamin C. The typical snack makes a relatively minor contribution to the RDAs (10 percent or less), with intakes from afternoon snacks lower than intakes from morning ones.

Many clients consume more than one reimbursable meal daily. Overall, the typical client obtains 42 percent of his or her food energy RDA and 72 percent of his or her protein RDA from CACFP reimbursable meals. Intakes of micronutrients tend to be in the range of 40 to 80 percent, with the lowest levels being 36 percent (zinc) and the highest being 94 percent (vitamin B-12).

The intakes of fat and saturated fat from CACFP reimbursable meals exceed the levels recommended in the DHHS/USDA Dietary Guidelines. The intake of carbohydrate is lower and the intake of sodium exceeds the levels recommended in the National Research Councils' (NRC) guidelines. The intake of cholesterol is within NRC's recommended range.

For the reimbursable lunch eaten by the typical CACFP client, carbohydrates represent only 45 percent of food energy; well below the 55 percent guideline. Total fat represents 35 percent and saturated fat 12 percent of food energy, while DHHS/USDA guidelines suggest 30 and 10 percent, respectively. The intake of salt from CACFP reimbursable lunches tends to exceed NRC's recommended levels, but this is somewhat mitigated by relatively lower salt contents of reimbursable breakfasts and snacks. The intake of sodium from a typical CACFP client's lunch is 50 percent of the recommended daily maximum, well above the 33 percent target. The intake of sodium from breakfasts and snacks is more in line with the recommended amounts. The intake of cholesterol from CACFP reimbursable meals appears to be largely consistent with NRC's recommendations. The typical CACFP client consumes approximately 100 milligrams of cholesterol from reimbursed lunches, approximately one-third of the recommended daily maximum.

The typical CACFP client consumes somewhat below the RDA level for food energy but has adequate intakes of most other nutrients over a 24-hour period.

When overall consumption over 24 hours is considered, the typical CACFP participant tends to consume somewhat below the RDA for food energy (86 percent of RDA) but consume the RDA for most other nutrients. For only 4 of the 14 micronutrients examined was the median consumption below 100 percent of the RDA (vitamin E, vitamin B-6, magnesium, and zinc). Intakes of fat (as a percentage of food energy) were higher than recommended in 24-hour dietary intakes, while intakes of carbohydrate were lower. Sodium consumption tends to be above recommended levels, but the cholesterol content of foods tends to be within guidelines for the majority of CACFP participants.

CACFP reimbursable meals contribute just under 50 percent of a typical participant's total daily intake of most nutrients. On average, clients who eat reimbursable breakfasts and lunches at the centers obtain approximately 55 to 60 percent of their total nutrient intake from these two meals.

FINDINGS ON ISSUES RELATED TO PROGRAM ACCESSIBILITY AND PARTICIPATION

Most participating centers find out about the CACFP through state CACFP-administering agencies, which typically conduct outreach by mass mailings, direct marketing through adult day care associations, or conducting technical assistance workshops.

The referral source most commonly mentioned by center directors was the state CACFP-administering agency (usually the state education agency). State CACFP agencies identify eligible centers through other state agencies that license or administer adult day care programs. State CACFP administering agencies conduct center outreach in the ways listed above, most frequently through mass mailings.

Overall, directors of participating centers appear to be satisfied with the program; however, they had some specific concerns about program features and requirements.

Virtually all centers responding to the center survey reported that they planned to continue participating in the CACFP; less than one percent of CACFP center directors said they planned to dropout. State agency respondents also reported that few centers have dropped out of the program. Many CACFP center directors had concerns about the level of staff burden associated with participating, especially monthly reporting and record-keeping requirements. In addition, they perceived that reimbursements for full-priced meals and snacks were too low, and felt that some aspects of the meal pattern requirements (such as the fluid milk requirement) should be changed.

The main reasons for center nonparticipation are: (1) lack of knowledge or information on the program; (2) center ineligibility for the program, because of such factors as lack of licensing or not providing meals; and (3) perceived burden of record keeping in relation to reimbursement levels.

Based on a synthesis of data from self-reports from directors of nonparticipating centers, reports from state agency staff, and a statistical analysis of the relationship between nonparticipation of eligible centers and center characteristics, we conclude that the following are the most important reasons for nonparticipation in the CACFP:

- *Lack of Information on the Program.* One-third of directors of nonparticipating centers said that they did not know the program existed. This was particularly true for ineligible centers, where 46 percent cited this reason.

- *Center Is Currently Ineligible.* Overall, 20 percent of the directors of nonparticipating centers thought they were not eligible to participate. Based on the center survey data, we estimated that about 40 percent of nonparticipating centers are probably not eligible. These results suggest that ineligibility is an important reason centers do not participate.

Lack of licensing and not providing food to clients are the primary reasons centers do not meet eligibility requirements.

- *Too Much Paperwork Relative to Reimbursement Levels.* Of nonparticipating centers that know about the program, 26 percent thought that CACFP requirements are too burdensome, 12 percent said that meal reimbursement rates are too low, and 27 percent reported receiving reimbursement from another program (usually Title III). Half of state CACFP administering agency respondents mentioned insufficient reimbursement relative to paperwork as a reason centers do not participate.

Program growth during the first several years of CACFP operations was rapid, but recent data suggest growth has slowed.

In September 1988, approximately one year into the program, 213 adult day care centers participated. In September 1989, the number had doubled to 418, and it nearly doubled again by the following September to 728. Since then, center participation has continued to increase but has slowed somewhat. According to fiscal year 1992 program data, 1,044 adult day care centers participated in September 1992.

Most states expect growth in the program over the next 5 to 10 years, but only a few expect rapid growth.

State agency respondents reported that centralized state licensing for adult day care would facilitate recruiting and approving centers for the CACFP and enhance the program. Relaxing program regulations, which currently do not allow clients in institutionalized settings to participate, would also increase participation.

I. INTRODUCTION

This report describes the findings of a national study of the adult component of the Child and Adult Care Food Program (CACFP). The report provides (1) a description of adult day care centers and clients participating in the CACFP, including the clients' dietary intake; (2) comparisons of centers and clients participating and not participating in the CACFP; (3) an assessment of the contribution of program reimbursable meals to the dietary intakes of CACFP adult clients; (4) an examination of the reasons for nonparticipation by centers; and (5) an assessment of prospects for program growth.

A. THE CHILD AND ADULT CARE FOOD PROGRAM

The adult component of the Child and Adult Care Food Program (CACFP) provides federal funds to centers for meals served to elderly or impaired adults who are participating in structured, nonresidential adult day care programs. In 1987, P.L. 100-175 amended the Older Americans Act (OAA) to mandate that the Child Care Food Program (CCFP) be expanded to allow eligible adult day care centers to participate. The Child Nutrition and WIC Reauthorization Act of 1989 (P.L. 101-147) changed the name of the program from the CCFP to the CACFP to reflect the two different populations served and allow two separate state agencies to administer the program (one for the child care and one for the adult day care component).

1. Program Administration

The Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA), which implements the CACFP authorizing legislation, is responsible for: (1) establishing regulations, policies, and guidelines for the program; (2) monitoring and evaluating the performance of the CACFP; and (3) providing program and administrative funds to states. The CACFP is administered through the seven regional FNS offices, which monitor and offer technical assistance to the states.

With few exceptions, the State Education Agency (SEA) administers the program within a state. SEAs provide technical assistance to program sponsors, monitor the performance of sponsors, and establish fiscal record-keeping systems. At the local level, a sponsoring organization (often the adult day care center itself, in the case of freestanding centers) enters into an agreement with the state agency to assume administrative and financial responsibility for program operations. Sponsors and independent centers submit management plans and establish procedures to collect and maintain all necessary program records. Sponsors operate or distribute reimbursements to individual sites, which have responsibility for providing nutritious meals to eligible participants.

2. Center Eligibility Requirements

Public agencies, private nonprofit organizations, and proprietary Title XIX or Title XX centers (if at least 25 percent of their enrolled eligible adults are Title XIX or Title XX beneficiaries) are eligible to participate in the CACFP.[1] Centers must be licensed or approved by federal, state, or local authorities,[2] and must provide day care services to chronically impaired adults 18 years of age or older or persons at least 60 years of age. Services must be based on individual plans of care and provided in a group setting outside participants' homes on a less than 24-hour basis. Centers providing only socialization and/or recreational care to persons age 60 or older or providing only employment and developmental opportunities are not eligible to participate. Thus sheltered

[1]Title XIX refers to the Medicaid program authorized under Title XIX of the Social Security Act; the program provides medical assistance to low-income families with dependent children or to elderly and/or disabled persons. Title XX refers to the Title XX Social Services Block Grant authorized under Title XX of the Social Security Act. It used to be that private for-profit centers had to have at least 25 percent of their enrolled clients in either the title XIX *or* Title XX; now they can combine the two titles in meeting the 25 percent requirement.

[2]Program legislation requires that eligible adult day care centers be licensed or approved by federal, state, or local authorities. Approval is granted by a state or local authority when an adult day care center meets written standards or criteria assuring that the individuals are receiving care in a center that has been determined by authorized state or local officials to provide a safe and healthful environment. These standards may include requirements for staffing, available services, fire safety, building layout, and maintenance.

workshops, vocational or substance abuse rehabilitation centers, social centers, and other similar types of centers do not qualify as adult day care centers for purposes of CACFP participation.

Centers must keep a variety of records to document compliance with program regulations, including the following:

- Information on the age of each enrolled person and, for persons under age 60, information to document that the individuals are functionally impaired
- Information on the family size and income of participants classified as eligible for free or reduced-price meals or information on their categorical eligibility
- Information on the number of meals by type served to persons who receive meals classified as free, reduced price, or full price
- In the case of for-profit centers, information to document that at least 25 percent of enrolled clients were Title XIX or Title XX beneficiaries for each month that CACFP reimbursement is claimed

In addition, programs receiving CACFP funding must follow and document compliance with meal pattern requirements specifying the minimum amounts of different types of food that must be served at each meal or snack (see Section I.A.5.)

3. Adult Client Eligibility Requirements

Persons at least 60 years of age or functionally impaired persons 18 years or older who are not residents of institutions are eligible to participate in the CACFP. The CACFP defines functional impairment according to certain criteria contained in federal regulations governing Title II (Federal Old-Age Survivors and Disability Insurance) and Title XVI (Supplemental Security Income for the Aged, Blind, and Disabled Program) of the Social Security Act. Essentially, functionally impaired adults have physical or mental impairments that markedly limit their capacity to function independently in Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs). The activities include, but are not limited to, cleaning, shopping, cooking, using public transportation, maintaining a residence, caring appropriately for one's grooming or hygiene, and using

telephones and directories. Marked limitations, which refer to the severity of impairment and not the number of limited activities, result when the degree of limitation seriously interferes with the ability to function independently.

4. Meal Reimbursement

USDA provides cash reimbursements and commodities to participating adult day care centers for meals and snacks served to eligible participants. Reimbursement can be claimed for not more than two meals and one snack provided daily to each participant (or two snacks and one meal). Reimbursement for the same meal cannot be claimed under both the CACFP and Title III of the Older Americans Act. Centers can, however, use CACFP and Title III monies to fund different meals within the same meal service or to fund different meal services.

Adult day care centers are reimbursed for meals at three different rates, on the basis of participating adults' family incomes, relative to the official U.S. government poverty threshold.[3] Meals and snacks served to participants who have household incomes of less than 130 percent of the poverty threshold or who are recipients of Medicaid or SSI or members of a food stamp household are reimbursed at the free meal rate. Meals served to participants with household income between 130 percent and 185 percent of the poverty line are reimbursed at the reduced-price rate. Meals served to adults with household income above 185 percent of the poverty threshold are reimbursed at the lowest or paid rate. From July 1, 1993, through June 30, 1994, providers in the contiguous United States are reimbursed for qualifying meals at the following rates:

- $.9600 per meal for free, $.6600 per meal for reduced-priced, and $.1900 per meal for paid breakfasts
- $1.7250 per meal for free, $1.3250 per meal for reduced-price, and $.1650 per meal for paid lunches and suppers

[3]Countable income is limited only to income of the adult participant and his or her spouse and any dependents residing with the adult participant. For example, for an adult participant who is residing with and being cared for by his or her children, the income of the children would not be counted toward free or reduced-price meal eligibility (See Federal Register, Vol. 53, No. 249, 1988).

- $.4750 for free, $.2375 for reduced-priced, and $.0425 for paid snacks[4]

5. Meal Pattern

The CACFP uses meal patterns to encourage centers to prepare nutritious meals. Meal patterns specify (1) food components, along with the minimum number of servings of each, and (2) the amount of food in a serving. The CACFP does this for both meals and supplements (snacks).

Since its inception, the adult component has been operating under an interim meal pattern that essentially adapted to adults the existing meal pattern for children age 12 and older (see Federal Register, Vol. 53, No. 249, 1988). On August 1993, the program began operating under a meal pattern developed to meet the specific needs of elderly and impaired adults (see Federal Register, Vol. 58, No. 133, 1993). The estimated caloric level of the permanent, full-day adult meal pattern is 1,934 kilocalories. The permanent, full-day meal pattern consists of the following components:

> *Breakfast.* Four servings--one from the milk group, one from the fruit/vegetable group, and two from the bread/bread alternative group
>
> *Lunch.* Six servings--one from the milk group, two from the fruit/vegetable group, two from the bread/bread alternative group, and one from the meat/meat alternative group
>
> *Supper.* Five servings--two from the fruit/vegetable group, two from the bread/bread alternative group, and one from the meat/meat alternative group
>
> *Snacks.* Two of four servings--one from the milk group, one from the fruit/vegetable group, one from the bread/bread alternative group, and one from the meat/meat alternative group

The differences between the permanent and interim meal pattern are that under the permanent meal pattern: (1) the bread/bread alternative requirement has doubled in each of the breakfast, lunch, and supper meal patterns (for example, the number of slices of bread is increased from 1 to 2 slices); (2)

---

[4]Meal reimbursement rates are higher in Alaska and Hawaii reflecting the higher costs of providing meals in these states (see Federal Register, Vol. 58, No. 129, 1993). The above reimbursement rates do not include the value of commodities or cash-in-lieu of commodities which centers receive as additional assistance for each lunch or supper served to participants under the program, which equals $0.1400 per lunch and supper for the period July 1, 1993 through June 30, 1994.

the vegetable and/or fruits requirement has increased form 3/4 cup to 1 cup total for both the lunch and supper meal pattern; (3) the vegetable and/or fruit or full-strength vegetable or fruit juice has decreased from 3/4 cup to 1/2 cup for snacks; (4) milk is no longer a component for supper; (5) yogurt can be used to satisfy the meat and meat alternatives requirement for snacks; and (6) the estimated caloric level of the full day adult pattern has increased from 1,785 kilocalories to 1,934 kilocalories.

Program regulations require that lunches served by each adult day care center receiving CACFP reimbursement must provide, on average, one-third of the daily Recommended Dietary Allowances (RDA) established by the Food and Nutrition Board of the National Academy of Sciences. There are no guidelines for breakfast and snacks.

6. Participation Data

In fiscal year 1992, 1,093 centers were participating in the CACFP, with average daily attendance equal to 29,672 clients. Approximately 14 million meals and snacks were served; the value of meals reimbursed and commodities provided (including cash in lieu of commodities) equaled approximately $15 million.

B. PURPOSE OF THIS STUDY

The adult component of the CACFP is a fairly new program and, as such, has yet to be studied systematically or comprehensively. There is a need for up-to-date information that accurately reflects the program.

This study provides information about the structure of the adult component of the CACFP, and the characteristics of centers and adults participating in the CACFP, including participating clients' dietary intake. The main objectives of the Adult Day Care Study were to:

- Describe the characteristics of adult day care centers and adults participating in the CACFP

- Compare the characteristics of centers and adults participating and not participating in the CACFP
- Assess the nutrient intakes of CACFP center participants and the contribution of the CACFP to their total daily nutrient intake
- Ascertain reasons for center nonparticipation
- Project potential future growth of the adult component of the CACFP

C. DATA SOURCES AND ANALYTIC METHODS

1. Data Sources

Five data collection efforts addressed these research objectives. They included: (1) a ***census*** of state agencies responsible for administering the adult component of the CACFP in the 50 states and District of Columbia; (2) a ***mail survey*** of a nationally representative sample of 564 adult day care centers, equally divided between CACFP and non-CACFP centers; (3) an ***in-person survey of center staff and record abstraction*** for a nationally representative sample of 942 adults attending 85 day care centers participating in the CACFP; (4) an ***in-person survey and interviewer observation*** of the foods and beverages eaten during a 24-hour period for the nationally representative sample of 942 adults attending 85 day care centers participating in the CACFP; and (5) ***collection of one week of menu data*** on foods offered at 85 CACFP centers. The following describes the data and how they were collected.

a. State CACFP Agency Census

State-level data was collected by telephone from state agency respondents, using a structured protocol administered by research analysts. Topics covered were the states' regulatory environment for adult day care centers, licensing and approval requirements for program eligibility, agency perceptions of reasons for center nonparticipation, agency outreach and recruitment policies and procedures, and agency perceptions of future program growth. Interviews were completed for all

states, and most state respondents provided usable data for most questions. However, there was considerable item nonresponse in some interviews.

b. CACFP and Non-CACFP Center Survey

A mail survey with telephone follow-up was used to collect data on a broad set of center characteristics. All centers were asked about their organizational structure, funding sources, operating characteristics, client services, meal services and staffing, and aggregate client characteristics. In addition, CACFP center respondents were asked to give their perceptions about the CACFP program--how well it meets the food and nutrition needs of clients, the burden imposed on centers to participate, and appropriateness of meal reimbursement rates and meal patterns--and to comment on ways in which the program could be improved. Non-CACFP center respondents were asked about the reasons for their nonparticipation in the program. Survey response rates of 78 percent and 83 percent, respectively, were achieved in the CACFP and non-CACFP surveys.

c. CACFP Client Characteristics Data Collection

Data were obtained on the characteristics of CACFP clients from program records supplemented with in-person interviews with center staff. Data elements collected included socioeconomic characteristics, functional and health characteristics, special diets, center attendance patterns, and center meals and other center services received.

A sample of 180 centers was originally drawn to provide data from the CACFP client and dietary intake data collection. Twenty-one centers were eliminated because they were run by organizations that had already cooperated with client data collection at another center and further data collection would be unduly burdensome for them. Another 58 centers were not contacted because they were not needed to meet sample size targets. Data collection was performed at 85 of the remaining 101 centers (84 percent). Of the individual clients selected, approximately 68 percent consented to participate in the study, and as high as 75 percent consented when one takes into account that some

individuals on enrollment rosters were no longer enrolled in the center. Thus, taking into account the center response rate and client consent, 57 to 63 percent of enrolled clients responded to the client characteristics component of the study.[5]

d. CACFP Client Dietary Intake Data Collection

Descriptions and quantities of all foods and beverages consumed by meal during a randomly selected study day for the sample CACFP clients were obtained. The period of interest was defined as the 24-hour period immediately preceding the time the center closed on the random study day. The dietary intake and related data were obtained via a combination of interview and observational methods. To the extent possible, clients were asked to recall the portion sizes and all foods they consumed away from the center during the 24-hour period. Two-dimensional visual aids and detailed verbal probes were used to obtain complete and accurate reporting. For clients unable to self-report, an appropriate proxy (usually the primary caregiver) was identified and interviewed about meals eaten away from the center. The intake of center meals for all clients was observed by trained interviewers; complete descriptions were provided by center kitchen staff and vendors. The intake data were used to code food items for analysis of nutrient content. In all, data were generated on the intake of 23 nutrients and dietary components for a 24-hour period and for CACFP reimbursable meals. Data were also collected to distinguish calories by source (that is, protein, carbohydrate, total fat, and saturated fat) for the 24-hour period and for CACFP reimbursable meals. The CACFP sample for

[5]The sources of nonresponse for the client characteristics and dietary intake component of the data collection include: (1) centers failing to participate; (2) clients failing to give consent; (3) clients giving consent but being absent on the random study day; and (4) clients giving consent, being present on the study day, but not providing dietary intake data. Of these, failing to give consent was the major source of nonresponse. However, the consent procedures was highly dependent on the cooperation of adult day care center staff and largely out of the control of MPR staff. Because of center confidentiality requirements, center staff, not MPR staff, were responsible for distributing the consent materials and collecting the signed forms. Importantly, clients' names were not made available to MPR so field interviewers or MPR centralized staff could not assist in obtaining consent. In assessing the cumulative response rates, nonresponse bias may be a problem. But this reflects the consent process--the fact that MPR could not get access to clients to persuade them to participate in the study because of the centers' client confidentiality requirements.

the dietary data is the same sample used to collect data on client characteristics. Thus 57 to 63 percent of enrolled clients responded to the CACFP client dietary intake component of the study.

e. CACFP Center Weekly Menu Data

Responding to MPR requests, the 85 CACFP centers that provided access to clients for the client dietary and characteristics survey also provided data on all meals and snacks offered to clients during a one-week period. The data, which were converted to five-digit USDA codes, were used to ascertain the types and frequencies of foods offered weekly to adult clients attending CACFP centers.

2. Analytic Methods

Several different types of analysis were used to address the research objectives as appropriate, given the nature of the data. Descriptive tabular analysis (including difference in means tests) and cross-tabulations were the primary analytic methods. These were used to examine the characteristics of participating centers and clients and to compare them with nonparticipating centers and clients, as well as to describe CACFP client dietary intakes and assess the contribution of program meals to total daily intake. In addition, some multivariate analysis was conducted, for assessing the reasons for nonparticipation by eligible centers.

In conducting these analyses, weighting was used to correct for differences in selection probabilities that stemmed from the clustered sample design. Standard errors and confidence intervals around various estimated variables are reported so that readers can judge the accuracy of the estimates.

D. ORGANIZATION OF THE REPORT

This report is divided into two volumes. Volume I presents the study's major findings based on the center, client, state agency census, and menu data. Volume II contains detailed statistical tables and technical appendices.

Volume I contains five chapters. Chapter II presents a descriptive profile of adult day care centers participating in the CACFP, and compares them with nonparticipating centers, distinguishing eligible and ineligible nonparticipating centers. Chapter III provides a descriptive profile of adults attending centers participating in the CACFP. The chapter also compares characteristics of adults attending CACFP and non-CACFP centers. Chapter IV examines meal services and reimbursement patterns and foods provided by CACFP centers. This includes examining dietary intake from CACFP reimbursable meals and all meals consumed daily, and determining the contribution of reimbursable meals to clients' total dietary intake. Chapter V presents findings on CACFP center director opinions about the CACFP and considers several issues on program accessibility. These include referral methods and outreach activities by state CACFP administering agencies and other organizations; reasons nonparticipating centers do not participate in the program based on responses from directors of nonparticipating centers and state agency staff, as well as a statistical analysis of the association between participation status and center characteristics; and prospects for program growth.

Volume II of the report contains the technical appendices, which cover sampling design, weighting methodology, precision of estimates, and data collection methodology. It also contains detailed statistical tables from all data sources: center survey data, client characteristics data, client dietary intake data, weekly menu data, and the state agency census. In addition, Volume II contains a descriptive profile of all adult day care centers and examines characteristics of subgroups of clients attending participating centers based on income status and age.

II. CHARACTERISTICS OF PARTICIPATING AND NONPARTICIPATING CENTERS

Adult day care is usually provided in structured, comprehensive, community-based group programs that provide a variety of health, social, and related support services to functionally impaired adults. These services are based on an individual plan of care and are delivered during any part of a day, but for less than 24 hours. The intent of adult day care is to provide regular and reliable respite to families and other caregivers to enable them to continue caring for impaired individuals at home. Adult day care also seeks to help impaired adults maintain their independence and avoid institutionalization longer than would otherwise be possible. This type of care also provides companionship and support services to adults who live alone to help them maintain their independence.

Adult day care has been one of the fastest growing long-term care assistance programs for functionally impaired persons residing in the community (Wolf-Klein et al. 1988). In 1977, the first directory of adult day care programs listed 200 programs nationwide (Department of Health and Human Services 1977). Ten years later, a national census conducted by the National Institute on Adult Daycare of the National Council on the Aging, Inc., identified 1,347 adult day care centers (Von Behren 1986). Based on the sample frame prepared as part of this study, we estimate that 2,837 adult day care centers were operating nationwide in 1991. Given future demographic trends that point to the continued aging of the U.S. population and an increase in the labor force participation of women--who typically assume the responsibility of caring for functionally impaired adults--the number of adult day care centers will probably continue to grow well into the next century (Hughes 1986).

Of the 2,837 adult day care centers that operated in the United States at the end of 1991, 882 centers participated in the CACFP, and 1,955 did not participate (see Table II.1). Not all of the 1,955 centers that did not participate in the CACFP were eligible to participate. Based on the survey

TABLE II.1

CACFP PARTICIPATION AND REGIONAL CHARACTERISTICS BY CENSUS REGION

	Census Region				
	Northeast	Midwest	South	West	Entire U.S.
Participation					
CACFP Centers[a]					
Number	196	123	488	75	882
Percent	22	14	55	9	100
Non-CACFP Centers[b]					
Number	568	411	514	462	1,955
Percent	29	21	26	24	100
All Adult Day Care Centers					
Number	764	534	1,002	537	2,837
Percent	27	19	35	19	100
CACFP Participation Rate					
All Centers (percent)[c]	26	23	49	14	31
Eligible Centers (percent)[d]	37	32	61	21	43
Characteristic					
Adult Population[e]					
Number (in thousands)	38,834	44,411	64,412	39,373	187,032
Percent	21	24	34	21	100
Elderly Population[e]					
Number (in thousands)	7,043	7,857	10,942	5,911	31,754
Percent	22	25	34	19	100
Adult Day Care Centers Per 100,000 Elderly	11	7	9	9	9
Nursing Home Beds Per 100,000 Elderly[e]	5,307	6,870	4,720	4,722	5,383
Percentage of States Not Requiring Adult Day Care Centers to be Licensed to Operate[f]	45	67	40	50	49

TABLE II.1 *(continued)*

[a]Data collected by Mathematica Policy Research, Inc., from state agencies that administered the CACFP as of May 1991. Regional totals were adjusted downward by four percent, which, based on our center survey of CACFP centers, is an estimate of the percentage of centers on the list that were no longer providing adult day care, either because they were providing another type of service, were no longer in business, or were sponsors and not centers.

[b]Data from 1991 Adult Day Care Census Update (RTZ Associates, August 1991). Regional totals were adjusted downward by twenty-eight percent, which, based on our center survey of non-CACFP centers, is an estimate of the percentage of centers in the census that were no longer providing adult day care, either because they were providing another type of service, were no longer in business, or were sponsors and not centers.

[c]Percentage of all centers participating, including ineligible centers.

[d]Percentage of eligible centers participating. Nationally, we estimated that 60 percent of nonparticipating centers are eligible. Regional estimates assume 60 percent of nonparticipating centers in each region are eligible to participate in the CACFP.

[e]Data on size of adult and elderly population and number of nursing home beds comes from U.S. Bureau of the Census, 1992.

[f]Data from Adult Day Care Study State Census.

of adult day care centers conducted for the study, we estimate that 782 centers (or 40 percent) were not eligible to participate in the CACFP because of such factors as not being licensed or not providing meals. Thus the data imply that about 43 percent of ***eligible*** centers participate (882 of 2055 centers). The remainder of this chapter presents a comprehensive descriptive profile of centers participating in the program and contrasts characteristics of participating and nonparticipating centers, distinguishing between eligible and ineligible nonparticipating centers.[1]

A. CHARACTERISTICS OF PARTICIPATING CENTERS

Adult day care centers may participate in the CACFP if they are public or private nonprofit institutions, or if they are for-profit centers that receive compensation for adult day care from Title XIX (Medicaid) or Title XX (federal block grant) for at least 25 percent of enrolled adults. Centers must be licensed or "approved" by federal, state, or local authorities, and must provide structured, nonresidential day care services to chronically impaired adults at least 18 years of age or persons at least 60 years of age under an individual plan of care.

1. Overview of Participating Centers

Most adult day care centers participating in the CACFP are licensed or certified, nonprofit facilities operating under the auspices of a parent organization, usually a social service or health agency. The majority of adult day care centers participating in the CACFP are located in the South. CACFP centers rely heavily on funding from client fees, Medicaid, and state governments.

Typically, CACFP centers operate virtually all year round, five days a week, nearly eight hours per day, and provide services to 30 clients per day. Participating centers rarely operate on weekends or during the evening. Commonly provided services include meals, nutritional counseling, exercise, recreation, art/music therapy, training in Activities of Daily Living (ADLs) and Instrumental Activities

[1]Volume II, Appendix K, of this report presents characteristics of all adult day care centers, both nationally and by census region.

of Daily Living (IADLs), health care by a registered nurse or licensed practical nurse, individual or group counseling, services for client families, and transportation between a client's home and the adult day care center.

Participating centers provide approximately three meals and snacks per day to attending clients; the most common meal pattern is breakfast, lunch, and afternoon snack. Breakfasts are generally prepared on site by center staff; whereas most lunches are prepared off site by either an affiliated or sponsoring organization or nonaffiliated contractor. Most CACFP centers serve meals restaurant style, where clients are seated at dining tables and preportioned servings are brought to them.

Below we discuss participating center characteristics in greater detail, presenting findings on organizational characteristics, operating characteristics, and program services.[2]

2. Organizational Characteristics of Participating Centers

Adult day care centers participating in the CACFP are fairly stable programs; the average center has been operating for nine years (see Table II.2). Seventeen percent of participating centers have been operating for 15 or more years; 19 percent have been operating for 3 years or less.

The majority of CACFP centers (55 percent) are located in the South; 22 percent of participating centers are located in the Northeast region, 14 percent are in the Midwest, and just 9 percent in the West.[3]

Possible reasons for the greater CACFP participation in the South than in other regions were considered. One partial explanation appears to be the greater prevalence of state licensing in the South. A greater proportion of states in the South require adult day care centers to be licensed in order to operate than in other regions, particularly compared with the Midwest and West regions (see Table II.1). As discussed in Chapter V, although most states that do not require state licensing have

[2]Means or percentages cited in the text and not found in the chapter summary tables can be found in the technical appendix tables in Volume II, Appendix E.

[3]The regional distribution of CACFP centers is based on data from the sample frame, which represents the universe of participating centers as of May, 1991 (see Table II.1).

TABLE II.2

ORGANIZATIONAL CHARACTERISTICS OF CACFP CENTERS
(Means and Percentages)

Center Characteristic	CACFP Centers
Center Auspices	
Private, nonprofit	75
Public, nonprofit	16
Private, for-profit, serving at least 25% Title XIX or XX clients	7
Private, for-profit, serving fewer than 25% Title XIX or XX clients	n.a.
Other	2
Parent Organization	
Medical clinic or hospital	9
Nursing home	5
Health department or organization	2
Mental health organization	12
Mental retardation or developmental disabilities organization	3
Social service agency	21
Agency on Aging	2
Community or senior center	8
Education institution	2
Church or synagogue	2
Other	12
None/freestanding	22
Average Annual Operating Budget	$285,164
Average Annual Budget for Meals or Food Service	$20,970
Receive In-Kind Contributions	51
Receive In-Kind Contributions of Food	18
Licensing/Certification	
Licensed and certified	63
Licensed, not certified	10
Certified, not licensed	23
Neither licensed nor certified	4
Average Number of Years in Operation	9.0

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

n.a. = Not applicable.

developed alternative ways to approve centers for CACFP eligibility, these do not always work smoothly, and thus center participation is correlated with licensure requirements. Supportive of the contention that licensing facilitates CACFP participation is the finding that overall, the average percentage of centers participating in the CACFP in states with licensing is twice as large as in the states with no licensing.

Another possible reason that participation is greater in the South is related to outreach efforts of state agencies. State CACFP administering agencies in the South appear to conduct more intensive outreach than state agencies in other regions, based on reports of state agency respondents about center outreach and recruitment efforts they engage in. Virtually all of the state agencies in each region have conducted some outreach since the CACFP became operational in their states; however, a larger proportion of state agencies in the South report conducting that outreach annually. Nearly half of the state agencies in the South reported notifying nonparticipating centers annually, compared to at most one-third of the states in the other regions.

In addition, centers in the South differ from centers in other regions along certain characteristics that may be related to their propensity to participate in greater proportions (see Appendix K). However, it is unclear whether these differences cause participation to be greater. For example, centers in the South typically have substantially larger food budgets than centers in most other regions, and this might encourage centers to participate in greater percentages in the South than in other regions in order to take advantage of availability of funding for meal services. But it is unclear whether the larger annual food budget is the cause or the result of CACFP funding availability.

a. Ownership Status and Auspices

Participating centers are virtually all nonprofit; just seven percent are for-profit (see Table II.2). Seventy-five percent of CACFP centers are private, nonprofit organizations, and 16 percent are public. A substantial majority of CACFP centers (78 percent) are operating under the authority of

another organization; the rest (22 percent) are independent or freestanding centers.[4] Social service agencies and organizations are the most common parent organization--social service agencies are the parent organization for 21 percent of CACFP centers.

b. Licensing and Certification

To be eligible for the adult component of the CACFP, adult day care centers must be licensed or "approved" programs. State and local governments establish licensing requirements to ensure that adult day care centers meet minimum standards for centers used by the public. Commonly regulated aspects of adult day care include the types and quality of services provided; nutritional services, staffing (numbers and skill level), physical facilities, and record keeping are also usually regulated. Licensing requirements vary from state to state. Not all states require centers to be licensed to operate; some state licensing requirements affect only particular types of programs.[5] Licensing bodies often allow the affiliated or parent organization's license to cover the day care component.

In the absence of state licensing, adult day care centers must be "approved" by federal, state, or local authorities in order to be eligible to participate. "Approval" is granted by a federal, state or local authority when an adult day care center meets written standards or criteria that assure clients are receiving care in a center that has been determined by authorized officials to provide a safe and healthful environment.

---

[4]Parent organizations should not be confused with sponsoring organizations. A sponsoring organization for the CACFP means a public or nonprofit private organization that is entirely responsible for the administration of the food program for one or more participating centers or a for-profit organization that is entirely responsible for administration of the program for one or more proprietary centers. The figure cited in the text does not mean that 78 percent of CACFP centers are "sponsored" centers in a program sense. From the point of view of the regulations, all CACFP centers have sponsors, although in some instances the CACFP center is its own sponsor.

[5]Based on information obtained from interviews with state agency staff, it is estimated that 25 states have no licensing requirement for adult day care centers. State agency officials in 26 states said that all or some types of adult day care centers were licensed--in 16 states all adult day care centers were licensed, and in 10 states some centers were licensed.

A closely related concept is certification. Certification is required for some types of funding (usually federal); state and federal grant regulations and statutes typically set certification standards. Certification constitutes "approval" when standards are established to ensure a safe and healthful environment for center clients, and officials determine that, in order to receive the funds, the standards must be met. Thus certification does not always mean approval for CACFP. Operation of a center by a state agency also constitutes "approval." In this instance, the center clearly must be a state facility--funded by the state and operated by state employees.

A substantial majority (73 percent) of participating centers report holding at least one license (see Table II.2). CACFP centers are licensed by a variety of agencies and sometimes by more than one. For centers holding licenses, the most common licensing agencies are state health departments (42 percent, Appendix Table E.5). Other common licensing agencies include state social service or welfare departments (26 percent), state Agencies on Aging (19 percent), mental health departments (18 percent), and state mental retardation/developmental disabilities departments (15 percent).

An even greater proportion of participating centers are certified for funding. Eighty-seven percent of CACFP centers are certified for at least one funding source (see Table II.2). The most common funding source is Medicaid.[6] Of the CACFP centers certified for funding, 76 percent are certified for Medicaid (see Appendix Table E.6). Sixteen percent are certified for Title XX block grant funds,[7] 12 percent for state/local aging funds, and 8 percent for Title III Older Americans Act

[6]Medicaid is a federally mandated entitlement program authorized under Title XIX of the Social Security Act. The program provides medical assistance to low-income families with dependent children or to elderly and/or disabled individuals. Medicaid programs are state administered, and states are reimbursed by the federal government for 50 to 80 percent of their Medicaid expenses, on the basis of per capita income in a state. Adult day care centers receive Medicaid funds in one of two ways. First, a center can receive Medicaid funds as payment for covered services provided by its facility or staff. Second, in states that choose to offer comprehensive services through home- and community-based programs, an adult day care facility can receive Medicaid payment for adult day care services provided to individuals who would otherwise require nursing home care.

[7]The Social Services Block Grant is authorized under Title XX of the Social Security Act. The purpose of the block grant is to provide federal funds to states and territories to assist them in offering social services including preventing or reducing inappropriate institutional care. Social Service Block Grant funds are allocated to states on the basis of low-income population.

funds.[8] As with licensing, state/local social service and health departments are the most common certifying agencies.

c. Annual Operating Budget and Funding Sources

The average annual operating budget for CACFP centers (exclusive of in-kind contributions) is $285,164 (see Table II.2). The average 12-month budget for meals or food service is $20,970, or about $2.70 per client per day.[9] Fifty-one percent of CACFP centers receive in-kind contributions, and 18 percent receive in-kind contributions specifically for food.

CACFP centers receive funding from various sources. Excluding CACFP funding, the two most common income sources are participant fees and Medicaid. Seventy-two percent of CACFP centers charge clients fees, where the mean fee is approximately $30 per day or visit. Sixty-seven percent receive funding from Medicaid (see Table II.3). Fifty-two percent of CACFP centers receive funding from state governments. More than one-third also receive funding from contributions or receive subsidies from sponsoring agencies or organizations. Twenty-five percent of CACFP centers receive funding from Title XX Social Services Block Grants. Just 15 percent of CACFP centers receive funding from Title III Older Americans Act grants.[10]

---

[8]The OAA is intended to foster independence and reduce unnecessary institutionalization among the elderly population by providing a broad array of social and community services to those with the greatest social and economic need. Title III of the act authorizes the creation of state and area Agencies on Aging (AoAs), which are responsible for funding OAA programs, acting as advocates for the elderly, and developing and coordinating comprehensive systems of services for the elderly population. Title III also provides grants for state and community programs offering a wide variety of assistance to the elderly, including in-home services, legal aid, improved access to community-based programs, and congregate and in-home nutrition services.

[9]Calculation assumes $20,970 annual food budget, daily attendance of 30 clients, and that center operates 5 days per week and 52 weeks per year. ($20,970 in food costs divided by 7,800 client days [30 clients per day × 5 days per week × 52 weeks a year] equals $2.69 per client per day.)

[10]Our estimate of the proportion of adult day care centers receiving Title III Older Americans Act funds may be somewhat low. In a prior national study of adult day care based on a sample of 580 centers, Von Behren (1986) found that 26 percent of adult day care centers receive Title III Older Americans Act funds, whereas we found that 18 percent of all centers received such funding. Weissert et al. (1990) found that 39 percent of centers received Older Americans Act funds; however,

(continued...)

3. Operating Characteristics of Participating Centers

Although there is some variation in operating schedules, the vast majority of CACFP centers operate 52 weeks a year, five days per week, and about eight hours per day (see Table II.4). Virtually all CACFP centers (99 percent) are open 50 or more weeks per year. Most (84 percent) are open five days a week; just seven percent of CACFP centers are open fewer than five days per week. Only a small percentage of CACFP centers are open on weekends or operate in the evening hours. Nine percent of CACFP centers are open weekends; these centers are typically open on Saturday only (seven percent). Just four percent of CACFP centers operate for more than 10 hours per day.

a. Enrollment and Attendance

CACFP centers vary in size. A few have less than 10 enrolled clients, and some have more than 100. The average CACFP center has an enrollment of approximately 50 clients (see Table II.4); median enrollment is 40. Twelve percent of CACFP centers have enrollments of fewer than 20 clients; 15 percent report enrollments in excess of 75 clients.

Scheduled attendance for weekdays in the average CACFP center is 35 clients per day; median scheduled attendance for weekdays is 29 clients per day. Actual weekday attendance is below

---

[10](...continued)
that estimate is based on an extremely small sample--just 32 centers (out of a national sample of 61 centers) provided complete revenue data. On the other hand, our survey of centers found a greater percentage of centers reporting funds from state or local governments then either the Von Behren or Weissert et al. studies. It is possible that our lower estimate of receipt of OAA funds reflects differences in question wording between the studies. For example, the questionnaire used in the Von Behren study asked respondents to give the annual amount of funds received. Because respondents had to provide information on amounts by funding sources, it is possible that they did a better job identifying Title III funding (because they looked up amounts in accounting records). Title III funding may not be as well identified by center directors when asked about funding sources but not amounts as we did in our survey, given that such funding passes through a hierarchy of agencies--from state units on aging, to area agencies on aging, to nutrition projects or sites. Thus, directors may have attributed the funds to state or local sources as opposed to federal OAA funds. Overall, however, the difference in proportions between the data sets is generally small (8 percentage points) and is within sampling error.

TABLE II.3

FUNDING SOURCES OF CACFP CENTERS
(Percentages)

Funding Source	CACFP Centers
Federal Government	
Medicare	10
Medicaid	67
Title III Older Americans Act Grant	15
Title XX Social Services Block Grant	25
Mental Health Grant	10
Mental Retardation or Developmental Disabilities Grant	5
Community Development Block Grant	9
CACFP reimbursement	100
Other federal funding	5
Other Government	
State-level	52
Local (county/city)	32
Other public funding	3
Nongovernmental	
Fees paid by client	72
Fees paid by private insurance	12
United Way	27
Other nongovernmental sources	6
Contributions/Subsidies from Sponsoring Agency or Organization	37
Combinations	
Federal sources	90
State/local government sources	67
Private sources	83
Federal, state/local, and private	48
Private and federal or private and state/local	34
Unweighted Sample Size	**281**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

NOTE: Percentages do not total 100 percent because a center can receive funding from more than one source.

TABLE II.4

OPERATING CHARACTERISTICS OF CACFP CENTERS
(Means and Percentages)

Center Characteristic	CACFP Centers
Average Number of Weeks per Year Center Open	51.6
Average Number of Days per Week Center Open (Weekdays)	4.9
Average Number of Hours per Week Center Open (Weekdays)	37
Open Weekends	9
Number of Adults Enrolled	
1-20	12
21-50	53
51-75	20
76-100	9
101 or more	6
Average Enrollment	49
Average Daily Attendance (Weekdays)	31
Average Rate of Utilization (Weekdays)	0.67
Have Waiting List	36
Average Number of Adults on Waiting List	9
Plan to Expand Operations within Next Two Years	36
Average Increase in Number of Clients due to Expansion	24

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

scheduled attendance because of illness and other reasons and averages 31 clients (median, 24 clients). The client absentee rate per day for the average center is 13 percent.

b. Capacity Utilization

The enrollment-based[11] measure of capacity utilization shows that 60 percent of CACFP centers operate at 90 percent or more of capacity; 49 percent report that they actually exceed 100 percent capacity. That enrollment exceeds capacity in such a high percentage of centers may reflect the fact that some clients attend for part of the day or fewer than five days per week. It may also result because centers sometimes keep clients who have ceased participation on enrollment lists. The daily attendance-based measure shows that CACFP centers, on average, operate at two-thirds of capacity (see Table II.4). Our study is not the only study to observe underutilization. Conrad et al. (1990) found that adult day care centers tend to over-enroll clients but fall short of daily capacity by about 20 percent.

c. Waiting Lists and Future Expansion

Despite the existence of some excess capacity, one-third of CACFP center directors report having waiting lists (see Table II.4). For centers with waiting lists, an average of nine clients are waiting to enroll. One-third of CACFP centers report plans to expand their program operations more than within the next two years. Of those centers planning future expansion, the average increase in the number of clients served per center is expected to equal 24 (median, 15).

[11]We computed two measures of capacity utilization--an enrollment-based measure and an attendance-based measure. For the enrollment-based measure, capacity utilization equals the number of enrolled clients divided by the licensed capacity or maximum capacity (for unlicensed centers). The attendance-based measure is the average daily attendance divided by licensed capacity or maximum capacity (for unlicensed centers).

4. Program Services Provided by Participating Centers

Participating centers offer a variety of health and social services (see Table II.5). Services provided by at least 50 percent of CACFP centers are meals, exercise, recreation, occupational therapy, training in Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs), health care by a registered nurse or licensed practical nurse, support services for client families, transportation between a client's home and the adult day care center, art/music therapies, nutritional counseling and screening, and individual or group counseling. A high percentage of CACFP centers also provide medical and health care services, such as care by doctors and physical, occupational, and speech therapies. Health and social services may be offered daily, weekly, monthly, a few times a year, or as client needs dictate. The services are provided by center staff, by contract, or by referral.

a. Meal Service

All participating centers provide meals or snacks. A substantial majority of participating centers (72 percent) provide at least one main meal (e.g., breakfast, lunch, or supper) ***and*** at least one snack to clients daily (see Table II.6). Twenty-eight percent provide main meals only, and less than one percent of CACFP centers provide snacks only. Considering types of meals and snacks provided, virtually all CACFP centers (99 percent) provide lunch to clients, nearly 60 percent provide afternoon snacks, and about half provide breakfast. Just seven percent provide supper to clients.

CACFP centers provide approximately three occasions per day for clients to eat on weekdays (see Table II.6). The most common meal pattern is breakfast, lunch, and afternoon snack; 27 percent of CACFP centers provide this pattern. Twenty percent of CACFP centers provide morning snack, lunch, and afternoon snack to clients; 18 percent provide lunch only. The average CACFP center provides 318 meals and snacks per week, or about 11 meals and snacks per week per attending client.

The majority of CACFP centers (62 percent) prepare at least one meal on site. However, meal preparation methods used by CACFP centers for main meals vary by meal (see Appendix Table

TABLE II.5

SERVICES PROVIDED BY CACFP CENTERS
(Percentages)

Services	CACFP Centers
Case Management	97
Health-Related Services	
Medical evaluation by doctor	40
Health care provided by doctor	42
Health care provided by RN or LPN	82
Physical therapy	49
Speech therapy	47
Occupational therapy	50
Optometry services	31
Hearing examinations	39
Podiatry services	46
Dental care	29
Nutritional screening	61
Nutritional counseling	71
Physical fitness/exercise	96
Therapeutic recreation	93
Psychosocial/Social Services or Activities	
Individual or group counseling/psychotherapy	70
Alcohol/drug abuse program	30
Art/music therapy	78
Recreational activities	99
Self-Care/Restorative Activities	
Training in Activities of Daily Living	89
Training in Instrumental Activities of Daily Living	83
Bowel/bladder retraining	58
Activities/Services for Clients' Families	
Support groups, educational programs, respite care	88
Transportation Services	
Transportation between home and center	86
Transportation to health care	13
Other transportation services	9
Meals	100
Other Services	11
Unweighted Sample Size	**281**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

TABLE II.6

MEAL SERVICE CHARACTERISTICS OF CACFP CENTERS
(Means and Percentages)

Center Characteristic	CACFP Center
Provide Main Meals or Snacks	100
Main meals and snacks	72
Main meals only	28
Snacks only	<1
Do Not Provide Main Meals or Snacks	n.a.
Meals Served	
Breakfast	49
Morning snack	39
Lunch	99
Afternoon snack	58
Supper	7
Pattern of Meals Served	
Breakfast, lunch, afternoon snack	27
Breakfast, lunch, no snacks	9
Morning snack, lunch, afternoon snack	20
Lunch only	18
Other patterns	26
Average Number of Eating Opportunities per Day (Weekdays)	2.5
Average Number of Meals Provided per Week	318
Average Number of Meals and Snacks Provided per Week per Client	11
Meal Preparation Methods for Main Meals[a]	
Prepared on site by the center	62
Prepared on site by an affiliated organization	3
Prepared on site by contractor	6
Prepared off site by affiliated organization	13
Prepared off site by contractor	42
Other	3
Serving Method for Main Meals[a]	
Cafeteria style, preportioned	29
Cafeteria style, not preportioned	5
Family style	11
Buffet style	1
Restaurant style	64
Provide Modified or Therapeutic Meals	79
Offer Nutrition Education by a Health Professional	74

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Total exceeds 100 percent because centers may use more than one meal preparation or serving method for main meals.

n.a. = Not applicable.

E.32). Typically, breakfasts are prepared on site by center staff (80 percent); 17 percent of CACFP centers have breakfast prepared off site by either an affiliated or sponsoring organization or nonaffiliated contractor, with delivery to the center. In contrast, 38 percent of CACFP centers have staff prepare lunches on site, whereas 56 percent have lunch prepared off site, either by an affiliated or sponsoring organization or nonaffiliated contractor, with delivery to the center. Few CACFP centers provide supper; centers providing suppers generally prepare the meals themselves on site (76 percent of those providing suppers).

The most common serving method used by CACFP centers for main meals is restaurant style. Sixty-four percent of CACFP centers serve main meals restaurant style, with staff bringing preportioned servings to clients seated at tables (see Table II.6). Twenty-nine percent serve main meals cafeteria style, preportioned, where plates are filled by center staff at central serving areas and clients carry their plates or trays to dining tables. Approximately 10 percent of centers serve meals family style, where clients serve themselves from serving dishes on the dining tables.

b. Accommodating Special Diets

Excessive intakes of calories, total fat, saturated fat, cholesterol, sodium, and alcohol, and low consumption of calcium, iron, and vitamin C are risk factors for several chronic conditions (U.S. Department of Health and Human Services/U.S. Department of Agriculture 1986; National Academy of Sciences 1989). For example:

- Excessive intakes of ***calories*** lead to obesity, which is a risk factor for high blood pressure, increased levels of blood fats and cholesterol, heart disease, strokes, non-insulin-dependent diabetes, and certain types of cancers.
- Excessive intakes of ***total fat, saturated fat, and cholesterol*** are linked to cardiovascular diseases and some cancers.
- Excessive intakes of ***sodium*** exacerbate high blood pressure.
- Inadequate intakes of ***Vitamin C*** adversely affect bones and teeth

- Inadequate intakes of ***calcium*** are linked to osteoporosis.
- Inadequate intakes of ***iron*** cause iron-deficiency anemia.

As we shall see in Chapter III, virtually all adults attending CACFP centers have at least one chronic health condition; multiple conditions are quite common. The most prevalent conditions are arthritis, high blood pressure, blindness or vision problems, heart conditions, cerebrovascular disease, and diabetes.

In response to the health conditions of enrolled clients, the substantial majority of CACFP centers (79 percent) provide special meals to clients (see Table II.6). The most common special meals are low-salt, diabetic, low-sugar, low-fat, and low-cholesterol ones (see Appendix Table E.35).

c. Nutritional Education and Counseling

A substantial majority (74 percent) of CACFP centers provide nutrition education and counseling services by a health professional (Table II.6).[12] Nutrition education services provided by at least 50 percent of CACFP centers are printed materials or brochures given to clients (76 percent), lectures (67 percent), and personal counseling or diet planning (68 percent). A high percentage of CACFP centers also convey nutrition knowledge through workshops, demonstrations, and visual displays. Nutrition education covers many topics, most commonly basic principles of nutrition (90 percent), food preparation methods (67 percent), and medications and nutrition (61 percent). (See Also Appendix Tables E.36 and E.37.)

B. COMPARISONS BETWEEN NONPARTICIPATING AND PARTICIPATING CENTERS

Approximately 1,955 of the 2,837 adult day care centers (69 percent) did not participate in the CACFP in 1991. There is considerable regional variation in participation rates. The percentage of nonparticipating adult day care centers in the South (51 percent) is below the national average of 69

[12]Health professionals include nutritionists, registered dietitians, other dietitians, and other health professionals.

percent (see Table II.1). Center nonparticipation is above the national average in the West, where 86 percent of adult day care centers do not participate. Nonparticipating centers tend to be concentrated in a relatively few large states within the census regions (see Appendix Table I.1). In particular, six states, California (377 centers), New York (222 centers), Pennsylvania (151 centers), Georgia (114 centers), Wisconsin (86 centers), and Ohio (79 centers) have a total of 1,029 nonparticipating centers, or 53 percent of the 1,955 adult day care centers not participating in the CACFP.

Not all nonparticipating adult day care centers are eligible for the CACFP. For a center to be eligible to participate in the adult component of the CACFP, the center must: (1) provide care to functionally impaired or elderly adults; (2) provide a structured, comprehensive program of health, social, and related support services; (3) develop and maintain an individual plan of care for each client; (4) provide services to clients on a less than 24-hour basis (nonresidential care); (5) be licensed or meet written standards or criteria determined by federal, state, or local authorities to ensure provision of a safe and healthful environment; (6) be nonprofit, or, if for-profit, provide services to at least 25 percent of Title XIX or Title XX beneficiaries; and (7) provide meals, maintaining a nonprofit food service. Nonparticipating centers were categorized as CACFP-eligible if they met all of the program eligibility requirements listed above; ineligible non-CACFP centers did not meet at least one of the eligibility criteria. Based on these methods, we estimate that 60 percent of nonparticipating centers are eligible and 40 percent are ineligible for the CACFP.

Below we compare and contrast the organizational, operating, financial, and program services of nonparticipating and participating centers. First we compare eligible nonparticipating and participating centers, and then ineligible nonparticipating and participating centers. Table II.7

TABLE II.7

CHARACTERISTICS OF PARTICIPATING AND NONPARTICIPATING CENTERS
(Means and Percentages)

Center Characteristic	CACFP Centers	All Non-participating Centers	Eligible Non-participating Centers	Ineligible Non-participating Centers
Region				
Northeast	23	31	31	30
South	52 [b,c,d]	24 [a]	21 [a]	18 [a]
Midwest	7 [b,c,d]	20 [a]	25 [a]	24 [a]
West	19	25	23	28
Organizational Characteristics				
Center Auspices				
Private, not-for-profit	75 [d]	71	77 [d]	62 [a,c]
Public, not-for-profit	16	19	18	20
Private, for-profit, serving at least 25% Title XIX or XX clients	7	2	2	2
Private, for-profit, serving less than 25% Title XIX or XX clients	n.a. [b,d]	5 [a]	0 [d]	13 [a,c]
Other	2	3	3	2
Parent Organization				
Medical clinic or hospital	9	6	7	4
Nursing home	5 [b,d]	13 [a]	12	15 [a]
Health department or organization	1	2	1	2
Mental health organization	12 [d]	6	7	4 [a]
Mental retardation or developmental disabilities organization	3 [d]	7	3 [d]	12 [a,c]
Social services agency	21	22	21	23
Agency on aging	2	2	3	1
Community or senior center	8	6	6	6
Education institution	2	2	2	2
Church or synagogue	2	2	3	1
Other	12	13	15	9
None/freestanding	22	20	18	22
Average Annual Operating Budget (Dollars)	285,164	274,740	227,482 [d]	348,359 [c]
Average Annual Budget for Meals or Food Service (Dollars)	20,970 [b,c,d]	8,808 [a]	9,210 [a]	7,487 [a]
Receive In-Kind Contributions	51 [d]	46	52 [d]	37 [a,c]
Receive In-Kind Contributions of Food	18	17	17	15
Average Number of Years Center Operating	9.0	9.6	9.5	9.8
Licensing and Certification				
Licensing/Certification				
Licensed and certified	63 [b,c,d]	38 [a]	49 [a,d]	22 [a,c]
Licensed, not certified	10 [b,c,d]	24 [a]	21 [a]	29 [a]
Certified, not licensed	23 [d]	18	24 [d]	8 [a,c]
Neither licensed nor certified	4 [b,d]	20 [a]	5 [d]	41 [a,c]

TABLE II.7 *(continued)*

Center Characteristic	CACFP Centers	All Non-participating Centers	Eligible Non-participating Centers	Ineligible Non-participating Centers
Licensing Agency				
State agency on aging	19 [d]	20	28 [d]	4 [a,c]
State social services/welfare department	26 [b,c]	41 [a]	43 [a]	35
State health department	42 [b,c,d]	19 [a]	23 [a,d]	11 [a,c]
State mental health department/agency	18 [b,d]	10 [a]	12	6 [a]
State mental retardation/developmental disabilities department/agency	15 [d]	26	12 [d]	57 [a,c]
Other state agency	6	8	6	11
County/local agency on aging	4	6	8 [d]	2 [c]
County/local mental retardation/developmental disabilities agency	1	3	2	4
County/local social services/welfare agency	9 [d]	3	3	2 [a]
County/local mental health agency	4	2	3	2
Other county/local agency	6 [d]	2	3	0 [a]
Other public agency	0	2	1	4
Certifying Agency				
State/local education	4 [d]	1	2	0 [a]
State/local health	23 [b,c,d]	10 [a]	11 [a]	6 [a]
State/local medicaid	6	6	6	7
State/local mental health	12	9	10	4
State/local health and mental health	11 [b,c,d]	1 [a]	2 [a]	0 [a]
State/local social services	38	31	29	37
State/local rehabilitation	4	7	8	2
State/local mental retardation	4 [d]	7	3 [d]	23 [a,c]
State/local aging	21	27	31 [d]	11 [c]
Federal agencies	3	5	6	3
Other state agencies	7	11	10	15
Other local agencies	8 [d]	6	7 [d]	0 [a,c]
Other	5 [d]	1	2	0 [a]
Funding Sources				
Federal Government				
Medicare	10	4	5	4
Medicaid	67 [b,c,d]	32 [a]	43 [a,d]	14 [a,c]
Title III Older Americans Act Grant	15 [c]	19	27 [a,d]	8 [c]
Title XX Social Service Block Grant	25 [b,d]	13 [a]	16 [d]	7 [a,c]
Mental Health Grant	10	4	4	4
Mental Retardation or Developmental Disabilities Grant	5	6	6	7
Community Development Block Grant	9 [d]	3	5	1 [a]
CACFP reimbursement	100	0	0	0
Other federal funding	5	9	9	7
Other Government				
State-level	52	48	48	49
Local (county/city)	32 [c]	40	49 [a,d]	27 [c]
Other public funding	3	3	4	3
Nongovernmental				
Fees paid by client	72 [b,d]	61 [a]	68 [d]	49 [a,c]
Fees paid by private insurance	12	11	13	7
United Way	27	24	28	18
Other nongovernmental sources	6	3	2	4

TABLE II.7 *(continued)*

Center Characteristic	CACFP Centers	All Non-participating Centers	Eligible Non-participating Centers	Ineligible Non-participating Centers
Contributions/Subsidies from Sponsoring Agency or Organization	37	38	44 [d]	30 [c]
Operating Characteristics				
Average Number of Weeks per Year Center Open	51.6	51.5	51.6	51.2
Average Number of Days per Week Center Open (Weekdays)	4.9	4.8	4.9	4.8
Average Number of Hours per Week Center Open (Weekdays)	37	37	38	36
Open Weekends	9	5	6	3
Program Size				
1 to 20 adults enrolled	12 [b,c,d]	30 [a]	26 [a]	36 [a]
21 to 50 adults enrolled	53 [d]	46	52 [d]	38 [a,c]
51 to 75 adults enrolled	20 [b,c]	10 [a]	8 [a]	11
76 to 100 adults enrolled	9	6	5	7
101 or more adults enrolled	6	8	8	8
Average Enrollment	49	45	47	42
Average Daily Attendance (Weekdays)	31	28	26	32
Average Rate of Utilization (Weekdays)	0.67	0.67	0.67	0.67
Have Waiting List	36	28	28	27
Average Number of Adults on Waiting List	9	10	11	9
Plan to Expand Operations within Next Two Years	36 [d]	29	34 [d]	22 [a,c]
Average Increase in Number of Clients due to Expansion	24	22	21	23
Services				
Case Management	97 [b,c,d]	90 [a]	91 [a]	88 [a]
Health-Related Services				
Medical evaluation by doctor	40 [b,d]	28 [a]	29	25 [a]
Health care provided by doctor	42 [b,c,d]	23 [a]	23 [a]	23 [a]
Health care provided by RN or LPN	82 [b,c,d]	58 [a]	64 [a,d]	50 [a,c]
Physical therapy	49 [b,d]	37 [a]	41	31 [a]
Speech therapy	47	38	37	40
Occupational therapy	50 [d]	39	42	36 [a]
Optometry services	31 [b,c,d]	18 [a]	19 [a]	18 [a]
Hearing examinations	39 [b,c]	25 [a]	23 [a]	29
Podiatry services	46 [b,c,d]	31 [a]	33 [a]	28 [a]
Dental care	29	22	22	21
Nutritional screening	61 [b,c,d]	39 [a]	43 [a]	33 [a]
Nutritional counseling	71 [b,d]	54 [a]	63 [d]	41 [a,c]
Physical fitness/exercise	96	95	96	95

TABLE II.7 *(continued)*

Center Characteristic	CACFP Centers	All Non-participating Centers	Eligible Non-participating Centers	Ineligible Non-participating Centers
Therapeutic recreation	93 [b,d]	86 [a]	90 [d]	80 [a,c]
Psycho/Social Services or Activities				
Individual or group counseling/psychotherapy	70 [b,d]	55 [a]	61 [d]	46 [a,c]
Alcohol/drug abuse program	30 [b,c,d]	15 [a]	18 [a,d]	10 [a,c]
Art/music therapy	78 [d]	72	79 [d]	63 [a,c]
Recreational activities	99	99	98	99
Self-Care/Restorative Activities				
Training in Activities of Daily Living	89 [b,d]	80 [a]	82	76 [a]
Training in Instrumental Activities of Daily Living	83 [b,c,d]	70 [a]	70 [a]	69 [a]
Bowel/bladder retraining	58	50	53	46
Activities/Services for Clients' Families				
Support groups, educational programs, respite care	88 [b,c,d]	72 [a]	72 [a]	72 [a]
Transportation Services				
Transportation between home and center	86 [b,c,d]	68 [a]	72 [a]	61 [a]
Transportation to health care	13 [b,d]	5 [a]	7 [d]	1 [a,c]
Other transportation services	9 [d]	9	12 [d]	3 [a,c]
Other Services	11	10	10	11
Meal Service Characteristics				
Provide Main Meals or Snacks	100 [b,d]	81 [a]	100 [d]	51 [a,c]
Main meals and snacks	72 [d]	62	76 [d]	41 [a,c]
Main meals only	28 [b,c,d]	14 [a]	17 [a,d]	8 [a,c]
Snacks only	<1 [b,c]	5 [a]	7 [a,d]	2 [c]
Do Not Provide Main Meals or Snacks	n.a. [b,d]	19 [a]	0 [d]	49 [a,c]
Meals Served				
Breakfast	49 [b,c,d]	21 [a]	21 [a]	24 [a]
Morning snack	39 [b,c,d]	69 [a]	69 [a]	67 [a]
Lunch	99 [b,c]	93 [a]	92 [a]	97
Afternoon snack	58 [d]	68	65	76 [a]
Supper	7	9	8	11
Pattern of Meals Served				
Breakfast, lunch, afternoon snack	27 [b,c,d]	5 [a]	5 [a]	5 [a]
Breakfast, lunch, no snacks	9 [b,c]	2 [a]	1 [a]	4
Morning snack, lunch, afternoon snack	20 [b,c,d]	39 [a]	39 [a]	40 [a]
Lunch only	18	14	14	11
Other pattern	26 [b,c]	40 [a]	41 [a]	40
Average Number of Eating Occasions per Day (Weekdays)	2.5	2.5	2.5	2.7
Average Number of Meals Provided per Week	318 [b,c,d]	218 [a]	240 [a,d]	150 [a,c]
Average Number of Meals Provided per Week per Client	11	11	11	11

TABLE II.7 *(continued)*

Center Characteristic	CACFP Centers	All Non-participating Centers	Eligible Non-participating Centers	Ineligible Non-participating Centers
Meal Preparation Methods for Main Meals				
Prepared on site by the center	62 [b,c,d]	34 [a]	37 [a]	26 [a]
Prepared on site by an affiliated organization	3 [b,c,d]	16 [a]	11 [a,d]	29 [a,c]
Prepared on site by contractor	6	8	8	9
Prepared off site by affiliated organization	13	19	18	25
Prepared off site by contractor	42 [d]	35	39 [d]	22 [a,c]
Other	3	2	3	1
Serving Method for Main Meals				
Cafeteria style, preportioned	29	22	23	20
Cafeteria style, not preportioned	5	4	5	4
Family style	11	7	6	9
Buffet style	1	5	5	4
Restaurant style	64 [b,d]	76 [a]	75	81 [a]
Provide Modified or Therapeutic Diets	79	83	86	74
Offer Nutrition Education by a Health Professional	74 [b,d]	57 [a]	66 [d]	44 [a,c]
Client Characteristics				
Centers with Clients:				
Less than age 60 only	9	11	8	16
Age 60 and older only	15 [b,c,d]	30 [a]	31 [a]	28 [a]
Age 18 and older	77 [b,c,d]	59 [a]	61 [a]	56 [a]
Average Distribution of Enrollment by Age (%)				
18 - 29	10	10	7 [d]	13 [c]
30 - 44	17 [c,d]	16	11 [a,d]	24 [a,c]
45 - 59	15 [b,c]	10 [a]	8 [a,d]	12 [c]
60 - 74	24 [c]	27	32 [a,d]	20 [c]
75 - 84	24 [c]	27	30 [a]	24
85 and older	11 [d]	9	11 [d]	7 [a,c]
Average Distribution of Enrollment by Gender (%)				
Female	64 [b,d]	60 [a]	63 [d]	57 [a,c]
Male	36 [b,d]	40 [a]	37 [d]	43 [a,c]
Average Distribution of Enrollment By Race/Ethnicity (%)				
White	64 [b,c,d]	79 [a]	77 [a]	81 [a]
Black	26 [b,c,d]	14 [a]	16 [a]	12 [a]
Hispanic	7	5	5	5
Other	4	2	2	2
Average Percentage of Center's Clients That Receive:				
Food stamps	21 [b,c,d]	12 [a]	14 [a]	9 [a]
Medicaid	53	50	49	53
SSI	47 [d]	52	46 [d]	62 [a,c]
SSD	13	16	14	18
Average Percentage of Center's Clients That:				
Have special diets or dietary restrictions	28 [d]	26	29 [d]	21 [a,c]
Need assistance eating	14 [b,c]	20 [a]	21 [a]	18
Need assistance with personnel care	26 [b,c,d]	36 [a]	36 [a]	35 [a]
Need assistance with mobility	25	28	29	28

TABLE II.7 *(continued)*

Center Characteristic	CACFP Centers	All Non-participating Centers	Eligible Non-participating Centers	Ineligible Non-participating Centers
Are incontinent 1-2 times per week	11 [b,c,d]	17 [a]	16 [a]	18 [a]
Are chronically confused	26	29	31	26
Are abusive or aggressive	10	11	10	13
Average Percentage of Clients Attending Center				
Less than 1 year	30	29	30	26
1-2 years	27	28	30	26
3-5 years	23	24	24	23
More than 5 years	20	20	17 [d]	25 [c]
Average Number of Months from Enrollment to When Client Leaves the Program	31 [b,d]	38 [a]	35	43 [a]
Unweighted Sample Size	**282**	**282**	**172**	**110**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Significantly different from CACFP centers at the .05 level, two-tailed test.

[b]Significantly different from all nonparticipating centers at the .05 level, two-tailed test.

[c]Significantly different from eligible nonparticipating centers at the .05 level, two-tailed test.

[d]Significantly different from ineligible nonparticipating centers at the .05 level, two-tailed test.

n.a. = Not applicable.

presents all findings. In this section we focus the discussion on those characteristics that are statistically significant and have implications for the program.[13,14]

1. Comparisons of Characteristics of Eligible Nonparticipating and Participating Centers

Eligible nonparticipating and participating centers are quite similar to each other on a number of important dimensions, particularly in terms of such organizational and operating characteristics as auspices, parent organizations, and operating schedules. This is not surprising given that both satisfy criteria required by law and regulation to be eligible to participate in the program. However, eligible nonparticipating and participating centers do differ along other important dimensions, most notably the state agencies from which they receive operating licenses or certification, their funding sources, program size, and health-related and meal services offered.

The following are important differences between eligible nonparticipating and participating adult day care centers:

- *Licensing and Certification.* Although eligible nonparticipating centers and participating centers are equally likely to be licensed or certified, the agencies that license or certify eligible nonparticipating and participating centers differ substantially. Eligible nonparticipating centers are much more likely to be licensed by state social services or welfare departments than participating centers (43 percent versus 26 percent), and are much less likely to be licensed by state health agencies or departments (23 percent versus 42 percent). A similar relationship holds for certifying agencies. Licensing and certification standards generally vary by state and funding source; however, standards are usually more rigorous for health-related licensure and certification than for social licensure or certification (see Weissert et al. 1990).

- *Funding Sources.* Eligible nonparticipating and participating centers also differ in terms of certain funding and income sources they receive. Eligible nonparticipating centers are much less likely than participating centers to receive funding from Medicaid (43 percent versus 67 percent), but are nearly twice as likely to receive Title III Older Americans Act funding (27 percent versus 15 percent). Approximately one-half of eligible nonparticipating centers receive local public funds compared with one-third of participating centers.

---

[13]The differences highlighted below are statistically significant at the 95 percent confidence level, using a two-tailed test.

[14]See tables E.1 through E.42 in Volume II, Appendix E, for a comparison of CACFP and all non-CACFP centers (not distinguished by eligibility) on all center characteristics.

- *Program Size.* Eligible nonparticipating and participating centers on average have virtually identical numbers of enrolled adults (47 versus 49 enrolled clients). However, eligible nonparticipating centers are twice as likely as participating centers to have very small programs (less than 21 enrolled clients). Twenty-six percent of eligible nonparticipating centers are programs with between 1 and 20 enrolled clients compared with just 12 percent of participating centers.

- *Annual Budget for Meals or Food Services.* The average annual food budget for eligible nonparticipating centers providing meals and snacks to clients is substantially lower than for participating centers ($9,210 versus $20,970). After controlling for differences in daily attendance, the proportional difference between the annual food budget for eligible nonparticipating centers and participating centers is reduced, but remains large ($1.36 versus $2.69 per client per day).[15]

- *Nonmeal Program Services.* Consistent with the differences in day care licensing and funding sources described above, eligible nonparticipating centers are much less likely than participating centers to provide certain client services, particularly health-related services. For example, eligible nonparticipating centers are less likely than participating centers to offer care by a doctor (23 percent versus 42 percent) and care by a registered nurse or licensed practical nurse (64 percent versus 82 percent). A lower proportion of eligible nonparticipating centers than participating centers provide nutritional screening (43 percent versus 61 percent).

- *Meal Services.* Eligible nonparticipating and participating centers differ in terms of the types and number of meals provided and meal preparation methods they use. Eligible nonparticipating centers are half as likely as participating centers to provide breakfast (21 percent versus 49 percent), but are almost twice as likely to provide morning snacks (69 percent versus 39 percent). They are twice as likely as participating centers to provide the morning snack, lunch, afternoon snack meal pattern (39 percent versus 20 percent); participating centers on the other hand were over five times more likely to provide the breakfast, lunch, and afternoon snack pattern than eligible nonparticipating centers (27 percent versus 5 percent). Reflecting differences in numbers of attending clients, eligible nonparticipating centers on average provided fewer total meals and snacks per week than participating centers (240 versus 318 per week). Eligible nonparticipating centers were more likely than participating centers to have main meals prepared on site by an affiliated organization (11 percent versus 3 percent), but less likely to prepare the main meals themselves on site (37 percent versus 62 percent).

[15]The calculation for eligible nonparticipating centers is based on an $9,210 annual food budget, daily attendance of 26 clients, center operates 5 days per week, 52 weeks per year ($9,210/6,760 client days = $1.36 per client per day). The calculation for participating centers is based on an $20,970 annual food budget, daily attendance of 30 clients, center operates 5 days per week, 52 weeks per year ($20,970/7,800 client days = $2.69 per client per day).

2. Comparisons of Characteristics of Ineligible Nonparticipating and Participating Centers

There are more differences in characteristics between ineligible nonparticipating and participating centers than between eligible nonparticipating and participating centers. This in large part reflects the fact that ineligible nonparticipating centers by definition do not meet the requirements specified by program regulations for eligibility such as holding a license or providing meals, while participating centers do meet these standards. Beyond the differences related to eligibility, ineligible nonparticipating and participating centers tend to differ along similar dimensions as do eligible nonparticipating and participating centers. One exception is that ineligible nonparticipating centers are much more likely to be providing care to clients with mental retardation or developmental disabilities than participating centers.

Important differences between ineligible nonparticipating and participating adult day care centers include:

- *Licensing and Certification.* Ineligible nonparticipating centers are substantially less likely than participating centers to be either licensed or certified, and when regulated, are much more likely to be licensed or certified by a mental retardation/developmental disabilities agency. Forty-one percent of ineligible nonparticipating centers are neither licensed or certified, compared to just 4 percent for participating centers. Fifty-seven percent of licensed ineligible nonparticipating centers are licensed by state mental retardation or developmental disabilities departments or agencies compared to just 15 percent of licensed participating centers.

- *Funding Sources.* Ineligible nonparticipating centers are less likely than participating centers to receive Medicaid, Title III Older Americans Act, and Title XX funding and to rely on client fees. Just 14 percent of ineligible nonparticipating centers receive Medicaid funding, 8 percent receive Title III Older Americans Act grants, and 7 percent receive Title XX block grant funds; the comparable percentages for participating centers are 67, 15, and 25 percent, respectively. Approximately one-half of ineligible nonparticipating centers charge clients fees, compared with nearly three-quarters of participating centers.

- *Program Size.* Ineligible nonparticipating and participating centers on average have roughly the same numbers of enrolled adults (42 clients versus 49 clients; difference not statistically significant). However, ineligible nonparticipating centers are three times as likely as participating centers to have programs with 20 or fewer enrolled clients (36 percent versus 12 percent).

- *Nonmeal Program Services.* With few exceptions, ineligible nonparticipating centers are less likely than participating centers to provide services, particularly health-related services. Ineligible nonparticipating centers are less likely than participating centers to offer medical evaluation by a doctor (25 percent versus 40 percent), health care by a doctor (23 percent versus 42 percent), or care by a registered nurse or licensed practical nurse (50 percent versus 82 percent). They are also less likely to offer physical or occupational therapy services: about one-third of ineligible nonparticipating centers provide these services compared with approximately one-half of participating centers. Only one-third of ineligible nonparticipating centers provide nutrition screening services compared to nearly two-thirds of participating centers.

- *Meal Services.* Only half of ineligible nonparticipating centers provide meals or snacks to enrolled clients. Ineligible nonparticipating centers providing meal services differ from participating centers in terms of the types and number of meals provided, and the meal preparation and serving methods used. They are twice as likely to provide the morning snack, lunch, afternoon snack meal pattern than participating centers (40 percent versus 20 percent) and provided half as many meals and snacks per week on average than participating centers (150 versus 318 per week). Ineligible nonparticipating centers providing meals were substantially more reliant on affiliated organizations for providing main meals compared with participating centers (54 percent versus 16 percent), and were more likely to serve meals restaurant style (81 percent versus 64 percent).

III. CHARACTERISTICS OF ADULTS ATTENDING PARTICIPATING AND NONPARTICIPATING CENTERS

More than 40,000 adults were enrolled in day care centers participating in the Child and Adult Care Food Program (CACFP) in 1991; approximately 90,000 adults were enrolled at nonparticipating centers. This chapter examines the characteristics of the adults served by participating centers, including their socioeconomic, functional, and health characteristics; special dietary needs; services received; and center attendance.[1] The CACFP client profile is based on a nationally representative sample of 942 clients selected from 85 CACFP centers and on data from client records, supplemented by center staff observations. We then contrast characteristics of clients attending CACFP and non-CACFP centers. This comparison is based on information on client characteristics obtained from the surveys of CACFP and non-CACFP centers.[2]

A. CHARACTERISTICS OF ADULTS ATTENDING PARTICIPATING CENTERS

Persons at least 60 years of age or functionally impaired persons 18 years or older who are not residents of institutions are eligible to participate in the CACFP. Functionally impaired adults have physical or mental impairments that markedly limit their capacity to function independently in Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs). These activities include, but are not limited to, cleaning, shopping, cooking, using public transportation, maintaining a residence, caring appropriately for one's grooming or hygiene, and using telephones and directories.

---

[1]Appendix L examines attendance and service utilization patterns of CACFP participants by income and age. Section A of Appendix L compares low-income participants to non-low-income participants, where low-income is defined as client income less than or equal to 130 percent of the poverty line. Section B contrasts elderly and nonelderly CACFP participants, where elderly clients are age 60 and older. In addition, tables in Volume II, Appendix F, provide complete distributions on all characteristics for CACFP clients for the age and income subgroups defined above.

[2]The comparison of CACFP and non-CACFP client characteristics is based on the surveys of centers because the study did not include a client survey of adults attending non-CACFP centers.

1. Overview of Characteristics of Adults Attending Participating Centers

Most frequently, clients attending CACFP centers are elderly, female, and white. Yet, the program serves a diverse clientele, as evidenced by the fact that it serves substantial percentages of men and nonelderly and nonwhite clients. CACFP clients typically have low incomes and participate in the Supplemental Security Income (SSI) and Medicaid programs. A substantial minority of CACFP clients have functional impairments. CACFP clients are slightly dependent in basic self-care tasks (as measured using an Activities of Daily Living Index) and much more dependent in tasks related to independent living (as measured by an index of Instrumental Activities of Daily Living). Many CACFP clients also have mental and emotional impairments. Virtually all CACFP adult participants have at least one chronic health condition; multiple conditions are commonplace. The most prevalent chronic health conditions are mental disorders, arthritis, hypertensive disease, heart conditions, and vision impairments.

Services most commonly received by CACFP clients from their adult day care program are case management, health care by a registered or licensed practical nurse, exercise, recreation, art/music therapy, and transportation between home and the center. A typical client has attended his or her current center for just under two years and was referred there by a social service agency, family, or friends. Clients typically are scheduled to attend five days a week (Monday through Friday), for six hours per day.

2. Demographic Characteristics

The typical client attending adult day care centers participating in the CACFP is elderly, white, and female (see Table III.1). Sixty-two percent of enrolled clients are female, 54 percent are age 60 and older, and 57 percent are white. While the typical client is an elderly white female, the program nonetheless serves a very diverse clientele. Participating centers serve a substantial proportion of younger, functionally impaired adults. Thirty-two percent of adults attending CACFP centers are

TABLE III.1

DEMOGRAPHIC CHARACTERISTICS OF CLIENTS ATTENDING CACFP CENTERS

Demographic Characteristic	Percentage
Age	
18-29	9
30-44	23
45-59	14
60-74	23
75-84	21
85 and older	10
Mean	59
Median	62
Gender	
Female	62
Male	38
Race/Ethnicity	
White	57
Black	35
Hispanic	7
American Indian or Alaskan	<1
Asian or Pacific Islander	<1
Living Arrangement	
Married, living with spouse only or spouse and others	14
Not married, living alone in the community	19
Not married, living alone in a group setting	21
Not married, living with children, relatives, or friends	45
Other	1
Number of Persons in Client's Household[a]	
One	41
Two	27
Three or more	32
Mean	2.2
Median	2

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

[a]Clients living alone in group setting are counted as one-person households in the calculation.

between the ages of 18 and 45. The program also serves a substantial number of racial/ethnic minorities. Thirty-five percent of CACFP clients are black, and seven percent are Hispanic.

The living arrangements of CACFP participants vary. The majority (59 percent) live with children, relatives, friends, or their spouse. Forty-five percent are unmarried and live with their children, relatives, or friends, and another 14 percent are married and live with either their spouse only or with their spouse and others. The remainder live alone, either in group settings or by themselves in the community. Twenty-one percent live alone in a congregate or group home setting; and 19 percent of CACFP clients live alone in the community.

3. Economic Characteristics

Clients attending centers participating in the CACFP have very low incomes. Eighty-four percent have incomes of less than 130 percent of the U.S. poverty threshold (see Table III.2).[3] Just nine percent have incomes above 185 percent of the poverty level. Thus the bulk of program benefits go to economically needy households.

Reflecting their low incomes, substantial proportions of clients attending CACFP centers participate in the Supplementary Security Income (SSI) and Medicaid programs (see Table III.2). Fifty-seven percent of CACFP clients receive SSI, and 68 percent participate in the Medicaid program. Eighteen percent of CACFP clients also participate in the Food Stamp Program.

The relatively low Food Stamp Program participation of elderly CACFP clients is consistent with low participation observed for all elderly nationwide. Trippe et al. (1992) estimate that 27 percent of eligible elderly persons participated in the Food Stamp Program in August, 1990. After adjusting

[3]Income refers to the program definition of income and includes income of the participating client, his or her spouse, and dependents. The income/poverty status of each participant was determined by ascertaining the client's CACFP meal price certification status from client records (the few participants in which certification status was not ascertained provided information on monthly income). The annual federal poverty threshold for a one-person household is $6,810. For a two-person household, the threshold is $9,190; for three persons, it is $11,570.

TABLE III.2

ECONOMIC CHARACTERISTICS OF CLIENTS ATTENDING CACFP CENTERS
(Percentages)

Economic Characteristic	CACFP Clients
CACFP Meal Price Certification Status	
Certified eligible for free meals	82
Certified eligible for reduced-price meals	7
Certified eligible for full-price meals	6
Did not apply	5
Total	**100 %**
Client Income as a Percentage of Poverty Level	
Less than 130 percent	84
Between 130 percent and 185 percent	7
More than 185 percent	9
Total	**100 %**
Receives Supplemental Security Income (SSI)	57
Receives Social Security Disability Income (SSD)	24
Receives Food Stamps	18
Receives Medicaid	68

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

our client sample statistics with an estimate of eligibility rates for this population, we estimate that 29 percent of eligible elderly CACFP participants participate in the Food Stamp Program.[4]

Food Stamp Program participation rates for elderly persons are consistently lower than for other age groups in the population because, as compared to other food stamp eligible persons, elderly persons eligible for food stamp benefits tend to live in smaller households, have higher per-capita incomes, and are eligible to receive smaller monthly benefits--all of which are characteristics associated with low participation rates (Trippe and Doyle, 1992). Ponza and Wray (1990) found that many elderly persons do not participate in the Food Stamp Program for three reasons: (1) they believe they do not need the assistance, (2) they believe they are not eligible, and (3) they have problems with accessibility.[5] The first and third reasons are particularly relevant for elderly CACFP clients since nearly two-thirds live with others and over half are unable to shop for groceries without the assistance of others (see Appendix Tables F.1 and F.4).

4. Functional Characteristics

The functional status of adults attending CACFP centers was assessed primarily with two commonly used scales. The Activities of Daily Living (ADL) scale obtained information on the ability of clients to perform eight basic self-care activities according to a three-point scale: does not need assistance; needs some assistance; or needs maximal assistance (unable to perform activity). The eight personal care activities are feeding oneself, maintaining continence, bathing, dressing, getting in or out of bed or chair, getting around inside the house, grooming, and making needs understood. Seven

---

[4]Twenty percent of elderly CACFP clients with gross income less than or equal to 130 percent of the poverty line participate in the Food Stamp Program. Using the January 1989 FOSTERS SIPP eligibility file, 68 percent of elderly persons with income less than or equal to 130 percent of the poverty line are eligible to participate. Thus, based on the 20 percent gross participation rate noted in the text, the FSP participation rate of elderly CACFP clients that are eligible is 29 percent.

[5]Access problems refer to not being able to get to the FSP offices to receive benefits, or having received benefits, not being able to get to retail food stores to use them. More broadly, many elderly do not participate because they believe the relatively low amount of benefits for which they are eligible for are not worth the time and costs involved in applying for and receiving benefits.

Instrumental Activities of Daily Living (IADL) were also assessed. These activities are using the telephone, traveling beyond walking distance, shopping, preparing meals, doing housework, taking medications, and managing finances. The IADL activities are generally thought to be more relevant to independent living than the more basic functions included in the ADL list of activities.

a. Activities of Daily Living

CACFP clients are only slightly dependent in ADLs. Most clients attending CACFP centers (80 percent) do not need assistance or require minimal assistance to perform basic self-care tasks. Just 20 percent need maximal assistance with one or more of the eight activities of daily living (see Table III.3). Eight percent of CACFP clients need maximal assistance with four or more activities of daily living.

The CACFP client survey found that for any particular ADL category, the majority of CACFP clients were not impaired. Of the eight activities of daily living examined, CACFP clients are most likely to require some level of assistance with taking a bath or shower, dressing or undressing, and personal grooming. Forty-two percent of CACFP clients need assistance with personal grooming, about one-third need assistance taking a bath or shower, and one-third need help dressing and undressing (see Table III.4).

b. Instrumental Activities of Daily Living

CACFP clients are much more dependent in IADL than in ADL. Sixty-two percent need maximal assistance to perform one or more of the seven IADLs (see Table III.3). Thirty-nine percent require maximal assistance with four or more IADLs; 12 percent require maximal assistance with all seven. The average CACFP client needs maximal assistance with approximately three IADLs.

Of the seven instrumental activities of daily living examined, CACFP clients are most likely to require some level of assistance handling personal finances, shopping for groceries, and preparing meals. Approximately three-quarters need some or maximal assistance with handling personal

TABLE III.3

FUNCTIONAL STATUS OF CLIENTS ATTENDING CACFP CENTERS

Characteristic	CACFP Clients
Number of ADLs Requiring Maximal Assistance	
0	80
1	6
2	3
3	3
4 or more	8
Mean	0.7
Median	0.0
Number of IADLs Requiring Maximal Assistance	
0	38
1	8
2	6
3	9
4 or more	39
Mean	2.7
Median	2.0
Number of ADLs and IADLs Requiring Maximal Assistance	
0	37
1-5	38
6-10	18
11-15	7
Mean	3.4
Median	2.0

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

TABLE III.4

CACFP CLIENTS' ABILITY TO PERFORM ADLS AND IADLS
(Percentages)

Activity	Do Not Need Assistance	Need Some Assistance	Require Maximal Assistance	Not Ascertained	Total
ADL					
Eat meals	85	11	4	<1	100
Walk indoors	83	8	9	<1	100
Take a bath or shower	58	28	14	<1	100
Dress and undress	66	23	11	<1	100
Get in or out of bed or chair	82	12	6	<1	100
Take care of personal grooming	58	31	11	<1	100
Get to the bathroom on time	80	11	9	<1	100
Make needs understood	77	17	6	<1	100
IADL					
Handle personal finances	25	26	47	2	100
Use the telephone	58	19	21	2	100
Go shopping for groceries	24	28	45	2	100
Prepare meals	31	21	44	2	100
Take medications	38	29	31	2	100
Do light housekeeping	38	26	34	2	100
Take public transportation	30	17	45	8	100

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

finances, and three-quarters need assistance with shopping for groceries. Two-thirds need assistance with preparing meals (see Table III.4).

c. All Activities Combined

For instrumental and activities of daily living combined, 63 percent of CACFP clients require maximal assistance with at least one activity (see Table III.3). One-quarter require maximal assistance with six or more activities. Seven percent require maximal assistance with 11 or more activities.

d. Other Limitations on Functioning

In addition to physical impairments, substantial numbers of CACFP clients have mental, emotional, or social impairments (see Table III.5). For example, one-third are chronically confused or disoriented, and 20 percent have emotional/behavioral problems.

e. Summary

Substantial minorities of adults attending CACFP centers have functional, emotional, or mental impairments that require assistance and supervision. In many cases, dependence reflects chronic disease or impairment that is the consequence of aging. However, a substantial proportion of CACFP participants are nonelderly, and nonelderly and elderly participants are similarly impaired.[6]

5. Health Characteristics

Virtually all CACFP clients (99 percent) have at least one diagnosed chronic health condition; multiple chronic health conditions are common (see Table III.6). Sixty-four percent have three or more diagnosed chronic health conditions; 25 percent have five or more chronic health conditions.

[6]Appendix L of Volume II compares characteristics of elderly and nonelderly CACFP participants.

TABLE III.5

OTHER FUNCTIONAL CHARACTERISTICS OF CACFP CLIENTS
(Percentages)

Characteristic	CACFP Clients
Assistive Devices Used by Client	
Cane	15
Walker	9
Wheelchair	13
Modified dishes	1
Modified eating utensils	1
Other	4
Percentage of Clients Experiencing:	
Regular urinary or bowel incontinence	16
Frequent confusion, disorientation, or wandering	33
Behavioral problems	20
Emotional difficulty chewing or swallowing food	10
Recent loss of appetite or chronically poor appetite	11

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

TABLE III.6

CHRONIC HEALTH CONDITIONS OF CLIENTS ATTENDING CACFP CENTERS

	CACFP Clients
Number of Diagnosed Health Conditions	
0	1
1	15
2	20
3	20
4	19
5 or more	25
Mean	3.5
Median	3.0
Clients Diagnosed as Having:	
Alzheimer's	13
Anemia	9
Arthritis or rheumatism	37
Blindness or vision problems	31
Cancer	7
Cerebrovascular disease, stroke	22
Diabetes	18
Heart disease	27
High blood pressure	35
Kidney stones or chronic kidney trouble	6
Malnourishment, emaciation	2
Mental retardation	23
Obesity	18
Osteoporosis	6
Psychiatric disorder	41
Other health problems	
Head	18
Chest	5
Abdominal	8
Extremities	6
Neurological	10
Endocrine	3
Other	1
Percentage of Clients Experiencing	
Recent hospitalization (within last three months)	8
Recent surgery (within last three months)	2

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

The most prevalent chronic health conditions for CACFP clients are mental or psychiatric disorders, arthritis, hypertensive disease, heart conditions, and vision impairments. Forty-one percent have psychiatric disorders, 37 percent have arthritis, 35 percent are hypertensive, 27 percent have heart disease, and 31 percent have vision impairments.[7]

Approximately eight percent of CACFP clients had a recent hospital stay (within the last three months). Fewer than three percent had surgery within the last three months.

6. Special Diets

A substantial proportion of adults attending CACFP centers have dietary restrictions. Table III.7 shows that 44 percent of CACFP clients have one or more dietary restrictions; 15 percent have two or more dietary restrictions. Consistent with the chronic conditions experienced most often by CACFP clients--cerebrovascular disease, hypertension, heart disease, and diabetes--the most common dietary restrictions are low-salt, diabetic diets, and low-cholesterol diets. Twenty-two percent of CACFP clients are on low-salt diets, 11 percent are on diabetic diets, eight percent are on low-cholesterol diets, and another 7 percent are on low-fat diets. As reported earlier in Chapter II, the substantial majority (80 percent) of participating centers accommodate clients' special dietary needs, by providing low-salt, diabetic, low-sugar, low-fat, low-cholesterol, and other special diets.

7. Program Services Received

Clients attending participating centers receive a variety of health and social services. Services most commonly received by CACFP clients are case management, health care by a registered nurse (RN) or licensed practical nurse (LPN), exercise, recreation, art/music therapy, and transportation between home and the center (see Table III.8). Thirty-six percent receive health care services from an RN or LPN daily; 44 percent receive these services once per week or more. More than half of

[7]Psychiatric disorders include, but are not limited to, depression, dementias, schizophrenia, post-substance abuse syndrome, and delusions.

TABLE III.7

SPECIAL DIETARY NEEDS OF CLIENTS ATTENDING CACFP CENTERS

Dietary Need or Restriction	CACFP Clients
Number of Dietary Needs/Restrictions	
0	56
1	29
2	8
3 or more	7
Mean	0.7
Median	0.0
Clients with the Following Dietary Needs or Restrictions:	
Low salt	22
Low cholesterol	8
Low fat	7
Low calories	5
Low sugar	7
High fiber	2
Low fiber	<1
High carbohydrate	<1
Bland	1
Vegetarian	<1
Diabetes diet	11
Ground or pureed	4
Liquid or formula--supplement	<1
Other	4

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

TABLE III.8

FREQUENCY OF CLIENTS ATTENDING CACFP CENTERS
PARTICIPATING IN PROGRAM SERVICES/ACTIVITIES
(Percentages)

Service/Activity	Frequency of Client Participation						
	Not Offered	Never	Rarely or a Few Times/Yr	Once or Twice a Month	Once a Week or More	Daily	Total
Case Management	6	3	49	25	8	10	100 %
Health-Related Services							
Medical evaluation by doctor	65	5	22	4	4	0	100 %
Health care provided by doctor	67	7	11	7	8	0	100 %
Health care provided by RN or LPN	28	5	10	13	8	36	100 %
Physical therapy	63	23	8	1	2	3	100 %
Speech therapy	69	23	7	1	1	0	100 %
Occupational therapy	55	24	9	1	4	8	100 %
Optometry services	81	10	9	1	0	0	100 %
Hearing examinations	78	11	11	0	0	0	100 %
Podiatry services	68	14	12	6	1	0	100 %
Dental care	81	7	11	1	0	0	100 %
Nutritional screening	53	8	18	10	1	10	100 %
Nutritional counseling	46	9	21	15	2	7	100 %
Other nutritional services	65	8	5	13	8	2	100 %
Physical fitness/exercise	12	6	4	5	17	56	100 %
Therapeutic recreation	16	5	3	4	16	55	100 %
Psychosocial/Social Services							
Individual or group counseling	35	16	12	16	17	4	100 %
Alcohol/drug abuse program	72	15	7	1	5	1	100 %
Art/music therapy	19	8	4	15	21	32	100 %
Recreational activities	1	3	7	9	23	57	100 %
Self-Care/Restorative Activities							
Training in ADLs	16	36	7	6	11	25	100 %
Training in IADLs	32	28	5	7	13	16	100 %
Bowel/bladder retraining	32	50	3	1	1	13	100 %
Activities for Client Families							
Support groups, educational programs, respite care	39	21	10	11	3	15	100 %
Transportation Services							
Transportation between home and center	19	9	2	1	1	68	100 %
Other Services	2	0	24	25	16	34	100 %

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

CACFP clients receive physical fitness and recreation activities daily. Approximately one-third receive training in ADLs and IADLs once per week or more. Two-thirds of CACFP clients are provided transportation between home and center. Approximately 20 percent of CACFP clients receive nutritional screening and nutritional counseling services once a month or more. Fifteen percent of CACFP clients are provided health care by a physician once a month or more.

8. Referral Agency and Duration of Participation

The most common referral sources to the adult day care program currently attended by CACFP clients were social service agencies and word of mouth from family and friends (see Table III.9). Twenty-five percent of CACFP clients found out about the adult day care program they attend through public social service/welfare agencies, and 21 percent through family or friends. Nineteen percent were referred to the adult day care program by a health agency, and 14 percent by a hospital, physician, or nurse. Most CACFP clients (64 percent) have attended their current center for less than three years (see Table III.9). Twenty percent have attended for more than five years.

9. Attendance Patterns During a Typical Week

CACFP clients most commonly are scheduled to attend adult day care programs five days a week (Monday through Friday), for six hours per day (see Table III.10). One-third are scheduled to attend three days or less, and just two percent are scheduled to attend more than five days per week. Nearly one-third of CACFP clients are scheduled to attend seven or more hours per day.

Actual attendance is somewhat lower than scheduled attendance because of illness or other reasons. In a typical week, 17 percent of CACFP clients miss one or more days they were scheduled to attend their center (see Table III.10). Ten percent miss just one scheduled day per week, four

TABLE III.9

DURATION OF PARTICIPATION AND REFERRAL SOURCE
FOR CLIENTS ATTENDING CACFP CENTERS

	CACFP Clients
Client Has Attended Center:	
One year or less	28
Between 1 and 3 years	36
Between 3 and 5 years	17
More than 5 years	20
Mean	3.3
Median	1.8
Source of Referral to Adult Day Care Program	
Self-referral	4
Family, friend, or word of mouth	21
Community organization	6
Public social services/welfare agency	25
Health agency	19
Hospital, physician, or nurse	14
Residential facility	2
Adult day care association	3
Center outreach	3
Other	4
Total	**100 %**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

TABLE III.10

ATTENDANCE PATTERNS OF CLIENTS ATTENDING CACFP CENTERS

	CACFP Clients
Number of Days Client is Scheduled to Attend Weekly	
1	3
2	17
3	14
4	15
5	49
6	2
7	<1
Mean	4
Median	5
Days Scheduled to Attend	
Monday	72
Tuesday	83
Wednesday	79
Thursday	79
Friday	80
Saturday	3
Sunday	<1
Pattern of Scheduled Weekday Attendance	
Monday through Friday	49
Monday through Thursday	2
Tuesday through Friday	10
Tuesday through Thursday	1
Monday, Wednesday, Friday	7
Monday, Tuesday, Wednesday	1
Tuesday, Thursday	6
Wednesday, Friday	2
Other pattern	22
Average Hours Scheduled to Attend per Day, Weekdays	
Less than 5 hours	5
5-6	65
7-8	28
9-10	2
11-24	<1
Mean	6
Median	6

TABLE III.10 *(continued)*

	CACFP Clients
Average Hours per Week Scheduled to Attend Weekdays	
Less than 20 hours	37
21-30	46
31-40	15
41-50	2
More than 50 hours	<1
Mean	24
Median	24
Number of Days Missed but Scheduled to Attend, Weekdays	
0	83
1	10
2	4
3	1
4	1
5	1
Mean	0.3
Median	0.0

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

percent miss two days, and three percent miss three or more days. The typical client attends four days, six hours per day, for a total of 24 hours per week, weekdays.[8]

B. COMPARISON BETWEEN CLIENTS ATTENDING PARTICIPATING AND NONPARTICIPATING CENTERS

The study did not survey clients attending nonparticipating centers. However, as part of the center survey, directors of nonparticipating centers (and participating centers) were asked to provide information on selected client characteristics. Table III.11 summarizes these data, comparing CACFP and non-CACFP clients in terms of average distribution of enrollment by the age, gender, race/ethnicity, and functional characteristics of enrolled clients.[9] In general, non-CACFP clients do not differ appreciably from clients enrolled in CACFP centers along the dimensions analyzed.[10]

Similar to CACFP clients, the majority of non-CACFP center clients are elderly, white, or female. Of clients enrolled at non-CACFP centers, 56 percent are elderly, 71 percent are white, and 58 percent are female. Non-CACFP clients are somewhat less ethnically diverse than CACFP clients, but the difference is not statistically significant. Twenty-seven percent of enrolled clients at non-CACFP centers are black or Hispanic, compared with 36 percent at CACFP centers. Males are somewhat more likely to enroll in non-CACFP centers than CACFP centers (42 percent vs. 38 percent), but the difference is not statistically significant.

---

[8]Section B, Chapter IV presents findings on the numbers and types of center meals received by CACFP clients.

[9]The data are weighted by the centers' number of enrolled clients.

[10]Although weighted by the number of clients, the percentages for CACFP client characteristics differ somewhat from those reported earlier in Section III.A for some client characteristics. This reflects the two different sources of data. In the center survey, directors were asked to give the number or the percentage of enrolled clients with various characteristics. In the CACFP client survey, data underlying the distributions were based on client records, supplemented by reports by center directors or the clients themselves (or their proxies). We have chosen to use the center data for CACFP clients when comparing CACFP and non-CACFP clients so that both are based on the same data source. The differences between CACFP client characteristics based on the center survey and client survey are minor and do not change the conclusions regarding CACFP versus non-CACFP client differences.

TABLE III.11

CHARACTERISTICS OF CLIENTS ATTENDING PARTICIPATING AND NONPARTICIPATING CENTERS
(Means and Percentages)

Client Characteristic	CACFP[a,b]	Non-CACFP[a]
Average Distribution of Enrollment by Age		
18-29	11	12
30-44	20	21
45-59	16	12
60-74	22	27
75 - 84	21	21
85 and older	10	8
Average Distribution of Enrollment by Gender		
Female	62	58
Male	38	42
Average Distribution of Enrollment by Race/Ethnicity		
White	61	71
Black	27	17
Hispanic	9	10
Other	3	2
Average Percentage of Center's Clients that Receive:		
Food stamps	22	17
Medicaid	57	58
SSI	50	55
Average Percentage of Center's Clients that:		
Have special diets or dietary restrictions	27	25
Need assistance eating	13	16
Need assistance with personal care	24	28
Need assistance with mobility	23	23
Unweighted Sample Size	**282**	**282**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Based on center survey, where data weighted by number of enrolled clients.

[b]Percentages differ somewhat from those reported in Tables III.1 through III.7 because different data sources are used (see discussion in text).

Since center directors were not asked to categorize clients by their income, it is difficult to say with these data whether CACFP or non-CACFP centers are more likely to serve low-income clients. However, the available data suggest that both CACFP and non-CACFP centers provide services to substantial and comparable proportions of low-income clients. Approximately equal proportions of clients enrolled at non-CACFP and CACFP centers (58 percent) participate in the Medicaid program (see Table III.11). While a slightly greater proportion of non-CACFP clients participate in the SSI program than CACFP clients (55 percent versus 50 percent), a slightly greater proportion of clients enrolled at CACFP centers participate in the Food Stamp Program (22 versus 17 percent), and, as reported above, a higher proportion of clients attending CACFP centers are racial/ethnic minorities.[11] None of these differences are statistically significant.

A somewhat greater proportion of non-CACFP centers' clients are impaired. For example, a larger percentage of non-CACFP clients need help with personal care, compared with CACFP centers' clients (28 percent versus 24 percent) or need assistance with eating (16 percent versus 13 percent; see Table III.11). However, the differences are not statistically significant.

[11]Of elderly persons in the U.S., blacks and Hispanics are more likely to have incomes below or near poverty than white persons (Ponza and Wray 1990).

IV. CENTER PARTICIPATION IN THE CACFP AND THE PROGRAM'S CONTRIBUTION TO THE DIETARY INTAKE OF PARTICIPANTS

Centers participating in the adult component of the Child and Adult Care Food Program (CACFP) receive cash reimbursement for meals and snacks to help them provide nutritious meals to eligible clients. Reimbursement can be claimed for a maximum of three eating occasions (two meals and one snack or two snacks and one meal) daily for each eligible participant. Reimbursement rates are greater for main meals than snacks; reimbursements for lunches and suppers are larger than those for breakfasts. Reimbursements are also larger for meals and snacks served to eligible clients with lower incomes. Centers also receive USDA commodities or cash in lieu of commodities.

Program regulations require that lunches served by each adult day care center receiving CACFP reimbursement provide, on the average, approximately one-third of the Recommended Daily Allowances (RDA). Beginning August 1993, centers participating in the CACFP began providing meals and snacks under a meal pattern developed to meet the specific needs of the elderly and functionally impaired adults. Prior to this change, participating centers had been providing meals and snacks under an interim adult meal pattern, which essentially adapted to adults the existing program meal pattern for children 12 years of age and older.[1] Like the new pattern, the interim meal pattern has three meals (breakfast, lunch, and supper) and two supplements (snacks), and requires servings from some or all of four specified food components--a meat/meat alternate component, a fruit/vegetable component, a bread/bread alternate component, and a milk component.

This chapter presents findings on center participation in the CACFP program, including meal reimbursement patterns, the prevalence of unclaimed meals, and use of USDA commodities. In addition, the chapter examines the foods offered at CACFP centers and the contribution of CACFP reimbursable meals to participating clients' total dietary intakes.

---

[1]See discussion in Chapter I, Section A.5 and the Federal Register, Vol. 58, No. 133, July 14, 1993, pages 37847-37853, and Vol. 53, No. 249, December 28, 1988, pages 52584-52598.

A. CACFP PARTICIPATION

The adult component of the CACFP was authorized in 1987 and is relatively new. Consequently, most centers have been participating in the program for a short amount of time--for about two and a half years on average. The typical CACFP center claims reimbursement for two meals or snacks daily. Centers claim approximately 90 percent of the meals and snacks they provide to clients weekly. Nearly one-third of CACFP centers, however, provide at least one unclaimed meal per week, with a minority of these centers accounting for most of the unclaimed meals. Few centers use USDA commodities to prepare center meals or snacks, preferring the cash-in-lieu feature instead.

1. Meal Reimbursement Patterns

The typical CACFP center claims reimbursement for approximately two eating occasions daily (see Table IV.1). A substantial proportion (41 percent) of CACFP centers, however, claim three eating occasions per day for reimbursement; 23 percent claim reimbursement for just one. The most commonly claimed meal pattern is breakfast, lunch, and an afternoon snack or lunch only. Twenty-four percent of CACFP centers claim the breakfast, lunch, and afternoon snack meal pattern for reimbursement; 23 percent claim lunch only (see Table IV.1). Other meal patterns claimed by at least 10 percent of CACFP centers include morning snack, lunch, and afternoon snack (14 percent) and breakfast and lunch (14 percent).

In a typical week, the average CACFP center claims reimbursement for a total of 293 meals and snacks. Of these 239 are free, 19 are reduced price, and 35 are full price, according to reimbursement claiming categories (see Table IV.2). Using information from the center survey on the number of meals provided per week by meal type and claiming category plus reimbursement rate amounts, we estimate that, on average, a CACFP center receives approximately $14,550 annually in reimbursement from USDA for meals and snacks provided and claimed for CACFP reimbursement.[2]

[2]Calculation assumes 293 meals claimed per week for reimbursement distributed across meal type and claiming category shown in final row of Table IV.2 for 50 weeks per year, or a total of 14,650 meals annually. The estimate does not include the value of cash received in lieu of commodities for centers not receiving commodities as part of program participation.

TABLE IV.1

DAILY MEAL REIMBURSEMENT CLAIMS

	CACFP Centers
Number of Eating Occasions Claimed for Reimbursement (Percent Distribution)[a]	
1	23
2	31
3	41
4	5
Average Number of Eating Occasions Claimed for Reimbursement	2.3
Median Number of Eating Occasions for Reimbursement	2.0
Reimbursement Meal Patterns (Percent Distribution)	
Breakfast, morning snack, and lunch	3
Breakfast, lunch, and afternoon snack	24
Morning snack, lunch, and afternoon snack	14
Morning snack and lunch	9
Lunch and afternoon snack	5
Breakfast and lunch	14
Morning snack and afternoon snack	1
Lunch only	23
Other patterns	7
Unweighted Sample Size	**272**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Centers can claim up to two meals and one snack or one meal and two snacks per day for each enrolled client. However, the number of eating occasions may exceed three if centers claim different eating occasions for different clients or claim different meal patterns on different days.

TABLE IV.2

CACFP MEAL REIMBURSEMENT

Meal Reimbursement Characteristic	CACFP Centers
Average Number of Meals or Snacks Claimed for Reimbursement Per Week	
Free	239
Reduced price	18
Full price	35
All meals or snacks	293
Mean Percentage of Reimbursed Meals That Are Free or Reduced Price[a]	
Breakfast	82
Morning snack	86
Lunch	86
Afternoon snack	79
Supper	94
All meals or snacks	86
Mean Percentage of All Meals and Snacks Provided Per Week But Not Claimed[b]	9
Percentage of Centers Providing at Least One Unclaimed Meal or Snack Per Week	31
At claiming limit[c]	11
Not at claiming limit[c]	20
Average Number of Total Meals Provided But Not Claimed Per Week in Centers Serving Unclaimed Meals	77

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Calculated for centers providing the specific meal type.

[b]Weighted average, based on the numbers of meals in the various meal categories.

[c]The CACFP regulations limit the number of meals and snacks that centers may claim per adult to two meals and one snack or one meal and two snacks. Centers are at the claiming limit if they receive reimbursement for two meals and one snack or one meal and two snacks. Centers are not at the claiming limit if they receive reimbursement for less than two meals and one snack or one meal and two snacks.

Most meals claimed for reimbursement are free or reduced-price meals. On average, a center claims at least 80 percent of any meal for reimbursement as free or reduced price (see Table IV.2). For example, of centers claiming reimbursement for lunch, an average of 86 percent of lunches are claimed for reimbursement as free or reduced price; 82 percent of breakfasts that are claimed are free or reduced price.

2. Unclaimed Meals

A comparison of center directors' reports on the number of meals provided weekly and the number of meals claimed for CACFP reimbursement weekly (by eating occasion) shows that, on average, centers do not claim nine percent of the meals and snacks provided. Overall, 31 percent of CACFP centers provide at least one unclaimed meal per week (see Table IV.2). On average, centers with unclaimed meals provide but do not claim a total of 77 meals per week. A minority of CACFP centers account for the majority of unclaimed meals. One third of the CACFP centers with at least one unclaimed meal account for approximately two-thirds of all unclaimed meals.

Of the centers providing at least one unclaimed meal, about one-third appear to be claiming the maximum number of eating occasions allowable in the regulations (either two meals and one snack or two snacks and one meal, per client per day). The remaining centers appear to be under the claiming limit (see Table IV.2).

Some centers under the claiming limit may not be claiming all meals and snacks for CACFP reimbursement for the following reasons:

- The reimbursement rate for an eating occasion may not be worth the paperwork involved in order to receive the reimbursement, particularly in the case of snacks.
- The center may be receiving reimbursement from other meal programs for all or some of the unclaimed eating occasions (e.g., a center may receive Title III reimbursement for lunch).
- Some clients attending a center may not be eligible to receive reimbursable meals (e.g., some enrolled clients may live in an institution rather than the community and, according to CACFP regulations, meals provided to those clients are not reimbursable).

- The center may claim CACFP reimbursement for all meals it provides, but the number of reimbursed meals may be less than the number provided because of reporting error.[3]

In assessing the first of these possibilities, it should be noted that the proportion of unclaimed meals for a specific meal or snack is greater when the reimbursement rate associated with that meal or snack is smaller. For example, CACFP centers, on average, do not claim about 5 percent of the lunches or breakfasts served weekly, compared with 15 percent of afternoon snacks and 23 percent of morning snacks.

3. Receipt of USDA Commodities or Cash in Lieu of Commodities

Relatively few CACFP centers (nine percent) report that they use USDA commodities to prepare center meals or snacks (see Table IV.3).[4] Centers participating in the commodities component of the program use various USDA commodities, depending on availability. The most commonly used ones are peanut butter, flour, butter, pasta, and canned fruit.

Directors at centers not receiving USDA commodities gave the following reasons for not participating in the commodities component of the program: commodities were not available from the state, administrative burden, and the center has no interest in or need for commodities (see Table IV.4).

---

[3]Center directors were asked to report the number of meals provided by meal type; in a subsequent question, they were asked to report the number of meals claimed for CACFP reimbursement by meal type. Responses were supposed to be based on center records but may not be consistent for several reasons: (1) rounding error; (2) use of different reference weeks; or (3) the numbers of meals provided may include meals served to staff or others (although directors were specifically asked to exclude these meals).

[4]As reported by state agency respondents, the states and District of Columbia have a variety of options in administering the commodities feature of the CACFP. In 29 states, centers annually indicate their choice for the cash or commodities. Centers either make their choice on their annual renewal applications or in an annual survey that is separate from the renewal form. In nine states, centers make their preference known in an annual survey, and the preference of the majority dictates whether all participating centers receive commodities or cash in lieu of commodities. Several states receive annual waivers from FNS to offer only cash in lieu to their centers; states exercising this option do so because they perceive commodities are not appropriate for their centers or centers simply don't want the commodities.

TABLE IV.3

USE OF USDA COMMODITIES

	Percentage of CACFP Centers
CACFP Centers Using USDA Commodities	9
Unweighted Sample Size	**282**
Types of USDA Commodities Used[a,b]	
Frozen or chilled meat or poultry	43
Canned or frozen fish	25
Frozen eggs	25
Peanut butter	94
Cheese	48
Fresh fruit	20
Canned or frozen fruit	52
Dried fruit	25
Canned or frozen potatoes	38
Canned or frozen vegetables	34
Rice	44
Pasta	56
Oats, grits, bulgur, cornmeal	53
Flour	81
Vegetable oil, soybean oil, shortening	52
Butter	73
Honey	48
Unweighted Sample Size	**25**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Calculated for centers receiving USDA commodities.

[b]Sum of percentages exceeds 100 percent because centers can use more than one type of commodity.

TABLE IV.4

REASONS CACFP CENTERS DO NOT USE USDA COMMODITIES

	Percentage of CACFP Centers
CACFP Centers Not Using USDA Commodities	88
Unweighted Sample Size	**282**
Reasons for Not Using USDA Commodities[a,b]	
Not available from state	86 [c]
Types of foods offered are not acceptable to clients	8
Commodities do not come in appropriate form	15
Administrative burden	25
Storage or transportation problems	7
No interest or need for commodities	21
Other	12
Unweighted Sample Size	**226**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Calculated for centers not receiving USDA commodities.

[b]Sum of percentages exceeds 100 percent because centers could give more than one reason for not using USDA commodities.

[c]May include responses from centers in states where commodities would have been made available if more centers had wanted them.

State agency respondents offered similar reasons, as well as a few others, for why centers do not choose commodities:

- Centers are too small to make the commodities program worthwhile. They would receive too much food under the program for the clients they serve and would end up wasting it.
- Centers contract for their meal service and have no use for the commodities.
- Centers receive commodities through other programs, so the additional CACFP commodities are not needed.
- Centers do not have enough space to accommodate the bulk quantity of commodities.
- The delivery costs associated with commodities, such as drop-off fees and traveling costs, are deterrents to participation.
- Centers feel the choice of commodities is not appropriate for their elderly population.

State agency respondents report that centers like the fact that cash-in-lieu of commodities adds additional money to their reimbursement. (At present, $0.14 is received for each lunch and supper claimed for reimbursement). Moreover, they report that the cash-in-lieu feature is attractive for other reasons:

- It is hassle free--centers do not have to worry about delivery, inventory, or storage space.
- It allows centers to buy foods appropriate for their population.

B. FOODS OFFERED AT CACFP CENTERS

The principal objective of the CACFP is to help participating centers provide nutritious meals to attending adults. Section IV.C examines the contribution of CACFP reimbursable meals to participating clients' total daily dietary intakes; this section examines the types and frequencies of foods served at participating centers to describe food variety.

Our analysis is based on a weekly menu collected from each of the 85 centers sampled for the client dietary intake data collection. Key aspects of CACFP meal service examined include:

- Numbers of food items served
- Types of foods served
- Variety of foods served

1. Numbers of Food Items Served

The typical CACFP center serves seven menu items for lunch (see Table IV.5). Most centers serve at least 5 items, and a few serve more than 10.[5]

As would be expected, the median numbers of foods served for meals other than lunch tend to be lower. For those centers serving breakfast, the typical center serves five food items.[6] The comparable numbers for the morning and afternoon snacks are three and two, respectively.

2. Types of Food Items Served

In order to provide insight into the types of food items frequently served, Table IV.6 displays the distribution of food items served in CACFP lunches among major food categories,[7] as well as the most common individual items within food categories. The single most common food item served is fluid milk, which constitutes about 13 percent of all lunch items served. Altogether, milk products

---

[5]Because it seemed surprising that some centers would be serving more than 10 food items at a meal, we examined the hardcopy data collection records for a sample of these cases. In general, the centers with the very high numbers of food items are offering substantial amounts of choice in their meals. For instance, one center, which is affiliated with a hospital and apparently has access to foods prepared by the hospital food service, offers a lunch menu with two alternative main entrees, and a choice from among four vegetables, as well as choices of soups, deserts, and drinks. In another instance, a center that served breakfast offered choices between hot or cold cereal, several different kinds of bread and rolls, alternative spreads for the bread, and alternative drinks. Some centers also often made available choices from as many as four different kinds of juices for breakfasts and the morning snack, and this significantly increased the number of total items they offered.

[6]The medians are decimal rather than whole numbers, because for each center the number is averaged over all of the days when the relevant meal was served. For instance, if a center served 8 items half the days and 7 items the other half, its value in the data set would be 7.5.

[7]The categories shown are those denoted by the first digits of the codes used in the food type coding structure maintained by the USDA Health and Human Nutrition Information System.

TABLE IV.5

NUMBER OF FOOD ITEMS SERVED AT CACFP CENTERS
(Percentage of Meals)

	Breakfast	A.M. Snack	Lunch	P.M. Snack
Number of Food Items per Meal				
11 or more	5.6	0.0	7.8	0.0
9 to 10.9	15.1	1.1	17.1	0.0
7 to 8.9	7.6	5.4	18.0	1.5
5 to 6.9	25.0	11.9	50.4	7.1
3 to 4.9	46.8	35.6	6.7	22.5
1 to 2.9	0.0	46.0	0.0	69.0
Mean	5.7	3.5	7.2	2.7
Median	4.6	2.8	6.8	2.2

SOURCE: Adult Day Care Study, Menu data, weighted tabulations.

TABLE IV.6

FOOD OR FOOD CATEGORY MOST COMMONLY SERVED LUNCH ITEMS
(Percentage of all Servings)

Food or Food Category	Percentage of All Servings
Milk Products	
Milk, fluid	13.12
Yogurt	0.56
Cheeses	0.59
Milk desserts	1.24
Other milk products	0.15
TOTAL MILK PRODUCTS	15.66
Meat Products	
Beef	3.85
Pork	1.46
Poultry	3.27
Seafood	1.47
Other or not specified	2.44
TOTAL MEAT PRODUCTS	12.49
Eggs	
TOTAL EGG PRODUCTS	0.17
Beans and Nuts	
Dried bean dishes	1.07
Other beans and nuts	0.21
TOTAL BEANS AND NUTS	1.28
Grain Products	
Breads and rolls	7.44
Cakes and cookies	1.83
Cereals	1.09
Pasta	1.85
Cornbread, corn muffins, tortillas	1.23
Biscuits	0.89
Cobblers, eclairs, turnovers, other pastries	0.54
Other grain products	2.32
TOTAL GRAIN PRODUCTS	17.19
Fruits	
Apple or apple juice	1.87
Peach	1.25
Pear	0.81
Pineapple	0.74

TABLE IV.6 *(continued)*

Food or Food Category	Percentage of All Servings
Other noncitrus fruits and juices	2.51
Noncitrus fruit, type not specified	1.55
Orange juice	0.95
Other citrus fruits and juices	0.76
Mixtures including fruits	1.39
TOTAL FRUITS	11.83
Vegetables	
Potatoes	4.51
Tomatoes	1.17
Lettuce salad with assorted vegetables	2.71
Beans, string, green/pole/snap	1.72
Cabbage salad, coleslaw	1.49
Carrots	1.30
Corn	1.03
Peas, green	0.79
Broccoli	0.75
Vegetable soups	0.74
Other vegetables and mixtures	7.91
TOTAL VEGETABLES	24.12
Fats	
Table fats	3.74
Salad dressings and other fat	0.73
TOTAL FATS	4.47
Sweets and Beverages	
Tea and coffee	9.24
Gelatin desserts/salads	1.23
Fruit ades and drinks, type not specified	1.99
Other sweets and beverages	0.42
TOTAL SWEETS AND BEVERAGES	12.88

SOURCE: Adult Day Care Study, Menu data, weighted tabulations.

constitute more than 15 percent of servings, with the most common menu item in the category other than milk itself being milk-based deserts such as custards and puddings.

Vegetables constitute the single most common food category, accounting for about 24 percent of all servings. Grain products, most importantly breads and rolls, is second in size, with about 17 percent of servings. Meat products and fruits each make up approximately 12 percent. The prevalence of these food components reflect their emphasis in the meal pattern.

3. Menu Diversity

Menu diversity is another important concern in evaluating meal patterns. To examine this issue, we computed the average number of **different** food items served per lunch by each center during the week.[8]

The results, summarized in Table IV.7, indicate that there is considerable diversity in CACFP meals. The median center serves an average of nearly 5 different items per day (or 24 different items during a five-day week). This result means that, even if "repeater" items on the menus that appeared more than once during the week had been dropped without replacement, the typical center would still have served about 5 items per lunch.

To be sure, comparing this five number estimate with the seven median **total number** items served per day (see Table IV.5) indicates that there is also a considerable amount of repetition--the number of **different** items is about two below the **total** number of items. However, not all repetition necessarily represents diminished quality. Some repetition, such as serving milk or coffee every day, may be expected and desirable and, in the case of milk, required by program regulations. Taking this into account, the data suggest that the CACFP centers are, by and large, successfully providing clients with diverse menus.

---

[8]This was defined as total different food items served at lunches during the week divided by the number of lunches served.

TABLE IV.7

WEEKLY LUNCH MENU DIVERSITY
(Percentages)

Average Number of Different Food Items Served at Lunch	
7 or more	2.1
5 to 6.9	35.3
3 to 4.9	58.7
Less than 3	3.9
Mean	4.7
Median	4.8

SOURCE: Adult Day Care Study, Menu data, weighted tabulations.

C. CACFP CLIENT DIETARY INTAKE

A key objective of the study was to examine the contribution of CACFP meals to the dietary intake of center clients. Among the important questions were the following:

- How many CACFP reimbursable meals do participants eat in a given day?
- What is clients' nutritional intake from CACFP reimbursable meals?
- How do clients' intake from CACFP reimbursable meals compare with established guidelines for dietary quality?
- What is the proportional contribution of CACFP reimbursable meals to the overall nutritional intake of program participants?

As we report in more detail below, most clients report relatively traditional meal patterns, consuming breakfast, lunch, supper, and one or more snacks. Virtually all CACFP clients consume their lunches at the centers; about 43 percent also consume breakfasts there. Most breakfasts and lunches consumed at the centers, as well as the majority of snacks, are claimed for CACFP reimbursement.

The evidence suggests that the adult component of the CACFP is attaining its objective of supplying lunches that provide at least one-third of the RDA to participants, with the typical client consuming at least this amount for most of the nutrients studied and more for many of them. The nutrient content of lunches appears to be more than adequate for the five nutrients identified in the past as warranting particular monitoring in elderly persons.

The composition of CACFP lunches, however, is too high in fats and protein and too low in carbohydrates, in relation to guidelines. There is some tendency for the salt content of CACFP lunches to be proportionately above recommended levels, but this is somewhat mitigated by relatively lower salt content of breakfasts and snacks. The cholesterol content of CACFP meals seems to be within established standards.

When overall consumption during a 24-hour period is considered, the median CACFP participant tends to consume somewhat below the RDA for food energy but to achieve the RDA for most other nutrients. For only 4 of the 14 micronutrients examined was the median consumption below 100 percent of the RDA. These micronutrients were vitamin E, vitamin B-6, magnesium, and zinc.

CACFP participants tend to have higher than recommended levels of fats (as a percentage of food energy) in their 24-hour dietary intakes and lower than recommended levels of carbohydrates. Sodium consumption tends to be above recommended levels, but the cholesterol content of foods tends to be within guidelines for the majority of CACFP participants.

In general, CACFP reimbursable meals contribute just less than 50 percent of a participant's total intake of most nutrients. This percentage is remarkably stable across nutrients. Clients who eat reimbursable breakfasts and lunches daily at the centers obtain approximately 55 to 60 percent of their total nutrient intake from these two meals.

The remainder of this section describes these findings in greater detail.

1. Research Methods

As a context for assessing the findings about the meal patterns and nutrient intake of CACFP clients, it is important to understand how the data have been collected and analyzed.

a. Data Collection

Obtaining dietary intake data for the CACFP population presents significant challenges that must be kept in mind in examining the results of the research. Traditional methods for collecting food consumption data had to be modified for this study. Perhaps the most common survey approach for obtaining information about dietary intake is the 24-hour recall technique, which asks respondents to provide detailed information about all foods they consumed in the 24 hours before the interview.

However, many CACFP clients are not able to respond accurately to a traditional 24-hour dietary recall instrument, because of disabilities and/or impairments.[9]

As a result, a hybrid approach to data collection was adopted. Specially trained data collectors employed by Mathematica Policy Research observed clients eating at the CACFP centers and recorded what they ate on a data collection instrument similar to that used for 24-hour recalls. Information on foods eaten during the remainder of the day was obtained through questions asked of both clients and proxy respondents who were knowledgeable about clients' eating patterns. (Typically, the proxy respondent was the at-home caregiver.)

Once the intake information was recorded, food codes were assigned, using the seven-digit food codes in the nutrient database maintained by the Human Nutrition Information Service of USDA. This food coding also drew upon information obtained from centers about the contents of meals served under the CACFP during the observation days. After food codes were assigned, the data were converted to nutrient information using a table look-up computer procedure. This software also imposed edit checks on the data to detect potential coding errors for problem resolution, as necessary.

An assessment of this methodology must recognize the potential for error in the nutrient information for individual person records on the data file. Many respondents, including the clients and their proxies, may have had difficulty recalling foods eaten away from the centers. Even foods eaten at the centers observed by trained interviewers may have been recorded with a margin of error in some instances. There are no reasons a priori to expect these reporting errors to be systematically high or low. Since most of the analysis is based on examining means and medians for variables in the data file, this variation resulting from measurement error at the individual level may not substantially affect the conclusions reported, because over- and underreporting tend to "average out." However,

[9]The same factors precluded the successful use of another common approach to obtaining intake data--i.e., the use of food diaries, in which respondents are asked to record information about the foods they eat during the day.

in addition to random measurement error in both directions, there could be systematic under- or overreporting of food consumption, resulting from the data collection methodologies used.

To assess the possibility that our data either systematically under- or overstate participants' intake, we have compared the levels of nutrient consumption in the database for the current study with those reported in several national food use studies. The results of these comparisons, reported in Appendix D, suggest that the levels of nutrient intake observed in our sample are generally somewhat higher than those reported in the comparison studies. The differences are in the range of 10 to 40 percent. On the one hand, this may be evidence that our data systematically overestimate CACFP clients' nutrient consumption. However, observing that CACFP participants have higher intakes in comparison to similarly defined persons in the general public is also consistent with a finding that the CACFP is having the program-intended effect of improving the dietary intake of participants.

b. Analytic Issues

The analysis strategy used in the research involves tabulating key meal consumption and nutrient intake variables both for the sample as a whole and for various subgroupings, based on age and gender. In much of the analysis, we focus on medians rather than means. Use of median values in the analysis makes it possible to discuss the "typical" client and also ensures that reported results are less sensitive to observed values for a few clients who may have very high levels of a particular nutrient.[10] Several issues that arise in implementing this overall approach are discussed below.

Use of RDAs in Assessing Consumption. Parts of the analysis focus on comparing clients' intakes of nutrients with Recommended Dietary Allowances (RDAs) of these nutrients, as determined by the Food and Nutrition Board, Commission on Life Sciences, National Research Council (1989). Two issues must be kept in mind in interpreting findings based on RDA

[10]In general, the medians and means are quite close, so that the two are effectively interchangeable in terms of the interpretation of findings.

comparisons: RDAs represent the levels of intake of essential nutrients that are thought to meet the nutrient needs of all healthy persons--not all persons require nutrient intakes as high as the RDAs; and there may be considerable variation between days in an individual's nutrient consumption, relative to the RDAs.

Relationship Between RDA and Typical Requirements. The RDAs are developed separately for age and gender groups, to reflect differences between these groups in nutrient requirements. However, even *within* such groupings, there is considerable variation between people in nutrient requirements. The established RDA levels provide adequate nutrient intake for almost all individuals. Thus, there is a substantial "safety margin" in the RDAs, as they apply to most individuals--even if an individual is somewhat below his or her RDA in the intake of some nutrient, he or she may still be getting an adequate amount. Although nutrient consumption in relation to the RDAs provides a useful indicator of potential nutritional problems, consumption below the RDAs is not necessarily a reason for serious concern.

Variation Among Days in Consumption. The RDAs are defined in terms of average consumption of nutrients over time. Good health does not necessarily require that a person must consume at the RDA levels (or even near them) **every** day; rather, the RDAs are guidelines for usual or average consumption. The current data set, which contains information on only one day of dietary intake for each individual, may show some individuals below the RDAs, even though, from a longer perspective, their nutrient intake is perfectly adequate. Consumption below the RDAs is again not necessarily a cause for serious concern.

Standards for the Macronutrient, Sodium, and Cholesterol Content of Foods. Several important aspects of dietary quality are not addressed in the RDA standards. America has become increasingly aware of the importance for good health of assuring an appropriate distribution of macronutrients, such as total and saturated fat, within the foods consumed. Attention has also been placed on the importance of limiting sodium and cholesterol intake.

The Joint Nutrition Monitoring Evaluation Committee (JNMEC) and various other public health initiatives, including the *Dietary Guidelines for Americans* and the National Academy of Science's National Research Council's (NRC) *Diet and Health,* have recommended that these food components be monitored, and for some components, have made recommendations about intake. The *Dietary Guidelines* provide quantitative standards only for total and saturated fat. The recommendations are that:

- Total fat should be 30 percent or less of food energy.
- Saturated fat should be 10 percent or less of food energy.

The NRC's *Diet and Health* recommended intake for total and saturated fat is the same as that recommended by the *Dietary Guidelines.* In addition, NRC recommends the following standards for carbohydrate, protein, cholesterol, and sodium intake:

- Carbohydrates should be at least 55 percent of food energy.
- Protein should be about 15 percent of food energy.
- Daily sodium intake should be 2,400 milligrams or less per day.
- Daily cholesterol consumption should be 300 milligrams or less per day.

Currently, the adult component of the CACFP is encouraged by USDA to consider the *Dietary Guidelines* when planning menus. The guidelines, however, are not requirements currently placed on participating centers. The NRC recommendations are not mentioned in any official program materials. The *Dietary Guidelines* and the NRC standards are presented in this report as reference points to assist the reader in interpreting the results.

Definition of Eating Occasions. Parts of the analysis are disaggregated by "eating occasion" and "meal." An eating occasion is defined as any discrete time at which a food or beverage is consumed.

For instance, if a respondent reported having cookies and juice at 10:30 A.M. and then drinking milk at 11:00, these would represent two eating occasions.

Meals eaten at CACFP centers were divided into different kinds of meals (breakfast, lunch, supper, snack), according to the CACFP program regulations used to define these terms for reimbursement purposes. Meals eaten away from CACFP centers were defined in relation to the meals eaten at the centers. For instance, if no breakfast was eaten at the center, the eating occasion with the highest food energy content before the respondent came to the center that day was defined as breakfast.[11] Similarly, if no supper was eaten at the center, the eating opportunity after leaving the center with the highest food energy content was defined as supper.

The tables included in this chapter summarize key findings from the analysis and highlight the main conclusions drawn from the data. More comprehensive tables are included in Appendix G.

2. Meal Patterns

To provide a context for analysis of CACFP clients' nutrient intakes, we examine the meal patterns of CACFP clients, both when they are at the centers and during the remainder of the day.

a. Common Meal Patterns

When data on all eating occasions, both at the CACFP center and at home, are examined, most of the CACFP clients in the sample ate at least the traditional three meals. About 89 percent had breakfast, 99 percent had lunch, and 96 percent had supper (see Table IV.8).[12] In addition, snacking was common, with 32 percent of clients eating a morning snack and 60 percent eating an

[11]If the client ate a center breakfast but also consumed a meal before coming to the center that had a higher food energy content, the client was defined as having eaten two breakfasts. If the prior meal at home had less food energy content than the center breakfast, the meal at home was defined as a snack.

[12]On the basis of the definitions of meals reported earlier, even a small eating occasion prior to coming to the center would be interpreted as breakfast, if no other breakfast was consumed. This definition is similar for supper. Thus, some of the "breakfasts" and "suppers" reported in the table may have been quite small, such as a glass of juice and toast or a single food item.

TABLE IV.8

NUMBER AND TYPES OF EATING OCCASIONS
DURING A TYPICAL DAY

	All CACFP Clients (Percentage)
Percentage of Clients Eating	
Breakfast	89
Morning snack	32
Lunch	99
Afternoon snack	60
Supper	96
Evening snack	37
Number of Eating Occasions	
1	<1
2	3
3	17
4	24
5 or more	55
Median	5
Mean	4.7
Sample Size	**942**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

afternoon snack. More than half of the clients in the sample had five or more eating occasions per day; only four percent had fewer than three.

b. Meals Eaten at the Center

By far the most commonly eaten meal at participating adult day care centers is lunch. Virtually all of the CACFP sample (97 percent) had lunch at the center on the day of the data collection (see Table IV.9). More than 40 percent had breakfast at the center; very few had supper there.[13]

There is wide variation in the patterns of meals eaten at the center. The most common pattern is breakfast, lunch, and an afternoon snack (21 percent). However, other patterns observed for 15 percent or more of the sample include lunch only; morning snack, lunch, and afternoon snack; and breakfast and lunch.

c. Reimbursable Meals Eaten at the Center

It is possible for some meals eaten at the CACFP centers to be nonreimbursable under the program (see Section IV.A.2). In practice, however, as shown in Table IV.10, 96 percent or more of the breakfasts and lunches eaten at the centers are reimbursed under the program. The majority of the snacks consumed are also reimbursed, although the percentages tend to be somewhat lower (61 percent for morning snacks and 86 percent for afternoon snacks).

3. Nutrient Content of CACFP Reimbursable Meals Consumed by Clients

An important goal of the CACFP is to provide funds to centers to assist them in providing nutritious meals to clients. This section examines the nutritional content of the meals consumed by clients that were claimed for reimbursement under the program.

[13]Because of the very small sample sizes for suppers and the fact that very few CACFP suppers are served, the analysis of CACFP meals in the remainder of this chapter will focus principally on meals prior to supper.

TABLE IV.9

NUMBER AND TYPES OF CENTER EATING OCCASIONS DURING A TYPICAL DAY

	All CACFP Clients (Percentage)
Percentage of Clients Eating	
Breakfast	43
Morning snack	31
Lunch	97
Afternoon snack	49
Supper	1
Number of Eating Occasions	
1	20
2	39
3	38
4	1
5	1
Pattern of Meals Received	
Breakfast, morning snack, lunch, afternoon snack	1
Breakfast, morning snack, lunch	1
Morning snack, lunch	12
Breakfast, lunch, afternoon snack	21
Morning snack, lunch, afternoon snack	15
Breakfast and lunch	18
Lunch and afternoon snack	9
Lunch only	18
Other patterns	5
Sample Size	**942**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

TABLE IV.10

MEALS EATEN AT CENTER THAT ARE REIMBURSED BY THE CACFP
(Percentages)

	All Clients
Meal Type	
Breakfast	96
Morning Snack	61
Lunch	97
Afternoon Snack	86
Sample Size	**942**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

a. Food Energy, Protein, and Micronutrients in CACFP Reimbursable Meals

Lunches. The law authorizing the CACFP program requires that lunches served by each adult day care center receiving CACFP reimbursement provide, on average, approximately one-third of the nutrient RDAs for program participants. The survey evidence suggests that the program is achieving this objective, at least for the typical participant.

The one-third goal is met almost precisely for the median intake of food energy at CACFP lunches and is exceeded for most other nutrients. The typical client consumes 32 percent of the RDA for food energy in a CACFP lunch (see Table IV.11), and higher levels of consumption relative to the RDAs are achieved for protein and most micronutrients. The typical client obtains 61 percent of the RDA for protein from a CACFP lunch.

The relevant percentages for other nutrients range from a low of 31 (zinc) to a high of 79 (vitamin B-12). Most estimated consumption levels exceed 40 percent of the RDAs--well above the 33 percent target. Biological assessment studies have shown elderly populations to be at particular risk for inadequate consumption of five micronutrients: vitamin A, thiamin, riboflavin, iron, and calcium.[14] It is interesting to note in the table that the typical CACFP lunch consumed includes 40 percent or more of each of these nutrients.

It is important to highlight the fact that the entries in Table IV.11 are for median observations. This means that half the observations are below the percentages of RDAs shown. Thus, there are substantial numbers of program participants whose intake from CACFP reimbursable lunches are below the target RDAs--about half in the case of food energy. In interpreting this, however, it should be remembered that RDAs are set quite conservatively, so that consumption levels somewhat below the RDAs may be quite adequate for good health in most people. From the point of view of

[14]Bowman and Rosenberg 1982; and Young 1983. Similar lists of micronutrients warranting particular monitoring have been obtained from dietary survey data. See Young 1983; U.S. Department of Health and Human Services, U.S. Department of Agriculture 1986; Betts 1988; and Blumberg 1989.

TABLE IV.11

MEDIAN VALUES OF NUTRIENT INTAKES FROM CACFP REIMBURSABLE MEALS

Dietary Component	Breakfast	Morning Snack	Lunch	Afternoon Snack
	Percentage of RDA	Percentage of RDA	Percentage of RDA	Percentage of RDA
Macronutrients				
Food Energy (kcal)	12	10	32	8
Protein (gm)	15	10	61	5
Vitamins				
Vitamin A (mcg-re)	17	10	44	2
Vitamin C (mg)	45	4	45	8
Vitamin E (mg)	10	9	36	4
Thiamin (mg)	22	13	40	9
Riboflavin (mg)	27	14	57	9
Niacin (mg)	14	9	49	5
Vitamin B-6 (mg)	10	8	34	5
Folate (mcg)	23	11	38	7
Vitamin B-12 (mcg)	19	6	79	1
Minerals				
Calcium (mg)	21	9	50	4
Iron (mg)	16	10	42	8
Phosphorus (mg)	26	15	66	7
Magnesium (mg)	15	11	34	6
Zinc (mg)	7	5	31	2
Sample Size	**361**	**207**	**863**	**390**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

assessing program performance, the fact that at least half of the clients are consuming the RDAs seems to demonstrate that the **meals being made available** are sufficient to achieve the RDAs. Given the older ages and functional limitations or disabilities of CACFP clients, it is not surprising that many are not fully availing themselves of the foods being offered.[15]

To further examine this issue, Table IV.12 provides information on the percentages of program participants whose reported consumption was below 25 percent of the RDAs for their CACFP reimbursable lunches. These tabulations show the proportions of clients who miss the one-third RDA guideline by a substantial amount. They also show those for whom low nutrient intake could be a significant problem if similar patterns were followed at other meals. In general, depending on the nutrient, 10 to 30 percent of the sample have consumption levels substantially below the lunch target of one-third of the RDAs. This finding could potentially result either from clients not consuming all their lunches or from the meals not offering sufficient nutrients to attain one-third RDAs. However, examination of data disaggregated by center (not shown) suggests that the failure to meet the target is due largely to clients not consuming all of their meals. In particular, the typical pattern within a center is similar to that for the sample as a whole, with the majority of the clients in a center meeting 25 percent of the RDA for various nutrients but with some clients below those levels. This suggests that, in general, the meals being served contain the desired nutrients (since most clients are obtaining them) but that some clients fail to consume their entire meals.

Breakfasts. The typical CACFP client consumes 12 percent of the food energy RDA and 15 percent of the RDA for protein from program-reimbursable breakfasts. For the micronutrients,

[15]Physiological conditions, such as poor dentition or loss of olfactory and taste thresholds, chronic disease, consumption of medications, and isolation and depression, can affect clients' ability or desire to eat, preventing clients from receiving the full nutrients offered in program meals.

TABLE IV.12

PERCENTAGE OF CLIENTS BELOW 25 PERCENT OF RDA FOR CACFP REIMBURSABLE LUNCH

Dietary Component	All CACFP Clients
Macronutrients	
Food energy (kcal)	28
Protein (gm)	11
Vitamins	
Vitamin A (mcg-re)	25
Vitamin C (mg)	25
Vitamin E (mg)	26
Thiamin (mg)	16
Riboflavin (mg)	11
Niacin (mg)	16
Vitamin B-6 (mg)	29
Folate (mcg)	23
Vitamin B-12 (mcg)	15
Minerals	
Calcium (mg)	26
Iron (mg)	19
Phosphorus (mg)	8
Magnesium (mg)	24
Zinc (mg)	33
Percentage of Clients Eating the Meal	92
Sample Size	**863**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

reimbursable breakfast consumption levels in relation to RDAs range from a low of 7 percent for zinc to a high of 45 percent for vitamin C.[16]

The similarity of the RDA-normed consumption levels for food energy and protein in the breakfast data is interesting, given that in the *lunch* data, the protein content (in relation to the RDAs) was much higher than the food energy content. This difference between breakfasts and lunch probably results because the breakfast meal pattern prescribed in the program regulations does not contain a meat or meat substitute, whereas the lunch pattern does.

Snacks. Nutrient intakes from CACFP snacks tends to be similar to, but somewhat lower than, that from breakfasts.[17] The typical client consumes nearly 10 percent of the food energy RDA and 10 percent of the protein RDA from the morning snack. Nutrient intake from afternoon snacks tends to be slightly smaller; the typical client consumes eight and five percent, respectively, of the food energy and protein RDAs. For the micronutrients, the percentages of RDAs attained from specific snacks tend to be below 12 percent for the morning snack and below 9 percent for the afternoon one.

b. Nutrient Content of All CACFP Meals Consumed Throughout the Day

As noted earlier, many clients consume more than one reimbursable meal at the CACFP center. To supplement the meal-by-meal analysis, the nutrient content of all reimbursable meals eaten by each client at the center was estimated. Overall, the typical client obtains 42 percent of his or her food energy RDA and 71 percent of his or her protein RDA level from CACFP reimbursable meals (see Table IV.13). The comparable levels of micronutrients obtained tend to be in the range of 40

---

[16]The program regulations provide no explicit target for percentages of the RDAs expected to be met by breakfasts; thus, there is no clear yardstick to measure the information about breakfasts shown in Table IV.11.

[17]The program regulations do not provide explicit target for percentages of the RDAs expected to be met by snacks. As with breakfasts, there is no clear yardstick to measure the information about snacks shown in Table IV.11.

TABLE IV.13

MEDIAN VALUES OF NUTRIENT INTAKES FROM CACFP REIMBURSABLE MEALS: ALL MEALS

Dietary Component	All Clients' Percentage of RDA
Macronutrients	
Food energy (kcal)	42
Protein (gm)	71
Vitamins	
Vitamin A (mcg-re)	55
Vitamin C (mg)	83
Vitamin E (mg)	44
Thiamin (mg)	55
Riboflavin (mg)	73
Niacin (mg)	59
Vitamin B-6 (mg)	43
Folate (mcg)	56
Vitamin B-12 (mcg)	94
Minerals	
Calcium (mg)	58
Iron (mg)	52
Phosphorus (mg)	80
Magnesium (mg)	44
Zinc (mg)	36
Percentage of Clients Eating Any CACFP Reimbursable Meals	98
Sample Size	**920**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

to 80 percent, with the lowest levels being 36 percent (zinc) and the highest being 94 percent (vitamin B-12).

c. Macronutrient Composition of CACFP Meals

There are substantial divergences between the macronutrient contents of the CACFP lunches and the patterns recommended by USDA/DHHS in the *Dietary Guidelines for Americans* and the guidelines contained in NRC's *Diet and Health.* For the CACFP reimbursable lunch eaten by the typical client, carbohydrates represent only 45 percent of food energy (see Table IV.14). This is well below the 55 percent standard. Only 18 percent of clients in the sample reach the 55 percent level for carbohydrate.

Correspondingly, consumption of fats and protein tends to be higher than the guidelines. For the reimbursable lunch consumed by the typical CACFP client, fat represents 35 percent of food energy and saturated fat is 12 percent of food energy, but the guidelines recommend 30 and 10 percent, respectively. Only 24 percent and 31 percent of the clients consumed lunches with fat content below these two guidelines. The median proportion of food energy at lunch from protein is 19 percent. The relevant guideline is approximately 15 percent.

As compared to the lunches, the macronutrient patterns observed for breakfasts and snacks are more in accordance with established standards. For the typical CACFP breakfast consumed, carbohydrates account for a large (65 percent) proportion of food energy. Fat and saturated fat are 24 and 9 percent, respectively, each slightly below the standards. Protein is at 12 percent, within the standard.

Because lunch is by far the most common CACFP meal, the macronutrient composition patterns for all meals combined are similar to the patterns observed for lunch. The inclusion of breakfasts and snacks (which tend to reflect the standards more than lunch) in the "all meals" pattern means the overall pattern is not quite as divergent from the standards as the lunch patterns are. Nevertheless, even when all CACFP meals eaten are aggregated (as shown in Table IV.14), there is a clear

TABLE IV.14

INTAKE OF MACRONUTRIENTS FROM CACFP REIMBURSABLE MEALS

Dietary Component	CACFP Reimbursable Meals				
	Breakfast	Morning Snack	Lunch	Afternoon Snack	All Meals
Carbohydrates as Percentage of Food Energy					
Median	65	59	45	73	50
Percentage Above 55 Percent	79	53	18	66	31
Fat as a Percentage of Food Energy					
Median	24	27	35	21	33
Percentage Below 30 Percent	72	47	24	66	33
Saturated Fat as a Percentage of Food Energy					
Median	9	9	12	7	11
Percentage Below 10 Percent	35	48	31	60	33
Protein as a Percentage of Food Energy					
Median	12	11	19	7	17
Percentage Between 10 and 20 Percent	47	48	48	30	59
Sample Size	**361**	**207**	**863**	**390**	**920**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

NOTE: Table entries give data for each dietary component for those clients who ate the reimbursed meal indicated in the column headings. The "All Meals" column is for all reimbursed meals the client ate.

tendency for carbohydrates to be too low a proportion of food energy, for levels of fats and saturated fats to be somewhat high (by about 10 percent), and for protein to be somewhat high.

d. Salt and Cholesterol Intake

There is some tendency for CACFP lunches to have more salt than is consistent with NRC guidelines. For a typical CACFP client, the sodium intake from his or her reimbursable lunch is 50 percent of the recommended daily maximum (see Table IV.15). Thus, the client is getting approximately half of the suggested maximum sodium intake at lunch, even though, as noted earlier, only approximately a third of the food energy RDA is obtained at lunch. If the client maintains approximately the same ratio of sodium to food energy in his or her other meals and consumes 100 percent of the RDA of food energy, he or she will consume substantially more sodium during the course of the day than is recommended.

The sodium content of reimbursable breakfasts and snacks appear to be more in line with the recommended amounts. Intake of sodium from the typical CACFP reimbursable breakfast is equal to 14 percent of the recommended daily maximum. This is only slightly higher than the estimated 12 percent of food energy contained in that breakfast. In relation to the standard, the sodium content of morning snacks is comparable to the corresponding food energy proportions, while it is lower for afternoon snack. It appears that the use of salty snacks is quite low.

The cholesterol content of CACFP meals appears to be largely consistent with NRC recommendations. The intake of cholesterol from the typical CACFP client's reimbursable lunch is approximately 100 milligrams, which is approximately one-third of the recommended daily maximum. Using the same reasoning employed earlier for sodium content, this is a level which, if sustained through other meals of the day, would lead to daily consumption consistent with the standards. This conclusion is reinforced by the data for the cholesterol intake from breakfasts and snacks, where the proportions of the cholesterol standard consumed were considerably below the proportions of the food RDAs consumed.

TABLE IV.15

INTAKE OF SODIUM AND CHOLESTEROL FROM CACFP REIMBURSABLE MEALS

Dietary Component	CACFP Reimbursable Meals				
	Breakfast	Morning Snack	Lunch	Afternoon Snack	All Meals
Sodium as a Percentage of the Daily Recommended Maximum					
Median	14	10	50	5	61
Mean	17	14	55	10	67
Cholesterol as a Percentage of the Daily Recommended Maximum					
Median	5	3	32	1	36
Mean	12	9	38	5	46
Sample Size	**361**	**207**	**863**	**390**	**920**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

NOTE: Table entries give the percentage distribution for each dietary component for the clients who eat the reimbursable meal indicated in the column heading.

4. Overall Dietary Intake of CACFP Participants

The analysis in the previous section focused on the nutrient intake from CACFP reimbursable meals. Here we extend this analysis to consider the overall intake of CACFP participants throughout the day.

a. Nutrient Intake

When food intake for the entire 24-hour period covered by the survey is considered, the typical client consumes below the RDA level for food energy but appears to have adequate levels of most other nutrients. The typical client consumes approximately 86 percent of the food energy RDA during the course of the day, with only an estimated 35 percent of clients attaining 100 percent of the RDA (see Table IV.16). However, for most of the other nutrients studied, median reported intake levels are in the range of 110 to 150 percent of the RDAs. Median intakes are below the RDAs for only four nutrients other than food energy: vitamin E at 88 percent of the RDA, vitamin B-6 at 98 percent, magnesium at 91 percent, and zinc at 77 percent.

b. Macronutrient Content

The macronutrient content patterns found in the total foods eaten by CACFP participants during the 24-hour period are similar to the patterns observed previously for their CACFP reimbursable meals. As shown in Table IV.17, the typical CACFP client's diet tends to have too few carbohydrates and too much fat. The median sample member consumed 51 percent of his or her food energy in carbohydrates, below the 55 percent standard. Only 30 percent of the sample met or exceeded the standard. About 23 percent of the sample had diets with carbohydrate content below 45 percent of food energy, which is 10 percentage points below the guideline.

The median CACFP client consumed 33 percent of his or her food energy as fat, above the guideline of 30 percent. Significant numbers of participants--approximately 17 percent--exceeded the overall fat standards by 10 percentage points or more, consuming at least 41 percent of their food

TABLE IV.16

MEAN VALUES OF NUTRIENT INTAKES FROM ALL MEALS CONSUMED DURING THE 24-HOUR PERIOD

Dietary Component	All Clients	
	Median Consumption as a Percentage of RDA	Percentage of Clients Exceeding RDA
Macronutrients		
Food energy (kcal)	86	35
Protein (gm)	145	79
Vitamins		
Vitamin A (mcg-re)	118	57
Vitamin C (mg)	182	77
Vitamin E (mg)	88	43
Thiamin (mg)	127	69
Riboflavin (mg)	147	80
Niacin (mg)	135	73
Vitamin B-6 (mg)	98	48
Folate (mcg)	128	65
Vitamin B-12 (mcg)	194	86
Minerals		
Calcium (mg)	106	53
Iron (mg)	119	66
Phosphorus (mg)	156	86
Magnesium (mg)	91	39
Zinc (mg)	77	29
Sample Size	**942**	

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

TABLE IV.17

INTAKE OF MACRONUTRIENTS, CHOLESTEROL, AND SODIUM FROM ALL MEALS DURING THE 24-HOUR PERIOD

	All CACFP Clients (Percentage)
Carbohydrate	
Median Percentage of Food Energy from Carbohydrate	51
Distribution of Intake as a Percentage of Food Energy	
Less than 45 percent	23
45-55 percent	48
56-65 percent	23
More than 65 percent	7
Total Fat	
Median Percentage of Food Energy from Total Fat	33
Distribution of Intake as a Percentage of Food Energy	
Less than 20 percent	3
20-30 percent	28
31-35 percent	26
36-40 percent	25
41-50 percent	15
Greater than 50 percent	2
Saturated Fat	
Median Percentage of Food Energy from Saturated Fat	11
Distribution of Intake as a Percentage of Food Energy	
Less than 5 percent	1
5-10 percent	30
11-15 percent	52
16-20 percent	16
Greater than 20 percent	1
Protein	
Median Percentage of Food Energy from Protein	17

TABLE IV.17 *(continued)*

	All CACFP Clients (Percentage)
Distribution of Intake as a Percentage of Food Energy	
Less than 5 percent	<1
5-15 percent	45
16-25 percent	51
Greater than 25 percent	3
Sodium	
Median Intake (mg)	3,000
Distribution	
Less than 2,400 mg	28
2,401-3,000 mg per day	18
More than 3,000 mg per day	54
Dietary Cholesterol	
Median Intake (mg)	236
Distribution	
Less than 300 mg	67
300-400 mg per day	13
More than 400 mg per day	20
Sample Size	**942**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

energy as fat. Similar patterns were found for saturated fat, where the median percentage content of meals (11) is slightly above the guideline of 10 percent.

c. Sodium and Cholesterol Content of Foods Eaten

The sodium and cholesterol intake patterns in the overall 24-hour data mirror those found when CACFP reimbursable meals are examined separately. The median CACFP participant in the sample consumed 3,000 milligrams of sodium during the observation day, well above the 2,400 milligram maximum recommended. Only approximately 28 percent were at or below the NRC guideline (see Table IV.17). In general, cholesterol levels do not seem to be a significant problem for the sample. The median 24-hour cholesterol intake was 236 milligrams, and approximately two-thirds were below the recommended maximum of 300 milligrams.

5. Contribution of CACFP Reimbursable Meals to the Overall Dietary Intake of Participants

The data examined so far can be combined to assess the overall percentage contribution of CACFP reimbursable meals to the dietary intake of program participants. In general, CACFP reimbursable meals contribute just under 50 percent of a participant's total intake of most nutrients. This percentage is remarkably stable across nutrients; it is 49 percent for food energy and ranges between 46 percent and 54 percent for most of the nutrients examined (see Table IV.18). Non-reimbursable meals eaten at the CACFP center account for two to three percent of most nutrients, with noncenter meals accounting for the rest.

It is also of interest to examine the contribution of CACFP reimbursable meals to the dietary intake of clients who eat most of their meals at the CACFP centers and are most likely to be dependent on the CACFP for a significant share of their nutritional intake. To examine this, Table IV.19 presents information comparable to that presented earlier for a sample limited to clients who eat *both breakfast and lunch* at the CACFP centers. As shown in the table, on average, clients who eat both breakfast and lunch at a CACFP center obtain approximately 55 to 60 percent of their total

TABLE IV.18

PERCENTAGE OF TOTAL DAILY DIETARY INTAKE BY SOURCE, ALL CACFP CLIENTS

Dietary Component	CACFP Reimbursable Meals	Other Center Meals	Noncenter Meals	Total
Macronutrients				
Food Energy	49	3	49	100 %
Protein	51	2	48	100 %
Carbohydrate	48	3	49	100 %
Total Fat	50	3	47	100 %
Saturated Fat	51	3	47	100 %
Vitamins				
Vitamin A	54	2	44	100 %
Vitamin C	53	3	44	100 %
Vitamin E	53	3	44	100 %
Thiamin	47	2	51	100 %
Riboflavin	51	3	47	100 %
Niacin	47	2	51	100 %
Vitamin B-6	48	2	50	100 %
Folate	48	2	50	100 %
Vitamin B-12	52	2	45	100 %
Minerals				
Calcium	57	3	41	100 %
Iron	46	2	52	100 %
Phosphorus	52	2	46	100 %
Magnesium	50	3	47	100 %
Potassium	52	3	46	100 %
Zinc	49	2	49	100 %
Other Components				
Sodium	49	2	49	100 %
Cholesterol	50	2	48	100 %
Dietary Fiber	50	2	48	100 %

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

NOTE: Table entries indicate the percentage of daily intake from the source indicated in the column head for each dietary component indicated in the row head.

TABLE IV.19

PERCENTAGE OF TOTAL DAILY DIETARY INTAKE BY SOURCE, CLIENTS WITH CACFP REIMBURSABLE BREAKFAST AND LUNCH

Dietary Component	CACFP Reimbursable Meals	Other Center Meals	Noncenter Meals	Total
Macronutrients				
Food Energy	56	1	43	100 %
Protein	56	1	43	100 %
Carbohydrate	56	1	43	100 %
Total Fat	56	1	43	100 %
Saturated Fat	57	1	42	100 %
Vitamins				
Vitamin A	61	1	39	100 %
Vitamin C	62	1	37	100 %
Vitamin E	60	1	40	100 %
Thiamin	55	1	45	100 %
Riboflavin	58	1	41	100 %
Niacin	55	1	45	100 %
Vitamin B-6	54	1	45	100 %
Folate	55	1	44	100 %
Vitamin B-12	58	1	41	100 %
Minerals				
Calcium	62	2	37	100 %
Iron	53	1	46	100 %
Phosphorus	59	1	41	100 %
Magnesium	56	1	43	100 %
Potassium	58	1	41	100 %
Zinc	54	1	45	100 %
Other Components				
Sodium	56	1	43	100 %
Cholesterol	56	1	43	100 %
Dietary Fiber	55	<1	45	100 %
Sample Size				**331**

SOURCE: Adult Day Care Study, Client Survey, weighted tabulations.

nutrient intake from CACFP meals. The CACFP is the single most important source of their nutrition, but they also remain heavily reliant on non-CACFP meals as well.

More generally, considering dietary intake from program reimbursable meals and over the 24 hour period, both relative to RDAs, shows that while the CACFP is an important source of clients' nutrition, clients typically are not overly dependent on program meals for their daily nutrition. The typical CACFP client has intake above the RDA for most nutrients over the 24-hour period, and, for all nutrients except calcium and phosphorous, intakes from meals consumed away from the adult day care center and from center meals not claimed for reimbursement exceed the nutrient intake from CACFP reimbursable meals. The differences range from a minimum of 1 percent higher (for riboflavin) to a maximum of 29 percent higher (for iron).[18]

[18]See Tables IV.13, IV.16, and IV.18.

V. ISSUES RELATED TO PROGRAM ACCESSIBILITY AND PARTICIPATION BY CENTERS

The adult component of the Child and Adult Care Food Program (CACFP) provides funding and commodities to help participating centers provide nutritious meals to eligible elderly and functionally impaired adult clients. The ability of the program to meet the nutritional needs of eligible clients depends on two conditions: (1) that the meals and snacks provided by participating centers are nutritious, and (2) that centers eligible for the program actually participate. The program is attaining its objective of providing reimbursable lunches that provide at least one-third of the Recommended Dietary Allowances (see Chapter IV). However, while many centers participate, more than half of the centers estimated to be eligible for the program are not participating (see Chapter II). This chapter examines several issues about program accessibility and participation by centers as it relates to how well the program is meeting it's mission of providing nutrition assistance to people who need it and the implications for program growth.

A. REFERRAL METHODS AND OUTREACH ACTIVITIES FOR THE CACFP PROGRAM

Federal regulations governing the CACFP stipulate that the state agencies administering the program must notify centers about the availability of the program, the requirements for participation, and the application procedures to be followed. This section examines how participating centers typically find out about the CACFP. It then examines the types of outreach activities conducted by state agencies administering the CACFP and other state agencies to get nonparticipating centers to participate in the program.

The referral source most commonly mentioned by center directors was the state CACFP-administering agency. State agencies administering the CACFP reported identifying eligible adult day care centers through other state agencies that license and/or administer adult day care programs and from state adult day care associations. Once they have identified centers, state agencies conduct

center outreach by mass mailings, by direct marketing through adult day care associations, and by conducting technical assistance workshops.

1. How Participating Centers Learn About the Program

As shown in Table V.1, centers participating in the CACFP learn about the program in several ways. The referral source most commonly mentioned by center directors was the state CACFP-administering agency. Fifty-four percent of CACFP center directors mentioned that their center learned about the adult component of the CACFP through the state-administering agency. Twenty-one percent learned about the program from the national or state adult day care association, and 21 percent mentioned professional contacts (e.g., conferences).

2. State Agency Outreach Activities

In interviews with CACFP state agency staff, respondents in 44 (86 percent) of the 50 states and the District of Columbia reported that they have conducted outreach to nonparticipating centers at least once since the inception of the program.[1] Of the seven states not conducting any outreach, two respondents stated they did not operate an adult component of the CACFP, two said they did not have the staff time to devote to outreach, and three did not give a reason for not conducting outreach.

State CACFP agencies identify eligible centers through other state agencies that license or administer adult day care programs. Once they identify eligible centers, state administering agencies conduct center outreach in three basic ways: by mass mailings, by direct marketing through adult day care associations, and by conducting technical assistance workshops (see Table V.2). The most common method of notifying centers of the CACFP was through mass mailings to adult day care centers identified by other state agencies or associations. Twenty-seven state respondents said that

[1]The 44 states include eight states that do not conduct the outreach themselves but have the state licensing agency or Agency on Aging conduct the outreach.

TABLE V.1

HOW PARTICIPATING CENTERS BECAME AWARE OF CACFP
(Percentages)

	Percentage of CACFP Centers
State CACFP Administering Agency	54
Another State Agency	18
National or State Adult Day Care Association	21
CACFP Sponsoring Organization	9
Other Parent or Sponsoring Organization	5
Professional Contacts	21
Informal Contact with Staff of Participating Centers	17
Other	2
Unweighted Sample Size	**270**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Percentages do not total 100 percent because centers could mention more than one way of becoming aware of the program.

TABLE V.2

TYPES OF OUTREACH CONDUCTED BY STATE CACFP AGENCIES
(For States that Have Conducted Outreach)

	Number of States	Percentage of States[a]
Mass Mailings to Centers	27	63
Dissemination of Information to Licensing Agency/State Association	19	45
Attendance/Presentations at State Association Meetings	11	26
Workshop/Meetings with Eligible Centers	6	14
Advertisements	4	9
One-on-One Center Contacts	4	9

SOURCE: Adult Day Care Study, State Census Interviews.

[a]Distribution calculated for the 44 states reporting some form of outreach since the program's inception.

they had done mass mailings. These mailings usually included a letter of introduction to and a fact sheet about the adult component of the CACFP. In its first mailing, one state also sent an application packet. The state stopped this procedure because the response was too small to justify the higher mailing and handling costs.

State agencies rely heavily on the state licensing agencies or the state adult day care associations to conduct their outreach. Nineteen respondents in states where the CACFP agency does some of its own outreach reported involvement of the licensing agency and/or the association in disseminating information about CACFP to centers.[2] This involvement can take three forms: (1) the state licensing agency or association informs its centers about the program and encourages their participation (17 states); (2) it distributes information furnished by the CACFP agency to its membership (5 states); or (3) it uses both of the preceding methods. In addition, some state agencies (11 states) send representatives to adult day care association meetings in their states to increase awareness about the CACFP. These meetings are usually held annually, and a state agency representative may lead a session of the meeting on the opportunities for CACFP reimbursement. Four state respondents also said that they have advertised in association and state newspapers to recruit new participants.

Some states conduct workshops for eligible and interested centers. Six states reported that they have conducted workshops or outreach meetings for interested centers in an effort to facilitate the application process. Workshops are announced either in the annual mailings or in newsletters of the state licensing agency or the adult day care association. These workshops were viewed as valuable in correcting misconceptions about the program. In states with a small number of adult day care centers, four of the state agencies reported providing this type of technical assistance one-on-one through telephone calls or visits to centers.

---

[2]In addition, three states rely solely on these groups to do their outreach; the CACFP agency does not do any of its own outreach.

B. CENTER DIRECTORS' ATTITUDES TOWARD THE CACFP

Directors of centers participating in the CACFP were asked a series of questions to assess their attitudes toward the CACFP, including satisfaction with meal reimbursement rates, burdens associated with program participation, appropriateness of the meal requirements, and the importance of the program in meeting clients' nutritional needs. Examining participating center directors' attitudes toward participation in the CACFP is important since it provides information that can assist policymakers and program officials in identifying the need for regulatory or programmatic changes which could prevent centers from dropping out of the program.

Overall, directors of centers participating in the CACFP appear satisfied with the program. Indeed, virtually all of the participating centers surveyed said that they planned to continue participating, and state agency respondents report that few centers have dropped out of the program. However, CACFP center directors had some specific concerns about the level of staff burden associated with participating in the program, especially with monthly reporting and record-keeping requirements, perceived that reimbursements for full-priced meals and snacks were too low, and felt that some aspects of the meal pattern requirements (milk requirement) should be changed.

1. Opinions About Program Features

Staff Burdens Associated with Program Participation. In order to ensure accountability of program funds and that meals and snacks served to adult clients are nutritious, centers participating in the CACFP are required to keep a variety of records to document compliance with program regulations (see discussion in Chapter I, Section A.2). At the same time, providing care to elderly and functionally impaired adults places many demands on center staff. To assess burden on staff from program application and record-keeping requirements, CACFP center directors were asked about staff burden associated with the initial application and renewal process, general program

requirements, monthly record keeping and accounting, and procedures for obtaining USDA commodities.[3]

When asked to characterize the application process on a four-point scale ranging from "not at all burdensome" to "very burdensome," most center directors (72 percent) chose one of the two middle categories, with the greatest number (43 percent) choosing the second-highest category, "somewhat burdensome" (see Table V.3). Eighteen percent chose the highest response category, "very burdensome." Similar patterns of responses were given for meeting general program requirements and monthly reporting requirements. One-fifth of CACFP center directors found that monthly record keeping associated with claiming meal reimbursement and meeting meal patterns was "very burdensome." Few centers receive USDA commodities, but 86 percent of those that do thought the process of ordering and receiving commodities was straightforward and not burdensome to staff.

CACFP center directors were asked an open-ended question allowing them to list specific aspects of program features that could be changed to reduce the burden on staff of program participation. Twenty percent of CACFP directors reported that there was "too much paperwork" in response to the open-ended question (see Table V.4). Nineteen percent wanted to simplify client eligibility determination, for example, either by simplifying forms or requiring centers to report changes only. Twelve percent of CACFP directors wanted to change the application/renewal process. Directors did not specify how the application process should be changed to reduce staff burden; they mentioned reporting changes only for the renewal forms as a way of reducing staff burden associated with the center application renewal process. Approximately 10 percent of directors reported that attendance,

[3]General program requirements refer to becoming licensed/"approved"; collecting initial information on family size and income of participants; developing and implementing a management plan; ascertaining information on age and/or functional limitations of clients; ensuring food management company conforms to agreement with state agency; and training staff to implement program at center. Monthly record-keeping and accounting requirements refer to the monthly documentation and forms related to claiming meal reimbursements and meeting meal pattern requirements.

TABLE V.3

CENTER DIRECTOR ATTITUDES: STAFF BURDEN ASSOCIATED WITH CACFP PARTICIPATION
(Percent Distribution)

Program Feature	Not at All Burdensome	Not Very Burdensome	Somewhat Burdensome	Very Burdensome	Total	Unweighted Sample Size
Application/renewal process	10	29	43	18	100 %	277
Program requirements	14	38	40	8	100 %	276
Monthly record-keeping/accounting requirements	8	29	41	22	100 %	276
Ordering USDA commodities[a]	64	22	14	0	100 %	25

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Asked of centers that receive or have attempted to receive USDA commodities.

TABLE V.4

CENTER DIRECTOR ATTITUDES: ASPECTS THAT SHOULD BE CHANGED TO MAKE THE PROGRAM LESS BURDENSOME

	Percentage of CACFP Centers
Aspects Director Would Liked Changed[a,b]	
None	21
Client eligibility determination (simplify forms; report changes only)	19
Paperwork and reporting requirements (too much paperwork)	20
Application and renewal process (report changes only for renewal)	12
Attendance forms	9
Meal count forms	14
Menu planning forms	10
Meal production records	6
Meal reimbursement claiming procedures or forms	9
Management plan	2
Staff training (more frequently, longer, on site)	4
Staff training (less frequently, shorter)	3
Less frequent audits	2
Other aspects	6
Unweighted Sample Size	**255**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]The question was, "What aspects of the program participation requirements should be changed to make them less burdensome?"

[b]Sum of percentages exceeds 100 percent because center directors could give multiple responses.

meal count, and menu planning forms should be changed to reduce burden; however, they did not report how or in what ways forms should be changed to reduce burden.

Appropriateness of Meal Reimbursement Rates. CACFP center directors were asked about the appropriateness of the meal reimbursement rates by type of meal and claiming category.[4] CACFP directors were satisfied with the level of free and reduced-price reimbursement rates for meals and snacks, but were not very satisfied with the reimbursement rates for full-priced meals or snacks (see Table V.5). For example, 87 percent were satisfied with the reimbursement rate for free breakfasts and 80 percent with the rate for reduced-price breakfasts; 58 percent of center directors, however, thought that the reimbursement rate for full-priced breakfasts was not very or not at all satisfactory. This pattern held for all other main meals and snacks, although less strongly for snacks. For all full-priced meals and snacks, center directors were most unhappy with breakfast and supper full-price reimbursement rates.

Appropriateness of Meal Patterns. The majority--67 percent--of CACFP center directors thought that the then current (interim) meal pattern was appropriate for adults attending their centers (see Table V.6).[5] However, one-third did not think the interim meal pattern was fully appropriate. Of those responding that the interim meal pattern was not appropriate, 66 percent mentioned that it should be more flexible, for example, allowing centers to substitute meal components or offer different serving sizes. Forty-eight percent thought the fluid milk requirement should be eliminated or at least reduced. Thirteen percent of CACFP center directors mentioned that the bread requirement should also be eliminated or reduced. Eleven percent would like to

[4]Directors could give one of four responses: the meal reimbursement rate is very satisfactory, somewhat satisfactory, not very satisfactory, or not at all satisfactory.

[5]Effective August 1993, the program began operating under a new meal pattern developed to meet the specific needs of elderly and impaired adults. Prior to then, the adult component had been operating under an interim meal pattern which essentially adapted to adults the existing meal pattern from the child component for children age 12 and older. The differences between the new and interim meal pattern are described in Chapter I, Section A.5.

TABLE V.5

CENTER DIRECTOR ATTITUDES: SATISFACTION WITH CACFP MEAL REIMBURSEMENT RATES[a]
(Percent Distribution)

Meal/Reimbursement Category	Reimbursement Rate Is: Very Satisfactory	Somewhat Satisfactory	Not Very Satisfactory	Not at All Satisfactory	Total	Unweighted Sample Size
Breakfast						
Free	43	44	12	1	100 %	124
Reduced price	33	47	18	3	100 %	84
Full price	20	23	48	10	100 %	79
Lunch						
Free	40	48	9	3	100 %	255
Reduced price	31	47	19	3	100 %	150
Full price	20	36	33	11	100 %	134
Supper						
Free	61	20	20	0	100 %	14
Reduced price	26	47	27	0	100 %	7
Full price	41	7	37	16	100 %	8
Snacks						
Free	54	38	7	1	100 %	162
Reduced price	41	44	13	3	100 %	101
Full price	29	35	28	10	100 %	97

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Percentage distribution of centers claiming specific meal/meal reimbursement category.

TABLE V.6

CENTER DIRECTOR ATTITUDES: APPROPRIATENESS OF MEAL PATTERN

Center Director Responses	Percentage of CACFP Centers
Meal Pattern Is Not Appropriate for Adults Attending Center	33
Unweighted Sample Size	**282**
Changes that Will Make Program More Appropriate for Clients[a,b,c]	
Eliminate or reduce milk requirement	48
Eliminate or reduce bread requirement	13
Provide better/more information on nutritional needs of the elderly or impaired population	11
Change meal pattern to make it more flexible	66
Other changes	7
Unweighted Sample Size	**84**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Calculated for centers that do not think meal pattern is appropriate.

[b]Sum of percentages exceeds 100 percent because center directors could give multiple responses.

[c]The question was, "What should be changed in the meal pattern requirements to make them more appropriate for your clients?"

receive more and better information on nutritional needs of the elderly or impaired population to help them better tailor their meals to these individuals.

2. Importance of the Program in Meeting Clients' Food and Nutrition Needs

Directors of CACFP centers were asked how important they thought participation in the CACFP was in helping the center meet its clients' nutritional needs.[6] The vast majority (76 percent) thought that participation was very important in helping clients meet their nutritional needs. Just six percent thought the program was not very important or not at all important.

Directors were asked what aspects of the program were most important in helping clients meet their nutritional needs. The majority (68 percent) mentioned that the financial reimbursement (for meals and cash in lieu of commodities) helped centers provide balanced, nutritious meals. Nineteen percent of CACFP center directors mentioned that the program guidelines for meal patterns and menu planning were important in helping the center prepare nutritious meals. Thirteen percent indicated that information provided by the program on nutritional needs of clients was an important aspect of the program.

3. Aspects of Program that Could Be Improved

Table V.7 synthesizes all the responses to the open-ended question asking center directors about aspects of the CACFP that could be improved. Overall, 35 percent of directors responded that nothing about the program needed to be changed. One-third would like to see the overall paperwork associated with participation and receiving reimbursement reduced. Thirty percent thought the meal pattern should be made more flexible. Nearly one-fifth would like the client eligibility determination process simplified.

---

[6]Directors could respond on a four-point scale: very important, somewhat important, not very important, or not at all important.

TABLE V.7

CENTER DIRECTOR ATTITUDES: ASPECTS OF THE CACFP THAT COULD BE IMPROVED

	Percentage of CACFP Centers
Aspects of the CACFP that Could be Improved[a]	
None	35
Reduce overall paperwork	33
Change meal pattern to make it more flexible	30
Change portion size	2
Provide better/more information on nutritional needs of the elderly and impaired population	10
Simplify reimbursement claims	16
Simplify attendance forms	8
Simplify meal count forms	13
Simplify menu planning forms	10
Simplify meal production records	6
Simplify application and renewal process	14
Simplify management plan	2
More or improved staff training	12
Less staff training	3
Simplify client eligibility determination	18
Eliminate or reduce milk requirement	16
Eliminate or reduce bread requirement	6
Other	8
Unweighted Sample Size	**282**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Sum of percentages exceeds 100 percent because center directors could give multiple responses.

4. Future Participation

Virtually all the centers responding to the center survey reported that they planned to continue participating in the program. Fewer than one percent of CACFP center directors said they planned to discontinue participation.

C. REASONS FOR NONPARTICIPATION

Three types of information were collected to determine the reasons nonparticipating centers currently do not participate in the adult component of the CACFP. The first, and most direct method, asked directors of nonparticipating centers to report the reasons they currently do not take part in the program. The second method asked state CACFP administering agency staff to report the reasons they believe, based on their experience and contact with centers, nonparticipating centers don't participate. The final, and least direct method, entailed a statistical analysis of the relationship between nonparticipation and center characteristics.

Each of these methods has relative strengths and weaknesses.[7] Taken together, however, the findings from the three approaches shed considerable light on reasons centers do not participate. These findings are described here. A final section synthesizes findings from the three approaches and gives major conclusions.

As discussed in that final section, the main reasons for nonparticipation are:

- Lack of information on the program

---

[7]The strength of the first method is that directors of nonparticipating centers, the people most likely to know why their center does not participate, were asked directly to give the reasons. The weakness of this approach, however, is that center directors may not give the real reasons for nonparticipation. The second approach has similar strengths and weaknesses. In addition, state agency staff tend to come from State Education Agencies and are not always well informed about adult day care or specifics about nonparticipating centers. The strength of the third method is that it avoids biases that may occur when people are asked what they regard as intrusive questions. The weakness of this method is that the analysis only identifies center characteristics associated with nonparticipation and not the reasons for nonparticipation; the reasons have to be inferred from the associations.

- Center ineligibility for the program, because of such factors as lack of licensing or not providing meals
- Perceived burden of record keeping in relation to reimbursement levels

1. Reasons for Nonparticipation: Center Director Responses

The majority of nonparticipating centers are aware of the existence of the CACFP. Sixty-four percent of non-CACFP centers reported that they had heard of the CACFP. However, a substantial minority of centers are not aware of the CACFP, and based on direct responses by directors of nonparticipating centers, the major reason that centers do not participate in the CACFP is that they do not know about the program (36 percent; see Table V.8). Related, six percent of centers mentioned that they knew about the existence of the program but they did not know enough about the program to participate (for example, they did not know how to apply).

A substantial minority of centers mentioned eligibility factors as reasons for nonparticipation: 19 percent of nonparticipating centers believe they are not eligible. A substantial minority of centers also said program features discourage participation. Eighteen percent said that program requirements are too burdensome given meal reimbursement rates, and seven percent said meal reimbursement rates are too low. Finally, 17 percent of centers said they did not participate because they received reimbursement from another program (mostly Title III).

Just three percent of the nonparticipating centers had participated in the past but were currently not participating. Some of these centers said that they discontinued participating because they felt the requirements were too burdensome; others reported that they were no longer eligible.

2. Reasons for Center Nonparticipation: State Agency Respondent Perceptions

As part of the state agency census, information was obtained from state agency respondents about the reasons based on their experience administering the program adult day care centers were not participating in the program. State agency respondents distinguished eligible from ineligible nonparticipating centers.

TABLE V.8

REASONS NONPARTICIPATING CENTERS CURRENTLY DO NOT PARTICIPATE IN THE CACFP

	Percentage of Non-CACFP Centers
Reasons Centers Are Not Participating[a]	
Center doesn't know program exists	36
Center not eligible	19
Requirements too burdensome	18
Meal reimbursement rates too low	7
Staff not interested in program	10
Receive reimbursement from another program	17
Not enough information on CACFP	6
Clients provide own meals	3
Small or new program	4
Other	4
Unweighted Sample Size	**277**

SOURCE: Adult Day Care Study, Center Survey, weighted tabulations.

[a]Percentages may total more than 100 percent because centers could give more than one reason for not participating in the CACFP.

a. Reasons Ineligible Centers Are Not Eligible

Lack of state licensing appears to be an important reason why a number of non-CACFP centers are ineligible to participate in the CACFP, according to state agency respondents. Overall, 17 state respondents (33 percent) said that the lack of state-level licensing restricted participation in the CACFP program. Fourteen of the 35 state respondents (40 percent) in states that did not license adult day care or required only some centers to be licensed reported that lack of state-level licensing was a barrier to participation.

Although most states that do not have state licensing have developed mechanisms for approving centers for CACFP, these mechanisms may not always work smoothly because adult day care is not central to the mission of the State Education Agency and state-level CACFP staff are not well connected to the adult day care community. Given this situation, many respondents felt that centralized state licensing would facilitate recruiting and approving centers for the CACFP.

The center survey data are consistent with this view. Based on these data it is estimated that 50 percent of ineligible nonparticipating centers are ineligible because they do not have a license or are not certified. Forty percent are ineligible because they do not provide meals or snacks to clients. Approximately 10 percent are ineligible because they are private, for-profit centers that do not have at least 25 percent of enrolled clients receiving Title XIX or Title XX funds.

The data on the percentage of centers participating in the CACFP by state also strongly support the view that lack of licensing affects center participation. The average percentage of centers participating in the CACFP in the 25 states with no licensing is 18 percent, whereas in the 26 states with licensing, 35 percent of centers participate.

Five state respondents mentioned lack of facilities to provide meals as a barrier to program participation. A few state respondents mentioned that the eligibility criteria for clients restrict participation. Two state respondents (in states with very large numbers of nonparticipating centers) mentioned the ineligibility of individuals in residential institutions as an important reason why a

number of centers were ineligible and not participating.. This factor was an important determinant of why centers serving developmentally disabled and mentally retarded clients were ineligible in those states. Another state respondent said that some adult day care facilities have a wide range of programs and a variety of client groupings, but the regulations do not allow all clients to qualify for CACFP. These centers decided not to participate because it is difficult to treat some of their programs and clients differently.

b. State Licensing and Approval for the CACFP

Lack of state licensing is an important reason centers are not eligible to participate in the adult component of the CACFP. In order to understand this issue, it is important to consider the state licensing and approval process for CACFP eligibility.

CACFP officials in 25 states (49 percent) reported that there is no licensing for adult day care centers in their states. Officials in 26 states (51 percent) said that all or some types of adult day care centers are licensed; in 16 of the 26 states all adult day care centers are licensed and in 10 states only certain centers are licensed. Of the 10 states in which some centers are licensed, four license most centers and exempt only small or specialized centers, three require licensing for health- or medical-oriented centers but not other types of adult day care programs, one requires licensing for centers serving mentally retarded/developmentally disabled clients, and two offer optional licensing.

Licensing Agencies in States that License. Twenty-six states require some or all of the centers operating in the state to have a license. In the majority of states that license some or all adult day care programs (18 of 26), one state department or agency has licensing responsibilities. In eight states, licensing responsibilities are split between two state departments or agencies. Licensing responsibilities are primarily the responsibility of state health or social service agencies (see Table V.9). In 15 states, the health department (or health division of a social service department) is responsible for all or some adult day care licensing. Social service or human services departments or agencies license adult day care in 12 states. Six states use other state departments or agencies to

TABLE V.9

LICENSING AGENCIES IN STATES THAT LICENSE ADULT DAY CARE

Licensing Agencies	Number of States
Number of States that License Some or All Adult Day Care Centers in State	26
Licensing Agency[a]	
Health department or agency	15
Social services department or agency	12
Mental health department or agency	3
Mental retardation department or agency	1
Elderly affairs/aging department or agency	2
Department of hospitals	1

SOURCE: Adult Day Care Study, State Census Interviews.

[a]Numbers total more than 26 states because in some states, more than one agency is responsible for licensing adult day care centers.

license adult day care, including mental health departments or agencies (three states), mental retardation departments (one state), aging or elderly affairs departments (two states), and the department of hospitals (one state).

CACFP Approval for Unlicensed Centers in Licensing States. In the 10 states that require some but not all adult day care centers to be licensed, some form of alternate approval for CACFP participation is available so that unlicensed centers may be eligible to participate (see Table V.10). In 8 of 10 states, unlicensed adult day care centers may participate in the CACFP if they are approved as adult day care facilities by a state department or agency (4 states), or if they are approved to receive Medicaid or SSBG (Title XIX or Title XX) funds (4 states).[8] Two states determine CACFP eligibility of unlicensed centers on a case-by-case basis, based on the definition of adult day care provided in the federal regulations.

CACFP Approval for Centers in Nonlicensing States. Twenty-five states have no mechanism for licensing adult day care centers. Table V.11 shows that in the majority (18 of 25) of these states, adult day care facilities may still participate in the CACFP if they are certified or eligible to receive Medicaid funds (9 states), or if they obtain approval, certification, or "evidence of oversight" from a specified state agency (9 states). Two states allow centers to participate in the CACFP if they receive (or have a contract to receive) SSBG funds. In four states, adult day care centers may participate in the CACFP if they hold a contract or purchase of service agreement with specified state departments or agencies, or if they participate in another specified state program. In three states, CACFP eligibility is determined on a case-by-case basis, using such criteria as national accreditation or conformity to federal CACFP regulations. Finally, three states reported having no mechanism for approving unlicensed adult day care centers.

[8]In two of the four states accepting alternative state agency approval, the approving state agency is the licensing agency.

TABLE V.10

CACFP APPROVAL FOR UNLICENSED CENTERS IN STATES THAT LICENSE ADULT DAY CARE

	Number of States
Number of States that License Some Adult Day Care	10
CACFP Approval Criteria	
Health agency approval	2
Social service agency approval	2
Medicaid certification or receipt of SSBG funds	4
CACFP agency approval, determined on a case-by-case basis	2

SOURCE: Adult Day Care Study, State Census Interviews.

TABLE V.11

CACFP APPROVAL CRITERIA IN STATES THAT DO NOT LICENSE ADULT DAY CARE CENTERS

CACFP Approval of Unlicensed Centers	Number of States
Number of States that Do Not License Adult Day Care	25
CACFP Approval Criteria[a]	
Medicaid certification	9
State agency certification or approval	9
Contract or purchase of service agreement with a state agency	4
Receipt of SSBG funds	2
CACFP agency approval determined on a case-by-case basis	3
No mechanism for approving unlicensed centers	3

SOURCE: Adult Day Care Study, State Census Interviews.

[a]Numbers total more than 25 because some states have more than one method of determining approval for adult day care centers.

c. Reasons Eligible Centers Do Not Participate

The respondents to the state census interview reported a wide variety of reasons for nonparticipation by eligible adult day care centers. In order of importance, they are: (1) too much paperwork relative to reimbursement levels; (2) availability of other funding for meals (principally Title III funds); (3) center enrollments are too small to make participation worthwhile; and (4) centers do not want additional government interference (regulations, audits). Table V.12 organizes the various reasons cited into a few broad categories: (1) administrative burden relative to funds received; (2) availability of other funding; and (3) program-related reasons.

Administrative Burden. State agency respondents in 37 states (73 percent of state agency respondents) said the administrative burden (paperwork) associated with participation was a major reason adult day care centers did not participate in the CACFP. Twenty-five state respondents (49 percent) specifically said the amount of paperwork and record keeping required for CACFP participation in relationship to the amount of funding received was a major impediment to participation. This was especially true for centers already receiving funds from Title III. State respondents perceived that many of the eligible nonparticipating centers are already receiving funding for lunch under Title III, and that center directors feel it is not worth doing the paperwork for reimbursement for additional meals (e.g., breakfasts or snacks) under the CACFP. In addition, record-keeping requirements expand if a center receives Title III and CACFP funding, because of the need to document that they are not receiving reimbursement from two funding sources for the same meals.

A substantial number of state agency respondents said that for many eligible nonparticipating centers, center enrollments were too small to make participation worthwhile. Seventeen state agency respondents said that centers with small numbers of enrolled clients would not find it advantageous to participate because the costs of setting up and keeping the requisite records diminish the net gain when reimbursement can be claimed for only a few clients. The accounting burden worsens if some

TABLE V.12

REASONS GIVEN BY STATE CACFP OFFICIALS FOR CACFP NONPARTICIPATION BY ELIGIBLE ADULT DAY CARE CENTERS

	Number of States	Percentage of States
Administrative Burden	37	73
Funding for Meals Available from Some Other Source[a]	23	43
Title III of Older Americans Act	16	31
Other sources	9	18
Program-Related Reasons[a]	9	18
Meal reimbursements too low	7	14
Aspects of meal pattern requirements	5	10
Lack of knowledge about CACFP	2	4

Source: Adult Day Care Study, State Census Interviews.

[a]Numbers may not add to total because states could give multiple responses.

clients pay full price while others are eligible for free or reduced-price CACFP meals; in this instance, it becomes necessary to keep separate records for the CACFP-funded clients. Three state agency respondents reported that in some instances it would be necessary to treat groups of clients differently based on their meal-price status, which center staff were often unwilling to do.

Finally, five state respondents mentioned centers' reluctance to become involved with the state agency. For the most part, this reaction was based on centers' dislike for the regulations imposed by government agencies. One respondent said that "centers perceive themselves as caregivers first and are more interested in giving care--the regulations scare them away." In states that do regulate adult day care centers, centers are reluctant to be further regulated. Another respondent said "many centers don't want to deal with another aspect of state government." Another aspect of this reluctance was center directors' unwillingness to be associated with a state agency.

Availability of Other Sources of Funding. Respondents in 23 states (43 percent) perceived that funding was available from other sources and/or that centers preferred funding from other sources. Sixteen state respondents specifically mentioned Title III of the Older Americans Act, and respondents in nine states mentioned other sources of funding as alternatives to the CACFP. Several of these state respondents specifically noted that funding from other sources was preferred because it typically came with fewer requirements, restrictions, and accounting guidelines. For example, Title III congregate meal programs are not means-tested and only require recipients to be 60 years of age or older, so centers do not have to document client income eligibility. In addition, while Title III meal programs require program meals to meet one-third of the RDA, it does not specify minimum meal components and number of servings which must be met.

Program-Related Factors. Nine state agency respondents (18 percent) mentioned one or more factors related either to program meal patterns, reimbursement rate levels, or knowledge of the program. Five said that dislike of the meal patterns or program restrictions on the provision of meals was an important reason eligible centers do not participate. One respondent felt the food-services

aspect of the program--facilities for food, setting up the meal pattern, etc.--created obstacles for centers that might be interested in participating. Another state respondent mentioned the "rigidity of the program" (e.g., having to serve milk). Some mental health programs do not like the fact that they cannot deviate from the meal patterns; they feel the CACFP meal pattern is not suitable for nonelderly impaired adults (however, they did not specify in what ways the meal pattern was inappropriate).[9]

Seven state respondents said centers felt that CACFP reimbursements were too low and did not come close to covering the costs of the meals. Finally, two respondents admitted that the centers did not know a lot about the program. In one state without licensing, there is no agency that disseminates information about the CACFP. In another state, centers were confused about the different programs available.

Types of Eligible Centers Not Participating. State agency respondents did not have enough knowledge about nonparticipating centers in their state to determine whether certain types of eligible centers are more likely than others not to participate. The state respondents did identify several characteristics that made centers less likely to participate in CACFP:

- Smaller programs, with insufficient enrollment to make participation feasible
- Private, for-profit programs that receive sufficient money from paid clients
- Centers funded under Title III that do not need reimbursements for another meal or do not want the additional burden of separate reporting for two different sources of funding
- Centers affiliated with hospitals or nursing homes that do not need additional funding

[9]In discussing commodities versus cash in lieu of commodities, many respondents said that they preferred the cash-in-lieu feature because they could purchase food more appropriate for their elderly populations.

3. Reasons for Nonparticipation by Eligible Centers: Results Based on Multivariate Analysis of Center Characteristics Data

The results of an analysis that uses the center survey data to examine nonparticipation by eligible centers, relating participation to center characteristics, are described here. Table V.13 summarizes the results of the multivariate analysis of participation of eligible centers, based on Ordinary Least Squares (OLS) regression analysis.[10]

Eligible centers operating under the authority of nursing homes or health agencies or organizations are less likely to participate (see Table V.13). Centers that provide only snacks (not main meals), and those with smaller food budgets are also less likely to participate in the program. In addition, centers that tend to provide adult day care services to only elderly clients are less likely to be participants. Interestingly, even though CACFP centers tend to be slightly larger than nonparticipating centers, after controlling for all other center characteristics, eligible centers with larger daily attendance are less likely, not more likely, to be participants.

4. Reasons for Center Nonparticipation: Conclusions

Three sources of data were examined to determine the reasons adult day care centers do not participate in the CACFP--self-reports from directors of nonparticipating centers, reports from state

---

[10]Since the dependent variable, nonparticipation, is a binary variable (equal to one if the center does not participate and zero if the center participates in the CACFP), an alternative estimation technique is to use a logit or probit model. In practice, OLS and logit (probit) coefficient estimates tend to be similar, unless the proportion of the sample with the attribute (in our case, not participating) is extremely small (say, 10 percent or less). In our case, the proportion is not small; 25 percent of eligible centers in the sample do not participate, which is well above the threshold where it makes a difference to use logit or probit methods. However, we did run the regression using logit instead of OLS, and the conclusions remain the same. We present the OLS results in the text because they are easier to interpret.

Table V.13 summarizes the effects for selected variables. The full regression equation included the following variables: region, number of years center has been operating, profit status, average daily attendance, license and certification status, parent organizations, adult day care model, annual budget, annual food budget, funding sources, number of eating opportunities per day, types of meals/snacks provided, number of meals and snacks provided per week, and composition of enrolled clients (such as percentage female, percentage elderly, percentage racial/ethnic minorities, and percentage with physical disabilities). See Appendix Table J.1 for the full results.

TABLE V.13

ASSOCIATION OF PARTICIPATION AND SELECTED CENTER CHARACTERISTICS

(Summary of Results of Ordinary Least Squares Analysis of Participation of Eligible Centers)

Center Characteristic	Participation
Midwest	Decrease [a]
Private, For-Profit, Serving at Least 25% Title XIX or XX Clients	Increase [a]
Operating Under Authority of Nursing Home	Decrease [a]
Operating Under Authority of Health Agency or Organization	Decrease [a]
Average Daily Attendance	Decrease [a]
Annual Budget for Meals or Food Service	Increase [a]
Receive Funding from County/City Government	Decrease [a]
Provide Snacks Only	Decrease [a]
Provide Care to Elderly Clients Only	Decrease [a]
Percentage of Clients Needing Assistance with Personal Care	Decrease [a]

SOURCE: Adult Day Care Study, Center Survey, OLS regression reported in Appendix J.

[a]Association is statistically significant at the .05 level, two-tailed test.

agency staff, and a statistical analysis of the relationship between nonparticipation of eligible centers and center characteristics.

Based on a synthesis of the three data sources, the following are the most important reasons for current nonparticipation in the adult component of the CACFP:

- ***Lack of Information on the Program.*** One-third of directors of nonparticipating centers reported that they did not know the program existed. This was particularly true for currently ineligible centers; 46 percent cited this reason. Thirty percent of eligible centers mentioned this reason.

- ***Center Is Currently Ineligible.*** Overall, 20 percent of the directors of nonparticipating centers thought they were not eligible to participate in the CACFP.[11] Based on the center survey data, about 40 percent of nonparticipating centers are probably not eligible. Although the results from the two sources are not uniform, they suggest that ineligibility is an important reason why a number of centers currently do not participate. Lack of licensing and not providing food to clients are the primary reasons centers do not meet eligibility requirements.

- ***Too Much Paperwork Relative to Reimbursement Levels.*** Of nonparticipating centers that know about the program, 26 percent reported that CACFP requirements are too burdensome, 12 percent said that meal reimbursement rates are too low, and 27 percent reported receiving reimbursement from another program (usually Title III). Twenty-five of the 51 state agency respondents specifically said that the amount of paperwork and record keeping required for CACFP participation in relationship to the amount of funding received was a major impediment to participation. These findings reveal that, for a large number of nonparticipating centers, the perception that reimbursement rates are not sufficient to make the reporting requirements worthwhile is an important reason for nonparticipation.

- ***Other Reasons.*** Other reasons included staff disinterest in the program, centers being small or new, or meal patterns were not appropriate for the clientele served.

D. PROSPECTS FOR PROGRAM GROWTH

It is also important to examine evidence on participation and nonparticipation since this will assist FNS project future program growth and address budgetary issues. Program growth during the first several years of CACFP operations was rapid, but recent data suggest growth has slowed

[11]Forty-five percent of the centers that we classified as ineligible gave this response, compared with 21 percent of eligible centers. A center was classified as eligible or ineligible based on the eligibility criteria for the program (see Chapter II, Section B.).

somewhat. Most states expect the program to grow during the next 5 to 10 years, but only a few of these states expect rapid growth. This chapter discusses participation trends based on program data. It then presents findings on prospects for future program growth based on perceptions of state agency staff.

1. Participation Trends

Center participation in the adult component of the CACFP has risen dramatically since the inception of the program; program growth, however, appears to be tapering off somewhat (see Figure V.1).

In September 1988, approximately one year into the program, 213 adult day care centers participated in the CACFP. One year later, in September 1989, the number had doubled to 418, and it nearly doubled again by the following September to 728 centers. After that, center participation continued to increase but slowed down somewhat. According to FY 1992 program data, 1,044 adult day care centers participated in the CACFP in September 1992.

The growth in average daily attendance (ADA) is similar to the pattern of center growth (see Figure V.2). In September 1988, 6,605 clients daily received reimbursed meals or snacks. ADA increased to 11,470 in September 1989 and then to 21,769 in September 1990. It reached a peak in March 1992, when 31,920 clients received reimbursed meals or snacks daily. As of September 1992, average daily attendance equaled 30,197. In FY 1992, 13.9 million meals and snacks were served, and the value of meals reimbursed and commodities and cash in lieu of commodities equaled $14.7 million.

2. State Agency Perceptions of Program Growth

State agency respondents were asked to characterize program growth in the next 5 to 10 years and identify any factors unique to their state that they believed might cause program growth to be either higher or lower than the levels projected.

FIGURE 1
NUMBER OF ADULT DAY CARE CENTERS IN CACFP, BY QUARTER

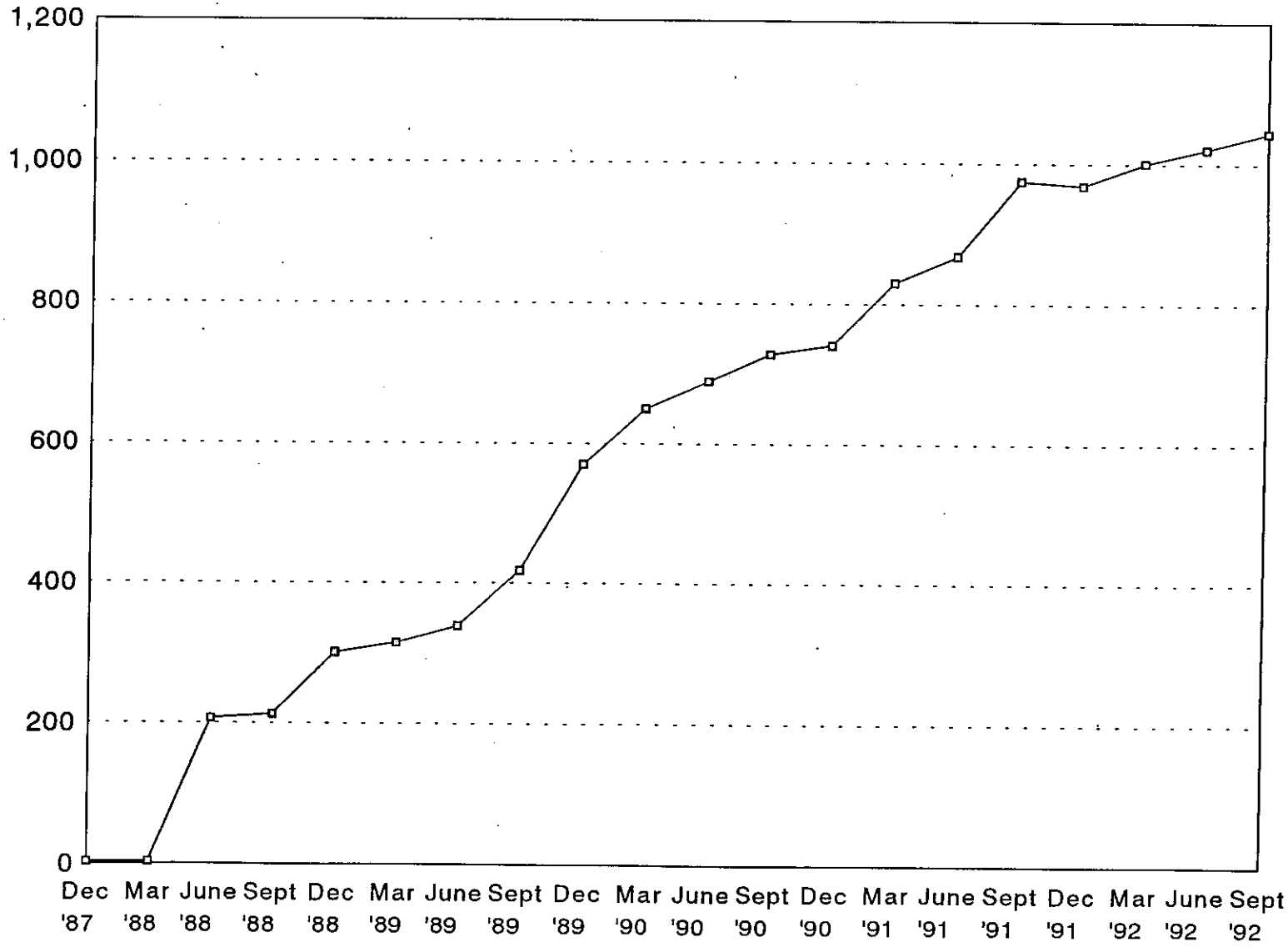
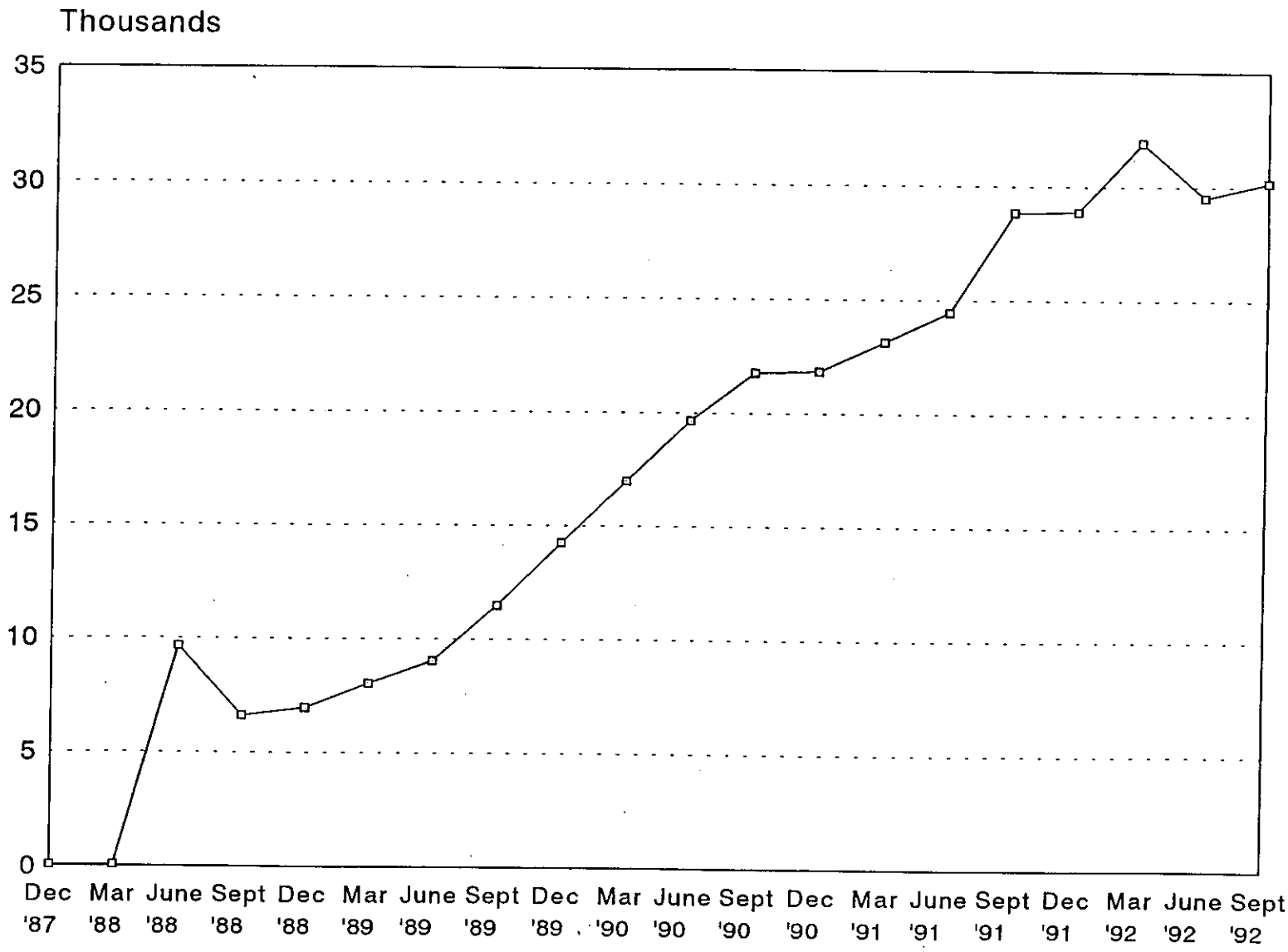


FIGURE 2
AVERAGE DAILY ATTENDANCE IN CACFP, BY QUARTER



Respondents in 36 of the 50 states and the District of Columbia (71 percent) said that they expected some growth in the number of centers participating in the CACFP over the next 5 to 10 years. Respondents in the remaining 15 states (29 percent) expected little or no growth in the adult component of the CACFP, or growth that was largely contingent on changes in state licensing or other eligibility factors. The majority of state agency respondents (29 states, or 57 percent) expected program growth to be small to moderate, while respondents in seven states (14 percent) expected growth to be large.

Chapter II noted that six states account for more than 50 percent of CACFP nonparticipating centers nationwide (California, New York, Pennsylvania, Georgia, Wisconsin, and Ohio). Expectations for future program growth in these states (as reported by state agency respondents) varied. One respondent expected a large and rapid increase in the number of CACFP participating centers; two respondents expected either large, rapid increases in CACFP participation or little or no program growth, depending on changes in state licensing or federal eligibility criteria. Two state respondents expected slow or gradual program growth, based on the nature of the state economy or past trends; another state respondent expected little or no program growth because of a lack of interest in the CACFP program on the part of centers.

Overall, state respondents reported a variety of reasons for their projected levels of growth. The aging of the population and concomitant growing need for adult day care was the predominant reason cited by states that expected program growth. This reason was cited by state respondents in 3 of 7 states expecting large program growth and in 13 of the 29 states expecting small or moderate growth. Other factors underlying program growth include increased interest in the CACFP program on the part of centers (five states), stability of CACFP funds and/or additional investment of state monies for adult day care (five states), and increased outreach and recruitment efforts and/or additional administrative support by the CACFP state agencies (five states).

Factors that may temper or inhibit program growth were also mentioned by state respondents when explaining their expectations for small or gradual increases in the number of centers participating in the CACFP. Of the 29 states expecting small or gradual program growth, 5 cited the sluggish economy and the lack of funding for adult day care. Two states mentioned the availability of Title III funds, viewed as a competitor to the CACFP. State respondents also cited the high administrative and paperwork burden of the CACFP program and other factors such as small center size, cultural biases against adult day care, and small state populations.

The respondents from the 15 states reporting that they expected little or no growth in the adult component of the CACFP mentioned a variety of reasons for lack of program growth.[12] In four states, respondents indicated that lack of state licensing for adult day care would restrict program growth. In two of those states, respondents expected the number of centers participating in the CACFP to grow rapidly if state licensure became available. In one state with a fairly substantial number of non-CACFP centers, the respondent reported that growth in the adult component of the CACFP would be contingent on expanding the eligibility of centers serving mentally retarded clients, by relaxing the definition of institutionalized adults. In three states, respondents' expectations of little or no program growth were based on past trends. Two states identified other factors contributing to little or no program growth, including inadequate levels of staffing (one state) and lack of interest in the CACFP program (one state).

State respondents were also asked to identify other factors that might influence growth in the adult component of the CACFP. The factors most frequently identified as affecting program growth included the availability of or changes in state licensing of adult day care (18 states), changes in funding levels available for adult day care programs (15 states), expansion of federal requirements regarding the eligibility of adult day care centers or adults in day care (8 states), and reduction in the

[12]Four state respondents did not offer any explanation for why they anticipated little or no growth in the adult component of the CACFP. In addition, one state respondent indicated that there were no adult day care centers in that state.

amount of paperwork required for CACFP participating centers (6 states). Four respondents also mentioned the following as factors with the potential to affect future growth of the CACFP program: changes in Title III funding; increased recruitment efforts or additional administrative support; greater interest in providing adult day care services on the part of community, advocacy, or church-related organizations; and other federal program changes, including changes in meal pattern requirements and increased reimbursement rates.

REFERENCES

Betts, Nancy M. "Nutrition Perspectives on Aging." *American Behavioral Scientist,* vol. 32, no. 1, 1988, pp. 17-30.

Blumberg, Jeffrey B. "Recent Advances on Nutrition and Aging." Paper presented at the Spring National Conference on Understanding Nutritional Needs of Older Adults, sponsored by the Gerontology Institute of New Jersey, May 1989.

Bowman, Barbara B., and Irwin H. Rosenberg. "Assessment of the Nutritional Status of the Elderly." *The American Journal of Clinical Nutrition,* vol. 35, no. 1, 1982, pp. 1142-1151.

Conrad, K.J., P. Hanrahan, and S.L. Hughes. "Survey of Adult Day Care in the United States: National and Regional Findings." *Research on Aging,* vol. 12, no. 1, March 1990, pp. 36-56.

Directory of Adult Day Care Centers. Washington, DC: Department of Health and Human Services, 1977.

Harder, W.P., J.C. Gornick, and M.R. Burt. "Adult Day Care: Substitute or Supplement?" *The Milbank Quarterly,* vol. 64, no. 3, 1986, pp. 414-441.

Kalton, G. *Introduction to Survey Sampling.* Beverly Hills, CA: Sage Publications, 1983.

Kish, L. *Survey Sampling.* New York: John Wiley & Sons, 1965.

Kish, L. "Weighting: Why, When, and How?" Paper presented at the Annual Meeting of the American Statistical Association, Anaheim, California, August 6-9, 1990.

Menke, G. Personal communication, June 6, 1990.

National Academy of Sciences, National Research Council. *Diet and Health: Implications for Reducing Chronic Disease Risk.* Report to the Committee on Diet and Health, Food and Nutrition Board, Commission on Life Sciences. Washington, DC: National Academy Press, 1989a.

National Academy of Sciences, National Research Council. *Recommended Dietary Allowances,* 10th edition. Washington, DC: National Academy Press, 1989b.

National Council on the Aging. "Interview with B. Ransom." *Christian Science Monitor,* January 5, 1987.

National Institute on Adult Daycare, National Council on the Aging, Inc. *Standards and Guidelines for Adult Day Care.* Second Edition. Washington, DC: The National Council on the Aging, Inc., 1990.

Ponza, M., and L. Wray. "Evaluation of the Food Assistance Needs of the Low-Income Elderly and Their Participation in USDA Programs." Final report prepared for the U.S. Department of Agriculture, Food and Nutrition Service. Princeton, NJ: Mathematica Policy Research, Inc., January 1990.

Robbins, E.G. "Adult Day Health Services." Paper presented at the American Public Health Association Meeting, Detroit, October 22, 1980.

Trippe, Carole, and Pat Doyle. "Food Stamp Program Participation Rates: January 1989." Current Perspectives on Food Stamp Program Participation. United States Department of Agriculture, Food and Nutrition service, Office of Analysis and Evaluation, July, 1992.

Trippe, Carole, Pat Doyle, and Andrew Asher. "Trends in Food Stamp Program Participation Rates: 1976 to 1990." Current Perspectives on Food Stamp Program Participation. United States Department of Agriculture, Food and Nutrition Service, Office of Analysis and Evaluation, July, 1992.

U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Nutrition and Your Health: Dietary Guidelines for Americans* (3rd edition). H&G 232, 1990.

U.S. Department of Health and Human Services, National Center for Health Statistics/U.S. Department of Agriculture, Human Nutrition Information Services. *Nutrition Monitoring in the United States: A Progress Report from the Joint Nutrition Monitoring Evaluation Committee.* DHHS Pub. no. 86-1255. Hyattsville, MD: National Center for Health Statistics.

U.S. Department of Health and Human Services, Public Health Service. *The Surgeon General's Report on Nutrition and Health.* Washington, DC: Office of the Surgeon General, 1988 (Appendix Chapter on Aging).

VonBehren, R. "Adult Day Care: A Decade of Growth." *Perspective on Aging,* vol. 18, 1989, pp. 13-14.

VonBehren, R. *Adult Day Care in America: Summary of a National Survey.* Prepared for the National Institute on Adult Daycare. Washington, DC: The National Council on the Aging, Inc., October 1986.

Wolf-Klein, G.P., V.K. Maar, and C.J. Foley. "Adult Day Care--A Recent Past and a Growing Future." *New York State Journal of Medicine,* October 1988, pp. 528-530.

Weissert, W.G., J.M. Elston, E.J. Bolda, W.N. Zelman, E. Mutran, and A.B. Mangum. *Adult Day Care: Findings from a National Survey.* Baltimore, MD: The Johns Hopkins University Press, 1990.

Young, Eleanore A. "Nutrition, Aging, and the Aged." *Medical Clinics of North America,* vol. 67, no. 2, 1983, pp. 295-312.

Zawadski, R. *1991 National Adult Daycare Census Update.* Albany, CA: RTZ Associates, August 1991.