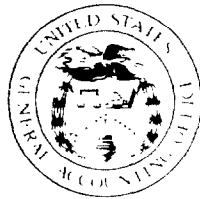


June 1990

FOOD ASSISTANCE PROGRAMS

Recipient and Expert Views on Food Assistance at Four Indian Reservations



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United States
General Accounting Office
Washington, D.C. 20548

**Resources, Community, and
Economic Development Division**

B-236011

June 18, 1990

Congressional Requesters

This is the second of two reports responding to your request for information on the availability and adequacy of food assistance on four Indian reservations: Fort Berthold in North Dakota; Pine Ridge in South Dakota; White Earth in Minnesota; and Navajo in Arizona, New Mexico, and Utah. Our first report issued on September 29, 1989, discussed the availability of food assistance on the four reservations and the nutritional basis of the Food Stamp Program and Food Distribution Program on Indian Reservations. This report provides recipient and expert views on (1) the reasons why households participate in the Food Stamp Program or the Food Distribution Program on Indian Reservations, (2) the effect of these programs on hunger and the health of Indians on the four reservations, and (3) the availability of nutrition education. It also discusses the characteristics of Indian households who most frequently participate in these programs.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 10 days from the date of this letter. At that time, we will send copies to the Secretary of Agriculture; the Director, Office of Management and Budget; tribal officials; and other interested parties.

This work was done under the direction of John W. Harman, Director, Food and Agriculture Issues, (202) 275-5138. Other major contributors are listed in appendix V.

A handwritten signature in black ink, appearing to read 'J. Dexter Peach'. The signature is written in a cursive style with a large initial 'J' and 'P'.

J. Dexter Peach
Assistant Comptroller General

B-236011

List of Requesters

The Honorable Quentin Burdick, Chairman
Committee on Environment and Public Works
United States Senate

The Honorable Daniel Inouye, Chairman
Select Committee on Indian Affairs
United States Senate

The Honorable Patrick Leahy, Chairman
Committee on Agriculture, Nutrition, and Forestry
United States Senate

The Honorable Jeff Bingaman
The Honorable Kent Conrad
The Honorable Tom Daschle
The Honorable Dennis DeConcini
The Honorable Tom Harkin
The Honorable John McCain
United States Senate

Executive Summary

Purpose

In an August 3, 1988, letter, three Senate committees and seven Senators expressed concerns regarding the effectiveness of public and private programs in alleviating hunger and promoting the nutritional welfare of residents on Indian reservations. They requested that GAO evaluate the availability and adequacy of food assistance on four reservations they selected, representing about 25 percent of the total Indian reservation population: Fort Berthold, North Dakota; Pine Ridge, South Dakota; White Earth, Minnesota; and Navajo—Arizona, New Mexico, and Utah.

In response, GAO conducted two studies. The first (GAO/RCED-89-177, Sept. 29, 1989) identified available food assistance and examined the nutritional basis of the Food Stamp Program and the Food Distribution Program on Indian Reservations (FDPIR). In this second study, GAO obtained recipients' and community officials' views on the (1) ability of Indians to participate in these programs, (2) impact of the Food Stamp Program and FDPIR on hunger, (3) diet-related health problems of Indians on the four reservations, and (4) adequacy of nutrition education provided by the Food Stamp Program and FDPIR.

Background

The Food Stamp Program and FDPIR are the two primary federal food assistance programs available to Indians on or near the four reservations. The Food Stamp Program provides monthly coupons, redeemable for groceries to eligible households. As an alternative to food stamps, FDPIR provides commodities to eligible Indian and non-Indian households located on, and Indian households located near, reservations. The maximum food stamp benefit is designed to provide households with no countable income an adequate quantity of food. However, most households have some countable income and do not receive maximum benefits; for such households, food stamps are a supplemental food source. Similarly, FDPIR benefits are intended to be supplemental.

To obtain the views of recipients, GAO used a focus group methodology to elicit spontaneous and candid discussion of specific topics. However, because the results discussed in this report are based on the views of selected recipients, they may not be generalized either to other food stamp and FDPIR recipients at the four reservations or to participants nationwide. Further, because environmental, cultural, economic, and other conditions vary on reservations nationwide, the information reported for these four reservations may not represent all Indian reservations.

To obtain the perspective of community officials who are familiar with the problems of Indian diet and health conditions on the four reserva-

tions, GAO convened panels of social service providers, program officials, and health care professionals to obtain their expert views on these matters. As with recipients' views, our results based on the views of these community officials cannot be extrapolated.

Results in Brief

According to the collective views of the health care providers and officials interviewed, some hunger exists on all four reservations. For those participating in federal food assistance programs, according to panelists, hunger is more common among Food Stamp Program households than FDPIR households for two reasons. First, the Food Stamp Program's administrative requirements can contribute to breaks, losses, or variances in benefits. Second, allotment levels are too low to buy an adequate low-cost diet. They also indicated that hunger exists in households who cannot qualify, or are discouraged from applying, for assistance by the administrative and eligibility requirements of the Food Stamp Program. These requirements included household composition, income, and asset limits and the application process itself.

Recipients and panelists were also concerned that the limited variety and poor quality of some FDPIR foods and limited nutrition education contribute to diet-related health problems, such as diabetes, prevalent on the four reservations. Nutrition education that addresses the nutritional needs of the general population, as well as diet-related health problems, is offered on a limited basis through FDPIR. Little, if any, is provided through the Food Stamp Program.

Improving the nutritional status of Indian households depends on many economic and social factors. While it is difficult to fully address them through federal food assistance programs, improving the accessibility and quality of diet and the availability of nutrition information can help to alleviate hunger and more effectively serve individuals with diet-related health problems.

Principal Findings

Food Stamp Program Participation Obstacles

FDPIR recipients at three reservations told GAO that they could not qualify under stringent food stamp eligibility criteria because their household composition, income, or resources made them ineligible for benefits (this issue was not discussed at the fourth reservation). A frequently cited obstacle was that households exceed the Food Stamp Program's

resource limit because of the vehicle asset limit of \$4,500, which has not been changed since it was established by the Food Stamp Act of 1977. Introduced on February 27, 1990, H.R. 4110 would raise the limit to \$5,500 for the period January 31 to September 30, 1991. On October 1, 1991, and each year thereafter, the limit would be adjusted to reflect changes in the Consumer Price Index.

The lengthy and complex application process and excessive verification requirements of the Food Stamp Program discourage households from participating. Furthermore, according to recipients and panelists, the distant location of and lack of reliable transportation to food stamp offices on the four reservations present other barriers to participation. They noted that these obstacles contribute to hunger by preventing or discouraging households from getting the needed food assistance.

Hunger Identified as a Problem for Some Food Assistance Recipients

Food stamp and FDIPIR recipients at all four reservations told GAO that they had few means beyond federal programs of obtaining food. According to panelists, because of high unemployment, most reservation households rely heavily on federal food assistance programs for their dietary needs. However, panelists considered food assistance benefit levels inadequate to buy a low-cost diet.

Panelists also believe that hunger is more common among food stamp recipients than FDIPIR beneficiaries because food stamp recipients have difficulty in complying with the program's monthly reporting requirements. As a result, they experience delays or losses in their benefits because of failure to complete or errors in their monthly reports or are terminated from the program for untimely reporting. Also, because food stamp benefit levels for those with changing incomes are based on a prior month's income, they may not accurately reflect a household's current food assistance needs.

According to recipients, Food Stamp Program benefits are inequitably distributed among reservation households. They told GAO that benefits often understate the needs of households with older children. The food stamp benefit further understates households' needs, according to some panelists and recipients, because it does not consider high reservation food prices, and transportation costs to grocery stores. An official of the U.S. Department of Agriculture agreed that the distribution of food stamp benefits is affected by family composition, food prices, and transportation costs.

FDPIR Foods Can Aggravate Diet-Related Health Problems

Diets low in fat and salt and high in a variety of fruits and vegetables can help minimize diet-related health problems at the four reservations. While panelists agreed that the Food Stamp Program can better accommodate these special needs, they stated that FDPIR is less likely to because the food package is high in fat and salt. Further, the consistent absence of many commodities, particularly fruits and vegetables, and the inedibility of other commodities limit the nutritional variety of the package.

Nutrition Education Is Limited

Although nutrition education is a component of both programs at the four reservations, according to recipients, FDPIR participants received some nutrition information while Food Stamp Program participants received little or no nutrition information. In addition, the type and amount of nutrition education provided to FDPIR recipients varied by reservation. Nutrition education activities, provided through both programs, ranged from written materials and monthly lectures to cooking demonstrations and one-on-one counseling. These activities were most evident at the Navajo Reservation. According to health officials, expanded education services, tailored to reservation Indians, are needed on the four reservations.

Recommendations

To enhance the overall effectiveness of the Food Stamp Program and FDPIR in meeting the nutritional needs and diet-related health concerns of Indian households, GAO recommends the Secretary of Agriculture (1) monitor the availability of FDPIR commodities, (2) review the quality of FDPIR commodities and determine improvements needed, and (3) emphasize the importance of nutrition education and ensure that adequate education services are provided to Food Stamp Program and FDPIR recipients. In addition, GAO has made prior recommendations discussed in chapter 5, which, if adopted, should help address some of the problems, such as monthly reporting, faced by reservation food stamp recipients.

Agency Comments

GAO obtained the views of responsible program-level agency officials during its review. These officials generally agreed with the report's findings and suggested several technical changes that have been included where appropriate. In accordance with the requesters' wishes, GAO did not obtain official written agency comments on this report.

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Abbreviations

AFDC	Aid to Families With Dependent Children
FDPIR	Food Distribution Program on Indian Reservations
FNS	Food and Nutrition Service
GAO	U.S. General Accounting Office
IHS	Indian Health Service
TFP	Thrifty Food Plan
USDA	U.S. Department of Agriculture
WIC	Special Supplemental Food Program for Women, Infants, and Children
FRAC	Food Research Action Center

Introduction

A range of issues are associated with the availability and adequacy of federal and nonfederal food assistance on Indian reservations.¹ Two primary programs provide federal food assistance to the Indian reservations—the Food Stamp Program and the Food Distribution Program on Indian Reservations (FDPIR)—both administered by the U.S. Department of Agriculture (USDA) and authorized by the Food Stamp Act of 1977 (P.L. 95-113, Sept. 29, 1977), as amended. In September 1989, in response to congressional requesters, we issued a report² which provided an overview of the nutritional adequacy of these two major federal programs and the availability of nonfederal food assistance at four reservations: Fort Berthold in North Dakota; Pine Ridge in South Dakota; White Earth in Minnesota; and Navajo in Arizona, New Mexico, and Utah.

This report supplements our September 1989 report by presenting the views of participants in these two programs and those of health care and social service providers on the four reservations. We also profile the characteristics of households that participate in the programs to gain insight into the adequacy of their food assistance benefits. (See apps. II and III.)

Food Assistance Programs

Participating Indian households on the four reservations rely primarily on either the Food Stamp Program or FDPIR for their overall dietary needs. Both programs provide eligible households with the opportunity to obtain a more nutritious diet. The Food Stamp Program provides participants with redeemable food coupons that are intended for the purchase of supplemental foods that they purchase out of family income or other welfare program payments. In general, to be certified as eligible for food stamps, a household must meet income and resource requirements unless all members receive Aid to Families with Dependent Children (AFDC) or Supplemental Security Income. Unless exempted for reasons such as age, disability, or current employment, household members must register for work and comply with the requirements of a training and employment program. In addition, the household must meet

¹An Indian reservation is an area of land "reserved" through treaties, congressional acts, Executive Orders, and agreements for Indian use. Reservation land may be owned and occupied by non-Indians, and some reservations have a high percentage of non-Indian land owners.

²Food Assistance Programs: Nutritional Adequacy of Primary Food Programs on Four Indian Reservations (GAO/RCED-89-177, Sept. 29, 1989).

several other nonfinancial standards, which include citizenship or eligible alien status; provide social security numbers; and, if a student, meet certain criteria.

FDPIR, which serves eligible Indian and non-Indian households located on and Indian households located near reservations, is designed to present an acceptable nutritional alternative to food stamps. It provides benefits in the form of a monthly food package. Eligibility for and participation in FDPIR are based on application and certification of reservation or tribal status, income and resource qualifications, and other nonfinancial factors similar to those of the Food Stamp Program. Also, like the Food Stamp Program, households composed entirely of AFDC and/or Supplemental Security Income recipients, automatically meet income and resource eligibility requirements.

Depending on individual household characteristics and program criteria, households may be eligible to participate in one program or the other. Households that are both food stamp and FDPIR eligible may choose to participate in either program, but not simultaneously in both. The programs differ in household definition and income and resource criteria.

Individuals residing, purchasing, and preparing meals together are generally required to apply for food stamp or FDPIR participation as one household, and the income and resources of each member are combined to determine eligibility. However, the two programs differ for related household members. The Food Stamp Program requires specific related members residing together to generally apply as one household without regard to their purchase and meal preparation practices, whereas, FDPIR allows individuals residing together to apply separately, without regard to relationship, if they do not purchase and prepare meals with other household members.

Although both programs provide benefits to low-income households, income eligibility standards for both programs differ. Participation in the Food Stamp Program is limited to households that meet both gross and net income standards, whereas FDPIR household participation is based solely on net income standards, which are more generous than food stamp standards. For example, in fiscal year 1990 a four-person household will be eligible for food stamps if its gross income is less than \$1,311 and net income is less than \$1,009. On the other hand, to qualify for FDPIR a four-person household must have a net income that is less than \$1,121.

Both the Food Stamp Program and FDPIR place limits on the value of a participating household's resources. However, the Food Stamp Program limits the combined value of both liquid and nonliquid household resources while FDPIR limits only the value of a household's liquid resources.

Previous GAO Report

In our September 1989 report, we determined the following:

- The two largest federal food assistance programs serving the four Indian reservations are USDA's Food Stamp Program and FDPIR. Three of the four reservations also receive some type of nonfederal food assistance.
- The Food Stamp Program and FDPIR are designed to provide recipients with benefits consistent with national dietary guidelines. However, because many factors affect the nutritional value of the food that individuals consume, we were unable to determine the nutritional adequacy of program benefits for specific individuals.
- Four major diet-related health conditions exist on the four reservations: obesity, diabetes, heart disease, and hypertension. Although proper nutrition may not cure these conditions, it can reduce their complications or help prevent their occurrence. The Food Stamp Program and FDPIR are not designed to specifically address the special dietary needs of Indian recipients; however, ensuring that program recipients receive and apply adequate nutrition education can help accommodate these needs. Other federal programs are available to Indians on reservations that address the dietary needs of special groups.

Objectives, Scope, and Methodology

This is the second report responding to an August 3, 1988, request by the Chairmen of the Senate Committees on Agriculture, Nutrition, and Forestry; Environment and Public Works; and the Select Committee on Indian Affairs; six Senators—Jeff Bingaman, Kent Conrad, Tom Daschle, Dennis DeConcini, Tom Harkin, John McCain—and former Senator Daniel Evans, regarding food assistance on four Indian reservations: (1) Fort Berthold in North Dakota; (2) Pine Ridge in South Dakota; (3) White Earth in Minnesota; and (4) Navajo in Arizona, New Mexico, and Utah.

Our specific objectives for this report were to solicit the views of recipients of federal food assistance programs—Food Stamp Program and FDPIR—and others in the community, knowledgeable about these programs, regarding

- the ability of reservation households to participate in the programs,
- the impact of the programs on hunger and diet-related health problems that are prevalent on the four reservations, and
- the adequacy of nutrition education provided by the programs.

Additionally, we agreed to describe the characteristics of Indian households that participate in the Food Stamp Program and FDPIR on the four reservations. (Apps. II and III provide this information.)

Because of the widely varying demographic conditions found on about 304 federal Indian reservations throughout the United States,³ the information reported for these 4 selected reservations should not be considered as representative of all Indian reservations.

To solicit the views of recipients and others in the community, we convened panels of individuals knowledgeable about Indian diet and health and interviewed program participants in focus groups.⁴ We also interviewed responsible federal, state, and local program administrators. In addition, we identified and obtained household demographic characteristic information from probability samples of (1) FDPIR food package issuances and (2) FNS data of issued food stamp benefits.

Use of Panels

To identify the nutritional concerns at the four reservations and the impact of food programs in addressing these concerns, we convened seven panels of social service providers, program officials, and health care professionals from the reservation communities—one panel each at the Fort Berthold and White Earth reservations, two at the Pine Ridge Reservation, and three at the Navajo Reservation. More panels were held at the Pine Ridge and Navajo reservations because of their larger geographic size and population. We recruited panel members who, based on their profession or role in the community, were particularly knowledgeable about Indian diet and health. A listing of reservation panelists is provided in appendix I.

³American Indians Today: Answers to Your Questions, U.S. Department of the Interior, Bureau of Indian Affairs, 1988.

⁴Focus groups are small homogeneous groups assembled to candidly discuss a topic under the controlled guidance of a moderator. They are generally viewed as an effective way to capture major themes related to a discussion topic.

Use of Focus Group and Individual Interviews

To obtain recipient views on their ability to participate in these programs, how the food programs address nutritional needs, and the adequacy of nutrition education, we conducted 10 “focus group” interviews with food stamp and FDPIR recipients—2 food stamp and 2 FDPIR groups at the Navajo Reservation and 1 each for the 2 programs on the other 3 reservations.

Focus group participants were recruited by the local food stamp and FDPIR offices, and each group had between 8 and 12 participants, for a total of 37 food stamp and 48 FDPIR participants. Because the spontaneity of the discussion and its focus are facilitated when participants have common demographic or relevant characteristics, only adult females who, for the most part, spoke English were recruited for our groups. Participants ranged in age from 21 to 71 and represented various household compositions, ranging from 1 to 12 members.

We interviewed recipients new to food assistance as well as long-term program participants. Food stamp recipients had an average of 6 years of experience with the program, ranging from less than 1 year to 20 years. FDPIR recipients had an average of 8 years experience with the present program or its predecessor, the Needy Family Program,⁵ ranging from less than 1 year to 40 years. Additionally, approximately 58 percent of the focus group members had at one time or another participated in both programs.

Because we used a style of moderation that would spontaneously elicit opinion, specific topics of discussion varied within and between groups. The absence of discussion about an issue implies nothing about its relative importance to the group at a particular reservation.

Because the focus group results discussed in this report are based on the perceptions and experiences of selected recipients who may not be representative of the general recipient population, they cannot be generalized either to other food stamp and FDPIR recipients at the four reservations or to participants nationwide.

⁵FDPIR is an outgrowth of the Needy Family Program, established in 1936 as a state-administered commodity distribution program.

We also interviewed appropriate federal, state, and local administrators of the federal food programs to clarify program rules regarding the process of applying for and maintaining benefits and to ascertain the differences in local administration of the programs. The results of relevant studies and reports were discussed with appropriate officials.

Use of Probability Samples

To provide information on households receiving FDIIR packages, we took a probability sample of packages issued in calendar year 1988 at each of the four reservations—Fort Berthold, Pine Ridge, White Earth, and Navajo—and studied the characteristics of the households receiving these packages. (See app. IV for a detailed description of our sample selection process.) Appendix II summarizes the characteristics of households that received FDIIR packages on the four reservations.

To provide information on Indian households receiving food stamps, we also analyzed data from Food and Nutrition Service's (FNS) automated quality control data base on households with at least one Indian member.⁶ Our analysis focused on households receiving food stamp benefits in fiscal year 1988 and residing in areas that somewhat approximate the boundaries of the Navajo Reservation in Arizona and New Mexico and the Pine Ridge Reservation in South Dakota, the only areas of the 4 reservations with at least 30 records in FNS' data base.

We use the term "somewhat approximate" for the following reasons. The Navajo Reservation data in Arizona include three counties, each containing land both on and off the reservation. Because the Navajo Reservation in Arizona completely surrounds the Hopi Reservation, the data from Arizona includes both Hopi and Navajo households. The Navajo Reservation data in New Mexico include two counties with land both on and off the reservation and four additional counties that contain Navajo tribal lands that are not part of the major Navajo Reservation. The data for the Pine Ridge Reservation in South Dakota do not include Bennett County—roughly the southeastern quarter of the reservation. The FNS data base cannot distinguish between Indian tribes. Also because the local agency/geographic codes did not exactly coincide with reservation boundaries, the FNS data base may also contain Indian households living off the reservation. (See app. IV for a more detailed discussion of the contents of this data file.) The data provided by FNS

⁶We did not review the internal controls established by FNS for its automated quality control data base. We did, however, review documents describing record layout and defining data elements and compare values of the data we received with documented values. Within this context, we observed no data outside expected ranges.

are from a stratified sample of food stamp issuances (see table IV.3). Appendix III summarizes the characteristics of households that received food stamps on these two reservations.

For each estimate based on either the FDPIR or food stamp samples discussed in this report, the associated sampling error at the 95-percent confidence level is given in parentheses following the estimate. For example, “23 (± 7) percent” means that the chances are 19 out of 20 that the true value could be as low as 16 percent—23 minus 7—or as high as 30 percent—23 plus 7.

We performed our review between March and November 1989, in accordance with generally accepted government auditing standards.

Obstacles to Participation in the Food Stamp Program

Although many Indian households prefer the Food Stamp Program over FDIPIR because it allows them to make their own food choices, panelists and recipients told us that many households are discouraged or prevented from participating in the Food Stamp Program because of administrative hindrances in applying and qualifying for benefits. In particular, the food stamp application and documentation requirements present obstacles to reservation Indians who may be illiterate or do not keep the type of records needed to verify income and expenses. Further, the distant location, from 30 to 165 miles away, and the absence of reliable transportation for some recipients to food stamp offices present barriers, even to program application, that could affect a household's ability to comply in a timely manner with the procedural requirements of the program.

Some households cannot qualify for food stamp benefits because of program regulations concerning either their household composition, income, or resources. While it may be easier, depending on individual household circumstances, to qualify for FDIPIR, we were told that many households that are ineligible for food stamps will not apply for commodities. They perceive the eligibility criteria to be the same for both programs and, therefore, believe a rejection by the Food Stamp Program disqualifies them from FDIPIR.

We were told that others will not participate in the Food Stamp Program because they believe the benefit is so low that transportation costs to the food stamp office would eliminate any benefit they might receive. According to most panelists and recipients, these obstacles contribute to hunger by preventing or discouraging households from getting the needed food assistance.

Application and Qualifying Criteria Viewed as Complex and Stringent

Panel members and recipients at all four reservations told us that the Food Stamp Program was less accessible than FDIPIR because of the sometimes lengthy and complex food stamp application process and/or the program's stringent eligibility criteria. They also mentioned that they encountered transportation problems when going to the food stamp office. According to FDIPIR recipients at the Navajo, White Earth, and Pine Ridge reservations, FDIPIR was their only option because they could not meet food stamp eligibility criteria. At the Fort Berthold Reservation, FDIPIR recipients did not indicate that they were ineligible for food stamps but told us that the burdensome application process discouraged their participation in the Food Stamp Program.

Application Process

At all four reservations, food stamp and FDPIR recipients described applying for food stamps as a complex and sometimes lengthy process. Panel members told us that the process is cumbersome, in part, because of the complex process involved for determining eligibility. Traveling long distances to the food stamp office also posed significant problems for many applicants.

The Application

To participate in the Food Stamp Program, households, or their authorized representatives, must file an application form, be interviewed, and provide documents to support their eligibility. Although the application process often cannot be completed the day applicants first visit the office, they can file a partial application to establish a filing date for determining when benefits begin.

In the states administering the program for the four reservations, households applying for food stamp eligibility must file a multipurpose application, which is used to determine eligibility and benefit levels for several assistance programs at once. Although more efficient than separate applications, the combined application is lengthier and more difficult to complete than a typical food stamp application. The application forms at three reservations ranged from 21 pages at Pine Ridge to 38 pages at Fort Berthold, while at the Navajo Reservation, applicants use a shorter form, between 8 to 11 pages, depending upon which of the three states (that serve the reservation) with which the application is filed. In some of these applications, households must provide at least 60 pieces of information about household composition, income, living expenses, and assets.

The lengthy application form and the time required to complete it were cited as stumbling blocks to participation by recipients and panels at all four reservations. One FDPIR recipient told us that the food stamp application scared her off after she had sat for hours trying to complete the application. Others shared this sentiment.

At the Navajo, Pine Ridge, and Fort Berthold reservations, recipients believed that the verification requirements—the need for receipts, pay stubs, and other documents to support or verify their statements on the application form—were excessive and could unnecessarily delay delivery of benefits (this was not discussed by the White Earth recipients). Some recipients claimed that they were required to bring in their children's report cards (to establish student status), residency testimonials from neighbors, and other forms of verification before their application

for food stamps could be approved. Another recipient stated she had to produce documents to verify that her husband was in prison.

Further, according to a Pine Ridge panelist, many people who seek emergency food assistance from food banks are those who experienced problems completing the food stamp application and as a result had benefits delayed up to 4 weeks. The Food Stamp Program requires states to provide benefits to destitute¹ households within 5 days of their application. However, the Pine Ridge panelist did not indicate whether those households seeking emergency assistance were eligible for or offered expedited benefits by the local food stamp offices. In an earlier report,² we found indications that eligible households elsewhere in the nation were not always offered expedited benefits.

Panel members at the Navajo Reservation explained that the application process is especially difficult for Indian households who may be illiterate or who do not keep the types of records required to verify income and expense information on their application. For example, medical expenses for services rendered by a tribal "medicine man" may be difficult to document, according to panelists.

Transportation Problems

Recipients at the Navajo and Pine Ridge reservations noted that the location of the food stamp office, and the absence of reliable transportation to get there, presented barriers that could affect someone's ability to comply in a timely manner with the procedural requirements of the program (this was not discussed by the White Earth and Fort Berthold recipients). As shown in table 2.1, potential food stamp applicants could have to travel anywhere from 30 to 165 miles one way to get to the office to apply in person.

¹A household is considered destitute if its expected monthly income is less than \$150 and its liquid assets are \$100 or less.

²Food Stamp Program: Administrative Hindrances to Participation (GAO/RCED-89-4, Oct. 21, 1988).

Chapter 2
Obstacles to Participation in the Food Stamp Program

Table 2.1: Distances to Food Stamp Offices Serving the Four Reservations

Reservation	Offices serving the reservation	Range of miles to nearest food stamp office
Fort Berthold	5	30 - 60
Pine Ridge	2	30 - 50
White Earth	3	40 - 50
Navajo		
Arizona	8	50 - 75
New Mexico	3	75 - 120
Utah	3	30 - 165

Source: Local food stamp officials on the four reservations.

According to panel members at the Pine Ridge and Navajo reservations, because the Food Stamp Program limits the value of resources³ that can be owned by recipients, many participants do not have cars or have older, unreliable cars and, as a result, may have to pay neighbors or others for rides to the food stamp office. Further, according to recipients at the Navajo and Fort Berthold reservations, the transportation costs—because of distance and/or payment to others—that would be incurred in visiting the food stamp office to apply and gather the required documentation would eliminate any benefit they might get.

According to local administrators of the Food Stamp Program, food stamp offices serving the Fort Berthold, Pine Ridge, and Navajo reservations offer alternative services so that applicants do not have to travel to the main office. However, satellite offices operate for a few hours on 1 to 4 days a month. For example, they told us that, the McKenzie County food stamp office, which serves the Fort Berthold Reservation, has a satellite location on the reservation that is open for 2 hours once a month. In Jackson County on the Pine Ridge Reservation, where 90 percent of all recipients in the county rely on alternative services, the satellite food stamp office is open 2 days a month. At the Navajo Reservation, local program officials told us that the frequency of operation of satellite offices depends on the number of clients in an area. They said that, at a minimum, satellite service is provided 2 days a month at chapter house locations.

The Hunger Prevention Act of 1988 (P.L. 100-435) authorizes several administrative improvements to the Food Stamp Program that simplify the application process and reduce barriers to participation in rural

³Resources include liquid and nonliquid assets, such as cash on hand, money in checking and savings accounts, stocks and bonds, licensed and unlicensed vehicles, and recreational property

areas. For example, the act requires state agencies to assist applicants in obtaining the appropriate verification and completing the application process. It also grants states permission to waive in-office interviews⁴ and to mail forms to households who live in a location not served by a certification office or have transportation difficulties. Panelists and recipients did not indicate whether in-office interviews were being exempted. However, according to local administrators of the program, households were mailed forms and provided assistance in obtaining verification documents when requested.

Eligibility Criteria

At all four reservations, panelists mentioned that the Food Stamp Program has more stringent eligibility requirements than FDPIR, which preclude or discourage many households from participating. FDPIR recipients at the Navajo, White Earth, and Pine Ridge reservations told us that Food Stamp Program regulations concerning either their household composition, income, or resources made them ineligible for benefits.

Household Members

Panel members at the Navajo and Fort Berthold reservations mentioned that often extended families who live together cannot qualify for the Food Stamp Program because they are required to apply as one household and their combined income exceeds the eligibility guidelines.

As a general rule, for both the Food Stamp Program and FDPIR, all individuals living together and purchasing food and preparing meals in common constitute a "household" and must apply together. The income and assets of all household members are aggregated in determining eligibility and benefits. However, for the Food Stamp Program, specified relatives (i.e., parents, children, and siblings) generally must apply together without regard to this "purchase and prepare" rule. Therefore, two adult sisters, for example, who live in one household, but who purchase food and prepare meals separately, must apply for food stamps together. (However, elderly or disabled individuals and parents with minor children, as well as some others, can apply as separate households.) In contrast, FDPIR regulations allow related individuals living together, without regard to relationship, who do not purchase and prepare meals in common, to apply separately for benefits.

⁴Waiver of in-office interviews are to be granted, on request, if a household is unable to appoint an authorized representative and all adult members are elderly or disabled, live in locations not served by a certification office, or have transportation difficulties.

According to panelists at the Navajo Reservation, it is common practice for relatives to live together. However, because these extended families may not share income for purposes of buying food, the aggregate income of the household does not accurately reflect the household's ability to purchase food or its need for food assistance.

Income

Recipients at all four reservations also mentioned that the Food Stamp Program considers certain types of payments, such as tuition assistance, as income that are not available for food expenditures. As a result, some households exceed the income guidelines. For example, recipients at the Pine Ridge and Fort Berthold reservations told us that portions of educational scholarships and grants are included as income, although they are not available for food purchases (this was not discussed by recipients at White Earth and Navajo).

According to Food Stamp Program regulations regarding federal education assistance, amounts in excess of tuition and mandatory fee requirements are generally counted as income; with respect to nonfederal education assistance, only amounts earmarked for living expenses are treated as income. Recipients believe that the excess amount available from federal grants should be income-exempt as it is used to pay for miscellaneous education expenses such as books, supplies, and transportation.

Recipients at the Navajo, White Earth, and Pine Ridge reservations told us that they had chosen FDIIR over the Food Stamp Program because Food Stamp Program regulations regarding income calculation made their benefit amount so low that it was not worth going through the process.

Resources

Another obstacle to participation for some Indian food stamp applicants, according to panelists and recipients at the Navajo and Pine Ridge reservations and recipients at the White Earth Reservation, is having resources, usually a vehicle, with a value that exceeds Food Stamp Program limits. The program sets maximum allowable resources that households must meet to be eligible for benefits. The combined value of a household's liquid and nonliquid resources—such as cash on hand, money in checking and savings accounts, stocks and bonds, unlicensed vehicles, and recreational property—cannot exceed \$2,000 unless the household has an elderly member, in which case the limit is \$3,000.

Additionally, non-exempt licensed vehicles⁵ are evaluated for fair market value, and the portion of the value that exceeds \$4,500—an amount established by the Food Stamp Act of 1977—is attributed to the household's resource level, regardless of any encumbrances on the vehicle. According to a local food stamp official, if a family has a vehicle that is less than 3 years old, the vehicle will in all likelihood have a value too high for the family to qualify for food stamps.

Recipients at the Navajo, White Earth, and Pine Ridge reservations claimed that they all had been denied food stamp benefits at one time due to the value of their vehicles. Some said they resorted to selling their cars to qualify. This created a hardship for their families because poor road conditions, inclement weather, and remote living locations on the reservations make having reliable transportation necessary.

Belief That FDPIR Criteria Are Same as Food Stamp Program's

According to Navajo and Pine Ridge panelists, many households that are ineligible for food stamps will not apply for commodities. Because they perceive the eligibility criteria to be the same for both programs, they believe that a rejection by the Food Stamp Program disqualifies them from FDPIR as well. Panelists indicated that outreach activities are needed to improve applicant understanding of the differences between the two programs. Although federal cost sharing for outreach was reinstated by the Hunger Prevention Act of 1988 to promote informational activities regarding program eligibility, benefits, and the application process, panelists and program officials we spoke to were not aware of whether an increase in outreach activities had occurred.

⁵Licensed vehicles exempt from this provision are those used to produce earned income, or necessary for the transportation of a physically disabled household member, or used as a home, or necessary for long distance travel to employment.

Hunger and Diet-Related Illnesses Continue for Those in Food Assistance Programs

The Food Stamp Program and FDPIR have helped to alleviate hunger and improve the diets of Indian recipients on the four reservations. For many Indians, these programs continue to constitute their primary and long-term food supply because of persistent high unemployment on the reservations. However, because the Food Stamp Program and FDPIR are intended to supplement, rather than satisfy, total dietary needs of most households, some panel members and recipients believe they may not be nutritionally adequate for those Indians who rely completely on them.

Hunger,¹ which continues to be a concern on the reservations we visited, is more common among food stamp recipients than beneficiaries of FDPIR, according to recipients and panel members. We were told that the monthly reporting requirement of the Food Stamp Program contributes to hunger because (1) some households experience breaks or losses in benefits for procedural noncompliance with this requirement and (2) it creates variances in monthly allotments that make it difficult for households to plan food expenditures. Further, benefit levels are perceived to be insufficient to purchase an adequate low-cost diet because of inequities in the benefit calculation and the high cost of living on the reservations. In addition, the elderly and children of alcoholic parents may experience hunger when the food assistance intended for their consumption is used by other household members or is exchanged to purchase nonfood items.

The food programs have provided Indian households an opportunity to obtain a more adequate diet. However, many diet-related health problems, such as obesity, diabetes, heart disease, and hypertension, still prevail on the reservations we visited. While neither program is designed to address special dietary needs of recipients, the Food Stamp Program can better accommodate those with diet-related illnesses. According to recipients and panel members, FDPIR, on the other hand, contributes to these problems, because of the inconsistent availability and poor quality of some foods in the FDPIR package.

¹We used a definition of hunger developed by the Food Research Action Center (FRAC), a nonprofit organization in Washington, D.C., for its Community Childhood Hunger Identification Project. FRAC identifies hunger as the lack of resources to obtain food, food shortages in the household, changes in food intake or eating habits of the household (such as skipping meals), and reliance on a limited number of foods or staples to stretch available resources.

Continuing Dependence on Federal Food Programs

Although the federal food assistance programs are, for the most part, intended to be supplemental, they are often the primary or only food source available to participating Indian households, because of continuing high unemployment on the reservations. This heavy reliance, in the absence of other substantial resources, can contribute to hunger among food stamp and FDPIR recipients.

FDPIR is not intended to provide a complete 30-day supply of food to eligible households and assumes that participants will purchase or rely on other resources for a portion of their monthly food supply. According to USDA officials, food stamps are also supplemental benefits for most households. While the food stamp benefit is designed to provide households with no countable income an adequate quantity of food and nutrients for an entire month, most food stamp households have some countable income, 30 percent of which the program expects to be contributed toward food purchases. However, food bank officials on the panels told us that many of their visitors are food stamp recipients who have used up their monthly allotment and have no other resources to buy food.

Food stamp recipients at the Navajo Reservation and FDPIR recipients at the Navajo, Pine Ridge, and White Earth reservations indicated that federal food assistance is their primary source of food. At the Fort Berthold Reservation, FDPIR recipients told us that the FDPIR package is their only source of food. Further, recipients at all reservations indicated that they had very little income with which to supplement their benefits.

Our analysis confirms that food stamp and FDPIR benefits were issued to households that, on average, have limited gross income² with which to pay for living expenses as well as food purchases needed to supplement their food assistance benefits. For food stamp issuances to households with any gross income over \$0 in the general area of the Pine Ridge and Navajo reservations in fiscal year 1988, we estimate that the average gross monthly income per person was \$102 (± 7). (We did not have data for White Earth and Fort Berthold.) We also estimate that for households with some gross income, the average gross monthly income per FDPIR household member on the four reservations in calendar year 1988 was \$177 (± 15) at Fort Berthold, \$188 (± 12) at Pine Ridge, \$283 (± 12) at White Earth, and \$198 (± 15) at the Navajo Reservation.

²We computed gross income for a FDPIR household by taking the sum of the household's earned and unearned income before deductions. For food stamp households, we used the gross countable income recorded in the FNS automated data base.

According to recipients at the Navajo, Pine Ridge, and White Earth reservations, many households supplement their food assistance benefits by depending on food banks for assistance, purchasing food with the small disposable incomes they have, and relying on other federal programs like the Special Supplemental Food Program for Women, Infants, and Children (WIC) and Aid to Families With Dependent Children (AFDC). These federal programs, however, are available only to special populations. For example, AFDC is available to eligible needy families with children; and WIC is available to eligible low-income pregnant, breastfeeding, and postpartum women and children up to 5 years old.

FDPIR recipients at Fort Berthold told us that they try to stretch their benefits by borrowing food, hunting, or relying on a limited number of staple foods, such as macaroni and flour (for fry bread), to feed their families for a portion of the month.

Recipients at all four reservations indicated that federal food programs have been a permanent long-term source of food for their families. For example, approximately 60 percent of the food stamp recipients that we met with have been receiving food stamps between 4 and 20 years, and approximately 60 percent of FDPIR recipients we talked to have been using commodities between 4 and 40 years. According to panel members at the Navajo, Pine Ridge, and Fort Berthold reservations, this heavy reliance on food assistance will continue unless unemployment is reduced on the reservations. As indicated by our September 1989 report, unemployment rates on the four reservations ranged from 50 percent on the Navajo Reservation to 79 percent on the Fort Berthold Reservation.

Hunger Identified as More Common Among Food Stamp Recipients Than Beneficiaries of FDPIR

According to panelists, hunger is a major concern at the Pine Ridge, Navajo, and Fort Berthold reservations and a lesser concern at the White Earth Reservation. This information confirms the preliminary findings we noted in our September 1989 report with respect to the Fort Berthold and Pine Ridge reservations. While our earlier study did not indicate that hunger was a problem at the Navajo Reservation, members of all three Navajo panels told us that, based on personal observations and the increasing use of food banks, hunger does exist on their reservation. Panelists, particularly food bank administrators, told us that although hunger affects participants and nonparticipants of the federal programs alike, nonparticipating households and food stamp recipients are groups that are severely affected.

According to panelists at the Navajo and White Earth reservations, hunger is more common among food stamp households than FDIPIR beneficiaries. This can be attributed to (1) breaks or losses in food stamp benefits due to noncompliance with the monthly reporting requirement, (2) variances in the amount of stamps issued each month, and (3) benefit levels that are believed to be insufficient to purchase an adequate low-cost diet.

Noncompliance With the Monthly Reporting Requirement Can Cause Breaks or Losses

Panel members at the Navajo and Fort Berthold reservations and food stamp recipients at all four reservations told us that the monthly reporting requirement³ of the Food Stamp Program is for many households a difficult and unnecessary administrative burden. For example, they said many food stamp-dependent Indian households experienced breaks or losses in benefits for procedural noncompliance with the reporting requirement.

Failure to accurately complete the monthly report or to submit it on time can result in an interruption of benefits or can cause the participant to be terminated from the program and lose benefits during the time it takes to reapply. Although, states may adopt a monthly reinstatement option that can prevent households from having to reapply and lose benefits during a lengthy reapplication process,⁴ Minnesota (White Earth), North Dakota (Fort Berthold), New Mexico and Utah (Navajo) are among 13 states that have not done so. To reapply, a participant must complete and file a new application, provide required verification, and appear for an interview.

In an earlier report,⁵ we recommended that FNS encourage the 13 states to adopt the reinstatement option, if practicable. In March 1990, USDA directed the food stamp regional offices to contact these 13 states, as we had recommended, and report the results to FNS by April 30, 1990. FNS is currently analyzing the responses.

³States administering the Food Stamp Program can require that certain households report and verify income and household circumstances on a monthly basis. This information is used to retrospectively calculate benefits. Every month households subject to this requirement must report and provide documents to support income, medical, dependent care, and shelter expenses; household composition; and other circumstances relevant to the amount of the food stamp allotment.

⁴The reinstatement option allows the state to accept a monthly report in the month after it is due and provides the recipient, if still eligible, a full month's benefits and the opportunity to continue in the program without reapplying.

⁵Food Stamp Program: Participants Temporarily Terminated for Procedural Noncompliance (GAO/RCED-89-81, June 22, 1989).

Food stamp recipients at the Fort Berthold, Navajo, and Pine Ridge reservations described the difficulty they had had in completing the monthly report and providing the state-required documentation. According to Food Stamp Program regulations, if a household has presented insufficient documentation or documentary evidence is difficult to obtain, state officials are required to offer the household assistance in obtaining the documents or use a collateral contact or home visit to obtain the information. According to local administrators of the program, this service is available if recipients are unable to provide the documentation after having made every effort to do so.

Also, according to panel members at the Navajo and Pine Ridge reservations, many food stamp recipients have difficulty completing the monthly report because they are illiterate or do not understand English and therefore need assistance.

According to local food stamp officials at all four reservations, to ensure that the monthly reports are received on time and thereby avoid breaks in benefits, many recipients deliver their monthly reports in person even though they are allowed to mail them in. For example, we were told that at the Navajo Reservation, approximately 50 percent of the Indian food stamp recipients in McKinley County that report monthly deliver their reports in person, even though they may have to travel an average of 100 miles one way to do so.

Some recipients at the Fort Berthold and Navajo reservations have had their benefits terminated for untimely reporting and have had to reapply to the program. Others at the Fort Berthold, Navajo, and Pine Ridge reservations have experienced delays of anywhere from 10 days to 1 month in receiving benefits because they did not complete or made errors in their monthly reports, which must be corrected before food benefits can be provided. Because recipients are so dependent on food stamps to supply the large majority of their food needs, delays in receiving benefits may affect their ability to feed their families.

Further, delays or suspensions in benefits brought about by the monthly reporting requirement create hardships for households who, because they are certified for the Food Stamp Program, cannot approach FDPIR for assistance. Program regulations prohibit households from simultaneously participating in FDPIR and food stamps, although households may from month to month choose to participate in one program and then the other.

Variations in Monthly Food Stamp Allotment

For those subject to the monthly reporting requirement, benefits are adjusted to more closely reflect the current financial situation of the household and ensure more accurate payments. However, it can result in hardships for recipients in that it contributes to variations in monthly food stamp allotments.

Although the program is designed to provide a means of obtaining minimum food requirements through a combination of stamps and income, in practice this does not happen when the household has fluctuating income and expenses. For those subject to the monthly reporting requirement, benefits are based on retrospective income and expenses. However, we were told that they often do not reflect recipients' immediate food needs. For example, a household's prior month's income could be high which would result in a small benefit amount when in actuality the household may need a larger benefit to make up for a loss of income or high shelter expense in the current month. According to recipients at White Earth, Pine Ridge, and Fort Berthold reservations, this mismatch of income and expenses with benefit amount creates hardships for many.

Because households have difficulty complying with the monthly reporting requirement and this noncompliance affects food stamp benefits, panelists at the Navajo and Fort Berthold reservations recommended that this requirement be eliminated from the program. Recipients at Fort Berthold also suggested eliminating monthly reporting due to the administrative burden it places on them and the variations in monthly benefits created by retrospective budgeting. It should be noted that the Hunger Prevention Act of 1988 allows states more flexibility in deciding whether households must report monthly.

Food Stamp Benefit Perceived to Be Too Low to Purchase an Adequate Low-Cost Diet

Both a perceived inequity in the calculation of food stamp benefits and the reservations' high cost of living—cost of food on the reservations and transportation to get to lower cost sources off the reservations—create problems in stretching benefits to obtain an adequate diet.

Perceived Inequities in Benefit Calculation

According to recipients at three reservations, inequities exist in the food stamp benefit calculation because of unrealistic assumptions regarding standard household composition and household definition.

Food stamp benefits are designed around the Food Stamp Program's standard family of four members—a man and woman 20 to 50 years old

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and children ages 6 to 8 and 9 to 11. In our analysis of Food Stamp households at the Pine Ridge and Navajo reservations, we found so few occurrences of families that fit the standard family definition that we were unable to make a meaningful estimate of the extent to which households on these reservations matched the definition. Furthermore, according to recipients at the Navajo and Fort Berthold reservations, their food stamps lasted only 1 to 2 weeks because they have older children, usually teenagers,⁶ in their family who have larger appetites than do younger children.

We estimated that 67 (± 5) percent of the food stamp issuances to Indian households in the general area of the Navajo and Pine Ridge reservations were at least 5 percent higher or lower than the cost of purchasing the Thrifty Food Plan diet using nationwide average food prices. We found that those households with younger children under 6 received benefits equaling or exceeding requirements, whereas those households with only adults or teenagers received less than required to purchase a low-cost diet. (See app. III for the details of this analysis.)

Panelists and recipients at the Pine Ridge Reservation also told us that the food stamp allotment is inadequate because it does not consider the needs of part-time household members, such as children in weekday boarding schools who eat at home on weekends. According to Food Stamp Program regulations, residents of institutions that receive over half of their meals from the institution are not included as household members.

Food stamp recipients at the Navajo and Pine Ridge reservations told us that feeding older children or family members on weekends who are not included when benefits are determined is a reason for their running out of food. Recipients at the Navajo and Fort Berthold reservations suggested that a more equitable determination of food stamp benefits could be made by tailoring benefit levels to the food requirements of households based on the age of its members. Panelists at Pine Ridge suggested that more equity could be built into the food stamp benefit by acknowledging part-time meal eaters in the definition of the food stamp household.

⁶Teenagers are defined as children ages 12-19.

Problems Faced by Indians in
Stretching Food Stamp Benefits

According to panelists at the Navajo and Pine Ridge reservations, Indians face unique conditions related to the high cost of living on reservations that erode the real value of the food stamp benefits and require them to stretch their food dollars more than other recipients do.

Navajo and Pine Ridge panelists and recipients at all four reservations told us that Indian households cannot purchase as much food with their food stamp benefit⁷ as do other recipients because of the high cost of food on the reservation. According to panelists, food prices are high because of the cost of transporting food over vast distances and the limited number of grocery stores on the reservations. To minimize erosion of food stamp benefits, panelists at the Navajo and Pine Ridge reservations and recipients at Fort Berthold told us that benefits should be adjusted for high-cost areas such as the reservations.

Additionally, Pine Ridge and Fort Berthold reservation recipients told us that since food stamps are issued to everyone on the same day of the month, grocers can and do increase food prices the week of issuance. However, food stamp regulations allow states to stagger issuance of stamps through the fifteenth of the month, provided that each household receives its coupons on the same day every month. We noted that only the states serving the Navajo Reservation stagger issuance of stamps, while at the Pine Ridge, White Earth, and Fort Berthold reservations, issuance dates are the same for all recipients.

Recipients at Fort Berthold and Pine Ridge told us that often to get better value from their food stamp allotments they must travel 50 to 75 miles off the reservation to purchase food at lower prices. Those recipients who do not have cars or whose cars are unreliable may have to incur the expense of finding alternative ways to travel to a grocery store off the reservation. For this reason, the panelists at the Navajo Reservation suggested allowing a deduction from income for transportation expenses.

Further according to panel members from the Navajo and Pine Ridge reservations, the Food Stamp Program does not adequately consider the high shelter cost on the reservations, such as rent and utilities, and its impact on disposable household income. The Food Stamp Program allows an excess shelter cost deduction of up to \$177⁸ in fiscal year 1990

⁷The value of the food stamp benefit is based on the cost of purchasing the Thrifty Food Plan at current average national food prices.

⁸This amount applies to households in the contiguous 48 states or the District of Columbia.

when shelter costs exceed 50 percent of the households adjusted income.⁹ However, panelists believe that the nondeductible portion of shelter costs decreases the amount of disposable income households have available for food purchases. For example, a household with adjusted income of \$500 and shelter expenses of \$400 can deduct \$150 of its shelter costs (i.e., \$400 less half of adjusted income [\$250]). The remaining \$250 of shelter expenses theoretically is paid out of the \$350 of net income (i.e., \$500 less \$150 of excess shelter costs). As a result, households may not be able to devote the 30 percent of disposable income that the program assumes it can if they have to pay for nondeductible shelter costs first.

Additional Problems Affect the Elderly and Certain Children

Additional problems exist for food assistance recipients who are elderly or for children of alcoholic parents. Panel members at all four reservations indicated that many elderly people and children not only experience a scarcity of food, as do other recipients who lack resources beyond their food assistance benefits, but also go without any food for days because the food assistance intended for their consumption may be used by other household members. For example, Elderly Nutrition Program representatives on the panels at the Navajo, Pine Ridge, and White Earth reservations told us that many of the elderly follow the ways of the traditional Indian family by allowing children and grandchildren to eat first. As a result, they will give a portion of their food assistance to their immediate family and go hungry for a part of the month.

Similarly, Child Welfare representatives on the panels at all four reservations told us that alcoholic parents will use any cash that the household may have, as well as sell or trade food stamps, to buy alcohol. It is common, they said, to see children left on their own for many days without any food. In fact, White Earth panelists indicated that those most affected by hunger on their reservation were children of alcoholic parents. Officials from the School Lunch Programs at the Navajo and Pine Ridge reservations also told us that they see many hungry children for whom the only meal of the day is the one they receive from either the School Lunch or Headstart programs.

⁹Adjusted household income is gross income reduced by a standard deduction and a dependent care cost deduction.

Commodity Program Not Designed to Address Nutrition- Related Problems

Although many in the Indian population have the unique opportunity of participating in FDPIR as an alternative to the Food Stamp Program, FDPIR may not meet the needs of some households, particularly those with diet-related health problems. Obesity, diabetes, heart disease, and hypertension are prevalent diet-related health problems on the four reservations we visited. Recipients and panelists at the Navajo, Pine Ridge, and Fort Berthold reservations told us that some of the food items offered by FDPIR often contribute to these problems. In contrast, the Food Stamp Program provides recipients with greater freedom to obtain a wider variety of foods, including fresh fruit and vegetables, and to accommodate special dietary needs, such as a need for foods low in fat and/or salt.

Health Problems on the Four Reservations

Obesity, which is primarily caused by an excessive intake of calories and a lack of exercise, is perceived to be a major health problem on all four reservations by panelists. For example, an Indian Health Service (IHS) official at Pine Ridge told us that 65 percent of all clinic patients were obese according to a recent survey.

Diabetes is also a major concern on all four reservations. IHS officials, from the Aberdeen area (which encompasses the Pine Ridge, Fort Berthold, and 13 other reservations) were especially concerned with the near epidemic proportions of the illness. We were told that the Aberdeen area leads all other areas nationwide in the number of diagnosed diabetes cases, with about 30 percent of all adults over the age of 45 having been diagnosed as diabetic. Moreover, the incidence of diabetes at the Pine Ridge Reservation is six times the national average for people between the ages of 45 and 64, and the Fort Berthold Reservation leads all other Aberdeen area reservations in the number of diabetic cases.

In addition to obesity and diabetes, which are common to all four reservations, panelists indicated the prevalence of reservation-specific complications as well. Panelists from Navajo and Fort Berthold believe that the high incidence of heart disease on both reservations is a complication resulting from obesity, and panelists from Pine Ridge and Fort Berthold told us that the high incidence of hypertension on both reservations also results from obesity.

FDPIR Package Lacks Variety

Our review showed that recipients may not be getting the full variety of foods authorized by FDPIR, because (1) many of the food items are not available for recipient selection, (2) the package lacks adequate servings

of fruits and vegetables, and (3) some of the food items are of poor quality and are inedible. Although panelists told us that this is a problem for all FDPIR recipients, it is of special concern for recipients with nutrition-related problems.

Unavailability of Food Items

Although FDPIR¹⁰ is designed to offer recipients several choices within the four food groups, not all of the items are consistently available for recipient selection. Panelists and recipients at all the reservations, except White Earth, were concerned that, of the authorized items, only half are available each month. Moreover, recipients told us that many of the items do not vary from month to month. For example, often the only vegetable available is canned green beans, the only fruit available is canned pineapple, and the only meat available is canned luncheon meat. As a result, households eat the same foods throughout the month and often for many months at a time. We observed a lack of many authorized items when we visited a distribution warehouse on the Navajo Reservation in June 1989. We found that only about 30 of the 60 authorized commodities from the 4 food groups were listed as available for selection by recipients. We also noted that few offerings were available from the vegetable and fruit food groups and that chicken was not available.

In contrast, the Food Stamp Program enables households to overcome the lack of variety experienced by FDPIR recipients. Food stamp recipients at all four reservations told us that the Food Stamp Program provides them the flexibility to choose what to buy and when to shop. Notably, they cited their ability to purchase fresh fruits, vegetables, meats, and dairy products, as well as other items not offered by FDPIR, as advantages of the Food Stamp Program. Panelists at the Pine Ridge and Fort Berthold reservations also agreed that the Food Stamp Program offers recipients a much greater variety of food than that authorized by FDPIR, and therefore, it is better suited for recipients with special dietary needs.

Panelists and recipients from the Navajo, Pine Ridge, and Fort Berthold reservations recommended that USDA ensure that the majority of all authorized food items be available on a regular basis. Recipients in particular stated that they should be issued "rainchecks" so that they may receive out-of-stock items whenever they become available.

¹⁰In 1977, USDA expanded the food package to include over 60 food items and represent the 4 basic food groups. In 1986, USDA increased the quantity and nutrient value of the foods authorized for distribution.

According to USDA, its annual commodity purchase plan determines what commodities will be available for distribution. FNS develops the annual plan by balancing legislative requirements with agricultural market information, available funds, and recipient commodity preferences. The plan may be modified throughout the year to take into account changing market conditions. If a food item is not available because of market conditions, there is, in most cases, an alternative commodity of equal nutritional makeup from the same food group available for distribution. However, according to USDA, local FDPIR staff do not always order the complete variety of food items even when choices are available. Our September 1989 report also identified other factors—such as the ordering pattern of local FDPIR staff, price fluctuations, and storage limitations at the state and reservation level—that limit the variety of food available at specific reservations for specific months.

Inadequate Servings of Fruits and Vegetables

We also found that the FDPIR food package lacks adequate servings of fruits and vegetables. According to criteria from the American Red Cross' Food Wheel, healthy individuals need approximately 92 servings of fruits and 122 servings of vegetables per month.¹¹ However, according to FNS, the FDPIR package is designed to provide only 67 servings of fruits (or 73 percent of that recommended) and 34 servings of vegetables (or 28 percent of that recommended) per month. Moreover, a comparison of the number of servings of fruits and vegetables actually issued to recipients to those recommended, shows that recipients were taking home only 59 percent of the recommended servings of fruits and 25 percent of the recommended servings of vegetables.¹² Although, USDA concurs that the food package is lacking in adequate servings of fruits and vegetables, it believes that because the food package is supplemental, it is not required to provide a complete diet.

However, this deviation from the recommended serving criteria is of great concern to panelists and recipients alike at the Fort Berthold, White Earth, and Navajo reservations, because many recipients rely on the food package for their total diet. They recommended that USDA increase the quantities of fruits and vegetables in the FDPIR package.

¹¹The American Red Cross' Food Wheel, developed in cooperation with USDA, gives a range for the number of servings needed to meet the nutritional needs of individuals since nutrient needs vary with age, sex, body build, and physical activity. Ninety-two and 122 represent the midpoint of the range of number of servings from the food wheel for fruits and vegetables, respectively.

¹²Actual issuance is based on USDA data for June 1987 to May 1988.

According to IHS officials on the panels, a diet lacking in adequate servings of fruits and vegetables can significantly impact diet-related health problems, such as diabetes.

Poor Quality of Food Items

Poor quality of available food items also contributes to inadequate food package variety. Recipients at all four reservations told us that many of the food items they receive, such as milk, butter, cheese, oatmeal, and flour, are inedible because they are either spoiled, moldy, or infested with bugs. Recipients also told us that they would like to see expiration dates printed on commodities to help them determine if an item is outdated. Additionally, they said that many edible items are of very poor quality. For example, foreign objects, like pebbles in the vegetables and veins in the meats, are found in the items. Although, FDPIR regulations provide for the replacement of damaged or inedible commodities, recipients at the Navajo Reservation told us that they could not obtain replacements for inedible items but did not say why. Fort Berthold recipients told us that they did not return commodities because they could not afford to go back to the warehouse, and White Earth recipients feared that returned items are redistributed to other households.

The lack of variety, inadequacy of servings, and inedibility of certain foods ultimately reduce the overall nutritional value of the FDPIR package. According to an FNS nutritionist, the nutrient value of the food package is based on the assumption of maximum variety (about 60 items). However, if maximum variety is not available, then recipients may not receive either the intended full nutritional content of the package or the recommended daily allowances of essential nutrients, unless they are able to supplement the package with other foods.

High Fat and Salt Content of FDPIR Foods

Despite improvements made to the package,¹³ panelists from the Fort Berthold, Pine Ridge, and Navajo reservations and recipients from all four reservations concurred that some commodities still contain too much fat and salt. Because a diet high in fat can contribute to obesity, diabetes, and heart disease and a diet high in sodium can contribute to hypertension, some foods in the FDPIR package may aggravate these conditions. Panelists and recipients both commented on the high quantities of fat and salt in the canned luncheon meat, the excessive fat in the canned pork, and the excessive salt content of the canned vegetables.

¹³The FDPIR food package is the result of a number of adjustments made by FNS to the commodity program since 1977, to reflect tribal preferences and improve the nutritional profile of the package. According to FNS, the food package compares favorably with the recommended daily allowance goals of the Thrifty Food Plan and is therefore an acceptable alternative to the Food Stamp Program.

Both recipients and panelists recommended that USDA reduce the fat and salt in the commodity package.

The level of sodium in the package may be of special concern to recipients that have hypertension.¹⁴ According to USDA's nutritional profile of a hypothetical FDPIR package for a family of four, the package provides 2,241 milligrams of sodium per day. Although this sodium level meets the recommended safe and adequate level for healthy individuals, it can negatively affect some recipients with hypertension. Recent studies¹⁵ by the National Institutes of Health and the National Research Council recommend that sodium levels for hypertensive individuals should be as low as 1,500 to 1,800 milligrams per day, respectively.

To minimize the detrimental effects of the high fat and salt content of FDPIR foods, recipients told us that they have to drain off the fat and rinse other commodities prior to using them. Panelists from IHS told us that recipients with special dietary needs are counseled on food preparation practices so that they may use the foods in the FDPIR package without aggravating their health problems. Nutrition education available to recipients on the reservations is discussed in chapter 4.

In addition, according to panelists at the Navajo and Pine Ridge reservations and recipients at the Pine Ridge and Fort Berthold reservations, the FDPIR food package contains an overly large proportion of starchy food, including macaroni, rice, and cornmeal. Recipients told us that often during the last week of the month, these are the only commodities left in their homes to feed their families. Consequently, many FDPIR households subsist solely on a high starch diet for several days of the month. Panelists believe that the high starch content of the commodity package is a major contributor to the prevalence of obesity on the reservations. Both panelists and recipients recommended that USDA reevaluate the starch content of the FDPIR package. However, FNS considers the starch content of the FDPIR package to be within the prescribed ranges for a nutritious diet.

¹⁴A hypertensive individual may or may not be sodium sensitive, depending on whether his/her blood pressure rises or decreases with sodium intake. Restriction of sodium in diets for some individuals with mild hypertension has been found to be beneficial.

¹⁵The 1988 Report of the Joint National Committee on Direction, Evaluation and Treatment of High Blood Pressure, National Institutes of Health, and Diet and Health: Implications for Reducing Chronic Disease Risk, National Research Council, 1989.

Chapter 3
Hunger and Diet-Related Illnesses Continue
for Those in Food Assistance Programs

In 1985, USDA reviewed the nutrient profile of the FDIIR package and concluded that the package provided a nutritionally adequate, supplemental diet for healthy individuals but made further improvements in the program to reduce the fat and salt in the package. USDA's conclusion assumed that the maximum variety of foods is consistently available to recipients. However, recipients' experiences indicate that this may be unrealistic; and in fact, the absence of maximum variety may change the salt, fat, and starch content of the package. For example, as noted in our September 1989 report, FDIIR recipients at the Navajo Reservation, unable to obtain canned chicken at the time of our review, may have instead consumed more canned beef or pork, which are about 63 and 135 percent higher in total fat content, respectively, than canned chicken.

In December 1989, USDA proposed further changes to the commodity package to make it more consistent with dietary guidelines and to be more responsive to the special needs of its participants. These changes when implemented will increase the quantities of fruits and vegetables and reduce the fat content and the quantity of flour available in the package.

Nutrition Education Is Limited

According to recipients at all four reservations, nutrition education offered by FDPIR is limited, and little, if any, assistance is provided to food stamp recipients to help them make knowledgeable food purchases. Since many of the health problems of greatest concern for Indians appear to be diet-related, panelists at all four reservations believe that nutrition education is necessary to convince recipients—especially those who are obese or diabetic—to adopt food preparation and eating habits that will prevent or minimize these problems. The panelists also suggested ways for addressing such education to all household members.

Nutrition Education Can Help Prevent and Treat Health Problems

Behavior change, especially in dietary practices, is a key element in reducing the risk for chronic disease, according to the Surgeon General's 1988 report on nutrition and health.¹ The report recognizes that efforts to induce beneficial changes in dietary habits are based on an assumption that people who understand the risks associated with their present practices will alter them to prevent illness. However, it is also recognized in the report that a number of societal and behavioral forces—such as peer pressure, cultural and familial standards of appropriate food intake, advertising of high-calorie foods and alcoholic beverages or other determinants—inhibit dietary change.

The report states that, despite these difficulties, considerable evidence supports the effectiveness of nutrition education in changing dietary intake to reduce risk factors for symptoms of conditions such as heart disease, diabetes, and hypertension, among others.

Panelists at all four reservations told us that nutrition education can play a significant role in the prevention and treatment of many of the chronic, diet-related diseases that affect Indians living on reservations. According to panel members, because obesity, diabetes, heart disease, and hypertension may get their start at a very early age, these diseases can be prevented through proper diet, especially one low in fat, sugar, and salt.

Panelists at all four reservations view nutrition education as being essential for food stamp recipients to help them make more knowledgeable, economical, and nutritious decisions about their food purchases. Panel members stated that nutrition education might not immediately

¹The Surgeon General's Report on Nutrition and Health, U.S. Department of Health and Human Services, 1988, pp. 511-514.

change food stamp households' purchasing and eating habits but it will make individuals more aware of the health impact of certain foods.

Nutrition education may even be more critical for FDIIR recipients, particularly those who are obese or diabetic. According to IHS nutritionists on the Navajo, Pine Ridge, and White Earth panels, FDIIR recipients who suffer from these problems are especially in need of nutrition counseling because of the inadequate servings of fruits and vegetables in the FDIIR package, the fat and salt content, and the limited availability of certain commodities. For example, Navajo, Fort Berthold, and White Earth panelists told us that recipients with diabetes need more fruits and vegetables than do healthy individuals. Since the package does not provide adequate servings of these foods for healthy individuals, diabetic recipients need to be aware that they must supplement their commodity diet with fruits and vegetables to stay healthy.

According to one Navajo nutrition educator for FDIIR, counseling households to stay away from fat and salt while providing them the commodities seemed contradictory. Other nutrition educators on the panels agreed that commodities could aggravate health problems but thought that these effects could be minimized through careful food preparation. Furthermore, Navajo panelists told us that the limited variety of other commodities from various food groups may compound these problems unless participants understand nutrition concepts. For example, they told us that many families do not know that corn and potatoes, which are both starches, should not be served at the same meal.

Panelists at the Fort Berthold and Pine Ridge reservations acknowledged that while Indian households with health problems could better accommodate their special diets through the Food Stamp Program, they feared that not all could switch to food stamps because of differences in program eligibility criteria as previously discussed in chapter 2.

While some panelists stated that it was essential that food stamp and FDIIR recipients comprehend the importance of and be able to obtain nutritious diets, they all stated that, in general, many Indian families do not understand the effects that certain foods have on their health. One Navajo panelist told us that when his office set up nutrition displays at different places on the reservation, people were surprised to learn how much fat went into fried chicken and how much sugar was in sodas. Others who confirmed this need for nutrition education reported seeing food stamp recipients continually buying soda and potato chips, which are high in sugar and fat, respectively.

Navajo and Pine Ridge panelists also believe poor nutrition results from individual preferences for traditional foods and cooking methods, which involves frying with either lard, shortening, or butter. For example, the most popular traditional foods eaten in the Indian homes are fry bread, Indian tacos, and Indian soup, which are usually cooked with grease, fat, and salt. Other cultural habits are related to individual tribes. For example, a mainstay of the Navajo diet is mutton, according to panelists; the Navajo diet is very fat oriented; and a common practice at White Earth is to fry macaroni. As a result, Navajo panelists told us that those most unaware of poor eating habits and their effects are the older Indians and those living in remote areas who continue to use the traditional methods of food selection and preparation. We were told that some of the Navajo elderly still believe that being obese is a sign of good health.

Nutrition Education Is Limited and Varies by Program

Nutrition education is a component of both the Food Stamp Program and FDPIR. Section 11(f) of the Food Stamp Act of 1977, as amended, authorizes USDA to extend food and nutrition education to food stamp program participants. USDA has developed single-concept printed material, especially designed for persons with low reading and comprehension levels, on how to buy and prepare more nutritious and economical meals and on the relationship between food and good health. The act allows the Secretary of Agriculture discretion in setting the form and content of nutrition education programs and in determining where and how such programs may best be used.

Nutrition education is also an integral part of FDPIR. FNS regulations stipulate that state agencies administering FDPIR shall provide nutrition education to participating households relative to the use and storage of USDA commodities. Nutrition education activities must be identified in state agency operating plans and are federally funded out of each agency's FDPIR administrative budget. However, according to an FNS official, the form, content, and amount of funds allocated to nutrition education activities is determined by each state agency; and these activities are limited and vary between the reservations.

Nutrition Education at the Four Reservations Varied

Although both programs provide for nutrition education, we noted in our September 1989 report that the amount and types of nutrition education activities provided as part of the Food Stamp Program and FDPIR at the four Indian reservations varied. According to Food Stamp Program officials, nutrition education activities of local food stamp offices serving the four reservations consist primarily of making nutrition

brochures and other literature available to food stamp recipients. Some recipients receive food stamps at their residences and, therefore, may not be exposed to this literature except when applying or reapplying for benefits at the food stamp office.

In FDPIR, the Navajo program provided the most nutrition education activities, which ranged from monthly lectures to cooking demonstrations. At the White Earth, Fort Berthold, and Pine Ridge reservations, nutrition education is provided primarily by IHS, tribal community health representatives, or the home extension service's home economist. Nutrition education at these three reservations consisted of cooking demonstrations and lectures at White Earth, counseling and visual presentations at Fort Berthold, and the dissemination of nutrition literature at Pine Ridge. Although nutrition activities were present on these reservations, IHS and tribal nutritionists expressed the need for expanded services that are tailored to the specific needs of reservation Indians.

Recipient Experiences With Nutrition Education Depended on Program

At the four reservations we visited, recipient nutrition education experiences related to the recipients' food assistance benefits were limited and varied depending on which program they participated in. Food stamp participants we interviewed at all four reservations were very interested in receiving nutrition education from the program but neither were aware of nor had attended any local food stamp office activities related to nutrition education or food budgeting. The general sentiment among recipients was that, beyond providing the basic benefit, the Food Stamp Program does not provide adequate nutrition education.

In contrast, FDPIR recipients at all four reservations had received or were aware of some nutrition education activities, particularly with respect to the FDPIR cookbook. While some were not interested in receiving these items from the program, others were very interested. Cooking demonstrations were perceived as desirable by many recipients, although only some recipients at the Fort Berthold and the Navajo reservations had attended cooking demonstrations. At the Navajo Reservation, some of the recipients stated that the cooking demonstrations already available were not advertised as well as they could be.

In addition to nutrition education offered through FDPIR, recipients at the Navajo, White Earth, and Pine Ridge reservations told us that counseling is available through the IHS nutritionist for individuals with special dietary needs, such as diabetics or the elderly. However, unless

recipients are being treated by IHS, they need to be referred by the Food Stamp Program or FDIPIR before they can receive counseling. We also noted that at Pine Ridge, this counseling may not be available because the IHS nutritionist position had been vacant for many months.

Suggestions for Expanding Nutrition Education

Panelists at all four reservations told us that because many of the Indian health problems require dietary modification for prevention and treatment, they believe that nutrition education should be provided with federal food assistance. In fact, panel members at the Navajo and White Earth reservations believe nutrition education should be a prerequisite to participation in the Food Stamp Program, by making benefits conditional on recipients attending nutrition classes similar to those in the WIC program. Unless the needed nutrition education accompanies food assistance and an adequate food supply is available, these panelists thought that the prevalence of obesity, diabetes, heart disease, and hypertension is likely to continue.

The panelists offered a variety of suggestions for expanding and improving nutrition education. The Navajo and Fort Berthold panelists suggested that the federal health, welfare, and food assistance programs pool their resources to provide nutrition education necessary to improve the health of recipients of these programs. The Navajo panelists recommended that the Food Stamp Program and FDIPIR earmark funds for nutrition education instead of leaving it to the discretion of local administrators of the programs. They also told us that federal agencies or programs within an agency should be allowed to consolidate their funds to sponsor mass media campaigns and education programs that would promote understanding of good health and nutrition and to allow them to use outside experts to effectively design these programs.

Panelists at all four reservations thought that one-on-one counseling with a nutritionist would be the most effective way of providing nutrition education through the Food Stamp Program and FDIPIR, while printed materials would be least effective. According to the 1988 Surgeon General's report on nutrition and health, to do this, the programs would have to hire more nutrition educators, which may be difficult in remote areas, such as the Pine Ridge Reservation. Other effective nutrition activities suggested by the panelists included (1) using public broadcasting services, (2) showing videotapes at strategic locations like FDIPIR warehouses and food stamp offices, (3) expanding or reinstating home extension services, (4) nutrition labeling of all commodities, and (5) developing and distributing more recipes for FDIPIR foods.

Because dietary behavior is also affected by psychological, cultural, environmental, and economic factors, the panelists told us that nutrition education provided through the federal programs needs to be tailored to the behavior and knowledge of recipients regarding food and nutrients. However, since it is difficult to change individual dietary habits in a short period of time, in the interim, other changes are needed in FDPIR, such as reducing the fat content of FDPIR meats. The White Earth, Fort Berthold, and Navajo panel members also thought that nutrition education should address cultural foods and their effects on health as well as different ways to prepare commodities in times of limited nutritional variety.

In addition to education provided through the food assistance programs for heads of households or parents, panelists at all four reservations thought that more nutrition education should be provided through the public school curricula to address dietary habits at an early age. Additionally, they said, teachers, particularly in elementary schools, and parents need extra training so that learning can be reinforced outside the classroom as well as inside.

GAO Observations, Conclusions, and Recommendations

The nutritional status of Indians is the product of complex interactions among environmental, cultural, economic, and other factors. The exact proportion of the effect that each of these factors has on an individual diet is uncertain. Some specific factors that we identified include the availability of an adequate food supply, nutritional content of foods consumed, individual food selection and preparation methods, accessible transportation, and individual diet-related health problems. While these and other factors cannot be fully addressed by existing federal food programs, efforts to improve program services—especially in providing adequate, consistent, and accessible food assistance and dietary education—can enhance the overall nutrition and health of reservation households.

Federal food assistance programs, primarily the Food Stamp Program and FDPIR, have provided supplementary sources of food assistance for Indian households. However, there are indications, although difficult to quantify, that some hunger exists at all four reservations we visited. Also of concern to Indian households on all four reservations was the prevalence of diet-related diseases and the impact of federal food assistance programs on those diseases.

Hunger

Our September 1989 report found indications, including studies by reservation officials, of some hunger on the Fort Berthold and Pine Ridge reservations, the report also noted the growing dependence of Indian households on nonfederal food assistance. In this follow-on report, community officials and federal food assistance recipients told us that some hunger exists on all four reservations, especially during the last week of the month.

It is difficult to quantify the severity, both in the percent of the population affected and the duration to which hunger lasts each month. Furthermore, because of the diversity of factors that may contribute to hunger on the reservations, it is difficult to devise a comprehensive solution that would allow all reservation households to obtain an adequate diet.

According to community representatives at all four reservations and administrators of nonfederal food assistance, hunger is common among households not receiving federal food assistance and more common among food stamp recipients than FDPIR participants. These observations were confirmed by many food stamp recipients we talked to who

described their food shortage experiences and limited resources to supplement their benefits.

Our past¹ and current work has shown that the administrative requirements of the application process and asset limitations can be participation obstacles in the Food Stamp Program. Some of the hindrances to participation that we have identified are the unintentional results of state or local office attempts to provide food stamps more efficiently. For example, according to recipients and community representatives, the lengthy application form, while helping to streamline the administrative process, can delay the delivery of benefits and discourage Indian households from applying for food stamps. These administrative hindrances—coupled with illiteracy, language barriers, a lack of information about program eligibility and benefits, and poor physical access to reservation food stamp offices—can prevent many needy Indian households from getting food assistance. As part of its annual review of state food stamp operations, FNS could focus on the administrative hindrances discussed in this report to identify these obstacles and ways to assist states in overcoming them.

Poor physical access, according to recipients and community representatives, is due, in part, to the Food Stamp Program's \$4,500 automobile exclusion, as applied to the household resource limitation. They believe that the \$4,500 exclusion, which was established by the Food Stamp Act of 1977, can deny rural participants the reliable transportation needed to comply with food stamp procedural requirements as well as, limit participation in the program. Although we did not determine how the \$4,500 vehicle exclusion affects participation nationwide, we believe that if the \$4,500 was considered to be a reasonable allowance for vehicle asset value at the time of the 1977 act, because of inflationary impacts it may no longer represent a reasonable allowance today. Introduced on February 27, 1990, H.R. 4110 would among other things increase the \$4,500 limit to \$5,500 for the period of January 31 to September 30, 1991. On October 1, 1991, and in each year thereafter, the limit would be adjusted to reflect changes in the Consumer Price Index.

Further, with community representatives and program recipients citing hunger among nonparticipants and misunderstanding about program eligibility, improvements in outreach effectiveness may attract eligible people to participate in one of the federal food assistance programs. The Hunger Prevention Act of 1988 authorized federal funding to help pay

¹Food Stamp Program: Administrative Hindrances to Participation (GAO/RCED-89-4, Oct. 21, 1988).

for outreach services. That funding is available to states to help promote informational activities regarding program eligibility, benefits, and the application process.

Providing assistance, as currently required by food stamp regulations, to applicants who have difficulty in obtaining the required documentary evidence can make the application process less burdensome for those households who are experiencing problems. Further, to help reduce barriers in rural areas, the Hunger Prevention Act of 1988 allows states to waive in-office interviews and mail application forms to applicants not served by a certification office or who have transportation difficulties. We believe that these types of services could make the Food Stamp Program more accessible to some Indian households.

For Food Stamp Program participants, local food stamp office practices that affect the delivery of benefits are also important factors in addressing the causes of hunger on the four reservations. In particular, monthly reporting and recertification procedures that cause interruptions in benefits, which we identified to be problems for other food stamp households in a June 1989 report,² also apply to Indians on the four reservations. As we previously reported, broader implementation of the monthly reporting reinstatement option can eliminate losses experienced by many of the participants who file late monthly reports and receive benefits prorated from the late filing date. To minimize these losses, we recommended that FNS contact the 13 states that had not adopted the monthly reporting reinstatement option, including Utah, New Mexico, Minnesota, and North Dakota, and encourage its adoption where practicable. FNS is in the process of analyzing the responses from these states that had been contacted by its regional offices.

Similar to the reinstatement option, eliminating the proration provision (section 8(c) of the Food Stamp Act of 1977, as amended) for recertification in the Food Stamp Program, as recommended in our June 1989 report, would benefit those participants who are eligible for food stamps but are temporarily terminated from the program for failing to meet its recertification requirements in a timely manner. Elimination of the proration provision would allow eligible reservation households to receive a full month's food stamp benefits if they complete their recertification requirements by the end of the following month.

²Food Stamp Program: Participants Temporarily Terminated for Procedural Noncompliance (GAO/RCED-89-81, June 22, 1989).

Another area in which administrative practices can improve delivery of benefits involves the scheduling of food stamp issuances. States have discretion in staggering the issuance of food stamps throughout the month, instead of issuing them to all participants concurrently. Staggered issuance, as is provided by the states serving the Navajo Reservation, may in fact help discourage grocers from allegedly raising their prices when food stamps are issued. Such actions might be particularly appropriate for North and South Dakota serving the Fort Berthold and Pine Ridge reservations, where the number of food stores are limited and increased food prices have been alleged.

Diet-Related Concerns

Since many Indian households on the four reservations suffer from health problems associated with diet (obesity, diabetes, heart disease, and hypertension) and rely heavily on federal food assistance, providing appropriate commodity foods and dietary education is important in the prevention and treatment of these diet-related health problems. Ensuring (1) that commodity packages consistently contain adequate nutritional variety, reduced levels of fat and salt, and expiration dates on commodities and (2) the replacement of inedible commodities can improve the nutritional quality of the Indian diet and is especially important for persons with special diet-related needs. We are aware that FNS is currently evaluating the effectiveness of FDPIR in providing participants with an acceptable alternative to the Food Stamp Program. However, because its study does not specifically address the quality and nutritional variety of available commodity foods, we believe that FNS should consider the issues identified in this report in its evaluations of the program.

Educating reservation households about the dietary choices most conducive to prevention and control of certain diet-related health problems is essential. While including the importance of adequate physical activity, educational efforts should focus on the potential benefits of eating a balanced diet that is low in fat and salt.

Effective nutrition education should encourage the Indian population, especially those with diet-related health problems, to adopt behavioral changes in their food preparation and dietary consumption practices that will benefit them and allow them to obtain the maximum value from their benefits. Nutrition education directed at reservation households that participate in federal food assistance programs would be most effective, we believe, if it were tailored to their food preferences

and lifestyles, emphasized the role of diet in health promotion and disease prevention, provided practical nutrition assessment methods, and included dietary counseling.

Although some nutrition education is being provided at the four reservations, the amount and form of educational activities varied by reservation and by program. We were told that this is so because state and local administrators determine the level of nutrition education effort for their programs.

Recommendations to the Secretary of Agriculture

To enhance the overall effectiveness of the Food Stamp Program and FDPIR in meeting the nutritional needs and diet-related health concerns of households located on the four Indian reservations, we recommend that the Secretary of Agriculture direct the Administrator, Food and Nutrition Service, to

- emphasize to the respective states the importance of promoting effective informational activities, particularly outreach services, to reduce misunderstandings about program eligibility,
- explore with state officials in North and South Dakota whether state food stamp issuance practices result in increased area food prices and take corrective action, as appropriate,
- monitor on a continuing basis the availability of all FDPIR commodities and, where variety is consistently limited, both (1) determine the nutritional implications for recipients and the costs of improving commodity availability and (2) take corrective action as appropriate,
- include as part of its program evaluations a review of the quality of FDPIR commodities, including reductions in the fat and salt content, determine whether improvements are needed to ensure the edibility of the commodities and their appropriateness for consumption, especially by those persons with special diet-related health problems, and
- emphasize the importance of nutrition education on Indian reservations and work with tribal and program officials to ensure that adequate education services are provided to recipients who participate in the Food Stamp Program and FDPIR.

Participants of Panel Meetings at the Four Reservations

Fort Berthold Reservation

Director, Headstart Program
Director, Department of Social Services, Three Affiliated Tribes
Director, Human Services Department, Three Affiliated Tribes
Director, FDPIR
Service Unit Director, Indian Health Service
Program Assistant, Home Extension Service
Nutritionist, WIC Program
Member, Tribal Council
Human Services Instructor, Fort Berthold Community College
Certifier, FDPIR
Caseworker, Mountrail County Department of Social Services
Representatives, Community Health Representative Program

Pine Ridge Reservation, Panel 1

Director, FDPIR
Director, Orte Food Bank
Tribal Chief and Member, Foster Grandparents Senior Groups
Administrative Officer, Indian Health Service Hospital
Health Coordinator, Ogala Sioux Tribe
Social Services Caseworker, Bureau of Indian Affairs
Certifier, FDPIR
Representative, Community Health Representative Program
Pastor, St. Agnes Parish

Pine Ridge Reservation, Panel 2

District Supervisor, Food Stamp Program
Acting Director of Social Services, Bureau of Indian Affairs
Chief, Nutrition and Dietetics Branch, Aberdeen Area, Indian Health Service
Coordinator, Community Health Representative Program
Supervisor, Shannon and Bennett County Social Services
Diabetes Control Officer, Aberdeen Area Indian Health Service
Manager, Lakota Produce Growers
Certifier, FDPIR
Nutritionist, WIC Program

White Earth Reservation

Director, Health and Human Services, Chippewa Tribe
Director of Education, Tribal Council
Coordinator, FDPIR
Coordinator, Indian Child Welfare Program
Coordinator, Elderly Nutrition Program
Mahnomon County Coordinator, Mahube Community Council

Appendix I
Participants of Panel Meetings at the
Four Reservations

Financial Assistance Supervisor, Becker County Human Services
Nutritionist, Indian Health Service
Medical Doctor, Indian Health Service

Navajo Reservation,
Panel 1

Director, Income Support Division, McKinley County
Director, Navajo WIC Program
Director, Navajo New Dawn Program
Co-Directors, Northern Arizona Food Bank in Flagstaff
Associate Director, Navajo Direct Services Section, Navajo Department
of Health
Coordinator, McKinley County Student Nutrition Program
Eligibility Coordinator, Navajo FDPIR

Navajo Reservation,
Panel 2

Director of Human Services, Southwest Indian Foundation
Nutrition Coordinator, Navajo WIC Program
Chief, Nutrition and Dietetics Branch, Navajo Indian Health Service
Manager, Navajo and Hopi Family Assistance Administration
Administrative Service Officer, Direct Services Section, Navajo Department
of Health
Administrative Officer, Community Health Service Program
Nutritionist, Navajo FDPIR
Manager, Fort Defiance Unit, Community Health Service Program

Navajo Reservation,
Panel 3

Director, Meals on Wheels
Executive Director, Echo Inc.
Manager, Shiprock Senior Center, Senior Citizen Centers Program
Coordinator, Senior Citizen Centers Program
Administrative Assistant, Navajo FDPIR
Supervisor, Teecnospos Warehouse, Navajo FDPIR
Eligibility Supervisor, New Mexico Income Support Division, San Juan
County
Supervisors, WIC Program
Eligibility Worker, New Mexico Income Support Division, San Juan
County
Nutrition Educator, Navajo FDPIR Program
Regional Nutritionist, WIC Program

Demographic Characteristics of Indian Households Participating in FDPIR

To provide demographic information regarding characteristics of Indian households receiving food packages in calendar year 1988 on the four reservations, we took a probability sample of packages issued at each of the four reservations.¹ (See app. IV for a detailed description of our sample selection process.)

The results of our analysis of Indian households receiving FDPIR packages are presented by reservation. The numbers in parentheses following each estimate are the sampling errors of the estimates at the 95-percent level of confidence.

Because we sampled FDPIR packages, not households, a particular household can appear more than once over the time period of our review. For example a household that received 12 monthly FDPIR packages during 1988 at 1 of the 4 reservations might have been the recipient of 2 sampled packages—1 in April and 1 in September.

Household Size and Composition

This section provides information regarding the size and composition of households receiving FDPIR packages on the four reservations.

We estimate that the average number of people served by a FDPIR package was 3.2 (± 0.2) for Fort Berthold, 3.0 (± 0.2) for Pine Ridge, 2.5 (± 0.2) for White Earth, and 3.3 (± 0.2) for the Navajo.

To provide information on household composition, we considered the percent of households with and without children. This information is provided in table II.1.

¹Our analyses of FDPIR and Food Stamp Program data are not comparable because they include differences in (1) eligibility requirements of the programs (as detailed in ch. 1), (2) time period differences (calendar year 1988 for FDPIR and fiscal year 1988 for food stamps), and (3) definitions and geography (as detailed in app. IV).

Appendix II
Demographic Characteristics of Indian
Households Participating in FDPIR

Table II.1: Estimated Percentages of 1988 FDPIR Packages Provided to Households With or Without Children

Household type^a	Fort Berthold	Pine Ridge	White Earth	Navajo
Households with children	50 (±6)	51 (±5)	41 (±5)	61 (±7)
Households without children	50 (±6)	49 (±5)	59 (±5)	39 (±7)

Notes:

The numbers in parentheses are the sampling errors of the estimates at the 95-percent level of confidence.

The number of packages represented in our analysis was 4,733 (± 127) for Fort Berthold, 15,613 (± 497) for Pine Ridge, 7,394 (± 0) for White Earth, and 71,170 (± 9,106) for Navajo.

^aAn adult is defined as someone age 20 or older, and a child is defined as someone age 19 or younger

To provide more detailed information concerning the composition of households with children, we combined these households into four groups: (1) households in which all the children were less than 6, (2) households in which all the children were between 12 and 19, (3) all other households with children,² and (4) all households without children. This information is provided in table II.2. These groupings were chosen to highlight households with very different dietary requirements. For example, the type and quantity of food required by teenagers is very different from that required by younger children.

Table II.2: Estimated Percentages of 1988 FDPIR Packages That Went to Different Household Types

Household type^a	Fort Berthold	Pine Ridge	White Earth	Navajo
All children less than 6	8 (±3)	8 (±3)	7 (±2)	7 (±5)
All children between 12-19	13 (±4)	13 (±3)	8 (±2)	15 (±6)
All other households with children	29 (±5)	30 (±4)	27 (±4)	39 (±8)
Households without children	50 (±6)	49 (±5)	59 (±5)	39 (±7)

Notes:

The numbers in parentheses are the sampling errors of the estimates at the 95-percent level of confidence

The number of packages represented by our analysis was 4,733 (± 127) for Fort Berthold, 15,613 (± 497) for Pine Ridge, 7,394 (± 0) for White Earth, and 71,170 (± 9,106) for the Navajo.

^aAn adult is defined as someone age 20 or older, and a child is defined as someone age 19 or younger

²This group includes households in which all the children are between 6 and 11, as well as households with a mixture of children, for example, one teenager and one infant.

According to FNS, because the nutrient profile of the FDPIR package is comparable to that of the Thrifty Food Plan (TFP)³ and is an acceptable alternative to the food stamp benefit, we were interested in estimating the extent to which FDPIR households matched the standard family structure as defined by the TFP. However, because there were so few occurrences of the standard family in our sample, we were unable to make a meaningful estimate of the extent to which they did match the definition. The standard family accounted for 0 percent of our sample at Fort Berthold, 0.5 percent at Pine Ridge, 1 percent at White Earth, and 0.2 percent at Navajo.

Gross Income of Households

Because the FDPIR package is intended to be a supplemental food source, we were interested in estimating what percentage of the FDPIR packages went to households with some gross income (any amount over \$0). We computed gross income by totaling each household's earned and unearned income.

We estimate that the percentage of FDPIR packages that went to households having some gross income (any amount over \$0) was 87 (± 4) percent at Fort Berthold, 75 (± 4) percent at Pine Ridge, 92 (± 3) percent at White Earth, and 96 (± 3) percent for the Navajo.

To obtain the following averages, we included only those packages going to households having some gross income. For these, we estimate that the average gross monthly income per person served by a FDPIR package was \$177 (± 15) at Fort Berthold, \$188 (± 12) at Pine Ridge, \$283 (± 12) at White Earth, and \$198 (± 15) at the Navajo.

³The TFP for a family of four (a man and woman 20 to 50 years of age, and children 6 to 8 and 9 to 11 years of age) by law constitutes the basis for allotments to households participating in the Food Stamp Program. Such a family constitutes the definition of a "standard family."

Demographic Characteristics of Indian Households Participating in the Food Stamp Program

To provide information on the demographic characteristics of Indian households receiving food stamps in fiscal year 1988 in areas approximating the Pine Ridge Reservation in South Dakota and the Navajo Reservation in Arizona and New Mexico,¹ we analyzed data from FNS' quality control data base on households with at least one Indian member.² Our analysis focused on households receiving food stamp benefits in fiscal year 1988 and residing in areas, administered by local agencies, that somewhat approximate the boundaries of the Navajo Reservation in Arizona and New Mexico and the Pine Ridge Reservation in South Dakota. Because it is important to understand the geographic area covered by our data, a detailed description is provided in appendix IV. However, the FNS data base cannot distinguish among Indian tribes or whether a household lives on or off the reservation. (See app. IV for a detailed discussion of the contents of this data base and our methodology.)

The results of our analysis of Indian households receiving food stamp issuances at Pine Ridge in South Dakota and Navajo in Arizona and New Mexico is presented below. The numbers in parentheses following the estimates are the sampling errors of the estimates at the 95-percent level of confidence.

Because we sampled food stamp issuances, not households, a particular household can appear more than once over the time period of our review. For example, a household that received 12 food stamp issuances during fiscal year 1988 in the general area of the two reservations, might have been the recipient of 2 sampled issuances—1 in April and 1 in September.

Household Size and Composition

We estimate that the average food stamp issuance served 4.3 (± 0.2) people in the general area of the two reservations. An estimated 85 (± 3) percent of the food stamp issuances were to households with children. For our analysis we define a child as anyone age 19 years or younger and an adult as anyone 20 years or older.

¹We received data from FNS only when its data base contained at least 30 Indian (Native American) households in the local area code(s) within a state. We received no data on the Fort Berthold or White Earth reservations. See app. IV for a more detailed description.

²Our analyses of FDPIR and Food Stamp Program data are not comparable, because they include differences in (1) eligibility requirements of the programs (as detailed in ch. 1), (2) time period (calendar year 1988 for FDPIR and fiscal year 1988 for food stamps), and (3) definitions and geography (as detailed in app. IV).

**Appendix III
Demographic Characteristics of Indian
Households Participating in the Food
Stamp Program**

To provide more detailed information concerning the composition of households with children, we combined these households into four groups: (1) households in which all the children were less than 6, (2) households in which all the children were between 12 and 19, (3) all other households with children,³ and (4) all households without children. This information is provided in table III.1. These groupings were chosen to highlight households with very different dietary requirements. For example, the type and quantity of food required by teenagers is very different from that required by younger children.

Table III.1: Estimated Percentages of Fiscal Year 1988 Food Stamp Issuances That Went to Indian Households, by Different Household Types

Household type^a	Estimated percent^b
All children less than 6	20 (± 4)
All children between 12-19	9 (± 3)
All other households with children	56 (± 5)
All households without children	15 (± 3)
Total	101

Source: GAO Analysis of FNS Data

Notes:

The estimate is the percent of fiscal year 1988 food stamp issuances to Indian households in the geographical areas of the Navajo Reservation in Arizona and New Mexico and the Pine Ridge Reservation in South Dakota.

The number of food stamp issuances represented by our analysis was 144,429 (± 13,764)

^aAn adult is defined as someone age 20 or older, and a child is defined as someone age 19 or younger

^bThe numbers in parentheses are the sampling errors of the estimates at the 95-percent level of confidence. The total of the estimate column does not add to 100 percent because of rounding.

We were also interested in estimating the extent to which the households receiving food stamps matched the standard family structure as defined by the TFP.⁴ However, we found so few occurrences of the standard family in our sample that we were unable to make meaningful estimates. Within our sample, the standard family accounted for only 0.2 percent of the food stamp issuances in the general area of the two reservations.

³This group includes households in which all the children are between the ages of 6 and 11, as well as households with a mixture of children, for example, one teenager and one infant.

⁴The TFP for a family of four (a man and woman 20 to 50 years of age and children 6 to 8 and 9 to 11 years of age), by law, constitutes the basis for allotments to households participating in the Food Stamp Program. Such a family constitutes the definition of a "standard family."

Gross Income of Households

Although the Food Stamp Program is intended to provide an adequate low-cost monthly diet for households with no countable income, it also provides a supplemental food source for households with some countable income. We estimated the percentage of the food stamp issuances that went to households with some gross income (any amount over \$0). For the FNS data, the term "gross income" refers to the data field in the FNS data base called "gross countable income," which is defined by FNS as the total monthly income of the food stamp household before applying any deductions. This monthly income is used to determine the food stamp allotment.

We estimate that 94 (± 2) percent of the food stamp issuances went to households having some gross income (any amount over \$0). Of these households, we estimate that the average gross monthly income per person receiving food stamps was \$102 (± 7).

Comparison of Maximum Food Stamp Benefit With Food Cost Based on Household Composition

Finally, we compared the household's maximum food stamp benefit provided by the Food Stamp Program with the total expected food costs for the recipient households on the basis of the age and sex categories of household members. We did this by computing a "household food standard" for each food stamp household. This standard is the sum of the recommended TFP amounts for each member of the food stamp household.⁵ We then determined the extent to which the maximum food stamp benefit provided the household food standard. We also estimated the extent to which the maximum food stamp benefit provided the household food standard according to various household types (detailed in table III.1). The results of these analyses are provided in table III.2.

⁵To provide consistency with the FNS data for fiscal year 1988, we used TFP costs for various age and sex categories published by USDA for June 1987. These amounts were used as the basis for the food stamp allotments for fiscal year 1988.

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Table III.2: Extent to Which the Maximum Food Stamp Benefit Provided the Household Food Standard, by Household Type

Percent of household food standard provided by maximum food stamp benefit ^b	Household type ^a				Total
	All children less than 6	All other households with children	All children age 12-19	Households without children	
95 or less	^c	2 (±1) ^d	5 (±2)	6 (±2)	13 (±3)
96-99	^c	9 (±3)	3 (±2)	9 (±3)	21 (±4)
100-105	2 (±1) ^d	15 (±4)	^e	^e	17 (±4)
106-115	6 (±2)	22 (±4)	^e	^e	28 (±5)
116-140	12 (±3)	9 (±3)	^e	^e	21 (±4)
Total	20 (±4)	57 (±5)	8 (±3)	15 (±4)	100

Source: GAO analysis of FNS data.

Notes:

The numbers in parentheses are the sampling errors of the estimates at the 95-percent level of confidence.

The estimate is the percent of fiscal year 1988 food stamp issuances to Indian households in the geographical areas of the Navajo Reservation in Arizona and New Mexico and the Pine Ridge Reservation in South Dakota.

The number of food stamp issuances represented in the analysis was 141,242 (±13,642).

Table III.2 may differ slightly from table III.1 because the number of cases excluded from analysis differed between the two tables (see note d, table IV.3). For example, the estimated percent of food stamp issuances to Indian households in which all the children were between the ages of 12 and 19 was 9 (±3) percent, representing 144,429 (±13,764) food stamp issuances in table III.1, and 8 (±3) percent, representing 141,242 (±13,642) food stamp issuances in table III.2.

^aAn adult is defined as someone age 20 or older, and a child is defined as someone age 19 or younger.

^bThe household food standard is based on the TFP amounts.

^cIt is possible that a household in which all the children are less than 6 years old could have these values. Because we did not observe any such households, we cannot make meaningful estimates in these cells.

^dThe sampling error of this estimate may be somewhat understated because no occurrences were observed in one of the four strata (see table IV.3 for the four strata).

^eNo households with all children between 12-19 or households without children can have these values. This occurs because the cost of the TFP for all persons age 12 and over exceeds the amount used as the basis of the food stamp allotment—the total for the standard family divided by 4.

Methodology and Sampling Plan for Food Stamp and FDPIR Demographics

This appendix details the methodology used to obtain samples of FDPIR packages on the four reservations. For food stamp issuances, we were able to obtain data for Indian (Native American) households on only the Navajo Reservation in Arizona and New Mexico, the Pine Ridge Reservation in South Dakota, and their general surrounding areas. Because of its importance, a detailed description of the geographic area covered by the FNS data is provided later in this appendix.

Because we reviewed probability samples of FDPIR packages and food stamp issuances, each estimate developed from the samples has a measurable precision, or sampling error. The sampling error is the maximum amount by which the estimate obtained from a statistical sample can be expected to differ from the true universe characteristics (value) we are estimating. Sampling errors are stated at a certain confidence level—in this case 95 percent. This means, for example, that the chances are 19 out of 20 that, if we applied our review procedures to all calendar year 1988 FDPIR packages issued on a reviewed reservation, the results of such a review would differ from the estimates obtained from our sample by less than the sampling errors of such estimates.

Because we sampled (1) FDPIR packages and (2) food stamp issuances, not households, a particular household can appear more than once over the time period of our review. For example, a household that received 12 monthly FDPIR packages during 1988 at 1 of the 4 reservations might have been the recipient of 2 sampled packages—1 in April and 1 in September.

Selecting a Probability Sample of FDPIR Packages

To provide information on the households receiving FDPIR packages, we took a probability sample of packages issued in 1988 at each of the four reservations and analyzed the characteristics of the households receiving these packages. At the White Earth, Pine Ridge, and Ft. Berthold reservations, we obtained lists of packages distributed in 1988 that allowed us to take a separate simple random sample of packages at each of these locations. The number of packages issued and sampled at the three reservations where package distribution lists were available is shown in table IV.1.

**Appendix IV
Methodology and Sampling Plan for Food
Stamp and FDIIR Demographics**

Table IV.1: FDIIR Packages Distributed in 1988 and Sampled

Reservation	Packages distributed in 1988	Sampled	Reviewed	Estimated 1988 packages represented by review^a
Ft. Berthold	5,017	300	300	5,017
White Earth	7,394	415	415	7,394
Pine Ridge	17,555	461	417 ^b	15,879 (± 465)
Total	29,966	1,176	1,132	28,290 (± 465)

^aThe numbers in parentheses are the sampling errors of the estimates at the 95-percent level of confidence.

^bWe were unable to locate any information other than the number of people in the household on 39 cases serviced by the main warehouse. In addition, the list of recipients of 193 January packages from the Wamblee warehouse was unavailable, which forced us to delete another 5 cases

Because no package distribution list was available for the Navajo Reservation, we sampled at that reservation in a two-step procedure. First, we selected household casefiles from the active files and from the inactive files and recorded the number of packages issued to those households in 1988. Second, we randomly selected one package for review from each household that received at least one package. We took a systematic sample by selecting every 18th active casefile and every 114th inactive casefile. See table IV.2 for the number of casefiles and packages sampled for the Navajo Reservation.

Table IV.2: Estimate of Total Packages Issued in 1988 at the Navajo Reservation

Type	Number of casefiles	Casefiles sampled	Sample casefiles receiving 1988 packages^a	1988 packages in sampled casefiles	Estimated 1988 packages issued^b
Active	7,241	399	336	2,932	53,210 (± 3,169)
Inactive	13,547	113	47	260	31,170 (± 8,762)
Total	20,788	512	383	3,192	84,380 (± 9,318)

^aThis is the number of packages selected for review.

^bThe numbers in parentheses are the sampling errors of the estimate at the 95-percent level of confidence.

We were able to review casefiles representing about 28,290 packages from Fort Berthold, White Earth, and Pine Ridge and 84,380 Navajo packages—a total of 112,670 packages. Because we were not always able to collect all the desired information from each casefile, the statistical results in this report represent only those cases that contained sufficient information to perform the analysis. If more than 10 percent of the

112,670 packages were not represented in an estimate because of missing information, the number of packages represented by the analysis is provided in the tables in the appendixes II, III, and IV.

Analysis of Data on Indian Households Receiving Food Stamps

In order to provide information on the characteristics of Indian households receiving food stamp benefits, we analyzed data, from FNS's Integrated Quality Control System, on benefits issued in fiscal year 1988. We requested data for Indian households¹ located on the four reservations in our review. FNS determined the local agency/geographic codes—county or county equivalents—for each of the four reservations. It then provided us information for a given reservation located within a given state if the data base contained at least 30 Indian (Native American) households in the local agency code(s) in that state. FNS was able to provide information only on areas that somewhat approximate the Pine Ridge Reservation in South Dakota and the Navajo Reservation in New Mexico and Arizona. A detailed explanation of the geographic areas covered by the FNS data is given below. FNS provided us with no information on the White Earth and Fort Berthold reservations or on the Navajo Reservation located in Utah. The Pine Ridge data do not include Bennett County—roughly the southeastern quarter of the reservation.

FNS provided information related to Indian households receiving food stamps, but the data were unable to distinguish households by Indian tribe (for example, the Navajo Reservation in Arizona completely surrounds the Hopi Reservation; therefore, data from Arizona include Hopi as well as Navajo) or whether the household was located on or off the reservation. Because the local agency code definitions did not exactly coincide with reservation boundaries, the data they provided could also contain Indian households located off the reservation. In South Dakota, the two local agency codes comprise Shannon County (located totally on the Pine Ridge Reservation) and Jackson County (of which only the lower half of the county is located on the reservation). In Arizona, the six local agency codes are located in three counties—Coconino, Apache, and Navajo—each containing land both on and off the Navajo Reservation. The Hopi Reservation is located in Coconino and Navajo counties. The local agency codes in New Mexico are located in six counties. Two of the counties—McKinley and San Juan—each contain land both on and off the Navajo Reservation. Each of the other four counties—Bernallilo,

¹FNS defined a household as Indian if at least one member of the household was coded as Native American in its data base.

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Sandoval, Socorro, and Cibola—contains Navajo tribal lands that are not part of the major Navajo reservation.

We analyzed the data provided by FNS as a probability sample of food stamp issuances in a manner consistent with the sample selection information provided to us by FNS. (See table IV.3 for information on sample and universe sizes.)

Table IV.3: Sample of Indian Households Located on or Near Pine Ridge Reservation, South Dakota, and Navajo Reservation in Arizona and New Mexico

Reservation	Stratum^a	FY 88 food stamp issuances in stratum	Total quality control sample size	Indian households in sample^b	Estimated issuances to Indian households in local agency areas^c	
Navajo	Arizona/36	328,248	1,230	94	25,086	(± 4,866)
	Arizona/37	493,086	1,616	120	36,615	(± 6,295)
	New Mexico	568,896	1,188	145	69,436	(± 10,583)
Pine Ridge	South Dakota	212,520	685	50	15,512	(± 4,136)
Total				409^d	146,649^d	(± 13,872)

^aOur data came from two strata in Arizona—36 and 37. New Mexico and South Dakota each had only one stratum.

^bBecause we took a sample of issuances not households, these may not be unique households, i.e., an individual household may have received more than one sampled issuance.

^cThe numbers in parentheses are the sampling errors of the estimates at the 95-percent level of confidence.

^dWe excluded four of these cases, representing an estimated 1,915 (± 1,873) issuances, from analyses because the value in the field denoting the number of persons in the food stamp household did not match the number of individuals described in detail who were flagged as being part of the food stamp household. The remaining 405 cases represent an estimated 144,734 (± 13,775) issuances in fiscal year 1988 to Indian households located in local agency areas approximating the Navajo Reservation in Arizona and New Mexico and the Pine Ridge Reservation in South Dakota. Depending on the analysis, we also excluded at most 10 cases for which the state finding on the Quality Control Sample review was "Totally Ineligible" and 1 case in which the sex of 1 member of the food stamp household was unknown. These exclusions represent an estimated 3,187 (± 1,998) and at most 902 issuances, respectively.

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