

**EVALUATION OF THE
FOOD DISTRIBUTION PROGRAM ON
INDIAN RESERVATIONS (FDPIR)**

**Volume II
Appendices**

Prepared by:

RESEARCH TRIANGLE INSTITUTE

Ronaldo Iachan
Jennifer McNeill
David S. Shanklin
Charles L. Usher
Judith B. Wildfire

Prepared for:

Food and Nutrition Service
U.S. Department of Agriculture

June 1990

Contract Number 53-3198-8-96(1)

APPENDICES

Table of Contents

- Appendix A SAMPLE DESIGN**
- Appendix B SAMPLING ERROR OF ESTIMATES**
- Appendix C HOUSEHOLD-LEVEL DATA COLLECTION**
- Appendix D DESCRIPTION OF ASSUMPTIONS USED IN
FOOD STAMP ELIGIBILITY SIMULATION**
- Appendix E JOB TITLES FOR FDPiR STAFF POSITIONS**
- Appendix F FOOD PREFERENCES AND DISLIKES BY
REGION**
- Appendix G THE AVAILABILITY OF FDPiR FOOD ITEMS
AND THE DESIRE TO OBTAIN ITEMS**
- Appendix H HOUSEHOLD CHARACTERISTICS BY
SUBGROUPS**

Appendix A

SAMPLE DESIGN

Appendix A

SAMPLE DESIGN

This evaluation concerned both program-level and household-level issues. As such, the program operations survey required a sample of FDPIR programs that was representative of the 105 programs in the United States, while the survey of FDPIR households had to be representative of the national participant caseload. Given that a few large programs account for most of the participants in the country, the most efficient approach to creating a profile of participants would have been to select most sample households from these programs, some from programs of a moderate size, and a few from small programs. However, this would have conflicted with our desire to include a representative sample of small and medium-sized programs in the program operations survey.¹ Therefore, in order to satisfy both needs for data, we employed a multi-stage sample design in which programs first were selected within three size strata and participants then were selected from the caseloads of the first-stage sample of programs.

This appendix describes the design for the sample of households selected for the FDPIR evaluation. The multi-stage stratified sample included 30 first-stage units (FDPIR programs) and 827 households selected from subsequent stages.

A. FIRST-STAGE SAMPLE

The first-stage sample of FDPIR programs was selected with probabilities proportional to program size, that is, the average number of households that received commodities each month during Fiscal Year 1988. An important initial step in selecting the first-stage sample of FDPIR programs was the construction of an appropriate sampling frame. Given the relative independence of the programs administered by individual ITOs under State government supervision, it was appropriate to treat such programs as the equivalents of programs that ITOs operate without any State government involvement. Specifically, the frame included:

¹The median caseload for local FDPIR programs in Fiscal Year 1989 was approximately 250 households. Therefore, half of the programs served fewer than 250 households each month, on average.

- 85 programs administered independently by ITOs;
- one program administered directly by the State of Nevada;
- two programs administered by individual tribes under contract with the States of North Carolina and Oregon; and
- 17 programs administered by ITOs under contract with the States of Montana, North Dakota, or South Dakota.

The frame thus included a total of 105 programs.

The first-stage sample of programs was stratified by size (explicitly) and by region (implicitly). Primary stratification was by program size (number of participating households). First, a certainty stratum was constructed that included the 5 largest programs, whose average monthly caseloads in Fiscal Year 1988 ranged from 1,233 to 7,173 households. The remaining 100 programs were then partitioned into two non-certainty strata:

- a small-program stratum containing programs with fewer than 250 participating households; and
- a medium-sized program stratum containing the remaining programs with 250 or more participants.

The small-program stratum had 52 programs and the medium-sized program stratum had 48 programs. The cutoff between the two non-certainty strata (250 participants) was chosen to approximate the median size in the universe of programs.

The first-stage sample allocation to the two non-certainty strata was 15 small programs and 10 medium-sized programs. This allocation ensured that the number of small programs for the program operations survey sample would represent the proportion of small programs among all FDPIR programs (i.e., 50 percent). Again, within each stratum, sample programs were selected with probability proportional to the number of participating households.

Programs within each stratum also were sorted by region to ensure adequate sample representation of different regions. The regional distribution achieved in the first-stage sample is presented in Exhibit A.1, and compared to the regional distribution of FDPIR programs in the sample frame. Although the distributions are very similar, some

differences exist because of the distribution of large programs among the regions.

Exhibit A.1

Regional Distribution by Size of Program

Region	Size Stratum			Total	%
	Large	Medium	Small		
SAMPLE PROGRAMS:					
Mountain Plains	2	2	6	10	33.3
Midwest	--	2	3	5	16.7
NE/SE	--	--	2	2	6.7
Southwest	2	3	2	7	23.3
Western	<u>1</u>	<u>3</u>	<u>2</u>	<u>6</u>	<u>20.0</u>
Total	5	10	15	30	100.0%
ALL FDPIR PROGRAMS:					
Mountain Plains	2	12	15	29	27.6
Midwest	--	8	13	21	20.0
NE/SE	--	2	3	5	4.8
Southwest	2	13	4	19	18.1
Western	<u>1</u>	<u>11</u>	<u>19</u>	<u>31</u>	<u>29.5</u>
Total	5	46	54	105	100.0%

Exhibit A.2 presents a listing of the first-stage sample sorted by size strata and by program size within strata. The first-stage sampling weights are consistent with the selection of programs with probability proportionate to size (PPS) within the three strata. Given that we were selecting a probability sample, each program had a given probability of selection within the PPS framework. Therefore, the weight for each sample program was the inverse of its probability of selection.

Exhibit A.2: Sample Programs

Sample Programs by Stratum	FNS Region	Program Size *	1st-Stage Samp. Wt.	Sample Size	Completed Interviews	2nd-Stage Samp. Wt.	Overall Samp. Wt.
<u>LARGE (1,229 OR MORE):</u>							
Navajo Nation	Western	7,173	1	137	123		
Fort Defiance						39.991	39.991
Pinon						154.755	154.755
Chinle						154.755	154.755
Teechnospos						38.661	38.661
Kayenta						37.400	37.400
Lukachucai						45.032	45.032
Cherokee Nation-Okla	Southwest	3,893	1	77	76	52.052	52.052
Choctaw Nation of Oklahoma	Southwest	1,822	1	36	26	53.944	53.944
Oglala	Mountain Plains	1,274	1	24	24	53.917	53.917
Rosebud Sioux Tribe	Mountain Plains	1,233	1	24	24	51.333	51.333
<u>MEDIUM (250 - 1,228):</u>							
Eight Northern Indian Pueblos	Southwest	1,228		35	34		
Santa Clara			1.733			42.029	72.837
Taos			1.733			39.694	68.791
Muscogee Creek Nation	Southwest	1,027		37	37		
Eufaula			2.072			23.575	48.847
Warehouse			2.072			27.735	57.467
Tohono O'Odham Nation	Western	660	3.225	35	35	15.343	49.481
Ponca Tribe of Oklahoma	Southwest	584	3.644	35	22	16.857	61.427
Northern Arapahoe Tribe	Mountain Plains	436	4.881	35	32	12.200	59.548
Fort Berthold	Mountain Plains	419	5.079	35	31	11.086	56.304
San Carlos Apache Tribe	Western	360	5.912	35	34	10.514	62.161
Colville Reservation	Western	336	6.334	35	30	11.971	75.824
Lac Courte Oreilles	Midwest	326	6.528	35	33	8.888	58.006
Oneida Tribe	Midwest	259	8.217	32	30	6.094	50.072
<u>SMALL (FEWER THAN 250):</u>							
Apache Tribe of Oklahoma	Southwest	249	1.867	12	12	17.167	32.050
Menominee Indian Tribe	Midwest	233	1.996	12	8	20.667	41.251
State of Nevada	Western	223	2.085	12	12	20.750	43.264
Seminole Tribe	Southeast	205	2.268	12	11	17.833	40.446
Fort Belknap	Mountain Plains	197	2.360	12	12	20.833	49.167
Flandreau Santee Sioux	Mountain Plains	189	2.460	12	11	15.417	37.925
Confed Tribes of Siletz	Western	178	2.612	12	12	16.083	42.100
Northern Cheyenne	Mountain Plains	168	2.768	12	10	15.917	44.057
Lac Du Flambeau Tribal Council	Midwest	155	3.000	12	11	11.500	34.500
Wichita Tribe of Indians	Southwest	143	3.252	12	11	10.500	34.146
Bad River Band	Midwest	133	3.496	12	11	10.833	37.873
Trenton (TISA)	Mountain Plains	113	4.115	12	11	7.000	28.805
St. Regis Mohawk	Northeast	108	4.306	12	11	6.667	28.707
United Tribes of Kansas	Mountain Plains	84	5.536	12	11	6.250	34.600
Potawatomi Tribal Council	Mountain Plains	56	8.303	12	12	4.083	33.904
				<u>827</u>	<u>757</u>		

* Size measure is average number of households participating each month in FY88.

B. SUBSEQUENT STAGES OF SAMPLING

The selection of individual households involved a second, and in some cases third and fourth, stage of sampling. This section describes the sampling method used to select sample households, the response rates achieved in the survey of FDPIR households, and the sampling weights applied to households in the data analysis.

Sampling Method

To define a target population, it was necessary for us to specify a reference month and to identify every household that received commodities that month from each of the 30 sample programs. This reference month for FDPIR participation (September 1989) was defined as the month immediately prior to the month in which data collection began (October 1989). This decision reflected a trade-off in the lag between sampling frame construction and data collection. On one hand, sufficient time had to be allowed to compile a list for the reference month and to select a sample from it. On the other hand, the time lag had to be as narrow as possible to minimize the number of listed households no longer participating in the program.

The task of constructing a sampling frame for each site consisted of compiling a list of all September FDPIR participants in each site. With only a few exceptions, program officials provided RTI with such a listing by the end of the first week of October. In most cases, therefore, obtaining the list of September participants required little effort by local programs other than copying and mailing the list.

After receiving the listing of households that participated in September, RTI sampling statisticians selected a systematic random sample of the required size. This approach to sampling makes use of a random start, r , and a skip interval, k . The sampling interval, k , is determined from the number of participants on the list, N , and the second-stage sample size (see Exhibit A.2), n . Explicitly, k is the nearest integer to N/n . The random start, r , is a random integer between 1 and k ; the units in the sample are the r th unit on the list and every k th unit thereafter (i.e., units r , $r+k$, $r+2k$, etc.).

If the participant list could not be obtained from program officials ahead of data collection, sample selection was implemented through field supervisor and sampling statistician interactions. First, the field supervisor needed to obtain or construct on site a sampling frame (i.e., a list of September program participants). This frame was sometimes in the form of issuance cards or case records in a file

cabinet. The field supervisor then ascertained the frame size, N, to be relayed to the sampling statistician. The statistician relayed back to the field supervisor the units to be selected in the (systematic random) sample. These steps were typically accomplished in a single telephone call.

Some exceptions to this simple procedure occurred when households in the sample site were dispersed over several distribution points. These subsites were typically very far apart (20 to 100 miles apart) so that cost and operational reasons dictated subsampling. We included this additional stage of sampling to enhance the efficiency of the fieldwork. It also resulted in some clustering effect by not choosing a few households served by each distribution subsite. However, given that we found the average design effect for key variables to be on the order of 1.65, the variability of survey estimates did not seem to be inflated substantially by this approach (see Appendix C concerning sampling error).

The programs involving subsamples of distribution points were the following, with the number of subsample sites indicated:

- Rosebud Sioux (4),
- Muscogee Creek (2),
- Choctaw (3),
- Eight Northern Pueblos (2), and
- Navajo (6).

The specific subsample sites for each sample ITO are listed in Exhibit A.2.

**Response
Rate**

We were able to obtain case records for all 827 households sampled, although only the name and address were available for one of the sample households.² Among these households, interviews were completed with 757, or 91.5 percent (the household-level data collection process is discussed in Appendix C). As indicated by Exhibit A.2, interview completion rates were high in most sample programs.

Among the 8.5 percent of the sample households that were not interviewed, approximately 35 percent could not be located. An equally large group was located, but it was not possible to schedule an interview with the household. Approximately 22 percent of these households had moved away from the reservation and were not traced to their new homes. Finally, less than one percent of the households refused to be interviewed.

**Sampling
Weights**

A self-weighting sample improves statistical precision by minimizing unequal weighting effects. The multi-stage sample for this evaluation was designed to achieve approximately equal weights within each stratum by: (a) selecting programs with probabilities proportional to size at the first stage; and (b) selecting similar numbers of participants in each sample program within the small and medium-sized program strata. The procedure was modified to include certainty units which altered the strictly PPS nature of the first-stage sampling design, and hence, the self-weighting character of the overall design.

In an attempt to make sampling weights approximately equal, the number of sample cases allocated to each of the three strata was proportional to the stratum size, based on the number of participating households. For instance, the five programs in the certainty stratum contain about 35 percent of the total number of FDPIR participating households. Therefore, as shown in Exhibit A.2, 298 of the 827 sample cases were drawn from those programs.

Exhibit A.2 also shows the second-stage sample allocation to the two noncertainty strata (medium-sized and small programs) and the number of cases selected at each site in each stratum. Whereas the absolute size of the large programs and variation in their size re-

²The issuance records of the local program indicated that the household was eligible for and received commodities in September, but the case folder could not be located.

quired different sample sizes for programs in that stratum, it was possible, with few exceptions, to set fixed samples for each medium-sized and small program in the sample. Exhibit A.2 shows the sampling weights resulting from this allocation. Using this approach, the variation in weights was minimal within each stratum, and the overall variation in sampling weights was kept small.

The second-stage weights shown in Exhibit A.2 also reflect a post-stratification adjustment. This adjustment was made for two reasons. First, the original sample design was based on average monthly participation levels for Fiscal Year 1988, whereas later program data permitted us to weight the sample according to levels of participation for September 1989, the survey reference month. Second, by making a slight adjustment in weights for respondent households selected from programs for which the interview-completion rate was less than 100 percent, the adjustment accounted for the relatively small degree of non-response.

In summary, the integrity of the FDPIR household survey sample as a probability sample was maintained by strictly adhering to probability sampling procedures and by completing interviews with approximately 92 percent of the sample households. As a complex multistage sample, it incorporates a relatively small design effect. However, the software used in the analysis done for this study allowed this effect to be factored into statistical estimates presented in the research.

Appendix B

SAMPLING ERROR OF ESTIMATES

Appendix B

SAMPLING ERROR OF ESTIMATES

Statistical sampling error is inherent in the calculation of any estimates derived from sample data. Since the key variables presented in this report are based on the data collected from a sample of 827 FDPIR households, they are subject to sampling variations. In this appendix we present estimates of the standard errors associated with specific key variables. In addition, for the convenience of the reader, we also outline a method for estimating the variation of measures whose standard errors are not presented.

A. STANDARD ERRORS AND CONFIDENCE INTERVALS

The standard error of an estimate provides an indication of the magnitude of possible sampling error associated with the estimate. Three factors influence the magnitude of the standard error of an estimate: the amount of variation in the measure within the entire population, the design of the sample, and finally, the size of the sample on which the estimate is based. The standard error of an estimate provides an idea of the variation in the estimated measure which could occur if multiple replications of the sample were drawn.

To calculate the standard error of an estimated proportion, s_p , and of an estimated number, s_N , of households using data derived from a simple random sample the following formulas could be used:

$$S_p = \sqrt{p(1-p)/n-1}$$

$$S_N = \sqrt{Np(1-p)/(n-1)}$$

where p is the sample estimate of the proportion and n is the sample size, and N is the number of households in the population.

However, when estimates are based on more complex sample designs, such as the stratified sample design used in this study, the above formulas do not provide an accurate estimate of sampling variability. Estimates produced by the formulas above are referred

to as "naive standard errors" in this appendix. More accurate standard errors are provided for key study variables. These standard errors were directly calculated using a Taylor series linearization method used in survey data analysis software developed by RTI (SUDAAN®). This method computes standard errors based on the sampling design and calculates a design effect that is factored into the standard error estimate

Confidence intervals for study estimates can be constructed using standard errors. A confidence interval is a range of values that will contain the true value of the estimate with a known probability. Several of the exhibits presented at the end of this appendix show the 95-percent confidence intervals (labelled "CI" in the exhibits) for some of the study's key variables. These confidence intervals extend approximately two standard errors above and below the estimated value of the characteristic.

B. STANDARD ERRORS OF POPULATION ESTIMATES

Direct estimates of the standard errors for FDIPIR household characteristics are presented in the following exhibits. Exhibits B.1, B.2, and B.6 illustrate the confidence intervals constructed using these direct standard errors. For example, the estimated percentage of one-person households (25.27 percent) has a standard error of 1.84 percent. Thus, an approximate 95-percent confidence interval for this estimate ranges from 21.7 percent to 28.9 percent (that is, the probability that the true value lies within this range is 95 percent).

An approximate standard error, s_e , can be calculated for estimates whose standard errors are not directly calculated using the following formula:

$$s_e = s_N \times d$$

where s_N is the naive standard error from the equations above and d is the average design effect. The design effect indicates the degree to which the variability of estimates produced from a complex sample is greater than would be produced by a simple random sample. Our estimate of the overall design effect for this study is based on the average design effect computed for the key variables presented

in Exhibit B.5 The average design effect (d) is about 1.65.

For estimated percentages and numbers, standard errors can usually be approximated fairly accurately by using the generalized methods described above. This is true because the standard errors for these measures depend only on the sample size, the estimated proportion and the design effect. For standard errors of means, these methods are not as appropriate since these standard errors depend on the variance as well as other factors such as sample size and design effects. Thus, we have presented the standard errors for the means of key income variables in Exhibit B.6 with the 95-percent confidence intervals. These standard errors were directly calculated using the RTI software and Taylor series approximations.

Exhibit B.1

Standard Errors of Estimated Percentages and Numbers of FDPIR
Households with Specific Characteristics*

	Percent	S.E.	95% C.I.	N	S.E.	95% C.I.
Household Composition						
Adult male present	76	2.0	72.1 - 79.9	33,660	867	31,969 - 35,351
Children	50	2.5	45.1 - 54.8	22,240	1,093	20,044 - 24,426
Extended family	14	2.0	10.0 - 17.9	6,190	902	4,422 - 7,958
Non-family members	5	1.5	2.0 - 8.0	2,350	671	1,035 - 3,665
Household members who eat separately	5	1.5	2.0 - 8.0	2,370	671	1,035 - 3,665
Senior citizen	39	2.4	34.3 - 43.7	17,280	1,067	15,146 - 19,414
Household size of 1	25	1.8	21.4 - 28.6	11,230	818	9,627 - 12,833
Having Earned Income	66	3.1	59.9 - 72.2	29,440	1,395	29,440 - 32,174
Simulated Eligibility For Food Stamps	89	1.2	86.6 - 91.4	39,640	542	38,578 - 40,702

*Standard errors of percentages estimated using Taylor series approximation and the merged record abstraction and FDPIR questionnaire data file. Standard errors of numbers of households were calculated as the number of households in the population (44,442) times the standard error of the estimated percentage.

Exhibit B.2

Standard Errors and 95% Confidence Intervals for Estimated Percentages and Numbers of FDPIR Households with Income and Assets

	All Households			Households With Source		
	%	S.E.	95% C.I.	N	S.E.	95% C.I.
Zero gross income	10	2.5	5.1 - 14.9	4,270	833	2,637 - 5,903
Earned income						
Wages	31	2.8	25.5 - 36.5	13,515	1,767	10,052 - 16,978
Self-employment	3	0.5	2.0 - 4.0	1,252	391	486 - 2,018
Unearned income	66	2.9	60.3 - 71.7	28,980	4,550	20,062 - 37,898
Assets						
Cash	21	4.7	11.8 - 30.2	9,406	2,833	3,853 - 9,406
Savings account	6	1.5	3.0 - 9.0	2,650	666	1,345 - 3,955
Checking account	9	2.4	4.3 - 13.7	3,821	1,047	1,769 - 5,873
Any assets	28	5.8	16.6 - 39.4	12,148	3,327	5,627 - 18,669

Exhibit B.3

Standard Errors of Estimated Percentages of FDPIR Households
by FNS Region with Income and Assets.*

	Mtn. Plains		Southwest		West		Midwest		Northeast/ Southeast	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Zero gross income	13	5.94	5	1.37	11	4.59	13	5.04	15	8.89
Earned income										
Wages	29	2.94	39	1.81	22	2.69	34	10.14	31	8.89
Self-employment	4	0.91	4	0.95	2	0.70	2	1.74	--	--
Unearned income	66	5.88	62	2.23	70	4.35	66	1.36	49	20.73
Assets										
Cash	8	2.67	36	8.48	19	7.50	21	9.60	--	--
Savings account	5	1.40	10	2.60	3	0.65	8	5.14	--	--
Checking account	8	3.60	16	2.14	2	0.89	8	5.24	4	3.00
Any assets	13	4.26	46	11.30	22	6.30	25	13.15	4	2.96

*Standard errors of percentages of households with each type of income were estimated using Taylor series approximations and record abstraction data.

Exhibit B.4

Standard Errors of Estimated Numbers of FDPIR Households
by FNS Region with Income and Assets.*

	Mtn. Plains		Southwest		West		Midwest		Northeast/ Southeast	
	N	S.E.	N	S.E.	N	S.E.	N	S.E.	N	S.E.
Zero gross income	1,371	766	785	278	1,383	676	564	414	168	168
Earned income										
Wages	3,105	1,146	5,704	2,295	2,855	1,599	1,492	815	359	285
Self-employment	383	173	519	281	263	190	88	88	--	--
Unearned income	7,109	2,648	9,281	3,612	9,145	5,609	2,881	1,490	565	420
Assets										
Cash	809	304	5,219	2,539	2,466	2,200	913	587	--	--
Savings account	575	218	1,378	697	368	190	329	269	--	--
Checking account	835	383	2,356	1,076	229	147	362	274	40	40
Any assets	1,433	483	6,729	3,261	2,868	2,259	1,078	758	40	40

*Standard errors of estimated numbers were computed by multiplying the number of households in the base population by the standard errors of the estimated percentages.

Exhibit B.5

Design Effects (DEFF) for Key Variables

Variables	DEFF
Percentages	
Presence of Elderly	1.83
Applied for Food Stamps	1.77
Eligible for Food Stamps*	1.17
Means**	
AFDC Income	2.10
Household Wages	1.65
Social Security Income	1.41
Average DEFF	1.65

*Based on simulation.

**For appropriate domains:

- (a) AFDC participants
- (b) households with wages
- (c) Social Security recipients

Exhibit B.6

Standard Errors and 95% Confidence Intervals
of Estimated Means by Sources of Income and Assets*

Type of Income	All Households			Households with Source**		
	Mean Income	S.E.	95% C.I.	Mean Income	S.E.	95% C.I.
Earned income						
Wages	257	23	234 - 303	827	31	765 - 889
Self-employment	15	5	5 - 25	456	93	270 - 642
Unearned income						
AFDC	15	3	9 - 21	284	28	228 - 340
Social Security	112	12	88 - 136	385	22	341 - 429
SSI	49	10	29 - 69	270	14	242 - 298
General Assistance	22	4	14 - 30	165	21	123 - 207
Unemployment benefit	20	3	14 - 26	521	42	437 - 689
Veterans Assistance	26	3	20 - 32	346	24	298 - 394
Assets						
Cash on hand	9	3	3 - 15	44	5	34 - 54
Savings account	20	5	5 - 10	326	55	216 - 436
Checking account	25	9	7 - 43	281	50	181 - 381
Value of all assets	61	17	27 - 95	221	53	115 - 327

*Standard errors were estimated using Taylor series approximations and case record abstraction data.

**For households with non-zero amounts.

Appendix C

HOUSEHOLD-LEVEL DATA COLLECTION

Appendix C

HOUSEHOLD-LEVEL DATA COLLECTION

This appendix describes the methods used to collect household-level data in the evaluation of the Food Distribution Program on Indian Reservations (FDPIR). Data were collected from case records and through personal interviews with recipients or their authorized representative.

A. FIELD STAFF RECRUITMENT

Given the fact that most respondents were American Indians living on reservations, we employed a more complex field staffing plan than is required for most household surveys. The experience of RTI and other research organizations suggested that American Indians should be employed as interviewers when possible to minimize potential political problems, language barriers, and the need for training on Indian customs.

Hiring and training American Indians was, thus, the preferable staffing arrangement. However, finding qualified American Indian interviewers posed a recruitment problem and retaining the staff throughout the data collection period was also potentially problematic. Our recruitment and training plans were designed to address both these concerns. Briefly, we:

- obtained the names of experienced American Indian interviewers from other research organizations and employed these individuals as field supervisors;
- hired experienced interviewers as supervisors for areas where a qualified American Indian could not be identified;
- asked FDPIR program directors for the names of qualified interviewer candidates;
- personally interviewed all prospective interviewer candidates;
- hired American Indian interviewers from the sampled reservation when possible;

- provided non-American Indian interviewers with American Indian guides and interpreters; and
- provided a sufficient number of supervisors so that they could make site visits whenever needed.

We did not ask field staff to state if they were affiliated with an Indian tribe. It is not possible, therefore, to state specifically how many were American Indians. Nevertheless, through informal contacts with the staff (for example, unsolicited comments during casual conversation), indications were that approximately one-third of the field supervisors were American Indians. Reports from the field supervisors indicated that most of the locally recruited and trained field interviewers and guides/interpreters were American Indians.

B. FIELD STAFF TRAINING

Following OMB approval, we held a training session at RTI for 15 field supervisors. Using a field supervisor manual developed specifically for the project we covered the following topics:

- sensitivities and procedures that are necessary for conducting surveys on an Indian Reservation;
- contacting the appropriate individual at the ITO/State Agency and arranging for the initial meeting;
- selecting the participant sample;
- abstracting the required data from case records;
- training field interviewers;
- conducting the participant interviews;
- shipping completed forms;
- reporting progress and problems; and
- maintaining quality control.

Training for the field interviewers was held at sites on or near the selected reservations. The sessions were conducted by the field

supervisors after the selection of the household sample and the case record abstraction. The training session concentrated on how to administer the FDPIR Household Questionnaire, how to introduce the study to program participants, and how to overcome objections. Additionally the session covered how to complete administrative forms and reporting requirements.

Following the training, the Field Supervisor accompanied the interviewer on the first two interviews. The Supervisor conducted the first interview thus re-enforcing the classroom training. The interviewer conducted the second interview, under the scrutiny of the Field Supervisor. At the conclusion of each interview the supervisor held a debriefing to discuss concerns that the interviewer had.

C. SUPERVISION AND QUALITY CONTROL

Twice each week the field interviewers reported to the field supervisor for a case-by-case review of assignments. Difficult cases were discussed and the supervisor made suggestions for handling problems. The supervisor, in turn, reported to the central office. The status of each case was updated in the control system. Computerized field reports were generated each week. These reports summarized the data collection activities for the survey as a whole as well as by site. All incoming mail was entered into the control system as received. The forms were then batched and processed as described later in this document. The field supervisors were notified of any problems, such as late return.

We verified fieldwork by telephone when possible. We contacted 55 households in this manner. However, since many households on reservations do not have telephones, verification was difficult. Anticipating this, we had selected a 20-percent sample for verification instead of the usual 10 percent, and mailed a business-reply postcard to the subsample of verification respondents who did not have a phone. The respondent was asked to answer a few questions and return the card. We obtained completed postcards from 33 respondents for a total of 88 completed verifications by phone or mail (10.6 percent of the entire sample). Each contact, whether by telephone or mail, verified that the interviewer's work actually had been completed.

D. DATA COLLECTION ACTIVITIES

Case Record Abstraction Procedures

After obtaining OMB approval, we called each program to obtain counts of the FDPIR participants for the month of September. We also requested a copy of the list of September participants be sent to RTI for sample selection. The names of sample households selected from the list were then sent to the field supervisor/interviewer. Each sample household was assigned a unique identification number where the first three digits indicate the ITO/State Agency, and the next four indicate the participant. For programs where a list could not be obtained the supervisor selected the sample in the field after calling RTI for selection specifications.

Following the training session each field supervisor received an assignment consisting of approximately two to three ITOs/State Agencies. He/she was responsible for calling the contact person for each agency and making arrangements for a visit. The supervisor determined how the case records were maintained and filed and whether he or she would be responsible for pulling the records.

After the meeting, the supervisor proceeded to select the sample using procedures specified by RTI. Generally, the supervisor obtained a list of participating households. Based on a count of households on this list, an RTI statistician provided the supervisor a random start number and designated interval so that cases r , $r+k$, $r+k+k$, etc. could be selected. The supervisor then pulled or requested the records for each selected participant and abstracted the required data items.

We experienced a low incidence of missing or uninterpretable data in FDPIR case records for two primary reasons. First, as official records that are subject to audit by the Food and Nutrition Service, case records were generally well-maintained by local program staff. Second, FDPIR staff were very cooperative with RTI field staff and were available to resolve occasional inconsistencies and to clarify information that was not immediately interpretable.

Survey of FDPIR House- holds

Household surveys in the smaller sites were conducted by the field supervisors during their visit to the FDPIR program. In the larger sites, field interviewers were hired and trained. The field interviewers received their assignments at the end of training.

Each assignment consisted of a Progress Report that listed all the assigned cases and had space for recording the status of that case at

the end of each week. Additionally the field staff received a questionnaire for each assigned case. The back of the questionnaire contained the label identifying the selected participant and a record of calls section for recording all attempts to contact and interview the participant.

After the identification of the sample, a lead letter from FNS was mailed to each sample household. During the initial visit to the program, the FDPIR staff were asked to suggest a "neutral" site where sample members could be interviewed. A second letter specifying the site and a reimbursement of \$10 for travel and other interview-related expenses was then mailed to the sample members.

If the interview was not completed at the neutral site, the field staff tried to contact the participant by phone and arrange an appointment for the interview. If a phone number could not be obtained the interviewer visited the participant's home.

No major data collection problems were encountered during the survey. In one area a field interviewer resigned, and thus we had to send the field supervisor back to the site to complete the interviews. In another site the field supervisor had to make a presentation before the Tribal Council in order to receive study approval. Other than these two instances, the data collection procedures were implemented as planned.

Survey of Food Stamp Households

In three sites in Arizona, Montana, and Wisconsin, we conducted a limited exploratory survey of 107 American Indian households that were participating in the Food Stamp Program. There were necessarily differences in how samples were selected for the two groups.

In each of the three sites, RTI field staff selected systematic random samples of food stamp households from a listing of food stamp participants provided by the local food stamp office. In each case, we cleared the use of this listing with State food stamp officials prior to making the selections and contacting any households. Since the lists included Indians and non-Indians, the most reliable indicator of potential FDPIR eligibility for households on the lists were their addresses. In some cases, however, (such as households with post office boxes) it was necessary to consult the local FDPIR director about specific households' ethnicity or place of residency. This was possible because of their familiarity with their service area.

The collection of data from food stamp households followed the

same procedures as those for FDPIR households, except that we did not abstract food stamp case records. The survey instrument contained most of the items on the FDPIR household survey except those pertaining to preferences among items in the commodity package.

E. DATA PROCESSING

Data processing activities included five steps. These were data receipt; manual edit which includes coding of literal (alphabetic) responses; data entry of survey instruments and case record abstractions; full machine editing; and construction of an analysis file. Quality control procedures, including verification reports, were associated with each step. The data were processed separately for the FDPIR and food stamp household questionnaires and the abstract form but the steps involved were the same for each of them.

Data Receipt

Completed interviews were returned by mail and received centrally by a designated project staff member. This person manually inspected each form to determine its completion status and entered the receipt into the control system.

Completed questionnaires were aggregated in batches of 20 using a batch header sheet. Such batching facilitated document control through subsequent processing steps and any required retrieval of hard-copy documents. Food stamp and FDPIR household questionnaires were maintained in separate batches.

Manual Edit

After the survey questionnaires had been checked in, they were manually edited and coded according to questionnaire specific instructions. Each of the questionnaires included some "other/specify" type questions and other literal response alternatives. During the edit process designated "other/specifies" and open-ended items were coded. Where possible, the "other/specify" answers were moved up into a category printed on the questionnaire. If the editor/coder was uncertain about moving the answer up, or felt that the answer could not be moved, a new code was created. As codes were created, they were added to a coding sheet which was used by all the editors/coders. Quality control procedures for the manual edit consisted of a 10-percent re-edit of a clerk's initial batch and a 10-percent random re-edit of a sample from each batch thereafter. If at any point a clerk's work was deemed unacceptable, the entire batch was re-edited.

Data Entry

Data entry consisted of keying the item responses from the questionnaire into a data file. In preparation for data entry, data dictionaries or codebooks were developed for each questionnaire. The codebook for a particular questionnaire contained detailed information about each item in that questionnaire such as a short label, a complete description of the item, field width, position in the record, format, and acceptable range of values. The initial version of the codebook also contained data entry specifications for use in training key operators.

Hard copy questionnaire data were converted to machine readable form through a key-to-disk data entry program. Data entry screens were developed for each questionnaire which displayed the question number and variable size on a cathode ray tube (CRT). The CRT display guided the keyer in entering data directly from the hard copy instrument. As the data were entered, the program checked the entry to verify that it was in the acceptable range. The keyer was immediately notified of out of range entries so they could be corrected during the data entry process.

Quality control for data entry involved a 100-percent rekey of the data. The program automatically compared the first keying to the second. The keyer was notified when the entities did not match, and the initial data were corrected as needed.

Following data entry, the files were checked to verify completeness. The data were then reorganized to produce a single record for each respondent. The output files were run through a machine edit program to check skip patterns, missing data, and logical consistencies. Problems identified during the edit were listed on a printout. As necessary, the hard copy form was then pulled and the corrections were made to the data file. The machine edits were then re-run to insure that all data problems were corrected.

Consistency (or missing data) codes were utilized to indicate the reason that a substantive response to an item was missing; i.e., the question may not have been applicable based on a response to a previous question, the response may have been out-of-range, there may have been multiple responses where only a single response was expected, or the interviewer failed to recode the response. The codes assigned to these various situations were beyond the range of acceptable codes to clearly distinguish between "good" and "bad" data.

Appendix D

DESCRIPTION OF ASSUMPTIONS USED IN FOOD STAMP ELIGIBILITY SIMULATION

Appendix D

DESCRIPTION OF ASSUMPTIONS USED IN FOOD STAMP ELIGIBILITY SIMULATION

Chapter IV in Volume 1 provides a summary of results from a simulation of the potential food stamp eligibility of FDPIR sample households. This appendix describes how we used the following data to conduct the simulation.

The simulation was based on income, asset, and dependent care expense data from the FDPIR case record, and data pertaining to household size and composition, housing and medical expenses, and type of vehicles owned from the household questionnaire. The reference month for the survey was September 1989, while the case record data reflected the household's circumstances reported to the FDPIR agency at the time of certification, recertification, or interim changes.¹ Thus, for many households, the simulation was based on data representing their financial situations at two different points in time.

To be eligible for food stamps, a household cannot have financial resources in excess of specified limits, and its gross and/or net income must fall below certain levels. The income limitations are specific to household size, whereas the resource limitations are dependent upon whether a person aged 60 or older is present in the household.

The steps followed in this simulation determined the following:

- whether a household's countable resources were within the resource eligibility standards;
- whether gross monthly income was below 130 percent of Federal poverty guidelines;
- whether net monthly income was below 100 percent of Federal poverty guidelines; and

¹Participants have a responsibility to report changes in circumstance that may affect their eligibility for commodities. It is possible, nevertheless, that some had not reported such changes and that the case record data reflected their circumstances at the time of certification or the last recertification.

- the monthly food stamp allotment a household could receive based on the Thrifty Food Plan.

The following discussion describes the application of these tests and reports the proportion of households that failed to meet each criterion.

A. RESOURCE ELIGIBILITY

Households in which a member is 60 years of age or older, may possess assets totalling no more than \$3,000 and be eligible to receive food stamps. All other households are limited to \$2,000 in countable resources. The resource limits in FDPIR (\$3,000 for elderly households and \$1,750 for others) fall within food stamp limits, except, as we discuss below, with regard to vehicles.

Household resources were calculated from case record data by adding the amounts shown for cash on hand, money in a savings account, money in a checking account, stocks and bonds, and other assets. Not unexpectedly, we found that all but one sample household had fewer financial resources than the food stamp limits.²

Using household survey data, we also assessed the applicable value of any vehicles owned by household members. For purposes of this simulation, the value of vehicles was determined using the National Automobile Dealers Association (NADA) wholesale values for the specified make and model. Based on a review of the various makes and models reported to be owned by sample households and a review of the NADA data, we made the assumption that all vehicles manufactured prior to 1985 had a value of less than \$4,500, and thus, would not increase the resource total of the household (approximately 18 percent of FDPIR households had vehicles manufactured in the model years from 1985 through 1989). The value of any vehicle in excess of \$4,500 was added to the other household assets

available from the record abstraction data, to determine the household's total resources.³

Approximately three percent of FDPIR households were ineligible for food stamps because of resources in excess of the standards. Except for the one household noted above, all of these households had countable resources below the eligibility limit before their vehicle value in excess of \$4,500 was added.

B. GROSS INCOME ELIGIBILITY

To be eligible for food stamps, households without a senior member (aged 60 or older) must have gross income below 130 percent of the Federal poverty guidelines. In the simulation, total monthly gross income was calculated by summing gross earned income (wages and self-employment income) and unearned income. Unearned income included sources such as Social Security, SSI, AFDC, Veteran's Assistance, General Assistance, and other miscellaneous income. Nearly four percent of FDPIR households whose financial resources were within limits did not meet the gross income requirements and thus would not have been eligible for the Food Stamp Program.⁴

C. NET INCOME ELIGIBILITY

The computation of net income for food stamp applicants involves a series of standard and special deductions, that may or may not apply depending on a household's circumstances. In addition to the standard deduction, allowances can be made for medical expenses in excess of \$35 incurred by households with an elderly member, dependent care expenses that enable food stamp participants to be employed, and shelter costs that exceed established standards. We applied the following rules in determining net income.

Medical expenses were allowed for households with an elderly or disabled household member. We found that 11.7 percent of the sample households had medical expenses in excess of \$35 during the survey reference month, and that about one-fourth (27.3 percent) of these households included a person aged 60 or older.⁵ The amount of the medical deduction for elderly households was based on the

determine the equity value of such vehicles.

⁴This is slightly lower than the 4.3 percent of households whose income exceeded 130 percent of the poverty level (see the discussion in Chapter III). The reason for this slight discrepancy is that we applied the assets test prior to the gross income test.

⁵This represents 8.2 percent of all households that included an elderly member.

household's reported medical expenses *net* any reimbursement by insurance and the \$35 threshold amount. The average amount of the deduction was \$52, which compares to \$77 for households that were participating in the Food Stamp Program in Summer 1987.⁶

Dependent care expenses were also allowed up to the \$160 maximum allowable amount. The case records of 2.8 percent of the sample FDPIR households reflected dependent care costs that were the basis for the allowances we made for this deduction. Among this relatively small group of households, the average deduction was approximately \$138, higher than the \$100 average deduction among the 2.4 percent of food stamp participants who had this deduction in 1987.

Approximately one-third of the sample FDPIR households had earnings. Among this group, the average earned income deduction was \$167. This is considerably higher than the average of \$101 among the 20.2 percent of the 1987 food stamp households that had earned income. This results from the higher level of income that we reported for FDPIR households (compared to American Indian and other types of food stamp households) in Chapter IV.

Shelter costs were calculated by adding the monthly amount spent for utilities and rent or mortgage (no information on taxes or insurance was obtained in the survey). The total shelter amount was then reduced by one-half of the income after other deductions were taken resulting in the excess shelter costs (within the maximum monthly excess shelter expense deduction of \$164). A relatively small percentage of households (20 percent) had excess shelter costs that averaged \$77. This compares to \$114 among the 70.9 percent of the Summer 1987 food stamp caseload. These differences are probably attributable to two factors: 1) the large percentage of FDPIR households who owned their home or lived rent-free; and 2) the relatively low mortgage and rental costs of the remaining households.

After determining which of these deductions were relevant to each household, we proceeded to calculate net monthly income by taking the total gross income and subtracting the 20-percent earned income deduction, the standard deduction (\$102), and medical and depen-

⁶The data used for this and other comparisons in this appendix are taken from FNS, Characteristics of Food Stamp Households: Summer 1987 (Alexandria, VA: January 1990), p. 50.

dent care expenses and excess shelter costs. We then compared net monthly income to monthly income limits based on 100 percent of the Federal poverty guidelines for households of given sizes. If a household's net income was less than these amounts, it could qualify for Food Stamps. We estimate that three percent of FDPIR households that met the assets and gross income tests had net income greater than the allowable amount.

D. BENEFIT COMPUTATION

The allotment amount was calculated using the maximum coupon allotment allowed for households of a given size. This amount was reduced by 30 percent of the net monthly income. This resulted in the final simulated food stamp allotment amount. If this amount was less than \$10 and the household had one or two members, the monthly food stamp allotment was set at \$10.

After applying each of the means tests for assets, gross income, net income, and benefit amount, we found, as reported in Chapter IV, that 11.9 percent would have been ineligible for food stamps based on the circumstances reflected in their case records at the time of data collection and on information obtained in the survey. One assumption to emphasize, however, is that the income amounts used in this simulation were based on case record data, most of which were collected at the time of application or recertification. For households that had not been certified recently, these data may not accurately reflect all households' circumstances in the survey reference month (FDPIR programs do not have to obtain as precise information about income as do local food stamp offices). Nevertheless, FDPIR households are required to report changes in income that might affect their eligibility. As a result, the potential bias may not be too great.

In summary, we estimated that approximately 88 percent of the sample FDPIR households would have been eligible for food stamps, based on data available for the simulation. Approximately three percent would not have been eligible on the basis of financial assets, four percent on the basis of gross income, and three percent on the basis of net income.

Appendix E

JOB TITLES FOR FDPIR STAFF POSITIONS

Appendix E

JOB TITLES FOR FDPIR STAFF POSITIONS

The following exhibit lists the specific job titles for different types of positions we identified in our analysis of the staffing of local FDPIR programs. Generally, the persons filling the positions associated with each of the jobs listed in a set perform the same or very similar duties. This exhibit is referenced in Chapter II.

Personnel Classifications

1. PROGRAM DIRECTOR; PROGRAM MANAGER; PROGRAM COORDINATOR; COMMODITIES DIRECTOR; PROGRAM SUPERVISOR; WAREHOUSE SUPERVISOR (SEE OGLALA); PROGRAM DIRECTOR / CERTIFIER; PROGRAM COORDINATOR / CERTIFIER; PROGRAM ADMINISTRATOR / CERTIFIER; PROGRAM COORDINATOR / CERTIFIER
2. ASSISTANT DIRECTOR; ADMINISTRATIVE SERVICE OFFICER; ADMINISTRATIVE ASSISTANT (SEE ROSEBUD) ASSISTANT DIRECTOR / CERTIFICATION SUPERVISOR; ASSISTANT DIRECTOR / WAREHOUSE WORKER; OFFICE MANAGER; INVENTORY CLERK (SPECIAL POSITION - SEE EIGHT NORTHERN)
3. CERTIFICATION SUPERVISOR; INTAKE CERTIFICATION SUPERVISOR; CASEWORKER SUPERVISOR; PROGRAM COORDINATOR (SEE NAVAJO)
4. CERTIFIER; CERTIFICATION SPECIALIST; CERTIFICATION CLERK; CERTIFICATION TECHNICIAN; INTAKE CERTIFICATION CLERK; CASEWORKER; ASSISTANT CERTIFIER; CLERK; ELIGIBILITY / CERTIFICATION SPECIALIST; OUTREACH / CERTIFICATION SPECIALIST / RECEPTIONIST; CERTIFICATION CLERK / SECRETARY; CERTIFIER / SECRETARY; CERTIFICATION / NUTRITION EDUCATION / OUTREACH SPECIALIST CERTIFICATION CLERK / WAREHOUSE AIDE; CLERK / ADMINISTRATIVE ASSISTANT; CERTIFICATION SPECIALIST / WAREHOUSE CLERK; WAREHOUSE ASSISTANT / CERTIFIER; CERTIFICATION CLERK / LABORER; CERTIFICATION CLERK / WAREHOUSE AIDE; CERTIFIER / COMPUTER OPERATOR
5. ISSUANCE CLERK; VOUCHER CLERK; VOUCHER HANDLER
6. WAREHOUSE SUPERVISOR; WAREHOUSE MANAGER; STORAGE / INVENTORY SUPERVISOR; FOREMAN; ADMINISTRATIVE ASSISTANT (SEE NAVAJO); WAREHOUSE SUPERVISOR / DRIVER
7. WAREHOUSE WORKER; WAREHOUSE LABORER; WAREHOUSEMAN; ASSISTANT WAREHOUSEMAN; ASSISTANT WAREHOUSE MANAGER; FOOD HANDLER; WAREHOUSE TECHNICIAN; WAREHOUSE / INVENTORY SPECIALIST; STORAGE / INVENTORY TECHNICIAN; DISTRIBUTION CLERK
8. DATA ENTRY SUPERVISOR
9. COMPUTER OPERATOR; COMPUTER SPECIALIST; DATA ENTRY OPERATOR; LAP-TOP OPERATOR; COMPUTER OPERATOR / INVENTORY CLERK; COMPUTER OPERATOR / SECRETARY
10. SECRETARY; CLERICAL ASSISTANT; ADMINISTRATIVE ASSISTANT; PROCESSING CLERK / RECEPTIONIST; EXECUTIVE SECRETARY; SECRETARY / CLERK; PROGRAM ASSISTANT (SECRETARIAL); CLERK / TYPIST; PROGRAM ASSISTANT (SECRETARY / LABORER)
11. NUTRITIONIST
12. NUTRITION AIDE
13. TAILGATE SUPERVISOR / WAREHOUSEMAN; TAILGATE/TRUCK SUPERVISOR
14. DRIVER; EQUIPMENT OPERATOR II; DRIVER / ASSISTANT WAREHOUSEMAN; DRIVER / LABORER; TRUCK DRIVER / WAREHOUSE ASSISTANT; DRIVER / UTILITY MAN
15. EQUIPMENT MECHANIC
16. ASSISTANT EQUIPMENT MECHANIC
17. FORKLIFT OPERATOR; EQUIPMENT OPERATOR I
18. UTILITY MAN
19. SECURITY GUARD
20. CUSTODIAN
21. SPOT LABORER; PART-TIME LABORER; PICKUP LABORER; TEMPORARY LABORER; CASUAL LABORER; EMERGENCY TEMPORARY WORKER
22. WORK EXPERIENCE LABORER (JTPA, CWEP, TWEP);
23. RNIP LABORER
24. COMMUNITY SERVICE WORKER
25. EXTENSION WORKER
26. LOCAL WORK RELEASE LABORER; PRISON LABORER; JAIL WORKER
27. VOLUNTEER
28. BUDGET ANALYST (SPECIAL POSITION - SEE NAVAJO)

Appendix F

FOOD PREFERENCES AND DISLIKES BY REGION

Appendix F

FOOD PREFERENCES AND DISLIKES BY REGION

The following series of charts provides a summary of responses by region concerning participants' preferences among items in the FDPIR food package. The charts are based on responses to the following questions:

Name the two [items] from the list that you like the most.

Which of these [items], if any, do you dislike?

The frame of reference for each question was one of the FDPIR food groups. The set of items shown in each chart represents a food group from which recipients select items for their households. For example, the "list" referred to in the above questions included the following juices shown in Exhibit F.1.1: apple, grape, grapefruit, orange, pineapple, and tomato. Thus, respondents were asked to name the two juices among this group that they liked the most. Choices were not constrained to items respondents had been offered or had selected in recent months.

The strength of preference measures shown in the charts are based on the sums of mentions (first or second) in response to these questions. Most respondents mentioned two preferences, therefore, the percentages for preferences total more than 100 percent within any given set of preferences. Approximately one-fourth of the respondents did not mention disliking any FDPIR item.

Exhibit F.11
Regional Preferences Among Juices:
Mountain Plains Region

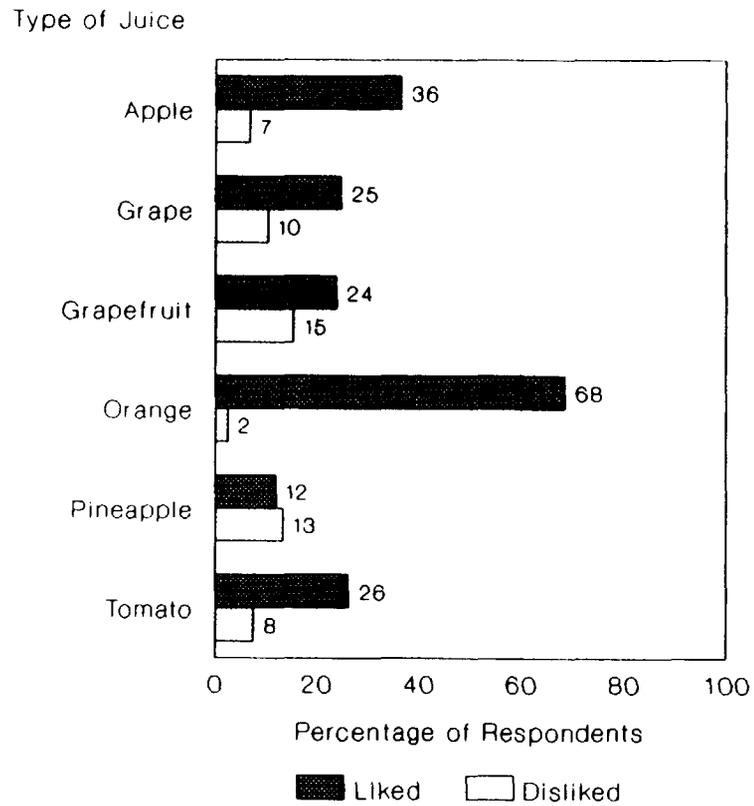


Exhibit F.12
Regional Preferences Among Juices:
Southwest Region

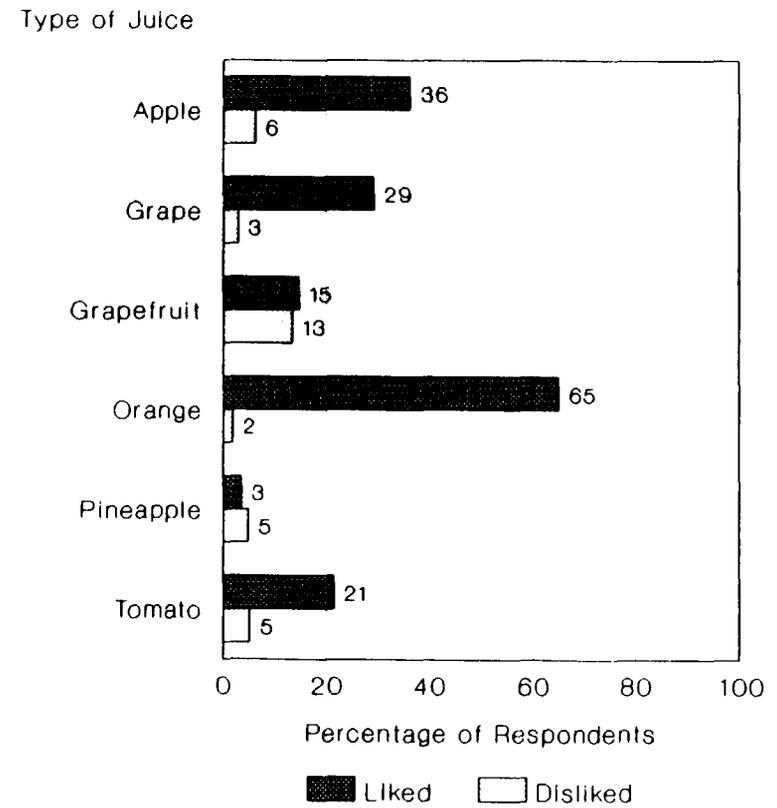


Exhibit F.13
Regional Preferences Among Juices:
West Region

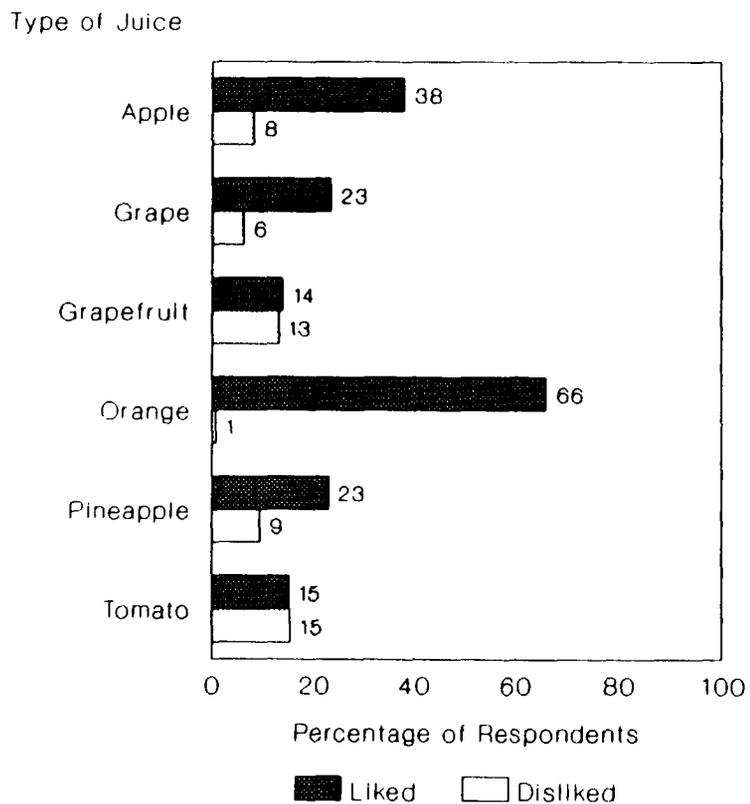


Exhibit F.14
Regional Preferences Among Juices:
Midwest Region

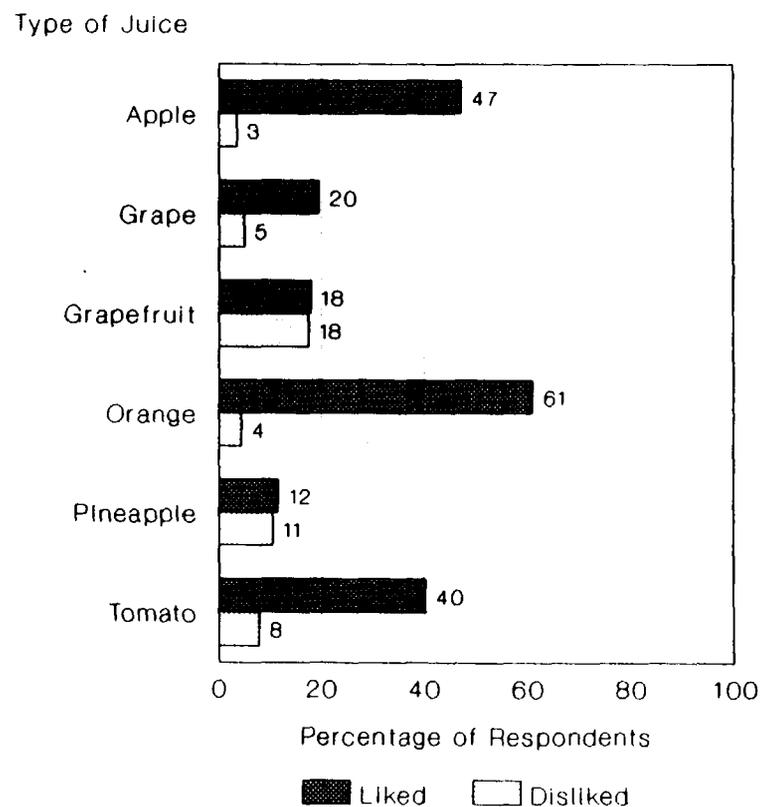


Exhibit F 15
Regional Preferences Among Juices:
Northeast/Southeast Region

Type of Juice

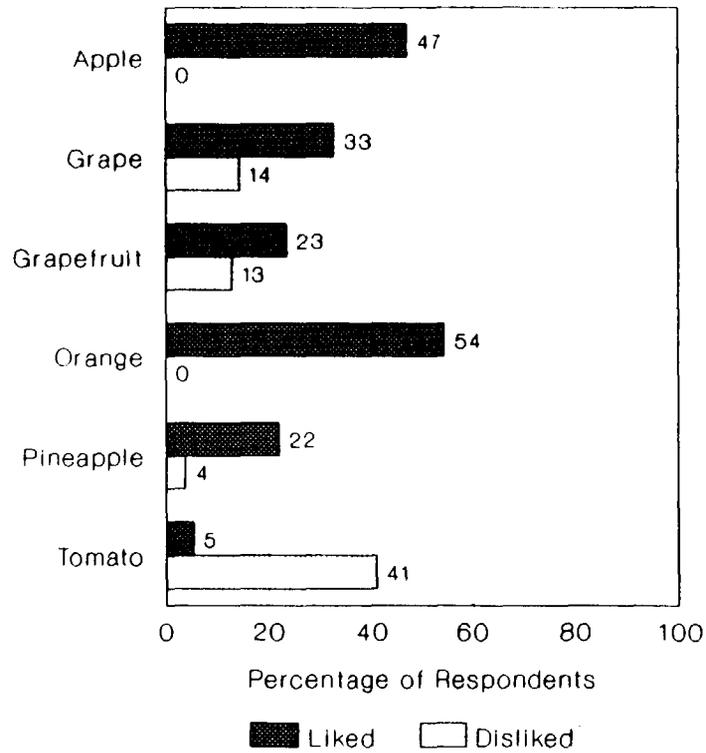


Exhibit F.2.1
Regional Preferences Among Canned Fruit:
Mountain Plains Region

Type of Canned Fruit

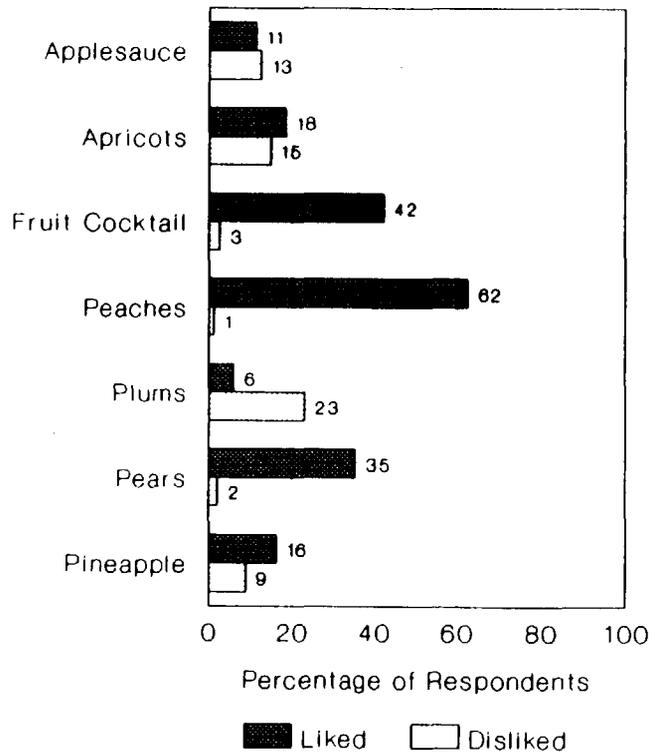


Exhibit F.2.2
Regional Preferences Among Canned Fruit:
Southwest Region

Type of Canned Fruit

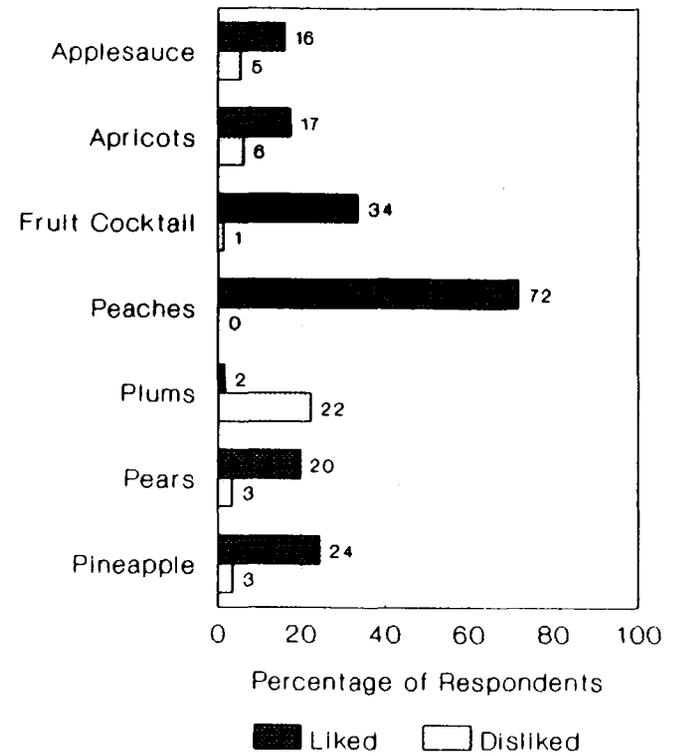


Exhibit F.2.3
Regional Preferences Among Canned Fruit:
West Region

Type of Canned Fruit

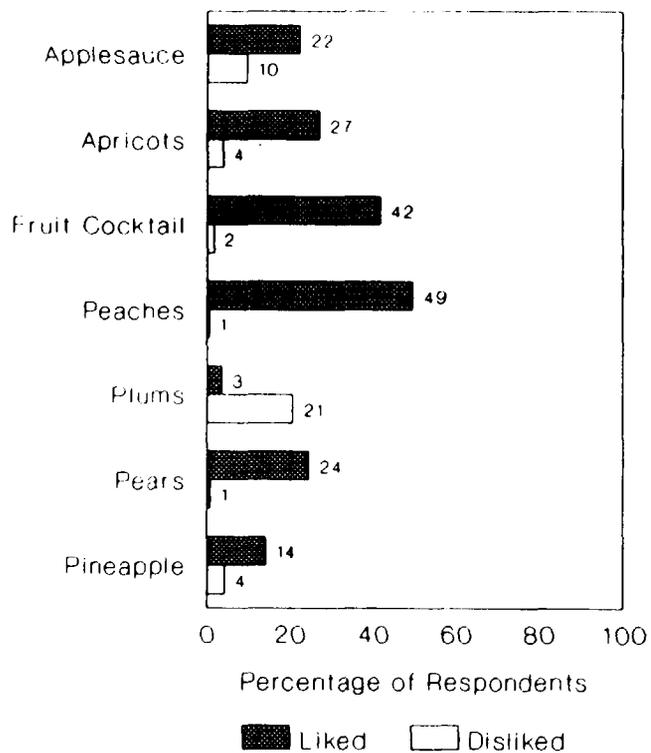


Exhibit F.2.4
Regional Preferences Among Canned Fruit:
Midwest Region

Type of Canned Fruit

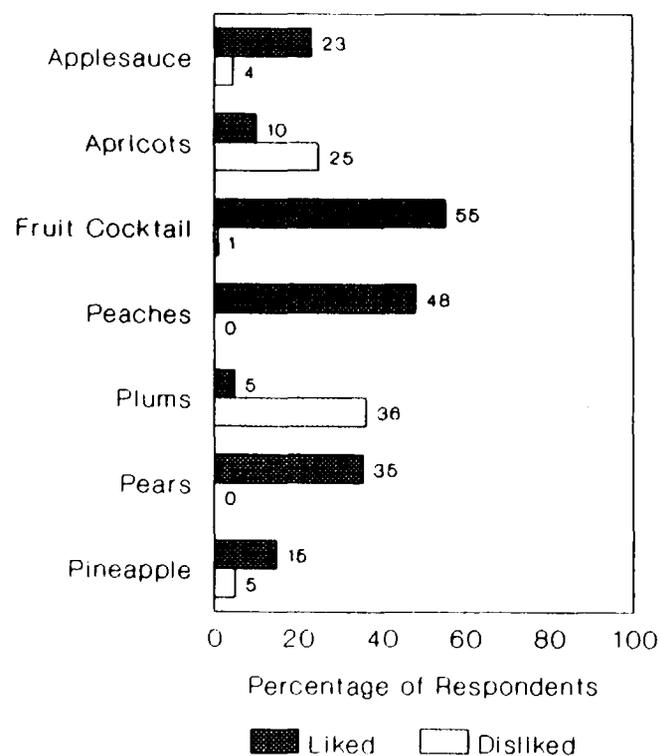


Exhibit F.2.5
Regional Preferences Among Canned Fruit:
Northeast/Southeast Region

Type of Canned Fruit

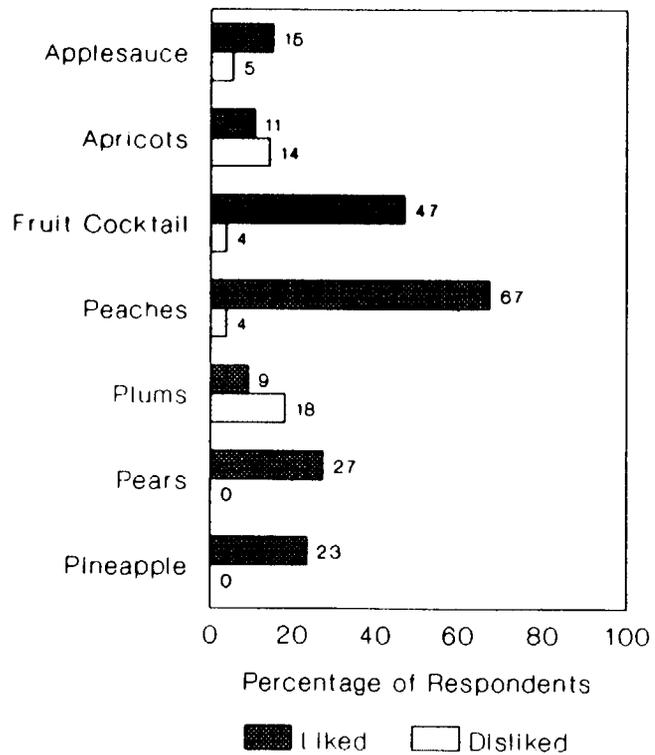


Exhibit F.3.1
Regional Preferences Among Vegetables:
Mountain Plains Region

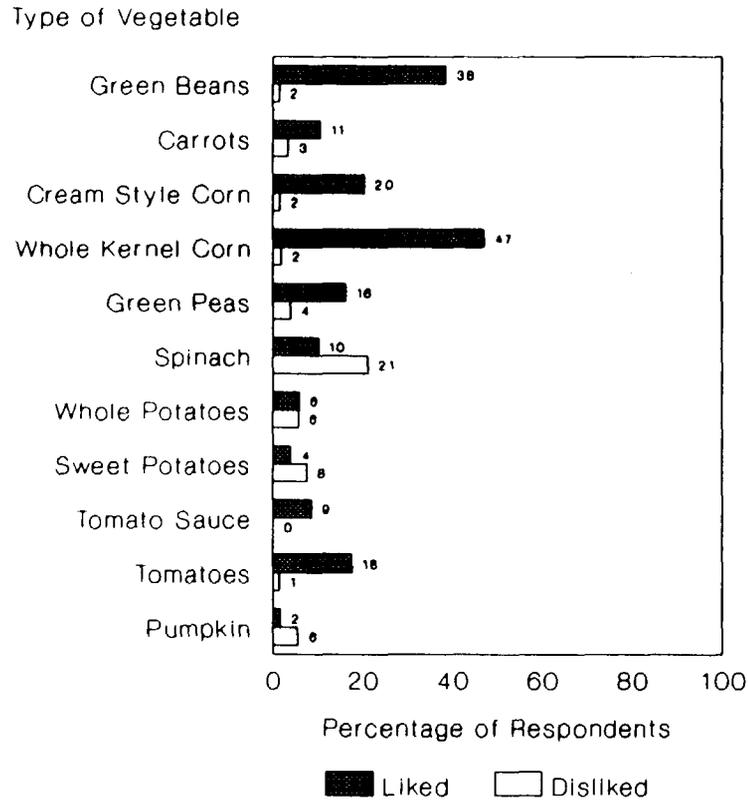


Exhibit F.3.2
Regional Preferences Among Vegetables:
Southwest Region

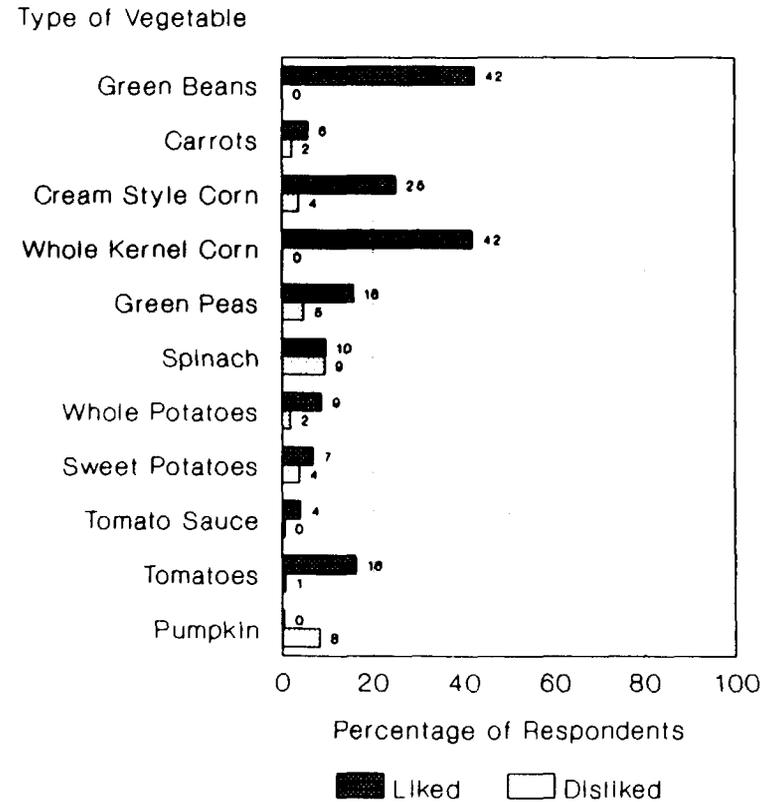


Exhibit F.3.3
Regional Preferences Among Vegetables:
West Region

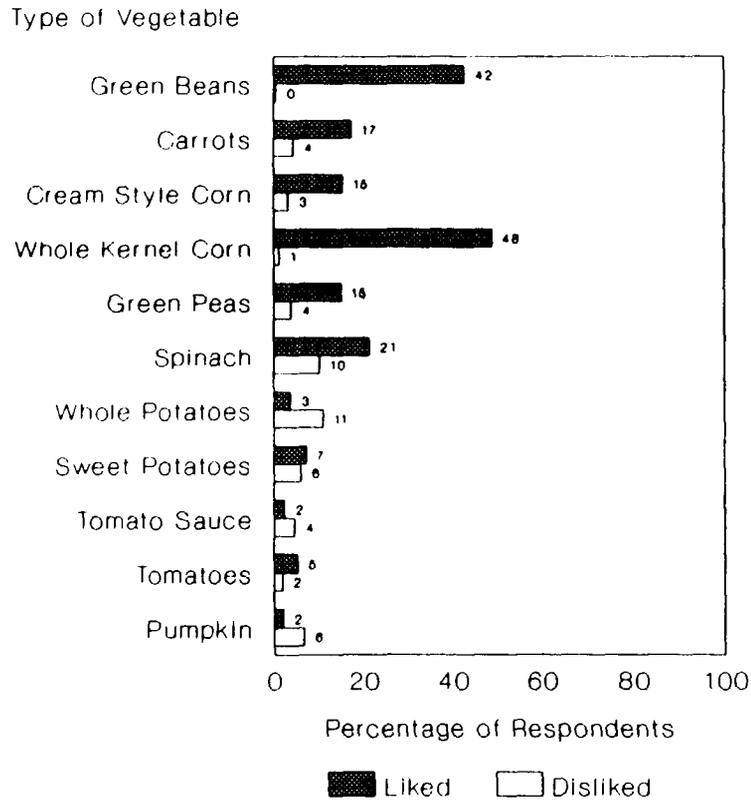


Exhibit F.3.4
Regional Preferences Among Vegetables:
Midwest Region

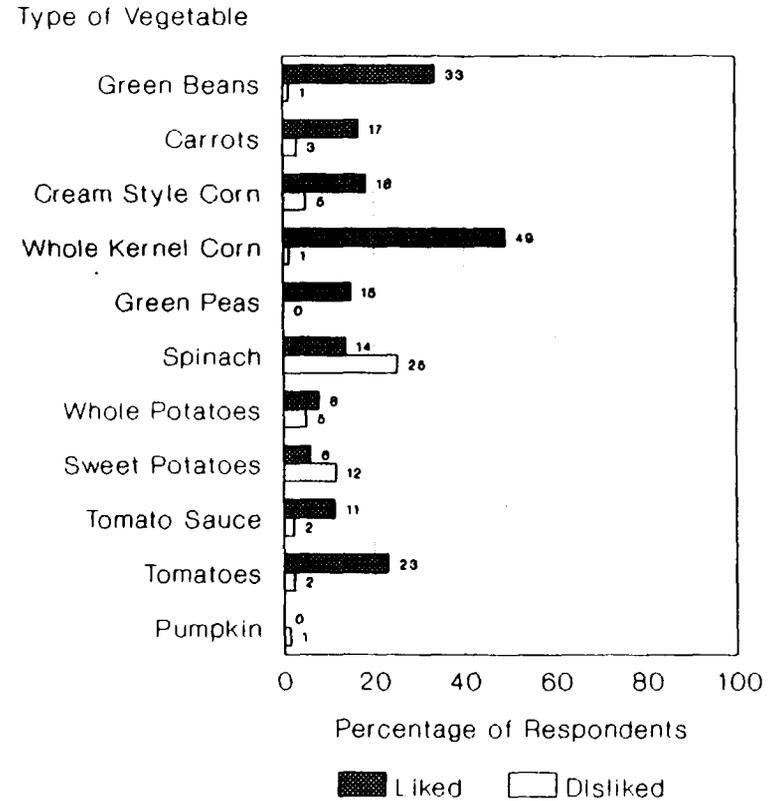


Exhibit F.3.5
 Regional Preferences Among Vegetables:
 Northeast/Southeast Region

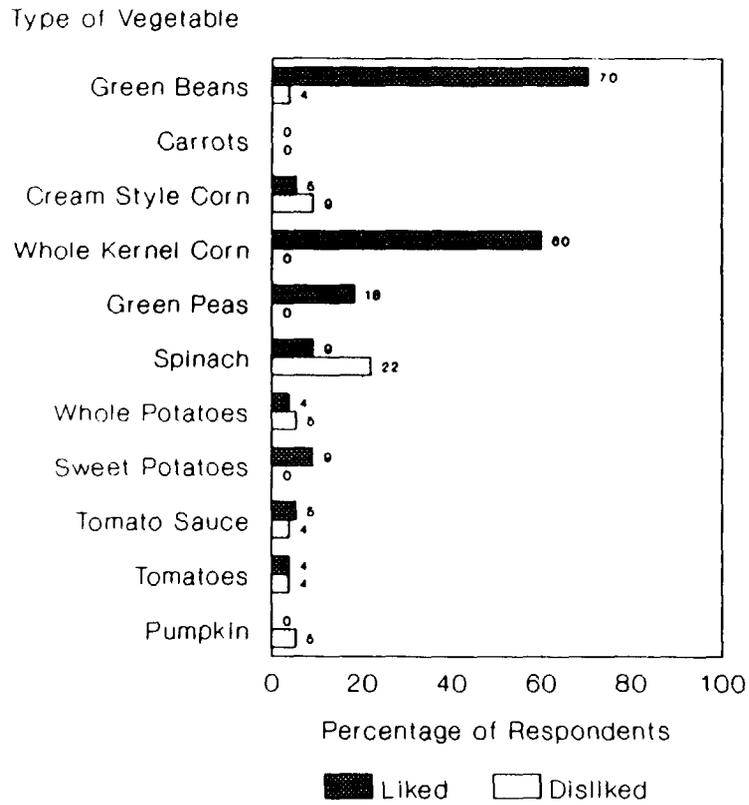


Exhibit F.4.1
Regional Preferences Among Dried Beans:
Mountain Plains Region

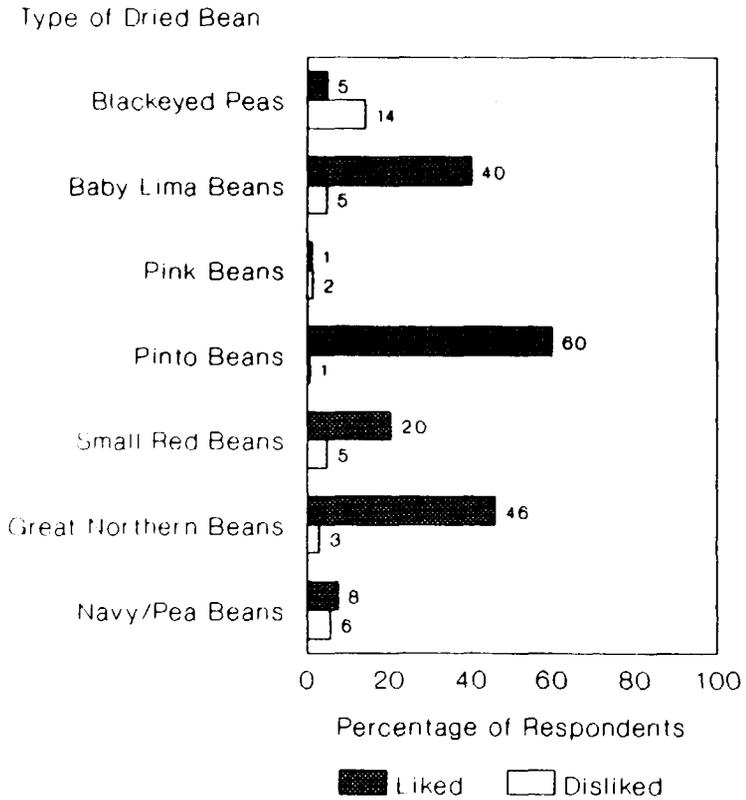


Exhibit F.4.2
Regional Preferences Among Dried Beans:
Southwest Region

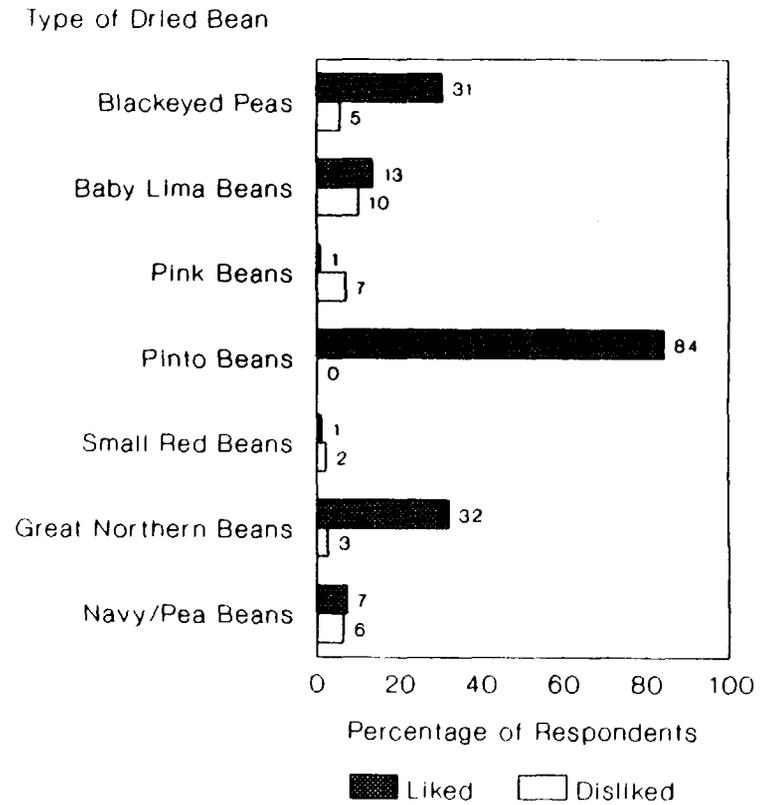


Exhibit F.4.3
Regional Preferences Among Dried Beans:
West Region

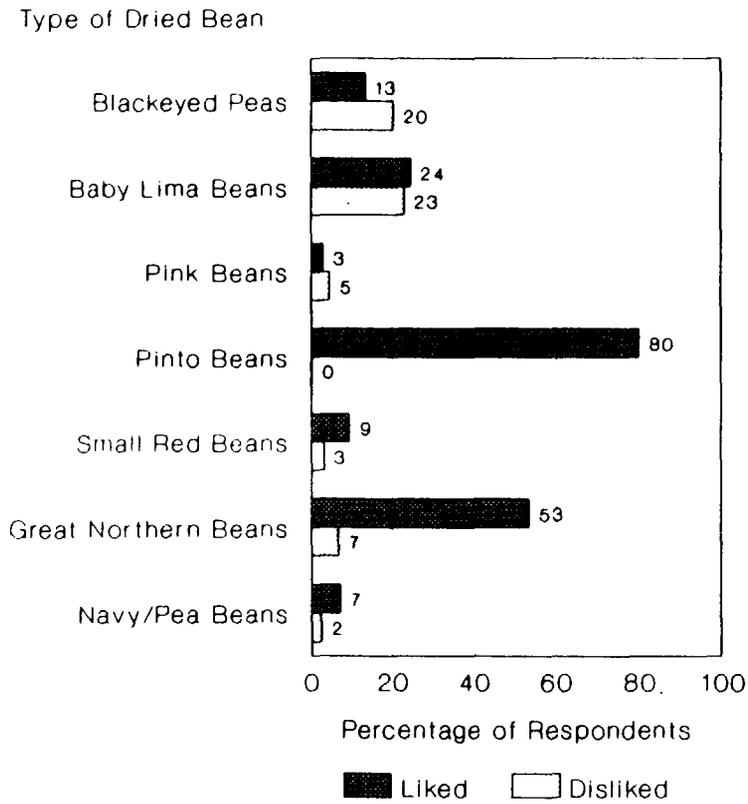


Exhibit F.4.4
Regional Preferences Among Dried Beans:
Midwest Region

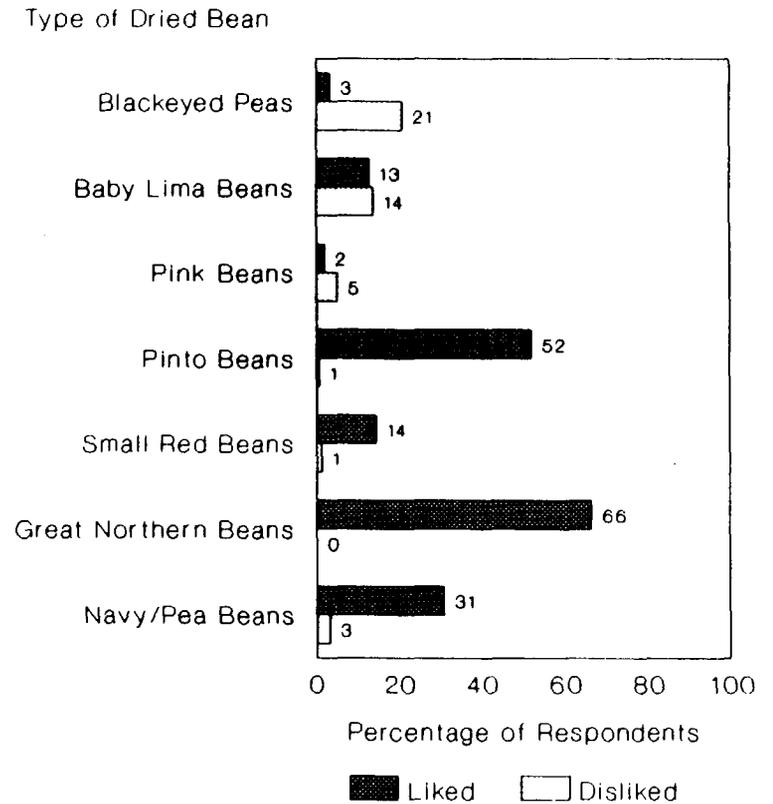


Exhibit F 4.5
Regional Preferences Among Dried Beans:
Northeast/Southeast Region

Type of Dried Bean

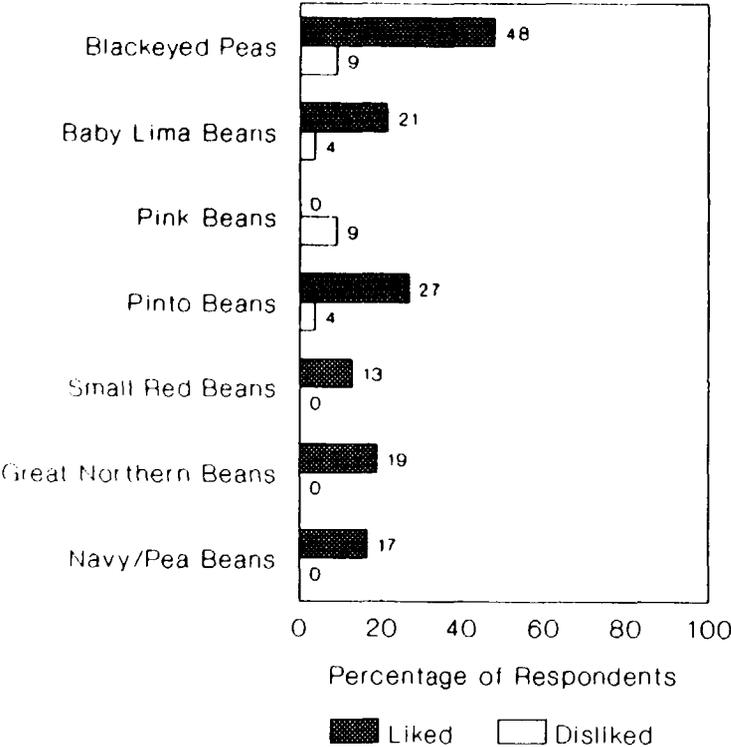


Exhibit F 5.1
Regional Preferences Among Canned Meats:
Mountain Plains Region

Type of Canned Meat

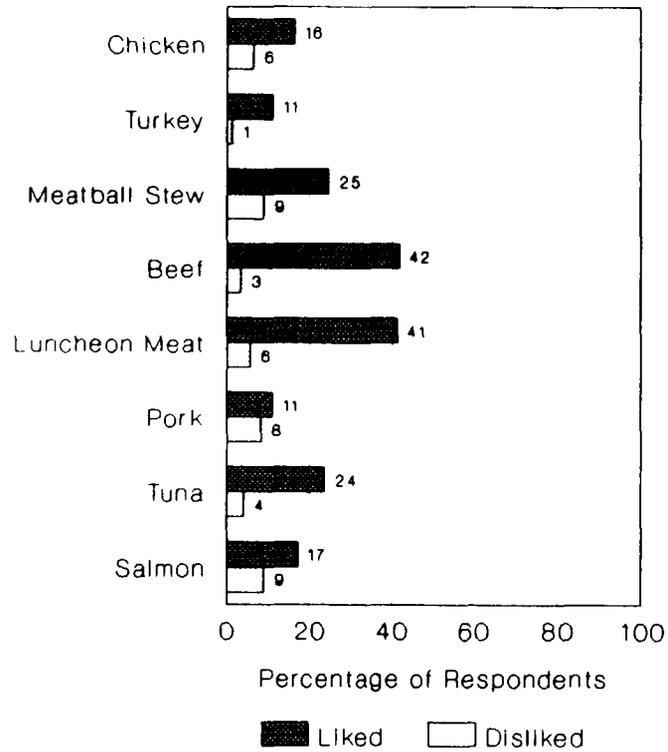


Exhibit F.5.2
Regional Preferences Among Canned Meats:
Southwest Region

Type of Canned Meat

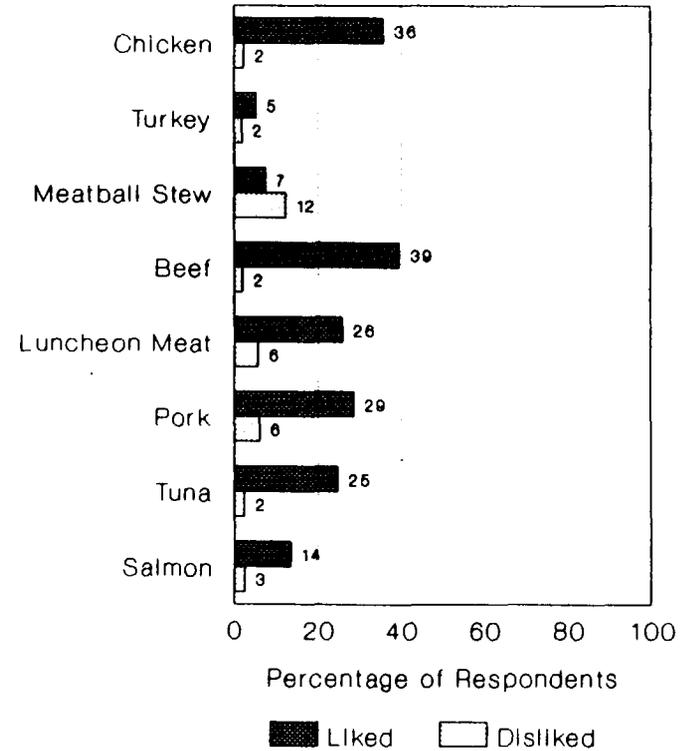


Exhibit F.5.3
Regional Preferences Among Canned Meats:
West Region

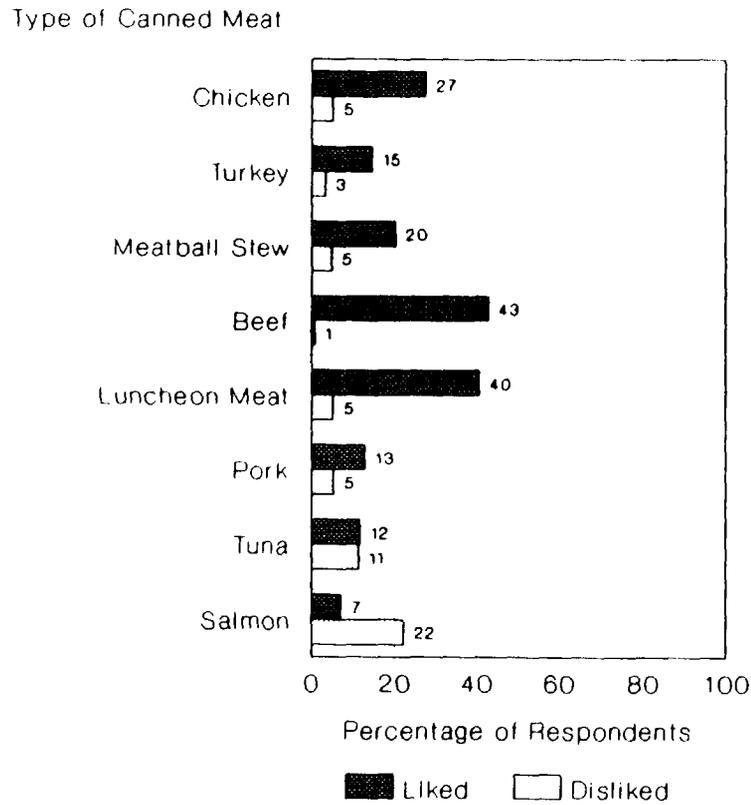


Exhibit F.5.4
Regional Preferences Among Canned Meats:
Midwest Region

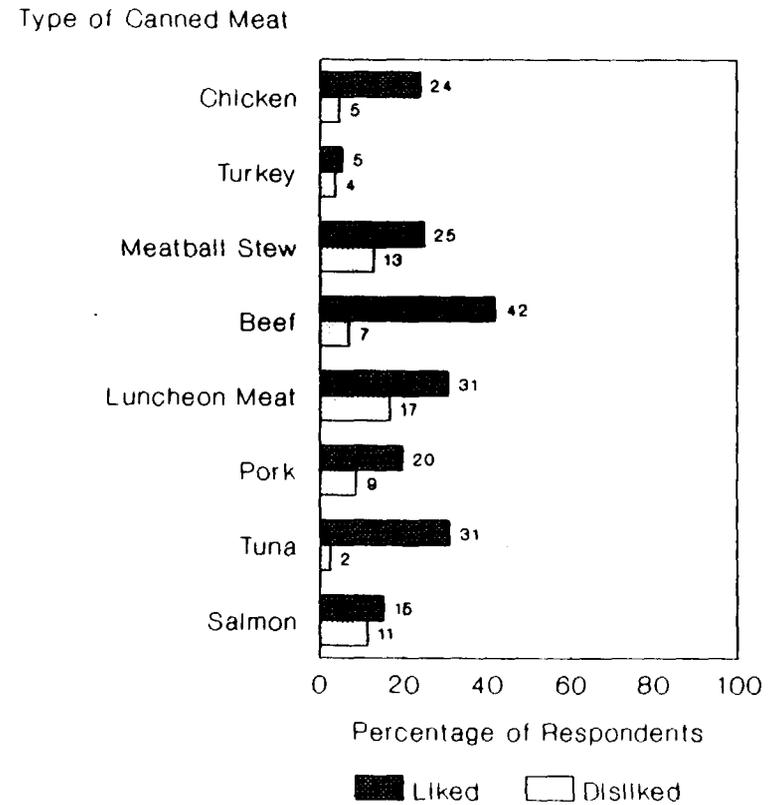


Exhibit F 5.5
Regional Preferences Among Canned Meats:
Northeast/Southeast Region

Type of Canned Meat

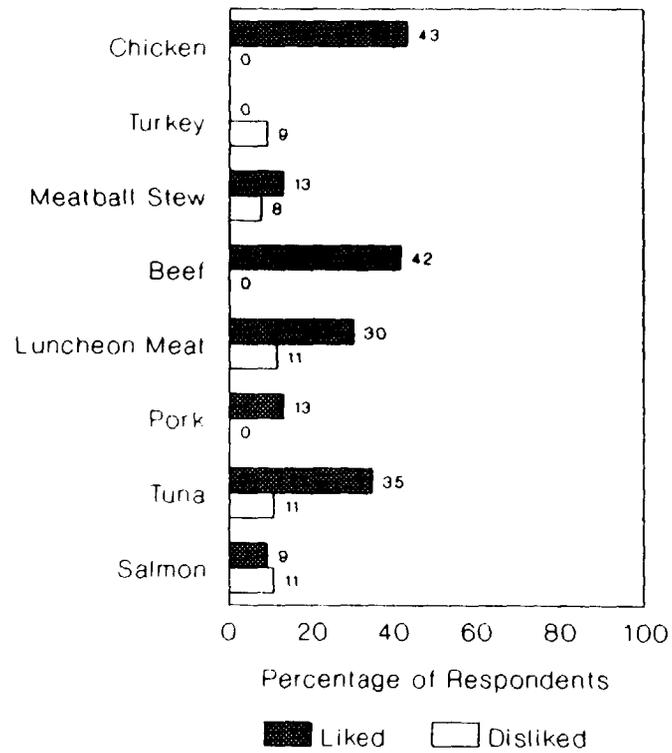


Exhibit F.6.1
Regional Preferences Among Cereals:
Mountain Plains Region

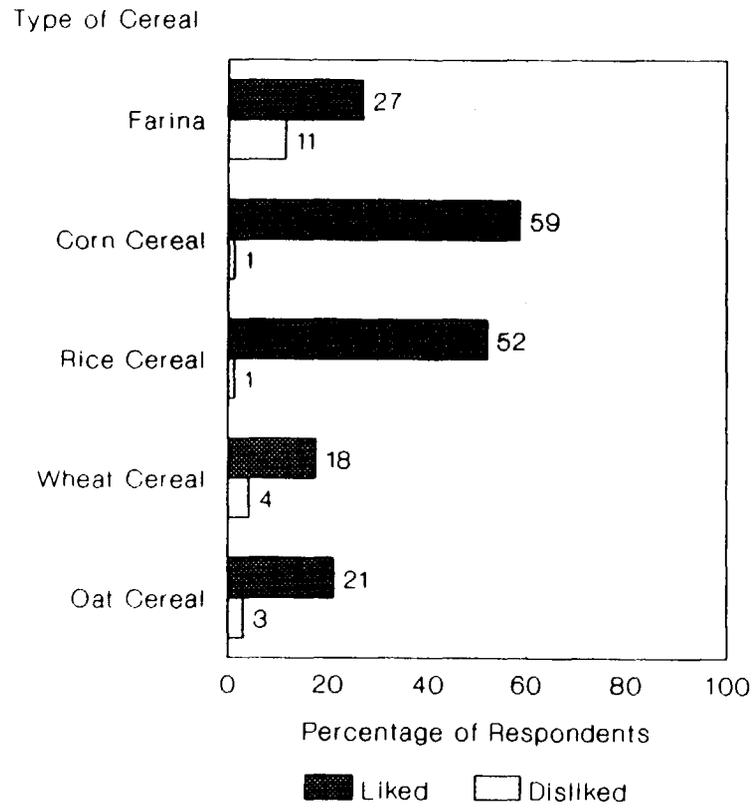


Exhibit F.6.2
Regional Preferences Among Cereals:
Southwest Region

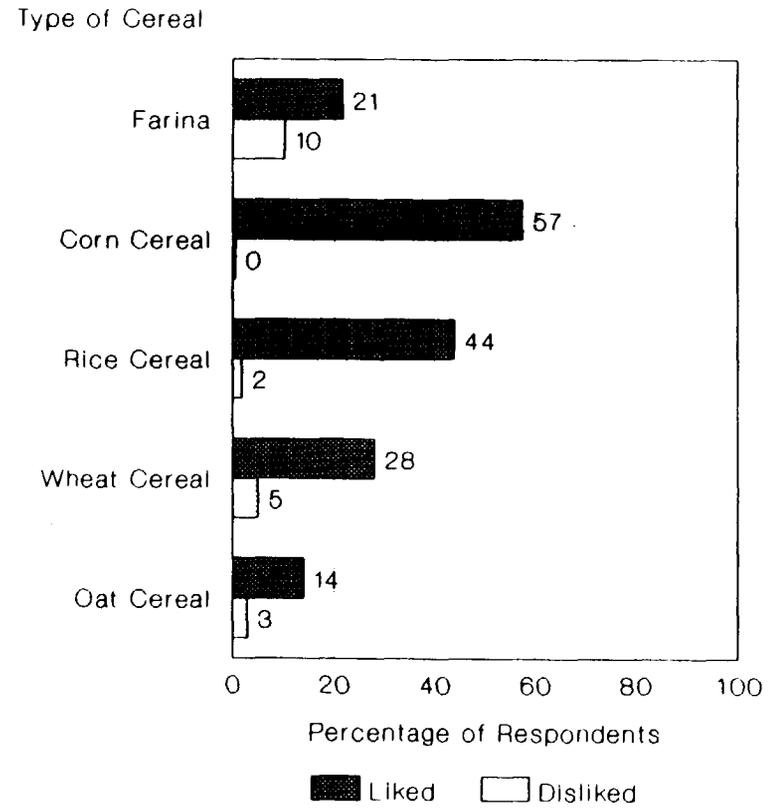


Exhibit F.6.3
Regional Preferences Among Cereals:
West Region

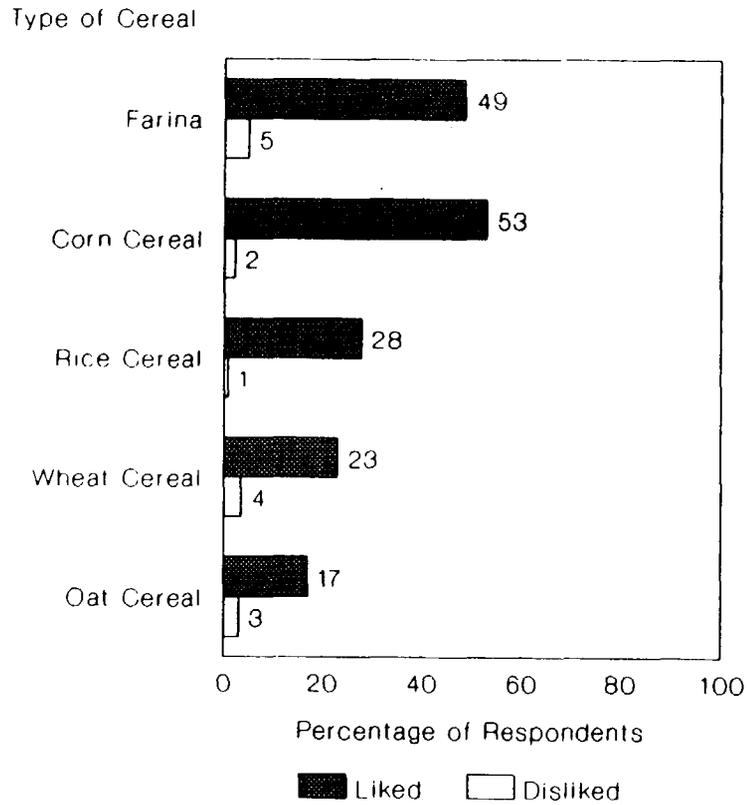


Exhibit F.6.4
Regional Preferences Among Cereals:
Midwest Region

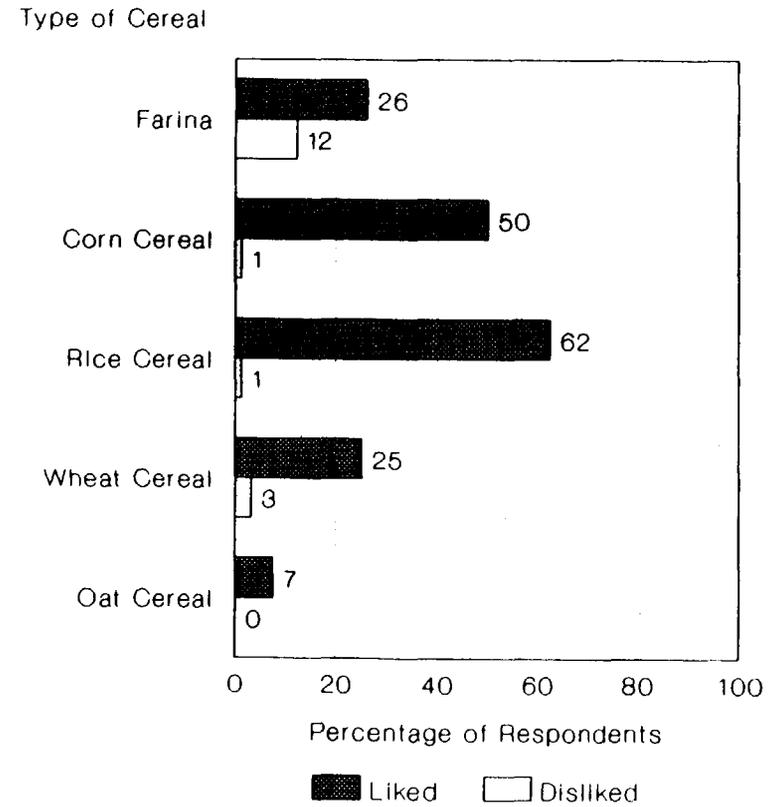


Exhibit F 65
Regional Preferences Among Cereals:
Northeast/Southeast Region

Type of Cereal

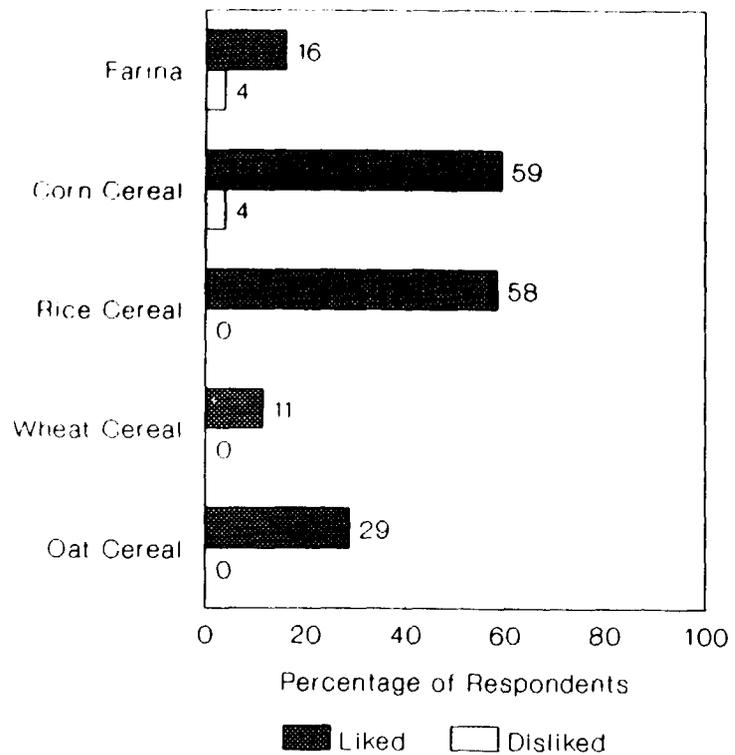


Exhibit F.7.1
Regional Dislikes of Various Foods:
Mountain Plains Region

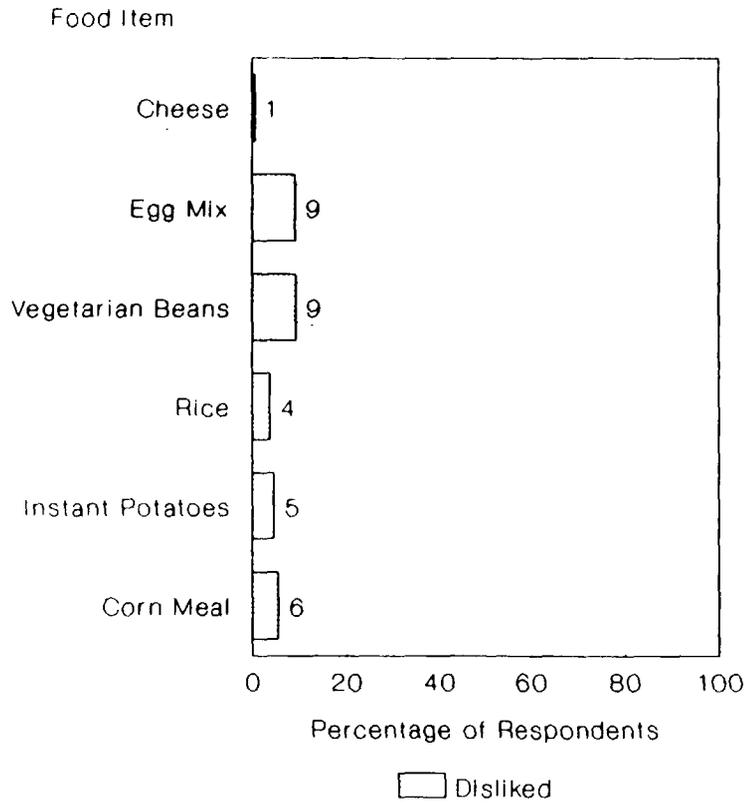


Exhibit F.7.2
Regional Dislikes of Various Foods:
Southwest Region

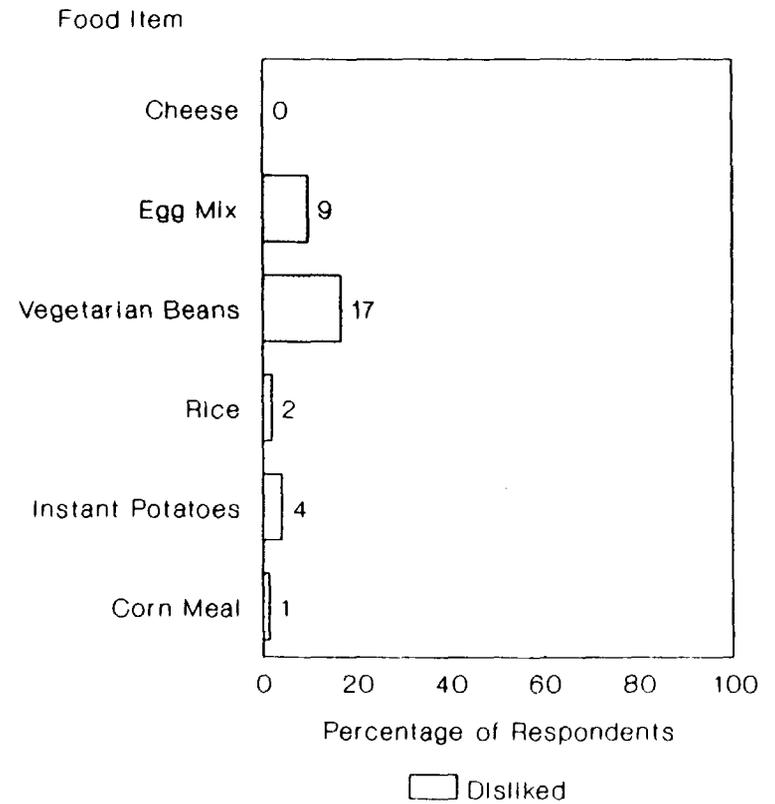


Exhibit F.7.3
Regional Dislikes of Various Foods:
West Region

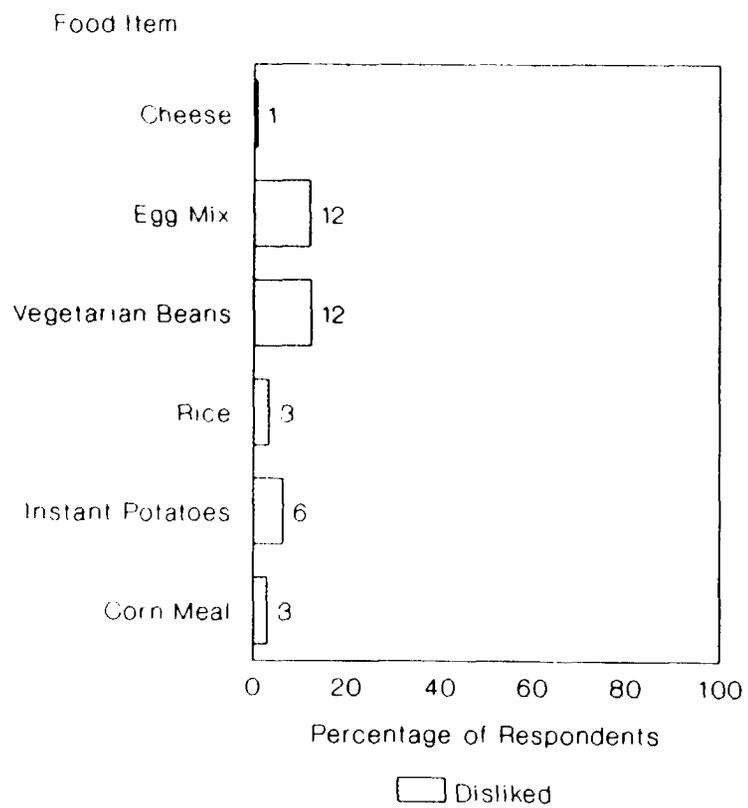


Exhibit F.7.4
Regional Dislikes of Various Foods:
Midwest Region

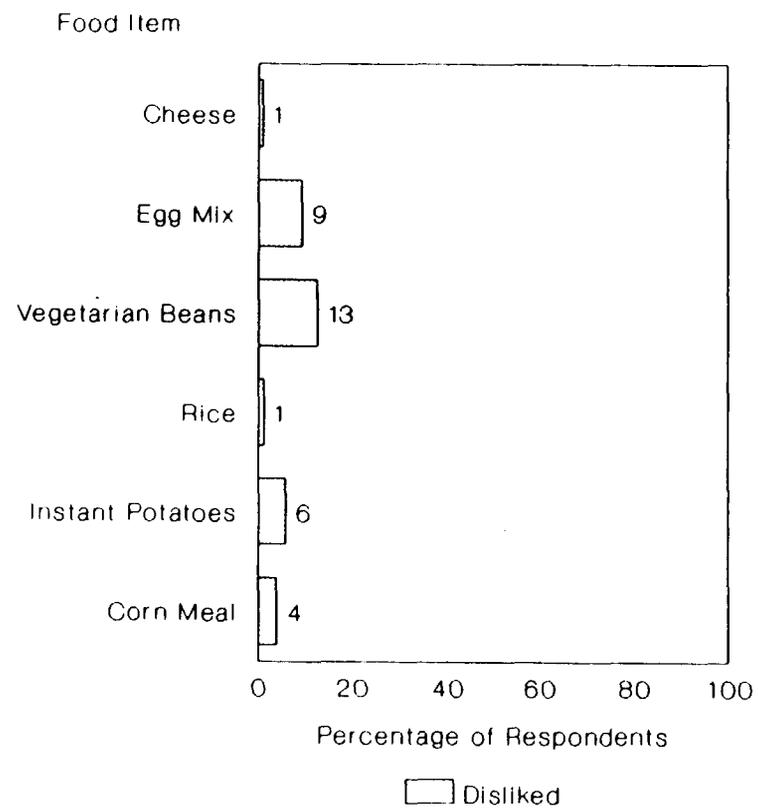


Exhibit F.7.5
Regional Dislikes of Various Foods:
Northeast/Southeast Region

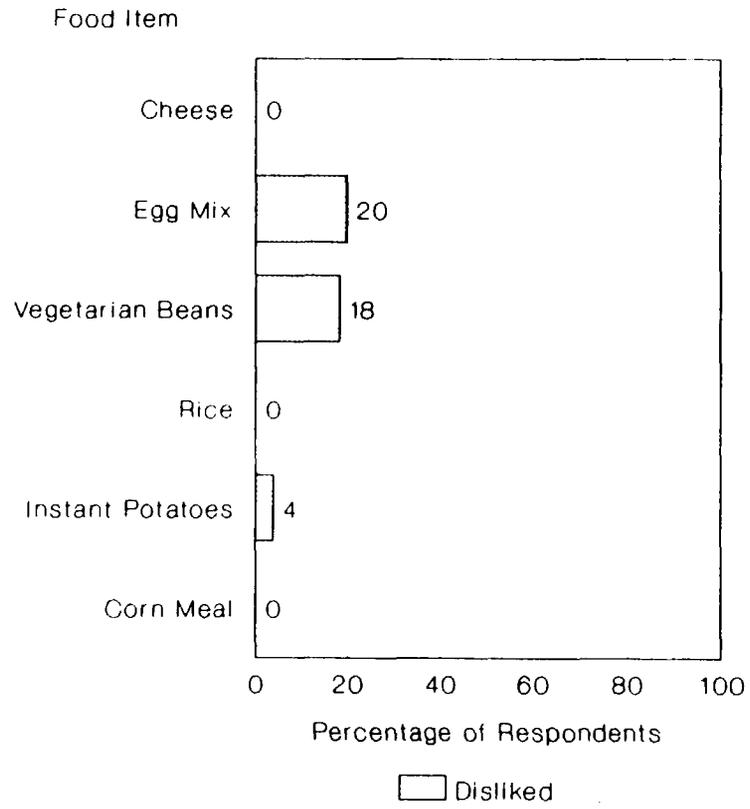


Exhibit F.8.1

Regional Preferences Among Food Items

Food Item	Preference	Region (Estimated Number of Households)				
		Mountain Plains (10,875)	Southwest (14,871)	West (13,143)	Midwest (4,405)	Northeast/ Southeast (1,148)
DRIED FRUIT						
Prunes	Liked	21.9%	22.9%	36.7%	17.5%	19.7%
	Disliked	21.5	12.1	22.0	20.8	12.9
Raisins	Liked	63.9	63.1	71.2	71.7	53.0
	Disliked	5.5	0.9	3.3	7.2	10.6
PEANUT PRODUCTS						
Smooth Peanut Butter	Liked	64.6	71.0	63.7	73.5	67.4
	Disliked	1.2	0.0	6.2	3.8	3.7
Chunky Peanut Butter	Liked	42.4	42.5	39.5	52.0	32.6
	Disliked	7.9	4.5	12.1	8.7	20.4
Roasted Peanuts	Liked	58.1	57.6	51.1	57.7	68.9
	Disliked	5.2	3.9	0.7	4.6	7.5
PASTA						
Macaroni	Liked	54.2	51.3	67.0	55.6	37.9
	Disliked	0.6	1.8	0.5	1.3	0.0
Spaghetti	Liked	23.7	30.5	41.8	35.7	15.9
	Disliked	4.1	1.5	2.3	3.8	0.0
GRAINS						
Oatmeal	Liked	80.3	85.1	79.2	85.9	100.0
	Disliked	2.5	0.0	0.6	2.2	0.0
Rolled Wheat	Liked	8.0	5.5	23.3	12.0	0.0
	Disliked	23.3	30.7	11.7	19.0	3.7
SWEETENERS						
Corn Syrup	Liked	66.6	51.6	57.9	66.6	18.2

Region
(Estimated Number of Households)

Food Item	Preference	Region				
		Mountain Plains (10,875)	Southwest (14,871)	West (13,143)	Midwest (4,405)	Northeast/ Southeast (1,148)
FLOURS						
All Purpose Flour	Liked	86.5%	91.0%	68.0%	90.0%	85.6%
	Disliked	0.3	0.0	0.8	0.0	9.1
Bread Flour	Liked	35.2	22.7	57.5	43.6	34.8
	Disliked	2.2	1.6	1.5	0.0	7.5
Whole Wheat Flour	Liked	29.3	42.6	31.2	27.3	36.4
	Disliked	11.2	10.6	10.9	9.5	7.6
FATS						
Shortening	Liked	31.0	39.2	67.9	27.7	9.1
	Disliked	3.0	2.5	1.9	4.9	3.7
Vegetable Oil	Liked	31.1	36.4	30.4	37.5	50.1
	Disliked	8.3	3.0	20.2	3.7	3.7
Butter	Liked	38.8	35.7	27.4	53.7	29.5
	Disliked	3.4	5.2	7.4	2.6	0.0
MILKS						
Evaporated Milk	Liked	61.9	66.8	74.6	76.8	49.2
	Disliked	2.5	2.0	1.1	2.4	9.1
Non Fat Dry Milk	Liked	21.0	19.4	31.8	24.4	14.4
	Disliked	4.4	5.5	11.5	9.4	12.8

Appendix G

**THE AVAILABILITY OF FDPIR FOOD ITEMS AND THE DESIRE
TO OBTAIN ITEMS**

Appendix G

THE AVAILABILITY OF FDPIR FOOD ITEMS AND THE DESIRE TO OBTAIN ITEMS

We reported in Chapter II of Volume 1 that not all FDPIR food items were available in all the sample programs as indicated by inventory records and by reports from respondents in the FDPIR household survey. We described in Volume 1 how a variety of factors can affect the availability of specific FDPIR food items. In this appendix, we provide a detailed regional breakdown of the availability of food items.

Exhibit G.1 is a summary of responses to the following questions posed to respondents in the FDPIR household survey:

In the past three months were the following [items] available?

FOR EACH [ITEM] THAT WASN'T AVAILABLE ASK:

Would you like to receive [ITEM]?

The frame of reference for each question was the set of items within a given food group, such as canned fruit. For example, the following juices constituted such a group: apple, grape, grapefruit, orange, pineapple, and tomato.

The percentages reported with regard to the availability of an item pertain to the entire sample. They represent percentages of sample households for whom an item was not available in the three months preceding the survey reference month (September 1989). An estimate of the number of participating households in each region is shown in the table.

The percentages shown for "want to have" pertain only to the groups of households that reported not having a particular item available. For example, 8.7 percent of the respondents in the Mountain Plains Region reported that applesauce had not been available to them. Of the respondents who reported that applesauce was not available to them, 81.6 percent wished to have applesauce as one of their choices for canned fruits.

In the analysis of food availability presented in Chapter II of Volume 1, we used five percentage points (plus or minus) difference between the percentage not available for the total sample and the regional percentages not available as the standard for judging meaningful differences. This was based on our finding that the estimates of non-availability for individual food items were approximately 2 percent or so. Thus, the confidence interval for the estimate would be approximately five percentage points above or below the estimated percentage for the entire sample of respondents.

Having thus identified regions within which a given food item was *relatively* unavailable, the reader can examine the percentage of respondents who wished to have that item available. Using apricots as an example, it is apparent that even where the level of unavailability is similar, there can be wide variation in the desire to have a particular item. However, in reviewing these data, it is important to keep in mind that estimates within regions tend to have larger standard errors because they are based on small regional subsamples (that is, only respondents that reported not having the item available). As a result, these data must be interpreted cautiously.

Exhibit G.1

Non-Availability and Desire to Obtain Items in FDPIR Food Package

Food Item	Measure	Region (Estimated Number of Households)					Total (44,442)
		Mountain Plains (10,875)	Southwest (14,871)	West (13,143)	Midwest (4,405)	Northeast/ Southeast (1,148)	
FRUITS							
Applesauce	Not Available	8.7%	6.4%	5.2%	1.1%	9.1%	6.2%
	Wish to Have	81.6%	69.7%	80.4%	50.0%	63.1%	75.3%
Apricots	Not Available	18.8	25.7	15.1	17.1	16.0	19.8
	Wish to Have	70.6	62.8	79.1	37.4	25.0	65.0
Fruit Cocktail	Not Available	5.3	3.7	7.1	11.9	5.3	6.0
	Wish to Have	88.9	100.0	92.2	78.5	100.0	90.3
Peaches	Not Available	5.3	4.6	6.0	32.0	0.0	7.8
	Wish to Have	100.0	100.0	95.6	96.1	N/A	97.4
Plums	Not Available	23.3	13.7	31.1	21.7	5.3	21.8
	Wish to Have	65.0	36.8	66.8	30.8	50.0	56.5
Pears	Not Available	10.9	5.9	11.1	5.9	9.1	8.7
	Wish to Have	83.7	68.9	93.3	100.0	41.5	84.5
Pineapple	Not Available	17.3	5.7	15.2	4.7	9.1	11.3
	Wish to Have	94.8	75.7	78.1	78.8	100.0	84.3
FRUIT JUICES							
Apple Juice	Not Available	22.5	8.2	22.2	5.9	0.0	15.4
	Wish to Have	93.6	65.5	90.4	81.4	N/A	86.4
Grape Juice	Not Available	11.6	11.0	33.7	17.9	11.3	18.6
	Wish to Have	89.2	75.9	84.4	82.7	68.0	83.0
Grapefruit Juice	Not Available	20.5	22.8	25.7	9.8	0.0	21.2
	Wish to Have	77.8	47.2	68.1	89.9	N/A	64.3
Orange Juice	Not Available	6.6	3.1	1.4	3.6	18.9	3.9
	Wish to Have	100.0	100.0	100.0	100.0	100.0	100.0
Pineapple Juice	Not Available	11.5	15.6	16.3	13.1	10.6	14.4
	Wish to Have	65.6	60.2	85.6	55.1	100.0	70.2
Tomato Juice	Not Available	11.7	5.7	16.5	2.6	0.0	9.9
	Wish to Have	90.2	80.6	82.3	62.5	N/A	83.3

Region
(Estimated Number of Households)

Food Item	Measure	Region					Total (44,442)
		Mountain Plains (10,875)	Southwest (14,871)	West (13,143)	Midwest (4,405)	Northeast/ Southeast (1,148)	
DRIED FRUITS							
Prunes	Not Available	34.2%	15.8%	48.9%	69.0%	10.6%	35.2%
	Wish to Have	67.2	72.0	69.6	67.0	50.0	68.6
Raisins	Not Available	6.3	1.8	5.8	1.3	0.0	4.0
	Wish to Have	80.8	75.3	79.0	100.0	N/A	80.4
VEGETABLES							
Green Beans	Not Available	7.5	5.3	7.2	3.8	16.0	6.5
	Wish to Have	91.3	100.0	94.6	100.0	100.0	95.8
Carrots	Not Available	23.7	26.5	42.3	23.6	10.6	29.8
	Wish to Have	80.4	81.7	86.6	85.2	25.0	82.8
Cream Style Corn	Not Available	24.1	6.0	41.1	10.5	10.6	21.4
	Wish to Have	88.0	100.0	80.8	64.9	100.0	84.0
Whole Kernel Corn	Not Available	21.1	35.6	25.4	15.6	21.3	26.7
	Wish to Have	89.9	97.6	93.5	88.4	100.0	94.4
Green Peas	Not Available	8.6	12.4	10.2	34.4	12.9	13.0
	Wish to Have	85.9	76.4	70.6	96.6	100.0	82.5
Spinach	Not Available	21.1	8.2	25.7	25.5	9.1	18.3
	Wish to Have	64.3	56.2	74.2	35.2	0.0	61.9
Whole Potatoes	Not Available	5.6	9.6	39.1	18.7	14.4	18.4
	Wish to Have	84.7	85.0	65.5	84.5	63.1	72.3
Sweet Potatoes	Not Available	31.5	16.7	32.5	27.4	10.6	25.9
	Wish to Have	75.8	85.6	72.1	56.6	100.0	74.8
Tomato Sauce	Not Available	8.0	19.5	19.5	8.2	14.4	15.4
	Wish to Have	83.5	85.2	75.7	64.6	100.0	80.6
Tomatoes	Not Available	22.9	12.8	22.4	23.8	18.2	19.4
	Wish to Have	93.0	90.0	80.8	87.0	100.0	87.5
Pumpkin	Not Available	69.0	70.0	61.8	74.8	28.8	66.8
	Wish to Have	83.3	76.5	76.9	78.0	86.0	78.6

Region
(Estimated Number of Households)

Food Item	Measure	Region					Total (44,442)
		Mountain Plains (10,875)	Southwest (14,871)	West (13,143)	Midwest (4,405)	Northeast/ Southeast (1,148)	
DRIED BEANS							
Blackeyed Peas	Not Available	70.2%	22.5%	90.5%	53.2%	25.7%	57.4%
	Wish to Have	47.8	68.7	47.2	25.9	56.0	48.0
Lima Beans	Not Available	50.1	46.9	54.9	43.2	27.3	49.2
	Wish to Have	72.6	60.6	46.5	42.9	49.0	57.1
Pink Beans	Not Available	78.9	89.1	87.8	82.3	69.0	85.1
	Wish to Have	47.1	43.0	40.0	46.2	28.1	43.0
Pinto Beans	Not Available	6.2	0.9	2.9	16.5	12.9	4.6
	Wish to Have	63.9	100.0	91.6	62.5	70.7	72.1
Small Red Beans	Not Available	65.7	84.8	86.7	65.4	65.2	78.3
	Wish to Have	70.1	55.6	47.3	76.7	48.0	57.6
Great Northern Beans	Not Available	13.4	26.9	60.6	7.7	31.9	31.8
	Wish to Have	74.6	56.7	44.2	100.0	28.6	52.0
Navy Pea Beans	Not Available	60.3	54.5	84.7	40.7	44.8	63.2
	Wish to Have	54.1	53.8	42.6	75.5	53.5	51.0
MEATS							
Chicken	Not Available	44.7	31.7	27.1	10.8	5.3	30.8
	Wish to Have	77.5	88.6	83.1	83.1	100.0	83.1
Turkey	Not Available	84.7	95.1	79.2	93.1	83.4	87.4
	Wish to Have	89.2	88.7	86.4	92.5	80.3	88.4
Meatball Stew	Not Available	7.9	11.7	21.2	5.6	21.3	13.2
	Wish to Have	86.8	56.7	87.1	53.1	100.0	77.2
Beef	Not Available	2.4	0.5	15.1	0.0	5.3	5.4
	Wish to Have	100.0	100.0	96.8	N/A	100.0	97.4
Luncheon Meat	Not Available	7.7	2.4	24.1	3.9	14.4	10.6
	Wish to Have	100.0	100.0	95.4	77.8	61.3	93.9
Pork	Not Available	15.4	2.8	18.5	2.4	10.6	10.7
	Wish to Have	72.8	50.1	79.1	100.0	100.0	75.7
Tuna	Not Available	21.5	4.3	17.3	5.2	12.9	12.7
	Wish to Have	82.6	88.6	66.6	55.5	100.0	75.9
Salmon	Not Available	82.9	78.2	81.8	91.1	40.8	80.7
	Wish to Have	78.9	91.3	62.7	85.7	89.4	78.9

Region
(Estimated Number of Households)

Food Item	Measure	Region					Total (44,442)
		Mountain Plains (10,875)	Southwest (14,871)	West (13,143)	Midwest (4,405)	Northeast/ Southeast (1,148)	
PEANUT PRODUCTS							
Smooth Peanut Butter	Not Available	3.1%	1.5%	22.3%	2.0%	0.0%	8.0%
	Wish to Have	100.0	100.0	76.2	37.3	N/A	79.5
Chunky Peanut Butter	Not Available	36.4	23.1	56.1	8.5	30.4	34.9
	Wish to Have	79.4	81.3	72.2	22.0	77.0	75.0
Roasted Peanuts	Not Available	6.7	2.6	8.0	2.0	5.3	5.2
	Wish to Have	90.4	83.2	83.0	100.0	50.0	84.2
PASTA							
Macaroni	Not Available	2.6	5.7	1.3	2.0	0.0	3.1
	Wish to Have	58.3	84.4	100.0	100.0	N/A	82.9
Spaghetti	Not Available	28.4	8.2	7.4	34.8	16.0	15.7
	Wish to Have	88.8	92.9	82.4	92.8	100.0	89.7
CEREALS							
Farina	Not Available	11.2	32.1	31.2	7.8	44.6	24.6
	Wish to Have	68.2	65.6	85.9	44.4	31.2	71.3
Corn Cereal	Not Available	7.2	14.3	23.9	2.7	25.0	14.5
	Wish to Have	81.5	92.5	88.1	100.0	65.0	87.7
Rice Cereal	Not Available	16.3	8.5	36.5	8.0	16.0	18.9
	Wish to Have	91.6	84.5	85.1	78.3	66.7	85.7
Wheat Cereal	Not Available	32.7	21.8	30.9	11.4	37.9	26.5
	Wish to Have	90.3	78.2	85.0	69.9	79.0	83.8
Oat Cereal	Not Available	56.8	63.0	59.0	45.4	49.2	58.2
	Wish to Have	85.4	86.7	88.2	83.1	82.9	86.4
Oatmeal	Not Available	43.9	73.3	50.7	39.7	37.1	55.2
	Wish to Have	97.1	99.4	99.5	91.7	77.7	98.0
Rolled Wheat	Not Available	22.4	45.4	64.9	17.4	67.4	43.3
	Wish to Have	65.2	72.1	70.8	55.2	28.7	67.8
SWEETENERS							
Corn Syrup	Not Available	1.6	0.4	22.3	2.6	26.4	8.1
	Wish to Have	100.0	100.0	82.6	61.5	78.7	82.5
Honey	Not Available	11.6	6.6	20.1	4.7	0.0	11.5
	Wish to Have	67.5	85.4	73.9	59.3	N/A	73.6

Region
(Estimated Number of Households)

Food Item	Measure	Region					Total (44,442)
		Mountain Plains (10,875)	Southwest (14,871)	West (13,143)	Midwest (4,405)	Northeast/ Southeast (1,148)	
FLOURS							
All Purpose Flour	Not Available	1.0%	0.7%	25.6%	1.1%	3.8%	8.3%
	Wish to Have	57.5	100.0	79.2	100.0	100.0	79.9
Bread Flour	Not Available	49.3	65.7	30.4	56.3	46.3	49.8
	Wish to Have	61.8	70.3	77.8	71.5	58.8	69.3
Whole Wheat Flour	Not Available	53.7	36.4	45.8	45.4	46.3	44.6
	Wish to Have	64.9	63.7	75.5	55.1	74.3	67.0
FATS							
Shortening	Not Available	3.8	2.0	25.5	4.5	5.3	9.7
	Wish to Have	100.0	54.3	100.0	65.4	100.0	95.0
Vegetable Oil	Not Available	14.0	27.1	38.9	12.8	10.6	25.5
	Wish to Have	87.9	90.2	74.3	84.1	100.0	82.6
Butter	Not Available	2.7	3.8	40.9	0.0	0.0	14.0
	Wish to Have	100.0	88.5	77.7	N/A	N/A	79.9
MILKS							
Evaporated Milk	Not Available	0.0	0.0	0.3	1.3	16.0	0.6
	Wish to Have	N/A	N/A	100.0	53.7	75.0	75.7
Non Fat Dry Milk	Not Available	0.0	15.7	7.1	1.1	21.3	8.0
	Wish to Have	N/A	91.6	32.3	37.2	50.0	70.3
MISCELLANEOUS							
Corn Meal	Not Available	29.0	20.6	24.9	18.5	5.3	23.3
	Wish to Have	80.5	85.7	84.2	68.1	100.0	82.2
Cheese	Not Available	0.7	2.6	5.0	1.3	3.8	2.7
	Wish to Have	100.0	100.0	100.0	100.0	0.0	96.6
Egg Mix	Not Available	1.4	0.9	5.4	1.3	16.0	2.8
	Wish to Have	100.0	55.7	68.7	0.0	0.0	56.3
Vegetarian Beans	Not Available	2.2	3.0	12.6	2.1	0.0	5.5
	Wish to Have	63.7	90.2	37.3	39.5	N/A	49.3
Rice	Not Available	1.2	4.8	6.1	1.6	0.0	3.9
	Wish to Have	100.0	100.0	74.1	100.0	N/A	86.9
Instant Potatoes	Not Available	1.0	13.4	17.3	1.3	5.3	10.1
	Wish to Have	100.0	82.0	71.9	36.7	100.0	76.3

Appendix H

HOUSEHOLD CHARACTERISTICS BY SUBGROUPS

Appendix H

HOUSEHOLD CHARACTERISTICS BY SUBGROUPS

The following statistical tables present percentages and means of key study variables by subgroups within the FDPIR sample. Weighted estimates are given for the FDPIR sample, while unweighted measures are presented for the food stamp sample. The estimates are subject to sampling variation (see Appendix B for a summary of standard error estimates).

The FDPIR estimates were calculated using data from both the case record abstraction and the FDPIR household survey. For the analysis of the economic status of FDPIR households by FNS region (Table H.1), the overall sample size is 827. In this instance alone, it is possible to use the entire sample of 827 households because none of the estimated measures are dependent on household questionnaire data. All other tables, including analyses of food expenditures, health characteristics and other household characteristics, are based on the sample of 757 interviewed households because they require questionnaire data.

The subgroups of FDPIR households presented in the analysis include:

- households with a single person aged 60 or over;
- households with two or more people aged 60 or over *only*;
- households with at least one person aged 60 or over *plus* other household members; and
- households with no elderly members.

One other household type also was defined, those with children (that is, a member under 18 years old). The first four groups are defined by categories that are mutually exclusive and collectively exhaustive. The last group, households with children, constitutes a separate analysis and these households can include elderly persons as well.

It is important to be aware that the cell sizes available for analysis vary considerably dependent upon the subgroup of interest. The number of households from the Northeast and Southeast Regions (combined in the analysis) and the number representing multiple-elderly households are very small (24 and 36 respectively). The standard errors for these estimates are quite large, and thus, these estimates are not considered reliable. They are presented here only for informational purposes. Readers also should note that throughout the tables, extremely small percentages for given characteristics indicate small cell sizes and large standard errors. Here, again, these statistical estimates are not reliable.

The following is a list of tables included in this appendix:

<u>Table Number</u>	<u>Topic(s)</u>	<u>Data Source(s)</u>
H.1	Economic Status	FDPIR Case Record Abstraction Form
H.2	Food Expenditures	FDPIR Questionnaire Section IV
H.3	Housing Expenses	FDPIR Questionnaire Sections VII and VIII
H.4	Travel Distances	FDPIR Questionnaire Sections VI and IX Food Stamp Questionnaire Sections V and VIII
H.5	Food Storage and Preparation Resources	FDPIR Questionnaire Section VIII Food Stamp Questionnaire Section VII
H.6	Food Storage and Preparation Problems	FDPIR Questionnaire Section VIII Food Stamp Questionnaire Section VII

<u>Table Number</u>	<u>Topic(s)</u>	<u>Data Source(s)</u>
H.7	Food Supply and Participation in Food Assistance Programs	FDPIR Questionnaire Section IV Food Stamp Questionnaire Section III
H.8	Health Problems and Prescribed Diets	FDPIR Questionnaire Section VII Food Stamp Questionnaire Section IV

Table H.1: Economic Status of FDPIR Households

Economic Characteristics	FNS Region					All	Household Composition				
	Mountain Plains	Southwest	Western	Midwest	Northeast/Southeast		Multiple Elderly	Single Elderly	Elderly + Others	No Elderly	Children Present
n	190	245	266	102	24	827	36	104	148	469	380
Mean Household size	3.5	2.9	3.4	3.1	3.1	3.2	2.0	1.0	3.6	3.7	4.6
Average Monthly Income											
Wages											
% with wages	27.0	40.3	22.4	35.2	36.2	31.1	6.6	2.7	12.0	44.6	47.5
Average wages	\$877	\$792	\$818	\$821	\$1,045	\$827	\$667	\$139	\$567	\$863	\$907
Self employment											
% with self-em.	4.2	4.8	2.0	1.0	0.0	3.3	2.9	2.2	2.0	4.3	4.8
Average self em.	\$570	\$484	\$173	\$502	----	\$456	\$711	\$150	\$628	\$432	\$516
AFDC											
% with AFDC	6.3	2.1	5.0	15.3	0.0	5.2	0.0	0.0	3.9	7.6	10.4
Average AFDC	\$295	\$202	\$211	\$385	----	\$284	----	----	\$199	\$296	\$284
Social Security											
% with S.S.	18.2	35.8	32.6	18.1	49.2	29.1	73.4	67.3	52.9	8.9	15.5
Average S.S.	\$391	\$424	\$332	\$393	\$386	\$385	\$482	\$344	\$368	\$427	\$381
SSI											
% with SSI	12.2	16.6	29.2	4.3	13.2	18.0	43.1	30.9	32.2	8.5	7.8
Average SSI	\$291	\$247	\$277	\$363	\$188	\$270	\$249	\$198	\$267	\$356	\$295
General Assistance											
% with G.A.	15.2	9.1	16.1	20.4	0.0	13.5	15.1	17.5	19.2	11.0	7.6
Average G.A.	\$223	\$60	\$149	\$257	----	\$165	\$109	\$76	\$146	\$204	\$234

Table H.1: Economic Status of FDPIR Households, cont.

Sources of of Income	FNS Region					All	Household Composition				
	Mountain Plains	Southwest	Western	Midwest	Northeast/ Southeast		Multiple Elderly	Single Elderly	Elderly + Others	No Elderly	Children Present
VA											
% with VA	6.9	8.7	6.1	10.4	0.0	7.4	11.9	19.6	12.2	3.5	3.5
Average VA	\$342	\$321	\$375	\$372	----	\$346	\$239	\$245	\$392	\$401	\$266
Pensions											
% with pens.	3.4	3.0	4.4	0.8	6.9	3.4	1.9	6.0	6.9	1.9	2.8
Average pens.	\$226	\$297	\$487	\$82	\$41	\$334	\$66	\$190	\$478	\$312	\$417
Unemployment / Work Comp											
% with unem.	2.8	4.3	4.2	5.0	0.0	3.9	0.0	0.0	1.9	5.9	6.1
Average unem.	\$423	\$604	\$504	\$456	----	\$521	----	----	\$510	\$534	\$580
Child Support											
% with ch. sup.	1.9	3.8	0.5	3.0	0.0	2.2	0.0	0.0	0.0	3.4	4.0
Average ch. sup.	\$159	\$192	\$307	\$190	----	\$192	----	----	----	\$206	\$214
Money from Friends											
% with \$ frnds.	0.0	0.8	0.8	0.0	0.0	0.5	0.0	0.0	0.0	0.6	0.2
Average \$ frnds.	----	\$87	\$307	----	----	\$186	----	----	----	\$90	\$100
Leases											
% with leases	3.8	3.0	0.0	0.0	0.0	1.9	3.4	2.1	3.0	1.7	2.0
Average leases	\$103	\$49	----	----	----	\$75	\$39	\$90	\$80	\$72	\$82
Other Income											
% with othr. in.	12.8	6.3	2.5	3	0	6.3	0	7.4	4.8	6.7	6.7
Average othr. in.	\$313	\$299	\$565	----	----	\$274	----	\$74	\$247	\$333	\$371
Total Income											
% w/any inc.	87.4	94.7	89.4	87.1	85.4	90.3	93.3	98.1	95.9	87.1	88.8
Average tot. inc.	\$610	\$682	\$555	\$633	\$707	\$624	\$570	\$407	\$538	\$709	\$782

Table H.1: Economic Status of FDPIR Households, cont.

Assets	FNS Region					All	Household Composition				
	Mountain Plains	Southwest	Western	Midwest	Northeast/Southeast		Multiple Elderly	Single Elderly	Elderly + Others	No Elderly	Children Present
Cash on Hand											
% with cash	7.5	35.9	18.9	20.9	0.0	21.4	48.3	27.3	18.1	19.7	21.9
Average cash	\$33	\$42	\$45	\$60	----	\$44	\$49	\$55	\$51	\$31	\$38
Checking											
% with chkg.	7.7	16.3	1.8	8.3	3.6	8.7	22.5	12.9	7.9	8.1	9.4
Average chkg.	\$386	\$271	\$255	\$127	\$200	\$281	\$716	\$554	\$133	\$130	\$128
Savings											
% with savings	5.3	9.5	2.8	7.5	0.0	6.1	10.0	6.3	2.5	7.6	8.0
Average savings	\$474	\$300	\$292	\$211	----	\$326	\$1,056	\$454	\$758	\$173	\$237
Stocks & Bonds											
% with S&B	0.4	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.4
Average S&B	\$50	\$5	----	----	----	\$28	----	----	----	\$27	\$28
Other assets											
% with oth. as.	0.0	0.6	0.5	0.8	0.0	0.4	0.0	1.5	0.0	0.1	0.2
Average oth. as.	----	\$423	\$405	\$150	----	\$366	----	\$423	----	\$150	\$150
Total assets											
% with any as.	13.2	46.0	21.8	24.9	3.5	27.6	36.6	59.0	22.2	26.4	29.5
Average tot. as.	\$534	\$214	\$106	\$158	\$200	\$221	\$671	\$436	\$193	\$114	\$139

Table H.2: Food Expenditures of FDPIR Households

Monthly Food Expenditures (per capita)	FNS Region					All	Household Composition				
	Mountain Plains	Southwest	Western	Midwest	Northeast/Southeast		Multiple Elderly	Single Elderly	Elderly + Others	No Elderly	Children Present
n	178	218	246	93	22	757	36	104	148	469	380
Grocery Store % with groc. st. per capita	86.2 \$37	96.9 \$36	86.3 \$35	90.0 \$34	94.7 \$35	95.3 \$35	94.7 \$40	83.9 \$59	91.3 \$28	91.2 \$32	92.1 \$28
Restaurant % with rest. per capita	54.8 \$14	44.7 \$14	40.2 \$12	57.0 \$14	52.3 \$18	47.2 \$14	33.5 \$13	38.3 \$22	34.9 \$9	54.4 \$13	54.6 \$10
Carry out / home delivery % with car. out per capita	20.2 \$7	15.6 \$6	20.2 \$6	19.6 \$8	19.7 \$3	18.6 \$6	8.6 \$9	7.3 \$9	17.2 \$4	22.5 \$7	25.9 \$5
Total food expenditure % with fd. exp. per capita	99.3 \$33	100.0 \$32	99.5 \$26	100.0 \$34	100.0 \$38	99.7 \$31	100.0 \$43	98.6 \$58	99.3 \$26	100.0 \$30	100.0 \$26

Table H.3: Housing Expenses of FDPIR Households

Monthly Housing Expenses	FNS Region					All	Household Composition				
	Mountain Plains	Southwest	Western	Midwest	Northeast/Southeast		Multiple Elderly	Single Elderly	Elderly + Others	No Elderly	Children Present
n	178	218	246	93	22	757	36	104	148	469	380
Rent											
% renting	47.1	30.1	17.5	61.2	28.8	33.6	13.4	29.1	22.8	39.8	39.1
Average rent	\$109	\$139	\$107	\$148	\$80	\$124	\$118	\$98	\$98	\$138	\$143
Own											
% own	21.5	34.4	59.8	16.1	40.8	37.0	72.6	54.5	54.5	24.5	24.8
Buying											
% buying	16.8	26.2	10.3	13.4	10.6	17.6	6.9	7.5	14.0	21.9	24.9
Average paymnt.	\$131	\$117	\$105	\$130	\$89	\$119	\$53	\$70	\$85	\$131	\$135

Table H.4: Travel Distances and Transportation Problems Among Sample of FDPIR and Food Stamp Households

	FNS Region					All	Food Stamp Households
	Mountain Plains	Southwest	Western	Midwest	Northeast/Southeast		
n	178	218	246	93	22	757	107
<u>Mean distances to food sources (in miles)</u>							
Commodity dist. sites	13.7	13.0	15.4	7.5	4.1	13.1	----
Commodity office	----	----	----	----	----	----	49.1
Food Stamp office	18.5	10.9	20.0	10.9	17.9	15.6	26.9
Nearest food store	8.5	5.4	11.2	6.4	6.4	8.0	27.7
Store with fresh produce	12.8	6.7	17.0	8.5	12.0	11.5	29.6
<u>Transportation</u>							
% w/own vehicle	69.9	80.4	53.5	71.8	54.6	68.3	50.5
Can't go because need repairs (%) *							
Very often	16.5	14.1	16.1	22.2	6.9	15.9	14.8
Sometimes	28.8	38.0	32.4	31.1	6.9	33.1	46.3
Rarely	54.7	47.9	51.5	46.8	86.2	51.1	38.9
No transportation (car/truck not available) **	43.7	33.4	61.9	43.1	53.9	45.8	
Very often	31.7	33.5	29.6	28.6	16.9	30.6	44.6
Sometimes	55.9	43.9	49.2	62.1	63.4	51.0	50.0
Rarely	12.4	22.6	21.3	9.4	19.7	18.4	5.4
No money to pay for gas/trans. (%) **							
Very often	18.1	21.2	25.3	18.3	3.8	20.9	27.1
Sometimes	35.5	36.2	39.6	39.8	25.7	37.1	57.0
Rarely	46.4	42.6	35.2	41.9	70.5	42.0	15.9
Disability/health probs. (%) **							
Very often	5.8	6.9	5.3	3.7	7.6	5.9	2.8
Sometimes	8.4	13.0	16.6	5.2	3.8	11.9	1.9
Rarely	11.5	20.8	22.0	18.5	18.2	18.6	4.7
Never	74.3	59.3	56.1	72.6	70.5	63.7	90.6

* percentage of those with cars

** percentage of those with inadequate transportation

**Table H.5: Food Preparation and Storage Resources
Among FDPIR and Food Stamp Households**

Food Preparation Facilities (%)	FNS Region					All	Food Stamp Households
	Mountain Plains	Southwest	Western	Midwest	Northeast/Southeast		
n	178	218	246	93	22	757	107
Indoor run. water	94.3	93.8	61.6	96.0	100.0	84.8	86.9
Hot run. water *	98.2	96.2	82.4	98.9	89.4	93.9	93.5
Electricity	99.4	98.9	77.4	99.1	100.0	92.7	93.5
Refrigerator	98.2	98.8	71.5	99.1	100.0	90.7	92.5
Separate freezer	49.2	48.5	19.4	39.8	28.0	38.7	21.5
Range w/oven & cooktop	97.7	96.0	86.1	98.0	90.9	93.6	87.9
Fuel used by range **							
Electricity	47.9	17.1	31.3	24.5	61.7	30.7	37.4
Natural gas	9.9	37.5	12.5	25.6	5.9	21.6	17.6
Oil	0.0	0.0	0.3	0.0	0.0	0.1	0.0
Butane/propane	41.0	40.5	45.5	48.0	32.5	42.6	44.0
Kerosene	0.0	0.0	0.0	1.1	0.0	0.1	0.0
Wood	0.6	3.3	8.2	0.9	0.0	3.6	1.1
Other cooking appliances							
Outdoor oven	1.0	3.7	4.7	0.0	0.0	2.9	0.0
Toaster oven	11.3	20.5	16.3	10.8	24.2	16.1	14.9
Hot plate	5.7	3.7	8.1	9.2	5.3	6.1	17.8
Microwave	32.1	48.9	13.4	38.2	56.8	33.4	27.1
Grill	12.5	16.3	11.4	35.1	3.8	15.5	6.5
Campstove	6.7	2.7	3.3	0.8	0.0	3.6	6.5
Other	6.7	6.4	36.0	9.3	16.6	15.8	12.1

* percentage of those with running water

** percentage of those with ranges

Table H.6: Food Storage and Preparation Problems Reported By FDPIR and Food Stamp Households

Food Storage & Preparation Problems (%)	FNS Region					All	Food Stamp Households
	Mountain Plains	Southwest	Western	Midwest	Northeast/Southeast		
n	178	218	246	93	22	757	107
Food storage							
Lack stor. spce.	13.6	6.2	5.1	9.0	16.0	8.2	1.0
No refrigerator	0.0	0.0	1.6	0.0	0.0	0.5	1.0
No freezer	0.7	0.7	0.3	1.1	0.0	0.6	2.0
Lack ref. spce.	2.0	0.8	2.6	2.4	0.0	1.8	2.0
Lack freez. spce.	1.4	2.7	0.7	2.4	0.0	1.7	3.0
Mice	3.4	0.7	4.4	0.0	0.0	2.4	2.0
Damp / mold	1.5	0.3	0.8	3.1	0.0	1.0	1.0
Insects	6.2	2.3	4.2	7.5	10.6	4.7	1.0
Other	0.0	0.0	0.0	1.3	0.0	0.1	1.9
Food preparation							
No stove	0.0	0.0	1.6	0.0	0.0	0.5	0.0
No oven	0.7	1.4	0.8	0.0	0.0	0.9	0.0
Need utensils	0.6	0.5	0.0	0.0	0.0	0.3	0.0
Can't understand directions	0.6	0.0	2.9	0.0	3.8	1.1	0.0
Can't read Eng.	0.0	0.0	3.3	0.0	0.0	1.0	0.0
No recipes	7.4	3.0	3.6	2.4	0.0	4.1	0.0
Doesn't know how to prep.	5.3	0.9	5.4	1.1	0.0	3.3	0.0
Doesn't have time to prep.	1.3	0.0	0.7	4.2	0.0	0.9	0.0
Recipes too hard to prep.	0.0	0.0	1.4	3.3	0.0	0.7	0.0
Doesn't have all ingred.	5.1	1.0	5.5	2.2	0.0	3.4	1.0
Other	1.4	1.8	2.7	0.9	3.8	1.9	0.0

Table H.8: Health Problems and Prescribed Diets Among FDPIR and Food Stamp Households

	FNS Region					All	Household Composition					Food Stamp Households
	Mountain Plains	Southwest	Western	Midwest	Northeast/Southeast		Multiple Elderly	Single Elderly	Elderly + Others	No Elderly	Children Present	
n	178	218	246	93	22	757	36	104	148	469	380	107
Health Problems (%)												
Diabetes	24.9	24.6	20.7	24.1	12.9	23.2	32.6	24.7	33.7	18.6	18.2	8.4
Heart Disease	13.4	18.5	6.5	11.7	9.1	12.8	31.0	25.1	18.3	6.6	5.5	0.9
High blood pressure	29.4	36.3	24.4	34.4	38.6	31.0	52.2	37.5	34.2	26.7	25.5	8.4
Liver disease	2.7	0.9	1.3	3.3	0.0	1.7	0.0	0.7	2.6	1.7	1.5	0.9
Cancer	3.0	6.9	2.1	4.9	3.8	4.3	8.2	4.8	5.8	3.3	2.6	1.9
Overweight	18.7	25.8	12.7	26.5	22.0	20.1	21.4	15.3	18.6	21.7	22.8	9.4
Underweight	3.8	3.3	3.8	2.6	3.8	3.5	0.0	9.3	4.4	2.2	2.4	1.9
HH w/prescribed diet (%)												
Low calorie	14.8	11.1	3.4	12.1	3.8	9.7	12.0	16.4	12.3	7.1	6.9	3.7
Low salt	16.1	14.7	9.0	24.2	22.0	14.5	23.2	25.3	17.5	10.3	9.6	1.9
Diabetic/sugar free	18.0	18.7	11.6	19.5	9.1	16.3	17.9	16.5	23.6	13.7	13.4	5.6
Low cholesterol	14.7	15.7	6.1	13.8	18.2	12.9	17.5	19.0	17.4	9.7	10.0	2.8
Low fat	14.6	13.4	8.9	17.0	9.1	12.5	13.5	19.1	17.5	9.3	9.8	4.7
Other diet	0.7	1.8	2.9	4.1	0.0	2.0	0.0	0.0	4.4	1.9	1.6	0.9