

Access and Use of Non-Profit Food Assistance Programs by Vulnerable Populations in Selected Southern Rural and Urban Counties

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INTRODUCTION

Since the early forties, the United States Government has implemented and funded 15 nutrition and food assistance programs aimed at providing low-income citizens with food or the means to purchase foods. These programs are available to assist low-income individuals in obtaining a more nutritious diet.

In fiscal year 1998, 33.5 billion dollars were spent by the U.S. Government to ensure that citizens of this country did not go hungry or suffer the consequences of inadequate dietary intake. The impact of these programs and the continuous strength of the nation's "food safety net" have helped a large number of American households achieve and maintain food security. Over a three year period, 1995-1998, more than 90 percent of the U.S. households were food secure. However, during this same time frame 9.7 percent of U.S. households, about 10 million households each year were food insecure. Included among this 9.7 percent were 3.5 percent of households in which food insecurity reached levels of severity great enough that one or more household members were hungry at least some time during the year because of inadequate resources for food (Nord et al 1998).

In addition to the federally funded nutrition programs, a large network of private sector groups have organized to provide nutrition services to citizens who are hungry and food insecure. More than 95 percent of the food pantries, soup kitchens, and shelters that are members of the Second Harvest network are sponsored by private nonprofit agencies. The majority of these private food assistance sites (71 percent) were established after the 1981 recession, 47 percent after 1986 and 16 percent after 1990. The continuous growth of these programs suggest that the need for emergency food assistance has not abated regardless of the conditions of the U.S. economy (American Dietetic Association 1998)

The prevalence of food insecurity and hunger varies among states. In 1998 eleven states located in the western and southern borders of the U.S. had rates of food insecurity significantly above the national average (Nord et al 1999). The average prevalence rates of food insecurity and hunger in the five states involved in this study ranged from a high of 14.0 percent in Mississippi to a low of 10.9 percent in Tennessee. For the other states the average rate was Alabama 11.3 percent, Arkansas 12.6 percent and Florida 11.5 percent (Nord et al 1999).

Food assistance programs are a major component of public assistance to the poor, and they have become an important component of the social safety net. As a result of welfare reform, low paying jobs, inflation and increasing poverty levels, many people need additional support to maintain a family in the current economic environment. This situation is more grave in the rural South than any other area in the nation (Falk and Lyson, 1988).

A number of reports have documented that there has been an increase in the demand for food from non-profit food assistance agencies such as food banks and pantries, soup kitchens, and other programs. Second Harvest, 1995 indicates that approximately 16 percent of requests of food assistance agencies in the Second Harvest network went unmet. Over half of the agencies surveyed for this report indicated that they had experienced food shortages as a result of increased demand for food. Catholic Charities USA reported that the number of families receiving emergency food assistance through their program rose from 5 million in 1995 to 5.7 million in 1996 and that the number of meals served in their soup kitchens rose from 12.8 million in 1995 to 13.5 million in 1996.

This study focused on the access and use of non-profit food assistance programs in selected urban and rural counties in Alabama, Arkansas, Florida, Mississippi and Tennessee. Six counties, three urban and three rural, of proportionate size and characteristics were selected for the study. Consideration was given to counties that had non-profit food assistance programs (banks, food pantries, soup kitchens, commodity programs).

Food assistance agencies vary widely and may be as simple as a small supply of basic food stuffs in a parsonage, available upon request to a clergy person or a more formal, well-publicized and organized effort by a community organization with regular hours, guidelines for food distribution and a paid or volunteer staff. These agencies are designed to meet the food needs of a household when other resources are not available and often provide a household with food sufficient for a few days (typically three to five days). These agencies may or may not participate in government programs where they receive part of the food they distribute to families.

Purpose and Objectives

During the last few years, there has been an increasing demand for food from charitable organizations because of the prevalence of food insecurity and hunger among low income groups. Millions of people rely heavily on food from food banks and pantries, commodity food programs or other community food programs each month because they do not have adequate amounts of food to last the entire month.

Although a number of studies have been conducted on food security, there is limited information on access and use of non-profit food assistance programs in the rural and urban south. The 1890 food assistance research study was designed to determine access and use of non-profit food assistance programs by vulnerable populations in selected rural and urban areas of the South. The specific objectives addressed in this study include:

- \$ Identify selected non-profit food assistance programs in urban and rural counties in the South.
- \$ Identify specific socioeconomic characteristics that affect food security status.

- § Determine the extent of food insecurity and hunger among selected populations in the rural and urban South

Non-Profit Food Assistance Programs

Food Banks and Pantries. Food banks and pantries are common types of non-profit or emergency food assistance programs that are community-based organizations. Food is collected from a variety of sources and distributed to needy individuals and families. Many of these organizations are operated by local churches. Second Harvest is the nation's largest domestic hunger-relief charity. The nationwide network of nearly 200 regional food banks, including the Capital Area Food Bank in Austin, Texas, serves all 50 states and Puerto Rico by distributing food and grocery products to nearly 50,000 charitable feeding programs. Last year, the food bank network distributed more than one billion pounds of food and groceries, benefiting 26 million chronically hungry people including more than 11 million children (Second Harvest, 1998).

Commodity Supplemental Food Programs. The Commodity Supplemental Food Program (CSFP) works to improve the health of pregnant women, new mothers, infants, children and elderly people by supplementing their diets with nutritious USDA commodity foods. It provides food and administrative support funds to States to supplement the diets of low-income infants; children up to age 6; pregnant, postpartum and breast feeding women; and persons 60 years of age and over. Food packages are tailored to the specific nutritional needs of participants, and include canned fruits and vegetables, juices, meats, fish, peanut butter, cereal and grain, and dairy products (USDA/FNS-314, Jan. 2000).

CSFP food packages do not provide a complete diet, but rather are good sources of the nutrients typically lacking in the diets of the target population. CSFP is administered at the Federal level by the Food and Nutrition Services (FNS), an agency of the U.S. Department of Agriculture. An average of more than 370,000 people each month participated in the program in Fiscal Year 1997, including more than 243,000 elderly people and more than 127,000 women, infants, and children.

USDA purchases food and makes it available to State agencies, along with funds to cover administrative costs. State agencies that administer CSFP are typically departments of health, social services, education or agriculture. Local agencies determine the eligibility of applicants, distribute the foods, and provide nutrition education. Local agencies also provide referrals to other welfare, nutrition, and health care programs such as food stamps, Medicaid and Medicare.

Food Security

The United States Department of Agriculture (1999) defines food security as access by all people at all times to enough food for an active, healthy life. Food security includes at a minimum the ready availability of nutritionally adequate and safe foods, and an assured ability to acquire acceptable foods in a socially acceptable way.

The Community Food Security Coalition defines food security as the state in which all persons obtain a nutritionally adequate, culturally acceptable diet at all times through local non-emergency sources. The Coalition believes food security broadens the traditional conception of hunger, embracing a systemic view of the causes of hunger and poor nutrition within a community while identifying the changes necessary to prevent their occurrence. Food security programs confront hunger and poverty.

A study by Morris et al (1992) examined three major determinants of food security in rural America: (1) rural/urban supermarket availability, (2) food item availability and (3) the actual cost of a USDA Thrifty Food Plan market basket relative to food stamp allotments in persistency poor rural America. The results of this study showed that an average of 3.8 supermarkets per county in rural American versus 29 in urban America. The average TFP market cost was \$102 in small/medium stores and \$81 in supermarkets. The actual supermarket Thrifty Food Plan cost were eight percent higher, and small/medium stores costs 36 percent higher, than the USDA's recommended cost of \$75. A 17 percent increase in food stamp benefit allotments, and changes in methods used to price the Thrifty Food Plan, are necessary to ensure food security in rural America.

The American Dietetic Association (2002) report indicate that there is a great disparity in the percentages of persons living in poverty across racial and age groups. According to results from the 1995 food insecurity survey of the CPS, the prevalence of each category of food security and hunger was highest in inner city areas followed by areas outside of metropolitan areas. The lowest prevalence of food security resided with those in suburban areas. Prevalence of food security also varied across race and household type. When compared to race, food insecurity and hunger was 150% more prevalent among African Americans and 200% more prevalent among Hispanics than Whites. Households with children had the highest rates of food insecurity and hunger, and households with older Americans and no children had the lowest rates of food insecurity.

The assurance of food security has been proposed by the U.S. House Select Committee on Hunger as a major policy goal to protect the health of Americans by preventing the conditions that lead to hunger and malnutrition (U.S. House of Representatives, 1989). The definition of food security is met when people have nutritious and safe food readily available and the assured ability to acquire it through normal sources (Campbell, 1990).

Fisher (1995) says that food security broadens the traditional conception of hunger, embracing a systemic view of the causes of hunger and poor nutrition within the community while identifying the changes necessary to prevent their occurrence. A community food security analysis examines such question as access to grocery stores, food prices, transportation, personal income, ownership of stores, factories, farms, and environmental sustainability.

Food Security is particularly important in rural America, where high poverty rates cause more hunger. More than 9.1 million rural people have incomes below the poverty line. In 1987, the poverty rate in rural America was 16.9 percent, compared with 12.5 percent in metropolitan areas (U.S. Department of Commerce, Bureau of the Census, 1989). Nord, et.al (1999) reported that food insecurity is a bigger problem in rural areas than in either suburbs or metropolitan areas and that 10.6 percent of all rural households are food insecure.

Food Insecurity and Hunger

The root of current U.S. hunger policies was established during the Great Depression of the 1930's, when widespread unemployment, soup kitchens, and bread lines coexisted with the wholesale destruction of surplus food. These contradictions stimulated Congress to distribute surplus agricultural products as food relief—a policy designed to support agricultural producers while helping the poor (Popen dieck, 1986). The economic and social changes of the past decade have left large numbers of American unable to meet their daily food needs, and have increased pressures on food assistance (Brown, 1989).

Rose (1997) states that food insecurity and hunger affect certain segments of the U.S. population that lack access to sufficient resources. Food insecurity and hunger can also involve poor adaptations, such as reliance on low-quality diets that have little variety and may be lacking in nutrients. Food insecurity and hunger in the United States are largely hidden phenomena because those who experience them are usually not undernourished and so they do not show the obvious symptoms associated with under nutrition (Rose, 1997). The American Dietetic Association indicates that food insecurity is a problem of critical importance for society and that addressing food insecurity requires knowing the prevalence of the problem and the groups that are affected.

Household food insecurity is a problem in the U.S. (Rose, 1997). However, there was not a one-to-one correspondence between poverty and food insufficiency, since over 40 percent of food insufficient households were not poor and about 10 percent of poor households were food insufficient (Rose et al., 1997). Ross (1999) supports that income is a clear economic determinant to food insecurity and hunger. Findings from the 1995 Current Population Survey (CPS) show that 17 percent of households with incomes less than 50% of the poverty level were affected by some form of hunger and the rate falls to 1.4 percent for those with incomes greater than 185% of the poverty level.

Radimer et al.(1992) suggests that the conceptualization of hunger include two levels: the individual and the household. Hunger at an individual level has four components. The first is a problem with the quantity of food intake, labeled insufficient intake. The second component of individual hunger is a problem with the quality of food intake, labeled nutritional inadequacy. The third component of hunger at the individual level is psychological. Whether or not an occurrence was interpreted as a problem depended upon whether or not it resulted from a lack of choice and created a feeling of deprivation. Deprivation in the sense of not having an adequate calorie intake to prevent stunted growth and serious health risks. The fourth, social, component of individual hunger is disruption to the usual pattern of eating three meals a day, and was often referred to as “going without.” The

second level of hunger, household hunger, also has four components. First is a problem with the quality of the household food supply, labeled food depletion. The second component is a problem with unsuitable food. Third, household hunger is an uncertainty about the sufficiency of the household food supply (whether it was going to be enough and where it would come from), labeled food anxiety. Fourth, social, component the acquisition of food in socially unacceptable ways.

State hunger studies provide compelling evidence that inadequate access to food has become a chronic problem in this country; that the present system of food assistance is inadequate to solve this problem; that the shift in responsibility from the federal government to the state and the private sector has failed to improve food security for the poor; and that new federal policies are needed to reverse these trends (Nestle and Guttmacher, 1992). These studies concluded that food insufficiency has become a chronic problem in the U.S.; food insufficiency is not due to food shortages; people who lack access to a variety of resources - not just food - are most at risk of hunger; the federal poverty level is an inappropriate index of hunger; U.S. Social welfare system does not provide an adequate safety net; private charity cannot solve the hunger problem; and hunger is inextricably linked to unemployment and the cost of housing and other basic needs.

Methodology

Sample

Participants of non-profit food assistance programs, which included food pantries and soup kitchens, were selected from rural and urban counties identified in Alabama, Arkansas, Florida, Mississippi and Tennessee. One county was selected in each state. A list of non-profit food assistance programs was compiled in each county. Directors or managers of selected program sites were contacted for approval to interview individuals on site. Trained interviewers were used to collect data. A \$10 food coupon from approved grocery stores was given to each respondent who completed the survey.

Data Collection

A questionnaire was developed to solicit information on socio-demographic variables including gender, age, race, education, employment, family structure, and income. Also, information was sought on food stamp program participation. A copy of the questionnaire is included in the Appendix. Trained interviewers were used to conduct face-to-face interviews at the selected food pantry or soup kitchen. Data were collected from a convenience sample of participants of non-profit food assistance programs in the selected rural and urban counties.

Food security status was determined for urban and rural families with children and without children by conducting face-to-face interviews using the USDA 18-item Food Security Questionnaire. These questions focus on general types of household food conditions, events and behavior. The categories defined by Bickel, Nord, Price, Hamilton, and Cook (2000) were used to determine household food security. Each item on the questionnaire asks whether a condition or behavior occurred over the past 12 months and indicates a lack of money or other resources to obtain food as the cause for the condition or behavior. Individual responses were placed into four categories (food secure, food

insecure without hunger, food secure with moderate hunger, and food insecure with severe hunger) based on the USDA classification of food security status. The categories used to determine the level of food security are listed below.

- Food secure - Households show no or minimal evidence of food insecurity.
- Food insecure without hunger - Food insecurity is evident in household members= concerns about adequacy of the household food supply and in adjustments to household food management, including reduced quality of food and increased unusual coping patterns. Little or no reduction in members= food intake is reported.
- Food insecure with hunger (moderate) - Food intake for adults in the household has been reduced to an extent that implies that adults have repeatedly experienced the physical sensation of hunger. In most (but not all) food-insecure households with children such reductions are not observed at this stage for children.
- Food insecure with hunger (severe) - At this level, all households with children have reduced the children=s food intake to an extent indicating that the children have experienced hunger. For some other households with children, this already has occurred at an earlier stage of severity. Adults in households with and without children have repeatedly experienced more extensive reductions in food intake.

Data Analysis

Data were analyzed utilizing a SAS database management system. Frequency distributions and chi-square analyses were used to determine differences among urban and rural users of non-profit food assistance programs. Specific analyses were computed by family structure, age, race, income, employment, and educational level. Differences were considered statistically significant at $P < 0.05$. Statisticians used the Rasch Software to assess data and to assign household scale scores.

Results and Discussion

A total of 300 clients were interviewed, 50 from each county which represented two soup kitchens, three church-based food pantries, and one Second Harvest food pantry. Of the completed surveys, 283 surveys (135 from urban counties and 148 rural counties) were included in the study. Table 1 shows a summary of food assistance programs surveyed in rural and urban counties.

Table 1. Summary of Non-Profit Food Assistance Programs in Study

State	County	Classification	Type of Program
Alabama	Madison	Urban	Soup Kitchen
	Macon	Rural	Soup Kitchen
Arkansas	Jefferson	Urban	Church-Based Food Pantry
Florida	Leon Jefferson	Rural	Church-Based Food Pantry
Mississippi	Adams	Rural	Church-Based Food Pantry
Tennessee	Davidson	Urban	Second Harvest

Socio-demographic Characteristics of Respondents

Gender, Age, and Race

The demographic profile of this population is presented in Table 2. A majority, 51%, of the respondents lived in rural areas. In both rural and urban areas, an overwhelming majority of the respondents were female, 72%, and African American, 83%. Since female headed-households tend to be the primary caretaker in charge of food purchasing and preparation, this trend is not surprising. In addition, female-headed households are more likely to be at the poverty level and, therefore, be in need of this type of assistance. However, a significant number of single males, 27%, who completed the survey were frequent users of food banks and pantries, a finding not found in previous reports. Of the total sample, 56% were between 26 and 50 years of age. In the 19-25 age group, the majority of the families had children and were from rural areas. Among the older age group, 71 and over, a small percentage of food insecurity was reported. The results indicated that most older persons did not respond to the questions regarding insecurity.

Education Attainment, Income and Employment

Among both urban and rural respondents in this survey, with or without children, almost half, 49%, did not complete high school. Approximately 32% reported that they had completed high school or had acquired the GED. Only 5% reported having a college degree. As expected, the majority, 66%, of the respondents had incomes at the lower income level (below \$10,000). Families with children tended to have higher incomes than those without children. Approximately 7% of the respondents indicated that they did not know their income. More than half, 57%, of the respondents in this study reported that no one in the family was working, while 35% of the respondents reported that one person was employed. While the results of this study reflect that families with lower incomes are

frequent users of non-profit food assistance programs, it is worth noting that 3% of the respondents reported incomes of \$20,000 and over. Further results indicated a significant relationship between level of education, income, and employment. Respondents with higher education were more likely to be employed and have a higher income.

Food Security Status of Respondents by Selected Socio-demographic Variables

Total Food Security Status of Rural and Urban Respondents

Food security status of families, urban and rural, with and without children by age of the respondent is presented in Table 3. Results revealed that there was a high rate of food insecurity among the population in this study and that food insecurity is more prevalent among families with children than those families without children. Of the families with children, 78% were food insecure. However, thirty-six percent (36%) of families with children were food insecure with moderate hunger and 21% were food insecure with severe hunger. For families without children, results indicated that about 50% reported food insecurity with about 19% reporting food insecurity with moderate hunger and 3% food insecurity with severe hunger. When urban and rural were compared, Table 4 and 5, results show that 89% of families with children and 60.3% of families without children in rural areas were food insecure compared to 66% of urban families with children and 47% of families without children. Moreover, food insecurity with hunger was reported by 70% of families with children living in rural areas and 44% of families with children living in urban areas. In rural areas, the younger age groups reported some level of food insecurity with hunger. It is important to note that the older age group, 71 and over, did not report any food insecurity with severe hunger.

Food Security Status for Families With and Without Children By Age of the Respondent

Results revealed that there was a significant difference in food security status of families by age of the respondent. Data presented in Table 6 and 7 reveal that the younger the households with or without children the greater the food insecurity. Approximately 77% of families, urban and rural, between the age of 19-25 and 26-50 reported some level of food insecurity. Greater percentage of food insecurity was noted among the 26-50 age group. Also, the same group reported a greater percentage of food insecurity with severe hunger. When urban and rural families were compared, there was a significant difference between the two groups. Food insecurity was higher among the 19-25 and 26-50 age groups. In both urban and rural areas, food insecurity was greater in families with children than those without children. In urban areas, food insecurity averaged about 68% compared to 85% for rural areas. Also, in rural areas, the three younger age groups showed some form of food insecurity with severe hunger. Furthermore, for families without children, 52.9% of the families between the age of 26-50 and 29.4% of those between the age of 51-70 were food insecure with moderate hunger. It is important to note that the older age group, 71 and over, did not report any food insecurity with severe hunger.

Food Security Status of Families With and Without Children by Race

The proportion of non-black respondents were relatively small compared to Black respondents. The composition of the respondents were 84% black, 12% white and 4% other. When the respondents were compared by race, Black families in rural and urban counties with children proportionally experienced a greater degree of hunger than White families. Analyses showed that 16 out of 17 White families reported food insecurity, whereas 96 out of 126 Black families reported food insecurity, Table 10. For families without children, Table 11 indicates that 76.6% of Black families reported some level of food insecurity compared to 55.5% for White families. Also, White respondents did not report any food insecurity with severe hunger. When urban and rural families with children were compared by race, similar results were noted.

Food Security Status of families With Children by Educational Level

Analyses revealed that educational level had a significant influence on the level of food security. Food insecurity was greater in families with children in which the educational level of the respondent was less than a college degree. Respondents who did not complete high school reported 82% food insecurity; those with a high school diploma or GED reported 74% food insecurity; and those with additional training and no college reported 84% food insecurity. A greater percentage of the urban families with children who had not completed high school had experienced food insecurity than their rural counterpart. Ninety-five percentage (95%) of the urban families said they had experienced food insecurity with moderate or severe hunger as compared with 82.8% of rural families.

Eighty-two percent of rural families with children who had received a high school diploma and 35% of the urban families in the same category had experienced food insecurity while 55% of the urban families with children and 45% of rural families with some training but no college degree felt food insecure with moderate or severe hunger, Table 12 and 13.

Food Security Status for Families with Children by Employment and Household Income

Employment status is a predictor of household income. Food security tends to be higher among households, with and without children, in which at least one person is employed. Sixty-five percent (65%) of families with children whose household income was less than \$10,000 reported food insecurity with hunger and approximately 82% of families with incomes less than \$5,000 reported food insecurity, Table 14. When rural and urban households were compared, families with children in both regions reported a high percentage of food insecurity. Rural households with children reported 90% food insecurity as compared to 71% among urban households. Although food insecurity was somewhat lower among rural and urban households without children, more than half reported food insecurity, 59% rural and 54% urban.

Food Stamp Participation

Non-profit food assistance program usage point to the fact that many individuals and families are likely to earn less, to be at or below the lower income level, and are more likely to need additional food to feed their families. Also, they are likely to be food stamp recipients. The profile of this group indicates that level of education and income are two predictors of food stamp usage. Among the respondents, more rural families with children, 61.3%, participate in the Food Stamp Program than urban families, 49%. Less than half of families without children indicated that they receive food stamps, 45% rural and 36% urban, as presented in Tables 15 and 16.

Summary and Conclusions

Findings of this study revealed that the prevalence of food insecurity and hunger exist in both rural and urban areas of the south. Rural individuals and families with and without children are more food insecure than their urban counterparts. The majority of families with children, 89%, and those without children, 60.3%, reported food insecurity compared to 66% of urban families with children and 47% of families without children. There was a direct relationship between age, race, employment and income and food security/insecurity. Furthermore, food insecurity with hunger was higher among Black or African American female headed households with children. The majority of these individuals did not work and had annual incomes at or below the poverty level. Food Stamp participation was high among the respondents, particularly among rural families with children. The present study indicated that rural more than half, 61%, participated in the Food Stamp Program compared to 49% for urban families with children. The results are supported by other studies that have provided evidence that rural low income households are at risk of food insecurity and that food stamp benefits are inadequate to meet their needs.

Results of this study are consistent with other studies which show that food insecurity remains a problem in America, especially in both rural and urban areas of the south. Policy makers and others in positions of authority should be encouraged to monitor efforts to ameliorate these conditions and work to fund efforts to improve access to supplementary food assistance programs.

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Table 2. Socio-demographic Profile of Respondents

Characteristic	<u>Urban</u>		<u>Rural</u>	
	With Children	With Children	With Children	Without Children
Gender				
Female	54	37	55	39
	11	24	14	22

Male				
Age				
19-25	8	0	17	7
26-50	53	32	42	16
51-70	5	15	18	27
71 and above	3	16	3	18
Race				
White	12	16	5	2
Black	56	45	70	66
American Indians	2	1	0	0
Other	1	2	5	
Educational Level				
Did not Complete	29	33	32	39
H.S.	19	16	35	18
Diploma/GED	14	7	11	4
Additional Trng./No	2	0	0	1
College	5	3	1	4
Some College				
College Degree				
Household Income				
Under \$5000	18	13	21	16
\$5000 - \$9999	30	27	20	24
\$10000 - \$14000	17	4	14	6
\$15000 - \$19999	3	1	7	2
\$20000 - \$24000	0	1	4	1
\$25000 - \$29999	0	1	1	0
\$30000 - \$34000	1	0	0	0
\$35000 - \$39999	1	1	4	13
Don't Know	3	1	0	0
Refused				
Employment				
Not Working	22	37	31	46
1 person working	24	19	30	10
2 persons working	10	1	3	1
3 persons working	2	0	1	0
4 persons working	0	0	1	0

Status	Families w/children		Families w/o children		Total Families	
	N	%	N	%	N	%
Food Secure	33	22	59	44.7	92	33
Food Insecure w/o Hunger	31	21	37	28	68	24
Food Insecure w/Moderate Hunger	55	36	34	26	89	31
Food Insecure w/Severe Hunger	32	21	2	1.5	34	12
TOTAL	151	100	132	100	283	100

Status	Families w/children		Families w/o children		Total Families	
	N	%	N	%	N	%
Food Secure	9	11	27	40	36	24
Food Insecure w/o Hunger	15	19	19	38	34	23
Food Insecure w/Moderate Hunger	35	44	22	32	57	39
Food Insecure w/Severe Hunger	21	26	0	0	21	14
TOTAL	80	100	68	100	148	100

Table 5. Total Food Security Status of Urban Respondents						
Status	Families w/children		Families w/o children		Total Families	
	N	%	N	%	N	%
Food Secure	24	33.8	32	50.0	56	41.5
Food Insecure w/o Hunger	16	22.5	18	28.1	34	25.2
Food Insecure w/Moderate Hunger	20	28.2	12	18.8	32	23.7
Food Insecure w/Severe Hunger	11	15.5	2	3.1	13	9.6
TOTAL	71	100.0	64	100.0	135	100.0

Table 6. Food Security Status of Families with Children by Age of Respondent Urban and Rural											
Food Security Status											
Age Group	Food Secure		Food Insecure without Hunger		Food Insecure w/Moderate Hunger		Food Insecure w/Severe Hunger		No Response	Total	
	N	%	N	%	N	%	N	%	N	N	%
19-25	6	23	4	15.4	13	50	3	12		26	100
26-50	22	23	18	19.2	34	36	21	22		95	100
51-70	1	4	7	30	7	30	8	35		23	100
71 and above										6	

Table 6. Food Security Status of Families with Children by Age of Respondent Urban and Rural											
	4	67	1	16	1	16	0	0			100
TOTAL	33	22	30	20	55	37	32	21	1	150	100
Pearson Chi-Square = 0.049; significant											

Table 7. Food Security Status of Families without Children by Age of Respondent Urban and Rural											
Age Group											
	19-25		26-50		51-70		71 and above		No Response	Total	
Food Security Status	N	%	N	%	N	%	N	%	N	N	%
Food Secure	2	3.4	17	29.3	21	36.2	18	31		58	100
Food Secure w/o Hunger	3	8.1	11	29.7	11	29.7	12	32.4		37	100
Food Secure w/moderate Hunger	2	5.9	18	52.9	10	29.4	4	11.8		34	100
Food Secure w/Severe Hunger	0	0	2	100	0	0	0	0		2	100
TOTAL	7	5.3	48	36.6	42	32.1	34	26	1	131	100
Pearson Chi-Square = 0.049; significant											

Table 8. Food Security Status of Rural Families with Children by Race										
Food Security Status										
	Food Secure		Food Insecure without Hunger		Food Insecure w/Moderate Hunger		Food Insecure w/Severe Hunger		Total	
Race	N	%	N	%	N	%	N	%	N	%
White	0	0	4	26.7	0	0	1	4.8	5	6.3
Black	8	88.9	11	73.3	32	91.4	19	90.5	70	87.5
American Indian	0	0	0	0	0	0	0	0	0	0
Other	1	11.1	0	0	3	8.6	1	4.8	5	6.3
TOTAL	9	100	15	100	35	100	21	100	80	100
Pearson Chi-Square = 0.021; significant										

Table 9. Food Security Status of Urban Families with Children by Race					
Food Security Status					
		Food Insecure	Food Insecure	Food Insecure	

Table 9. Food Security Status of Urban Families with Children by Race										
Race	Food Secure		without Hunger		w/Moderate Hunger		w/Severe Hunger		Total	
	N	%	N	%	N	%	N	%	N	%
White	1	4.2	3	18.8	6	30.0	2	18.2	12	16.9
Black	22	91.7	2	5.0	13	65.0	9	81.8	56	78.9
American Indian	1	4.2	0	0.0	1	5.0	0	0.0	2	2.8
Other	0	0	1	6.3	0	0.0	0	0.0	1	1.4
TOTAL	24	100.0	18	100.0	12	100	11	100.0	71	100.0
Pearson Chi-Square = 0.035; significant										

Table 10. Total Food Security Status for Families with Children by Race										
Food Security Status										
Race	Food Secure		Food Insecure without Hunger		Food Insecure w/Moderate Hunger		Food Insecure w/Severe Hunger		Total	
	N	%	N	%	N	%	N	%	N	%
White	1	5	7	41	6	35	3	18	17	100
Black	30	24	23	18	45	34	28	22	126	100
American Indian	1	50	0	0	1	50	0	0	2	100
Other	1	17	1	17	3	50	1	17	6	100
TOTAL	33	21	31	21	55	36	32	21	151	100
Pearson Chi-Square = 0.496; not significant										

Table 11. Total Food Security Status for Families without Children by Race										
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Table 11. Total Food Security Status for Families without Children by Race										
Food Security Status										
	Food Secure		Food Insecure without Hunger		Food Insecure w/Moderate Hunger		Food Insecure w/Severe Hunger		Total	
Race	N	%	N	%	N	%	N	%	N	%
White	8	13.6	51	86.4	0	0	0	0	59	100
Black	4	10.8	33	89.2	0	0	0	0	37	100
American Indian	6	17.6	25	73.5	1	2.9	2	5.9	34	100
Other	0	0	2	100	0	0	1	17	6	100
TOTAL	18	13.6	111	84.1	1	0.8	2	1.5	132	100
Pearson Chi-Square = 0.334; not significant										

Table 12. Food Security Status for Families with Children by Educational Level										
Food Security Status										
	Food Secure		Food Insecure without Hunger		Food Insecure w/Moderate Hunger		Food Insecure w/Severe Hunger		Total	
Highest Degree Completed	N	%	N	%	N	%	N	%	N	%
Did Not Complete High School	11	18	16	26	16	26	18	29	61	100
Diploma/GED	14	26	8	15	27	50	5	9	54	100
Additional Training No College	4	16	4	16	9	36	8	32	25	100

Table 12. Food Security Status for Families with Children by Educational Level										
Some College	0	0	0	0	2	100	0	0	2	100
College Degree	2	33	3	50	1	17	0	0	6	100
TOTAL	31	30	31	30	55	37	31	30	148	100
Pearson Chi-Square = 0.029; significant										

Table 13. Food Security Status for Families without Children by Educational Level													
Highest Grade Completed													
Food Security Status	Did Not Complete High School		Diploma/GED		Additional Training No College		Some College		College Degree		No Respon.	Total	
	N	%	N	%	N	%			N	%	N	N	%
Food Secure	33	61.1	16	29.6	4	7.4	0	0	1	1.9		54	100
Food Secure w/o Hunger	23	63.9	7	19.4	3	8.3	0	0	3	8.3		36	100
Food Secure													

Table 13. Food Security Status for Families without Children by Educational Level													
w/moderate Hunger	15	45.5	11	33.3	4	12.1	1	3	4	6.1		33	100
Food Secure w/Severe Hunger	1	50	0	0	0	0	0	0	0	50		2	100
TOTAL	72	57.6	34	27.2	11	8.8	1	0.8	34	5.6	10	125	100
Pearson Chi-Square = 0.213; not significant													

Table 14. Food Security Status for Families with Children by Household Income											
Food Security Status											
Household Total Income	Food Secure		Food Insecure w/o Hunger		Food Insecure w/Moderate Hunger		Food Insecure w/Severe Hunger		No Response	Total	
	N	%	N	%	N	%	N	%		N	N
Under 5000	7	18	5	13	14	36	13	33		39	100
5001-9999	10	20	9	18	21	42	10	20		50	100

Table 14. Food Security Status for Families with Children by Household Income											
10000-14999	4	13	13	42	13	42	1	3.2		31	100
15000-19999	4	40	3	30	3	30	0	0		10	100
20000-24999	2	50	1	25	0	0	1	25		4	100
30000-34999	1	100	0	0	0	0	0	0		1	100
35000-39999	01	100	0	0	0	0	0	0		1	100
Don't Know	3	60	0	0	1	20	1	20		5	100
Refused	0	0	0	0	1	33.3	2	66.7		3	100
TOTAL	32	22	31	22	53	37	28	19	7 (4.6%)	144	100
Pearson Chi-Square = 0.016; moderately significant											

**Table 15. Food Security Status for Families with Children by Food Stamp Recipient
Rural**

Food Security Status											
	Food Secure		Food Insecure without Hunger		Food Insecure with Moderate Hunger		Food Insecure with Severe Hunger		No Response	TOTAL	
Food Stamp Recipient	F	%	F	%	F	%	F	%	0	F	%
Yes	4	50.0	10	66.7	24	75.0	8	40.0	0	46	61.3
No	4	50.0	5	33.3	8	25.0	12	60.0	0	29	38.7
TOTAL	8	100.0	15	100.0	32	100.0	20	100.0	0	75	100.0
Pearson Chi-Square = 0.073; not significant											

**Table 16. Food Security Status for Families without Children by Food Stamp Recipient
Rural**

Food Security Status											
	Food Secure		Food Insecure without Hunger		Food Insecure with Moderate Hunger		Food Insecure with Severe Hunger		No Response	TOTAL	
	F	%	F	%	F	%	F	%	0	F	%
Food Stamp Recipient	10	37.0	6	35.3	13	61.9	29	44.6	0	29	44.6
Yes	17	63.0	11	64.7	8	38.1	36	55.4	0	36	55.4
No	27	100.0	17	100.0	21	100.0	65	100.0	0	65	100.0
TOTAL											
Pearson Chi-Square = 0.152; not significant											

Table 17. Food Security Status for Families with Children by Food Stamp Recipient

Urban											
Food Security Status											
	Food Secure		Food Insecure without Hunger		Food Insecure with Moderate Hunger		Food Insecure with Severe Hunger		No Response	TOTAL	
Food Stamp Recipient	F	%	F	%	F	%	F	%	0	F	%
Yes	9	37.5	9	60.0	10	52.6	5	50.0	0	33	48.5
No	15	62.5	6	40.0	9	47.4	5	50.0	0	35	51.5
TOTAL	24	100.0	15	100.0	19	100.0	10	100.0	0	68	100.0
Pearson Chi-Square = 0.553; not significant											

**Table 18. Food Security Status for Families without Children by Food Stamp Recipient
Urban**

Food Security Status											
	Food Secure		Food Insecure without Hunger		Food Insecure with Moderate Hunger		Food Insecure with Severe Hunger		No Response	TOTAL	
Food Stamp Recipient	F	%	F	%	F	%	F	%	0	F	%
Yes	13	43.3	8	47.1	1	8.3	0	0.0	0	22	36.1
No	17	56.7	9	52.9	11	91.7	2	100.0	0	39	63.9
TOTAL	30	100.0	17	17	12	100	2	100.0	0	61	100.0
Pearson Chi-Square = 0.082; not significant											