

2006 Brown County Food Security Report

October, 2006

What is Food Security?

In recent years, the emerging concept of “food security” has expanded community concern beyond hunger to include persons who have uncertain or limited access to food through normal channels. The USDA defines “food security” as: **“When all people at all times have physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life.”** Persons who regularly utilize food pantries and soup kitchens have physical, but no economic access to food and therefore are food insecure, as well as those who reduce their nutritional quality or size of meals — or are forced to skip meals — because of insufficient income. Establishing food security for low-income families in Wisconsin goes beyond just providing food to valuing how assistance is provided. It means increasing the availability of food assistance programs that enhance dignity, self-sufficiency, choice and access to food through normal channels. Seen in this context, food stamps, school meals, farmer’s market vouchers and community gardens provide a higher level of food security than the regular use of soup kitchens and food pantries.

The Food Security Survey categorized respondents into four categories:

- **Food Secure:** Households show no or minimal evidence of food insecurity.
- **Food Insecure without Hunger:** Food insecurity is a concern for the household. Adjustments to household food and resource management, including reduced quality of diets may occur, but with little or no reduction in members’ food intake.
- **Food Insecure with Moderate Hunger:** Adult members of the household have reduced food intake to an extent that they have repeatedly experienced the physical sensation of hunger.
- **Food Insecure with Severe Hunger:** The household’s children have experienced the physical sensation of hunger due to more extensive reductions in food intake.



The University of Wisconsin-Extension and University of Wisconsin Green Bay Social Work Professional Program conducted the USDA Food Security Survey of At-Risk Households in Green Bay in both 1999 and 2004. The research was part of a Food Security Initiative that was started in 1995 as a response to political and cultural changes in welfare and family support programs. In 1999 data were collected from 566 persons at local food pantries, meal-providing sites, and the WIC office. Over the past 5 years several community initiatives have addressed the initial findings. UW-Extension and UW-Green Bay repeated the research in December 2004 to monitor changes and gather data for future initiatives. Data were collected from 641 persons at local food pantries only. The 1999 data for 277 food pantry customers only were compared to 2004 findings.

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USDA Household Food Security Survey of Brown County Food Pantry Users

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2004 Survey Design

The instrument used in this study is the USDA Household Food Security Module which was developed by Tufts University Center on Hunger and Nutrition Policy and the United States Department of Agriculture. The module contains sixteen questions about the relationship between hunger and having a limited income and has been tested for reliability and validity. For the purpose of this study, the survey was expanded to learn more about the population using food pantries. Questions were asked about demographics, employment status, income level, sources of income, educational background, nutrition and health, housing, sources of food assistance, reasons for food insecurity, and suggestions on how to relieve hunger. These questions were developed collaboratively between the UW-Green Bay students and professors, and nutrition specialists at the Brown County UW-Extension office. The survey was translated so that individuals speaking Spanish, Hmong, and Russian languages could be surveyed.

The sampling method used in the study was a stratified sample by pantry in which the number of surveys conducted depended on the number of pantry users at each site. Based on pantry usage at selected pantry sites listed below of 4,363 customers in an average month, 775 users were asked to participate in the survey to obtain a significant number for statistical analysis.

UW-Green Bay Professional Social Work seniors were involved in the survey design, implementation and analysis under the guidance of Professor Anne Kok and UW-Extension Nutrition Coordinator Karen Early. Survey interviews were coordinated with the 10 of the 21 food pantries in Brown County that have scheduled hours.

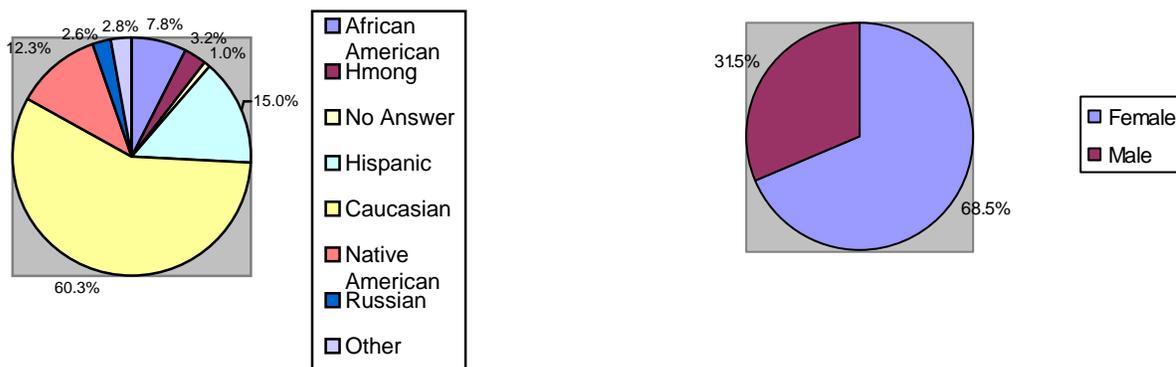
Pantry Sites:

Manna for Life
 Calvary Lutheran
 Trinity Food Pantry
 Salvation Army

St. Vincent DePaul Society
 St. Patrick's Food Pantry
 Pulaski Community Pantry

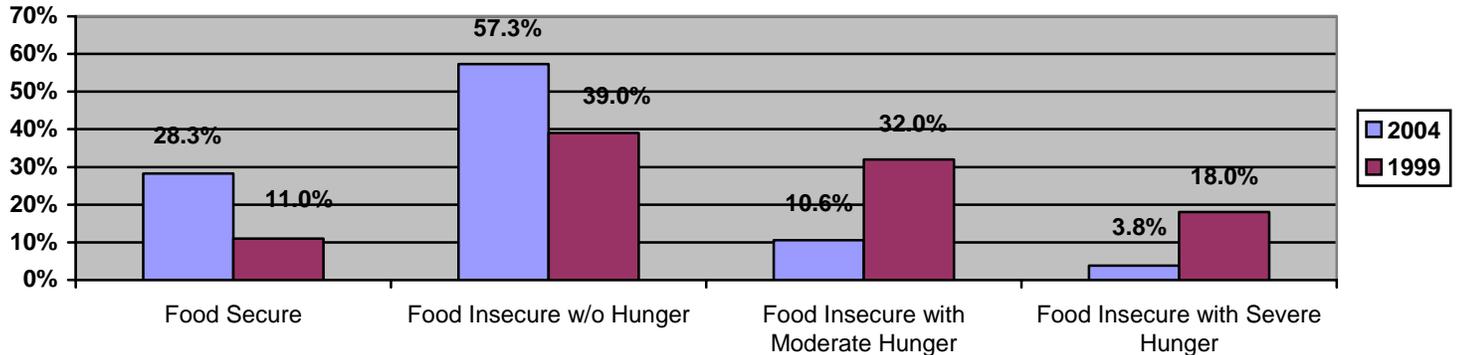
First Presbyterian Church
 Resurrection Lutheran
 First Methodist Church

Gender and Ethnicity of Food Pantry Users Surveyed in 2004



Findings Comparing 1999 and December, 2004

Food Security Status of Food Pantry Users 1999 and 2004 Compared



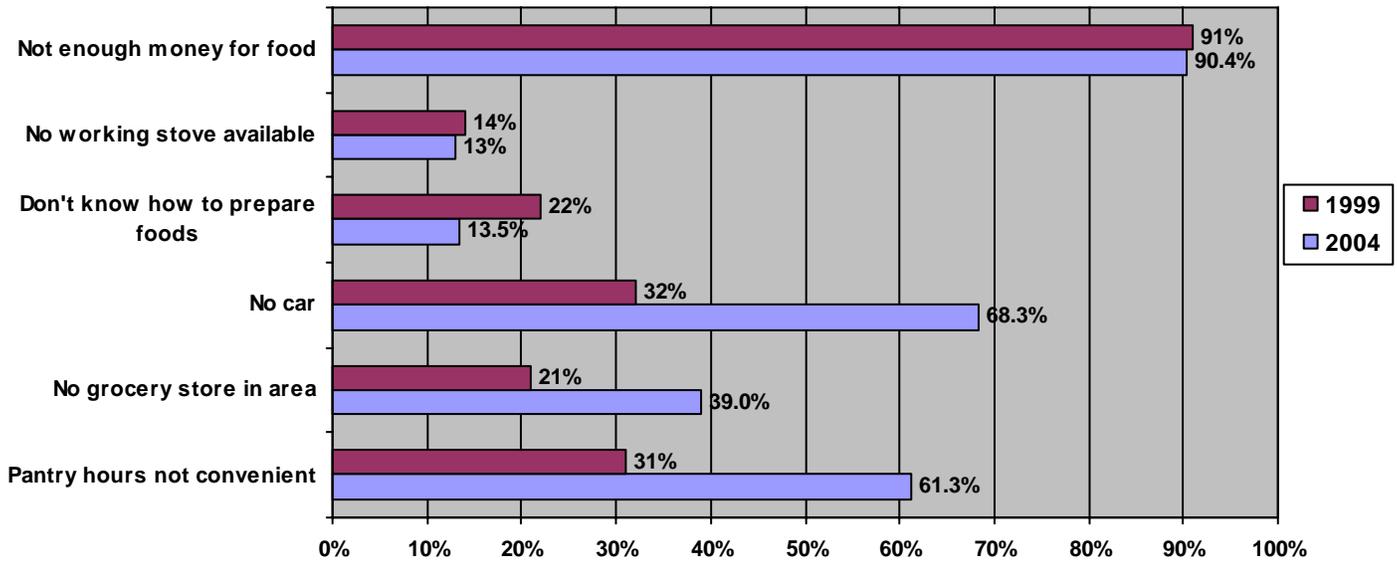
This graph displays the percentages of respondents in the four categories of food security in 1999 and 2004.

In Brown County the food security rate among people who go to pantries improved by 17% between 1999 and 2004. In addition, the degree of food insecurity **without** hunger, the least severe form of food insecurity, increased by 18.3%. The improvement in **overall** food insecurity appears to be possible because those experiencing food insecurity **with severe and moderate hunger** improved by 14.2% and 21.4% respectively. This means that 21.4% fewer adults using food pantries have reduced their food intake and repeatedly experienced the sensation of hunger in 2004 than in 1999. In addition, 14.2% fewer children have had their food intake reduced to an extent that implies feeling the physical sensation of hunger. However, a total of 57.3%, or 18.3% more, of food pantry users in 2004 were still worrying, juggling resources and reducing the quality and variety of their diets to have enough money for food. It is important to note that this is a lesser form of food insecurity, and there are more people with this experience in 2004 than in 1999.

To repeat, there are more people food secure in 2004 than in 1999. Of those people who are food insecure, more people are food insecure without hunger, a less severe degree of food insecurity, in 2004 than in 1999.

The initiatives implemented as a result of the 1999 findings may be, in part, responsible for the positive impact on the food security profile in Brown County.

Reasons for Food Insecurity Among Pantry Participants 1999 and December, 2004 Compared

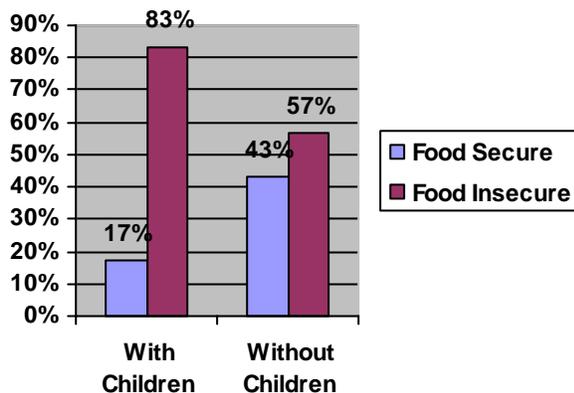


The above graph shows some of the most common reasons cited for food insecurity. Not having enough money was by far the reason most frequently given in both 1999 and 2004. It appears that transportation is an increasing problem for people as 68% of those answering the question in 2004 said they do not have a car as compared to 32% of respondents in 1999. (The percentage of the total Brown County households with no car is about 6%.*) Even though a grocery store has been located in downtown Green Bay and food pantries are increasingly working together since 1999 to improve food availability, participants still cite no grocery store in the area and difficulty getting to food pantries during pantry hours as reasons for their food insecurity.

**Source: Wisconsin Food Security Project - www1.uwex.edu/ces/flp/cfs*

Findings from December, 2004 Survey

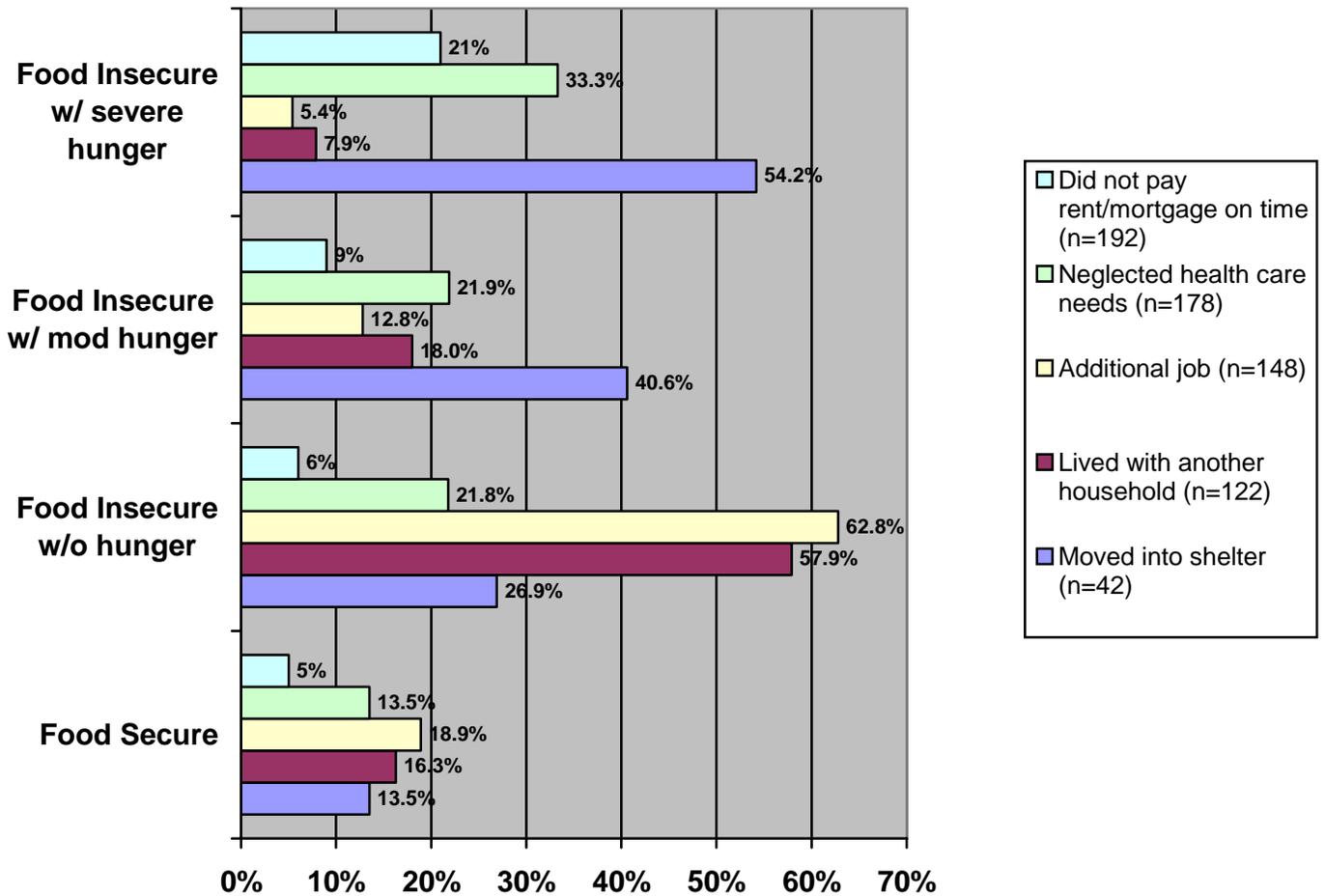
Food Security Status of Households With and Without Children



Eighty-three percent of households with children and 57% of households without children are food insecure. This is a 26% difference in the food security level of households with and without children. More households with children are food insecure than households without children.

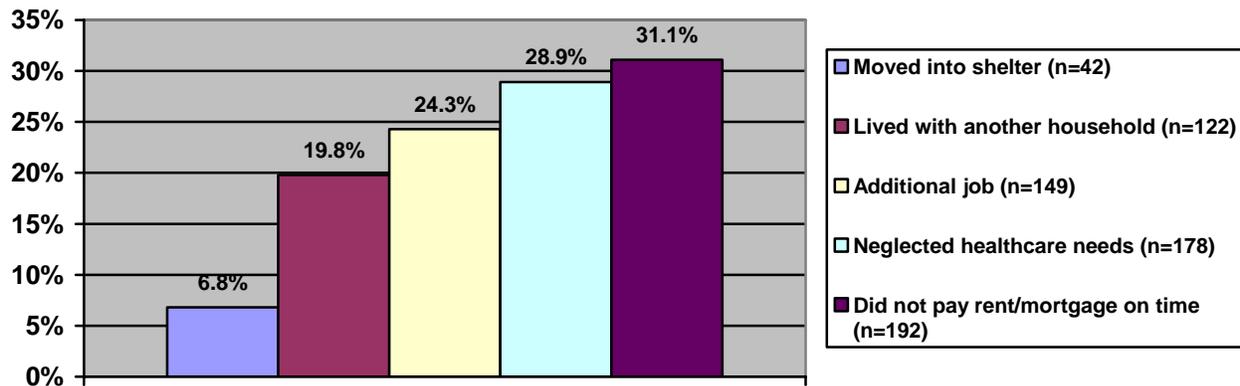
This suggests that children are vulnerable for inadequate nutrition, which other research tells us is important for growth and development.

Strategies Used by Food Security Status



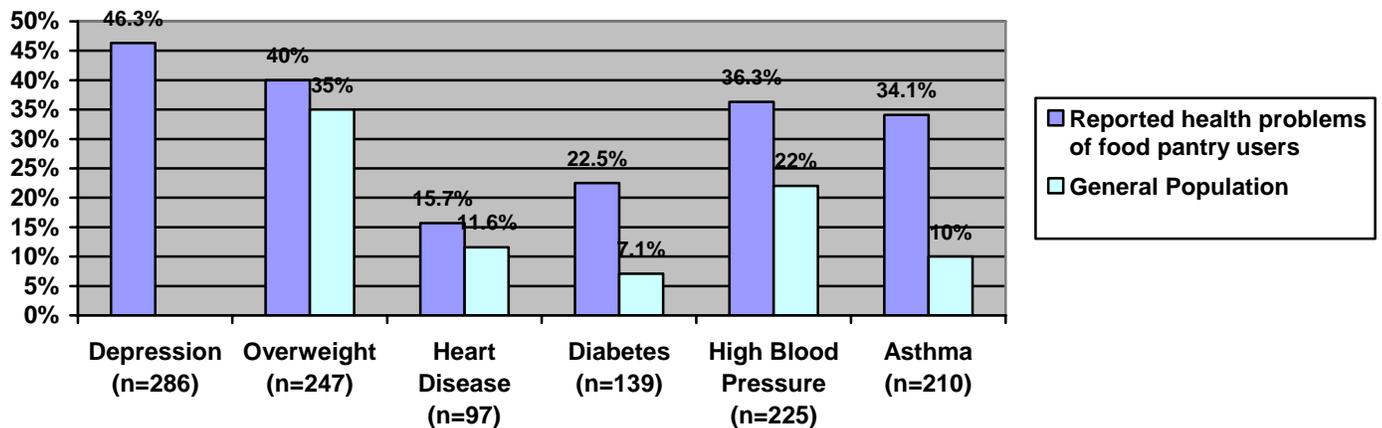
The strategies used by people to make more money available for food vary depending on their food security status. The graph demonstrates that a higher level of food security allows people to take more pro-active measures to improve their situations, like getting an additional job and living with another household. As the degree of food insecurity increases and they are experiencing hunger, people tend to take more reactive measures such as moving into a shelter and neglecting health care needs. The incidence of not paying rent or mortgage on time is correlated with the severity of food insecurity, along with neglecting health care needs and moving into a shelter. Households that are food secure are least likely to use any of the above strategies to have enough money for food.

Strategies Use by Food Pantry Users to Obtain Enough Money For Food by Total Respondents



The most common strategy by food pantry users to obtain enough money for food is to not pay the rent or mortgage on time, followed very closely by neglecting health care needs. The strategies of obtaining an additional job or living with another household are decisions which more actively solve a resource dilemma and avoid moving into a shelter. These lesser used strategies are pro-active rather than reactive solutions, even though they may be temporary.

Reported Health Problems of Brown County Food Pantry Users Compared to General Population in U.S.

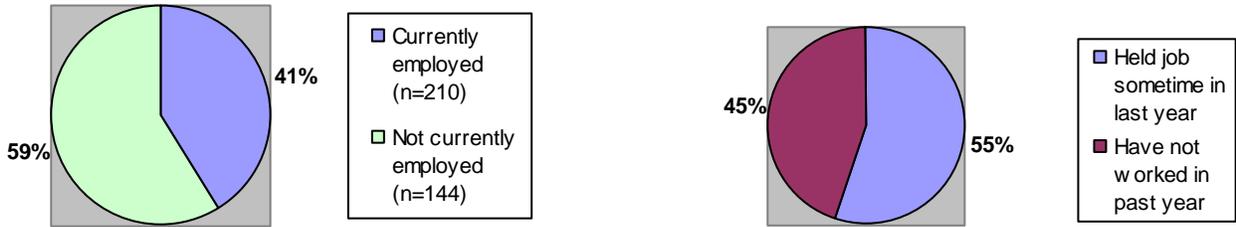


Neglecting health care needs was reported by 28.9% of respondents as a strategy to have enough money for food. Participants were also asked if anyone in their households had the above health care problems. When compared to the general population in the U.S., these self-reported data demonstrate the disparity of health problems experienced in low-income populations.

In each category compared, Brown County food pantry users experience each of these health problems at a greater rate than the general population in the US: 35% overweight; 11.6% heart disease; 7.1% diabetes; 22% high blood pressure; 10% asthma. **There were no data found for the general population specifically on depression**, however 3.3% experience sadness all or most of the time and 5.7% experience everything as an effort, which are indicators of depression.

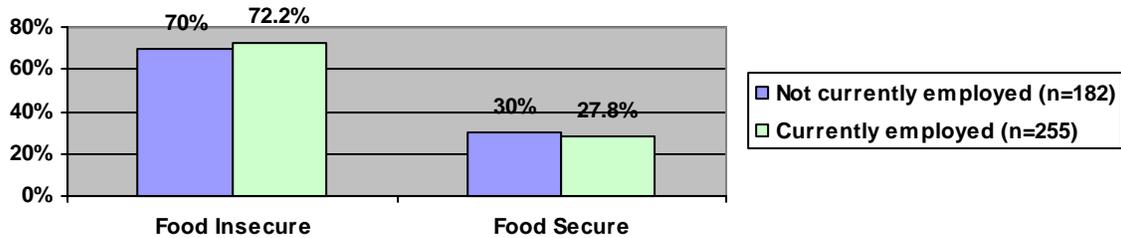
Summary of US Health Statistics from the National Health Information Survey of 2004

Employment Status of Food Pantry Users



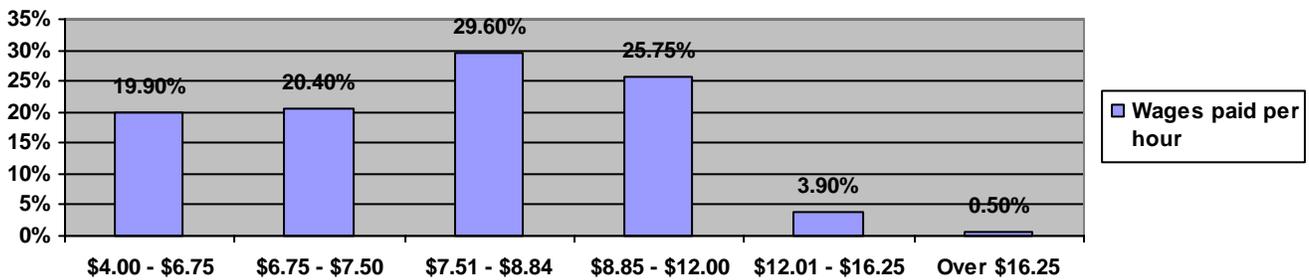
Of the people who were interviewed, 354 or 55% of food pantry users indicated they held a job at some time during the previous year. Of those that indicated they had a job in the previous year, only 41% were employed at the time they completed the survey. The fact that fewer held a job at the time of the survey than had a job sometime in the last year, may be an indicator of the volatility of the job market, or the ability of the individual to maintain steady employment. An individual may be unable to maintain steady employment because of a lack of access to transportation, reliable child care, job skills, health, family needs and affordability.

Food Security Status of Food Pantry Users is No Different Whether They Are Employed and Unemployed



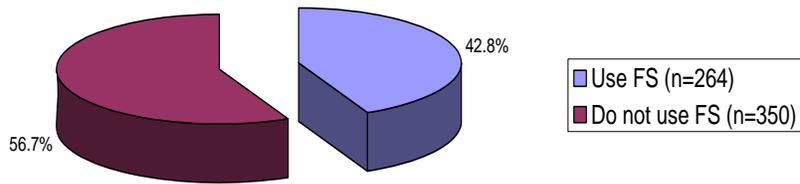
The findings that 70% of food pantry users who are not currently employed are experiencing food insecurity and 72.2% of food pantry users who are currently employed are experiencing food insecurity suggests that food security status is independent of employment status in food pantry users. This is most likely because the employment held by the majority of pantry users does not provide a living wage as reported below.

Hourly Wage Earned by Food Pantry Users



Comparing the Brown County self-sufficiency wage to the average hourly wage earned offers an explanation for the finding above. The self-sufficiency wage in Brown County for one adult and two children is \$15.89*. Survey respondents reported that nearly 70% make less than \$8.85 an hour. Participants were asked how much they were paid per hour at the job where they worked the most and selected a wage from the ranges in the graph above. We do not know how many wage earners there are in a household.*Source: Wisconsin Food Security Project – www1.uwex.edu/ces/flp/cfs

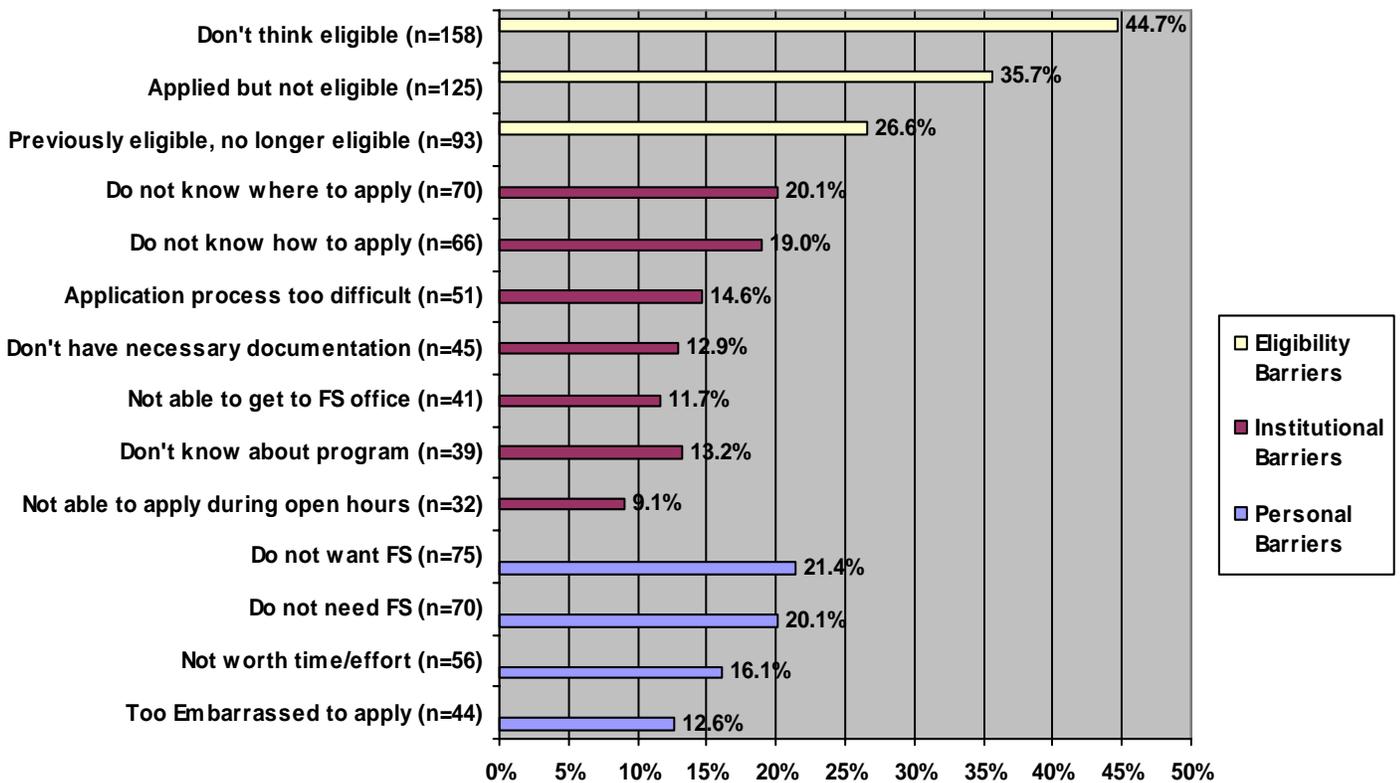
Food Pantry Use of Food Stamp Program Among Users



Utilization of food stamps by food pantry participants has increased in Brown County since 1999 from 36% to 42.8% as a result of outreach on the part of many agencies working together as you will see when we get to report on utilization of federal nutrition programs.

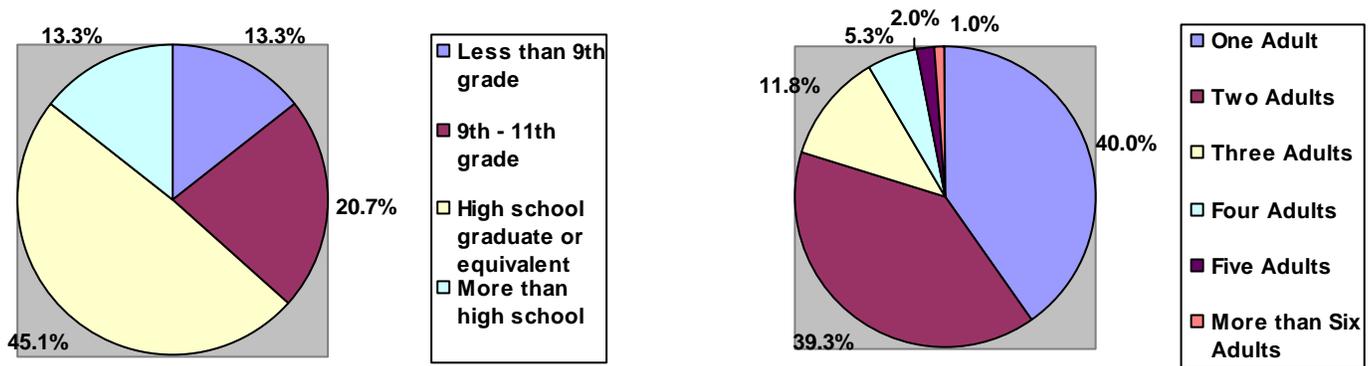
It is interesting that even though people are using food pantries to have enough food for themselves and their families, 56.7% of food pantry users still do not use food stamps. Several questions were asked to determine why more people do not use food stamps.

Reasons Why Food Pantry Users Do Not Receive Food Stamps

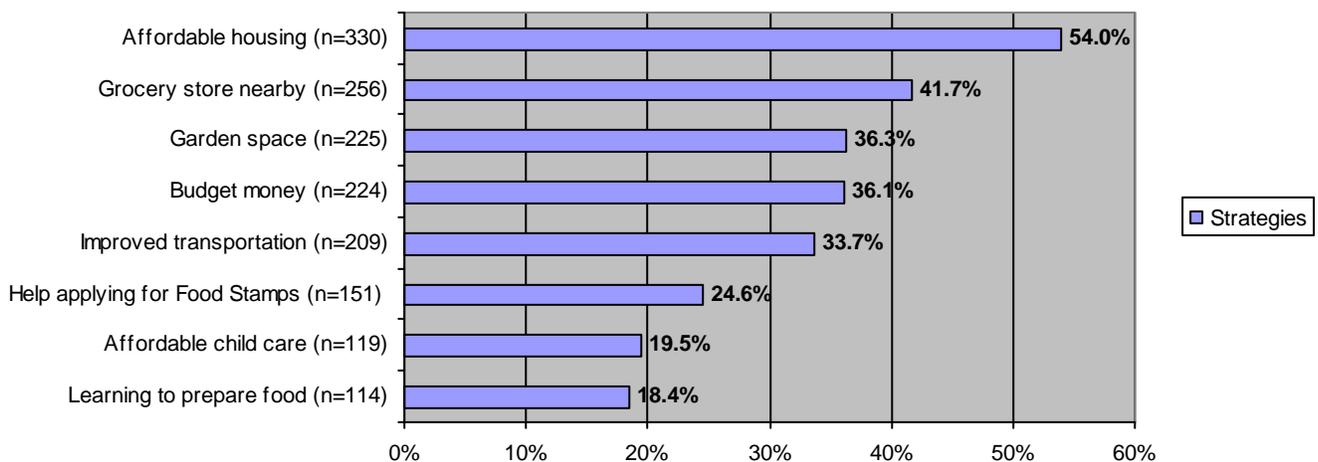


The reasons that food pantry users gave for not using food stamps were examined and grouped into three categories that were classified as barriers to participation: **Eligibility Barriers** – defined as those related to food stamp eligibility issues; **Institutional Barriers** – defined as those related to knowing where or how to apply; and **Personal Barriers** – defined as those related to individual choices or attitudes. The most commonly reported barriers are those identified as “eligibility barriers” followed by “institutional barriers.” “Personal barriers” are the least reported reasons. This indicates a need to examine food stamp access issues that can easily be addressed by the community.

Education and Number of Adults in Households of Food Pantry Users Surveyed



Strategies That Participants Report Would Help Obtain Enough Money for Food



The above list is a sampling of strategies reported by pantry users that would improve their food security situation. They can all be categorized as education, access or resource related.

Education: Budget money, help applying for food stamps, learning to prepare food

Access: Grocery store nearby, improved transportation

Resource related: Affordable housing, affordable child care, garden space

These and additional strategies can be used by community advocates and planners to develop initiatives for enhancing community food security.

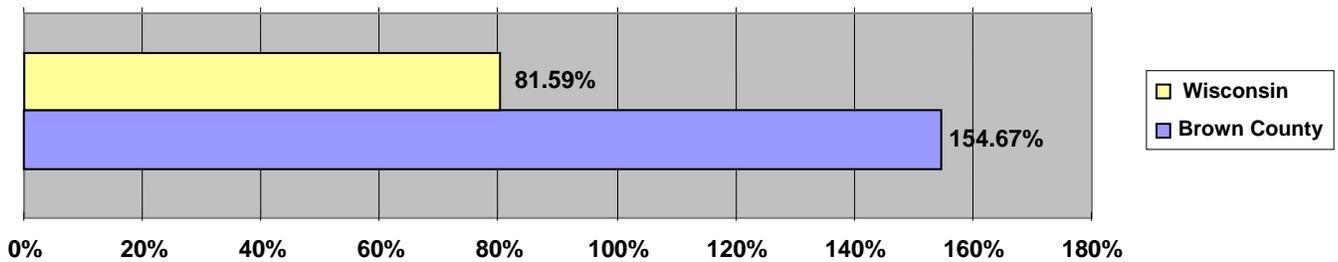
Federal Nutrition Assistance Programs Utilization

One way that participants alleviate food insecurity is by utilizing federal nutrition assistance programs to reduce demands on available cash income. The following programs are those used or not used most often by respondents to meet household food needs.

Food Stamp Program

In Brown County, 8.9% of the population receives food stamps. This is less than the state average of 10.3%. However, the number of Brown County food stamp recipients has increased at a significantly greater rate than statewide over the past 5 years. Statewide, participation almost doubled, while in Brown County, participation tripled. Several factors could account for this including; more of those eligible to receive the benefits are using the food stamps, and there are more people eligible for the program. In spite of this, we also know from our local research that only 34% of pantry users receive food stamps, even though they are using food pantries to have enough food for themselves and their families.

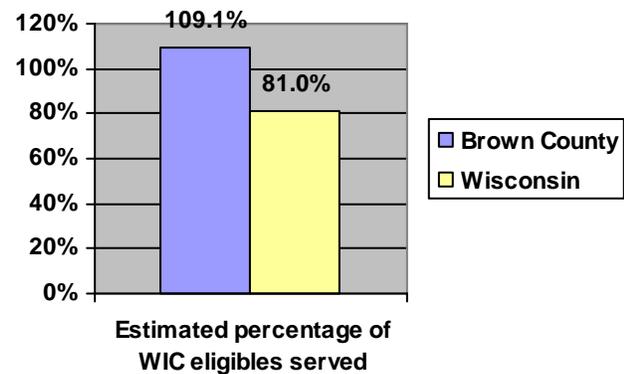
Percent Change in Food Stamp Recipients 1999 & 2005



Source: Wisconsin Food Security Project – www1.uwex.edu/ces/flp/cfs

Special Supplemental Nutrition Program for Women, Infants and Children (WIC)

WIC provides supplemental nutrition assistance to families with a pregnant woman and families with children under age 5 who are assessed as nutritionally “at-risk”. Those who participate in the WIC program are also eligible to receive Farmer’s Market vouchers for fresh produce. Value of the vouchers also contributes to greater food to security. In 2006, 3,243 families received Farmer’s Market vouchers. (Source: Green Bay WIC) Brown County serves 28% more people or families eligible for WIC than the state average.

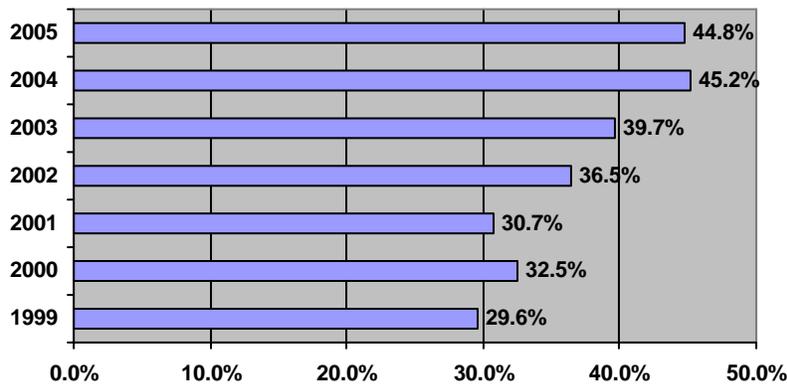


Source: Wisconsin Food Security Project – www1.uwex.edu/ces/flp/cfs

Federally Subsidized School Meals

Most schools in Brown County provide federally subsidized free or reduced price lunch programs to income-eligible families. On the average 6,100 Green Bay Public School students receive free lunch each day and an additional 1,100 qualify for reduced price lunch. In Green Bay, there has been a gradual increase in the number of public school students who are approved for free or reduced meals. This increase may have to do with outreach efforts through the direct certification process that automatically qualifies food stamp households for subsidized meals. In addition, Green Bay Public Schools now employ staff who works directly with homeless and migrant families within the district, therefore identifying **more** families for free and reduced price lunches than before.

Percentage of Green Bay Students Eligible for Free and Reduced Price Meals

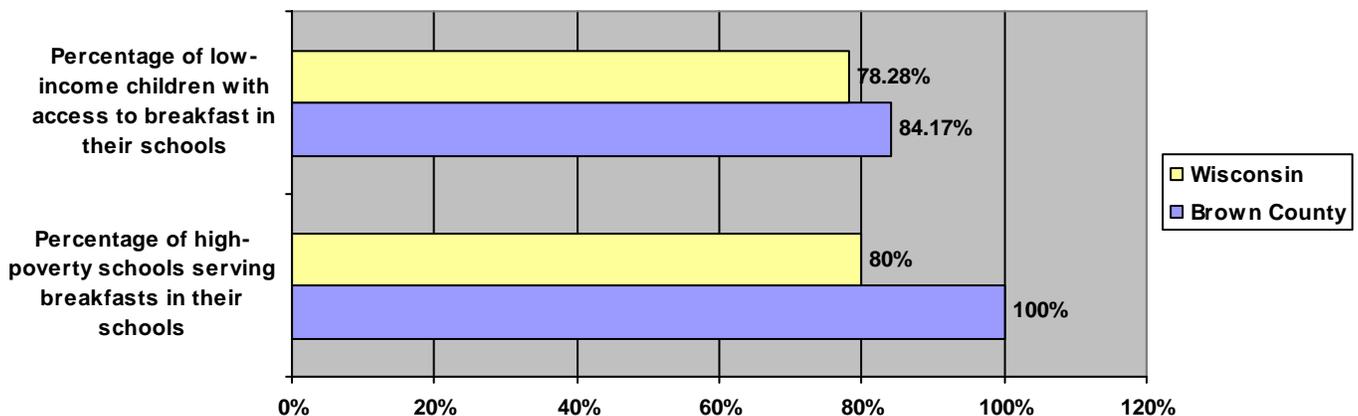


Source: Green Bay Public School Food Service

School Meals – Breakfast Program and Summer Food Programs

The USDA also provides funding for free and reduced price breakfast and summer food programs. Some school districts take advantage of these programs and others do not. On the average, about 2,000 Green Bay public school students receive a free breakfast each day and an additional 180 receive reduced price breakfast. (Source: Green Bay Public School Food Service.) The table below demonstrates the utilization of the school breakfast program in Brown County compared to the state average. During the school year, 32 of 35 Green Bay Public Schools offer breakfast. Summer breakfasts and lunches are provided at 33 sites (parks, schools, libraries, Boys and Girls Clubs) that lie within the boundary of a Green Bay school where 50% of the student population qualifies for free or reduced price lunch. In the summer of 2006, Green Bay School Food Service provided a total of 53,794 lunches and 12,233 breakfasts to children up to age 18 in these areas.

Source: Wisconsin Food Security Project – www1.uwex.edu/ces/flp/cfs

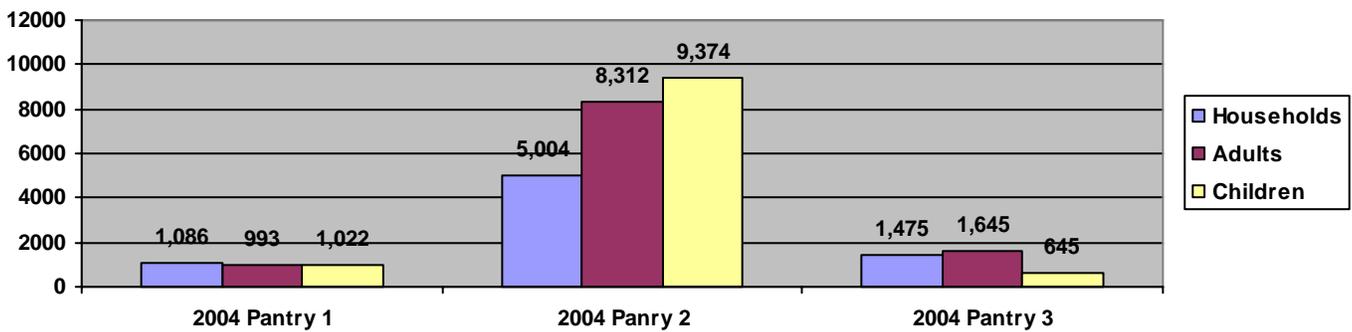


Brown County Food Pantry Utilization

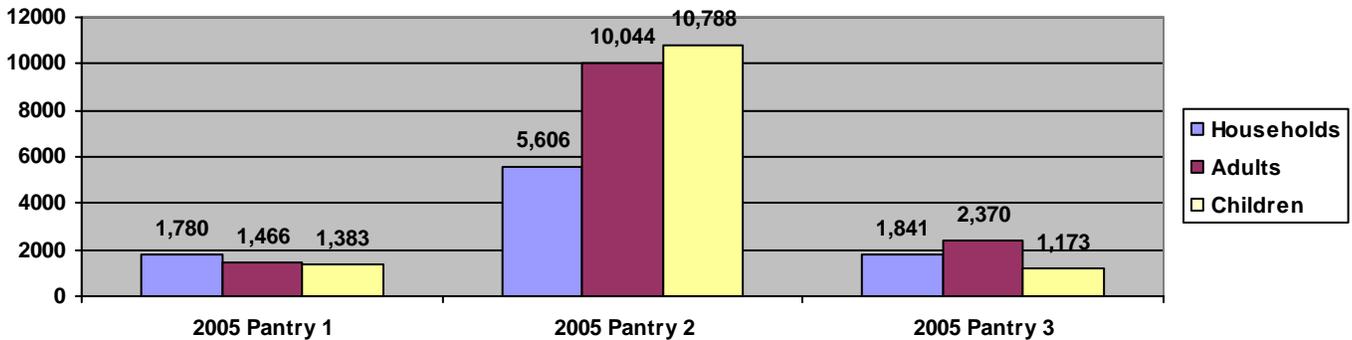
Sample Pantry Utilization Comparing 2004 and 2005

There are 22 pantries currently operating in Brown County. UWEX Nutrition Program has been working with the Brown County Food and Hunger Network to develop a pantry utilization data base since 2003. Monthly totals have been reported and entered into spread sheets to monitor trends. These totals were used to obtain the annual totals. The pantry usage data below is a representative sample of three typical pantries. Most report that there has been a significant increase in pantry use in the last three years, particularly by people that work full time jobs. Pantries also report that they may spend between \$100 and \$4000 per month to have adequate food supplies to meet their customer needs. The pantries have experienced a drop in food and cash donations as the number of people in need their services continues to rise.

Reported Pantry Utilization in 2004 by Three Pantries



Reported Pantry Utilization in 2005 by Three Pantries



Sample Brown Country Pantry Utilization 2004 - 2005

	Pantry 1			Pantry 2			Pantry 3		
	<u>2004</u>	<u>2005</u>	<u>%of Increase</u>	<u>2004</u>	<u>2005</u>	<u>%of Increase</u>	<u>2004</u>	<u>2005</u>	<u>%of Increase</u>
Households	1,065	1,780	67%	5,004	5,605	12%	1,475	1,841	25%
Adults	993	1,466	48%	8,312	10,044	21%	1,645	2,310	40%
Children	1,022	1,383	35%	9,374	10,788	15%	645	1,173	82%

Food Access Study: Market Basket and Resource Mapping

The Food Access Study and Market Basket Survey were designed to examine more carefully the availability of food and nutrition resources in relation to income, transportation and geography and the relative cost of common grocery items. The Green Bay Planning Department made the mapping of the data possible.

The research team consisted of Karen Early, Coordinator for the Brown County UW-Extension Nutrition Education Program; Cathy Huntowski, Brown County Nutrition Educator; and George Olm, a UW-Green Bay Community Nutrition student, as well as student volunteers from UW-Green Bay.

The project was divided into two main components – a Food Access mapping survey and a food availability (Market Basket) analysis. Each will be dealt with separately within each section until the final discussion on the research.

Methodology

Food Access Mapping

Organizations, food and nutrition assistance programs and food outlets were located by phone book, other printed resources or in person. The City of Green Bay GIS Coordinator, Mike Hronek, mapped the data against current census data based on median income by census tract. Bus routes were added to maps because of their importance in determining the relationship between transportation and food security, access to food and nutrition assistance programs and to reasonably priced food outlets.

Results

Food Access Mapping

Nine maps were generated with an overlay of median income for all of Green Bay, Ashwaubenon, DePere, Ledgeview, Bellevue and most of Howard. However the focus of the survey data was on the City of Green Bay. The titles and contents/results are as follows:

1. Food Outlets Map (all stores)

Most Asian, Mexican and convenience stores are located in the lower-income sections of Green Bay, while the majority of supermarkets and grocery stores exist in the higher-income periphery. However, most stores on this map tend to exist on or very near an operating bus route.

2. Food Outlets (Grocery/Supermarket)

Supermarkets and grocery stores are on a relative periphery of Green Bay. Two-thirds of those stores exist on or near a bus route.

3. Food Outlets (Asian/Mexican)

The majority of Asian and Mexican stores are found in the lower income areas of Green Bay and that all are located on or near an operating bus route.

4. Food Outlets that Accept WIC/Food Stamps

There is a relatively good mix of all stores that accept either WIC or Food Stamps and those that accept both, with the notable exception of grocery stores that serve the Hispanic population.

5. Food Pantries

Most of the pantries in low-income neighborhoods have scheduled hours while those that exist in the higher-income areas are by appointment only.

6. Nutrition Program Offices

Offices that provide nutritional education and food assistance (WIC) and food assistance only (Food Stamp Program at the Job Center) are located in the heart of the low-income area.

7. Non-Emergency Food Programs

Non-emergency food programs are relatively even in their dispersal through the city, however there is a distinct lack in DePere.

8. School Meal Programs

Schools located in the lower-income areas provide breakfast/lunch or breakfast/ lunch/after-school snack. Although schools that are considered to be at risk were not differentiated, it is known that these schools are included in this group. Those along the periphery and especially the DePere districts are not known to provide extra food opportunities.

9. Summer Meal Programs

This map demonstrates there are numerous opportunities in the city for summer food assistance.

Methodology and Results

Market Basket Survey

The Market Basket Survey was written using a form described in the Community Food Security Coalition's "Research Tools for Evaluation of Food Security Project Handbook." The research team modified and expanded the existing survey tool and tailored it to reflect thrifty and healthy food choices that were considered to be widely available in area supermarkets and groceries. Modifications were made to include foods that were most likely used by all ethnic groups. There was no attempt to accurately assess the availability of specific ethnic foods in the area as this was deemed to be beyond the scope of this project. The information was collected over a period of several months in early 2005. Four individuals were recruited and trained to conduct the surveys. Surveys were then returned and analyzed.

It was hypothesized that supermarkets and grocery stores would have the largest number of items available and for the cheapest price and that convenience stores would have a smaller selection at a higher cost. The ethnic stores were hypothesized to have very small selections from the list and for the items available to cost more than grocery stores.

Supermarket and Grocery Stores

The price averages for the total market basket did not differ greatly between Supermarket (\$78.99) and Grocery (\$81.09). However, a greater number of missing items skew the grocery price average. The supermarkets were missing on average between four and five items and the groceries were missing 16 items on average.

Four categories stand out when comparing average standard deviation, percentage of items missing, and total missing.

1. Frozen Foods – high average deviations, percentage missing and total missing;
2. Baby Products – high average deviations, percentage missing and total missing;
3. Dry Goods – a notably high percentage missing along with a high total missing;
4. The meat category has the highest average deviation difference.

Convenience, Mexican and Asian Grocery

Convenience, Mexican and Asian grocery outlets consistently had lower availability along with higher prices. Mexican and Asian stores had the lowest availability with Mexican stores missing 71% of the items surveyed and Asian stores 85% of the items surveyed.

The largest percent of missing items among these three store classes was 100% of all meat items surveyed were missing. In these outlets 97% of the frozen food items surveyed were missing and 82% of the items were missing from the fresh fruit category. Of these three types of outlets, Mexican stores had the highest percentage of fresh produce. In addition, a variety of some culturally specific produce was available.

Conclusion

There is nothing surprising in that supermarkets and groceries have the lowest prices. They have a larger, faster rotating stock than small convenience and ethnic stores and buy from suppliers in bulk and can then sell products at a lower cost. The challenge for those with limited income to access affordable food source is significant. There are many reasons for access to be a challenge; not owning a car and not being able to ride the bus with groceries (1999 and 2004 studies) are two major barriers to using more affordable food outlets. One instance of limited access is a Supermarket/Grocery with a very low total price average that cannot be easily accessed by bus. The more distance between an affordable food source and those of limited means, the less likely the outlet will be accessed by those who truly need that lowered average cost of goods. Perhaps transportation issues concerning access to markets need to be more accurately assessed.

Participation in Food Stamp and WIC Programs has steadily increased over the past five years. Several outreach efforts were put in place since the 1999 Study. Several outlets that do accept food stamps and WIC have no signage and many stores don't label items that are acceptable for purchase with WIC vouchers and there is no labeling of items in the store as WIC approved food. This makes it more difficult for customers to use the program benefits.

It is noted that no Mexican food outlets accept WIC vouchers, although a few did accept Food Stamps (38%) as compared to 92% of grocery stores and 81% of supermarkets. A little more than half of the Asian outlets in the city accept WIC vouchers but all accept Food Stamps. Convenience stores rarely accept WIC (15%) or Food Stamps (48%) but a small minority offered both (15%). All convenience stores that offered WIC also offered Food Stamps but not the other way around.

Definitions:

Food Stamp: Refers to the major USDA food assistance program

Food Share: Refers to the Food Stamp program in Wisconsin

Quest Card: The electronic benefits card issued to Food Stamp users in Wisconsin