

Food Security of At-Risk Households in Brown County



Our Mission



To challenge our communities to reduce health disparities and improve health outcomes associated with food insecurity across all social determinants.

Definitions

Food Insecurity

- Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in **socially acceptable ways**.

Food Security

- **Access by all people at all times** to enough food for an active, healthy life



A Strong Food Security Infrastructure

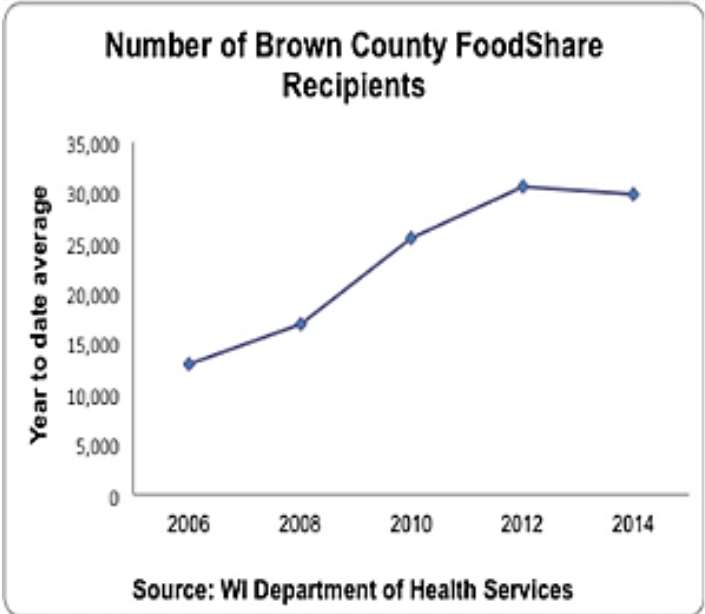
Household Economic Security

Federal Nutrition Assistance Programs

Local access to affordable and healthy food

A local emergency food system

FoodShare





School Meals

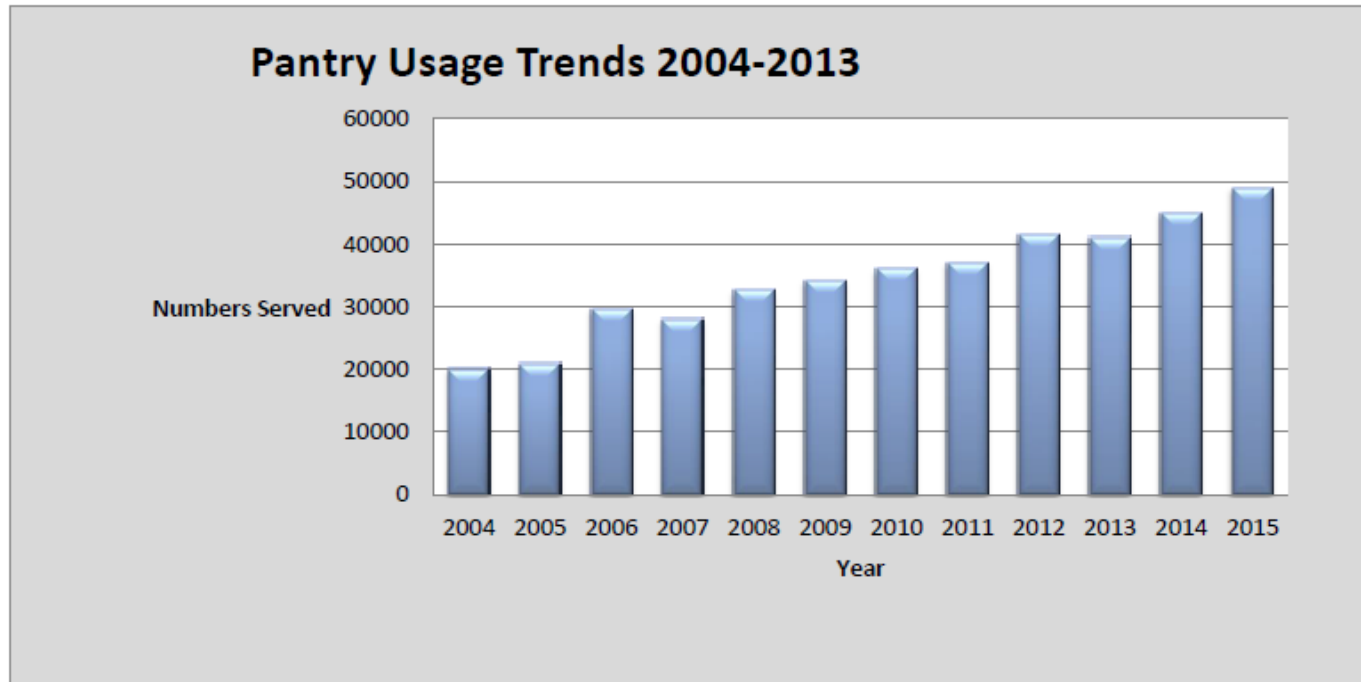
PERCENT OF STUDENTS ELIGIBLE FOR FREE AND REDUCED-PRICE MEALS IN BROWN COUNTY SCHOOL DISTRICTS

School District	2012-2013	2013-2014
Ashwaubenon	30.1%	30.3%
De Pere	20.3%	19.3%
Denmark	18.8%	18.9%
Green Bay Area	57.0%	57.8%
Howard-Suamico	21.7%	22.2%
Pulaski Community	23.9%	23.1%
West De Pere	27.5%	27.2%
Wrightstown Community	21.9%	22.6%

Emergency Food

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Households Served	20087	21075	29734	28163	32804	24,271	36,134	37,100	41,544	41,266	45,039	49,030

Year	Households Served
2004	20087
2005	21075
2006	29734
2007	28163
2008	32804
2009	34271
2010	36134
2011	37100
2012	41544
2013	41266
2014	45039
2015	49030



The Brown County Survey

Investigate and monitor the extent of food insecurity among food pantry consumers in the Green Bay area.



Purpose

- To better understand who is using pantries and how that has changed:
- What household types are the most food insecure?
- What are the barriers that contribute to people becoming food secure?
- What strategies do household use to have enough money for food?
- What are some health are considerations of pantry users?
- What are educational interests?
- Types of initiatives that would increase the availability and accessibility of food

History

- First local study done in 1998 in response to changes in welfare and family support programs. Validated in 1999.
- Share findings with community
- Implemented initiatives to increase access to healthy food, improve utilization of Federal nutrition programs and improve emergency food assistance in Brown County
- Repeated survey in 2004, 2009 and 2014

Preparation

- Re-establish University partnership
- Convene an advisory committee
- Students conduct literature review
- Determine community focused questions
- Translate survey into Spanish
- Enlisted participation of food pantries
- Determine sample size
- Train students
- Arrange interview schedule

Advisors

- Sarah Inman - United Way Vice President of Community Investment
- Ashley Vanden Boomen – United Way Research and Initiatives Manager
- Gail Trimmerger –UWGB Social Work Professor
- Karen Early –Brown County UWEX Nutrition Program Coordinator
- Nan Pahl – Salvation Army Social Services Director

Student Literature Review Topics

- Impact of food insecurity on children
- Food insecurity and older adults
- Relationship between food security, income and housing
- Relationship between race and food security
- Relationship between food security and employment
- Relationship between food assistance programs and food security
- Fruit and vegetable consumption among food pantry customers

How was the survey conducted?

- Sample size goal of 420 interviews, with 306 completed.
- Sample size determined based on the average number served per month at each pantry.
- Interviews conducted at 17 pantries by 40 UW Green Bay
• Social Work students
- USDA methodology was utilized to determine food security status based on a series of questions
- Cross tabulations computed to show relationship of food security to selected factors

Participating Food Pantries

- AIDS Resource Center
- Paul's Pantry
- Pulaski Community Pantry
- Resurrection Lutheran Church
- St. Bernard's Church
- St. Patrick Catholic Parish
- St. Willebrord Parish
- The Salvation Army
- Trinity Lutheran Church
- Calvary Lutheran Church
- De Pere Christian Outreach
- Denmark Food Pantry
- First Presbyterian Church
- First United Methodist Church
- The Giving Tree
- Grace Lutheran Church
- Manna for Life



UWGB Students Entering Data Collected at 17 Brown County Pantries



FOOD PANTRY SURVEY PARTICIPANT DISTRIBUTION BY YEAR

*total exceeds 100% due to rounding

Food Pantry Name	2009		2014	
	Number	Percent	Number	Percent
AIDS Resource Center	1	<1%	-	-
Calvary Lutheran Church	4	1%	4	1%
De Pere Christian Outreach	8	1%	13	3%
Denmark Food Pantry	8	1%	-	-
First Presbyterian Church	16	2%	6	2%
First United Methodist Church	26	4%	25	6%
Giving Tree	9	1%	1	1%
Grace Lutheran Church	6	1%	25	6%
Manna for Life	122	17%	54	13%
Paul's Pantry	415	58%	219	52%
Pulaski Community Center	14	2%	15	4%
Resurrection Lutheran Church	16	2%	-	-
St. Bernard's Church	1	<1%	-	-
St. Patrick Catholic Church	38	5%	38	9%
St. Willebrord Parish	7	1%	-	-
The Salvation Army	7	1%	-	-
Trinity Lutheran Church	10	1%	-	-
Pantry not specified	0	0	20	5%
TOTAL	713	100%	420	101%*

USDA Household Food Security



Broad category	USDA Category	Description
Food secure	High food security	No reported indications of food access problems or limitations.
	Marginal food security	One or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.
Food insecure	Low food security	Reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
	Very low food security	Reports of multiple indications of disrupted eating patterns and reduced food intake.

Examples of USDA Food Security/ Hunger Questions

- “The food we bought just didn’t last, and we didn’t have money to get more.” Was that often, sometimes, or never true for you in the last 12 months?
- In the last 12 months, did you ever cut the size of your meals or skip meals because there wasn’t enough money for food?
- In the last 12 months, did you ever not eat for a whole day because there wasn’t enough money for food?

Additional Questions Were Added

- Demographics
- Reasons for Not Enough Food
- Food Assistance Utilization
- What would help
- Nutrition and Health
- Employment
- Strategies Used to Have Enough
- Educational interests

Characteristics of All Survey Respondents and Their Households



AGE AND GENDER OF RESPONDENTS, 2014

Age (n=420)				Gender (n=420)	
15-24	25-44	45-64	65+	Male	Female
7%	37%	47%	9%	33%	67%

RACE/ETHNICITY OF RESPONDENTS, 2009 AND 2014

	2009 (n=713)	2014 (n=420)
American Indian or Alaska Native	8.6%	9.2%
Asian or Asian American	0.3%	0.3%
Black of African American	7.7%	10.3%
Native Hawaiian or other Pacific Islander	0.4%	0.3%
White	60.3%	64.6%
Hispanic or Latino	20.5%	10%
Hmong	3.9%	0.3%
Russian	0.4%	0.8%
Somalian	0.1%	0%
Other	2.7%	2.7%



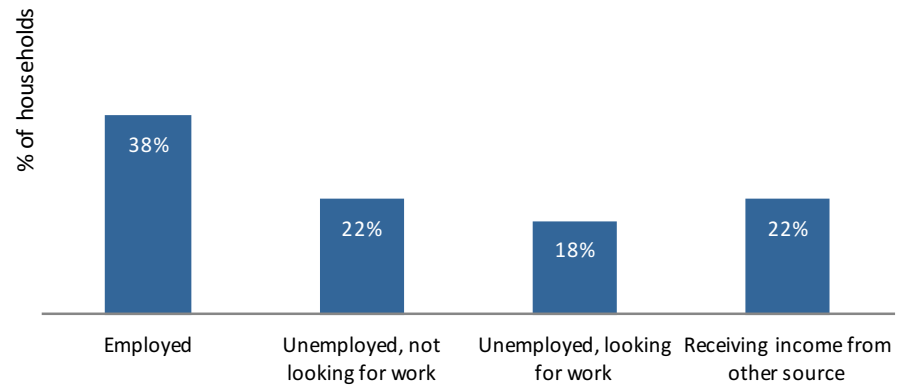
Employment, Income Sources and Education



Employment Status of Respondents

Employment Status of Respondents, 2014

(2014 n=375)

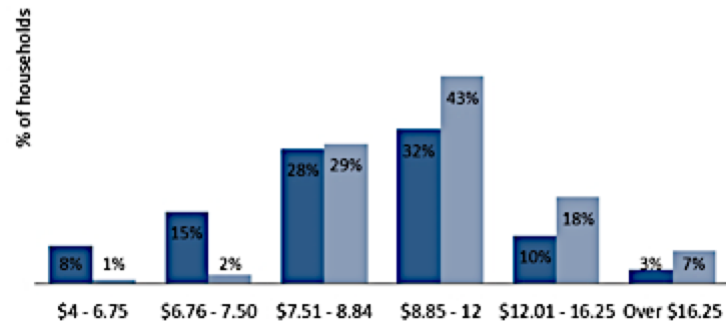


Source: 2014 Brown County Household Food Security Survey



Hourly Wage of Employed Respondents by Year

■ 2009 n=232 ■ 2014 n=139



Source: 2009, 2014 Brown County Household Food Security Survey

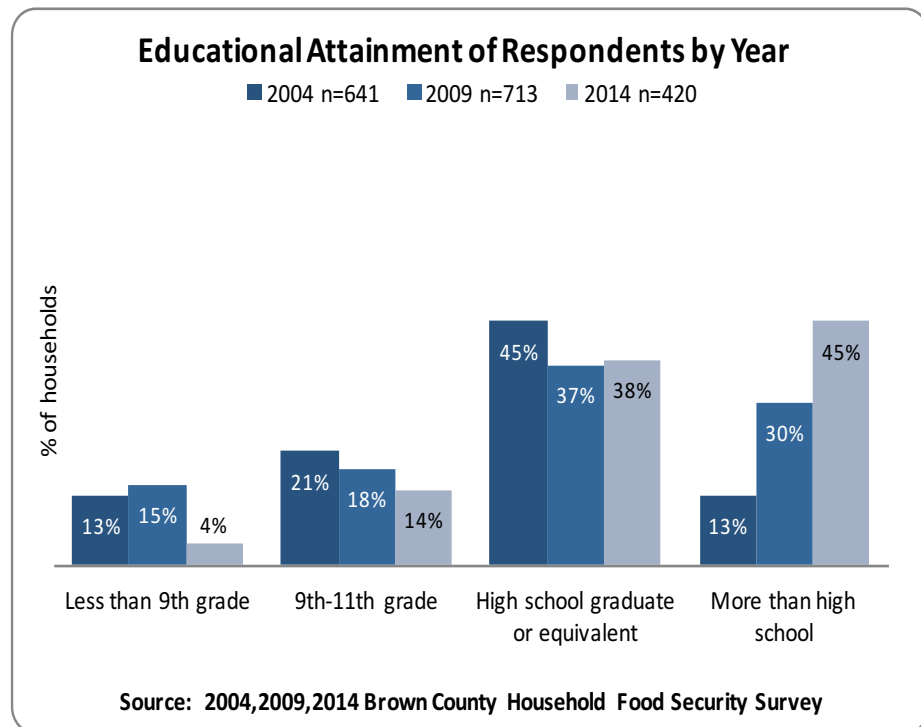
SOURCES OF HOUSEHOLD INCOME

	2009 (n=713)	2014 (n=420)
Employment	53%	55%
Pension/Retirement	6%	11%
Unemployment	19%	10%
Disability	13%	36%
Social Security	28%	34%
Child Support	12%	12%
W2 Program	5%	8%
SSI	22%	23%
Earned Income Tax Credit	8%	10%
Housing Assistance	16%	20%
Other Support	7%	14%





Educational Attainment of Respondents



COMPARISON OF 2009 AND 2014 RESPONDENT CHARACTERISTICS

	2009 (n=472)	2014 (n=420)
Female	69%	67%
No Children	20%	53%
Race/Ethnicity - Minority	42%	35%
Education Beyond High School	30%	45 %
Veteran	12%	12%
FoodShare Wisconsin	50%	61%
Disability Household Income	13%	36%
Currently Employed	54%	38%
Unemployment Income	19%	10%
Two or More Jobs (employed only)	22%	22%
Food from >1 pantry	41%	50%

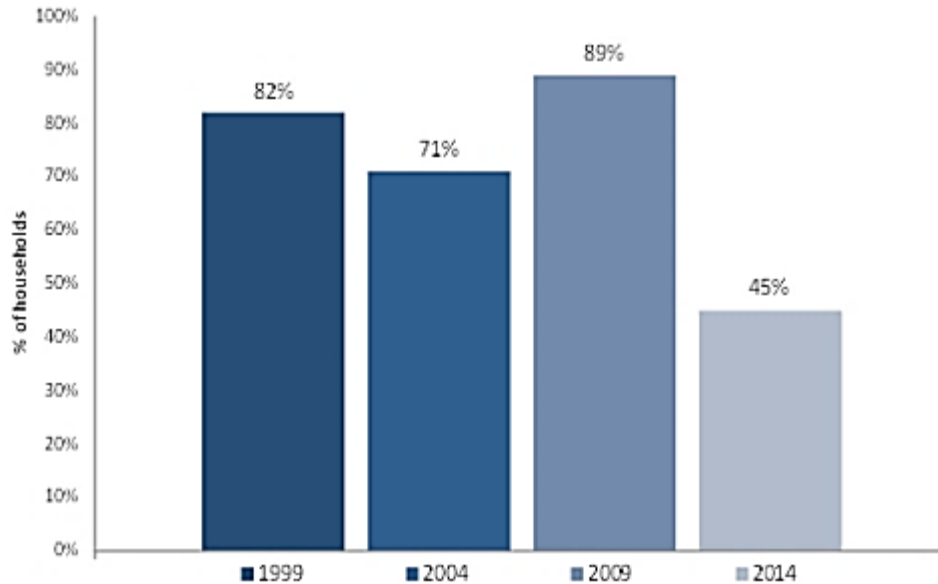
Food Security of pantry consumers



15 Year Comparison of Food Insecure Households

15 Year Comparison of Food Insecure Households

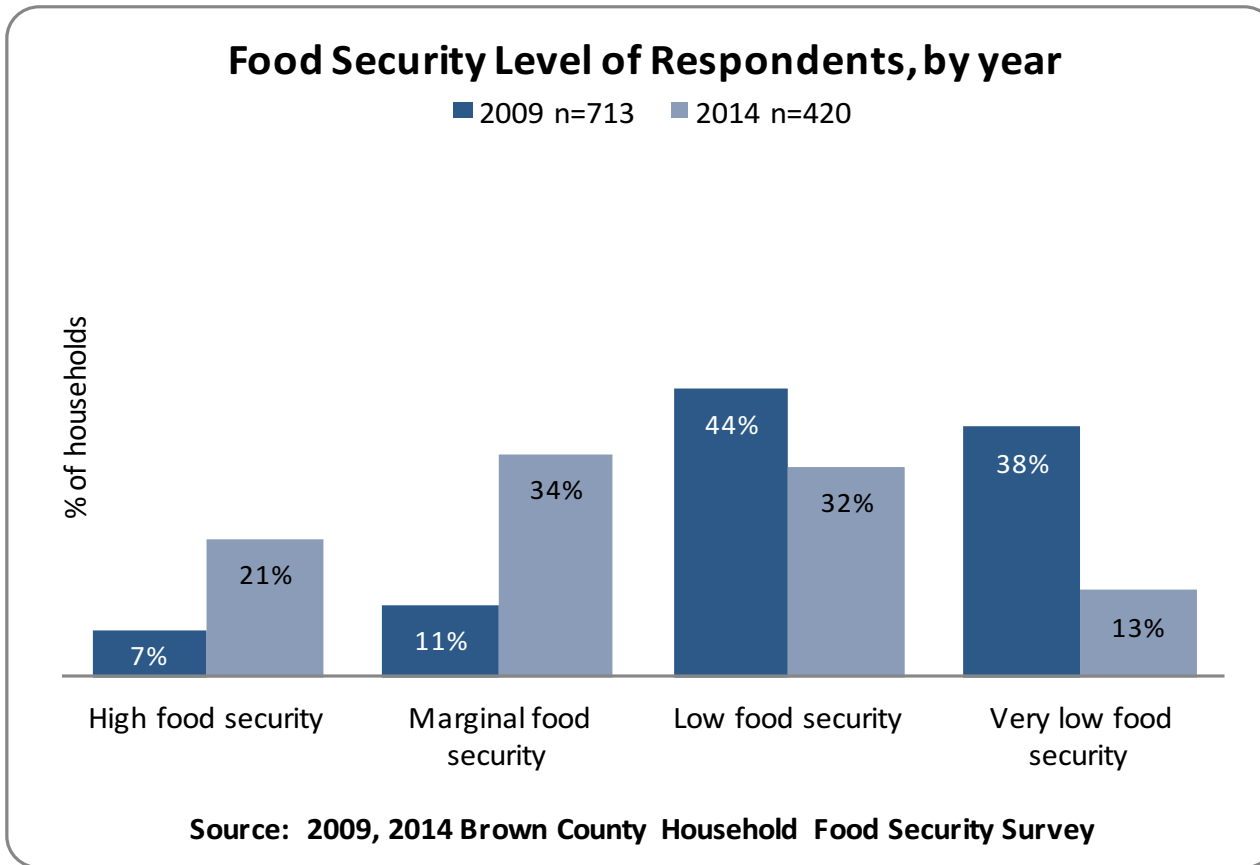
(1999 n=277, 2004 n=641, 2009 n=713, 2014 n=420)



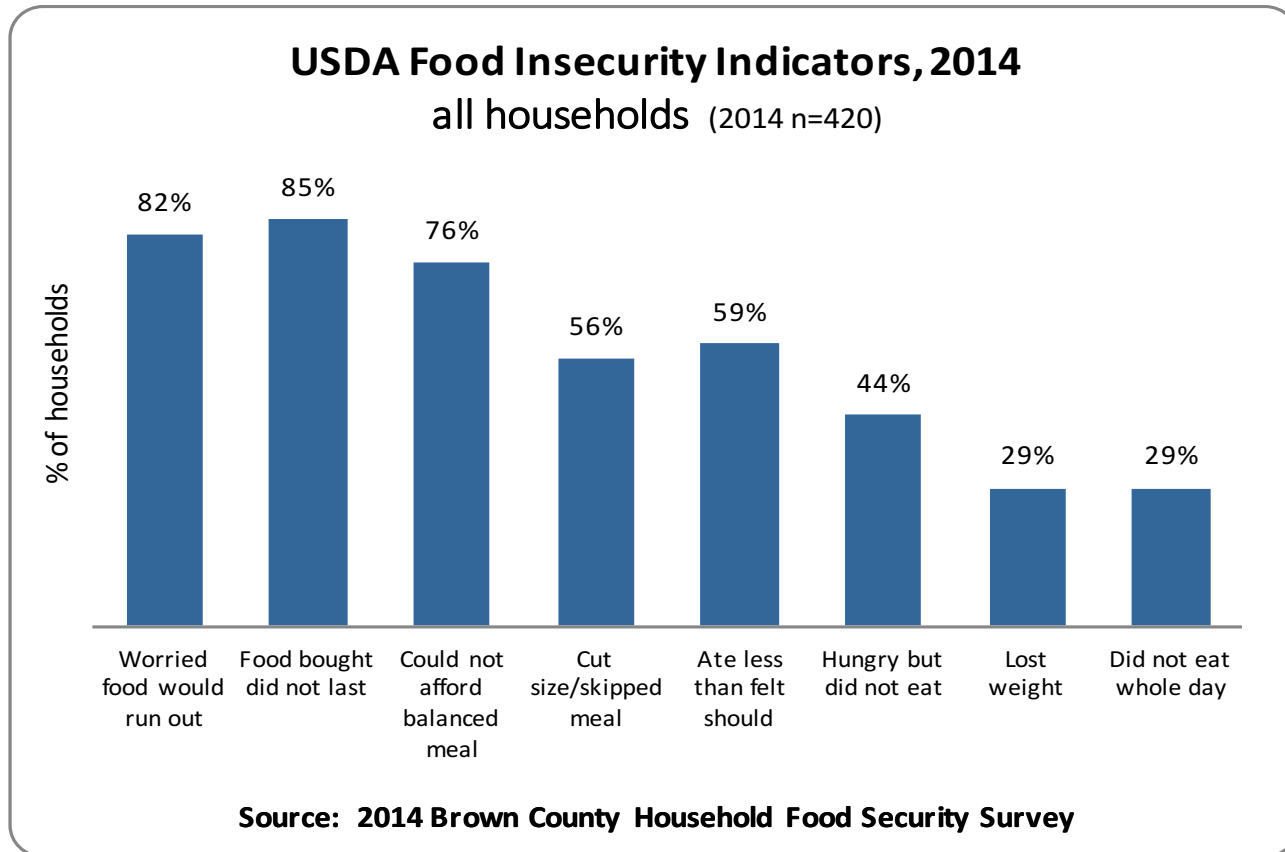
Source: 1999, 2004, 2009 and 2014 Brown County Household Food Security Survey



Food Security Level of Respondents



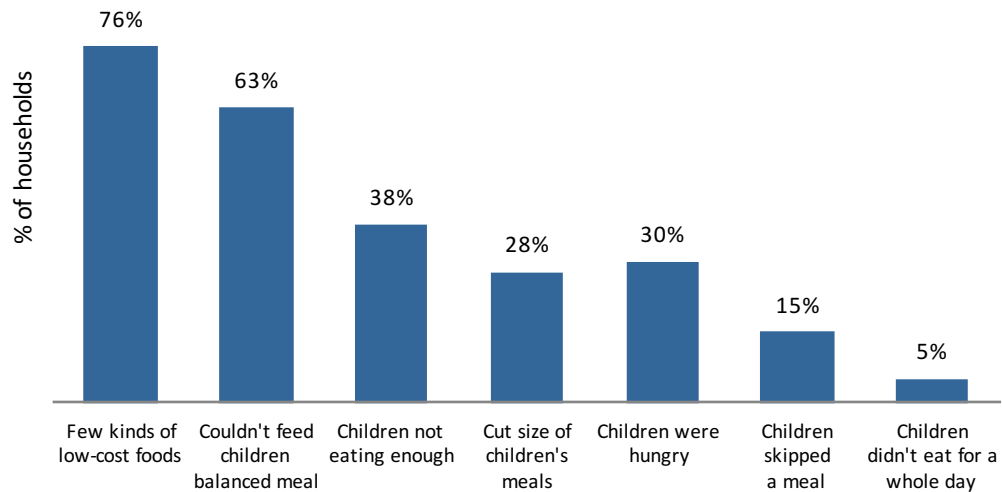
USDA Food Insecurity Indicators



USDA Food Insecurity Indicators



USDA Food Insecurity Indicators, 2014
households with children (2014 n=199)



Source: 2014 Brown County Household Food Security Survey

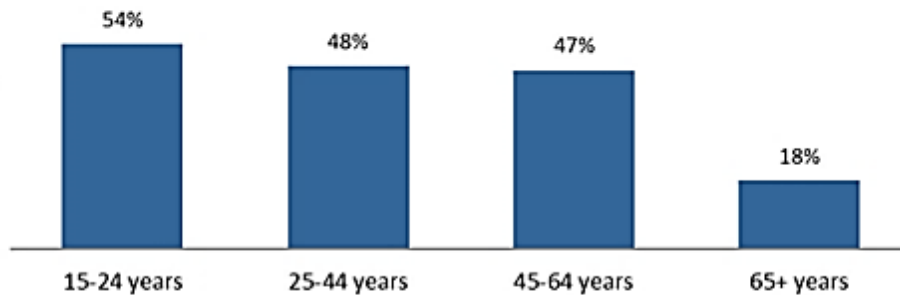
Characteristics of Food Insecure Respondents Only

Age

Food Insecurity Rates by Age Group

All households (2014 n=420)

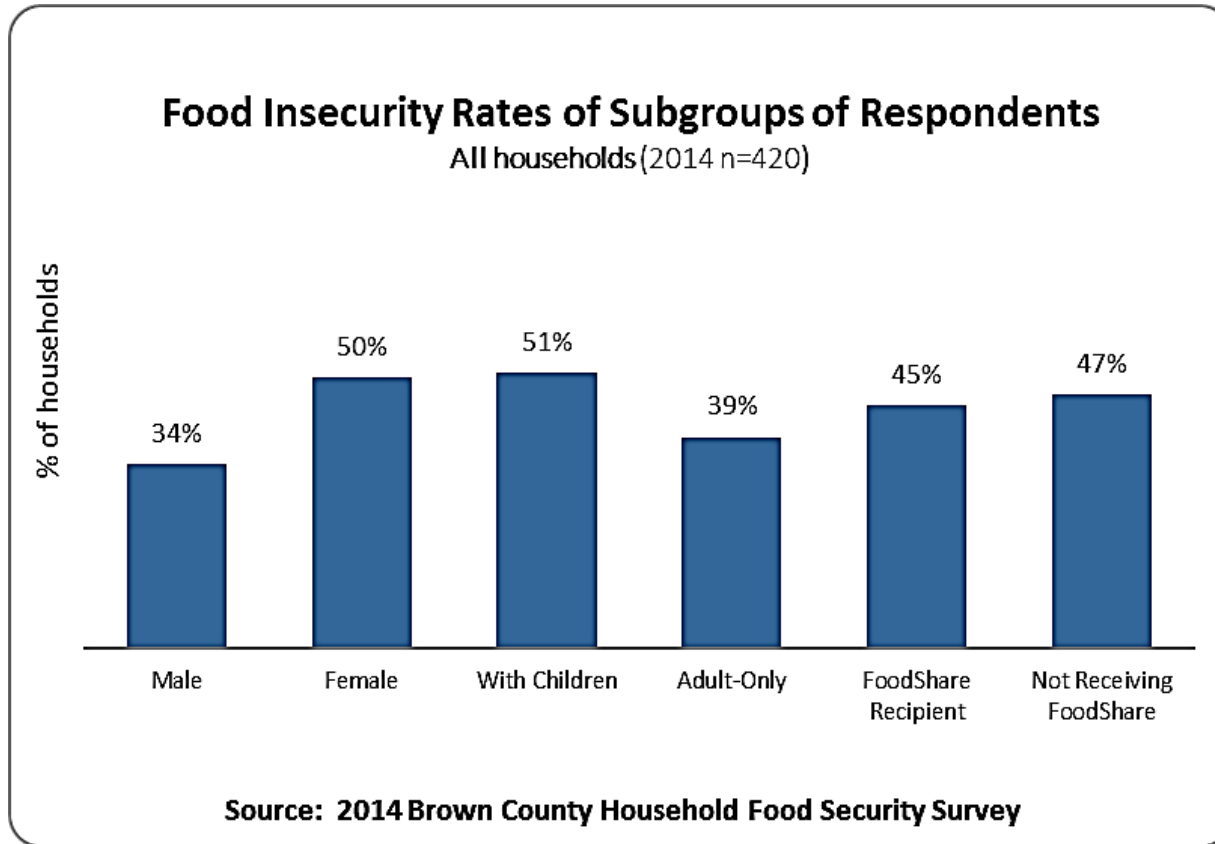
% of households



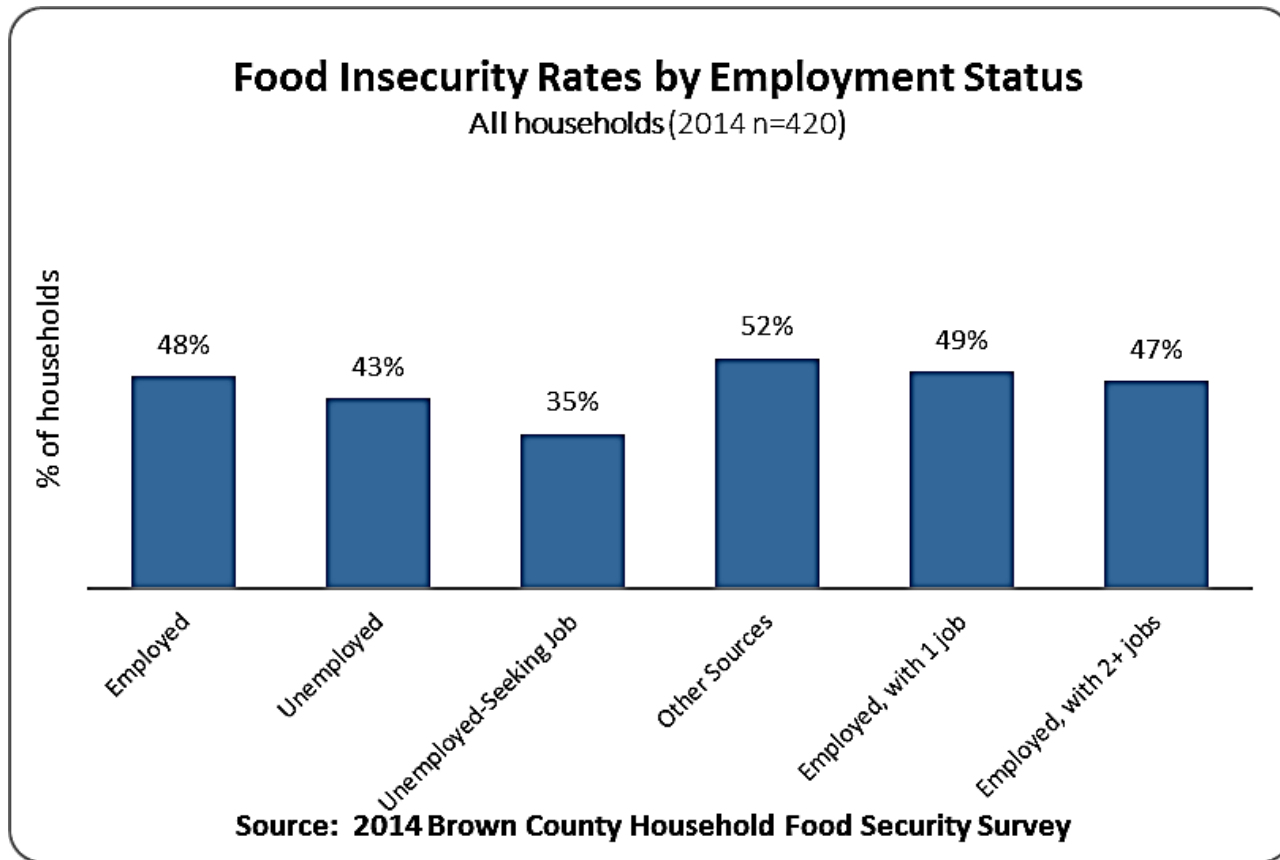
Source: 2014 Brown County Household Food Security Survey



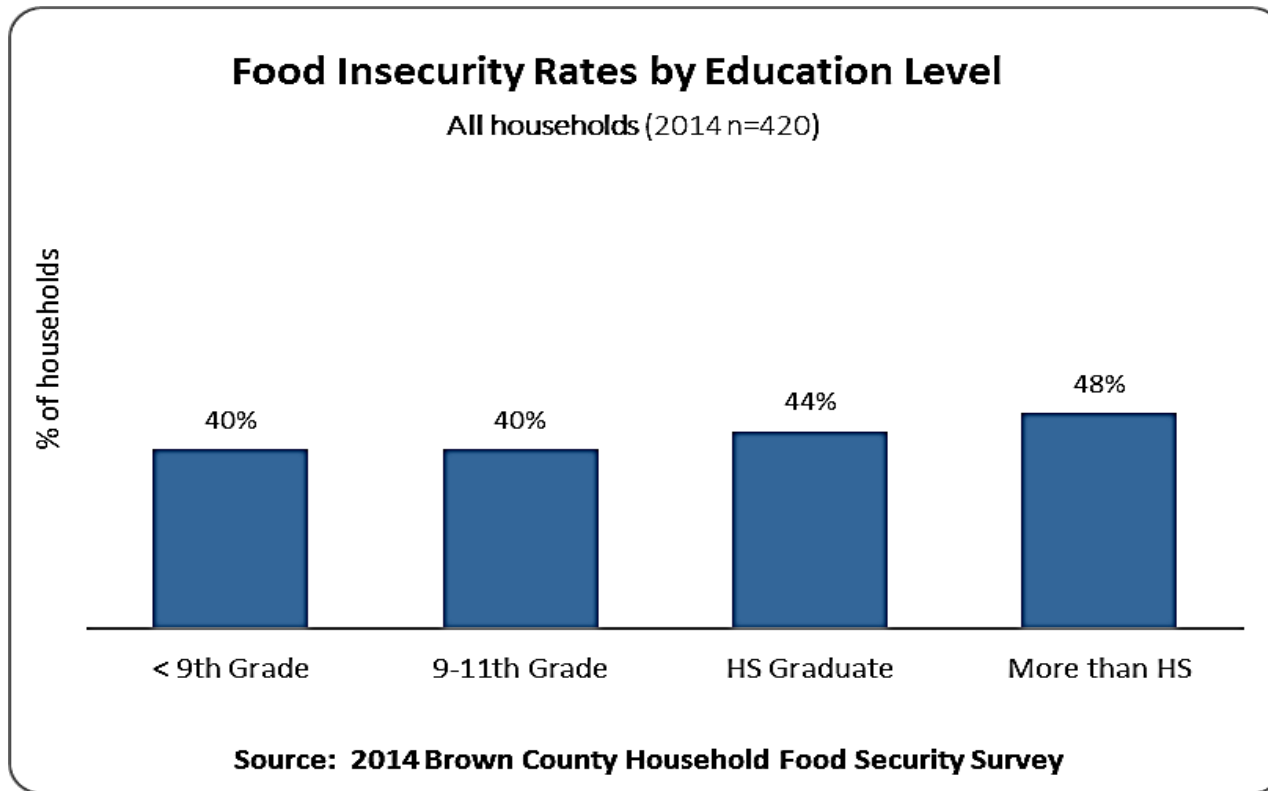
Gender, With/Without Children, With/Without Foodshare



Employed or Not & Number of Jobs



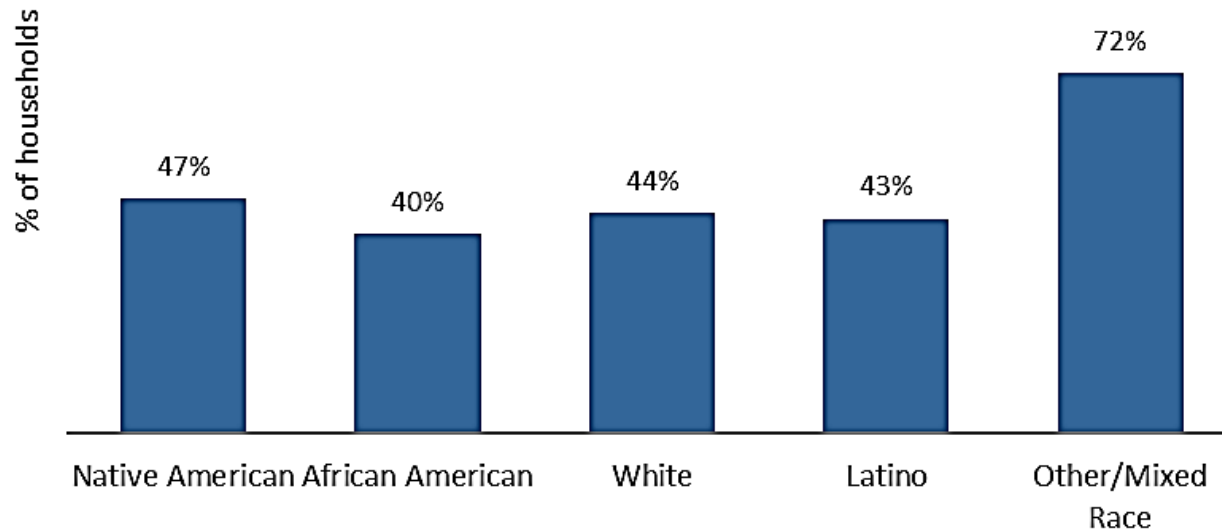
Below 8th Grade, High School, HS Graduate, Post HS



Race and Ethnicity

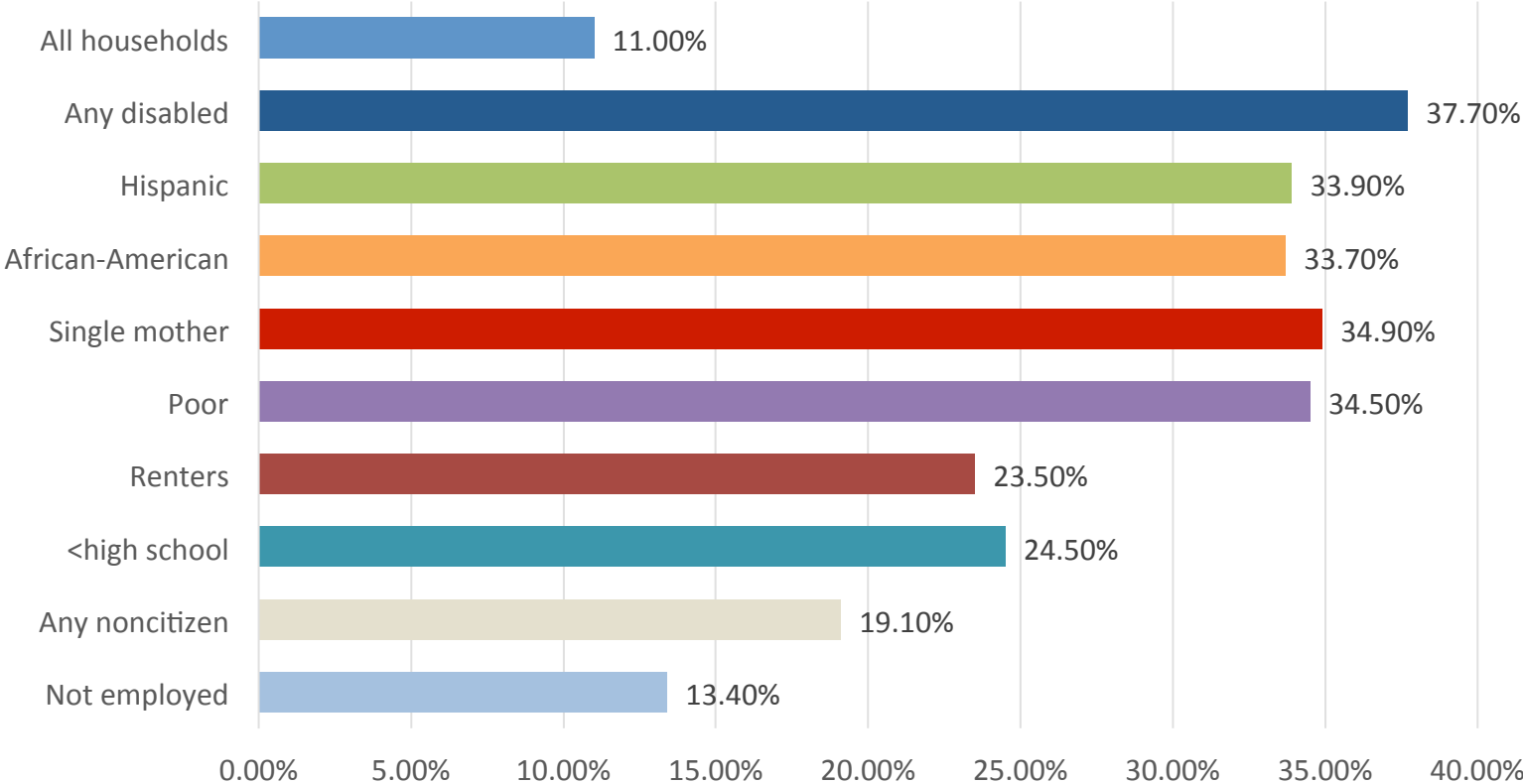
Food Insecurity Rates by Race/Ethnic Group

All households (2014 n=420)
(too few Asian Respondents to report)



Source: 2014 Brown County Household Food Security Survey

Households at highest risk of food insecurity in Wisconsin (2010-13)



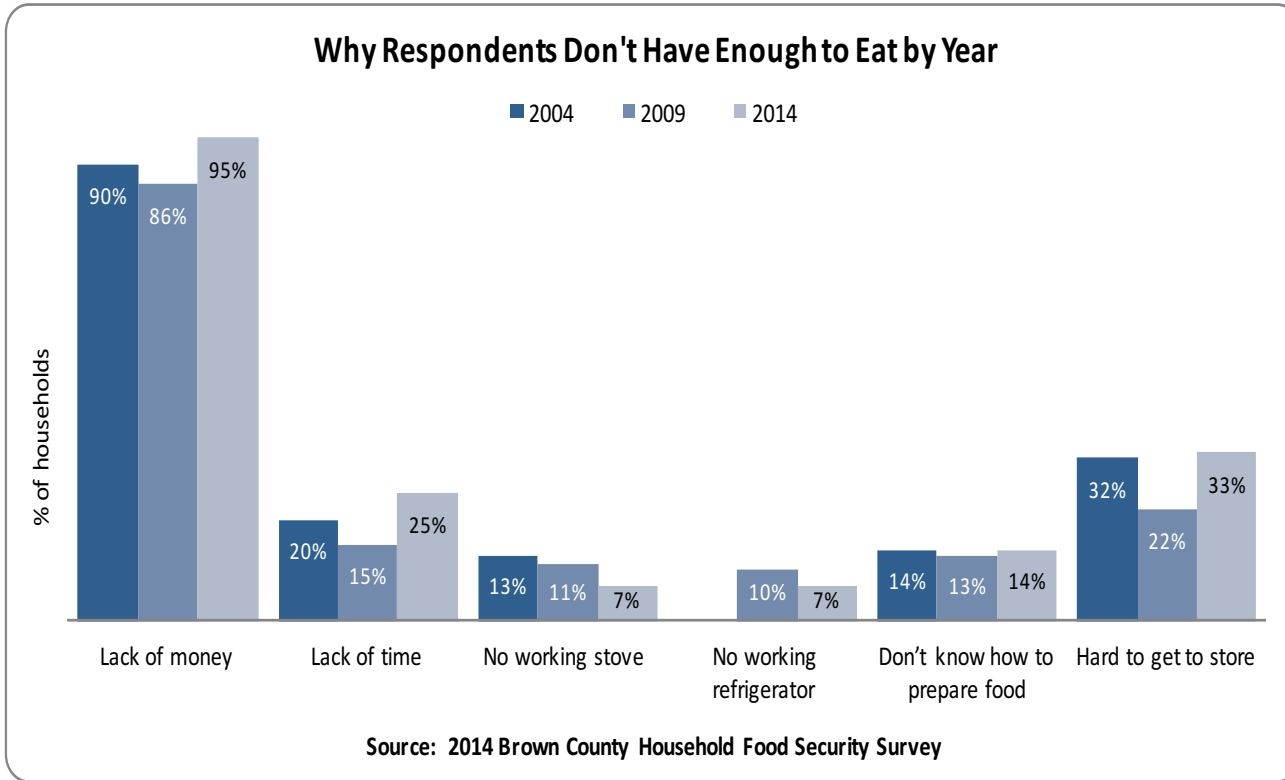
Source: Current Population Survey – Food Security Supplement, 2010-2013

Judi Bartfeld, UW Madison and UW-Extension

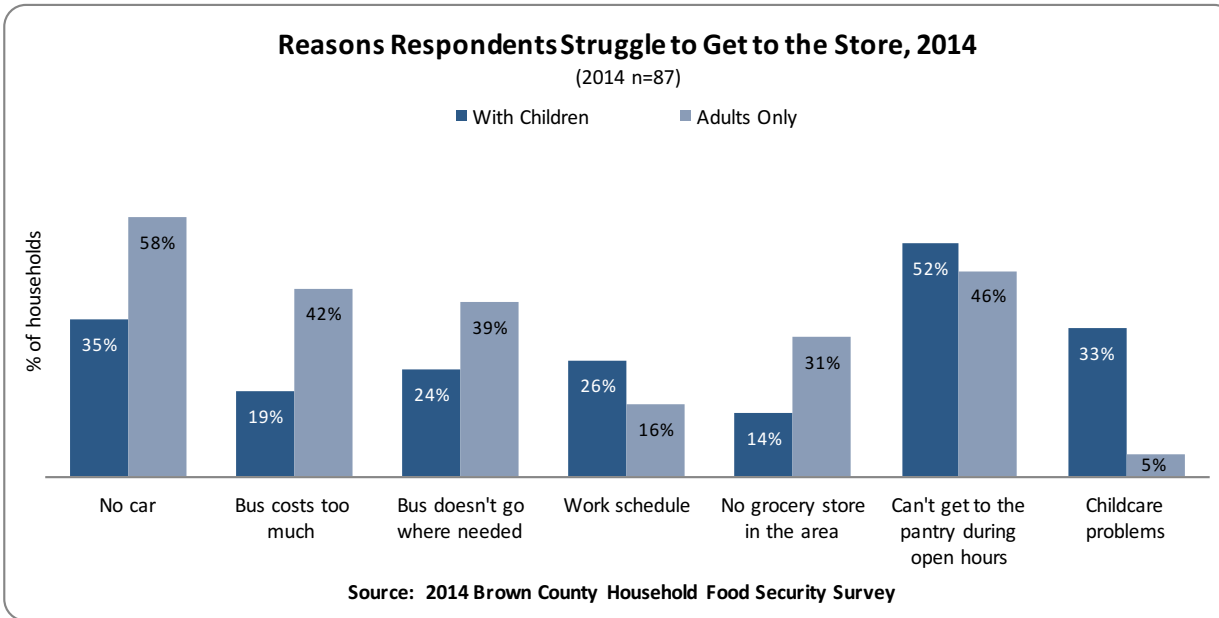


Reported Barriers to Food Security

Why Respondents Don't Have Enough to Eat by Year



Reasons Respondents Struggle to Get to the Store



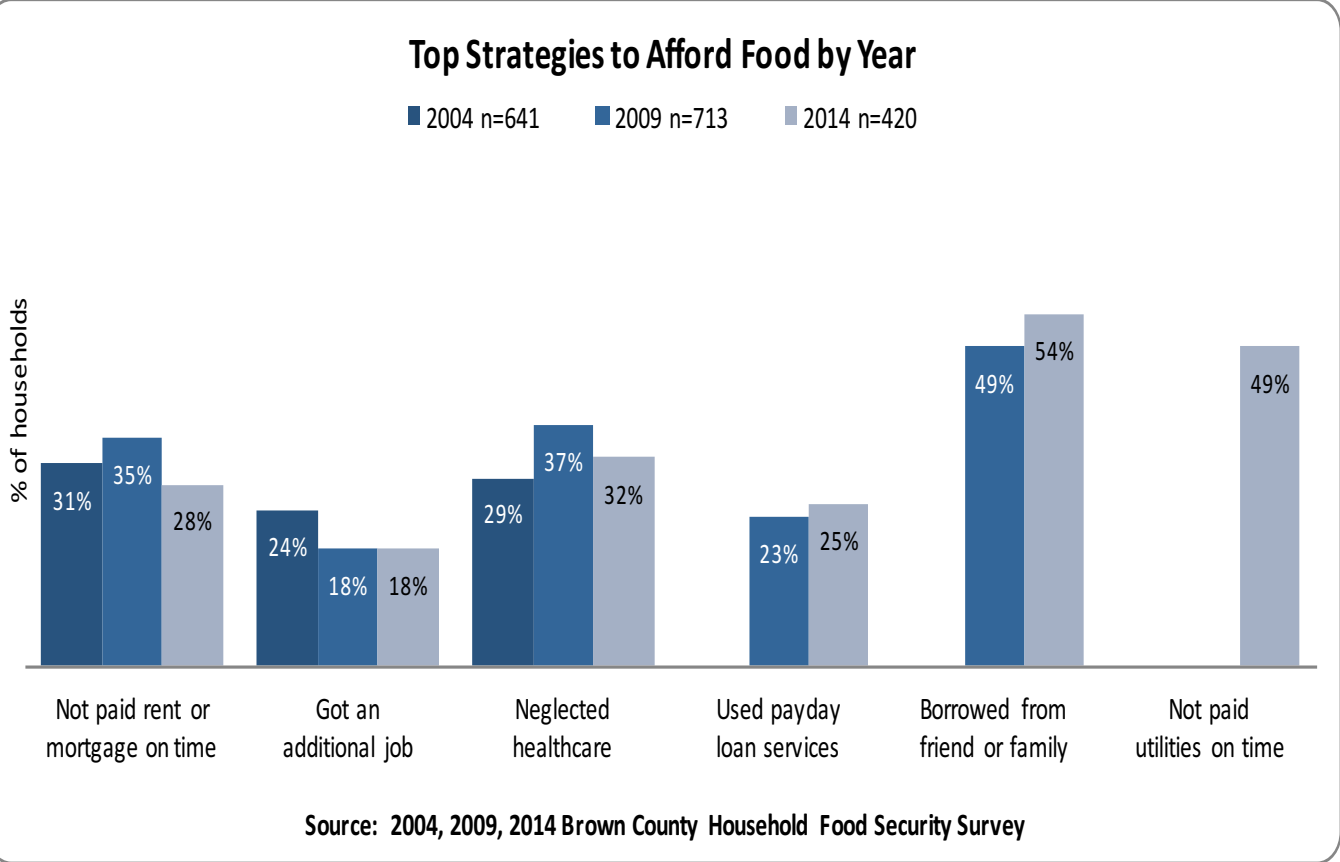
Reasons for not Receiving FoodShare

	2009	2014
Don't know about FoodShare	11%	19%
Don't think I'm eligible	43%	47%
Found not eligible	32%	38%
Don't know how to apply	25%	28%
Application too difficult	19%	15%

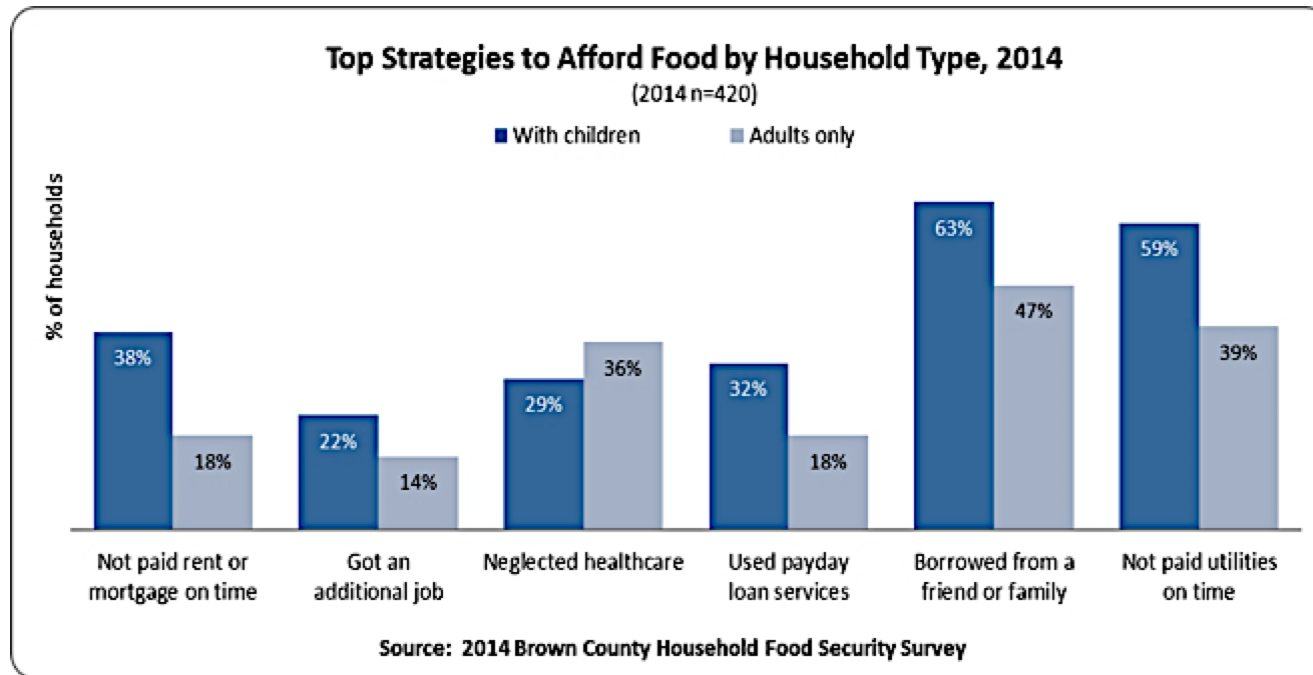


**How are pantry consumers
attempting to gain better
access to food?**

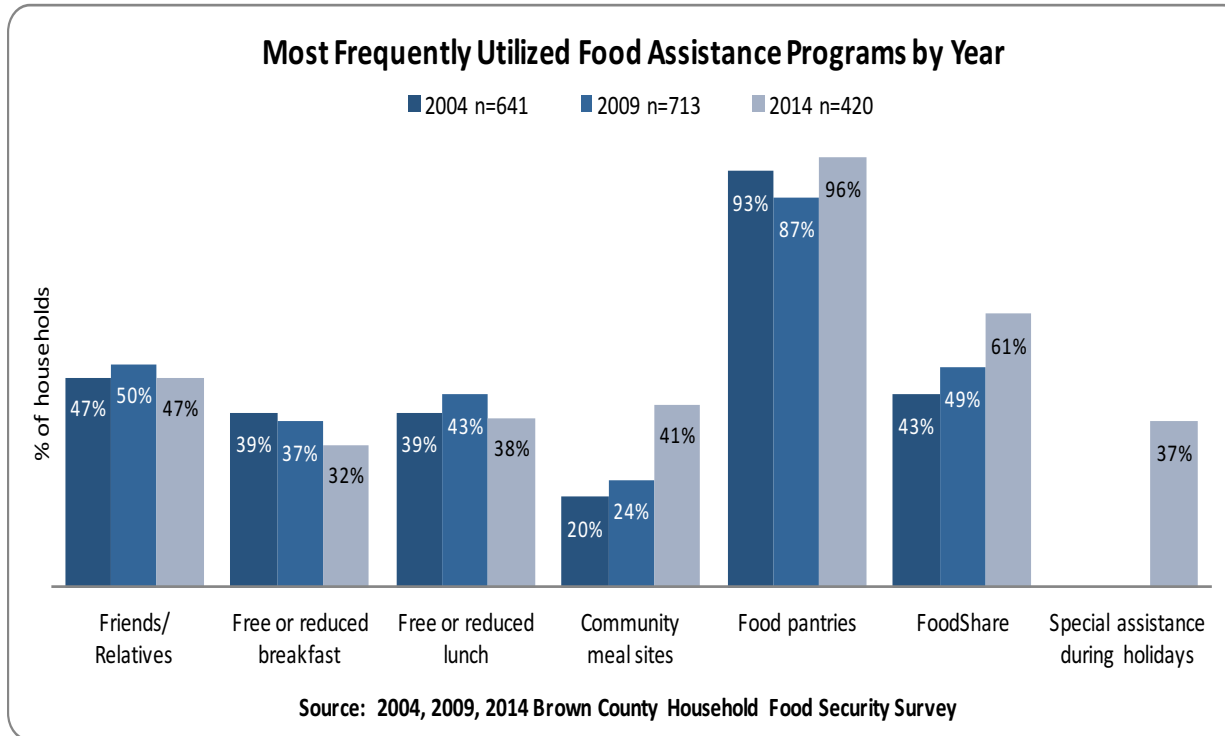
Top Strategies to Afford Food by Year



Strategies Used by Households With & Without Children



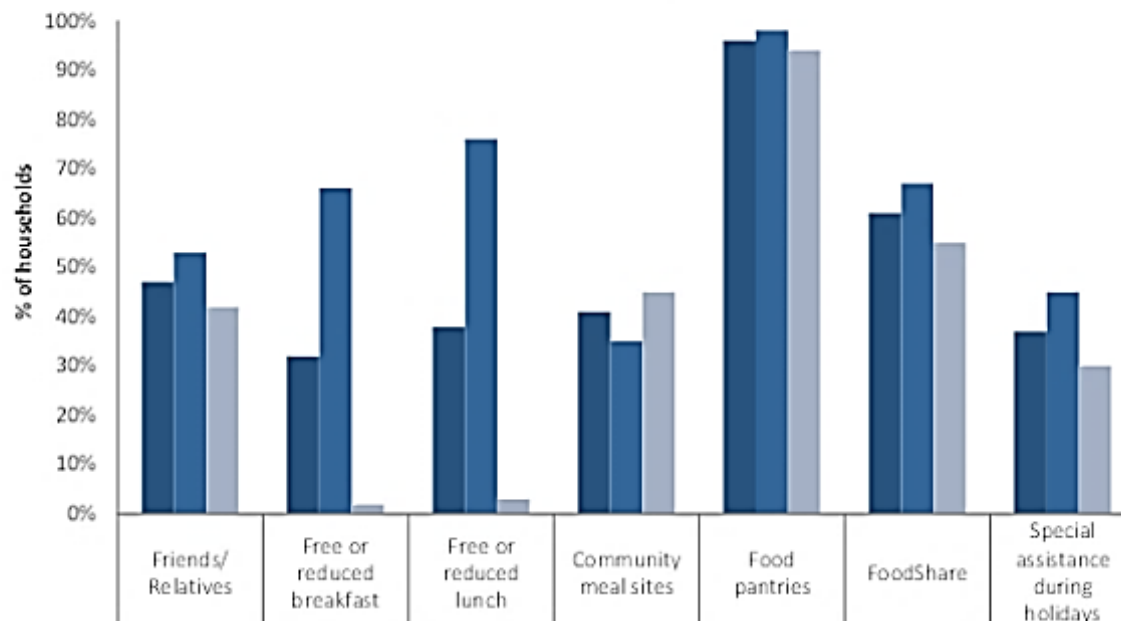
Food Assistance Used by Year



Food Assistance Used by Households With & Without Children

Most Frequently Utilized Food Assistance Programs

(n=420)



■ All Households	47%	32%	38%	41%	96%	61%	37%
■ With Children	53%	66%	76%	35%	98%	67%	45%
■ Adults Only	42%	2%	3%	45%	94%	55%	30%

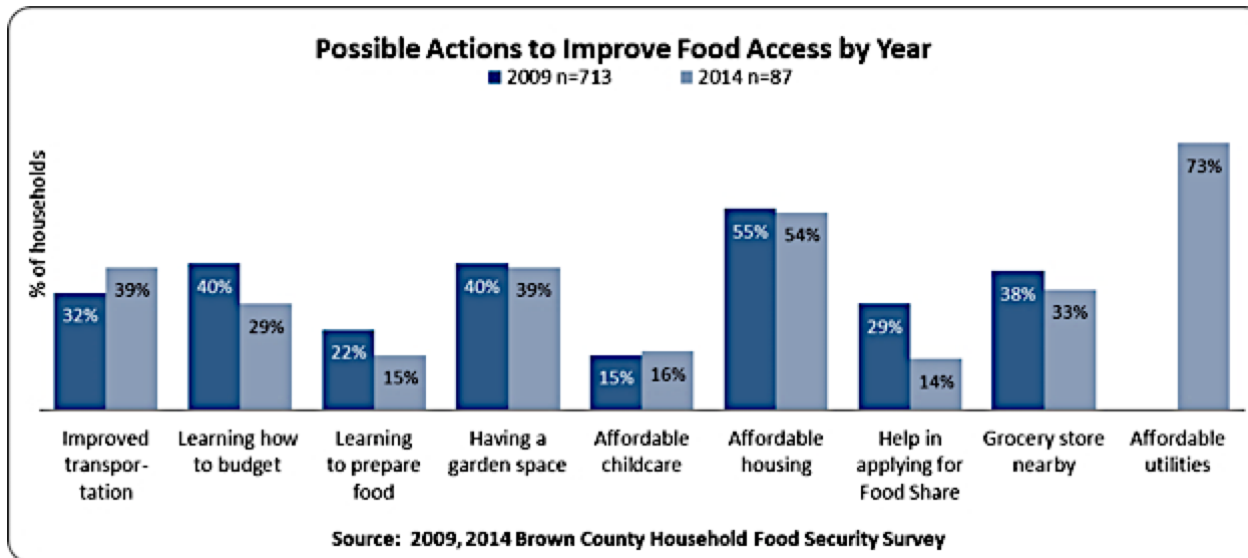
Source: 2014 Brown County Household Food Security Survey



Overcoming barriers to food security



Top Items to Improve Food Access by Year

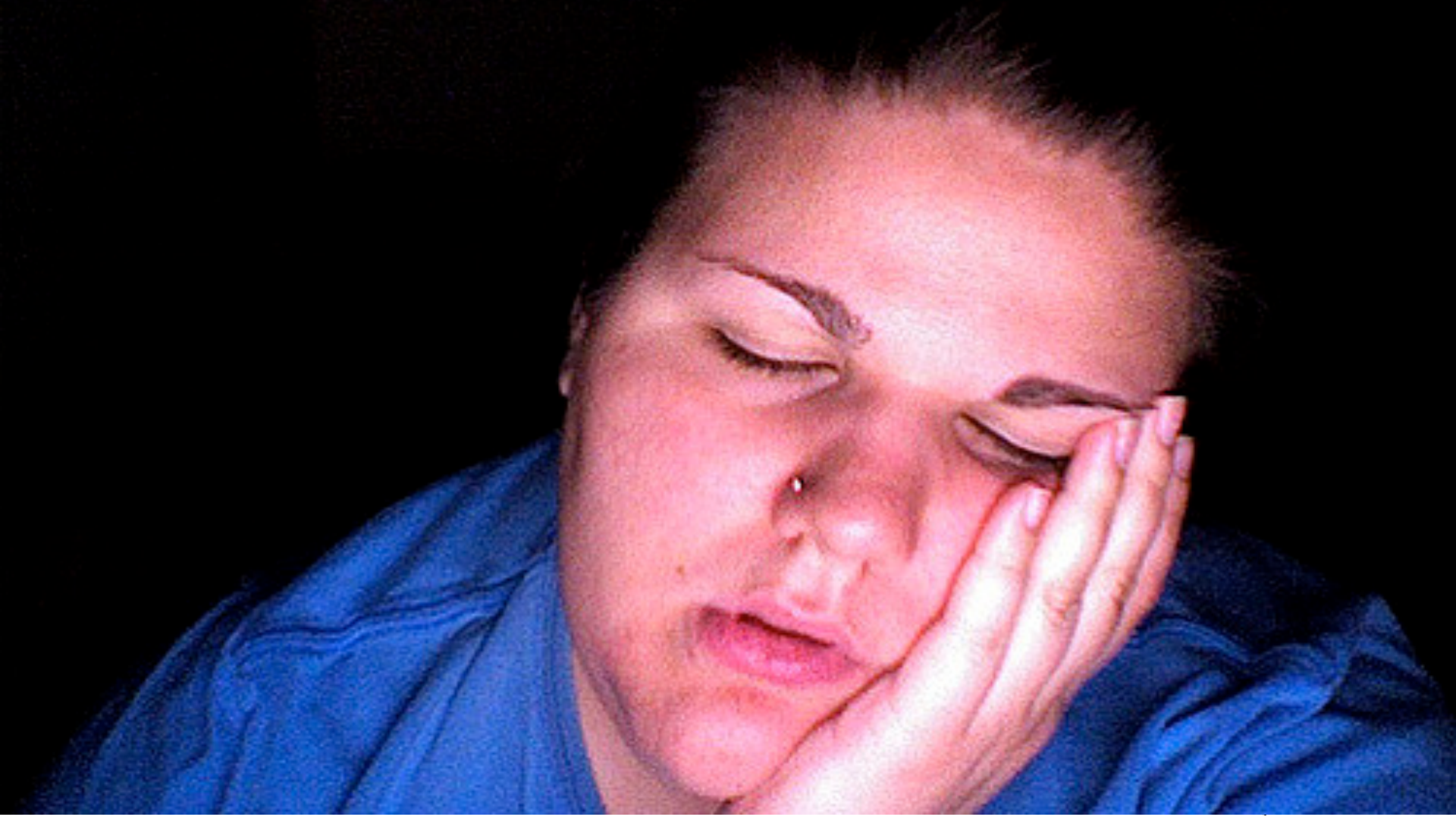


Top Items That Would Improve Food Access by households with/ without children, 2014

	Households with children (n=199)	Adult-only households (n=221)
Improved transportation	36%	41%
Learning how to budget	36%	22%
Having a garden space	42%	36%
Affordable housing	63%	45%
Grocery store nearby	29%	38%
Affordable utilities	82%	64%



Health and nutrition



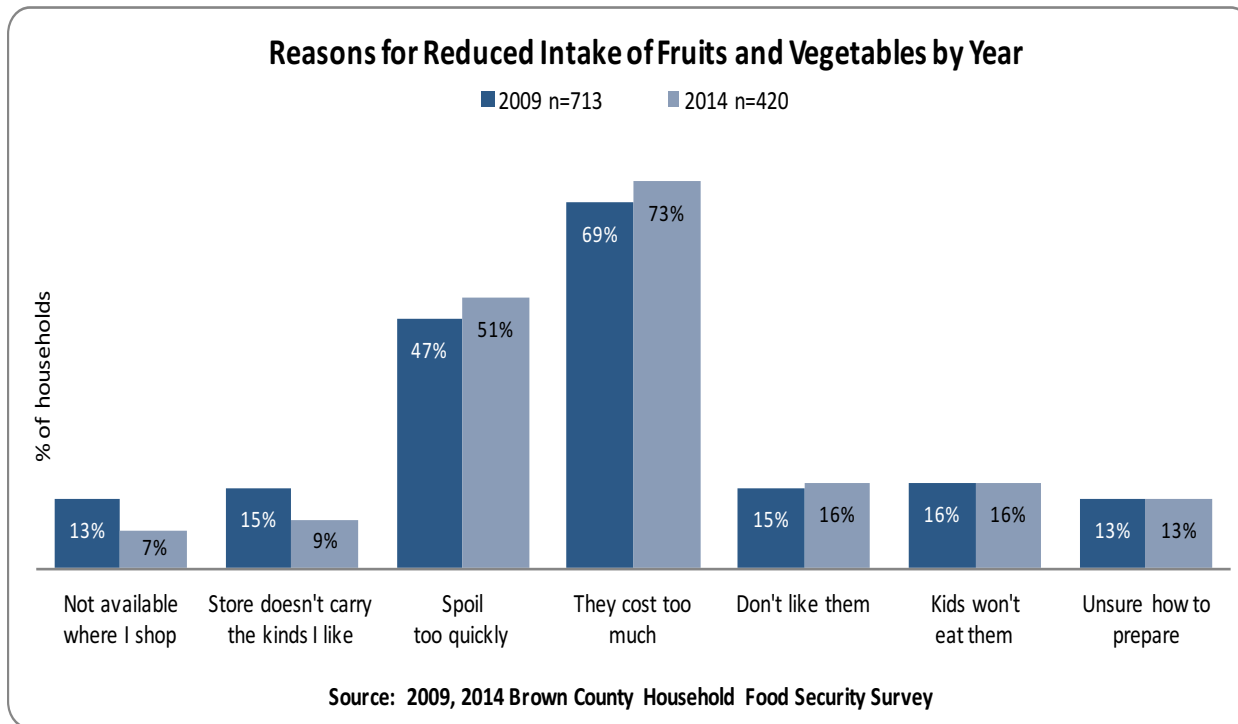
Health disparities

DISEASE RATES HIGHER FOR LOW INCOME POPULATION

Chronic disease	Disease Rate Entire Population	Disease Rate Low Income Population (200% Poverty)	
Diabetes	8%	22%	2.75x more prevalent
Obesity	26%	59%	2.3 x more prevalent
Hypertension	24%	53%	2.2x more prevalent
Coronary heart disease	6%	18%	3x more prevalent



Reasons for Reduced Intake of Fruits & Vegetables by Year

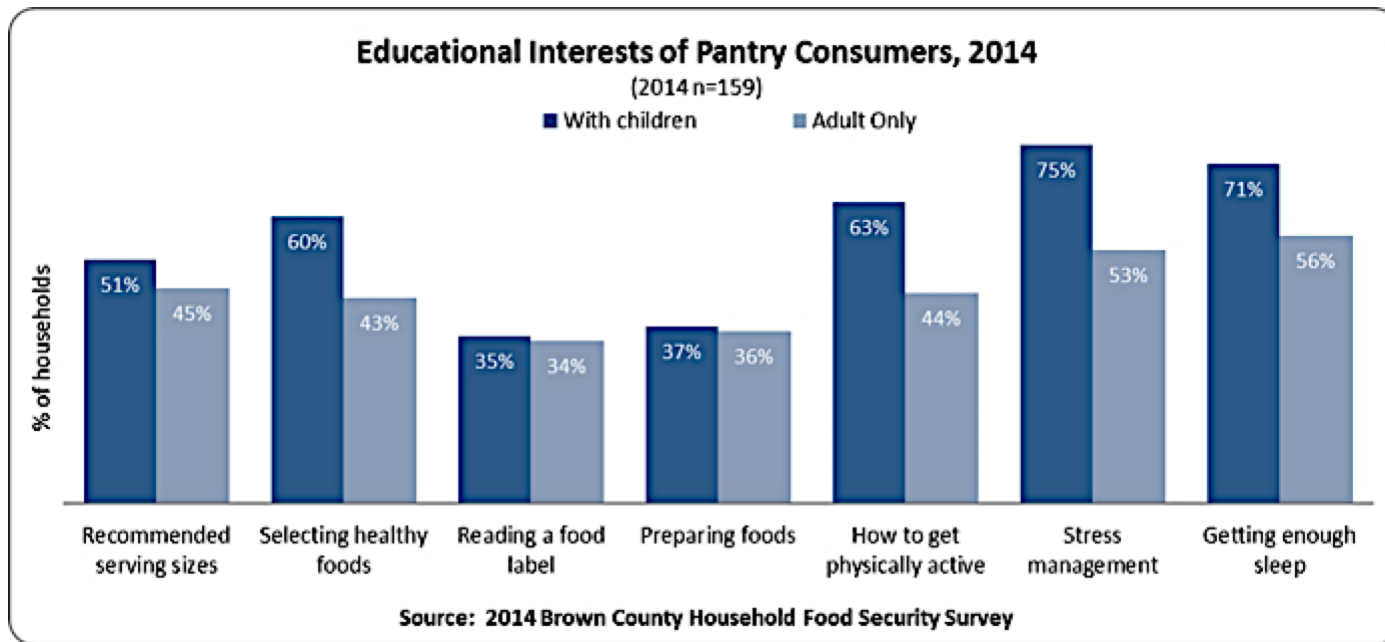


RESPONDENTS WITH SPECIAL DIETARY NEEDS DUE TO HEALTH CONDITION

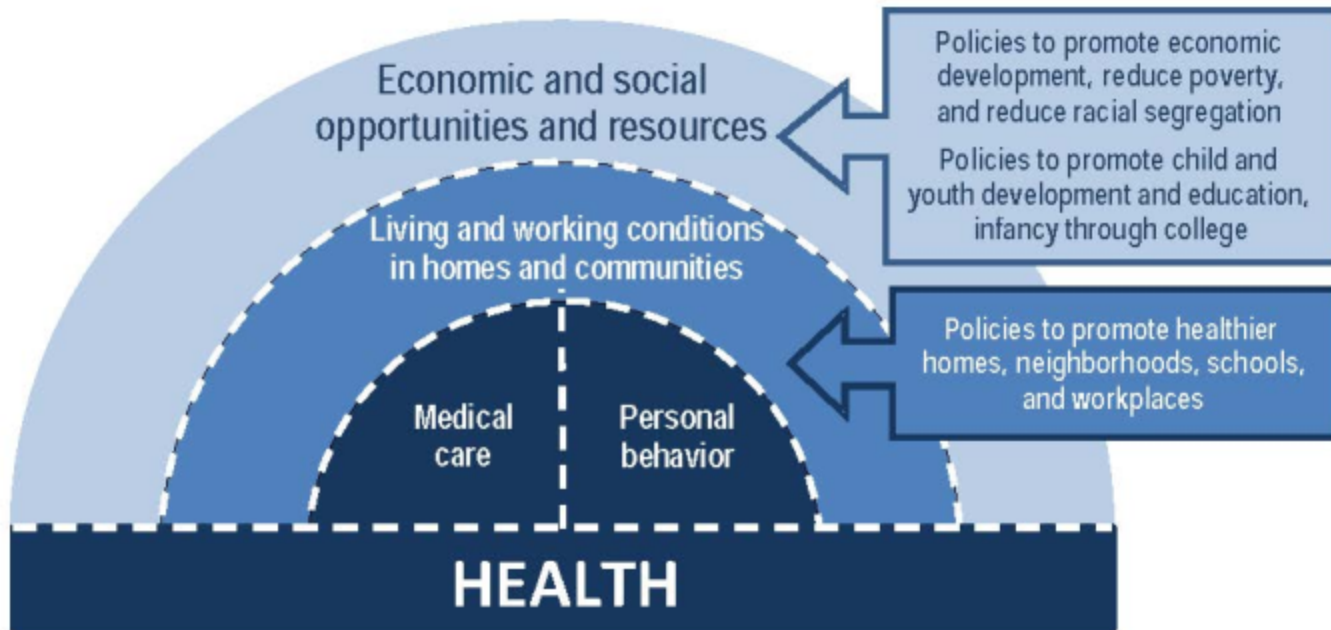
	2009 (n=713)	2014 (n=420)
Diabetes	25%	22%
Heart disease	15%	11%
High blood pressure	35%	32%
Digestive problems (gluten free, lactose free, fiber)	-	17%
Concerned about own weight	45%	41%
Concerned about child's weight (for those with children n=143)		18%

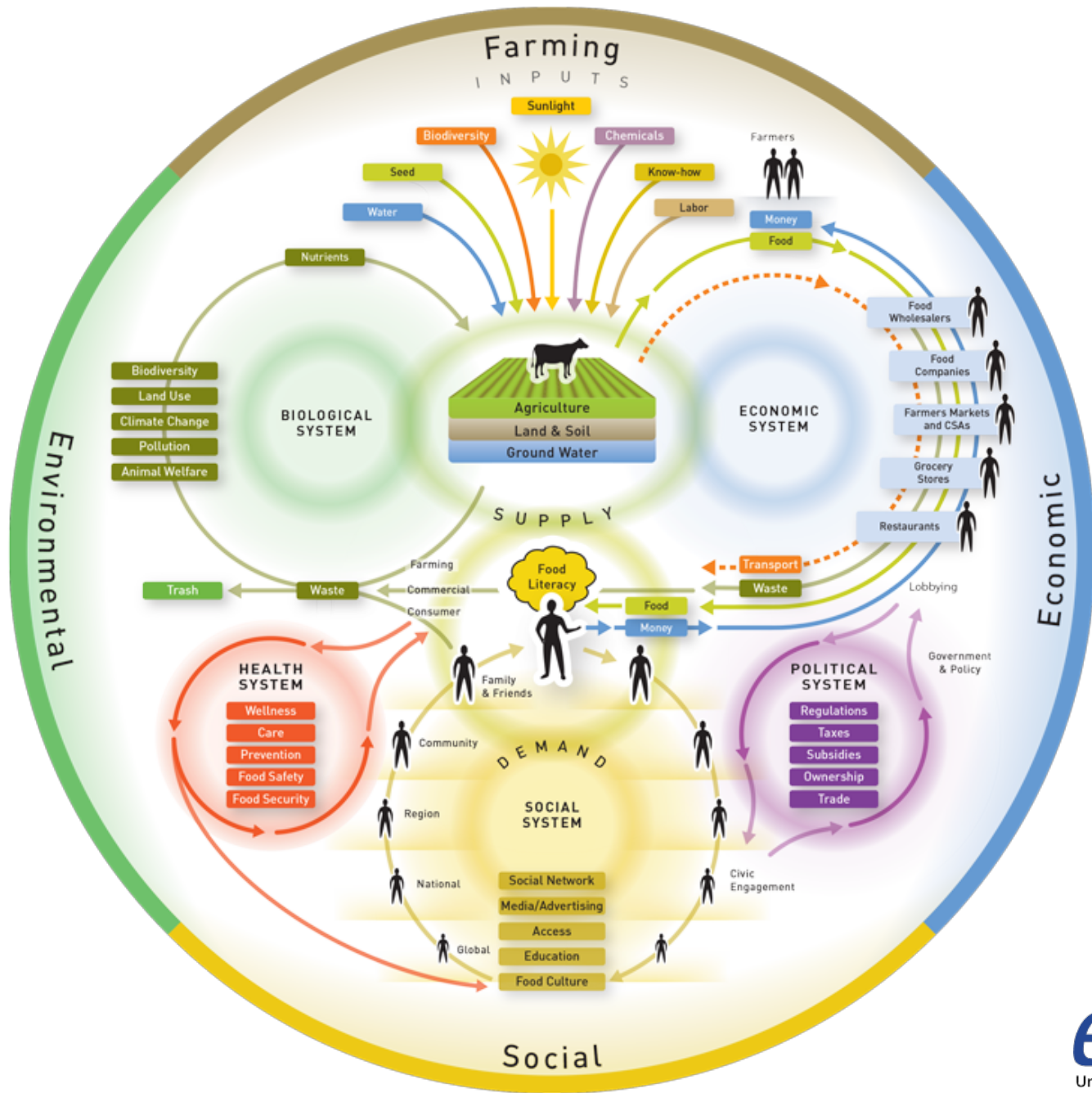


Educational Interests of Pantry Consumers



Social Determinants of Health





There are dramatic and real impacts from any food insecurity.



As the amount of food available becomes less of an issue and diet related health issues are more of a concern, the need to address food quality in all food outlets and meal services rise as a public health priority.

Questions

Thank you

Karen Early MS RDN
Brown County Nutrition Program Coordinator

