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ASSESSING AND ADDRESSING FARM WORKER FOOD SECURITY

YOLO COUNTY, 2015



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Executive Summary

California Institute for Rural Studies assessed the food assistance resources in Yolo County and the level of food insecurity among selected Yolo County farm workers living in a rural food desert. The project was designed to address the USDA Community Food Projects Competitive Grant Program priorities by determining the level of farm worker food security and planning long-term solutions utilizing the existing network of food assistance resources in Yolo County.

In 2000, the county estimated a population of 6,900 farm workers with 26,236 farm worker related persons. For this project, we focused our efforts on farm worker families living in rural communities in Yolo County and, using survey methodology, assessed their level of food security. We also identified the current extent of farm worker participation in food assistance programs. We created three food inventories: types of foods farm workers prefer, actual fruit and vegetable consumption, and types of food offered by the Yolo Food Bank. In this way we were able to determine where the gaps exist, and how to address them to better serve farm worker communities. Based on our results, we offer guidance for

food programs in Yolo County regarding both optimal geographic locations for food distribution to reach farm workers and the types of foods that are appropriate for this population. This report outlines the level of food insecurity among rural farm workers in Yolo County and includes a directory of food resources for the county, map of distribution locations and suggestions for improving services specifically for farm workers.

Introduction

Project Overview

Ironically, the same agricultural workers who are responsible for producing an abundance of food find themselves at serious risk of hunger, diet-related chronic diseases, unsafe living and working conditions and inadequate access to health care. As a farm worker interviewed for one of our recent projects noted, *“I’m disappointed in this country, which is supposed to be the best in the world. Here it’s not true that if you work hard you’ll have health and housing. I’ve been working day and night, and no, in this country there is no health.”*

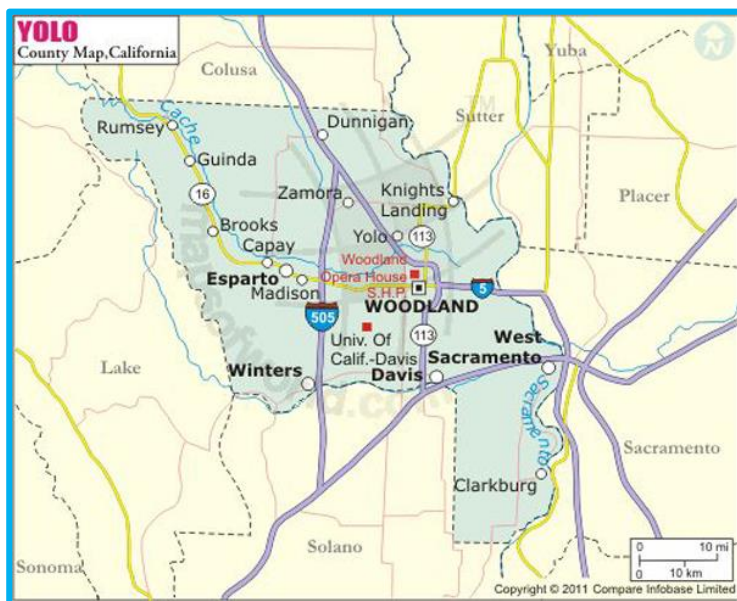


FIGURE 1 YOLO COUNTY

Yolo County is located in Northern California just west of the capital of Sacramento. Eighty-five percent of the county is agricultural land and that is how the residents like it. Davis is the largest city in the county with over 65,000 inhabitants and an on-campus resident population close to 6,000. For more than a century, the University of California, Davis, has been at the vanguard of agricultural research and innovation. More than 30 international seed research companies are headquartered in the county. Out of the 58 counties in

California, Yolo is ranked 41st in the state by area but 20th for agricultural production. In 2014, the county’s agricultural gross production hit an all-time record high at \$801,205,000, and an increase of 11% from 2013 (Yolo Dept. of Ag 2016). A large proportion of crops grown in Yolo County are specialty crops and organic production, both requiring high labor inputs. County agriculture is very diverse with processing tomatoes, wine grapes, dairy, nuts, berries, vegetable row crops, poultry, forage, nursery crops and more. There are close to 1,000 farms, 91 of them are certified organic. In addition there are six certified farmers markets, and 19 Community Supported Agriculture programs in the

county. Local general plans and land-use management practices are developed with the goal of farmland preservation.

Additionally, Yolo County has a robust farm to school program, written into the Yolo County general plan and managed by Yolo County Department of Agriculture since 2010. Farm to school programs in the county bring more local fresh fruits and vegetables into school cafeterias, build and plan school gardens, provide from scratch cooking lessons for school cafeteria staff, and have been important in creating various nutrition education programs, school wellness policies and obesity prevention programs. Yolo County farm to school participating agencies and programs include; Davis Farm to School, Winters Farm to

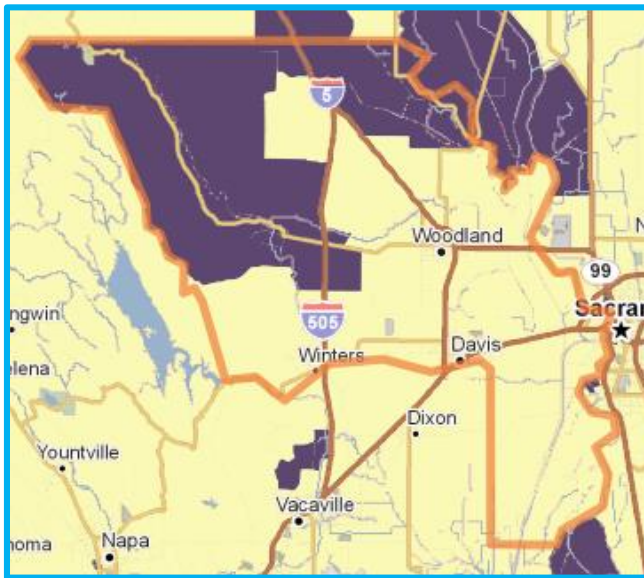


FIGURE 2 FOOD DESERT IN UC 2011 REPORT

School, UC Cooperative Extension, WIC Nutrition with Obesity Prevention, Rural Innovations Sustainable Enterprise and Yolo Farm to Fork.

Even with all of these agricultural, community and programmatic assets, there is still food insecurity in Yolo County at rates more than double both the US average (14.5) and the California average (15.6), hovering at 32% of adults living in food insecure households. ⁱ Yolo County has responded to this problem with programs designed to increase food access and affordability. The Yolo Food

Bank provides food to 25,000 residents a

month and distributes nearly 3 million pounds of food and grocery items annually to residents in need of food assistance. They do this through a network of 60 non-profit partners. More than 25% of the food provided is fresh produce. The food bank partners with local farmers to source locally-grown fruits and vegetables.

In 2011, student researchers at UC Davis completed a project for the Yolo County Ag and Food Alliance to determine the feasibility of creating a food hub in the county. ⁱⁱ While the team did not feel confident that a food hub would succeed in Yolo County, they did compile a large amount of data on the Yolo County food and agriculture system. In the process of this project, they mapped Yolo County food deserts. Figure 2 shows the extent of the food desert, located in rural Yolo County in purple as mapped in 2011. Many of the residents living within this area are farm workers. Figure 3 shows the USDA category “Low access at 1 and 10 miles” indicating distances to supermarkets: more than one mile in urban areas and 10 miles in rural areas. The majority of Yolo County fits the low access definition.

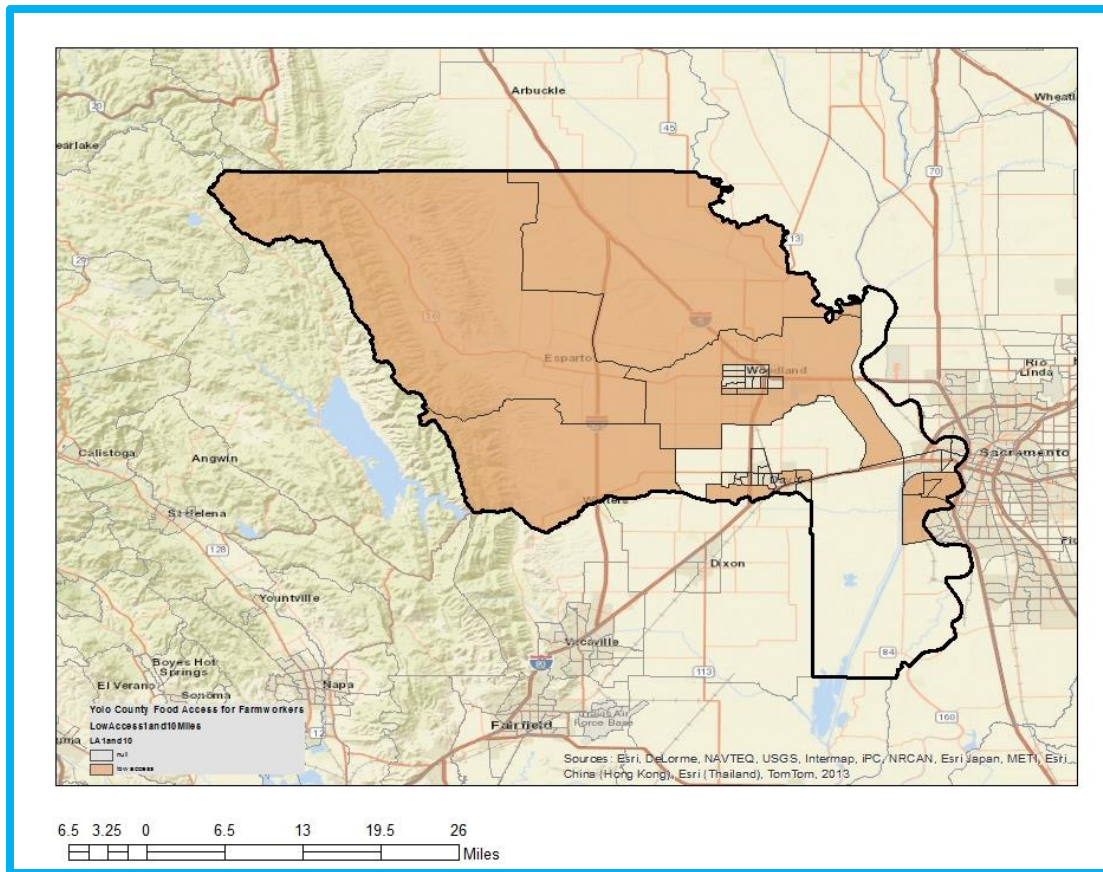


FIGURE 3 LOW ACCESS AT 1 AND 10 MILES

In 2000, Yolo County estimated a population of 6,900 farm workers with 26,236 farm worker related persons.ⁱⁱⁱ Because of the challenges of enumerating farm workers, the range of population estimates for farm workers and their families is quite large in Yolo County as is the case, nationally. Yolo County maintains two farm worker housing facilities totaling 150 units for migrant farm worker families. At capacity, these housing centers can house 805 individuals. The units are limited to use by families who reside more than 50 miles away for most of the year but come to the county to work in agriculture. As a result, they are open for a maximum of six months. In addition to these known migrant farm worker housing units, there are on-farm housing facilities in the county that can house an estimated 506 farm employees. With the trend to year-round production of crops in California, farm workers in the state are less migratory and tend to reside near their workplaces year round.^{iv} As a result of the lack of housing facilities for non-migrating workers, most are now forced to live in private market dwellings and many of these are in rural towns and cities in Yolo County.

Barriers to Healthy Food Access for Farm Workers in Rural Regions

There are many barriers to healthy food access in rural communities, such as the food desert described above. Our ongoing research at CIRS shows that food stamp utilization is

low among farm workers. Reasons given by farm workers for not applying for SNAP include a perception of ineligibility, challenges to understanding the application processes and fears about applying for public assistance related to documentation status. Young single male farm workers who do not live in families may have limited cooking skills, may not have access to kitchen facilities and thus may be more likely to eat processed or pre-prepared meals. In the California Agricultural Worker Health Survey (CAWHS) CIRS determined that a full 17% of farm workers lacked kitchen facilities where they lived. ^v

Farm workers suffer from disproportionately high rates of diet related diseases such as diabetes, obesity, hypertension, and anemia. The CAWHS also found that 18% of male farm workers had at least two of the three following risk factors for chronic disease: high serum cholesterol, high blood pressure, or obesity. In addition, 81% of male and 76% of female study subjects were overweight, with obesity rates of 28% and 37% respectively. Despite the demanding physical nature of agricultural labor, in general, indicators for diet related conditions among farm workers are worse than both the Latino and the general populations of the US. Stanford University researchers^{vi} found that for every five years of residence in the US, male migrant workers in the Salinas Valley showed a 35% increase in fast food consumption and a 50% increase in alcohol consumption. Over a ten year period, the same researchers found the prevalence of obesity increased 47% among male farm workers in general, and 91% for men living in migrant housing facilities. ^{vii}

In two previous CIRS studies of farm worker communities in California levels of food insecurity were well above county, state and federal levels. In our first assessment, 45% of the workers we interviewed in Fresno County were food insecure ^{viii} and in our second assessment, 66% of the workers we interviewed in Salinas, Monterey County, were food insecure. ^{ix} These studies were completed in two of the most productive agricultural counties in the country. The Fresno County work was completed prior to the financial downturn and the Monterey County study was completed in the midst of the financial crisis.

In this project, CIRS assessed the food security of farm workers in Yolo County and their access to food programs that already exist, using survey and mapping methods. Included in the survey were questions focused on food access, use of food assistance programs, barriers to use, and food preferences. In addition, CIRS compiled and reviewed data on county based food programs to determine which ones reach farm workers and where gaps may exist.

This report will explain the results of our farm worker survey and food bank inventory, including recommendations for any potential improvements in the programs. This report includes maps showing where farm workers interviewed live in relation to the service areas of food programs. We have also created maps showing where Latinos live and where people in poverty live in the county.

Based on all information collected, we have compiled a set of recommendations for improving services to farm worker families living in the rural food desert of Yolo County. These can be found beginning on page 30.

Food Security Defined

“Food security means access by all people at all times to enough food for an active, healthy life.” (USDA ERS, 2016) Eighty-six percent of American households had “consistent, dependable access to enough food for active, healthy living” in 2014. They were food secure. That means that 14% of households in America were food insecure and of those, 5.6% were “very” food insecure.

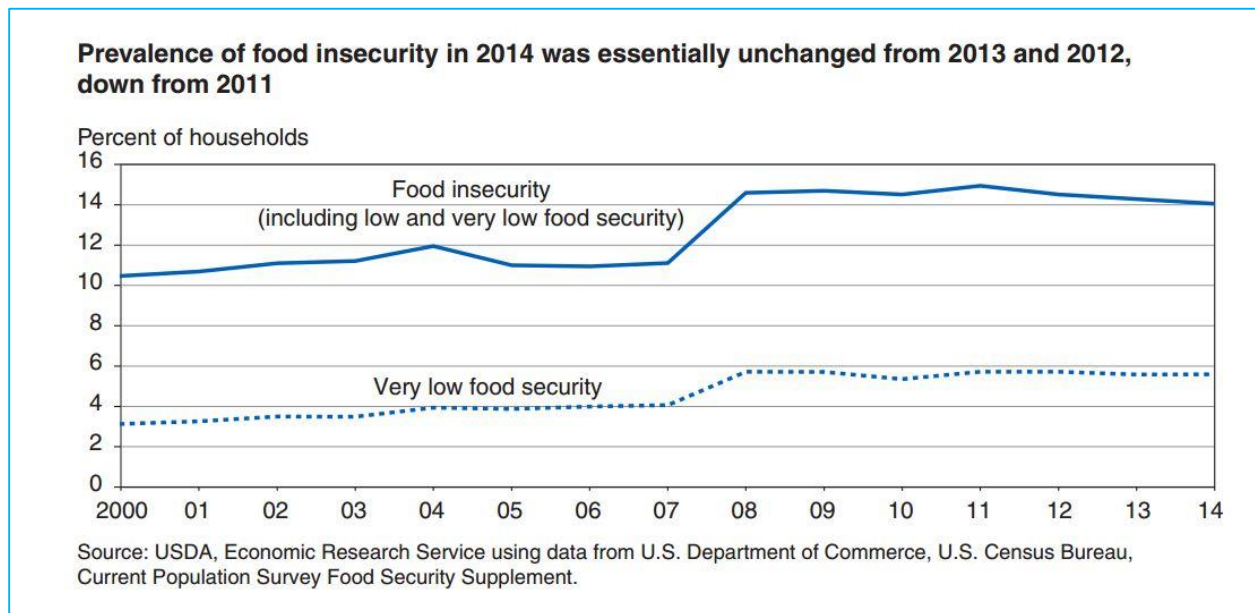


FIGURE 4 US TRENDS IN FOOD INSECURITY OVER TIME

In low food security households, members were able to get enough food so that their eating patterns were not substantially disrupted and food intake was not reduced. They did this by using a variety of coping strategies, like eating less varied diets, taking advantage of federal food assistance programs, or getting emergency food from community food pantries.

In very low food security households, one or more of the members disrupted their normal eating habits and reduced their food intake at times during the year. Both of these types of food insecure households had insufficient money for food. But very low food security households also lacked the resources to obtain food assistance.

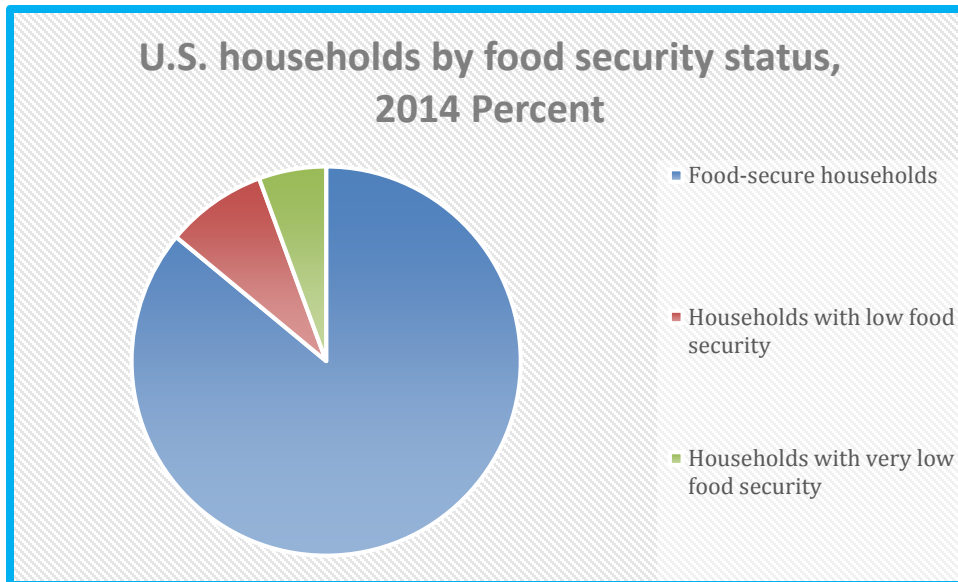


FIGURE 5 FOOD SECURITY IN USA—USDA ERS

The leading risk factors associated with food insecurity include: earning an income below the poverty level, living in a Hispanic or African-American household, and living in a female headed household (Nord, Andrews et al. 2009)

How many people lived in food-insecure households in 2014?

*48.1 million people lived in food insecure households in the US
7.9 million of them were children living with food insecure adults
914,000 of these children had siblings living with them who were also food insecure*

Food Insecurity in California

It is ironic that in California—the state that leads the nation in food production -- the prevalence of food insecurity is still about the national average at 13.5% (+ 0.65). Food insecurity is disproportionately related to socioeconomic status, with high levels of food insecurity occurring in low income populations. Approximately 4 million low income Californians experienced food insecurity during 2011-12. While 38.4% of low income California residents are food insecure only 18.1% currently receive SNAP benefits (California Health Interview Survey).^x

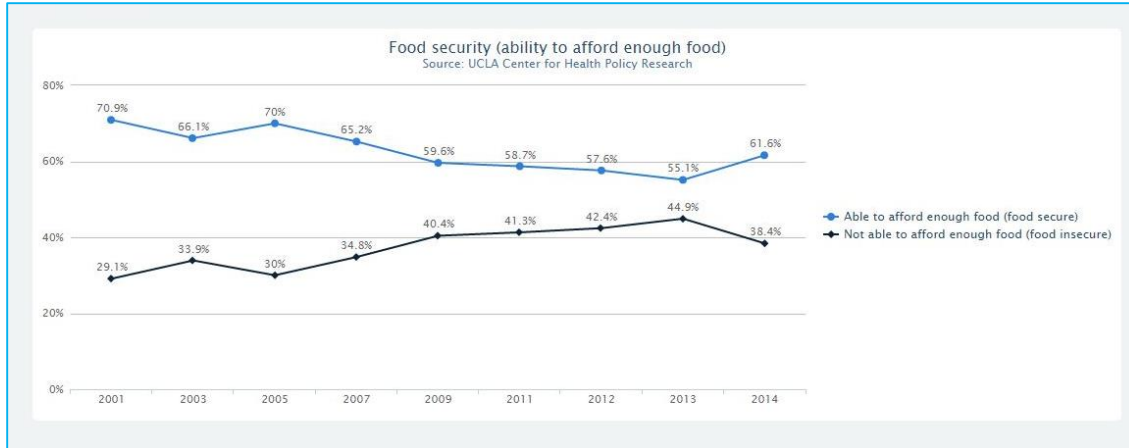


FIGURE 6 FOOD SECURITY OVER TIME, STATE OF CA – CHIS

Food Insecurity among Latinos

The vast majority of farm workers in California are Latino. National rates of food insecurity among all Hispanic or Latino households in the US are well above the average at 22.4% compared to 14% among all US households. Two additional studies have explored food insecurity among low income Latinos in California. One study evaluated food security status among low income Latino families from six different counties in California; out of a sample of 212 families participating, a total of 61% families were food insecure: 45% food insecure without hunger, 13% food insecure with moderate hunger; and 3% food insecure with severe hunger (Kaiser, Townsend et al. 2004). Another study among 630 low income Latino, Vietnamese and Cambodian legal immigrants in California, Texas and Illinois found that a total of 81% came from households that were food insecure: 40% food insecure without hunger, 27% food insecure with moderate hunger and 14% food insecure with severe hunger (Kasper, Gupta et al. 2000). CHIS data for 2001-14 show trends in food security over time among Latinos in California. In 2014, food insecurity for Latinos in California was 40% a full 2% higher than the state as a whole.

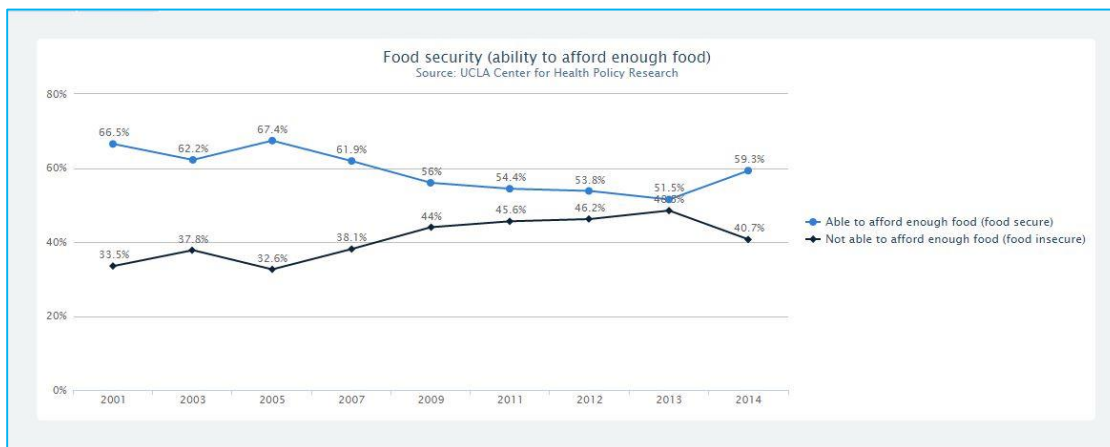


FIGURE 7 LATINO FOOD SECURITY OVER TIME, CA-- CHIS

Food Insecurity among Farm workers

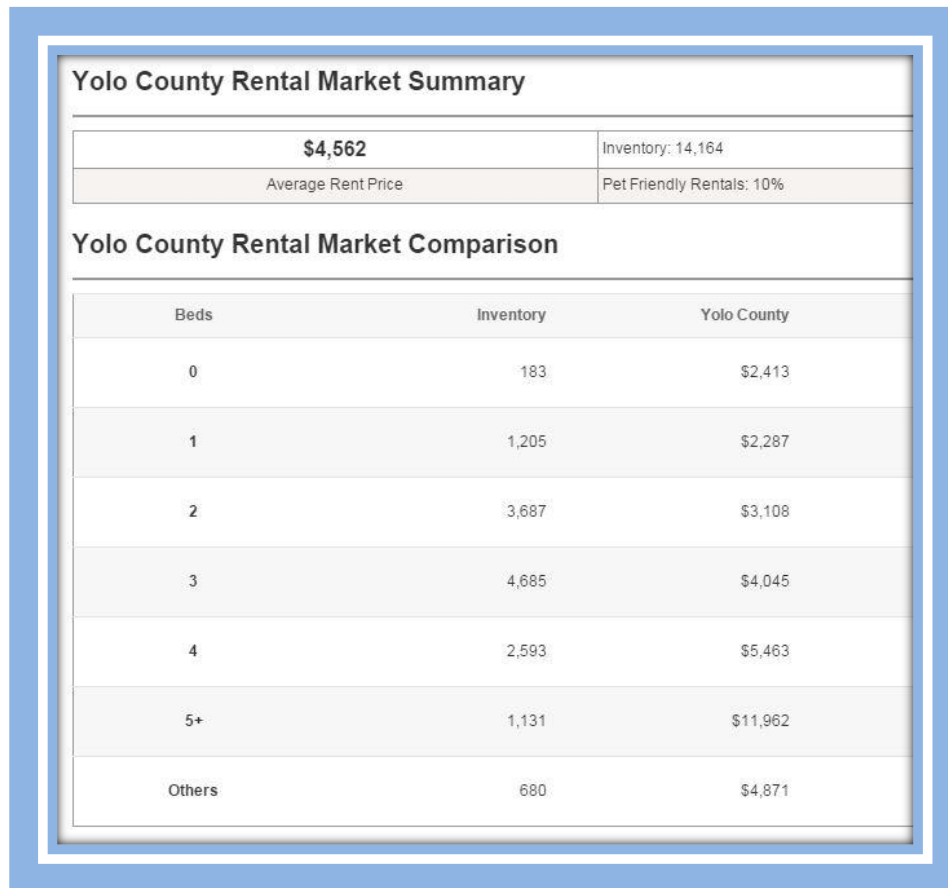
Studies completed among farm workers consistently report high levels of food insecurity. Two studies completed in California reported around 1/2 to 2/3 of participants interviewed were food insecure. A food security assessment of farm workers in Fresno conducted in 2007 prior to the economic recession reported 45% of participants were food insecure (Wirth, Strohlic et al. 2007). Another study completed in the Salinas Valley in Monterey County reported 66% food insecurity among participants. Mixtec workers participating in the Salinas study appear to be at an even higher risk for food insecurity and hunger (Kresge and Eastman, 2010).

In North Carolina, a study was completed among migrant and seasonal farm workers to determine their level of food security. Surveys were completed by adults in 102 farm worker households using the USDA Household Food Security Survey Module. Additionally, researchers completed 25 in-depth interviews with selected participants. Results showed that 47% of these farm worker households were food insecure including 10% with hunger (Quandt, et al, 2004).

A similar study completed in Texas with 100 migrant and seasonal farm workers revealed that 82% of the participants were food insecure with 49% of these having hunger (Weigel, Armijos et al, 2007). In Ohio, 50 migrant farm workers participated in a survey to assess food security among children of farm worker families. Only 22% of the children in participating farm worker households met the minimum recommended food group servings for their ages (Kilanowski, et al. 2009).

Barriers to Healthy Food Access among Farm workers

Living in poverty is one of the major barriers to healthy food access among farm workers who may have to make difficult choices between meeting other basic needs such as housing costs or medical care and food (Sullivan, Clark et al. 2009). Nationally, farm workers are among the poorest of all US residents. Findings from the National Agricultural Worker Survey (Aguirre International 2005) indicate that 75% of individual farm workers and 52% of farm worker families in California earn less than \$15,000 per year, 43% of individual farm workers and 30% of farm worker families earn less than \$10,000 per year. Despite



this high level of poverty, less than 1/3 of workers used needs-based services like SNAP, TANF and WIC. Only 37% took advantage of contribution based services including unemployment insurance, social security and disability. In addition, on-farm housing was not common, with 96% of all farm workers in California living in private market housing off farm. (Aguirre 2005).

FIGURE 8 RENTAL COSTS IN YOLO COUNTY

Housing costs in California are high, compounding the likelihood that farm workers may live in substandard conditions, lacking a kitchen, and may not have enough money for both food and rent. In Yolo County, 57% of county residents pay more than 30% of their monthly income for rent.

In addition to the inability to pay for food, farm workers experience a range of further barriers to healthy eating.

These commonly include:

- isolation in rural "food deserts"
- unstable income and employment due to seasonal nature of work
- inadequate housing and cooking facilities
- lack of transportation
- low utilization of food assistance programs

Non-utilization of assistance programs can be attributed to a lack of legal status (about half of farm workers in CA are undocumented¹), lack of understanding regarding eligibility for programs, and seasonal income fluctuation. The data for this study's population can be seen in the results section below.

Methods

Choice of Study Location

Yolo County was selected as the site for this study for a variety of reasons explained below.

Rural Yolo County has been identified as a food desert but no research has been done to pinpoint where farm workers live in this region and to what level they are food insecure.

Yolo County as a whole shows very low rates of SNAP enrollment with only 31% of eligible individuals participating in the program. The school lunch program, which has an active farm to school component has 77% of those eligible enrolled but the school breakfast program is reaching only 33% of those eligible and the summer nutrition program serves a bleak 19% of those eligible.^{xi}

Yolo County is primarily rural and agricultural with a large population of farm workers. Nationally, eighty percent of farm workers are males with two-thirds of them being under the age of 35. Sixty percent of farm workers are married. But about 40% of them are males unaccompanied by family members. More than half of all farm workers live in households with some non-family members and 75% of undocumented farm workers live in households that contain no family members.^{xii} All of these factors may contribute to low enrollment in SNAP and other food assistance programs.

Our purpose was to outline a plan toward improvement of community food security in a defined low income community by analyzing existing resources. Farm workers are among the lowest wage earners in the country averaging around \$13,000 per year. Many workers are employed seasonally, reducing their ability to purchase healthy foods to an even greater extent during the period of unemployment. In fact, previous CIRS work in Salinas

¹ NAWS

showed that food insecurity increased among participating farm workers during the off season.^{xiii} About half of farm workers are undocumented, limiting their access to SNAP benefits and increasing their need for alternative food programs or sources of food.

Resources abound for addressing food inequality in Yolo County, including the University of California, Davis, the Yolo County Food Bank with over sixty partner organizations, and a large community of farmers. In addition, Yolo County has multiple programs and agencies in place to address the challenges of providing healthy food to low income residents.

Survey

Convenience surveys were administered in Spanish to farm workers in Yolo County. Convenience sampling is a specific type of “non-probability” sampling method that relies on data collection from population members who are conveniently available to participate in the study. The first available primary data source was used for the research without additional requirements. In other words, this sampling method involves getting participants wherever you can find them and typically wherever is convenient. In this case, surveys were administered at farm worker health fairs, at migrant health clinics and in workplaces.

We designed a short survey instrument that would still maintain its effectiveness in addressing the issues of food security and other objectives of this study (see Appendices A and B for the English- and Spanish-language survey instruments). The survey includes questions from validated instruments but we added non-validated questions including questions from the Fresno Farm worker Food Security Assessment questionnaire (Wirth, Strohlic et al. 2007) and the Salinas Farm worker Food Security Assessment questionnaire (Kresge and Eastman 2009).

The USDA Six-item Short Form of the U.S. Household Food Security Survey Module was the validated instrument included in the survey. This shortened version of the USDA Food Security Module was developed as a brief tool to identify food security status among the general American population (Blumberg, Bialostosky et al. 1999).

A total of 114 farm workers were interviewed in-person between March and October 2015. All farm workers participating in this survey were working and/or living in Yolo County at the time of the study. Survey administrators included community-based outreach workers from RISE, Inc and a professionally trained researcher.

Three initial screening questions were administered to determine participant eligibility. These questions confirmed that each participant was at least 18 years of age, currently lived and/or worked in Yolo County, and worked in agriculture currently or at some time in the previous year.

Food Inventory

Another aspect of our study was an evaluation of available foods at the Yolo County Food Bank at various points in the year. We inventoried seasonal and fresh foods four times throughout the course of the project. Our goal in gathering this data was to see if the foods provided by the food bank as fresh offerings were both familiar and desired by Yolo County farm workers. We cross checked the inventories with data provided from farm worker surveys about food preferences.

Results

Farm worker Survey

Demographics

There were 60 male respondents and 54 female respondents to our survey. All of the respondents had worked in agriculture at some time during the 12 months prior to the survey. All of the respondents either lived or worked in Yolo County. More than half (69%) of respondents were married, compared with 31% single. More than half (69%) of married respondents lived with their spouses, compared to 30% of married spouses living alone. The majority (68%) of the respondents had children under 18 years of age living with them. The average number of children in each household was 2 with the highest number being 4.

The average age of survey respondents was 31.5 years old. Almost all (97%) reported Spanish as the primary language spoken in the household. Two respondents spoke English at home while 1 spoke Mixtec and 1 spoke Triqui.²

Ninety percent of respondents were employed in agriculture at the time they were surveyed. The main types of agricultural employment were: fieldwork, nursery work, field supervisor, labor contractor, packing house, ranch hand, and mechanic. At the time of the survey, 8.9% of participants were unemployed. The unemployment rate overall for Yolo County in 2015 was 6.4% and specifically during the months of our study was 6%. The primary reasons stated by participants for unemployment were: seasonal employment, company/farm operation went out of business, and caring for a sick spouse. Two respondents were students at the time of the survey.

² Mixtec and Triqui are indigenous Mexican languages.

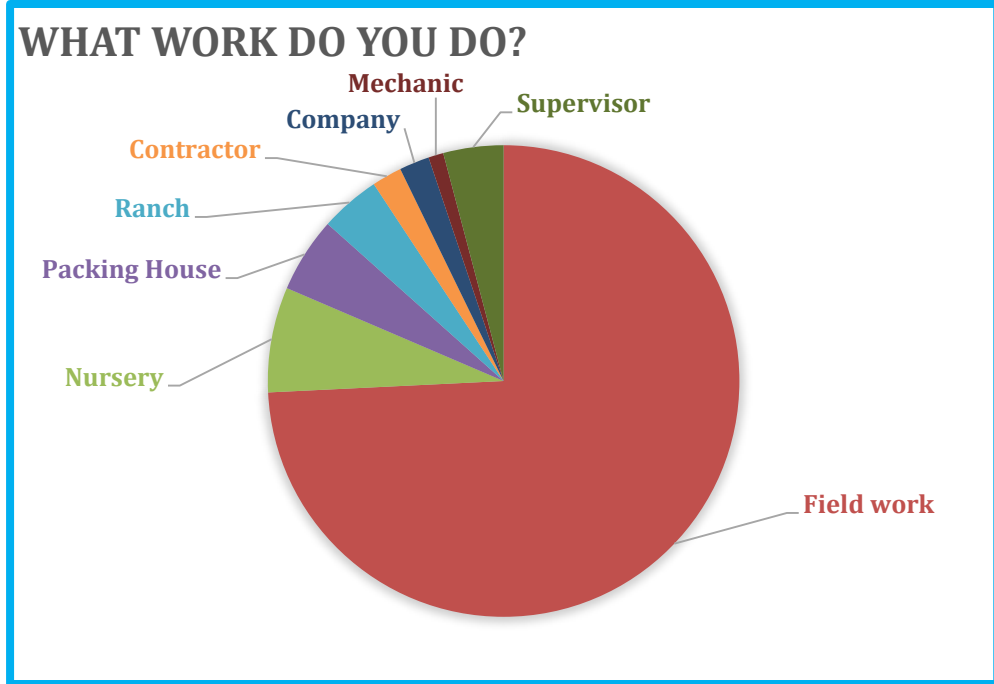
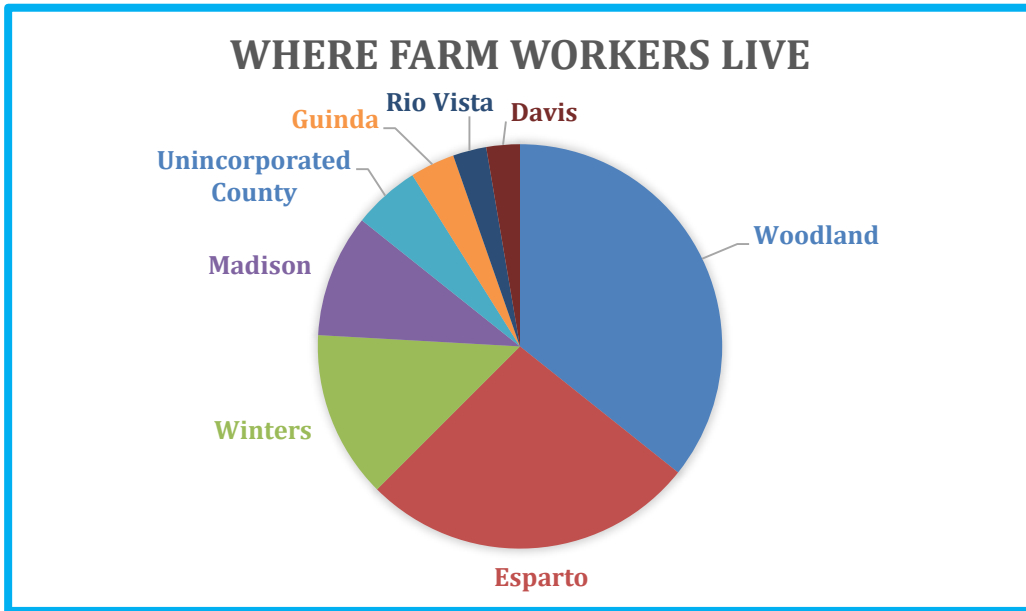


FIGURE 9 WORK TYPE REPORTED BY PARTICIPANTS



³Rio Vista is the only community outside Yolo County and is located near the southern boundary.

FIGURE 10 LOCATION OF PRIMARY RESIDENCE IN YOLO COUNTY

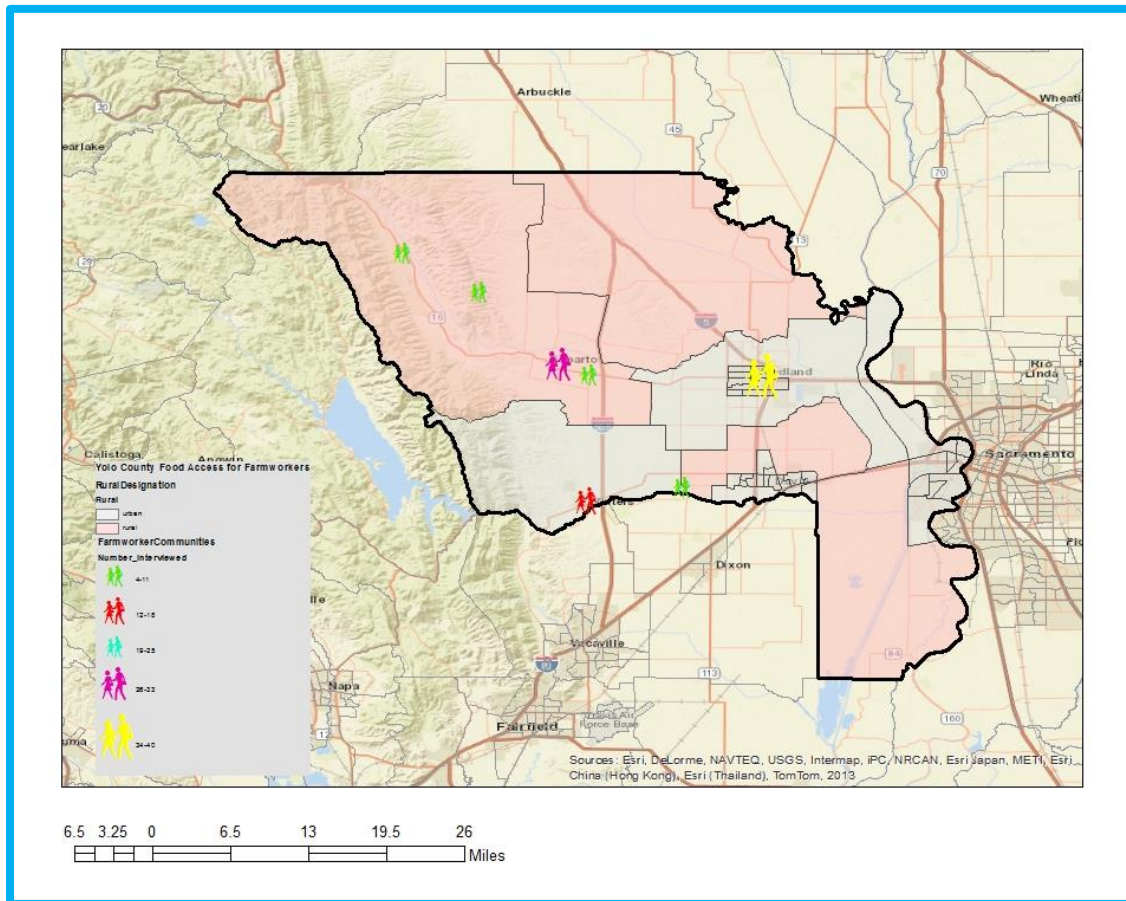


FIGURE 11 YOLO COUNTY SHOWING RURAL V URBAN LOCATIONS AND LOCATIONS WHERE INTERVIEWED WORKERS LIVE

40 respondents live in Woodland, a town with approximately 56,000 residents.

29 respondents live in Esparto, and 14 in Winters, two small rural communities in western Yolo County, and centrally located to many agricultural operations. 14 live in unincorporated rural areas of the county.

Farm worker Food Security Summary

Food insecurity among farm workers in Yolo County is almost three times the national average based on survey responses. For 47% of participants food ran out and they didn't have money to buy more. Reviewing by community, we can see that the frequency that food ran out is highest among workers living in Woodland. In Woodland 55% of households ran out of food "sometimes" during the year. Woodland and Esparto both have residents who ran out frequently during the year. The survey questions did not specifically ask at which time during the year food ran out, but farm workers in Yolo County are struggling with food insecurity at times during the year.

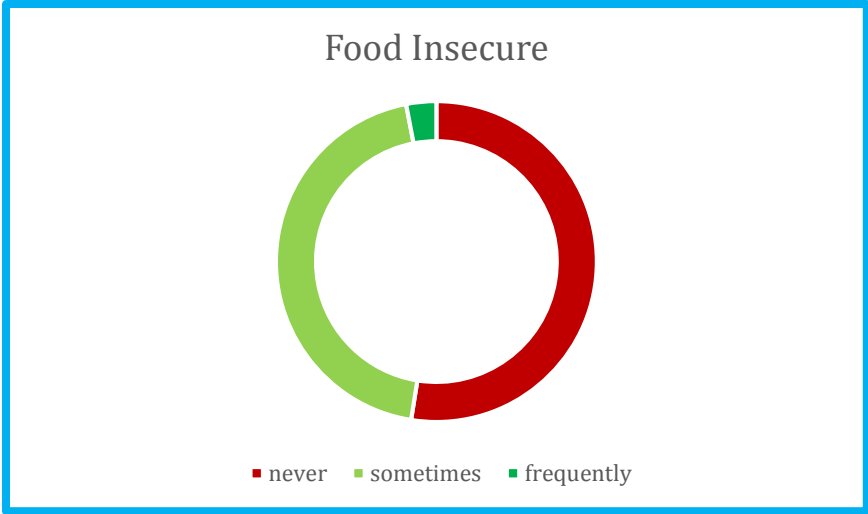


FIGURE 12 FREQUENCY THAT FOOD RAN OUT ALL DATA

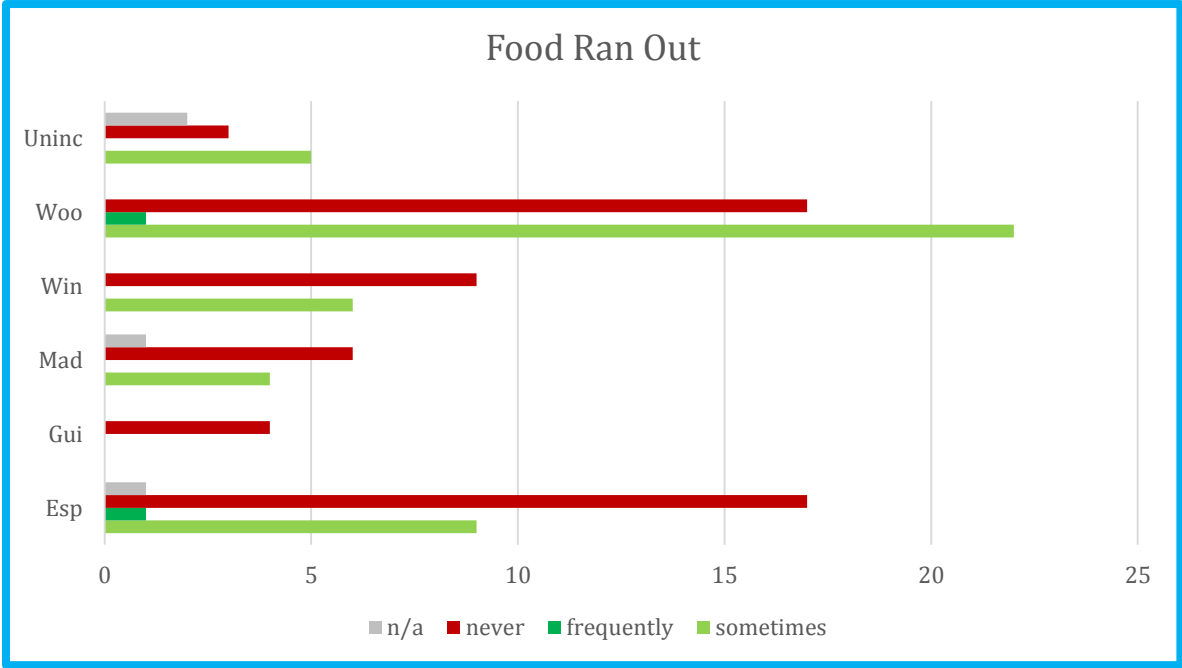
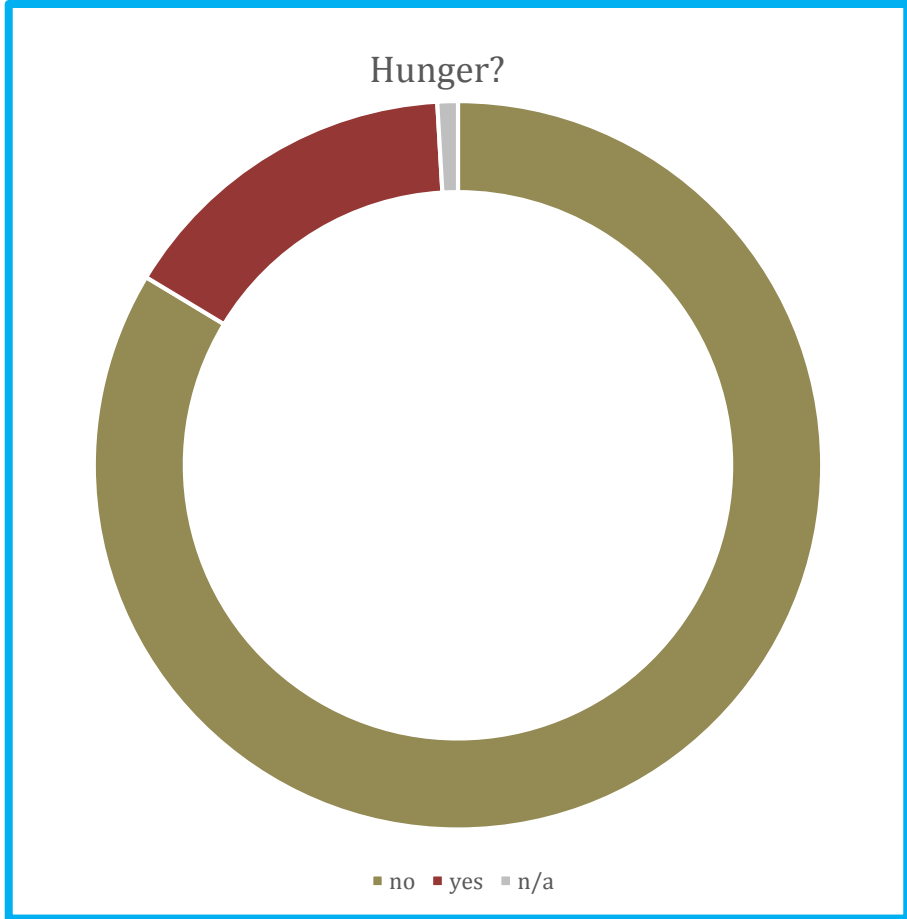


FIGURE 13 FREQUENCY FOOD RAN OUT BY COMMUNITY

In the last 12 months, the food that I bought didn't last long and I had no money to buy more.

- 52% Never
- 44% Sometimes (food insecure)
- 3% Frequently (very insecure)
 - **Total of 47% food insecure**



"In the past 12 months have you or anyone in your family eaten less or stopped eating because there was not enough money for food?"

In response to the above question, 83% of respondents said no, but 15% said yes (Figure 14). Of those that responded yes, most stated that this happened 1 or 2 months in the past year, with a small percentage stating that it happened every month, primarily living in the community of Esparto.

FIGURE 14 EATEN LESS?

When asked if they had enough food to eat a balanced and nutritious diet, almost 70% of participants reported that did, while 28% "sometimes" did not and 3% "frequently" did not. In total, 31% didn't have enough food to eat a balanced and nutritious diet. There was no definition of a "balanced or nutritious diet" given during the survey. But this self-reporting indicates that there are still a number of families unable to access nutritious foods for their household either by purchasing them or by receiving food assistance.

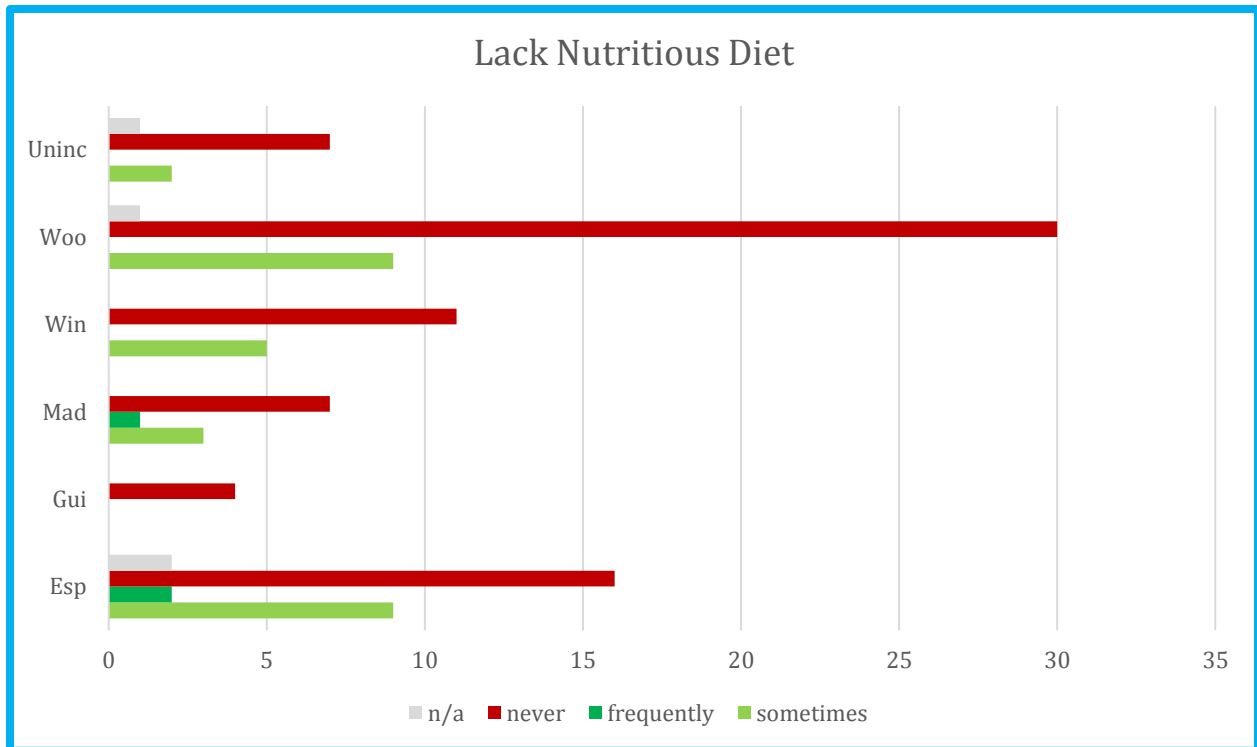


FIGURE 15 COMMUNITY STATUS WITH REGARD TO NUTRITIOUS AND BALANCED FOODS

In summary, almost half of the farm workers surveyed are experiencing food insecurity at some point during the year.

Food insecurity was reported in the following ways:

- ***15% had to eat less***
- ***47% ran out of food***
- ***31% did not have access to nutritious foods***

Knowledge of Food Assistance Programs

In California, the *Supplemental Nutrition Assistance Program (SNAP)* is called CalFresh. Also referred to as the food stamp program, Cal Fresh provides benefits for low income Californians with the aim of improving access to nutritious, affordable food. To be eligible, participants must have a net income below the Federal poverty level and either be a citizen or legal permanent resident. Undocumented immigrants are not eligible (CalFreshPrimer 2016). Since approximately 50% of farm workers in California are undocumented, this immediately eliminates a large number from eligibility, however, these workers may live in households with eligible individuals.

The WIC program is a federally-funded food assistance program for low income women who are pregnant, breastfeeding, just had a baby or have children under 5 years old, including foster children. There is no citizenship or legal residency requirement to be eligible for this program, and participants receive coupons for staple foods such as milk, eggs, bread, etc.

In order to determine both the knowledge of food assistance programs and participation in them, we asked participants about their knowledge of food stamps/CalFresh, WIC and food bank assistance programs.

There is a high degree of awareness of food assistance programs among farm workers in Yolo County. Sixty-seven percent of respondents had heard of food stamps, and 46% reported they had used food stamps within the past 12 months. When asked about specific Yolo Food Bank assistance programs they had utilized in the past 12 months, 61% said they had used some specific food program. The most utilized food bank programs were emergency food assistance (49%), drought food assistance (25%) and school markets (20%).

Respondents utilized 7 of the 9 food assistance programs listed in the survey. This shows a high degree of awareness of food assistance programs and how to access those programs.

Knowledge and Use of WIC and CalFresh

Of the respondents who did not use food stamps, almost half had not tried to apply for them (46.7%), while the remaining stated that they had problems with the application process, did not qualify because they do not have papers/ are afraid of ICE or because they earn too much (See Figure 15). This points to the need for further information or outreach opportunities to help people better understand the application process or how they might qualify for the programs. The latter choices indicate that there are still misconceptions or fears about the program due to immigration concerns, language barriers, or time constraints to fill out the paperwork.

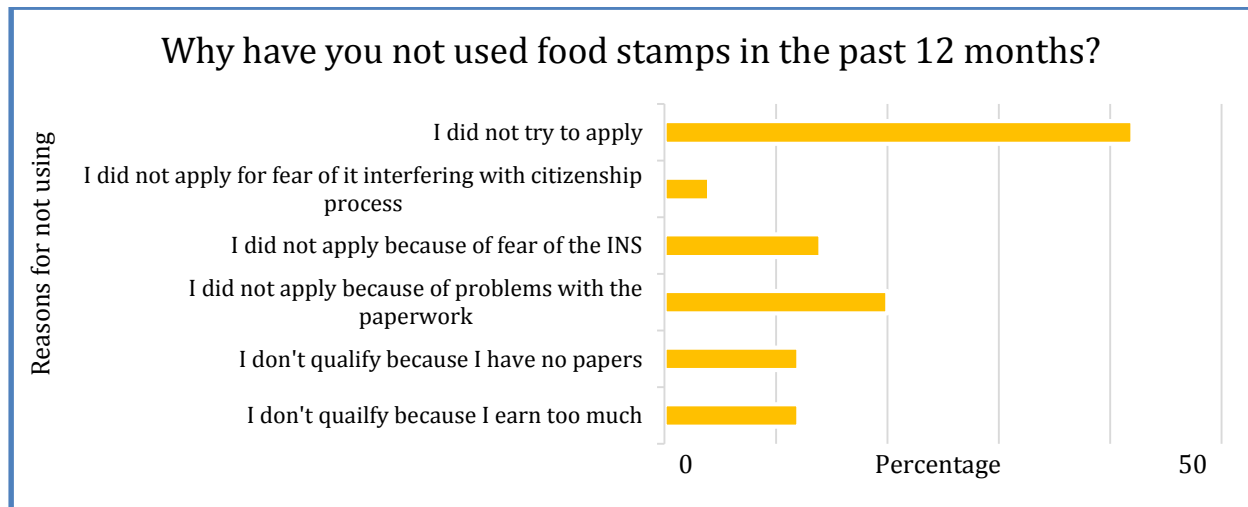


FIGURE 16 REASONS FOR NOT USING SNAP

Of all participants, 63% had heard of WIC and 31% had used WIC in the past 12 months. But half of the respondents to the survey have children under five living with them and are therefore eligible, but clearly a portion of these have not applied for the program. The main reasons for not utilizing the service mirrored reasons for not using SNAP. It is important to note that 10% of respondents with young children did not apply for WIC due to lack of documentation or fear of ICE, even though all children are eligible regardless of immigration status. Figure 17 shows the knowledge and use of WIC broken out by community. Blue indicates negative answers and orange indicates positive answers. For example, in Esparto at the bottom of the graph, knowledge of WIC was high while use was low.

These data point to a need for service providers to develop outreach programs for farm workers on how to access federal food programs, who is eligible and to provide more targeted outreach in the communities where food insecurity was highest, despite the availability of food programs.

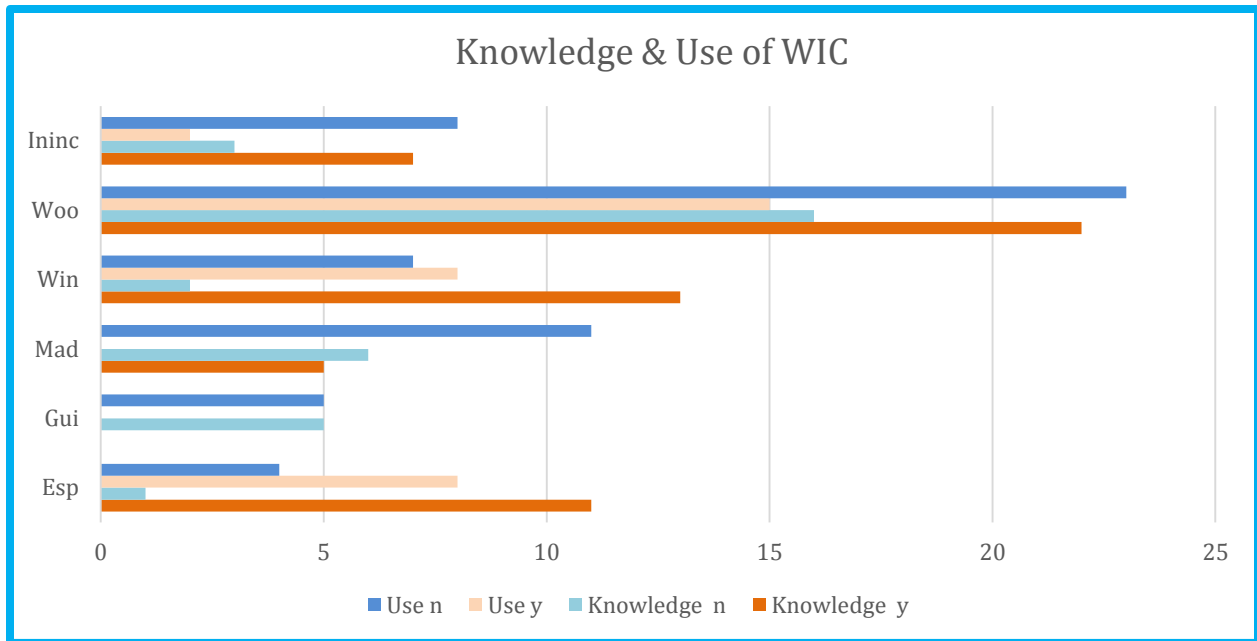


FIGURE 17 KNOWLEDGE AND USE OF WIC IN 6 FARM WORKER COMMUNITIES, YOLO COUNTY

There is a high level of awareness of both WIC and CalFresh/SNAP programs overall, but there are still eligible families that are not applying for the programs. As Figure 17 illustrates, there are some communities, like Madison and Guinda, where none of the residents interviewed utilize WIC and in Guinda there was no knowledge of WIC. In most of the communities where farm workers live, there is knowledge of federal food programs and yet food insecurity is experienced.

Knowledge and Use of Yolo County Food Bank Programs

We asked participating farm workers to let us know if they had ever heard of specific Yolo Food Bank programs as well as Cal Fresh (SNAP). The results are shown in Figure 18. Figure 19 shows actual use of programs among participants. Seven of the 9 programs listed were utilized by respondents. This shows a high degree of awareness of county food assistance programs.

Almost half of participants have heard of the Emergency Food Aid program run by the Yolo Food Bank. However, there are two additional programs specifically designed to reach isolated rural residents like farm workers. The Drought Food assistance and Rural Food Delivery programs are in place to assist all rural residents but also target farm workers.

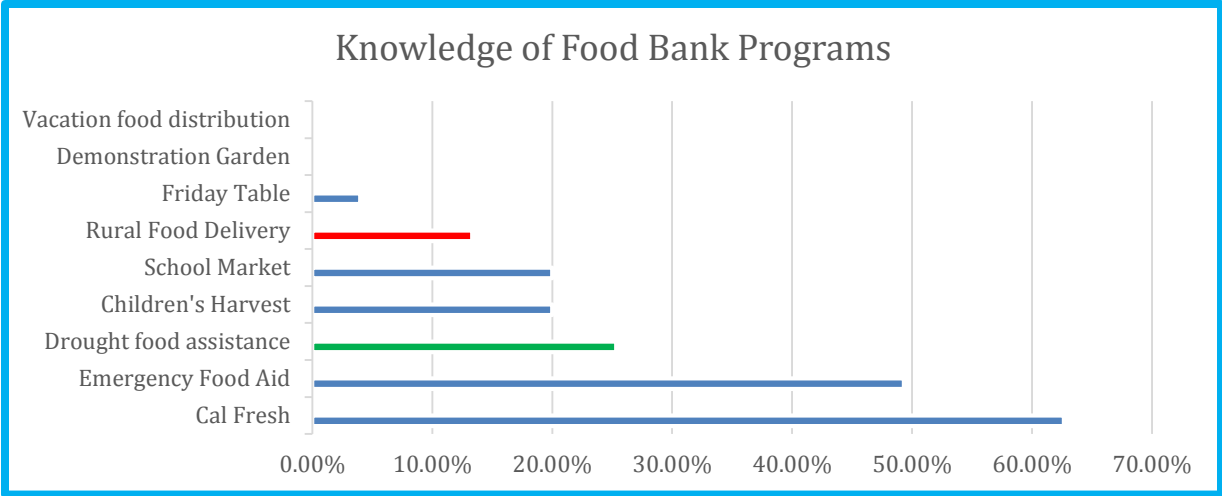


FIGURE 18 PERCENT OF PARTICIPANTS WHO HAVE HEARD OF PROGRAMS

Interestingly, about 25% of the participants in our survey had heard of the emergency drought relief food boxes, a short-term, temporary program, while fewer, only 13%, had heard of the longer term, monthly rural food deliveries.

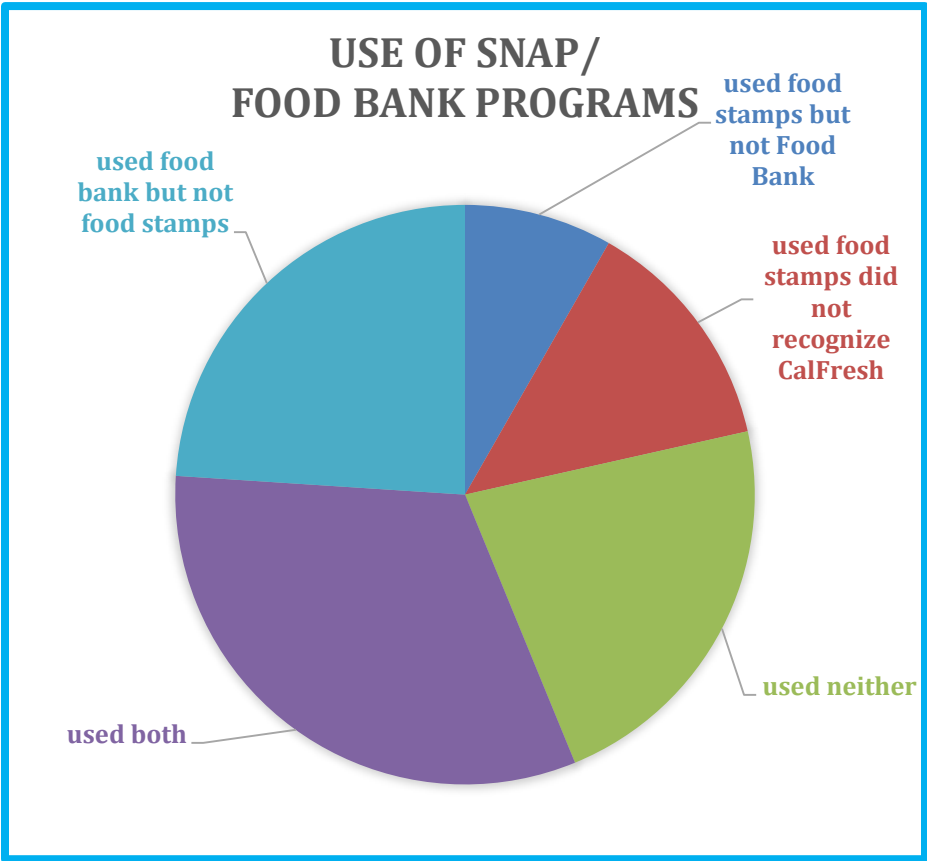


FIGURE 19 USE OF SNAP AND/OR FOOD BANK PROGRAMS

Nutrition/ Common Foods

The second part of the survey asked participants questions about the fruits and vegetables that they like to buy, and what they eat during the day.

The questions included:

- What which fruits and vegetables do you choose to buy in the store?
- What types of fruits and vegetables would you like to buy more for yourself or your family if it was affordable?
- List all of the fruits and vegetables that you ate yesterday (breakfast/lunch/dinner).

The most common fruit and/or vegetable that respondents chose in the grocery store was tomatoes (84%), followed by “fruits” (74%) and potatoes (70%). When asked what food they would like to buy more if money was not an object, the top items included tomatoes, strawberries, mangos, pineapples, avocados, watermelon, chayote, blackberry, banana pineapple guava and melons. Some respondents stated that if they could afford to buy organic, they would.

Fruit is typically a more expensive food item to purchase and may be considered a “luxury”, especially when challenged to meet basic food needs. However, fresh tomatoes are a main staple of the Latino⁴ diet, and the results indicate that they are sometimes not affordable. Yolo County is a top producer of processing and fresh market tomatoes.

⁴ The majority of farm workers in California are from Mexico.



FIGURE 20 FRUIT AND VEGETABLE PURCHASES

Respondents favor ethnic foods, specifically tropical fruit, and also organic fruit. Fruits represent an important part of a balanced diet and the lack of availability and / or affordability within an agriculturally rich area is noteworthy. Lack of access to fresh fruit and vegetable choices in Yolo County is made more significant by the location of fruit, vegetable and organic farms near farm worker communities as well as on the farms where workers spend their days.

When asked what fruits and vegetables were eaten in the previous day for breakfast, lunch and dinner, the most common fruits were bananas and oranges. Lunch fruits and vegetables typically included potatoes, salad, or vegetable soup. Potatoes, winter squash and tomatoes were also common dinner vegetables. (Figures 22-25) With the exception of bananas, all of these products are seasonally grown in Yolo County. These items could be made available more frequently and could be made available in the rural areas that don't have access to a fully stocked grocery store within a 10 mile radius (Rumsey, Guinda, Brooks, Zamora, Dunnigan and other unincorporated areas).

Our survey also asked participants to name what foods they had eaten in the last twenty-four hours by meal. The results are below.

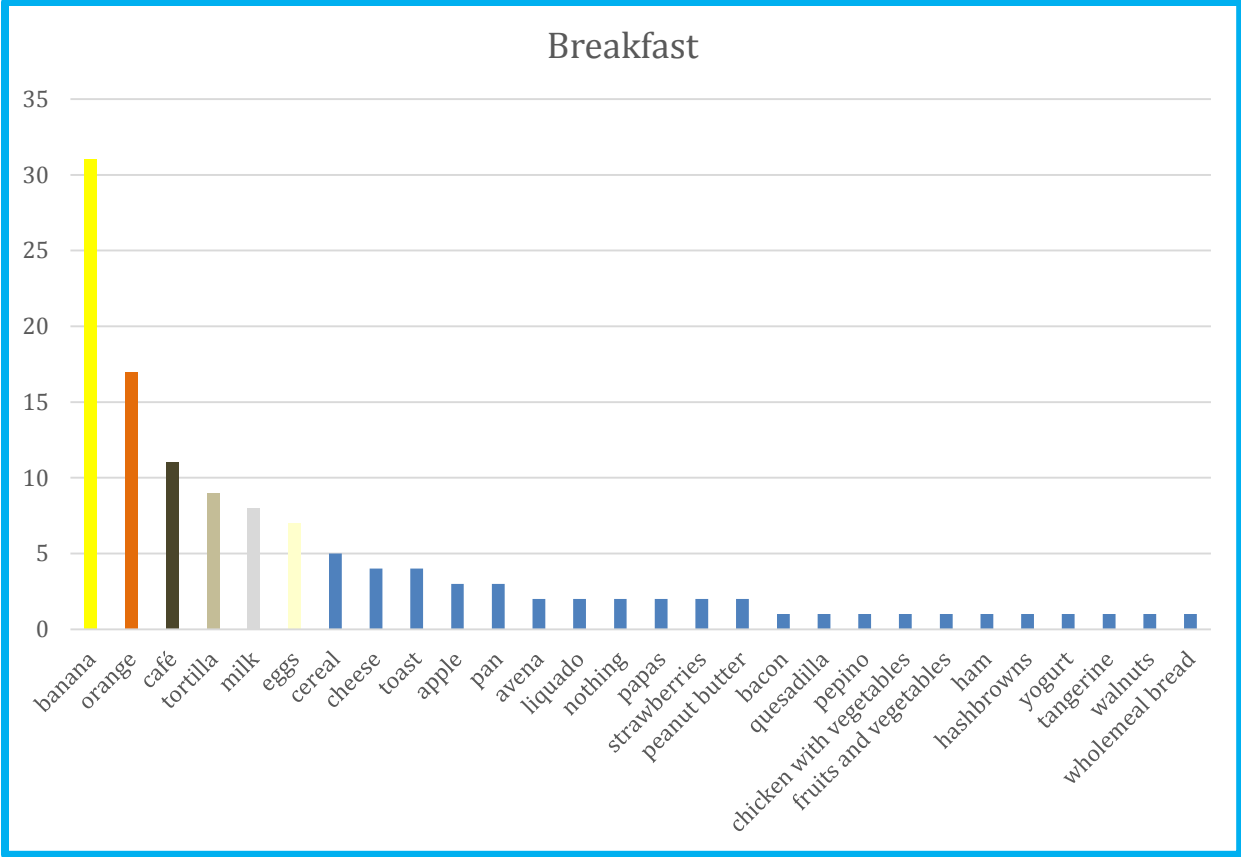


FIGURE 21 BREAKFAST ITEMS EATEN IN LAST 24 HOURS

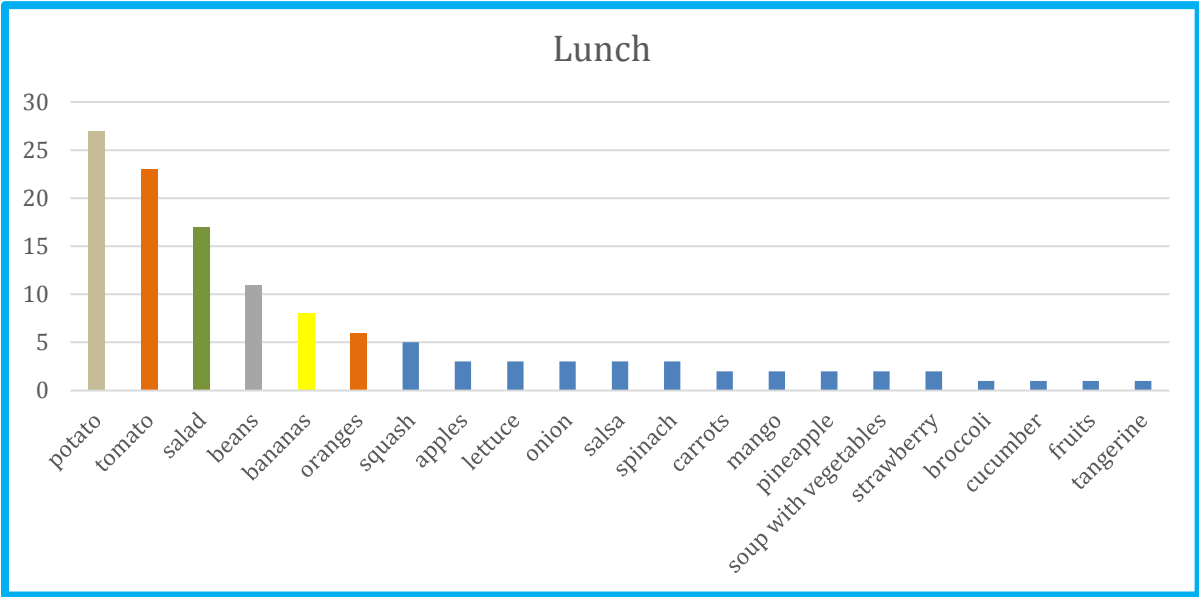


FIGURE 22 LUNCH ITEMS EATEN IN LAST 24 HOURS: FRUITS AND VEGETABLES

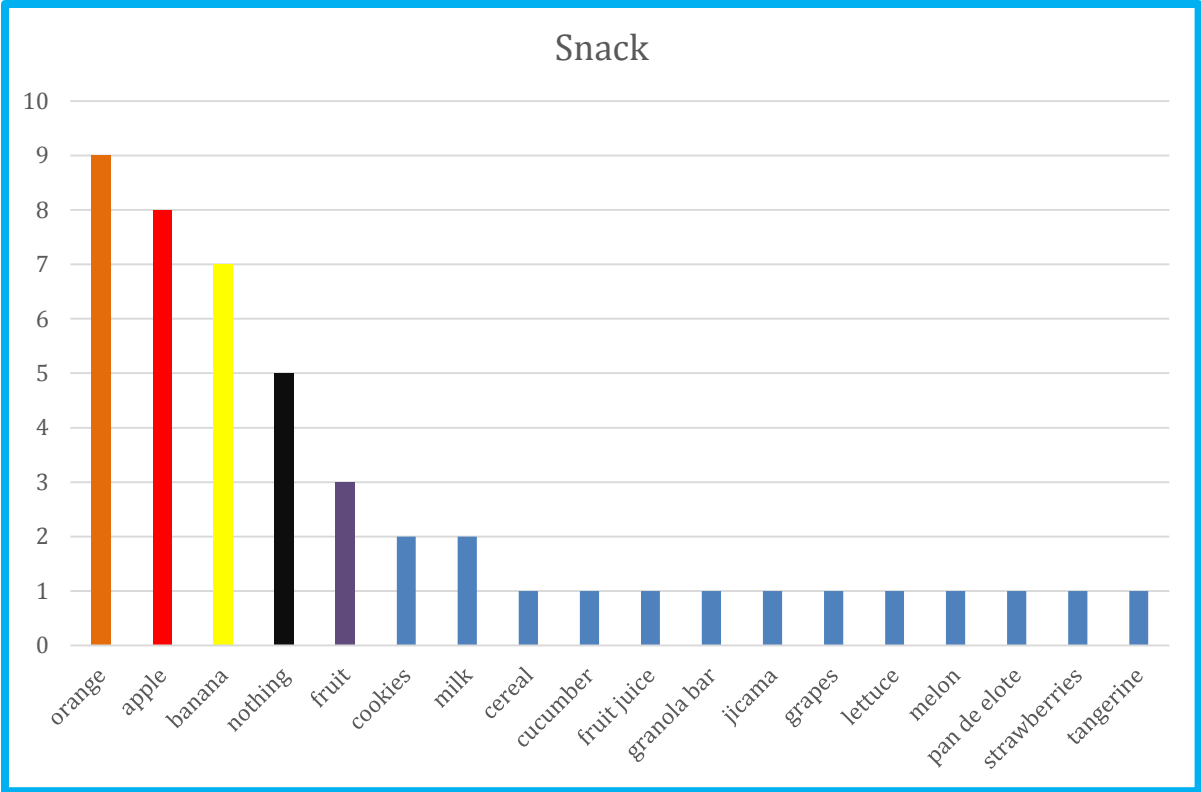


FIGURE 23 SNACKS EATEN IN LAST 24 HOURS

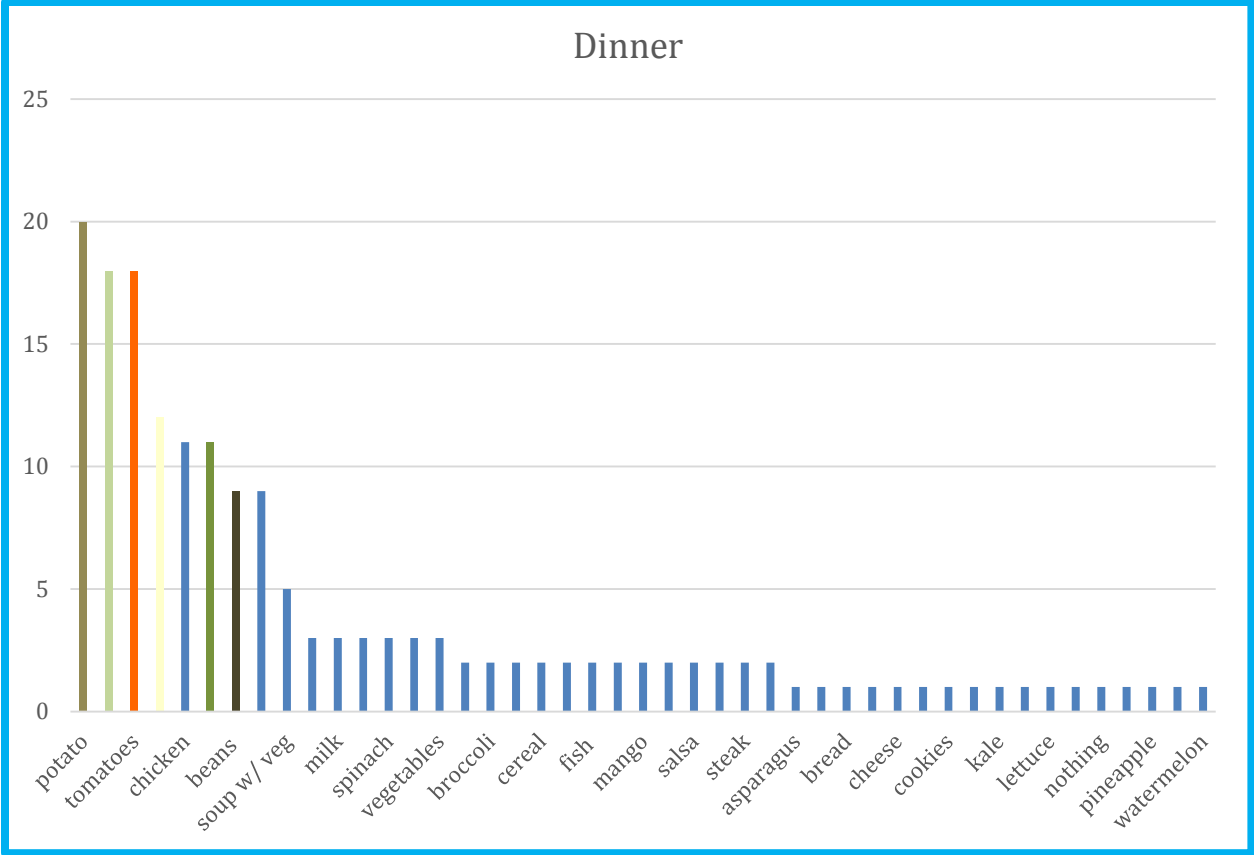


FIGURE 24 DINNER ITEMS EATEN IN LAST 24 HOURS

Food Program Assessment

Physical Access:

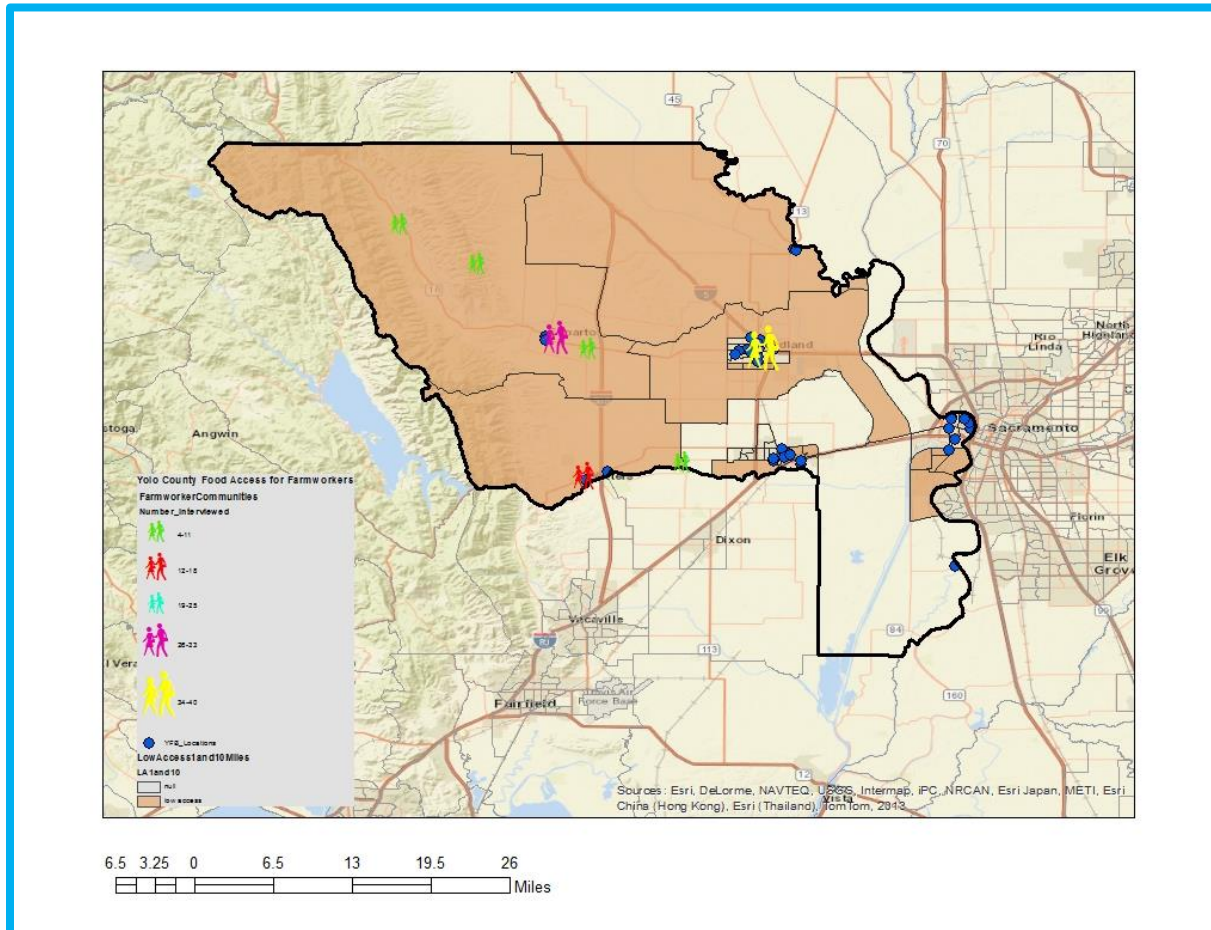


FIGURE 25 MAP SHOWING LOW ACCESS AT 1 AND 10 MILES, WHERE INTERVIEWEES LIVE, AND WHERE YOLO FOOD BANK PROGRAMS DELIVER

As this map shows, there are some rural regions not served by the Yolo Food Bank, those farthest to the north and west. As our data show, many farm workers have not heard of specific Yolo Food Bank programs. While most have heard of SNAP, there is not an equivalent positive response when asked about Cal Fresh indicating a disconnect between those two names for the same program. In addition, most farm workers in this study had not heard of the Rural Food Delivery Program or the Drought Assistance Food Program.

It is clear that the focus of food programs in Yolo County is in urban regions and while many farm workers do live in urban regions, they do not primarily live where the food distributions are clustered. In fact, there is a vast area of the county where there are no food bank programs. While the population density is low in these areas, the need for

RURAL FOOD DELIVERY

“RFD was developed in 1998 to address the unique needs of food insecure families and individuals living in remote areas. Research shows that people living in rural areas experience higher rates of poverty and lack access to fresh, nutritious foods. These areas tend to lack emergency food providers and resources for people who need them.

To provide people in remote areas with ongoing access to healthy foods, the Yolo Food Bank puts together 25-pound food boxes each month that contain a variety of grocery items. An average 650 food boxes are delivered to 9 sites each month. An additional 150 boxes are created during the summer season to provide food to families and individuals living at 2 local Migrant Centers.”

■ Yolo Food Bank

assistance appears to be high. For example, in Guinda the farm workers we interviewed had no knowledge of federal food programs whatsoever.

It should be noted that there is a high population of farm workers living in the City of Woodland and there are a wide number of food programs in that city. However, our interviews show that for 58% of those surveyed in Woodland, food ran out either sometimes or frequently. This is exactly the same percentage of workers who reported using WIC. For workers in urban areas, access to food programs is not an issue. However, knowledge of them might be.

Cultural Access

This section is a comparison between the stated preferences of farm workers we interviewed and the Yolo Food Bank inventories of fruits and vegetables we conducted quarterly. This was completed to determine the “cultural fit” between what farm workers choose to eat and what is included in county food assistance programs.

To determine food preferences, we asked a series of questions regarding purchase of fruits and vegetables as well as consumption of fruits and vegetables. Figure 19 shows the results of the question asking participants what fruits and vegetables they purchase most often from a list provided to them.

Over half of all participants purchased from all of these groups: tomatoes – including salsa fresca, chili verde and tomatillos—fruits and fruit juices, potatoes, salads or spinach and vegetable broths and soups. In addition, we asked participants what fruits and vegetables they would like to buy if economical. Results are in Figure 26.

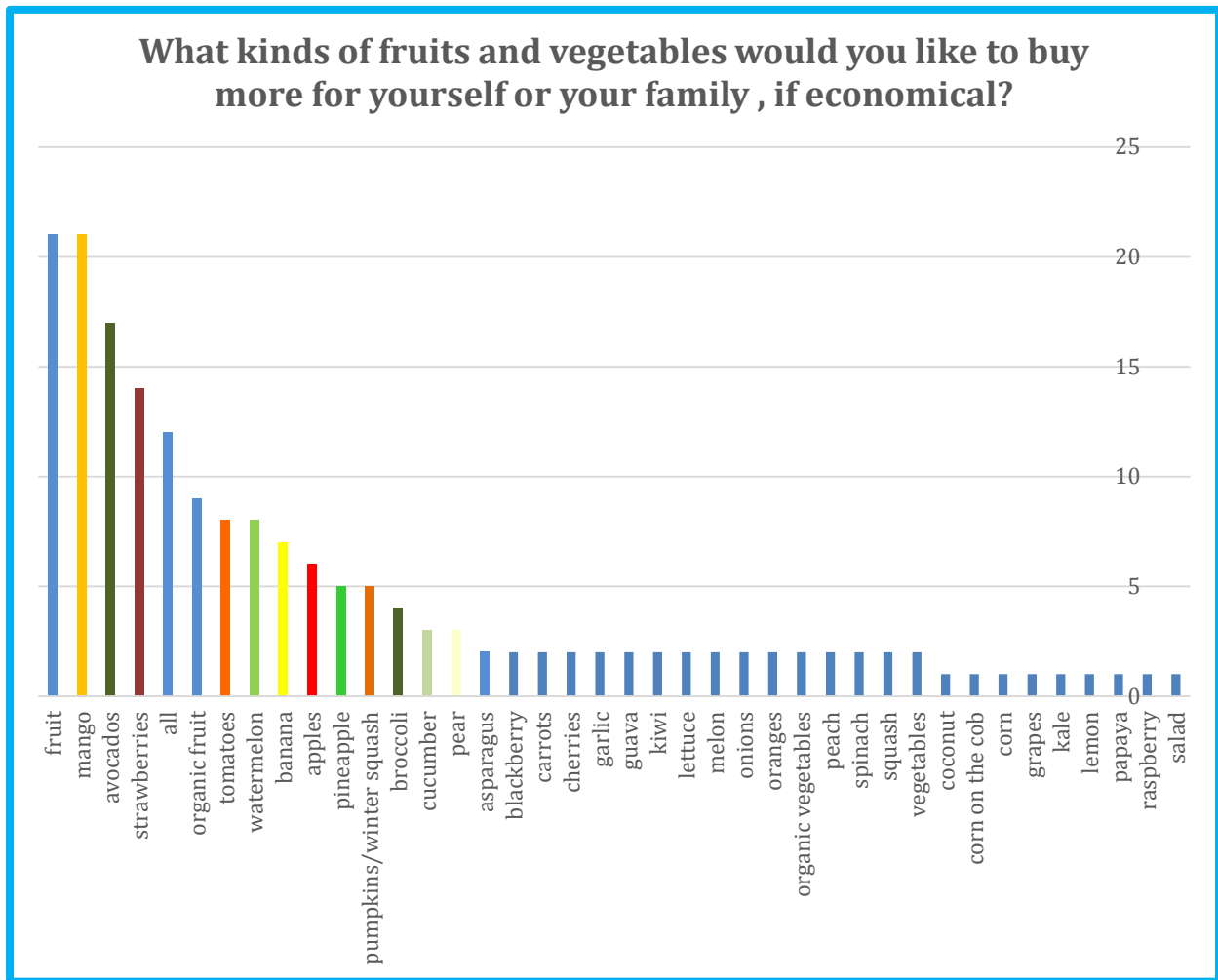


FIGURE 26 FRUIT AND VEGETABLE PREFERENCES RANKED

The top nine preferred fruits and vegetables that were identified by name are:

1. Mango
2. Avocado
3. Strawberry
4. Tomato
5. Watermelon
6. Banana
7. Apple
8. Pineapple
9. Pumpkin/Winter Squash

All of these have varied availability at the Yolo Food Bank.⁵ Mangoes were observed in June and December but not in March or August. Avocados, apples, bananas and tomatoes were observed at all inventories indicating a year round availability. Strawberries were observed in March and August. Watermelon was observed only in June. Pineapple was observed in March and June. Pumpkin/winter squash was observed only in December.

march	june	august	December
Apples	Apples	Apples	Apples
Avocados	Avocados	Avocados	Avocados
Bananas	Bananas	Bananas	Bananas
		Citrus	Citrus
head lettuce		Head lettuce	Head lettuce
lettuce mixes, bagged	Lettuce Mix, bagged	Lettuce Mix, bagged	Lettuce Mix, bagged
	Mango		Mangoes
Orange juice			
Oranges			
Pineapple	Pineapple chunks		
Potatoes	Potatoes	Potatoes	Potatoes
Potatoes	Potatoes	Potatoes	Potatoes
	Prepped guacamole	Prepped guacamole	Prepped guacamole
Prepped Salad Bowls	Prepped Salads	Prepped Salads	Prepped Salads
		Salsa	Salsa
Strawberries		Strawberries	
			Squash
Tomatoes	Tomatoes	Tomatoes	Tomatoes
	Watermelon		

FIGURE 27 PREFERENCES AVAILABILITY AT YOLO FOOD BANK

In addition, participants stated that all types of fruit, organic fruit and vegetables would be purchased if they were more economical. It's clear from these responses that participants would prefer to eat more fruits. From responses, farm workers include bananas, oranges, tomatoes and apples in their daily diet and grocery shopping, perhaps because these are more available and affordable items. However, they would prefer to include more diversified fruits, especially fruits that are more familiar and culturally common, such as mango, avocado, strawberry, pineapple, chayote (See Figure 26 above).

Discussion and Recommendations

1. More distribution into isolated rural regions
2. Education and outreach
 - a. Local fruits and veg and how to use them
 - b. Food programs offered and where to access them

⁵ See full inventory in Appendix

- c. SNAP/Cal Fresh who is qualified
3. Frozen fruits and veg in seasons when preferred are not available fresh
4. Outreach to farmers for local fruit donations
 - a. Food benefits for workers on farms
 - b. Distribution in small rural stores
5. Suggestions for replacements of favored fruits with local fruits
6. Geographic expansion of community based food bank programs

Our outcomes were accomplished through an integrated research project addressing both farm workers and food programs: in a sense, “matchmaking.” We gained a better knowledge of where farm workers live in rural Yolo County. We determined the level of food security of these workers. And we determined both overlap and gaps in food assistance programs currently serving residents of Yolo County.

It is clear from the data presented in this report that farm workers are food insecure even though they have knowledge about food assistance programs at both the federal (SNAP, WIC) and county levels.

Reviewing the map generated showing low access to super markets and Yolo Food Bank food assistance programs (Figure 24), there is a clear need for more outreach and distribution in isolated rural regions, especially in the northwest section of the county. While farm workers in Yolo County follow the pattern in California and live primarily in urban areas where private market housing is available, even those who live in Woodland and Winters have challenges with food security.

Reviewing the knowledge and use of food programs provided by farm workers, it is clear that some educational outreach is warranted. While Latino farm workers prefer fruits they are familiar with, it might be worthwhile to develop an educational program highlighting local fruits and vegetables specifically targeted to farm worker families. Information for farm workers about food programs—what they are, who qualifies and where to access them—should be distributed to farm workers in a suitable format. A quick facts sheet on federal food programs would be very useful, especially for those workers who have not yet been reached, almost half of those interviewed.

There seems to be a need for improved connections between farms and local retail outlets, especially small local shops in rural northwestern Yolo County. With information on what fresh fruits and vegetables farm workers will use, the Yolo Food Bank may need to seek a source for some of the preferred items that are cost prohibitive for farm workers. Farm employers may want to develop some benefit for farm workers to make sure they have access to fresh fruits and vegetables as a component of their employment.

Yolo Food Bank may need to increase staff time to solicit donations from local farms for preferred food items for the existing distribution channels. Alternatively, it might be feasible for

the food bank to work directly with local farms to offer produce to farm workers at a reduced price.

The food bank may want to seek access to more culturally preferred frozen fruits, like berries, canned fruits, like pineapple or dried fruits, like mangoes. Alternatively, they may want to develop an easy to understand fact sheet that offers suggestions for substituting tropical fruits with locally grown ones, explaining the taste and health benefits.

By working with the Yolo Food Bank, researchers were able to have an open dialogue with the primary food assistance provider in the county. We expect that the results we present here will encourage food assistance providers to focus on rural and remote farm worker communities and provide appropriate food choices to those communities. In addition, the outcomes should provide a target for SNAP educators and providers.

The current program at Yolo Food Bank called the Kids Farmers Market program, is an excellent example of an existing program that delivers fresh fruits and vegetable to families in Yolo County. Expanding this program geographically would be an excellent way to get more local foods that are culturally appropriate and nutritious to farm worker families. This program could provide foods such as tomatoes, watermelons, potatoes and winter squash, and offer these items at more rural schools or rural community gathering locations, like churches and health clinics.

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Appendices

Appendix I: Survey Instruments

Farm Worker Food Security Survey-- English Qualifications

Good morning (good afternoon). My name is _____. I am a health promoter with [insert name here]. We are conducting a survey to learn more about nutrition among farm workers here, in Yolo County. This information will serve to improve nutrition among farm workers and their families.

I have a survey that will take 15-20 minutes. This survey is completely confidential. Furthermore, you do not need to respond to any questions that you do not wish to answer, and you may terminate the interview at any time.

Would you be interested in participating in this survey?

Before we start, I have a few questions for you to confirm that you qualify for the survey.

1. Gender [Don't ask, just note]

Male

Female

2. Are you 18 years of age or older?

Yes

No:

ASK TO SPEAK TO SOMEONE THAT MEETS THESE REQUIREMENTS. IF THERE IS NOT A PERSON THAT QUALIFIES, FINISH HERE.

Thank you very much; those are all the questions that we have for you. This survey requires that we speak to people who are 18 years old or older.

3. Have you, or a family member that resides with you, worked in agriculture during the

past 12 months, such as in the field, in a packing house, or a nursery?

Yes

No FINISH HERE. Thank you very much. These are all the questions we have for you. This survey requires that we speak to people who have worked in agriculture during the past 12 months.

4. Do you live or work here, in Yolo County?

Yes

No FINISH HERE. Thank you very much. These are all the questions we have for you. This survey requires that we speak to people who live or work in Yolo County.

5. In what community do you live?

6. Are you married?

Yes

No

If yes, Do you live with your husband/wife here?

7. Do you have children under the age of 18 that live with you, either yours or your partner's children?

Yes

No

If yes, how many?

U.S. Household Food Security Survey Module: Six-Item Short Form

Transition into Module :

These next questions are about the food eaten in your household in the last 12 months, since (current month) of last year and whether you were able to afford the food you need.

NOTE: If the placement of these items in the survey makes the transition/introductory sentence unnecessary, add the word “Now” to the beginning of question HH3: “Now I’m going to read you....”

FILL INSTRUCTIONS: Select the appropriate fill from parenthetical choices depending on the number of persons and number of adults in the household.

I’m going to read you several statements that people have made about their food situation. For these statements, please tell me whether the statement was often true, sometimes true, or never true for (you/your household) in the last 12 months—that is, since last (name of current month).

8. The first statement is, “The food that (I/we) bought just didn’t last, and (I/we) didn’t have money to get more.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?

Sometimes true

Never true

DK or Refused

9. “(I/we) couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?

Often true

Sometimes true

Never true

DK or Refused

10. In the last 12 months, since last (name of current month), did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn't enough money for food?

Yes

No (Skip to Q12)

DK (Skip to Q12)

11. [IF YES ABOVE, ASK] How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?

Almost every month

Some months but not every month

Only 1 or 2 months

DK

12. In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food?

Yes

No

DK

13. In the last 12 months, were you every hungry but didn't eat because there wasn't enough money for food?

Yes

No

DK

Food Programs

Now I have some questions for you regarding food assistance programs. I would like to remind you that everything we have discussed is completely confidential, and you do not have to respond to any questions you do not wish to answer.

14. Have you heard about food stamps or EBT?

Yes

No

DK

15. Have you used food stamps or EBT in the past 12 months?

Yes

No

DK

16. Have you gotten food from any food aid programs, like the food bank or pantry?

Yes

No

DK

17. Will you name the food aid program (s) if you can?

Emergency food assistance

Drought food assistance

Rural food delivery

Friday's table

Children's harvest

Kid's farmers' market (school)

Demonstration garden

Holiday food distribution

Other (please specify)

18. If you have not used EBT in the last month, why not?[DO NOT READ RESPONSES, CHECK ALL THAT APPLY]

We do not qualify because we earn too much income

We do not qualify because we don't have papers (legal residency)

Because of problems with the paperwork

Because of fear of immigration (being deported)

Because it could intervene with the process of becoming a citizen

I have not tried to obtain food stamps/enroll in EBT

Other (please specify)

19. Do you have children under the age of 5 who live here with you or (IF THE INTERVIEWEE IS A WOMAN) are you pregnant?

Yes

No

DK/refus

20. Have you heard of WIC?

Yes

No

DK/refuse

21. Have you used WIC in the past 12 months?

Yes [Skip to Q 23]

No

DK/Ref

22. Why haven't you used WIC?

We do not qualify because we earn too much income

We do not qualify because we don't have papers (legal residency)

Because of problems with the paperwork

Because of fear of immigration (being deported)

Because it could intervene with the process of becoming a citizen 6

I have not tried to obtain food stamps/enroll in EBT

Other (please specify)

23. What foods do you choose when you shop?

Fruit juice, such as orange, apple, or grape juice, whether fresh, frozen, canned or in aguas frescas (except sodas or similar types of drinks)

Fruits – whether fresh, canned, frozen

Tomatoes, fresh salsa, tomatillos, or green chilies

Salad Greens (such as lettuce or spinach)

Soups or broths with vegetables

Potatoes, of any type—baked, mashed or fried

Any other type of vegetable, such as green beans, cabbage, corn or broccoli

Other (please specify)

24. What types of fruits and vegetables would you like to buy more of for yourself or your family if it was affordable? (Please list all fruits and vegetables)

25. I am going to ask you about what you and your family ate yesterday.

What did you eat for breakfast? (Write down all fruits and vegetables)

What did you eat for lunch? (Write down fruits and vegetable)

What did you eat for a snack? (Write down fruits and vegetables)

What did you eat for dinner? (Write down fruits and vegetables)

Demographic Information

Now I have some last questions.

25. How old are you?

26. What language do you mainly speak at home?

English

Spanish

Triqui

Mixteco

Purepecha

Other (please specify)

27. What is your current employment status?

Employed

Unemployed

DK/Ref

28. If you are employed, what is your job?

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29. If unemployed are you:

Disabled

Retired

Full time student

Other (please specify)

Entravista-- Espanol

INTRODUCCION

Buenos días (buenas tardes). Me llamo _____. Soy un/a promotor/a de salud con _____ [nombre de la organización]. Estamos llevando a cabo una encuesta para aprender sobre la nutrición entre los trabajadores agrícolas en Yolo county. Esta información servirá para mejorar la nutrición de los trabajadores agrícolas y sus familias.

Tengo una encuesta que tarda aproximadamente 15 minutos.

La encuesta es completamente confidencial y no tiene que responder a ninguna pregunta que no prefiere contestar. En cualquier momento puede terminar la entrevista.

¿Le interesaría participar en esta encuesta?

Antes que nada, le tengo unas preguntas para ver si califica.

1. ENTREVISTADOR/A: MARQUE EL SEXO DEL ENTREVISTADO/A:

Hombre

Mujer

2. Ud. Tiene 18 años o mas?

Sí

No

**PREGUNTE POR ALGUIEN MÁS. SI NO HAY OTRA PERSONA,
TERMINE AQUÍ: Muchas gracias, estas son todas la preguntas que le
tenemos. Esta encuesta está dirigida a personas con 18 años o más de edad.**

3. ¿Ud., o algún familiar que vive aquí con Ud., ha trabajado en la agricultura durante los últimos 12 meses – aun que sea de temporada - en el fil, en una empacadora o en una florería o nursería?

Sí

No

TERMINE AQUI. Muchas gracias, estas son todas la preguntas que le tenemos. Esta encuesta está dirigida a personas que han trabajado en la agricultura durante los últimos 12 meses.

4. ¿Vive o trabaja Ud. aquí en Yolo County?

Sí

No

TERMINE AQUI. Muchas gracias, estas son todas la preguntas que tenemos. Esta encuesta está dirigida a personas que viven o trabajan en Yolo county.

5. Donde vive Ud? Apunte el nombre de la comunidad

6. ¿Esta casado/a?

Sí - ¿Vive su esposo/a aquí? _____ Sí _____ No

No

7. ¿Tiene hijos menores de 18 años que viven con Ud, suyos o de su pareja?

Sí ¿Cuántos? _____ (solo menores de 18 años)

No

AHORA LE VOY A LEER ALGUNAS RESPUESTAS DE LA GENTE SOBRE SU SITUACIÓN DE COMIDA EN SU FAMILIA O EN SU CASA. PARA CADA REPUESTA, FAVOR DE INDICARME SI HA OCURRIDO PARA UD. / SU FAMILIA FRECUENTEMENTE, A VECES, O NUNCA EN LOS ÚLTIMOS 12 MESES.

(PARA LAS SIGUIENTES PREGUNTAS, SI HAY SOLO UNA PERSONA EN EL HOGAR, USE "YO," "MI," Y "USTED". DE OTRA MANERA, USE "NOSOTROS," "NUESTROS," Y "SU FAMILIA.")

8. "La comida que compré (compramos) no duró mucho y no había dinero para comprar más."

¿En los últimos 12 meses, si ha ocurrido frecuentemente, a veces, nunca o no sabe?

Frecuentemente

A Veces

Nunca

No sabe

rehuse

9. “(Yo/Nosotros) no teníamos lo suficiente para comer una comida balanceada (nutritiva).”

¿En los últimos 12 meses, si ha ocurrido frecuentemente, a veces, nunca o no sabe?

Frecuentemente

A Veces

Nunca

No sabe

rehuse

10. En los últimos 12 meses ¿Usted o algún miembro de su familia comió menos o dejó de comer porque no había suficiente dinero para la comida?

Sí

No (☒ PASE A LA PREGUNTA 12)

No sabe o rehuse (☒ PASE A LA PREGUNTA 12)

11. [#10 es sí, haga esta pregunta] ¿Con qué frecuencia ocurre esto? How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?

Casi cada mes

Algunos meses pero no cada meses _____ Cual meses? _____

A veces- 1 mes o 2 meses

No sabe o rehuse

12. En los últimos 12 meses, ¿Comió usted menos de lo que pensaba que debía porque no hubo suficiente dinero para comida?

Sí

No

No sabe o rehuse

13. En los últimos 12 meses, ¿Alguna vez tuvo hambre pero no comió porque no tuvo suficiente dinero para comida?

Si

No

ACCESO A PROGRAMAS DE ASISTENCIA ALIMENTARIA

Ahora le tengo unas preguntas sobre programas de asistencia de comida. Quiero recordarle que

todo lo que hemos hablado hoy es completamente confidencial, y que no tiene que responder a ninguna pregunta que no desee.

14. ¿Ha oído de estampillas de comida?

Sí

No (☐ PASE A LA PREGUNTA 15)

No sabe (☐ PASE A LA PREGUNTA 15)

15. ¿Ha usado estampillas de comida o EBT en los últimos 12 meses?

Sí (☐ PASE A LA PREGUNTA 16)

No

No sabe

16. ¿Ha recibido usted la comida de los programas de ayuda alimentaria, como el banco de alimentos o despensa de la comida?

17. ¿Se identificará el nombre del programa si te acuerdas?

Ayuda alimentaria de emergencia

Asistencia alimentaria de sequía

Delivery de comida rural

“Tabla del Viernes”

“Cosecha de los niños”

Mercado en la escuela

Jardín de demostración

Distribución de alimentos de vacaciones

Otro _____

18. ¿Por qué no ha usado estampillas de comida en los últimos 12 meses?

[NO LEER LAS RESPUESTAS, MARQUE TODAS LAS QUE APLIQUEN]

No califican porque ganan demasiado

No califican porque no tienen papeles
No ha aplicado por problemas con el papeleo
No ha aplicado por miedo de la migra
No ha aplicado por miedo de que pueda intervenir con su proceso de ciudadanía
No ha tratado de conseguirlo
Otro

19. ¿Tiene Ud. hijos menores de 5 años que viven aquí con usted o (SI ES MUJER) está embarazada?

Sí
No PASE A LA PREGUNTA

20. ¿Ha oído de WIC?

Sí
No (PASE A LA PREGUNTA)
No sabe (PASE A LA PREGUNTA)

21. ¿Ha usado el WIC en los últimos 12 meses?

Sí (PASE A LA PREGUNTA 23)
No

22. ¿Por qué no ha usado el WIC en los últimos 12 meses?

[NO LEA LAS RESPUESTAS, MARQUE TODAS LAS QUE APLIQUEN]

No califican porque ganan demasiado
No califican porque no tienen papeles
No ha aplicado por problemas con el papeleo
No ha aplicado por miedo de la migra
No ha aplicado por miedo de que pueda intervenir con su proceso de ciudadanía
No ha tratado de conseguirlo
Otro:

23. ¿Qué alimentos elegir para comprar en la tienda?

Jugo de frutas (naranja, manzana, uva, aguas frescas)

Frutas (con hielo, fresca o enlatados) Fruits

Tomates- salsa fresca, chili verde, tomatillos

Ensalada o espinaca

Sopa o caldo con vegetales

Papas (fritas, para horno o revueltas)

Otros vegetales o frutas- (POR FAVOR ESPECIFIQUE)

24. ¿Qué tipos de frutas y verduras ¿desea comprar más para usted o su familia, si fuera económico? (Por favor indique todas las frutas y verduras))

25. Voy a preguntarle sobre lo que usted y su familia comieron ayer

¿Qué comió para el desayuno? (Anote todas las frutas y verduras)

¿Qué comió para el almuerzo? (Anote frutas y verdura)

¿Qué comió para un bocado? (Anote frutas y verduras)

¿Qué comió para la cena? (Anote frutas y verduras)

Demographic Information

Tengo algunas preguntas finales.

26. ¿Cuántos años tienes?

27. ¿Qué idioma se habla en su hogar?

Ingles

Espanol

Triqui

Mixteco

Purepecha

Otro (por favor especifique)

28. ¿Cuál es su situación en el empleo?

Empleado

Desempleado

No Se o Refuse

29. Si usted es empleado, ¿cuál es su trabajo?

30. ¿Si está desempleado

esta minusválido,

se retiró

un estudiante

Otro _____

¡Muchísimas gracias por participar en esta encuesta! La información que nos ha proporcionado nos va a servir mucho para mejorar el estado nutricional de los trabajadores agrícolas.

NOMBRE DEL ENTREVISTADOR/A:

FECHA DE LA ENTREVISTA:

(¿Piensa Ud. que el entrevistado contesto a las preguntas honestamente?)

Si

No

¿Tiene algún otro comentario?:

Appendix II: Maps showing % Latino distribution in Yolo County and % People Living under the Poverty Level

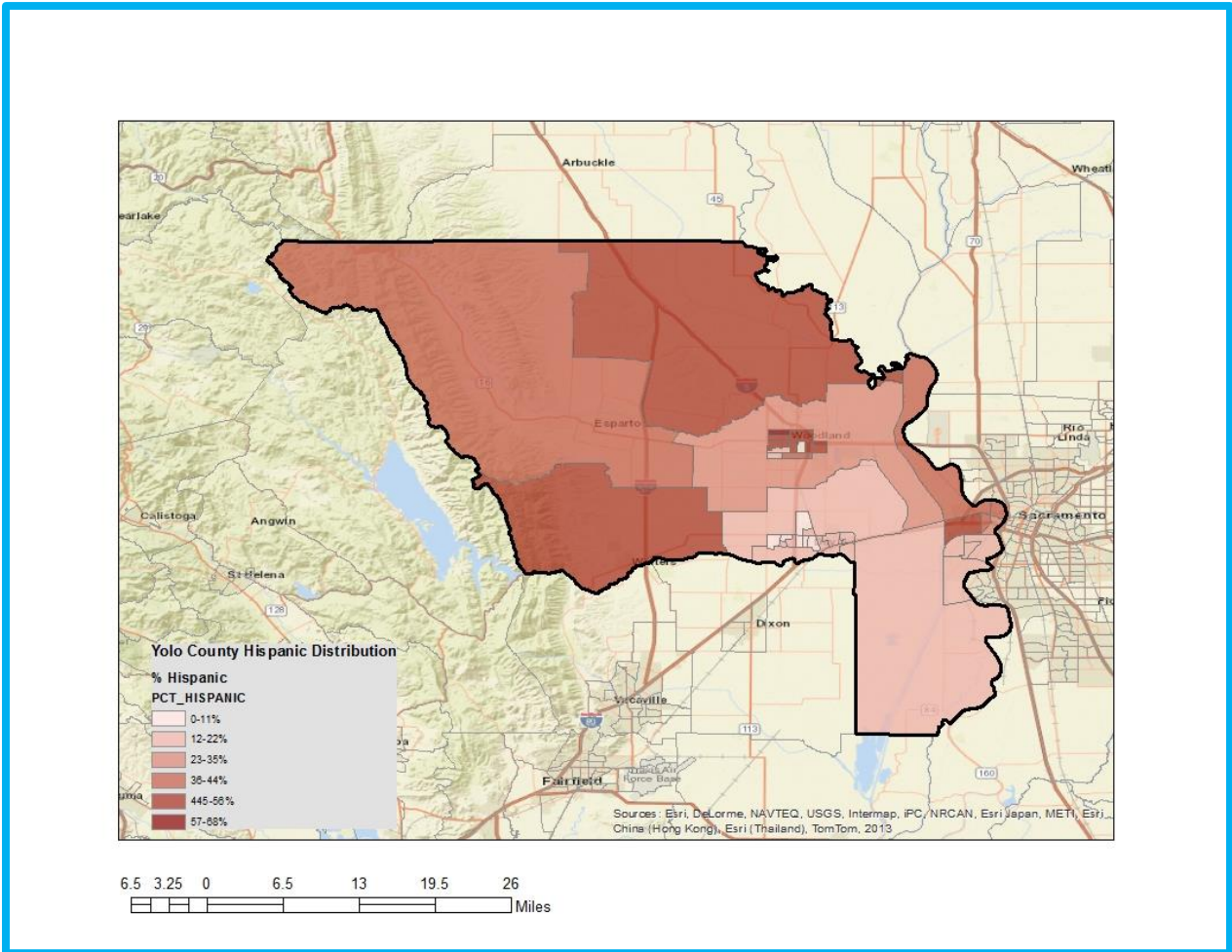


FIGURE 28-- % LATINO OR HISPANIC 2010 US CENSUS

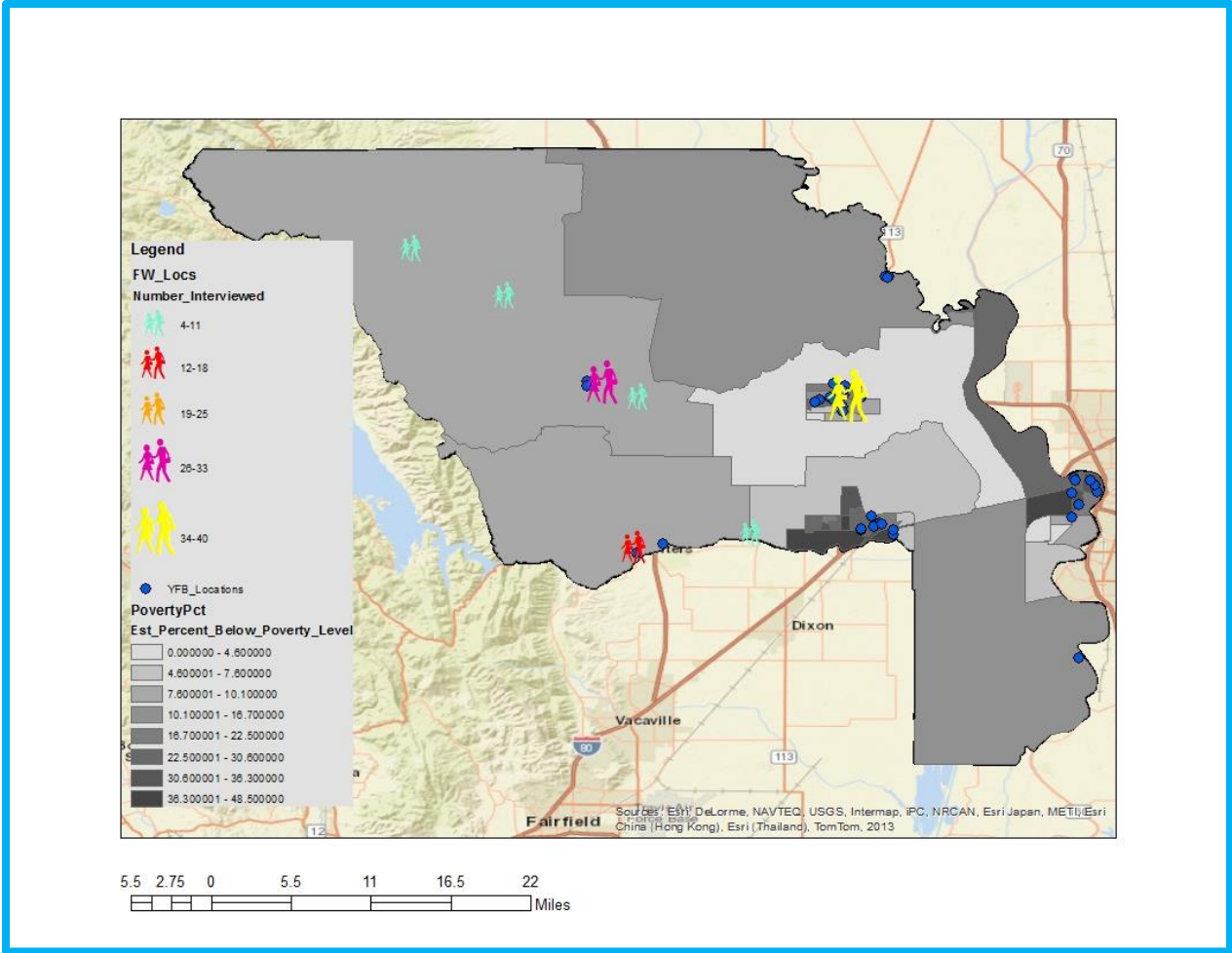


FIGURE 29 PERCENT POVERTY, FARM WORKERS INTERVIEWED, FOOD BANK PROGRAMS ⁶

⁶ ACS poverty data for Yolo County, and especially the rural regions have very large margins for error.

Appendix III: Food Bank Service Directory

<http://www.yolofoodbank.org/>

FOOD BANK DISTRIBUTION CHAIN

DONORS

Every day, through the generosity of our donors, local growers provide farm-fresh produce from the fields around us. Grocers and retailers offer us perishables such as meat, bread, milk and cheese. Area ranchers give fresh eggs, tree fruits and nuts. Food drives run by groups and individuals yield much needed canned goods for our Rural Food Delivery (RFD) program. And of course, without the generous monetary donations, we would not be able to purchase the items that we need to balance our offerings.

FOOD BANK WAREHOUSE

Staffed with eight full-time and part-time employees and over 300 volunteers, the warehouse collects and receives 3 million pounds of food annually. This comes in the form of fresh, frozen and shelf-stable meats, dairy, bread and grains, canned goods, baby food and even pet food. Household products such as cleaners, paper goods, laundry soap and other toiletries are donated and made available. All of our donated product is sorted, repacked, and prepared for distribution to our partner agencies and our own express programs.

AGENCIES AND PROGRAMS

Through our 60 partner agencies and nine direct distribution programs, we provide food to food closets, faith-based organizations, emergency shelters, migratory centers, soup kitchens, low income housing sites, after-school programs, senior housing, Family Resource Centers, summer lunch program and residential programs in Yolo County.

35,000+ HUNGRY RESIDENTS

Through our partner agencies and our own direct distribution programs we reach more than 25,000 residents each month representing children, working families, recently unemployed, veterans, students, seniors, migrant farm workers and the working poor. According to statistics, Yolo County has more than 35,000 people who are considered food-insecure.

Drought Food Assistance Program (DFAP)

Yolo Food Bank's Drought Food Assistance Program is an effort designed to provide food assistance to Yolo County residents who are either unemployed or have reduced employment because of the drought. Recipients of the program will receive pre-packed

boxes of non-perishable foods. Yolo Food Bank collaborates with several partner organizations to provide drought food assistance at 12 sites throughout Yolo County.

- **Who qualifies for drought food assistance?**
 - Anyone who lives in Yolo County and has less or no work because of the drought.
- **What type of documentation is needed to receive drought food assistance?**
 - None, this is a self-certification program. Participants only need to sign a form that certifies that they have less or no work because of the drought.
- **What type of food will participants receive?**
 - Clients will receive a 30-pound box of non-perishable foods.
- **Where can individuals access drought food assistance?**
 - Please see our distribution schedule below.

[DFAP March Flyer \(PDF\)](#)

[Emergency Food Assistance Program \(EFAP\)](#)

EFAP is a Federal program that supplements the diets of low income Americans by providing them with emergency food and nutrition assistance at no cost. U.S. Department of Agriculture (USDA) foods are purchased at the national level and made available to state agencies to distribute. States then provide the food to local agencies that have been selected to distribute commodities in their region. The Yolo Food Bank distributes EFAP commodities in Yolo County.

Products distributed through this program vary each month but often include non-perishable goods, frozen proteins, fresh produce and grains. Currently, Yolo Food Bank provides monthly emergency food to approximately 2,500 low income households at more than 32 locations, including the Food Bank, food closets, and congregate feeding programs.

To qualify for this program, individuals must self certify that they meet [income guidelines](#) that have been determined by the State of California.

Alternate Pick-Up Forms

Participants can pick-up for up to three other recipients who are unable to attend the distribution. Alternates must complete a form below or a signed note from the eligible recipient to authorize pick-up. All notes or forms must be submitted to the site volunteers in order to pick-up for

others. All notes should contain: date, written authorization for alternate to pick up, alternate's name, recipient's household size.

[Alternate Pick-Up Form \(English\)](#)

[Alternate Pick-Up Form \(Spanish\)](#)

*Recipients are asked to attend only one site per month and bring bag or container to their distribution.

[EFAP March Schedule](#)

[Rural Food Delivery \(RFD\)](#)

RFD was developed in 1998 to address the unique needs of food insecure families and individuals living in remote areas. Research shows that people living in rural areas experience higher rates of poverty and lack access to fresh, nutritious foods. These areas tend to lack emergency food providers and resources for people who need them.

To provide people in remote areas with ongoing access to healthy foods, the Yolo Food Bank puts together 25-pound food boxes each month that contain a variety of grocery items. An average 650 food boxes are delivered to 9 sites each month. An additional 150 boxes are created during the summer season to provide food to families and individuals living at 2 local Migrant Centers.

RFD boxes are delivered with EFAP each month to sites in the following locations: Clarksburg, Dunnigan, Esparto, Guinda, Knights Landing, Winters, Woodland, and Yolo.

[Fresh Produce Distributions](#)

Our fresh produce distributions provide families and individuals with ongoing access to healthy foods. Community members in need of food assistance can attend weekly distributions in Yolo County to receive fruits, vegetables, and other perishable goods including bread and dairy when available.

WEEKLY DISTRIBUTIONS

Woodland Locations

- **Yolo Food Bank**

Fridays: 6:45– 8:00am

1244 Fortna Avenue (distribution happens next to the warehouse, located behind the Food Bank office)

- [Woodland Senior Center](#)

Tuesdays: 9:00-9:45am

2001 East Street (distribution on the North side of the building)

West Sacramento Location

- **West Sacramento County Building**

Wednesdays: 9:00-9:45am

500 A-Jefferson Boulevard (distribution located in Community Room 1)

Davis Location

- [Davis Korean Church](#)

Fridays: 1:00 – 2:00pm

603 L Street

BI-MONTHLY DISTRIBUTIONS

Eat Well Yolo is a produce distribution program open to Yolo County residents. This program currently operates twice per month through Yolo Family Resource Centers at nine locations located in Winters, Esparto, Davis, Clarksburg, Knights Landing, Yolo, and Arbuckle (serving Dunnigan).

[Eat Well Yolo Schedule \(PFD\)](#)

[Kids Farmers Market \(KFM\)](#)

In Yolo County, 13.7% of children live in poverty and nearly 27% qualify for free or reduced meal programs at school. With the number of food insecure children growing, Yolo Food Bank is taking a proactive approach to provide youth with nutritious food. Through Kids Farmers Market (KFM), Yolo Food Bank hopes to provide youth with ongoing access to fresh fruits and vegetables through a fun, interactive farmers market-style distribution.

Kids Farmers Market provides a free weekly after school farmers' market for 1,000 preschool and elementary school students at six schools in Yolo County. This program allows students the opportunity to use play money to “purchase” up to 10 pounds of produce from an onsite market, to learn about and sample the available fruits and vegetables, and to take home the produce, recipes, and other information about healthy living.

[Holiday Food Distribution](#)

Thanksgiving Holiday Food Distribution 2015

Yolo Food Bank is excited to announce that we will be hosting a Thanksgiving Holiday Food Distribution this November. In an effort to provide food for Thanksgiving, Yolo Food Bank will distribute 2,000 meal kits to residents throughout Yolo County. Each meal kit will include a turkey, an assortment of fresh seasonal produce, a bag of rice and a bag of beans.

To receive a meal kit, participants must:

- Be residents of Yolo County
- Attend the distribution serving the town where they live
- Bring proof of address - this may include a driver license, a bill or mail

Participants may only receive one meal kit per household.

Thanksgiving Holiday Food Distribution Locations

Clarksburg

- When: Friday, November 20, 2015
- Distribution details:
 - Only Clarksburg residents will be served
 - Pre-registration is required for this site
 - Pre-registration will be open until November 12th or until all meal kits have been reserved
 - Please call Yolo County Children's Alliance for more information: (530) 902-6850

Dunnigan

- When: Thursday, November 19, 2015
- Distribution details
 - Only Dunnigan residents will be served
 - Pre-registration is required for this site
 - Pre-registration will be open until November 12th or until all meal kits have been reserved
 - Please call Family Action Center of Colusa County for more information: (530) 476-0822

Davis

- When: Saturday, November 21, 2015
- Where: Pole Line Road Baptist Church – 770 Pole Line Road Davis, CA 95618
- Distribution details:

- Only Davis residents will be served
- Meals will be distributed on a first-come, first-served basis
- Individuals must be present to receive a meal kit
- Places in line cannot be held or reserved
- Please call Yolo Food Bank for more information: (530) 668-0690

Esparto (also serving Brooks, Capay, Esparto, Guinda, Madison and Rumsey)

- When: Friday, November 20, 2015
- Distribution details
 - This site will only serve residents of the following towns: Brooks, Capay, Esparto, Guinda, Madison and Rumsey
 - Pre-registration is required for this site
 - Pre-registration will be open until November 12th or until all meal kits have been reserved
 - Please call RISE, Inc. for more information: (530) 787-4110

Knights Landing

- When: Thursday, November 19, 2015
- Distribution details
 - Only Knights Landing residents will be served
 - Pre-registration is required for this site
 - Pre-registration will be open until November 12th or until all meal kits have been reserved
 - Please call the Center for Families for more information: (530) 735-1776 x.102

West Sacramento

- When: Saturday, November 21, 2015
- Distribution details:
 - Only West Sacramento residents will be served
 - Pre-registration is required for this site
 - Pre-registration will be open until November 12th or until all meal kits have been reserved
 - Please call Yolo County Children's Alliance for more information: (916) 572-0560

Winters

- When: Friday, November 20, 2015
- Distribution details:
 - Only Winters residents will be served
 - Pre-registration is required for this site

- Pre-registration will be open until November 12th or until all meal kits have been reserved
- Please call RISE, Inc. for more information: (530) 794-6000

Woodland

- When: Saturday, November 21, 2015 at 8:00am
- Where: 233 Harter Avenue Woodland, CA 95776
- Distribution details:
 - Only Woodland residents will be served
 - Meals will be distributed on a first-come, first-served basis
 - Individuals must be present to receive a meal kit
 - Places in line cannot be held or reserved
 - Please call Yolo Food Bank for more information: (530) 668-0690

Yolo (also serving Zamora)

- When: Thursday, November 19, 2015
- Distribution details
 - Only Yolo and Zamora residents will be served
 - Pre-registration is required for this site
 - Pre-registration will be open until November 12th or until all meal kits have been reserved
 - Please call the Center for Families for more information: (530) 406-7221

Please contact us at (530) 668-0690 if you have any other questions about our Thanksgiving Holiday Food Distribution.

Appendix IV: Compiled Quarterly Inventories of Fresh Fruits and Vegetables

March	June	August	December
Apples	Apples	Apples	Apples
		Arugula	
Asparagus			Asparagus
Avocados	Avocados	Avocados	Avocados
Bananas	Bananas	Bananas	Bananas
Basil			
Beets			
Bell Peppers			
		Blackberries	Blackberries
	Blueberries		Blueberries
Broccoli			
Cabbage	Cabbage	Cabbage	
Carrots			
	Cantaloupe		
Cauliflower			
celery sticks	Celery		Celery
	Cherries		
		Citrus	Citrus
Collards			
	Cooking greens, bagged	Cooking greens, bagged	Cooking greens, bagged
	Corn		
	Dates		
Eggplant	Eggplant	Eggplant	
			Fennel
	Figs	Figs	
	Fresh juices		Garlic
	Grapefruit		
Grapes	Grapes	Grapes	Grapes
Green beans			
head lettuce		Head lettuce	Head lettuce
		Herbs	Herbs
	Honeydew		
	Jackfruit		
	Kale		
	Kiwi		Kiwi
Leeks			
lettuce mixes, bagged	Lettuce Mix, bagged	Lettuce Mix, bagged	Lettuce Mix, bagged
	Mangoes		Mangoes
Melons		Melons	Melons
Mixed cut fruit containers			
Mushrooms	Mushrooms	Mushrooms	Mushrooms

Mustard Greens			
	Nectarines	Nectarines	
Onions	Onions		Onions
Onions	Onions		
Orange juice			
Oranges			
		Peaches	
	Pears	Pears	Pears
	Peppers	Peppers	Peppers
Persimmons			Persimmons
Pineapple	Pineapple chunks		
	Plums	Plums	
		Pluots	
			Pomegranates
Potatoes	Potatoes	Potatoes	Potatoes
Potatoes	Potatoes	Potatoes	Potatoes
	Prepped guacamole	Prepped guacamole	Prepped guacamole
Prepped Salad Bowls	Prepped Salads	Prepped Salads	Prepped Salads
	Prepped Wrap Sandwiches		
			Raspberries
Rutabagas			
		Salsa	Salsa
Strawberries		Strawberries	
			Squash
	Sweet potatoes		Sweet Potatoes
Swiss Chard		Swiss Chard bundles	
Tomatoes	Tomatoes	Tomatoes	Tomatoes
Turnips			
Veggie snack trays			
	Watermelon		
		Wheatgrass	
Zucchini		Zucchini squash	

End Notes

ⁱ 2010 Yolo County Nutrition and Food Insecurity Profile. California Food Policy Advocates. Retrieved 3/18/2014 from:

<http://cfpa.net/GeneralNutrition/CFPAPublications/CountyProfiles/2010/CountyProfile-Yolo-2010.pdf>

ⁱⁱ Context Matters: Visioning a Food Hub in Yolo and Solano Counties. Prepared for The Ag and Food Alliance. Danielle Boulé, George Hubert, Anna Jensen, Alannah Kull, Julia Van Soelen Kim, Courtney Marshall, Kelsey Meagher, Thea Rittenhouse. JUNE, 2011. Retrieved 3/2/2014 from:

http://aginnovations.org/articles/view/context_matters_visioning_a_food_hub_in_yolo_and_solano_counties/

ⁱⁱⁱ 2002-2007 Yolo County Housing Element. Yolo County Planning and Public Works Department, March 2003.

^{iv} California's Hired Farm Workers Move to the Cities: The Outsourcing of Responsibility for Farm Labor Housing

Don Villarejo, Ph.D. California Rural Legal Assistance Priorities Conference, Asilomar, California

July 16, 2013; revised manuscript, January 24, 2014 Retrieved 3/15/2014 from:

http://www.crla.org/sites/all/files/u6/2014/rju0214/VillarejoFrmLbrHsngHlth_CRLA_012414.pdf

^v Suffering in Silence: A Report on the Health of California Agricultural Workers. Don Villarejo, David Lighthall, Daniel Williams, Ann Souter, Richard Mines, Bonnie Bade, Steve Samuels, Stephen McCurdy. California Institute for Rural Studies and The California Endowment. November 2000.

^{vi} Cancer-related health behaviors and screening practices among Latinos: Findings from a community and agricultural labor camp survey. Winkleby, Marilyn A., John Snider, Bonnie Davis, Maria Garcia Jennings; David K. Ahn. 2003. *Ethnicity and Disease*, 13: 376-386.

^{vii} Ten-year changes in cancer-related health behaviors and screening practices among Latino women and men in California. Winkleby, Marilyn A., Soowon Kim, Guido G. Urizar Jr., David Ahn, Maria Garcia Jennings and John Snider. 2006. *Ethnicity and Health*, 11(1): 1-17.

^{viii} Hunger in the Fields: Food Insecurity among Farm workers in Fresno County. Cathy Wirth, Ron Strohlic and Christy Getz. California Institute for Rural Studies, November 2007.

^{ix} Increasing Food Security among Agricultural Workers in California's Salinas Valley. Lisa Kresge and Chelsea Eastman. California Institute for Rural Studies, June 2010.

^x <http://ask.chis.ucla.edu/AskCHIS/tools/layouts/AskChisTool/home.aspx#/results> accessed 2/5/16

^{xi} California Food Policy Advocates, 2010b

^{xii} The National Agricultural Workers Survey Report. Retrieved 3/20/2014 from:

<http://www.doleta.gov/agworker/report/ch1.cfm>

^{xiii} Kresge and Eastman. 2010