



A Food Security Assessment for Klamath, CA

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Del Norte CalFresh Healthy Living Program

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A Food Security Assessment

Klamath, CA

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Executive Summary of Findings

1. Introduction

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2.a. Demography

Finding 1. The residents of Klamath have a strong social and cultural connection with one another and demonstrate social cohesion and resilience, overcoming many challenges, including food insecurity.

Finding 2. The overall food insecurity rate is high in Klamath, affecting disproportionately children and households led by single mothers and Native American populations.

3. Determinates of Health and Food Security

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Finding 3. Poverty is the major contributing factor to the food insecurity issue in Klamath.

Finding 4. The high school drop-out rate is significantly higher than the county rate.

Residents express resources and support are scarce in the community, especially for education.

3.b. Environment Health

Finding 5. Natural food such as salmon, deer meat, berries, and acorn, is integral in the subsistence diet, culture, and health among the residents, especially Yurok people in Klamath.

However, residents experience a decline in fish populations and the loss of harvesting and gathering sites for terrestrial species such as acorns.

3.c. Food Access

Finding 6. Various food assistance programs and services are available to meet the diverse community food needs. There needs to be a more coordinated communication plan to reduce information disparities and increase reach and impact.

3.d. Transportation and Housing

Finding 7. Transportation is one of the major barriers for the Klamath residents to bring their food to the table. People with no reliable transportation can face more significant challenges in readily available food access.

Finding 8. Many households in Klamath experience high housing cost burden.

4. Health Conditions

Finding 9. Drugs and alcohol issues are prevalent in Klamath, affecting food security negatively.

Finding 10. Lack of nutritional knowledge and information among the residents is one of the key contributing factors to food insecurity in Klamath.

1. Introduction

1.a. Background

Food plays a vital role in healthy living. Food is a source of nourishment and fuel for essential bodily functions and development and healthy living. A healthy diet helps children grow and develop properly and reduces their risk of chronic diseases, including obesity.¹ Adults who eat a healthy diet with nutrient-dense food such as fruits and vegetables live longer and have a lower risk of obesity, heart disease, type 2 diabetes, and certain cancers.¹ In contrast, highly processed and packaged foods containing high sugar, sodium, and unhealthy fats with very little nutrition value can negatively impact overall health and quality of life. Beyond its biological and physical roles, food holds social and cultural meaning representing cultural identity and tradition, connecting people around the table, building family bonds, social connection, and community cohesion. Food also can closely tie into one's emotions. Positive food experiences and memories can inspire a healthier diet. However, food insecurity and hunger, not having consistent access to healthy, safe, and affordable foods can disrupt one's food behavior and negatively impact the quality of life, including poor mental and emotional health.

Klamath, CA, is a food desert with no full-scale grocery stores in the community. People in Klamath must travel a minimum of 20 miles to the nearest grocery stores, putting the community at a greater risk of food insecurity and its adverse health outcomes, especially for low-income, marginalized, and underserved populations. It is critical to understand this issue in a social and cultural context and address the root causes and the conditions driving food insecurity and hunger issues and its adverse overall health outcomes through evidence-based approaches.

This report aims to understand food security status at the household level using secondary and primary data collection methods. The report also addresses social determinants of health in Klamath, CA, to understand driving factors causing food insecurity at household and community levels and explore community-driven sustainable solutions.

1.b. Methodology

Data collection methods include:

- One-on-one key informant interviews.
- A focus group discussion.
- A Food Security Assessment survey.
- A virtual town hall meeting.

A mixed methods approach was used to synthesize qualitative and quantitative data information to understand the household food security status and available community resources and needs, contributing factors to food insecurity, identify gaps in the services, and explore opportunities to increase food security in Klamath.

Primary Data Collection: Stakeholder Engagement and Community Outreach conducted November 2021- Feb.4th, 2022.

1. **Key Informant Interviews:** One-on-one key informant interviews were conducted with eleven community stakeholders, including community leaders and key representatives from various food security organizations and experts. The purpose of the key informant interviews is to gain an in-depth understanding of food insecurity impacting Klamath and community resources and needs addressing food insecurity. The key informant interviews were conducted via Zoom platform or phone call.
2. **Focus Group:** A focus group discussion was conducted in person at the Boys & Girls Club of the Yurok Tribe on January 13, 2022, through a semi-structured format co-facilitated by the food program director for the Community Food Council for Del Norte and Tribal Lands (DNATL), Amanda Hixon. Five Klamath residents participated in the focus group discussion and shared their perspectives on the food insecurity issue and provided their input to improve food security in Klamath.
3. **Food Security Survey:** Surveys were administered in both paper and online from November 2021 to January 2022. Paper surveys were conducted through face-to-face interview format at the Rural Human Services' Commodities and Senior food box distribution site, Klamath Community Center. And self-administered surveys were conducted at the focus group discussion and via an online survey tool, advertised on the Klamath Community Facebook page and personal invitation.
4. **Virtual Town Hall Meeting:** A town hall meeting was conducted virtually via the Zoom platform on January 14, 2022. Six people representing diverse community voices and expertise participated in the discussion, co-facilitated by the food program director for the DNATL Community Food Council, Amanda Hixon, through a semi-constructed interview format.

Secondary Data Sources: Quantitative epidemiological health data

This report incorporated key findings and local, statewide, and national data trends from the published reports from government agencies and research institutions to comprehensively understand the food insecurity issue in Klamath. The following secondary data sources guided this project to assess community food security in Klamath.

1. U.S. Department of Agriculture, Household Food Security in the United States in 2020
2. United State Census Bureau, 2015-2019 American Community Survey (ACS), 5-year Narrative Profile for Klamath, CA
3. County of Del Norte Community Health Assessment
4. Comprehensive Yurok Food Systems Planning Guide
5. Food for People Food Distribution survey data collection in 2020
6. Del Norte Community Food Assessment 2019

Methodological Limitations

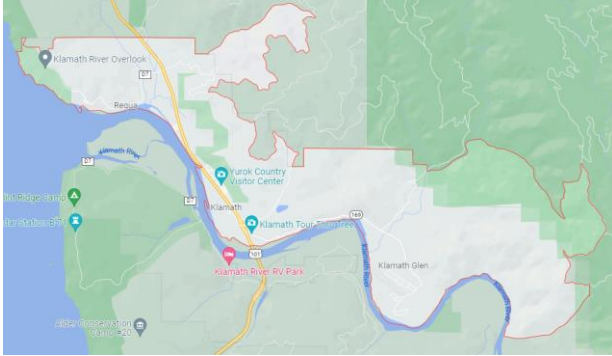
Reliability of Self-Reported Data: Most primary data is based on self-reported data from surveys, stakeholder engagements from the interviews and meetings, and focus group discussions. Self-reported data is subjected to recall bias; recall timeframe could become an issue providing false information due to a lapse of time or influenced by social desirability to present themselves in a socially acceptable manner. Despite these limitations, feedback from the community about their perspectives and experiences and challenges provide valuable input into the assessment to understand real issues regarding food security in social and cultural contexts.

Small Sample Sizes: The survey results have limitations in not representing a wide variety of population groups. It is not generalizable to represent the community food security status due to the small sample sizes (N=20).

However, the data obtained through the sample data provides important information to understand the trend and gaps and community needs to improve food security in Klamath. Due to limited available local data, this report utilizes secondary data sources.

Limited access to data: We faced the challenges of getting a response from key Tribal stakeholders during this research period. We also experienced limited access to in-person data collection due to the COVID-19 pandemic.

2. Klamath, CA Profile

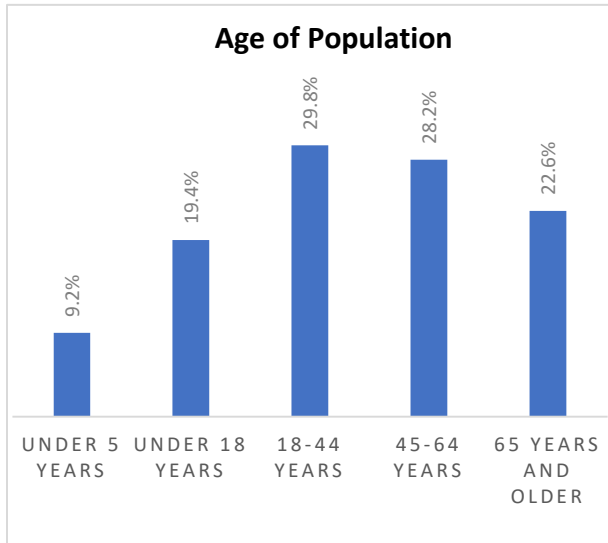


Klamath is an unincorporated, rural census designated in Del Norte County, California, located on U.S. Route 101 inland from the mouth of the Klamath River. Klamath is at an elevation of 30 feet and has a land area of 12.4 square miles. Klamath has two Native American Reservations, Yurok Tribe Reservation and Resighini Reservation.

2.a. Demography

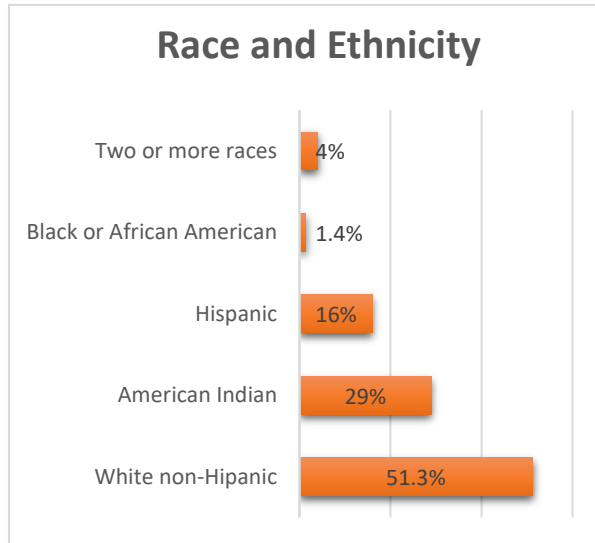
Klamath had 1,251 - 652 (52.1 %) females, and 599 (47.9 %) males in 2015-2019. The median age was 45.8 years. More than half of the population were between 18 and 64 (58%), under 18 years (19.4%), and 22.6 % was 65 years and older (Figure 1). In 2015-2019, more than half of the residents were White (61.7%), White non-Hispanic (51.3%), American Indian and Alaskan Native (29%), Hispanic (15.7%), Black or African American (1.4%), and two or more races (3.8%) in Klamath, CA (Figure 2).

Figure 1



Source: U.S. Census Bureau, American Community Survey, 2015-2019 5-Year

Figure 2



Source: U.S. Census Bureau, American Community Survey, 2015-2019 5-Year

Finding 1. The residents of Klamath have a strong social and cultural connection with one another and demonstrate social cohesion and resilience, overcoming many challenges, including food insecurity.

Food and nutrition security is dependent on a healthy and sustainable food system, including the food production, processing, distribution, marketing, acquisition, and consumption of food and food waste. Building a sustainable food system is a crucial component of building resilience. A sustainable food system benefits society (social sustainability) has a positive or neutral impact on the national environment (environmental sustainability) and is profitable throughout (economic sustainability) without compromising the ability of future generations to meet their own needs.² Sustainable food system development means generating economic value-added, considering equitable distribution and advancement of health and welfare, including animals, without undermining environmental impacts.²

Resilient people and communities can recover quickly from adverse experiences because they can cope with shock and stress in challenging times without experiencing a crisis.³ The residents of Klamath have a strong social and cultural connection with one another and demonstrate social cohesion and resilience, overcoming many challenges, including food insecurity.

Community Voices

Across a focus group and key informant interviews, participants expressed the culture of self-preservation, social cohesion, and community connections as key strengths of overcoming food insecurity issues, especially in emergencies. The following are some of the comments they shared.

“During the flood, the road closed, residents in Klamath Glen transported the people in the Glen to the down the Klamath River to the grocery store in Hoppa using their boats.”

“We take care of our neighbors, we check on each other, and we share food; we are good friends.”

“This community is pretty tight, and everybody loves one another.”

Finding 2. The overall food insecurity rate is high, affecting disproportionately children and households led by single mothers and Native American populations.

The U.S. Department of Agriculture (USDA) defines food security as "access by all people at all times to enough food for an active, healthy life." Since 1995, the U.S. The Department of Agriculture has collected information annually on food access and adequacy, food spending, and source of food assistance for the U.S. population.⁴ The questions used to assess households' food security include food experiences or behaviors such as being unable to afford balanced meals, cutting the size of meals, or being hungry for too little money for food. The household's food security status was assigned based on the number of food-insecure conditions reported.

- High food security among adults: Households had no problems, or anxiety about, consistently accessing adequate food.
- Marginal food security among adults: Household had problems at times, or anxiety about, accessing adequate food, but the quality, variety, and quantity of their food intake were not substantially reduced.
- Low food security: Households reduced the quality, variety, and desirability of their diets, but the quantity of food intake and normal eating patterns were not substantially disrupted.
- Very low food security: At times during the year, eating patterns of one or more household members were disrupted and food intake reduced because the household lacked money and other resources for food.

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.

Hunger—The uneasy or painful sensation caused by a lack of food. The recurrent and involuntary lack of access to food.

Food insecurity does not necessarily cause hunger, but hunger is a possible outcome of food insecurity. Food-insecure households (those with low and very low food security) had difficulty providing enough food for all their members at some time during the year because of a lack of resources. In 2020, 89.5 % of U.S. households were food secure, and the remaining 10.5 % (13.8 million households) were food insecure.⁴

14.8 % of households in the U.S. with children in 2020 experienced food insecurity (Figure 3). The prevalence of food insecurity varied considerably among household types; households with children headed by a single woman was highest (27.7%), followed by households with Black, non-Hispanic (21.7%) (Figure 4).

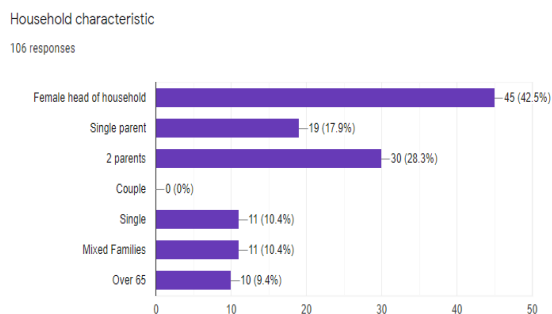
According to the data released in 2018 from the Feeding America, Meal the Gap, the overall food insecurity rate was 17% in Del Norte County, a lot higher than the state rate, 12%; the rate of food insecurity among children age under 18 years old was significantly higher with 24%, compared to the state rate, 19%.⁵

About 88 % of Margaret Keating Elementary School students were eligible for the free and reduced-price meal program, 79% and 9%, respectively, in the 2019-2020 school year, the highest rate amongst the schools in Del Norte County.⁶

In the 2020 school year, 66.5 % were eligible for the Free and Reduced-price meal program in Del Norte County, whereas 59. 2% of California students were eligible to receive free or reduced-price school meals.⁷

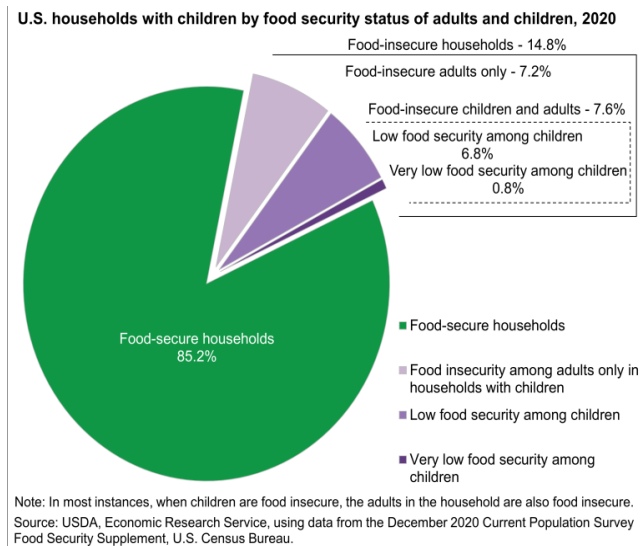
The data collected in January 2020 and February 20, 2020, in Klamath, for the Food for People Mobile Produce Pantry program shows families led by the female head of household had the highest participation rate compared to other household characteristics (Figure 5).

Figure 5. Household Characteristics



Source: Sign-in sheet data collected on 01/30/2020 for the Food for People Mobile Produce distributed at the Boys & Girls' Club for the Yurok Tribe in Klamath

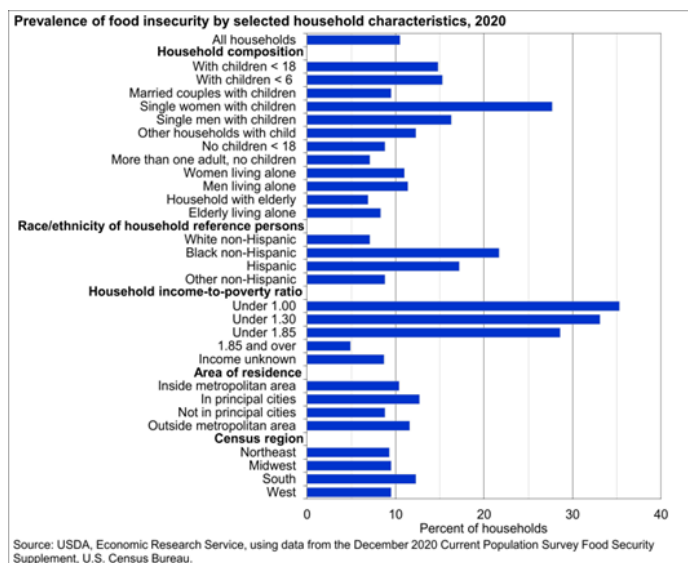
Figure 3: U.S. households with children by food security status of adults and children, 2020



Note: In most instances, when children are food insecure, the adults in the household are also food insecure. Source: USDA, Economic Research Service, using data from the December 2020 Current Population Survey Food Security Supplement, U.S. Census Bureau.

Source: U.S. Department of Agriculture. (2021). *USDA ERS - Key Statistics & Graphics*.

Figure 4: Prevalence of food insecurity by selected household characteristics, 2020

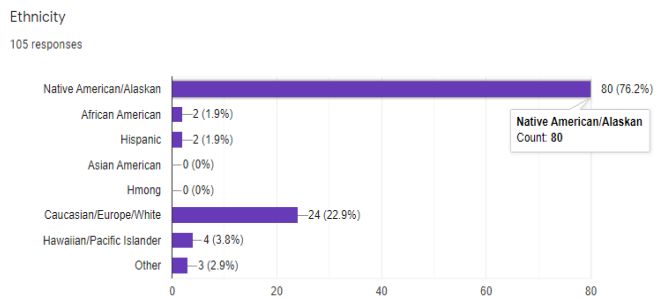


Source: USDA, Economic Research Service, using data from the December 2020 Current Population Survey Food Security Supplement, U.S. Census Bureau.

Source: U.S. Department of Agriculture. (2021). *USDA ERS - Key Statistics & Graphics*.

According to the U.S. Census Bureau's American Community Survey, 61.7% of households with children under age 18 participated in the Supplemental Nutrition Assistance Program (SNAP), which was the highest SNAP benefit utilization compared to the ones among other household characteristics.⁹ The second highest SNAP utilization was among households led by a female with no husband present with 43.6%.⁹

Figure 6: Race and Ethnicity



Source: Sign-in sheet data collected on 01/30/2020 for the Food for People Mobile Produce distributed at the Boys & Girls' Club for the Yurok Tribe in Klamath

The data also shows that most of the people who used the Food for People Mobile Produce program were Native Americans, indicating that Native Americans are more likely to experience higher food insecurity than other racial and ethnic groups (Figure 6).

The Food Security Assessment survey results indicated the overall household food insecurity rate is significantly higher than the national rate. According to the survey, 41.2 % said that the following statement happened to them sometimes, "the food that (I/we) bought just didn't last, and (I/we) didn't have money to get more". 27.8% answered that they had to cut the size of the meals or skip meals because there wasn't enough money for food in the last 12 months. Five people out of sixteen (31.3%) answered that they ever ate less than they felt they should because there wasn't enough money for food. 11.8% (2 out of 17) experienced hunger because there wasn't enough money for food.

It will be imperative to develop the interventions for the most vulnerable population groups to access safe, healthy, affordable, and culturally appropriate food to reduce disparities and achieve health equity.

Community Voices

During the focus group discussion and key informant interviews, many community residents cited children's food insecurity as an urgent community issue. They expressed that many children experience hunger. Some comments they said,

"I teach at the first grade, and our kids are hungry."

"Some kids come to the Boys' and Girls' Club just to eat, because we provide snacks every day."

3. Social Determinates of Health

Many factors influence the health of individuals and communities. Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

3.a. Socioeconomic Status and Food Security

Finding 3. Poverty is the major contributing factor to the food insecurity issue in Klamath.

Socioeconomic status is a critical indicator of health outcomes that can significantly influence one's access to necessities such as quality health care, healthy foods, and affordable housing. In Del Norte County, nearly a quarter of the population lives below the poverty level, with the highest rates among children, ethnic communities, and individuals with less than high school education.⁵ About one out of four children and one out of five adults in Del Norte County experience food insecurity, a lack of consistent access to sufficient, safe, and nutritious food.⁵

The County of Del Norte County Health Assessment indicates poverty, food insecurity, and lack of healthy food access as community needs and top priorities.⁸

In 2015-2019, 25.8 % of people lived in poverty (Table 1). Klamath has a disproportionately high rate of children living below poverty level (Table 1). An estimated 51.7 % of children under 18 lived below the poverty level, which was the highest rate compared to other age groups in Klamath in 2015-2019 (Table 1).

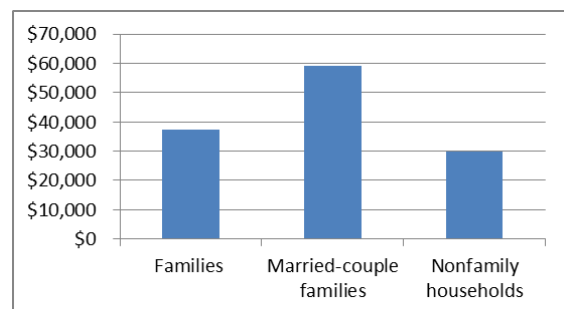
According to the 2019 American Community Survey, the median household income in Klamath is significantly lower, \$35,455, than the median household income in California, \$80, 440. Nonfamily households had the lowest median income with \$29,750, compared to married-couple families with \$59,167 (Figure 7).

Table 1: Poverty Rate in 2015-2019

	Percent
People in poverty	25.8
Children under 18 years below poverty	51.7
People 65 years old and over below poverty	4.9
People 18 to 64 years below poverty	25.3

Source: U.S. Census Bureau, American Community Survey, 2015-2019 5-Year Narrative Profile

Figure 7: Household Income in 2015-2019



Source: U.S. Census Bureau, 2019 ACS 5-Year Estimates

An estimated 46.2 % of the people employed were private wage and salary workers; 40.2 % were federal, state, or local government workers; and 13.6 % were self-employed in their own (not incorporated) business (Figure 8).

According to the 2019 American Community Survey estimates, about 60% were not in the labor; the employment rate was significantly lower in Klamath, CA than the state rate; 40.6% and 60.3 %, respectively. ⁹

People with steady employment are less likely to live in poverty and more likely to be healthy. Still, many people have trouble finding and keeping a job due to the conditions such as people with disabilities, limited available jobs in the communities, low education attainment. The U.S. Census data shows that 30.2 % reported a disability in Klamath in 2015-2019. ⁹

Figure 8: The number of Class of Workers



Source: U.S. Census Bureau, American Community Survey, 2015-2019 5-Year Narrative Profile

Community Vocies

Community members expressed "poverty" is the main contributing factor to the food insecurity and hunger issues affecting both the tribal and non-tribal members across the board in Klamath. During a focus group and key informant interviews, some people said,

"It is all income-based, low-income families "have it really hard" without transportation, regardless of tribal or not. However, tribal citizens tend to have more support than non-tribal income families".

"The high number of low-income families is the biggest problem in Klamath. The high levels of low-income families are due to lack of good jobs in the region, and lack of support for education".

"Poverty and high unemployment rate are big problems contributing to food insecurity in Klamath."

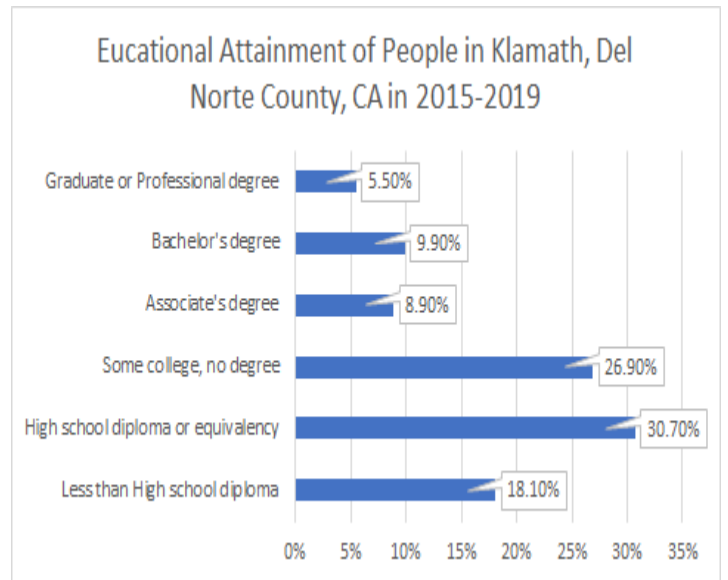
Finding 4. The high school drop-out rate is significantly higher than the county rate; however, residents express resources and support are scarce in the community, especially for education.

In Klamath, most residents (81.9%) have at least graduated from high school, but a lower proportion of residents have a bachelor's degree or higher in 2015-2019, compared to the state rate in California, 16.7% and 35.0%, respectively. An estimated 18.1 percent did not complete high school in Klamath, CA in 2015-2019 (Figure 9). In Del Norte County, 7.1% of the students did not complete high school in 2021.¹⁰

People with higher levels of education are more likely to get high-paying jobs and more opportunities and services, and quality food that will promote quality of living and longer life. Children from low-income families, children with disabilities, and children who routinely experience forms of social discrimination (e.g., bullying), are less likely to graduate from high school or go to college and get a safe, high-paying job.¹¹ They are more likely to have health problems like heart disease, diabetes, and depression.¹¹ The stress of living in poverty also affects children's brain development, making it harder for them to do well in school.¹¹

Food insecurity and hunger issues are interconnected and influenced by various social conditions. Educational attainment is an important determinant affecting individuals and community food security. Empowered people and communities can have greater control and influence over the decisions that impact their lives and communities.

Figure 9: Education Attainment in Klamath, CA



Source: U.S. Census Bureau, American Community Survey, 2015-2019 5-Year Narrative Profile

Community Voices

During the focus group and key informant interviews, people expressed that the community does not have adequate resources and services to meet their basic needs. People have to find resources somewhere else to bring the food to the table in times of need because the community does not have adequate resources to support them to make it through the challenging time.

3.b. Environment and Food Security

Finding 5. Natural food such as salmon, deer meat, berries, and acorn, is integral in the subsistence diet, culture, and health among the residents, especially Yurok people. However, residents experience a decline in fish populations and the loss of harvesting and gathering sites for terrestrial species such as acorns.

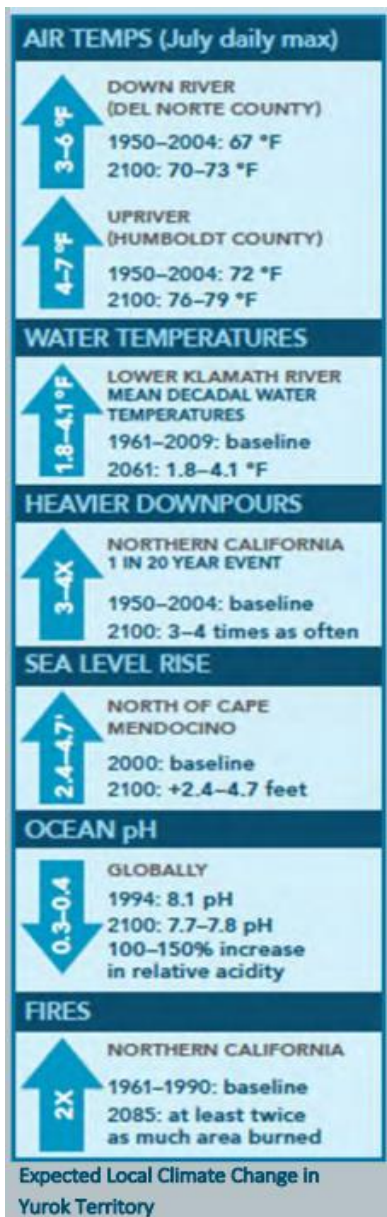
Humans interact with the natural environment without ceasing. We are interdependent. The natural environment is a critical player in human health, and so are humans to the natural environment. Healthy and safe environments can promote populations health and safety.

Environmental health is a branch of public health that focuses on the relationships between people and their environment, promoting human health and well-being, and fostering healthy and safe communities. Climate change is the major environmental health challenge of the 21st century. Nine out of every ten natural disasters are climate-related, exacerbates income gaps, deepens inequalities and health disparities, and threatens many people's security and livelihoods.¹² According to the CDC, some existing health threats will intensify, and new health threats will emerge due to climate change. Some are at higher risks than others from health impacts caused by climate changes- age, economic resources, and location are important considerations.¹³

Some climate change impacts on Yurok Lands and resources are already observable. Other impacts are predicted to occur in the future, including sea-level rise, temperature changes, precipitation, hydrology, aquatic resources, and terrestrial resources (Figure 10). Potential climate change impacts and territorial resources include species loss, species migration, invasive species, increased wildfire, drought, frequent flooding, diseases, ecosystem changes, and habitat loss (Figure 11).¹⁴ These changes may increase the risk and prevalence of diabetes, cancer, heart diseases, mental health, and multi-generational trauma.¹⁴ Climate change's health effects include respiratory and cardiovascular disease-related to air pollution, pollen and allergens and wildfires, injuries and premature deaths related to extreme weather events, food and water-borne illness, and other infectious diseases and threats to mental health.¹³

Food insecurity can be triggered or exacerbated by natural and human-made hazards that destabilize the local, regional, or global food system, such as climate change-associated extreme weather events or social unrest.¹⁵ Recovering from such events and preventing escalated food insecurity requires strong pre-event food system functioning and advanced planning.¹⁵ It is critical to build resilient food security in Klamath, CA, to reduce their vulnerability and build resiliency and sustainability.

Figure 10: Expected Local Climate Change in Yurok Territory



Source: Yurok Tribe Climate Change Adaptation Plan for Water & Aquatic Resources

Figure 11: Projected Climate Changes Affecting Yurok Aquatic Resources

Table 1.2 Projected Climate Changes Affecting Yurok Aquatic Resources	
	<u>Changes in Air Temperatures</u> Rising air temperatures
	<u>Changes in Precipitation Regimes</u> Precipitation amounts are uncertain Heavier downpours
	<u>Changes in Ocean Processes</u> Rising sea levels > increasing coastal inundation > erosion & intrusion into estuary and coastal aquifers Ocean acidification
	<u>Changes in Inland Hydrology</u> Shift from snow to rain > increasing winter flows & floods; Reduced late spring/summer flows in river, creeks, & springs Increasing drought intensities
	<u>Changes in Inland Water Quality</u> Warming surface water temperatures > lower dissolved oxygen; Expanding harmful algal blooms & water-borne pathogens
	<u>Changes in Fire Regimes</u> Fire seasons are expected to become longer with increased frequency and extent.
	<u>Combined Effects</u> Decreasing snowpack, earlier spring snowmelt Warming ocean temperatures > increased harmful algal blooms Heavier downpours > increase surface water sheeting > erosion > increasing turbidity, sedimentation & higher pollutant loadings Fire exposed slopes will further add to effects

Source: Yurok Tribe Climate Change Adaptation Plan for Water & Aquatic Resources

Community Voices

During the focus group and key informant's interviews, many people expressed they have been overcoming their lack of healthy food access by utilizing foods offered from the land. They also expressed their concerns for the depletion of natural resources in the face of climate change. Some people said,

"Fish and deer meat is most of the food I have now. We do garden, we try canning, and we have berries in summertime, just living off the land; We have to survive."

"Limited access to salmons, a few years back, we couldn't fish. The tribe only allocated 600 fish. There was not enough salmon; thousands of juvenile salmon were killed in the river before even they got into the ocean."

"I have never paid for salmon since living here".

3.c. Food Access

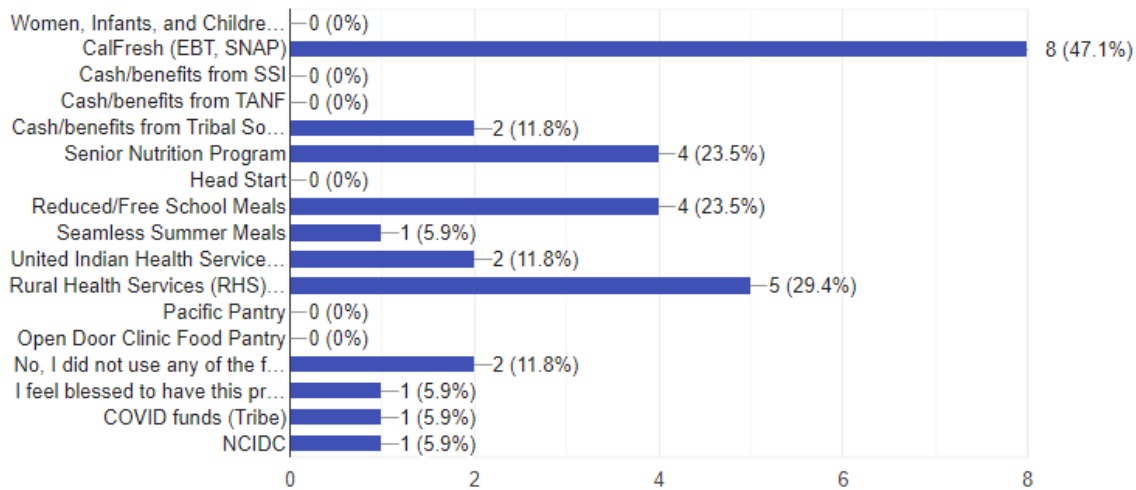
Finding 6. Various food assistance programs and services are available to meet the diverse community food needs. There needs to be a more coordinated communication plan to reduce information disparities and increase reach and impact.

The food security survey results show that the participants used the SNAP, CalFresh program (47.1%), followed by Rural Human Services (RHS) Food box distribution (29.4%), Senior Nutrition Program (23.5%) and Reduced/Free School Meal program (23.5%) in the last 12 months (Figure 12). Most of the recipients responded that the food assistance programs enabled them to eat the food they wanted to eat and left some comments on the survey on how much these food assistance programs and services mean to them during challenging times.

Figure 12: Food Assistance Programs and Services Utilizations in the Last 12 Months

1. In the last 12 months, Which, if any, of the following food assistance programs did your household use?(check all that apply)

17 responses



Source: The food security survey collected from November 2021-January 2022, Part 3: Household Food and Food Resource Access and Utilization, Question 1

Yurok Tribe Food Sovereignty program

The Yurok Tribe created the Food Sovereignty Division, a subsection of the Yurok Tribe Environmental Program, founded in 2020 to achieve food sovereignty for the Yurok Tribe. Food sovereignty means that tribal members meet their nutritional and cultural food needs to thrive without relying on external food systems. The Food Sovereignty Division provides programs and services funded by diverse funding sources from private foundations as the most significant funding source, followed by the state and federal governments. The Food Sovereignty Division is working toward creating a holistic food system through the development of the Food Villages, through the Reservation and extending to Ancestral Territory. The Food Villages will include a building modeled after traditional Yurok houses that will provide the local community and Food Sovereignty employees. The Food Village will have space for a commercial kitchen with a large refrigerator and freezer for safe food storing, gathering, and preparing food. People can use the commercial kitchen for their food preparation and storage. The Food Villages will also provide space for education, including outdoor instruction, focusing on growing their foods through gardening, food preservation, and processing, cooking techniques for traditional and farmed foods. They will have garden spaces, orchards, greenhouses, and farmers' markets. They are working to obtain additional funding to expand the current Farm to School educational for Yurok people to learn traditional and contemporary food production, preservation, processing of traditional, generational knowledge to increase the Tribe's self-sustaining capacity. If the funding is received and operated as planned, they anticipate building their food village structures in early 2022. Meanwhile, they will focus on planting fruit orchards and growing vegetables in the Klamath site in Spring 2022 and provide some fruits and vegetables to the community in summer 2022.

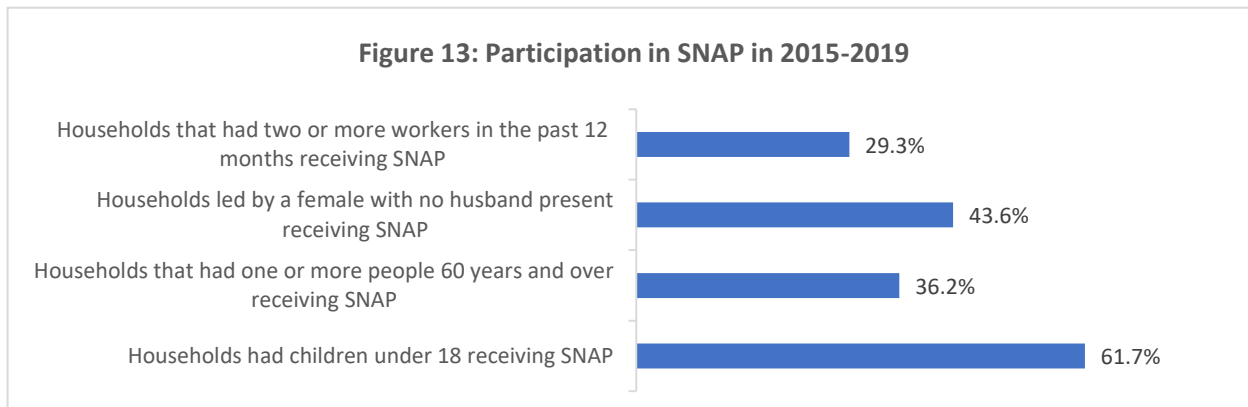
-the summary of the findings from the Key Informant Interview conducted with Taylor Thompson, Food Sovereignty Division Manager of the Yurok Tribe Environmental Program, on November 17, 2022

The CalFresh Program

The CalFresh Program, federally known as the Supplemental Nutrition Assistance Program (SNAP), issues monthly electronic benefits that can be used to buy most foods at many markets and food stores. The CalFresh Program helps improve the health and well-being of qualified households and individuals by providing them with a means to meet their nutritional needs. The CalFresh program is for low-income people who meet federal income eligibility rules and want to add to their budget to put healthy and nutritious food on the table.¹⁶ Del Norte County has one of California's highest CalFresh Program utilization rates. According to the press release by the California Food Policy Advocates in 2016, Del Norte County ranked 1st out of 58 counties on the index, with the first-rank county having the highest CalFresh utilization relative to potentially eligible individuals.¹⁸ If CalFresh reached all potentially eligible individuals, Del Norte County residents would receive an additional \$428,000 in federally funded benefits each year. Those benefits would result in \$766,000 of additional state and local economic activity.¹⁷

According to the 2015-2019 American Community Survey (ACA) 5-year estimates, in 2015-2019, about one out of five households (20.7 %) received SNAP (the Supplemental Nutrition Assistance Program) in Klamath, CA. The highest SNAP utilization rate was found in the households with children under age 18 with an estimated 61.7%. The SNAP participation rate among the households had one or more people 60 years was 36.2% (Figure 13). An estimated of 43.6% households led by a female with no husband present received SNAP benefits in Klamath during 2015-2019, which was the second highest SNAP utilization rate (Figure 13).

According to Dorothy Waddelow, Program Manager for Dept. Health and Human Services, Social Service Branch, as of September 2021, 3, 152 households in Del Norte County received the CalFresh benefit; out of the CalFresh benefits spent in Del Norte County, less than 1.5% is spent in Klamath, which is understandable as to the lack of EBT vendors in the community. Dorothy also mentioned that all that is CalFresh eligible are currently participating in CalFresh program as far as she knows. To be eligible for CalFresh Program benefits, an individual must be within the income requirements and not receive the Tribal Food Commodities Program. She hopes all that qualify for CalFresh have applied for the program. People can (1) apply online at BenefitsCal.org (2) calling the Social Service office at 707-464-3191, and they can send them the application form (3) come to the Social Service office, 880 Northcrest Drive, Crescent City, CA 95531, to apply in person at any time. Retrieve an application outside the building at the main doors and return it by dropping it back off or mail or fax it back to the office.



Source: U.S. Census, 2015-2019 American Community Survey (ACA) 5-year estimates

According to Dorothy Waddelow, the small portion of the CalFresh benefits is spent in Klamath, which will have negative economic impacts on the local community. There needs to be local policies and programs that will support the local food outlets in offering more healthy and culturally relevant food options in Klamath with affordable prices and high quality to promote the CalFresh participants spend their benefits locally.

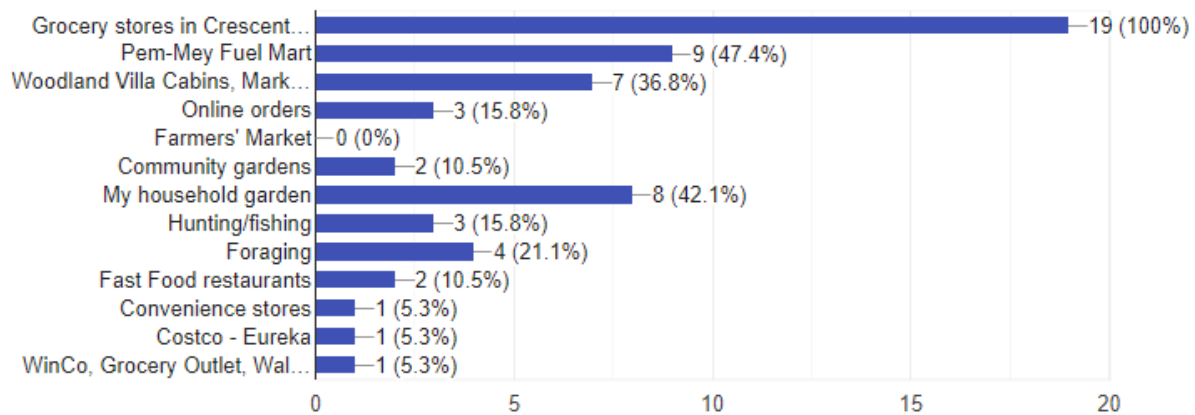
The Food Security survey results show that the participants acquire their food from the grocery stores in Crescent City (100%), household garden (42.1%), Pem-Mey Fuel Mart (47.4%), Woodland Villa (36.8%), and a few people answered they shop at the stores in Eureka (Figure 12). Some acquired their food from foraging (21.1%) and online orders (15.8%) (Figure 14).

From the food security survey, six people responded to the question, under Part 3: Household Food and Food Resource Access and Utilization, "If your household has used food assistance programs in the past year, what programs/services have been the most helpful? Why?". Three respondents are related to the CalFresh Program. They found the CalFresh Program has been most helpful because they get to choose what food to eat and spend wherever they meet their needs. One person states that the Elder Nutrition Program has been beneficial because the program delivers food. A few people left comments that the food assistance program, including the RHS food box distribution, has been most helpful.

Figure 14: How we Acquire Food

5. Where does your household acquire food? (Check all that apply)

19 responses



Source: The food security survey collected from November 2021-January 2022, Part 3: Household Food and Food Resource Access and Utilization, Question 5

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

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides federal grants to states for supplemental foods, health care referrals, and nutrition education. They provide their services to low-income pregnant, breastfeeding, and non-breastfeeding postpartum women and infants and children up to age five. Mothers are not eligible after 12 months postpartum, but children can stay with the program until they turn five years old. The Food and Nutrition Service administers the WIC Program at the federal level; state agencies are responsible for determining participant eligibility, providing benefits and services, and authorizing vendors. Retail stores need to be authorized by the State to accept WIC. WIC foods include infant formula; infant and adult cereal; baby food fruits, vegetables, and meats; whole wheat bread, brown rice, soft corn, and whole wheat tortillas; juice; eggs; milk; cheese; peanut butter; dried beans or peas; fruits and vegetables; soy beverage, tofu; and canned fish.

WIC is administered in Del Norte County by the Del Norte Department of Health and Human Services, Public Health branch and Tribal Lands (DNATL) by United Indian Health Services (UIHS). According to Roxanne Cameron, a Health Educator for the WIC program in the Department of Health and Human Services, many WIC clients use their benefits in WINCO in Eureka, CA and Crescent City, CA, even in Fred Meyer in Brookings, Oregon. Roxanne says that the county has high WIC utilization because of open communication, easier application processing, and receiving their benefit a card, like CalFresh EBT card, which has helped reduce stigma, improve the participants' shopping experiences. And their benefits can be used at the Farmers Markets if the vendors accept the WIC fruit and vegetable vouchers. Roxanne states that each child receives a value of \$150 per child a month in benefits; breastfeeding moms can get about \$200 worth of benefits a month, and their fruits and vegetables benefits have increased.



Pem-Mey Fuel Mart

Photo: Sunny Baker

Community Voices

During the focus group and key informants' interviews, many community residents expressed that affordability is one of their major barriers to accessing healthy food. They addressed that many people are unaware of the programs and services offered to the community.

"It would be nice to have a grocery store here, so we don't have to pay five bucks for a box of macaroni and cheese, and milk costs about 7 dollars per gallon."

"It is not like I buy all my groceries there, but I am out of something for dinner; I have to go to Pem Mey or Woodland villa." "Once in a while, they have some produce during summer; Not consistent"

"Communication is a barrier; I have no phone."

I visited Pem-Mey Fuel Mart in December 2021; fresh produce such as onions, potatoes, celery, tomatoes, lemons, and limes was available, along with the water bottles displayed at the cooler located next to Chester's Chicken Café inside the store. On the right hand of the cooler, there were a few display cases with the nutrition educational materials and recipe cards provided by the CalFresh Healthy Living program. The store also had small quantities of essential food items such as



brown rice, whole wheat tortillas, whole wheat bread, milk, cheese, eggs, deli meat, bacon, hamburger meat, and the local meat source from a local farm in Klamath. Community members expressed affordability is as one of their significant barriers in accessing healthy foods in Klamath during the focus group. Pem Mey Fuel Mart and Woodland Villa Market are SNAP vendors. Due to COVID-19, the Woodland Villas Market has been closed to the public, and only open for take-outs and they sell the food items available at the store upon the customer's requests, ordering through the window.

Pem-Mey Fuel Mart

Photo: Sunny Baker

According to the store manager, Troy Pruitt, their store price can't compete with Safeway, Walmart, and Grocery Outlet prices. Pem Mey is the Fuel Mart, set up for convenience, not for grocery stores. He said they do not profit from selling fresh produce. He also can't keep the fresh produce in larger quantities because it is highly perishable. He only has a few items of fruits and vegetables available in small quantities for the community. Because of the distributors they have for their store currently, Troy thinks it is not feasible for them to become a WIC vendor to stock all the items to meet the State's WIC vendor guidelines.

Yurok Food Distribution

The Yurok Food Distribution Program is a Yurok Tribe Social Services program. The Program provides an alternative to food stamps for low-income tribal members residing within non-metropolitan areas of Humboldt and Del Norte Counties and to other low-income individuals living on the Yurok Reservation. Yurok Food Distribution offers USDA food commodities and fresh fruit and produce. The Program also provides a tailgate option for delivery.

According to Rebecca, Certifier and warehouse worker for the Yurok Food Distribution, from the phone interview on December 3, 2021, the service is provided once a month, either tailgate delivery or pick up at the distribution center in Crescent City. The food items include fresh seasonal produce, frozen meats, canned goods, including canned meats, noodles, cereals, milk, cheese, peanut butter, oil, etc. The clients

can fill out the shopping list and receive a food box monthly at the pickup location, or the elders will get their food box delivered. Currently, about 100 households receive the services from Curry County, Del Norte, Eastern Humboldt, Josephine, and Jackson Counties. Most of the clients are people from Crescent City and Klamath. Among Klamath clients, five households receive their food boxes at the tailgate distribution center, and about 20 households pick up their boxes at the distribution center in Crescent City. The number of clients has decreased from 300 households to about 100 households compared to before the COVID-19 pandemic. Rebecca believes it is due to the SNAP benefit increase during the pandemic. People choose SNAP benefits instead of the Yurok Food Distribution program. The market values of the food items are comparable to the SNAP benefits; a household of 4 receives the equivalent of \$600 of Groceries monthly. According to Rebecca, the number of food items for one individual is not enough to stretch throughout the month. She wishes to see a few more items available adjust to the cost of living.

Community Food Council for Del Norte and Tribal Lands: Pacific North Fresh Mobile Market

Community Food Council for Del Norte County and Tribal Lands (DNATL) is working collaboratively to co-create a local food system that provides access to healthy, culturally appropriate food to all families in Del Norte and Tribal Lands (DNATL).¹⁸ The DNATL Community Food Council's programs and services include a choice-based food bank, Pacific Pantry, Food Recovery Program, Food Forest program serving low-income populations. DNATL Community Food Council is awaiting delivery of the



Photo: Community Food Council

Pacific North Fresh Mobile Market, which is now finished being built, and they hope to have it on the road to serve Del Norte's communities by March 2022.¹⁸

According to Amanda Hixson, Food Program Director for the DNATL Community Food Council, the Pacific North Fresh Mobile Market will offer various food options and choices and the DNATL Community Food Council's programs, including choice-based pantry program and CSFP (Senior Boxes) program, Food Recovery program. Amanda says they seek community input to bring their Mobile Pantry to the various locations where the communities can access healthy and fresh foods to increase food and nutrition security, starting with once or twice a month in each community, including Klamath, CA.

Pacific Pantry is located along the north side of the Family Resource Center of the Redwoods at 494 Pacific Avenue. Pacific Pantry allows clients to visit the pantry once a month and choose the items they need the most, depending on household size. People need their picture ID to sign up and check for monthly shopping. The sign-up process includes self-certification (no documents required) income and housing questions, but it does not affect eligibility. Once they are signed in, they only need to bring their photo ID for monthly shopping. CSFP (Senior Boxes) is monthly prepacked food boxes for income-eligible

seniors age 60 and older. The eligible need to sign up that requires an ID, meet the income guidelines, and renew the application annually. People can sign up "proxy" to pick up the box for them each month.

Rural Human Services (RHS) Food Bank Program

Commodities are distributed once a month. The income eligible must bring their California photo ID and self-certify on-site to receive their commodities. They offer their food box program at four communities, Crescent City, Gasquet, Smith River, and Klamath. The Klamath distribution site is at the Klamath Community Center, 219 Salmon Ave, CA 95548. RHS brings their food truck to the parking lot at the Klamath Community Center from 9 am-11:30 am every 2nd Tuesday of each month.

Free and Reduced Lunch Program

Margaret Keating Elementary School provide breakfast, lunch, and snacks at the afterschool program. Margaret Keating Elementary School in Klamath has 104 students enrolled during the 2020-2021 school year.¹⁹ 72 % of the students were American Indian/Alaska Native (N=75), 11 % were White (N=11), 10% were Hispanic (N=10), and 0% Asian and 0% Black, 8% were two or more races (N=8). About 83 % of Margaret Keating Elementary School students were eligible for the free and reduced-price meal program, 76% and 7%, respectively, in the 2019-2020 school year, the highest rate amongst the schools in Del Norte County. In the 2020 school year, 66.5 % were eligible for the Free and Reduced-price meal program in Del Norte County,¹⁹ whereas 59. 2% of California students were eligible to receive free or reduced-price school meals.⁶

According to Alicia Mckellar, a 1st-grade teacher in Margaret Keating Elementary School, she said that her students come to school hungry during the focus group. They used to have Fresh Fruit and Vegetable program from the nutrition service program, which was a great help to feed her students with healthy snacks, some crackers, and fruits, during school. She wishes to get the Fresh Fruit and Vegetable program back to her school and get at least a piece of fresh fruits to her students. She also mentioned that Margaret Keating School had a donation from "Friends of Pine Ridge Reservation", food and books during Christmas, which was a great help.

According to Jessica, staff from the Boys and Girls Club of the Yurok Tribe shared that Seamless Summer Program was a big help, offered at the Boys and Girls Club and a Steelhead Lodge in the Glen, Redwood subdivision church. Jessica stated that the Boys & Girls Club used to do food pantry every week before the covid started and delivered fresh produce and canned goods to about 27 families, about 47 kids when the first covid started when the center was closed. They are about to do the home delivery soon again. She also shared that Food for People, a food bank in Humboldt, used to set up the table at the Boys and Girls Club and distribute all kinds of fruits and vegetables, sometimes Alexander Dairy milk, to the community.

3.d. Transportation and Housing

Finding 7. Transportation is one of the major barriers for the Klamath residents to bring their food to the table. People with no reliable transportation can face more significant challenges in readily available food access.

Everybody should have safe, accessible, and convenient transportation options to get to work and other destinations. Lack of access to a car should not limit people’s access to opportunities. Having safe, adequate, and accessible transportation options has been linked to improved physical and mental health, employment outcomes, medical care, and resiliency during disasters.²⁰

Klamath, CA, is in very remote and rural areas in Del Norte County along the Klamath River with the Pacific Ocean and giant redwood forests. Highway 101 connects Klamath from Crescent City, the only incorporated city in the county to the north and adjacent to the Humboldt County to the south. Frequent Highway 101 closure due to the Last Chance Grade Road repair project between Klamath and Crescent City, land slides and severe weather conditions

Table 2: Commuting to work

are ongoing problems for the Klamath residents to access readily available food and services.

More than half of the Klamath residents drove to work alone (61.4%) in 2015-2019, and about one out of five people (19.5%) carpooled. Among those who commuted to work, it took about 19.7 minutes to get to work on average (Table 2).

	Percent
Car, truck, van -- drove alone	61.4
Car, truck, van -- carpooled	19.5
Public transportation (excluding taxicab)	0.0
Walked	2.4
Other means	0.9
Worked at home	15.8

According to the Food Security Survey, 33.3 % answered that transportation is the major barriers in accessing to the food assistance programs and services offered in the community, followed by lack of cultural foods (20%) and lack of healthy and quality foods including locally grown (20%) (Figure 15).

Source: 2015-2019 American Community Survey

During the focus group, when asked the question, "How do people with no reliable transportation acquire food for their families?" One of the participants answered, "Well, kids eat at school, and then they go to Pem-Mey Chester' Chicken or get frozen pizzas; Pem-Mey does accept EBT".

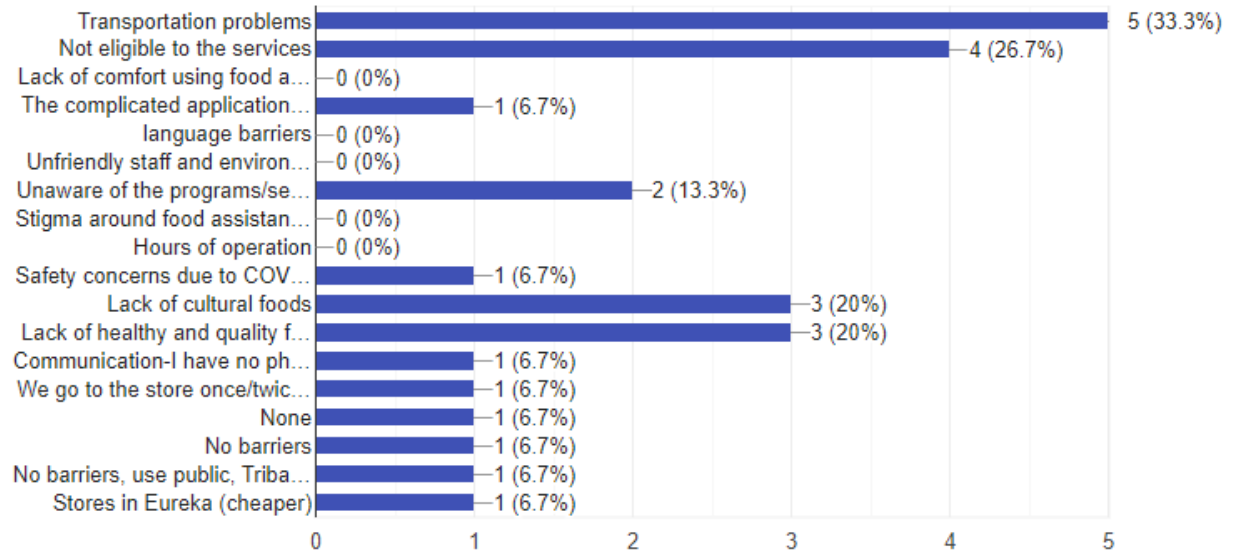
Many residents expressed that they need a grocery store that offers fresh and healthy at an affordable price. According to Alicia Mckellar, a 1st-grade teacher in Margaret Keating Elementary School, there used to be two grocery stores in Klamath, Klamath Market and Ruby's grocery store, offering fresh produce and bakery butcher, etc. She stated that Ruby used to cash people's checks and many other services to meet community needs, locally focused and community oriented. However, she also said that Klamath does not have enough population to support a grocery store. Improving supermarket

access can be a key strategy in creating healthier places, which requires planning and a community-involved process to identify gaps in healthy food access and the types of options available.²¹

Figure 15: Barriers to accessing the food assistance programs/services

4. What are the barriers accessing to the food assistance programs/services offered in your community?

15 responses



Source: The Food Security Survey

Community Voices

Transportation is a major challenge for many Klamath residents. People shared creative ideas and solutions to have fresh and healthy food readily available in the community. One idea is bartering and sharing their garden bounty. Another idea presented is a mobile unit that drives down to Klamath weekly and brings affordable and quality fresh produce to the community, so they don't have to find transportation into the Crescent City. Also, they need community space in each neighborhood where they can have access to the commercial kitchen, food preparation, and preservation. People can network with one another and share food, information, and knowledge.

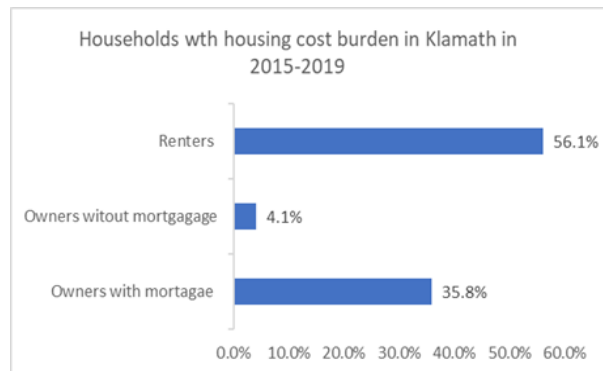
Housing and Food Security

Finding 8. Many households in Klamath experience high housing cost burden.

All residents should be able to afford adequate housing without giving up healthy food, medical care, or other necessities or accepting unsafe housing conditions. When housing cost burdens are high, individuals and families must make difficult choices with limited options.

Figure 16: Households with housing cost burden

According to the American Community Survey in 2015-2019, the median monthly housing costs for owners with a mortgage was \$1,113, and for the owners without a mortgage, it was \$337.²² For renter-occupied houses, the median gross rent for Klamath was \$800.²² More than half of the renters (56.1%) in Klamath are considered cost-burdened households that pay 30 % of their income on housing costs; 35.8 % of owners with a mortgage were considered cost-burdened (Figure 16).



Source: American Community Survey

According to the American Community Survey in 2015-2019, Klamath had 612 housing units.²² Of these housing units, 55.6% were single-family houses either not attached to any other structure or attached to one or more structures, commonly referred to as "townhouses". 0.8 % of the housing units were in multi-unit structures, and 43.3 % were mobile homes, while any remaining housing units were classified as "other", which included boats, recreational vehicles, Vans, etc., with 0.3%.²²

4. Health Conditions

Finding 9. Drugs and alcohol issues are prevalent in Klamath, affecting food security negatively.

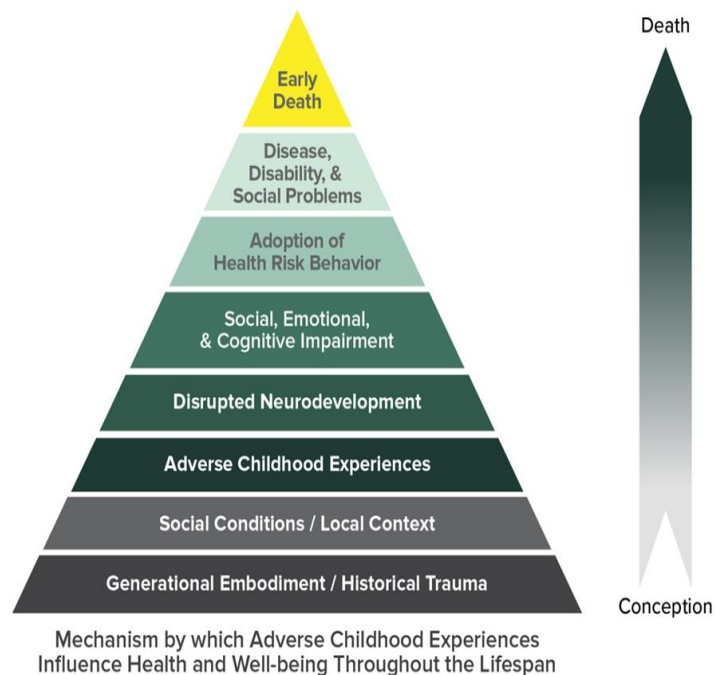
Del Norte County Community Health Assessment Survey shows that community members think alcohol and drug use is one of the biggest concerns in Del Norte County.⁸ Del Norte County has the second-highest rate of diagnosis for alcohol and drug disorders in California and the State's highest estimated mental health service needs.⁸

Community members voiced concerns about the high prevalence of drugs and alcohol manifested in the community affecting food security negatively. Alcohol and drugs misuse can negatively affect the affected individuals and the people around them, families and friends and the community. Many use alcohol and drugs to cope with their stress and mental health, depression, and anxiety. Alcohol and drugs can interfere with people's cognitive ability, interfering with learning and remembering information. Food budgeting, smart shopping, safe preparation, and cooking require cognitive skills. Children living in families with alcohol and drug problems can experience toxic stress and

trauma. Those children can often be neglected to meet their basic needs, including healthy and safe food and healthy role modeling and nourishment.

Adverse childhood experiences (ACEs) refer to traumatic events in childhood age 0-17 years, such as exposure to violence, neglect, substance misuse, mental health, or instability due to parental separation or poverty. ACEs can have lifelong negative impacts on children's health, well-being, and opportunity. The toxic stress associated with traumatic early adverse experiences can lead to behavioral, emotional, school, and health problems during childhood and adolescence and chronic health problems such as obesity, substance abuse, and mental illness in adulthood.²³

Figure 17: The ACE Pyramid



Source: About the CDC-Kaiser ACE study

The ACE Pyramid represents the conceptual framework, describing how ACEs are strongly related to the development of risk factors for disease and well-being throughout the life course.²⁴ According to the ACE Pyramid, the root causes of the ACEs include generational embodiment and historical trauma, which can cause disrupted neurodevelopment and social, emotional, and cognitive impairment, and adoption of health risk behavior that will lead to negative health outcomes, including early death (Figure 17). People with six or more ACEs died nearly 20 years earlier on average than those without ACEs.

It will be critical to understand the risk factors and root causes of the adoption of health risk behavior such as alcohol and drug use and have a greater awareness of how trauma is manifested in the society's culture and social norms. We can respond to trauma-sensitive and informed ways in the food program planning and implementation to bring healing, restoration, resiliency.

Community Voices

During the focus group and key informant interviews, community members shared their concerns on drug and alcohol problems and adverse health impacts. Some comments are followed.

"People are dying at a young age that I notice in the community for sure, that can cause a lot of stress and trauma."

"We have a lot of mentally ill people, and you can tell walking down the road."

"Drugs and Alcohol are the biggest, that takes food out of kids' mouths."

Finding 10. Lack of nutritional knowledge and information among the residents is one of the key contributing factors to food insecurity in Klamath.

Good nutrition is essential for healthy and quality living. A healthy diet can help children grow and develop properly. A healthy and balanced diet can help adults live longer and have a lower risk of obesity, heart disease, type 2 diabetes, and certain cancers and manage these conditions and prevent complications.²⁵

Healthy eating is vital at every stage of life. A balanced diet includes fruits and vegetables, whole grains, protein foods, including plant-based and low-fat dairy. There is convincing evidence that increasing the consumption of fruits and vegetables reduces the risk of chronic diseases and promotes health.²⁶ The 2020–2025 Dietary Guidelines for Americans advise incorporating more fruits and vegetables into U.S. residents' diets as part of healthy dietary patterns.²⁷ Adults should consume 2 cup-equivalents of fruits and 2 ½ cup-equivalents of vegetables daily.²⁷

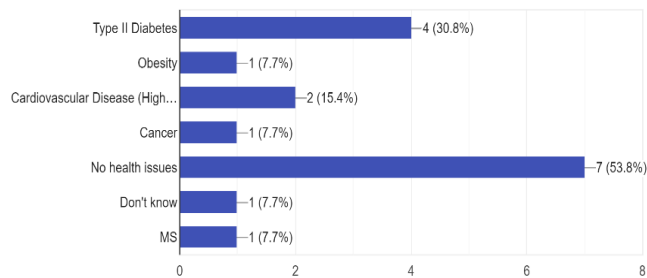
Eating a diet rich in fruits and vegetables can help reduce the risk of many leading causes of illness and death, such as cardiovascular disease, type 2 diabetes, some cancers, and obesity. Despite these positive health benefits, few adults meet the recommendations. In 2019, fruit and vegetable intake among U.S. adults remained low, with only approximately one in 10 adults meeting either recommendation.²⁸

The Food Security Assessment Survey indicates that about half of the respondents' members of households' experience at least one chronic diseases; Type 3 diabetes, cardiovascular disease, obesity (Figure 18).

The Food Security Assessment Survey shows that no respondents meet daily fruits and vegetables recommended consumptions based on the Dietary Guidelines. The survey shows that 23.1% eat 2-3 cups of fruits and vegetables, 38.5% eat 1-2 cups of fruits and vegetables, and 23.1% eat less than once cup of fruits and vegetables on average day (Figure 19).

Figure 18: Health Conditions

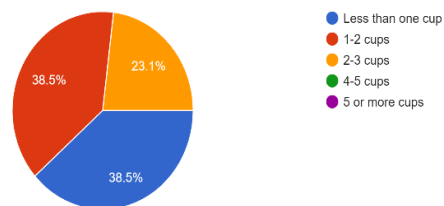
10. Which health issue do you or any members of your household experience currently? (Check all that apply)
13 responses



Source: The Food Security Survey

Figure 19: Fruit and Vegetable Consumption

7. How many cups of fruits and veggies do you eat on an average day?
13 responses



Source: The Food Security Survey

The Food Security Survey shows that perceived barriers include lack of healthy food access, lack of time and energy for shopping and cooking, poor mental health (stress, depression, and anxiety), lack of motivation for healthy eating, affordability, and lack of knowledge and skills for nutrition and healthy cooking.

Community Voices

Community members addressed the importance of education to raise awareness about basic nutritional knowledge and cooking skills, including food preservation, food resource management around planning and budgeting, incorporating cultural foods. Following are some of the community members' comments during the focus group and key informant interviews.

"Let people know what to do with them, such as recipes."

"There is a lot of diabetes in this community."

"Sugar consumption is just out of control; there is too much junk food out there, cheap and processed foods, candy and cookies and soda, and kids can't focus on school."

"We have one of the best foods in the world and one of the worst; it is quite a contrast."

5. Recommendations

The Six Pillars of Resilient Food Security Framework's principles guide the recommendations to build resilient and sustainable food security in Klamath, CA. The six pillars of the resilient food security framework include-Adaptive capacity, Resilient livelihoods, Sustainable natural resource management, Disaster risk management, Health and relationships, and Hope. ³

Adaptive Capacity is the ability of people and communities to make changes in their lives and livelihoods.

- Build a competent and skillful food security workforce to build cultural competency, resilience, and leadership.
- Create community action groups to strengthen food security, such as a task force or a coalition.
- Build social capital through community engagement/mobilizing.
- Empower residents through education to build nutrition knowledge and food resources management skills.
- Adopt and expand Farm to School initiatives at the early childhood, school and afterschool settings to teach children where the food comes from and empower them to make informed choices.

Resilient Livelihoods are income and food sources that are secure, risk diversified and flexible.

- Provide training and workshops (e.g., grant writing, business planning) to the community to become self-sufficient.
- Adopt a healthy corner store imitative to increase healthy and affordable food access.
- Conduct a feasibility/economic market analysis for a grocery store in Klamath.
- Improve the economic viability of local food producers through training and technical assistance.
- Integrate food security programs and services across the sectors through partnerships and collaboration.
- Secure resources to improve healthy and fresh food access and affordability among the low-income populations.

Sustainable natural resource management is the use and care of natural resources that results in their long-term flourishing for the good of all.

- Encourage local knowledge and self-sufficiency through education.
- Develop educational materials and resources to teach residents safe harvesting
- Disseminate the environmental research findings and data timely and culturally appropriate methods
- Reintroduce traditional land management practices to restore habitat for traditional food sources.

Disaster risk management includes disaster risk reduction and preparedness, emphasizing reducing and managing known risks.

- Provides emergency preparedness training and practices regularly to the residents to build resiliency by increasing the understanding of threats and hazards and communicating the expected actions for the community to undertake during an emergency.
- Participate in regional food security/emergency works.

Health and Relationships support the physical, mental, and social wellbeing of people and communities, enabling active engagement.

- Create a wellness plan to support the physical, mental, and social wellbeing of people and communities, enabling active engagement.
- Develop resilient food programming that focuses on a holistic response that integrates services to address social determinants of health and build sustainability.
- Build strong leadership and institutions to support joint decision-making and action, management of shared resources, and experimentation and learning to build resilient food security.

Hope is the personal belief that despite current problems, things will improve.

- Develop a culturally relevant communication and outreach plan to promote food security.
- Provide harvest festivals to celebrate health and wellness, cultural diversity, and traditional knowledge and heritage.
- Develop Hope initiative, social marketing campaign to promote healthy and sustainable living to build resilient individual and community food security that will bring healing, restoration, and health.

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Appendix: Food Security Survey

Survey for Food Security Assessment, Klamath, CA

Your answers to this survey will help us better understand the food security status and identify gaps in the food programs/services and opportunities to build resilient food security and meet the needs of the residents in Klamath, CA. Your answers will be kept confidential, and only the Community Food Council for Del Norte and Tribal Lands' staff will have access to analyze the aggregated data for their program planning. Thank you for your participation!

Date: _____

Which neighborhood does your household live in Klamath, CA?

- Klamath Cove, north side of town Hunter Creek Subdivision area Requa area Klamath town area Klamath Glen Resighini reservation area Klamath Camper's Corral area Other: _____

Part 1: Demographics (Question 1-10)

1. What is your age?

- under 20 21-29 30-39 40- 49 50- 59 60 or older

2. Select the option that best describes your sex:

- Male Female Prefer not to answer

3. Select the option that best describes your ethnicity:

- Hispanic Not Hispanic/Latino Prefer not to answer

4. Check all boxes that apply to your race:

- American Indian or Alaskan Native Asian Black or African American
 Native Hawaiian or Other Pacific Islander White Prefer not to answer

5. Please tell us about your household composition;

- Total number of adults (over 18 including you) living in your household: _____
- Total number of children (under 18) living in your household: _____

6. Household characteristic;

- Female head of household Male head of household Single parent 2 Parents Couple Single Mixed families

7. Which of the following best describes your current employment situation?

- Full-time employed Part-time employed Unemployed Homemaker Retired

Disabled Others _____

8. What is your best estimate of your household's monthly income (before taxes)? _____

9. How much does your household spend on food in an average month? _____

10. Which health issues do you or any members of your household experience currently?

Type II diabetes Obesity Cardiovascular Diseases (high blood pressure, hypertension)

Cancer No health issues Don't know Others _____

Part 2: Household Food Security Survey (Question 1-6)

We would like to ask you a few questions about the food eaten in your household in the past 12 months and what you may have done to make sure that everyone in the household had enough food. Please read to the question and then check the appropriate answer. Thank you!

1. Please indicate how often the following statements are true for your household. "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?

Often Sometimes Never true Don't know or Refused

2. Please indicate how often the following statements are true for your household. "(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 Sometimes Never true Don't know or Refused

3. In the last 12 months, 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 Don't know

4. (If yes to question 3) How often did this happen? (If No to question 3, you can go to question 5)

Almost every month Some months but not every month In only 1 or 2 months Don't know

5. 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 Don't know Not applicable

6. In the last 12 months, were you ever hungry, but didn't eat, because there wasn't enough money for food? Yes No Don't know

Part C: Household Food and Food Resource Access and Utilization

1. In the last 12 months, Which, if any, of the following food assistance programs did your household use?(check all that apply)

- WIC CalFresh (EBT, SNAP) Cash/benefits from SSI Cash/benefits from TANF
- Cash/benefits from Tribal Social Services Commodity Senior Nutrition Program Head Start
- Reduced/Free School Meals Seamless Summer Meals United Indian Health Services (UIHS) Foods Rural Health Services (RHS) Food Bank Pacific Pantry
- others _____

2. If you use a food assistance program, or multiple food assistance programs, have they enabled you to eat the foods you want to eat? Yes No A little bit Not at all Not applicable

3. If your household has used food assistance programs in the past year, what programs/services have been the most helpful? Why?

4. What are the barriers accessing to the food assistance programs/services offered in your community?

- Transportation Not eligible to the services Lack of comfort using food assistance programs/services The complicated application process language barriers Unfriendly staff and environment Unaware of the programs/services Stigma around food assistance programs Hours of operation Safety concerns due to COVID-19 Lack of cultural foods Lack of healthy and quality foods including locally grown
- others _____

5. Where does your household acquire food? (Check all that apply)

- Grocery stores in Crescent City Pem-Mey Fuel Mart Woodland Villa Cabins, Market and Restaurant Online orders Farmers' Market Community garden My household garden Hunting/fishing Foraging Fast Food restaurants Convenience stores others

6. How do you get to the store? by car by public transportation Carpooling By bicycle

On foot Others: _____

7. How many cups of fruits and veggies do you eat on an average day?

- Less than one cup 1-2 cups 2-3 cups 4-5 cups 5 or more cups

8. Imagine that you have the opportunity to do something in the community to help people have an easier time getting the types of foods that they want or need. What would you do?

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