

ADAPTIVE STRATEGIES TO FOOD INSECURITY
WITHIN THE CHUUKESSE COMMUNITY OF GUAM

BY

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Abstract

Food insecurity is a well-researched phenomenon that not only describes the reduced quality, variety, and desirability of dietary decisions, but also the accessibility of nutritional foods, the duration of food shortage, and the acquisition of foods in socially acceptable ways. While the nutritional impacts of food insecurity have been researched in Guam, the adaptive strategies of food insecure communities, such as the Guam's Chuukese community, have yet to be explored. This study explored the adaptive strategies utilized within members of the Chuukese community of Guam, as well as the adaptive strategies traditionally utilized in Chuuk. Recommendations on how identified adaptive strategies can be of use to education and support programs were also identified.

The USDA U.S. Household Food Security Survey Module identified the primary food preparers within insecure households within the Chuukese community. From those identified, nine participants were interviewed using basic interpretive and constant comparative qualitative methodology with prepared open-ended interview guides. Interviews were coded in *Atlas.ti*, and thematic categories were formed through an iterative process with multiple rounds of investigative triangulation. Emergent themes revealed by participants identified adaptive strategies that highlighted the differences between Chuuk's traditional subsistence agriculture economy, which emphasized familial and communal networks, and the personal impact of living in Guam's current cash economy.

Participants navigated such obstacles to food security by enacting strategies that (1) optimized resources outside the household, such as foraging, gathering and fishing (where possible), gifting and sharing, food banks, and government assistance; (2) lowered food costs in response to the cash economy; (3) performed entrepreneurship for supplemental income; and (4) managed food supply with previously acquired resources. Due to the repeated emphasis on subsistence culture and the strain of a western cash economy, these findings

indicate that the food security of the Chuukese community would be improved by targeted urban agricultural and agroforestry practices.

Keywords: *food insecurity; food security; adaptive strategies; Chuuk; qualitative interview; subsistence farming; urban agriculture*

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1. Introduction

Recent studies utilizing portions of the United States Department of Agriculture's (USDA) standardized food security survey indicate that potentially high numbers of low-income families on Guam experience varying levels of food insecurity (Acosta et al., 2017). USDA (2018) defines food insecurity as the reduced quality, variety, or desirability, of dietary decisions, with indications of disrupted eating patterns and reduced food intake. Some studies build upon that definition with the inclusion of accessibility and availability of nutritional foods, the amount of time spent between food security and food insecurity, and the acquisition of foods in socially acceptable ways (Cambell, 1991; Maxwell and Smith, 1992; Kempson et al, 2002; Kempson et al, 2003). Food insecurity is complex, as almost every aspect of one's lifestyle can affect the acquisition of adequate foods. In the Pacific Islands, quantifying food insecurity proves difficult, as household sizes are greatly affected by culture, and food security does not always equate to adequate nutrition (Maxwell, 1996; Acosta et al., 2017).

Both the nutritional and sociological impacts of food insecurity are becoming increasingly well researched on a national level. Food insecurity is a chronic stressor independent of poverty. It has been associated with cardiovascular disease, diabetes, and obesity in low income adults (Smith & Richards, 2008; Leung et al, 2014). It is also believed to be inversely related to both dietary intake and diet quality (Leung et al, 2014). A food environment that includes few healthy food options and low-quality food presents more environmental barriers to healthy eating (Zenk et al, 2011). The health implications of food insecurity include increased susceptibility to infection and chronic health afflictions (Baumier and Ford, 2010). Food insecurity can also lead to psychosocial and cognitive difficulties, such as suicidal symptoms and depressive disorders (Smith and Richards, 2008).

For the island of Guam, existing nutritional studies observed high rates of obesity in the native population (Leon Guerrero et al., 2008). Such findings prove disturbing, as excess weight and poor diet are risk factors for several chronic diseases. Although studies on Guam's food security in relation to diet exist (Malcom, 1958; Leon Guerrero et al., 2008; Pobocik et al., 2008), no studies focus primarily on adaptive strategies that communities employ to combat food insecurity. Adaptive strategies are often used as indicators of food insecurity. They can range from simple changes in eating patterns, to severe changes in diet and nutrition (Maxwell, 1996). Adaptive strategies not only give insight to the level of food insecurity one endures, but also the experiences and trauma behind hunger (Chilton and Booth, 2007).

Because disadvantaged communities experience the brunt of food insecurity with little to no available resources (Ahluwalia et al, 1998; Clifton 2004; Chilton and Booth, 2007; Zenk et al, 2011), it is imperative to document and analyze the adaptive strategies such communities employ. As many of Guam's resident cultures are communal, as opposed to the individualistic nature of most western communities, focusing on such island cultures may reveal strategies that are unique to this region. For example, strategies of communal cultures may include access to more familial aid or community connections, which may imply high levels of cultural obligations. This increased dependency on others may also prove a burden on the established members providing the aid, thus potentially increasing the threat of food insecurity overall.

As the fastest growing migrant population on Guam (Bautista, 2011; Hezel & Levin, 2012), with some of the highest rates of socioeconomic disparities (Hezel & Levin, 2012; Hattori-Uchima, 2017), the Chuukese community in particular provides a noteworthy case for food insecurity studies. About 58% of all Federated States of Micronesia (FSM) households, of which a majority are comprised of Chuukese families, received food stamps and public

assistance in 2011 (Hezel & Levin, 2012). Given their proclivity to retaining practices from their native culture post migration (Rubinstein and Levin, 1992), studying the adaptive strategies of such a community may reveal relationships between Guam's most vulnerable communities and the island's food availability. It may also reveal unique strategies of food acquisition, cultivation, gathering and utilization during times of shortage, especially in an age of rapid modernization. Such strategies may inform changes to existing policies and programs. Information gleaned from this study may even aid in the development of new policies and programs designed to fit the island's multicultural populations.

2. Literature Review

2.1 Barriers to Food Security

Numerous studies on adaptive strategies to food insecurity reveal several obstacles to food acquisition that are shared among many communities (Ahluwalia et al., 1998; Hamelin et al., 1999; Kempson et al., 2002; Clifton, 2004; Chilton & Booth, 2007; Beaumier & Ford, 2010; Zenk et al., 2011; Gadhoke et al., 2014). Issues with transportation, and lack of food health and safety knowledge, are common themes among the food insecure (Kempson et al, 2003; Clifton et al, 2004; Fish and Brown, 2013). Financial troubles are also a common issue most often experienced by low income communities (Kempson et al, 2003). As financial troubles lead to the inability to afford food and the mistreatment of consumers, both in and out food stores, low income communities often experience the extremes of food insecurity (Kempson et al, 2003; Zenk et al, 2011).

Many themes also focus on the social-interactional aspect of food acquisition, especially in regards to race, poor customer service, lack of safety, deceptive sales methods, and crowding during peak public benefits shopping schedules (Beaumier and Ford, 2010; Zenk et al, 2011). Food security is intertwined with the social and psychosocial conditions of communities, and thus depressive disorders and poverty are also commonly shared issues

(Beaumier and Ford, 2010). As food insecurity is a chronic stressor independent of poverty, studying the dynamic between communities and their strategies to adapt may give insight as to how to best tackle, or even prevent, this common phenomenon.

2.2 Adaptive Strategies

Four common themes in adapting to the adversities brought upon by food insecurity are presented in a study by Zenk et al. (2011). These four themes are referred to as optimizing, settling, advocacy, and proactivity. Moreover, a fifth theme emerges when socioeconomic aspects are emphasized (Kempson et al, 2003). This fifth theme will be referred to as illegal acquisition. Optimizing, settling, proactivity, and illegal acquisition directly involve food itself, while advocacy and proactivity include active changes to one's self or one's environment.

The first theme, optimizing, increases the use of acquired food and available resources. It may involve shopping at a different retailer for each food item, frequenting a store outside of one's neighborhood (Zenk et al, 2011; Fish and Brown, 2013), or saving food from work or church functions. It also involves accepting help from family members or the community, cooking in groups, and even home gardening and fishing (Kempson et al, 2003). Optimizing involves a notably higher level of planning than other strategies, as food acquisition becomes dependent on time, location, or other people.

The second theme, settling, occurs when participants are without resources, and must settle with readily available food or food stores (Zenk et al., 2011). These food environments may be unhealthy or lacking in quality. This theme emerges when transportation, time, and money are exhausted. The implications of this theme often include paying higher prices, settling for low quality foods (Maxwell 1996; Zenk et al., 2011), salvaging food from the garbage, and purchasing damaged foods at discounted prices (Kempson et al., 2003). Moreover, this theme precedes severe changes in diet, such as limiting portion size and

skipping meals altogether (Maxwell 1996). Settling is one of the more disheartening strategies, as it can affect not only food acquisition, but also diet, nutrition, and safety.

The third theme, advocacy, is one of two themes that don't directly deal with the acquisition of food itself. It instead involves the active pursuit to bring about change in one's store environments or food products (Zenk, 2011). Communicating concerns about product quality and store upkeep to store owners is a common form of advocacy. Reporting issues with safety to regulatory agencies, such as the police or health inspectors, is also common within this theme. The success rate, however, tends to vary, as the mere threat of regulatory action can either bring desired change to food environments, or be met with resistance from store owners (Zenk, 2011).

The fourth theme, proactivity, is the second of two themes that pertains to the social dynamics behind food acquisition. This theme focuses on the changes to the consumer during times of food insecurity, rather than the food itself. Proactivity leads to consumers to alter their appearance or demeanor in food stores, or even adjust their shopping time, to better ensure personal safety (Zenk, 2011). Those who utilize proactivity may even shop in certain stores, regardless of the possibility of decreased food quality, to avoid safety and health concerns. This theme also applies to the monetary aspect of food acquisition, like obtaining multiple side jobs, or even selling blood and participating in clinical drug trials, to receive more income for food purchases (Kempson et al, 2003). As such, this theme is predominantly seen in low-income communities.

The fifth and final theme, illegal acquisition, involves both social and physical activities that are deemed illegal. Like proactivity, illegal acquisition is mainly seen in disadvantaged communities where both safety and income are lacking (Kempson et al, 2003; Zenk et al, 2011). Some of the activities within illegal acquisition include selling food stamps, participating in several drug trials simultaneously, writing fraudulent checks,

panhandling, shoplifting, and purposely committing crimes to be jailed (Kempson et al, 2003). It is noted that study participants are often unwilling to admit to this final theme, given the legal and social repercussions that may result.

2.3 Chuukese Culture and Relationships to Food Insecurity

2.3.1 Historical Background

The island of Chuuk is one of four states that comprises the Federated States of Micronesia (FSM). According to the 2010 FSM-wide Census, Chuuk was the most populous state with a total population of 48, 651. Spain held control of much of the FSM islands from the 16th century onwards, until Germany acquired Chuuk after the Spanish American War in late 19th century (Hezel, 1995). Japan obtained control of Chuuk during World War I, and furthered Germany's economical and medical efforts on the islands (Hezel, 1995). Like Guam, the United States liberated Chuuk from Japanese forces near the end of World War II. Under a strategic trusteeship agreement, the U.S. had complete control over the island's immigration.

Following a period of benign neglect, FSM entered the Compact of Free Association (COFA) with the U.S. in 1980 in which they were granted self-governing rights. With the Compact, the U.S. controlled the right of denial of foreign entry and military power. The U.S. also provided most economic, political, educational, and healthcare funding (Hezel, 1995). The free immigration policy into the U.S. and its territories, created by the COFA and implemented in November of 1986, was notably one of several reasons for an increase of Micronesian migrants to Guam (Rubinstein and Levin, 1992). As Chuuk is the closest in proximity to Guam, compared to the other FSM islands, it has contributed the greatest number of Micronesian migrants (Rubinstein and Levin, 1992).

2.3.2 Cultural and Historical Relationships to Food

Foods such as taro, banana, coconut, breadfruit, and seafood, are native to all four states within the FSM (Englberger, 2011). Interestingly enough, green leafy vegetables were not traditionally consumed, but have instead been considered “pig food” in the past by many natives (Englberger, 2011). In the Chuukese language, the general word for “food” specifically pertains to cooked starches (Gladwin and Sarason, 1953). In traditional Chuukese culture, the most important of such foods was the breadfruit (Gladwin and Sarason, 1953; Pollock, 1992). Breadfruit was held in such high regard, that various feasts and festivals were established, and were planned around the different seasons of breadfruit cultivation (Goodenough, 2002).

In a historical snapshot of the FSM food culture before American influence, Gladwin and Sarason (1953) described the popularity of substitute starches, such as cassava (*manioc*) and taro, as well as the increasing popularity of imported foods. Taro, in particular, was commonly used as a means of indefinite food storage, as well as a viable method of improving poor soils in the lower islands. Bread and rice were also reserved primarily for emergency food shortages. Bread made of imported flour was mostly used for business purposes. Although rice was seen as more of a luxury import, it did serve an important role as emergency food for typhoon ravaged areas, as it was more palatable and digestible to the elderly and sick.

Moreover, Gladwin and Sarason (1953) also described the variety of fruits, including papayas, mangoes, bananas, pandanus, oranges, and limes, that were once available on the atolls, but were not considered nourishing. They were consumed only as occasional snacks. Coconuts, on the other hand, served an important role in the subsistence economy, and were also a source of drinking water. Coconut plantations were established with the production of

copra in mind, which was an important element in Chuuk's growing relationships with foreign powers.

Although subsistence farming was still practiced and supported many Micronesian households, few islands maintained traditional subsistence economies (Sproat, 1968). Given the rise of foreign presence and the establishment of a cash economy, a pure, unchanged subsistence economy no longer exists in Micronesia (Sproat, 1968). All islands, to some degree, engaged in cash-producing enterprises, and adjusted to the introduction of new food plants and foreign settlement (Sproat, 1968). Where subsistence farming held a percentage of the local economy, mechanized methods of cultivation and pest control were used (Sproat, 1968)

Traditionally, especially before Christianity took hold of the atolls, the preparation of food was mainly seen as the men's responsibility (Gladwin and Sarason, 1956; Goodenough, 2002). Goodenough (2002) provides historical insight to tasks traditionally reserved for men, such as gathering breadfruit and preparing it for cooking. Men solidified their familial and societal positions as providers by not only cooking the food, but also distributing it among their wives and children. Food focused events such as these were considered special, and ultimately coupled food with love and security (Goodenough, 2002). As such, it was noted that the withholding of food was a common form of punishment for younger children (Goodenough, 2002).

In a sociological sense, food continued to play a prominent role in Pacific Island societies. It transcended the basic human need for survival, and became a message of good relations and empathy between people (Pollock, 1992). In Chuuk, food served purposes that are paramount to the culture. The exchange of food expressed a closeness in relationships (Berland and Boggs, 1969). The most important of the Chuukese food, breadfruit, was cooked in a variety of ways and then gifted during special occasions (Berland and Boggs,

1969). The gift of food created a sense of gratitude, which was often expressed by returning a similar gift, or an offer of physical assistance by the younger generation (Berland and Boggs, 1969). It was also gifted to district chiefs as an act of recognition from his people that he was the source of their livelihood (Goodenough, 2002). Larger quantities of food were also given as payment, such as for treatment of injury by local doctors, or as celebratory gift between families after long absences (Berland and Boggs, 1969).

However, the principle of sharing food and goods also served as a form of social security in Micronesia (Sproat, 1968). Sharing not only occurred as a result of gratitude and fellowship, but also as a demonstration of a Pacific-wide custom of obtaining goods or food from relatives on request during times of hardship. Although this practice was seemingly natural, given the communal nature of Micronesian cultures, it nevertheless left those who were able to plan, cultivate, and acquire surplus at the obligation of less fortunate or industrious clansmen (Sproat, 1968). Sproat (1968) claimed that this system was “perhaps the greatest deterrent of individual initiative in the Trust Territory islands” (7).

It is imperative to note the data gaps that exist within the literature surrounding the historical and contemporary food culture within Micronesia, especially the Chuuk atolls. Detailed research on food practices in the atolls is limited to times of pre-American influence (Gladwin and Sarason, 1956; Berland and Boggs, 1969; Goodenough, 2002). Few research dates back earlier, yet even fewer detail the current foods and food practices on the atolls in present day, as the focus remains on Micronesia as a whole (Englberger et al, 2002; Englberger et al, 2005; Connell, 2014). Given the increase in modernization as a result of the COFA, both a nutritional and cultural shift is expected to have occurred within Chuuk. More current research would give insight to the type and quantity of foods currently available on the island, the shifts in food culture and tradition, and the adaptive strategies currently employed by the Chuukese on their home island.

2.3.3 Food Insecurity in Micronesian Communities Abroad and the Guam Context

Although few studies focus specifically on Chuukese communities abroad, much of the research supports similarities among other Micronesian communities. One of the most evident aspects of food security among Micronesian diasporic communities is the reliance on family and kinship for sustenance. In a study conducted by Shepard (2011) on Marshallese diasporic communities in northwest Arkansas, the Marshallese place extremely high value on interdependence. As such, Marshallese migrants rely heavily on community networks, such as family, friends, and church groups. Community members who have successfully integrated into their new lifestyles are expected to provide food, housing, transportation, and information to support new migrants (Shepard, 2011; Peter, 2017). It is important to note that significant aid can also come at the expense of established migrants, and leave new migrants at the mercy of others. Shepard (2011) notes multiple cases of family members within Marshallese church groups being evicted from their homes for exceeding the allowable number of occupants for rental property after taking in recent migrants.

Unfortunately, Micronesian diasporic communities also face varying levels of discrimination and resentment. On the island of Guam, Smith (2014) finds that speculation of Chuukese migrants coming to Guam specifically for food stamps, welfare, and U.S. citizenship, is common among the local community. The fact that a majority of Micronesian migrants live below the poverty line, and rely on government assistance perpetuates such beliefs among Guam residents. These negative experiences, along with the desire to experience one's native culture and eat one's native foods, are usual motivations for returning to the FSM (Smith, 2014).

The nutritional health of diasporic communities is also a topic of concern. The increasing consumption of sugary and high caloric foods among Micronesian diasporic communities is perpetuated by both the accessibility of such foods, and the lack of land

available for subsistence farming due to modernization (Hirata, 2015). A study conducted by Hirata (2015) reports that the Marshallese traditionally grew native produce, such as coconut and pandanus, and also frequently consumed fresh fish. The native diet was natural, high in fiber, and low in sugar. The nutrition transition experienced by migrants led to high blood pressure and cardiovascular disease (Hirata, 2015). Such diseases that once had very low incidence rates now affected a large portion of Micronesians (Hirata, 2015).

Furthermore, without available land to cultivate, migrants faced the dilemma of navigating foreign lands without the opportunity to bring a crucial part of their culture with them. The nutrition transition from healthy and fresh native foods to fatty and sugary foreign foods was often an instant switch (Hirata, 2015). Not only were migrants deprived of their traditional self-harvested foods, they risked the possibility of losing an integral part of their culture. As discussed previously, the values centered on land and food intertwined to create customs that ultimately dictate how Micronesians practice their cultures.

Much like other Micronesian islands, the Chuukese traditional diet was mostly comprised of subsistence agriculture and fishing (Connel 2014). Traditional major food crops included breadfruit, banana, taro, coconut, and pandanus (Englberger et al, 2003). However, federal programs introduced to the island by the USDA forever influenced food habits within the FSM (Englberger et al, 2003). Between the 1960s to early 1990s, USDA surplus commodities, such as rice and canned goods, were provided for school lunches and disaster relief efforts (Englberger et al, 2003). Dependency on foreign goods, especially rice, increased dramatically, as new food tastes devalued local foods (Englberger et al, 2003). Other federal programs implemented within the region, such as the Expanded Food and Nutrition Education Program (EFNEP), promoted U.S. foods and, in the past, undermined efforts for promoting local foods (Englberger et al, 2003). By the 1970s, rice became a staple

in the Chuukese diet, and was regularly categorized with traditional root crop staples (Connell, 2014).

The modern Chuukese diet, rich in rice, flour, sugar, fatty foods, and imported goods, gave rise to various nutrition and health issues (Yamamoto, 2013). A decline in health, noted by the increased incidences of cardiovascular disease, diabetes, and obesity, were driven by low incomes, inaccessibility to adequate foods, growing dependency on store foods, and poor quality of cheap imports (Connell, 2014). Moreover, social and cultural barriers lead to disparities in several areas of healthcare that were unique to the Chuukese community (Hattori-Uchima, 2017). Chuukese women in Guam experienced higher rates of diabetes during pregnancy, and increased risk of delivering large gestational age infants (Hattori-Uchima, 2017). Efforts to revert back to more traditional diets were met with adversity, as a “return to tradition” was rarely seen as progressive (Connell, 2014).

Moreover, socioeconomic disparities were notably experienced among Micronesian migrants. The Guam Bureau of Statistics and Plans (2005) reported that 45% of Micronesian migrants lived below the poverty level. In 2005, about 16% of Guam’s homeless population was reportedly of Chuukese ethnicity (Salvation Army, 2005). A 2017 Homeless Point-In-Time Report conducted by the Guam Homeless Coalition and the Guam Housing and Urban Renewal Authority (GHURA) reports that Chuukese represented the second highest number of homelessness, with Chamorros being the first. The Chuukese also represented the greatest percent of homelessness overall specifically within FSM ethnicities. *Children in Guam* (Census, 2002) reports higher numbers of children living in poverty in areas comprised mostly of recent migrants. A survey conducted by Hezel and Levin (2012) reports that 58% of all FSM migrant households received food stamp benefits.

Due to the statistics, historical food relationship, and notable lack of recent information regarding food security, the Chuukese community of Guam provides an ideal

population to study adaptive strategies to food insecurity in a unique island setting. Affirming such strategies, as reported by the Chuukese community itself, would reveal new relationships to other Guam based communities, cultures, or even public structures, that could aid in the formation of better food security programs. The lack of data gathered on migrant Micronesian communities hinders their success at integration. Given the high numbers of FSM nationals relocating abroad, the Chuukese in particular, the exploration of their adaptive strategies could reduce the many barriers to migrant prosperity, and could change the way Guam responds to its most deserving communities for the better.

2.4 Study Objectives

Given that numerous studies indicate high levels of government food support and potential food insecurity in the Pacific Islands, the objectives of this study are to explore the following questions:

- 1) What are the traditional adaptive strategies utilized in Chuuk;
- 2) What are the adaptive strategies to food insecurity currently in use within the Chuukese community of Guam;
- 3) How can these adaptive strategies be better incorporated in government and NGO education and support programs to address current issues with food insecurity in the Chuukese community of Guam?

3. Methods

This study utilized quantitative surveys and qualitative interviews in two separate phases (Figure 1). The first phase, quantitative surveys, is first discussed in its relation to study sample identification. The second phase, qualitative interviews, follows the quantitative surveys and is discussed in its relation to data acquisition and analysis.

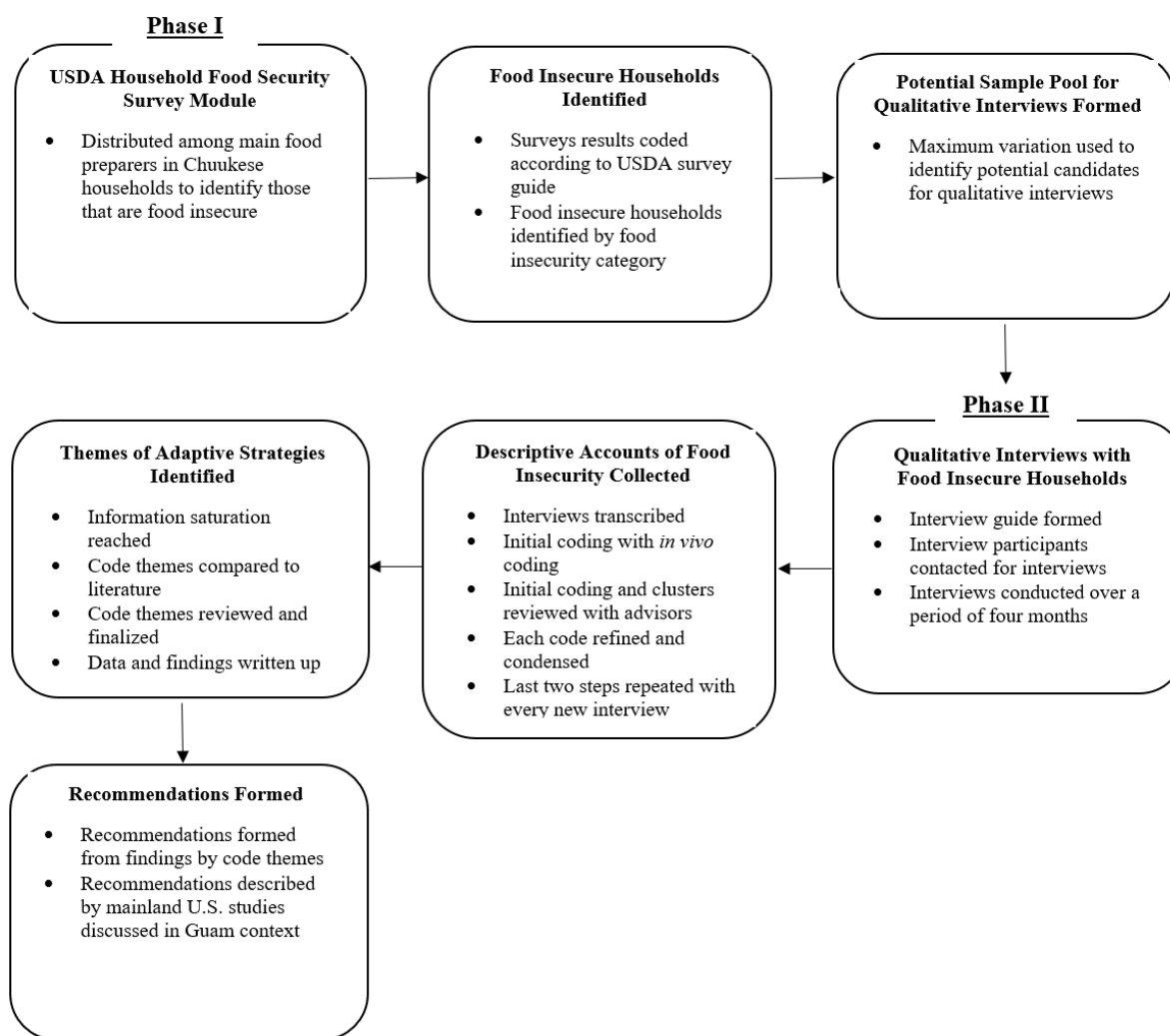


Figure 1. Flowchart illustrating the flow of quantitative to qualitative methodology

In order to establish a defined pool of food insecure individuals, the USDA U.S. Household Food Security Survey Module (Appendix I) was disseminated among adult Chuukese residents of Guam who identified as the main food purchasers/preparers of their household. Survey participants were recruited from various community organizations, collegiate clubs, and church groups. English and Chuukese translated surveys (Appendix II) were made available, as well as on-site translators. A total of sixty-six participants were successfully surveyed. Of the sixty-six participants, a total of fifty-two participants were determined to be food insecure. Of those fifty-two food insecure participants, a total of forty-five participants indicated a willingness to be interviewed in the qualitative stage. As the USDA survey served only as a screening tool and did not require further quantitative

analysis, this number was determined to be sufficient. All methodology was conducted with documents and procedures approved by the University of Guam International Review Board (IRB).

Surveys were coded and organized according to the USDA *Guide to Measuring Household Food Security* (2000), which outlines four tiers of increasing food insecurity: food secure, food insecure without hunger, food insecure with hunger (moderate), and food insecure with hunger (severe). Depending on household composition and food insecurity category, survey participants were contacted for follow up qualitative interviews. Qualitative interviews, ranging from thirty minutes to an hour and a half, were conducted with a total of nine participants when information saturation was reached.

Interview questions in the interview question guide (Appendix III) were drafted with the intent to elicit stories that would explore the nuances between food security and insecurity, culture, household composition, socioeconomic status and outside assistance, with respect to providing food for the household. Interviews further examined the topics of food acquisition, hunger, and adaptive strategies to food insecurity. Interviews were transcribed in Microsoft Word and coded in *Atlas.ti*. The defined units of analysis were sentences and paragraphs that conveyed concepts surrounding food security and insecurity, including but not limited to, hunger, food acquisition, meals, government assistance, adaptive strategies, cultural norms and food itself. Codes were given succinct names when possible to encompass all possible meanings. For example, some codes used include “Cheaper foods”, “Subsistence farming”, and “Government Assistance”. Code tables were then formed and discussed among committee members for clarity and validity. Emergent thematic categories evident from the code tables formed the foundation of the study’s findings.

3.1 Phase I: Quantitative Survey

Four food security survey modules were developed by the USDA to measure food security and food insecurity among households: the 18-item U.S. Household Food Security Survey Module, the 10-item U.S. Adult Food Security Survey Module, the 6-item Short Form of the Food Security Survey Module, and the Self-Administered Food Security Survey Module for Youth Ages 12 and Older. Each Module contains various levels of respondent burden and household composition requirements. In turn, the nature of the research topic dictates the Module that best fits its needs. Thus, the 18-item U.S. Household Food Security Survey Module was deemed the most appropriate for this study, due to the comprehensive yet diverse concepts explored. Moreover, the 18-item Module also explores households with children, which often report the most severe cases of food insecurity.

The USDA 18 Item Household Food Security Module was created from the 1992 Food Security Measurement Project, a federal interagency working group, as a means to appropriately and feasibly measure food security across all local levels. As stated in the *Guide to Measuring Household Food Security* (2000),

The key strength of the measure [...] is that its multiple indicator questions capture and distinguish the various levels of severity throughout the full range of severity with which the phenomenon of food insecurity/hunger is experienced in U.S. conditions. This feature is critical for accurately assessing the prevalence of food insecurity because the greater the severity, the less the prevalence and each separate indicator captures a different degree of severity. The frequency of the various indicators varies widely depending upon exactly which level of severity each one reflects. (2)

The survey module included “indicators” that convey various contexts in which food conditions, experiences, and behaviors all affect the level of food security one experiences.

Questions within the module directly explored household food expenditures, participation in public food assistance programs, coping behaviors to augment food supply from emergency sources, and direct indicators of food insecurity and hunger.

The survey was rated on a Likert Scale, and the severity of food security ranges from collective scores of 0 to 18. The more affirmative answers were given, the higher the participants' score, and the lower their food security. Likewise, the less affirmative answers given, the lower the participants' score, and the higher the food security.

Four categories of food insecurity were established by the USDA (2000) to represent a meaningful range of severity: food secure, food insecure without hunger, food insecure with hunger (moderate), and food insecure with hunger (severe). Households that are food secure show no to minimal evidence of food insecurity. Households rated food insecure without hunger are concerned about the adequacy of household food supply and, at times, make adjustments to household food management. However, such households see little to no reduction in food intake. Households rated food insecure with hunger (moderate) see a reduced food intake for adults to an extent that implies repeated hunger, although no children within the household observe such reductions. Finally, households rated food insecure with hunger (severe) experience repeated or extensive reduced food intake for children and adults alike. The final composition of the interview pool, in terms of the aforementioned categories, is further discussed in the following sections.

3.1.1 Quantitative Data Collection

Participants across all income levels were recruited through local resource organizations and community groups with large Chuukese membership, such as the Micronesian Resource Center (MRC), the University of Guam (UOG) Chuukese Student Organization (CSO), and various local church groups. Participants were adults of sound mind who make the food purchasing and cooking decisions for their households. Participants were

invited to Rooms 124 and 127 of the UOG College of Natural and Applied Sciences (CNAS) on July 12, 2019 and July 13, 2019, respectively, to complete the survey. Surveys were also disseminated during a local wedding reception hosted by one of the interpreters, with the couples' permission.

Depending on preference, English and Chuukese versions of the survey were available to the participants. On-site translators were also available to provide any further assistance. These translators served as cultural facilitators, when necessary. Participants were given as much time as they need to complete the survey. Participants were compensated with (2) \$10.00 gift certificates to Payless Supermarkets for them for their time and efforts. Their corresponding organization/community group was also awarded \$5 compensation for each survey completed for their recruitment and assistance. Participants were guaranteed their compensation regardless of study completion. Moreover, the confidential nature of the survey and their coded anonymity were explicitly stated and explained. Once surveys were collected, the identities of the participants and their corresponding answers were logged into a confidential database. Only the lead researcher and the UOG faculty advisors have access to the database.

A separate sheet was provided with the survey that asked participants of their willingness to participate in follow up qualitative interviews. Only those that had indicated their willingness were considered for the next phase of the study. The participants that fell in the last three levels of food insecurity (food insecurity without hunger, food insecure with hunger (moderate), and food insecure with hunger (severe), served as the potential participant pool for the second phase of the study, the qualitative interviews.

Surveys were coded according to the procedures outlined in the USDA Guide to Measuring Household Food Security (USDA, 2000). The number of affirmative answers were scaled against the 1998 Food Security Scale Values, which then ranked the surveys

against the four food security categories. From the surveys' scores, a diverse group of potential interviewees were identified using a qualitative sampling method called purposeful sampling. With this method, knowledge of experiences, incidents, or events, dictate participation in a study (Sandelowski, 1995).

Unlike quantitative research, which focuses on generalizations made by random and statistically representative samples, qualitative research values the understanding gained from information-rich cases (Sandelowski, 1995). Any findings, themes, or patterns identified through qualitative study are significant, even though they may not apply to all people (Lune & Berg, 2016). Identifying Chuukese individuals familiar with the experience of food insecurity allowed for a purposeful sample containing potentially rich cases of valuable information. Such rich cases offer monumental insight to the issues central to the purpose of the study (Patton, 2002).

By first screening for food insecure individuals, then assigning them to varying categories of food insecurity, the study maximized the range of the sample pool in a form of purposeful sampling called maximum variation. In qualitative research, maximum variation calls for the purposeful selection of respondents aimed to obtain a range of contexts or experiences present in dissimilar forms within the larger population (Weiss, 1994). Although quantitative researchers may see this form of heterogeneity as a weakness, qualitative research follows the logic that common patterns that emerge from variation capture the core experiences and shared contexts of a phenomenon (Patton, 2002; Lune & Berg, 2016). Using maximum variation to form a smaller sample pool ensures that the study subsample contains enough information-rich cases to prove significant, or representative, of the larger sample (Weiss, 1994; Patton, 2002). When studying a small diverse sample using maximum variation, data collection and analysis will yield both high-quality descriptions of each case

and documented uniqueness, and important patterns whose commonality across all cases prove its significance (Patton, 2002).

In order to achieve maximum variation, the household demographic variables of age, Chuuk island of origin, and socioeconomic status were established. The category of food insecurity that a participant scored in served as a phenomenal variable, which directly pertains to the phenomenon under study (Sandelowski, 1995), and ensures that the rich information gathered is appropriate to the study.

3.2 Phase II: Qualitative Interviews

Qualitative research emphasizes developing an understanding of not only the experiences of the study population, but also the assumptions and attitudes behind certain behaviors. It is concerned with the constructions and interpretations of reality that change over time (Merriam & Associates, 2002). As stated by Merriam & Associates (2002), “the key to understanding qualitative research lies with the idea that meaning is socially constructed by individuals in interaction with their world” (3). Exploring participants’ perspectives is a means of understanding the nature of a particular setting, what it means for participants to be in such a setting, what their lives are like, and what the world resembles from their perspective (Patton, 1985). This fluidity in meanings allows qualitative research to focus on the collaborative relationship between theory and method, as opposed to most quantitative research that suspend theoretical concerns during data collection and analysis (Marvasti, 2004). Qualitative research will provide deep descriptive, yet comprehensive, insights to the elements of food insecurity within the sample portion of the Chuukese community on Guam, a rather personal experience, which quantitative measures may not be able to explore fully.

The quality of qualitative research relies heavily on skill, sensitivity, and integrity of the researcher (Patton, 2005). As such, the researcher is the primary instrument for data

collection and analysis (Merriam & Associates, 2002). The researcher can expand their own understanding through both nonverbal and verbal communication, can process information simultaneously while receiving it, and can explore unusual or unanticipated responses for further clarification. However, as the researcher is also human, he or she may have shortcomings and biases that could potentially bias any qualitative study (Merriam & Associates, 2002). Therefore, the use of direct quotations within the study findings supported the perceptions and meanings articulated through the researcher.

The study employed the methodology of a basic interpretive qualitative interview study. With this type of study, the researcher is interested in understanding how participants make, find, or create meaning of a situation or phenomenon. The nuances of a particular phenomenon were detailed entirely through the participants' words (Patton, 2005). Data were primarily collected through interviews and research notes.

Interview questions were drafted with the intent of gathering descriptive accounts, and were left open ended to allow participants to elaborate accordingly. Participant accounts were then inductively analyzed, or analyzed from the researcher's perspective, for common patterns or themes. The result was a rich, descriptive account of the study findings (Merriam & Associates, 2002). Such accounts were not merely descriptions of observations, but elaborations of relationships and meanings embedded in a contextual setting. The qualitative analysis process sorted through the word data to find meanings that represent the perspectives of the interviewees.

As not much is known on the Chuukese response to food insecurity, both in Chuuk and abroad, obtaining rich, descriptive texts through basic interpretative open-ended interviews was an appropriate choice of methodology. This method was designed to get participants to tell stories of their experiences with food insecurity and surplus, resulting in information-rich cases that can be analyzed for shared patterns or themes. Because it was

difficult to determine the importance of any singular piece of information without a prior understanding of the phenomenon's context, interviews with open ended questions produced descriptive stories that encompass all contextual aspects. Exploring the interviewees' lived experiences identified not only strategies employed to combat food insecurity, but also the reasons why one experiences food insecurity, and the role culture plays in such an experience.

3.2.1 Qualitative Data Collection

Participants of the household food insecurity survey who indicated their willingness to take part in the qualitative interviews were identified as possible participants for this phase of the study. Two purposeful sampling strategies were utilized to select information rich cases, or participants (Patton, 2002). The first strategy, criterion sampling, was achieved through the quantitative survey, which was utilized as a filtering system to identify food insecure adults. The second strategy, maximum variation sampling, was used to obtain participants who offered the largest variety of insights. From the three food insecurity categories (food insecure without hunger; food insecure with hunger (moderate) and; food insecure with hunger (severe)), a total of twenty possible interviewees were identified. In order to reach information saturation, or a point where no new information is learned, nine interviews were conducted (Fusch & Ness, 2015). Interview participants varied across ages, island of origin (within the Chuukese atolls), socioeconomic status, household composition, and food insecurity category determined by the USDA survey module. Full participant demographics are discussed in the Results and Discussions chapter.

Data were collected via semi-structure interviews with prepared interview guides. The interview guides consisted of an open-ended question list with key probes. Semi-structured interviews are primarily used when the researcher knows what questions to ask but cannot anticipate answers (Morse, 1995; Lune & Berg, 2016). Semi-structured interviews allow for

greater freedom to discuss various topics within the study's context, and open-ended responses allow one to understand the world through the respondents' eyes (Patton, 2002). Interview guides also allow the interviewer to predetermine the flow of the interview, as well as to ensure the same material is covered across all interviews (Patton, 2002). Morse (1995) states that this technique "ensures that the researcher will obtain all information required (without forgetting the question), while at the same time gives participant freedom to respond and illustrate concepts" (94). Questions explored the themes of food insecurity and surplus experienced by participants, and the adaptive strategies they employ.

Each interview was conducted in Room 105G at the Agriculture and Life Sciences Building at the University of Guam. Translators and cultural informants were offered to each participant prior to the interview, although only one participant required a translator. The duration of each interview ranged from thirty minutes to an hour and a half. Participants were compensated with \$40 for their time and insight. Interviews were recorded, with both physical and verbal participant consent. Detailed reflection notes were also taken during and immediately following the interview in order to create a reliable audit trail for the researcher. The audit trail was a collection of preliminary descriptions made of the data collection, code development, and data interpretations as the study progressed (Huberman & Miles, 1994). The audit trail ensured that findings are supported by the data collected and not the researcher's biases.

3.2.2 Qualitative Interview Questions

Six interview questions with several corresponding probes were used in the data gathering process of the qualitative phase of the study. Six questions provided the core structure for primary findings identified in the analysis process. The final question was primarily used for final remarks and to close out the interview (Table 1).

Table 1. Purposes and Probes of Interview Question Guide

Question		Purpose
Can you tell me about yourself and your household?		Demographics
Probes	Any kids?	
	Do the people staying there change? (visitors, relatives, etc.)	
	How do meals go? Does everyone eat together? Who prepares and serves the meals?	
	Can you tell me about your favorite things to eat?	Demographics; Eases participant into interview
Can you tell me about a period in time (or period in your life) when you felt like you had enough food to eat/times of plenty?		Establishes contrast for times of food insecurity; Identifies factors that aid in food security
Probes	What was going on in your life that made the food plenty?	Establishes context
	What kind of foods? Where did they come from?	Establishes contrast for foods consumed when food insecure
	If story is on Guam, ask about Chuuk or reverse	Location qualifier
Can you tell me about a period in time (or period in your life) that you felt like you didn't have enough to eat?		Establishes context for food insecurity
Probes	Tell me more about this time. How long did this last?	Identifies amount of time food insecurity lasts for
	What causes this? Why?	Identifies reasons for food insecurity
	How did it change? What did you do to find food or make the food last longer?	Identifies adaptive strategies
	If story is on Guam, ask about Chuuk or reverse	Location qualifier
In your opinion, what do other Chuukese do in these situations?		Identifies knowledge of communal networks and existing strategies
Probes	Experiences, knowledge of aid/programs?	Establishes details
	If story is on Guam, ask about Chuuk or reverse	Location qualifier
Are there any traditional ways of acquiring food in your culture that you know of/are familiar with/regularly practice/with you could practice if you could?		Identifies traditional adaptive strategies and barriers to practices in Guam
Are there any other questions you think I should've asked? Anything I missed?		Ends the interview

The first question aimed to relax participants into the interviewing setting by describing their household and favorite foods to eat. The corresponding probes asked for

basic demographic information for the participants' households. The second question identified factors that dictated a time of plenty in the participants' lives, which also served as a contrasting image for times of food insecurity. Types of food, successful strategies, lifestyle details, and related contributing factors were explored. The third question then sought factors that dictated a time of food insecurity. Specific circumstances, the types of food consumed, the duration of food insecurity, and similar contributing factors were explored. The fifth question sought experiences with, and knowledge of, other possible strategies employed by the Chuukese community at large. This question also explored the interconnectedness within the Chuukese community in Guam. Finally, the sixth question closed out the interview and asked participants for final remarks.

3.2.3 Qualitative Data Analysis

Qualitative findings are detailed and vary in content. Analysis is often difficult because responses are neither systematic nor standardized, unlike quantitative studies (Patton, 2002). The main method of analysis was a form of constant comparative analysis. Using this method, data was examined to identify common themes of behavior, responses, or perspectives that were relevant to the study. Through an iterative process such concepts were constantly compared until commonalities were found and information saturation, or a point in which no new information is gained, was reached.

The first part of qualitative data analysis, coding, links segments within the data to create categories that share a commonality (Coffey & Atkinson, 1996). It is often considered data simplification as data was reduced to bare bones in a process referred to as data decontextualization. The data was extracted from its original context while retaining meaning. A process of recontextualization followed, in which segmented data were categorized and resorted by the thematic code's meaning to which it belonged to. Coding qualitative data requires breaking the data in analytically relevant ways in order to lead

toward further questions about the data (Coffey & Atkinson, 1996). Analysis of code groups lead to an exploration of how codes and categories related to not only the original data, but to other data and theoretical ideas as well, as the data was recontextualized back to the whole investigated context.

In vivo coding, which places emphasis on the spoken words of participants (Manning, 2017), was utilized in initial interviews. *In vivo* coding is often used in studies involving particular cultures or microcultures, as it proves helpful in understanding stories or ideas through the actual words of participants (Manning, 2017). However, as the study progressed, it became evident that certain Western English phrases or words held different meanings to the Chuukese community, and would thus be potentially misused in the formation of study findings. For example, an *in vivo* code, “food budget” was created as participants described the act of budgeting food among household members. The code was later changed to reflect the act of food portioning or rationing, as opposed to the use of monetary budgets used for food supplies. More appropriate code names were then drawn from the literature.

All interview recordings were reviewed multiple times, and all interviews were transcribed in Microsoft Word. Analysis began with consistent examinations of interview transcripts in order to identify any and all emergent themes (Kvale, 1996; Guion, 2011). Sentences or phrases that articulated particular concepts were the defined unit of analysis.

Transcripts were uploaded into *Atlas.ti* for coding organization, process, and management. Initial codes were determined during transcription review. Categories and subcategories were added as analysis of multiple interviews progressed, and modified to reflect nuances in the data accordingly (Taylor-Powell & Renner, 2003). Code families and code tables were reviewed by the thesis committee periodically as interviews were added to the analysis. In this review process, the researcher articulated code definitions and

descriptions. These descriptions constituted the findings of the study and were supported by representative quotes.

In order to increase the validity of the data collected, triangulation of the data via member checks were conducted. Triangulation establishes validity of the data through the combined judgement of multiple investigators, multiple sources of data, or numerous methodologies (Merriam & Associates, 2002). Investigator triangulation was achieved through advisor review and was used to ensure the validity of the data. Two research advisors monitored and reviewed data collection, code formations, and further coding analysis as the study progressed. Additional insights and feedback were provided to ensure that codes were appropriately described to fit the experiences expressed by participants, and that code analysis was supported by appropriate quotations of rich descriptions.

4. Analysis and Findings

4.1 Phase I: Preliminary Results of Quantitative Survey

The USDA 18 Item Household Food Security Module was disseminated among Chuukese head of households to identify food insecure households. Four categories of food insecurity were established by the USDA: food secure, food insecure without hunger, food insecure with hunger (moderate), food insecure with hunger (severe). A total of sixty-six head of households were surveyed. Participants were identified by their category based on their survey score. As the survey was only used to identify a possible sample pool for Phase II of the study, no statistical analysis was conducted. An overview of preliminary survey results is provided in Table 2.

Table 2. Quantitative Survey Results

Food Insecurity Category	Number of Participants
Food Secure	14
Food Insecure without Hunger	35
Food Insecure with Hunger (Moderate)	10
Food Insecure with Hunger (Severe)	7
Total	66

4.2 Phase II: Qualitative Interviews

4.2.1 Participant Demographics

Participants were recruited from various community groups, university organizations, and churches. Most participants were recruited through three main pathways: through the church community of the study's main cultural informant; through the Micronesia Resource Center One Stop Shop (MRCOSS), and the University of Guam's Chuukese Student Organization (UOG CSO). Out of the sixty-six head of households surveyed, a total of fifty-nine participants indicated that they would be interested in follow up interviews. Of the fifty-nine participants identified, a total of nine participants were interviewed. A brief description of each interview participant is provided below. Table 3 provides an overview of participant demographics.

Amelia

Amelia is currently a senior at the University of Guam. She lives with five of her siblings, while the rest of her family remains in Chuuk. She and her household represent an interesting take on food security within the Chuukese community, as the typical heads of household (ie, parents or elders) are absent. Because she and her siblings split household responsibilities, her role in purchasing groceries makes her the head of household meal decisions. She expressed that because she and her siblings have very different schedules, perspectives on food availability and preferences often change. However, they try their best

to carry on the teachings and determination their parents instilled in them. Her favorite foods are bananas and sushi.

Epot

Epot lives with her husband and three sons. As a homemaker, she manages the home and prepares dinner while her husband goes to work, and her children attend school. She described a closeness with her extended family, both in Chuuk and in Guam, and told of several occasions in which they shared food. She is Protestant and described relying on her religion to get her through times of severe food insecurity. Her favorite foods are local Chuukese food, such as fish and cooking banana.

Kisha

Kisha, a newlywed, lives with her mother and husband. She is the head of household meals, although they all tend to eat at different times. She described living in a household with extended family and numerous children in the past, and thus expressed a notable difference, in regard to food security, with the change of living conditions. She also described instances in which religious obligations within her community, both in Guam and in Chuuk, brought sudden yet fortunate times of plenty. Also, she creates and sells traditional Micronesian headdresses through word of mouth and social media to generate extra income for the household during times of need. Her favorite foods are cucumber, watermelon, rice with pork, and desserts.

Laila

Laila is a student at the University of Guam. She also offers a unique perspective on food in/security in the Chuukese community, as she and her sister came to Guam for education, and thus live apart from their parents in Chuuk. She described how her food security is limited by the resources around her, and thus relies much on their personal capabilities. However, she also described experiencing many times of plenty in her home

island with her family, and often with the help of her surrounding community. Her favorite foods are local Chuukese food, such as fish, breadfruit, banana, and seafood.

Lorna

Lorna lives with her husband and her four young children. She often expressed concern for her children's wellbeing and their food security in particular. She also emphasized the need to "fight" for her family and their problems, a lesson she took to heart from her father, a Pastor. Although she expressed a willingness to help others during times of need, she expressed a dislike to asking others, even family members, when situations were reversed. The role her father and religion played in her life lends her to also rely on prayer when she needs it the most. Her favorite food is fried chicken.

Mary Ann

Mary Ann lives with her husband and adult daughter. She cares for her son's youngest children while he is at work. She expressed the joy and happiness she feels when they have enough money for food, but also anger and physical weakness when there is not enough food in the house. To cope, she calls on friends and family for help, while also making sure to return the favor during her times of plenty. She also reminisced of her home island, where food was plentiful when one worked hard enough. Her favorite foods are chocolate and vanilla cookies, and sugary candy.

Robert

Robert, the only male in the interview pool, lives with his wife. He has many adult children who live apart from him, and has a young daughter finishing school in Chuuk. Both he and his wife prepare the meals in their household. He offered many cultural perspectives on the changes or differences in food security in Chuuk and in Guam, mainly the impact money has on everything from the ability to acquire food, community celebrations, and the Chuukese culture itself. His favorite foods are local Chuukese food, such as breadfruit and

bananas.

Sally

Sally lives with her boyfriend and her three youngest children. Since she and her boyfriend both work full time, they have a family member help care for the children when they are away from the household. Throughout the duration of the interview, she expressed an inherent need to “fight for her problems”, a determination solidified by her earlier years spent living with another family whose food security was dire. Interestingly, she also emphasized compassion for those who had threatened her food security in the past, and often finds herself still sharing food and prosperity with them. Her favorite food is tuna fish.

Tritee

Tritee lives alone, as her adult children reside with their own families and households. Due to health issues, she is unable to work and often relies on the aid of her daughter. However, she offers massage services out of her house to help with bills and money for food. To get by, she often gathers fruits from neighboring trees, and expressed a desire to plant if her access to land was not limited. Her favorite fruits to plant are banana, taro, tapioca, and breadfruit.

Table 3. Participant Demographics

Pseudonym	Main/Outer Islands	Gender	Age Range	No. of People in Household	Food Insecurity Category
Amelia	Main Islands	Female	20 - 29	5	Food Insecure without Hunger
Epot	Main Islands	Female	30 - 39	5	Food Insecure with Hunger (Severe)
Kisha	Outer Islands	Female	30 - 39	3	Food Insecure with Hunger (Severe)
Laila	Main Islands	Female	20 - 29	2	Food Insecure with Hunger (Moderate)
Lorna	Main Islands	Female	20 - 29	6	Food Insecure without Hunger
Mary Ann	Outer Islands	Female	50 - 59	3	Food Insecure with Hunger (Moderate)
Robert	Main Islands	Male	50 - 59	2	Food Insecure with Hunger (Moderate)
Sally	Main Islands	Female	40 - 49	6	Food Insecure without Hunger
Tritee	Main Islands	Female	50 - 59	1	Food Insecure with Hunger (Moderate)

Maximum variation was achieved through of the four parameters listed above in Table 3: Main/Outer Islands origin, number of people residing in the household, participant's ages, and participant's food insecurity category. Variation was attempted on the gender of the participants, but was not achieved due to the number of males that completed the quantitative survey.

4.3 Clusters of Themes

4.3.1 Optimizing Resources Outside the Household

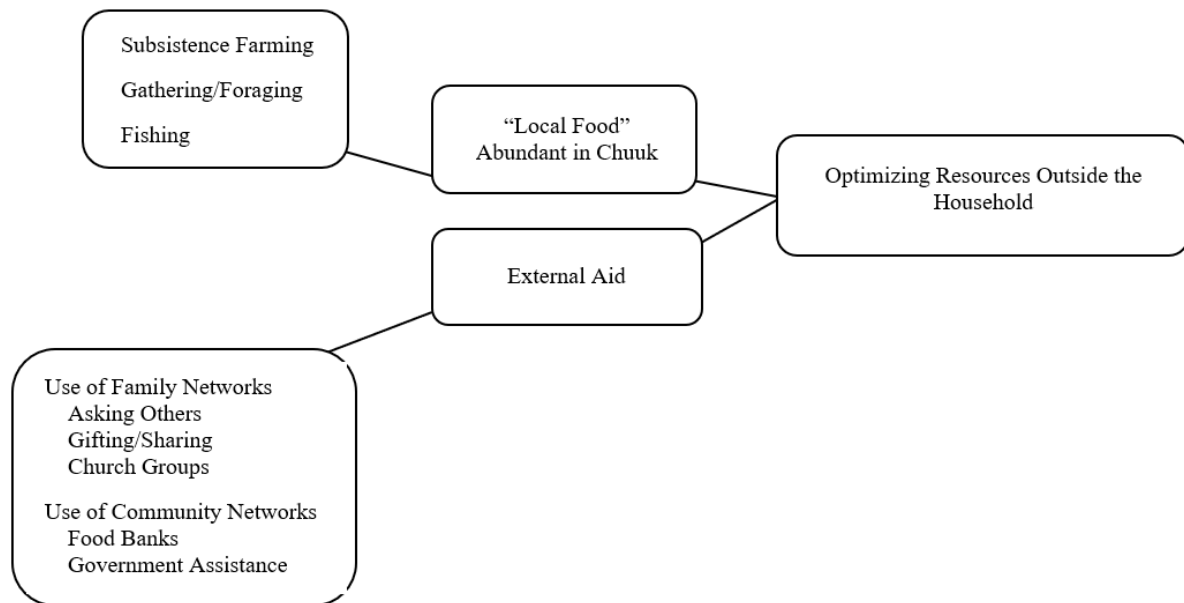


Figure 2. Dendrogram illustrating strategies to optimize resources outside the household

Strategies that optimize resources outside the household require participants to make use of resource pools that are readily available to them. Such strategies entail the active pursuit of food or resources. Given the strategies described by participants, the term “optimizing” was adopted from a study conducted by Zenk et al. (2011), with similar strategies echoed in studies conducted by Hoisington et al. (2002) and Kempson et al. (2003).

A study conducted by Zenk et al. (2011) describes optimizing strategies that make use of resources (such as time and transportation) in the acquisition of desired foods. Although many of the specific optimizing strategies listed in the Zenk et al. (2011) study pertain more to the Cash Economy strategies described in the following section (such as shopping at different stores or comparing food prices), the emphasis on the optimization of available resource pools led to the suitable use of the term “optimizing” for this code group. Moreover, the studies conducted by Hoisington et al. (2002) and Kempson et al. (2003) mention similar strategies described in this code group. For example, Kempson et al. (2003) describes

participants obtaining general help from family, friends, and neighbors, bringing food from work, and the use of food banks. Hoisington et al. (2002) similarly describes the use of food banks.

However, given that this study focused on an island environment with strong influences of a subsistence culture, this study found alternative resource pools that were not described in the literature. Unlike the participants of this study, who described the use of subsistence farming and gathering and foraging, participants of other another U.S. mainland study determined such strategies to be either unfeasible or undesirable given lack of education, time, and access to land (Fish et al., 2013). In comparison, participants of this study indicated that the only barrier to utilizing subsistence practices was the lack of access to land in Guam. Many participants described past experiences with subsistence practices that would aid in successful implementation if given access to land, or if they were allowed to grow at their residence. A similar notion is described by a study conducted by Hirata (2014), in which lack of access to land proves to be a barrier to traditional subsistence practices in migrant Marshallese communities, although through a nutritional perspective.

The act of obtaining help from others also differed in significant ways, in that the presence of multigenerational and culturally connected household networks created additional implications. Cultural connections led to a greater sense of communal responsibility, which meant even the most food insecure households felt obligated to become resource pools themselves. The highlights of such differences among the strategies described by this study's participants and that of other studies, as well as similarities and implications, are further described in the following sections.

Specific strategies described by participants include subsistence farming, gathering and foraging, fishing, directly asking family members and friends for food or money, and the use of food banks. Subsistence farming, gathering and foraging for food, and fishing were

three strategies adopted directly from Chuukese subsistence culture. However, many participants were quick to point out the differences in feasibility between the practices in Guam and that of their home islands in Chuuk. They were also just as quick to describe their intense desire to practice such cultural strategies in Guam.

4.3.1.1 Subsistence Farming, Gathering/Foraging, and Fishing

Unlike Chuuk, where many participants have their own land to practice subsistence farming or lineage rights to access land, many participants had to seek permission from those who owned private plantings to obtain locally grown produce in Guam. Those who own private plantings are usually known to the participants, such as family, neighbors and friends. However, given that networks are less extensive in Guam as compared to the networks in Chuuk, options for access are notably limited.

Obtaining fruits from a private source unknown to the participants was not described. An exception was made for foraging in areas that were owned by the public. Similarly, participants briefly described the difficulty in fishing in Guam as opposed to the ease and common accessibility of that in Chuuk. Many participants describe the inaccessibility to many potential fishing spots in Guam.

Given greater access to resources, as well as increased communal networks, participants emphasized that subsistence farming, gathering and foraging, and fishing were strategies much more commonly practiced in Chuuk. That is, traditional (“local”) food is not only abundant at no financial cost, and is easily accessible when one actively seeks it.

Mary Ann described easily finding locally grown fruits in her island in Chuuk. As stated by Mary Ann, as long as one is not “lazy”, one will always have something to eat.

Look around. They will go and get fish? Uh, they will go and looking around. Uh, breadfruit, they will get from higher. They will get down. They will get some banana everywhere. To have banana, they grow up. And papaya. Any kind of food. They will

go and get. Looking around and get... They will go and bring their own food they have on their island. They will get some food from breadfruit. They will go and gather all the food and they have food. They will cook them... Some, they don't have because they, they don't want to go. They have lazy. That's why they don't have. So on my home island? Always we have food. So if we have lazy. That's the day we don't have food...

Tritee described not having to worry about food while in Chuuk due to the availability of subsistence planting. She further noted the difficulty she experienced engaging in the cash economy in Chuuk given the low minimum wage. This sentiment further served to highlight the significance of having “free”, or accessible, food in places where store bought food is out of reach.

‘Cuz back there it’s, it’s, easy. We don’t have to worry about our food ‘cuz we are... each family, they have their own land. So... it’s that the... income? The one who were... were kind of uh, it’s hard for us ‘cuz the minimum wage there is so low. I think some, like if they’re get their only like, rice? They’re not have enough with the minimum wage if they gonna buy rice? And whatever.

Laila described the importance of land, as the living conditions of most Chuukese on in Guam don't usually allow for the type of planting they use to support themselves back home, and the reliance on money to acquire food proves itself a burden.

I would say um... Like, plant- I don't know. Um, ‘cuz back home we, like we plant our own food. And we cut the, the taro, the breadfruit, and then we fix it. And here... they have to pay for it. Because um, you don't have land. And it's really hard to get land here. Most Chuukese are just staying in the apartments, you know, and, yeah. I feel like it would be easier if, you know, we have our land here. Which I don't think that even makes sense ‘cuz this is not our place.

Laila also described the importance of having access to fishing, another subset of cultural based strategies more commonly practiced in Chuuk.

Only if you can just go out wherever? Here? And get fish? That would be good. But um, those are, like, um, my brother used to do that [with] another man? And they said like, they have to like, ride on the car to go to ap lace. Because there are certain parts that are restricted? From fishing? Here. That's I think- that's sad.

Mary Ann explained that when she visits family and friends, she also takes the opportunity to ask for fruits grown on their property.

Oh, even uh, you know the tree? Mangos tree? Oh, if I see my friends, my relative, they have mango beside their house? I will go and ask, can I have some?... Um, when I go there. When I uh, I want to go to my friend. So when I go there wi- uh, in their home? I'm looking. Oh, no more. So if I go there, I see mango tree, apple tree, can I have some.

Tritee briefly described the process of asking the owners of privately owned plantings for permission to forage. This entails actively looking for plantings, or personally knowing the owner of plantings. She said, "I go ask people where I see where they plant. I can go and ask them if I can get some to plant... For breadfruit, yeah. I ask my neighbor if I can pick some... Even let me... I don't need to ask him, I have- if I see it's ready, I'm just gonna pick."

Amelia briefly described asking neighbors who own plants for permission to pick, assuming there is enough to spare. She said, "Like, I went the, like, they went- if they have their own plant? They eat from the- their plant. But if they don't have their plant? They go ask... Ask a neighbor if they can pick two or three- they have enough for that. They cook, they slice it down..."

When asked where he forages for breadfruit, Robert described a popular spot in Guam that is also publicly owned.

Oh- uh- sometimes the- (coughs) in Piti? Those like, big- you see the big bomb? Is that a bomb or like, the one in- the one where they go jogging?... You see the- and then there's a lot of breadfruit trees? Some- Sometimes- sometimes we go there and we're just pretending that nobody is (laughs) back there. We're kind of stealing (laughs) Right?

4.3.1.2 Asking Others

Within Guam's cash economy, asking others for aid can take many forms. Many participants described asking family members and friends for both food and money. The types of food requested were notably cheaper foods, such as canned goods, bulk meats, rice, or packaged ramen. Food is asked for in dire times in which there is not enough within the household to sustain its members. This means that participants did not ask for food constantly, but mainly as a last resort. Moreover, participants usually asked for only what is needed until the next perceived time of food security. Asking for an abundance of food was not expressed, although it is also noted that those whom are asked are sometimes food insecure themselves.

Similarly, money was usually requested for immediately following household bill deadlines. Asking for money highlighted a cultural shift in which cash and store bought items displace cultural or societal relationships (discussed in the Cash Economy code group). This distinction conflicted with how the practice is done in Chuuk. Participants similarly asked family and friends for aid, however, they first made sure that those they are asking from had enough for their households. This level of familial or communal responsibility extended from traditional Chuukese subsistence culture, which relied heavily on collective partnerships. Without the numbers of extended family and community in Guam, strategies that relied on

cultural relationships were notably limited. Participants were not only unable to access land and agricultural systems that are linked to familial networks, but family members also residing in Guam were limited in resources themselves.

Kisha described asking relatives for food items during times of food insecurity in Guam and noted that requested food items are not excessive but are meant to satisfy the household in the short term.

When they don't have enough food? (clears throat) Um, sometimes calling relatives? And ask for help or, oh no, um... like do you have um, extra rice, can I just get a few cups? Or a pack of chicken... Yeah... 'Cuz even salt, you know? Hey, do you have uh, extra salt? (laughs)

Epot described a similar process, in that only enough food is requested to last until the next perceived time of food security. When asked what kind of food she asks for, she replied, "Rice, chicken... that's it. Not plenty, only just for us to like, survive to the time we're gonna get money for food. Just enough to that time". When further asked who she asks food from, she explained, "Uh, parents? My brothers and sisters? And, sometimes if we're out of food but if there's something like flour, small rice? I like, I make it... like, soup? The rice, make it soup. So it's gonna be more to enough for my family. And the flour I make pancake? Make soup?"

Mary Ann described visiting each of her siblings to ask for food when she herself can not or does not want to forage for food. Like Epot, she makes sure her family has food for themselves before asking if they can spare any for her.

Uh, sometimes when I don't want to go get food? I will go to my sister. You have food? Okay, can you give me some? And my brother, I will go and ask them, do you have food? Do you have taro? Do you have breadfruit? Do you have fish? Okay, can you give me some?

Robert described asking family members outside the household for money during times of economic hardship, like immediately following the payment of household bills, to ensure that he had enough money for food.

When I don't have enough money (laughs)... For payday or... After you pay your rent and (laughs)... Because sometimes when we're- we're in that kind of situation, we have families here. So we can call and ask, can I- can I have money for this? And they- they just c- give you. What you need. So it's not really... that hungry-hungry (laughs) Or... Yeah. So you have billings to pay and you don't have enough so you just buy a little bit to, just to survive, you know.

4.3.1.3 Gifting and Sharing

Gifting and sharing were also described as strategies that utilize communal networks. Based on the significance with which participants describe their experiences with, such strategies also directly correlated with traditional Chuukese subsistence culture. Participants described the notion of communal responsibility, in which helping others during their times of need is paramount. The practice of gifting and sharing extended beyond immediate family members to include those within participants' social circles and community groups.

Participants described times in which they were gifted food items from family members, friends, and fellow community members. Participants also recounted times in which food items were shared with them, as well as times they shared with others. Gifts were usually given or shared with when others take notice of participants' hardships, therefore they were rarely asked for. Gifts were usually food items, though monetary gifts were reported, as well. As such, instances of gifting and sharing primarily occurred during times of plenty. To emphasize the cultural bonds these strategies claim, participants also described gifting or sharing with others when they themselves were able to. Participants commonly reached out to family members and friends to share their resources to ensure that everyone is properly

taken care of and resources were utilized where they're most needed.

Lorna described a time when her older sister gifted her and her family with food during their time of need. Upon learning about Lorna's food insecurity due to a lapse of government assistance, her older sister took it upon herself to buy Lorna's family food, despite Lorna's protests.

So my older sister, the one- the one she came? She came to my house and she s- she knows that I don't, we didn't have rice. We didn't- she noticed. Why you didn't call me and ask me? I'm like, it's okay. We- we got it. We still got it. Tomorrow, I'll bring up our ta- our- my (SNAP) papers. She said, no, I'll- I have to go buy. So she get us food- food. She buy us rice, and then um, can- canned meat for my kids? Oh, thanks a lot. (laughs)

Amelia described similarly, as her aunt would bring Amelia and her siblings food purchased with her own food stamps. Because Amelia's aunt has children of her own, Amelia explained that this is done when her aunt has the time to spare.

I don't know if this answers your question, but sometimes our aunt would bring us food?... Like, 'cuz she has food stamp?... And she's that lives like, close to us, or that we're in contact with on the island? So like, whenever she feels uh- or- not she feels, whenever she wants to, or she has the time because she has kids of- of her own... She'll come and drop food. Yeah.

Epot expressed her opinions on the cultural aspects behind sharing food. When one experiences a time of plenty, whether obtained themselves or gifted by others, they are encouraged to share that with others in their family and community. She described how when she buys food for her immediate family, she also keeps her parents, brothers, and sisters in mind.

When we buy food for us? We buy for our parents? And our brothers and sister... Oh, if- if we have, we buy food, then we kind of, this is for my mom, my brother, my sister.

That's how our culture in Chuuk? When we have food, we kind of share... Anything, yeah... Yeah I think, sometimes if we have... like, much or more? That time, I think, for me? When I have something uh, someone give me? Like, my friends, they give me plenty things? That time I, this is for my brother, this is for my sister, this for my mom and dad. (laughs)

However, participants explicitly expressed how different the acts of gifting and sharing were in Guam as opposed to their home islands in Chuuk. It is noted that the practices were not as common in Guam, ultimately straining many Chuukese households in the process. Common reasons suggested that gifting and sharing were not always feasible in Guam, as limited resources and lack of communal and familial networks were more limiting in Guam than in Chuuk. Simply put, gifting and sharing was difficult when one rarely has anything to gift or share.

Epot suggested that the difference in sharing in Guam was because of the amount of “problems” that families face. She suggested that one of those problems may be the lack of resources that are able to support more than one household.

No, I think in Chuuk it's... uh, in Chuuk, they still, but maybe here, like less. Because we have plenty (laughs) uh, things to do, mm... Like, plenty (indiscernible) plenty problem (laughs)... Like, someone died, party... or, wedding... Yeah, plenty to do... Yeah but, back in Chuuk when they make the *kon*? The breadfruit? They cook and they share, too. The family. Even the fish, when they come back from catching fish? They like, share.

That's why in Chuuk, they still, but here? I think we don't have enough to share (laughs)

Sally, when describing her hardships living with another family, explained that their apparent lack of sharing was new for her. In her experience with Chuukese culture and values, food was always shared no matter what. Having a hierarchy of who gets fed depending on what was paid within the house was not traditionally done in her own household.

Like, what they do? What uh, what they... No. 'Cuz they don't have enough food 'cuz they're plenty have inside the house. Plenty adult. Plenty kids. So one case chicken, not enough for three days. Only... uh, on- two days only for one case chicken. So... if like, somebody working... he buy food, they have enough. But only one person working that time. So when they don't have enough food? They like, they don't share. They don't. They just, make uh, save for the one important for them like, oh, we save this one because he's working with our family. Uh, no eat this one 'cuz he stay or maybe just, he just make his. Eat the rice with the sugar and water 'cuz he stay home but we have to make, save the meat for the other person 'cuz he work for us to pay something for our house to stay. That's how they... In, because my family, first time I saw like that. But if my family, if even though not enough the meat? But we just make it all to feed all the people. Not only uh, like, three, we, nevermind this one, they don't need to eat.

Mary Ann also explained how she doesn't see much sharing in Guam, unless there is a visitor in the household. She also explained how large gatherings, such as parties, are one of the only times sharing is practiced in Guam.

On Guam, we didn't share. We follow the... when we stay on Guam. I buy rice. Only me and my daughter. So even my relative come to my house? That's the- they will eat. So it's different. My home? I cook food? I go there with their house, give it to them. So on Guam, if they come? They eat... On Guam, I didn't see they share. I didn't see... When we have party? That's we share.

Such a change in sharing, though common in Guam, may be occurring in Chuuk, as well. Robert suggested that although sharing was common back in Chuuk, it was also tied to how others perceived each other. That is, when one decides not to share, it does not go unnoticed by others. However, he did state that he sees a change in sharing that relies more heavily on money and what one is able to buy.

You know, we're neighbors, right, because usually, all family, right? And- Yeah, yeah. So if you come from the main island and you have something that... then you don't share? And they know, people will, oh, how come she, he's... but usually they come and oh, call, come! Take one bag of bread. Everyone take few. They open the bag and give. Back then they... most people they do that/ But nowadays? It's changing... They don't- they don't really give no more... They don't share. Not like before. Especially when you go fishing, come home, you catch plenty, oh, everybody, every house. They give. They don't have to buy. But if- but now? (laughs) You pay- you pay, you, you get (laughs)

4.3.1.4 Church Groups

Church groups were also recognized as a resource pool or communal family like network. Many participants described praying for food or aid during times of food insecurity, and then unexpectedly receiving it from fellow church members. As such, many participants described gifts from others as "blessings". This strategy was mainly seen in Chuukese households that not only claimed a specific religion or faith, but also took part in some sort of religious community.

Kisha described an unexpected occurrence with her mother's employer that left her and her mother feeling especially blessed during a time of hardship.

There was one time, I think in.. uh... I need to remember the year... I think it was 2005. Um, someone just call us and... um, tell us to meet her at the store, and she load our cart with food. And I feel like it's a- you know, it's a blessing because we're not expecting... and so that time, I feel like there is enough because it feels up the freezer, the cabinets, you know. Uh, from frozen to dry food, it was filled up and... I feel like, I mean that's the time that I would always recall. That's the time we had enough- we would have- we have enough, uh, food in the house. Yeah. So it was a great blessing

for us... Um, she is, so my mom used to work at, there was this school that called Southern Christian Academy? And so it's the principal's daughter. She just... she says she feel like she had a lot, and she just want to bless. So she called three different people to meet her at the store. And that's what she just did. Fill up the c- our carts with food and... so I was... I mean, my mom told me about it, we just cried (laughs) Yeah... Um.. the people that she call are the single mothers. Yeah. So she was- she was- she wanted to help, help the single mothers.

Lorna described a similar experience, in which members of her father's church unexpectedly provided food for her family as a form of gratitude for his services. She noted that his congregation "had a feeling" that they needed to gift their family food, given his lack of regular income.

So, like, I went to school, I came back, and I see a lot of stuff in our kitchen. Like, mom, where this food come from? Said, pray, and thank God that we have food. Like, who bought this? And like, the church member. They bring up the food. Yeah. They bring us food. That's why you have to believe in God. 'Cuz whatever you don't have? You have to believe? And pray? He will provide for you... Oh, wow. That was, I was so happy and I- I was, excited. Yeah... They bring us uh, rice? And al- like any kind of vegetable, any kind of fruits, chicken, mm, even the... the (laughs) the (indiscernible) shoyu ramen, like, any different of canned meat, yeah. (laughs)... Um... yes, I asked why. And um, you know, my dad? He... he didn't have a job? 'Cuz he said he wants- he wanna work for church. Like, he wanna preach the word of God. That's why he quit. He don't- he doesn't wanna go work. 'Cuz he, he wanna spend time, uh, to preach the word of God. So, maybe, no- no- they- no, it's not maybe. They, they said, they, they have a feeling they have to, yeah, they have to get food? And then bring it to the pastor. 'Cuz they know that he's not working.

4.3.1.5 Food Banks

Participants also described visiting local food banks that provided canned goods and other non-perishable food items, such as chips and boxed drinks. Participants noted that this was also done when there was not enough food in the household and almost all other resources were depleted or out of reach. Although helpful, such food banks restricted the kind of foods participants were able to acquire. Such restrictions further limited participants' agency over preferred foods, nutritional and cultural otherwise.

Epot described utilizing food banks during times of food insecurity, and the types of food they were able to acquire.

I'm, I'm trying to look. Sometimes when my, my experience? When uh, we gonna find the food? I usually go to the store in the Piti? The one they give out food for free? In Piti? And also in uh... Social Catholic? That's what I usually do when we kind of out of food? And then I ask my mom and dad if they have food

When asked what kind of food she is able to acquire from the food bank, she replied, "Mm, beans... milk, cereal, rice, only the bag, small bag. Uh, fruits? Like, canned food, uh, fruit cup, yeah. That's it. No more meat like, chicken and uh, no more canned meat"

Lorna also described using food banks during a specific time when her family's food security was low and she was particularly worried.

How long? Mm... It's like... um, wait... ten, eleven... it's like, three days. Three days I was worried. Yeah. Oh, when I remember the, the one they- we usually go to get food? The one at Piti? That's when I remember. I said, 'Okay, we have to go to Piti and get food.'... Uh they give out like uh, mm... mango juice? Spaghetti? And some, uh, their fr- fruit mix? Corn uh, now, apple juice? Beans...

4.3.1.6 Government Assistance

Finally, participants' use of government assistance programs was also described.

Many participants were actively enrolled in the Supplemental Nutrition Assistance Program (SNAP) and various housing programs, such as Section 8 and Guam Housing and Urban Renewal (GHURA) housing communities. Participants noted that times of plenty often coincided with government assistance scheduling, like the release of food stamps in the first half of the month.

Kisha described being able to balance the cost of food, bills, and housing needs once she and her mother obtained Section 8 approval.

You know, like how they do GHURA housing? Um... because I think... few years after that then we applied for uh, Section 8. Then we were able to get into one. And that's when everything started to balance out with us slowly coming in... because of the... I heard from friends about the Section 8 housing. So I try- I went ahead and try to fill out application. So after that then we were able to drop our, you know. Our paycheck comes then we're able to pay off rent, and buy food, and yeah

Tritee explained that due to her illness, she is unable to work and therefore receives monthly allowances from the government with which she helps pay her bills and afford food.

Because on Guam it's kind of hard for me 'cuz I can't even work 'cuz I have... sickness... My daughter said I cannot work... And now I'm under... GHURA? So, every, every month I have allowance from GHURA. They send me to, to pay my power? If I... hundred fifty, ah? If I power, hundred? Then the fifty I, pay some food for me...

In summary, strategies that optimize resources outside the household required external aid in the forms of familial and communal networks. Strategies within familial networks included directly asking family, friends, and neighbors for either financial or food aid, gifting and sharing processes between family, friends, and neighbors, and reciprocal processes among church groups. On the other hand, other optimizing strategies included

subsistence practices, such as farming, gathering and foraging, and fishing. Many participants noted that such subsistence based strategies were more common in their home islands, which led to the sentiment that “local”, or traditional, Chuukese food was more abundant in Chuuk. Based on participant accounts, subsistence practices were much more difficult or sparse in Guam given their overall lack of access to land.

4.3.2 Cash Economy

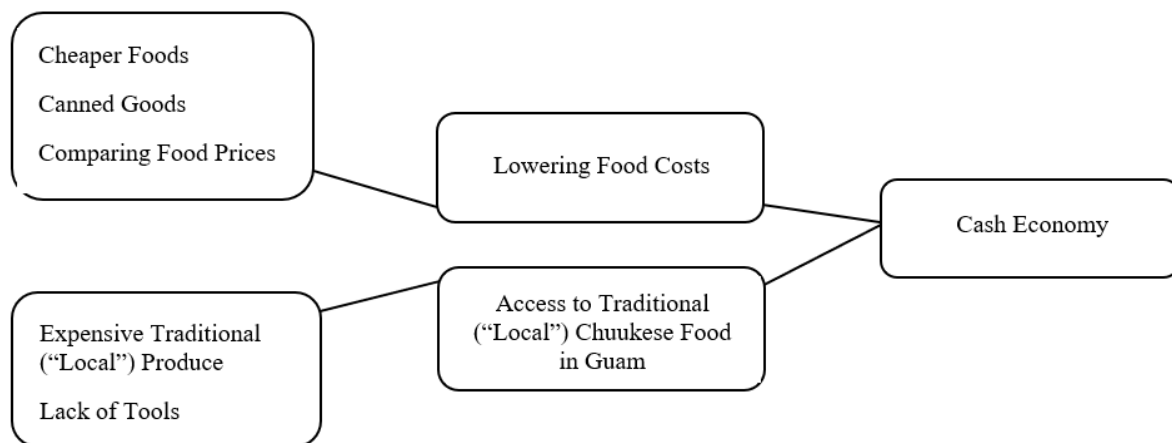


Figure 3. Dendrogram illustrating strategies that directly pertain to an identified susceptibility to food insecurity due to Guam's cash economy

Participants utilized strategies that directly result from their identified susceptibility to food insecurity due to the cash economy employed in Guam. Participants' food security in their home islands did not rely solely on a cash economy. Though a pure subsistence based economy no longer exists within Micronesia (Sproat, 1968), many participants described utilizing subsistence practices to sustain their households. Such practices still rely on land and resources that were accessed through familial networks. On their home islands, many participants and their families own land in which they practice subsistence farming and have tools with which they can catch fish or crabs with, all within a web of extensive familial networks. Participants even went as far as to describe the differences between Guam and their home islands in terms of money as the primary “cash” transaction in Guam. They often reminisced about their home islands where subsistence farming is still widely practiced and

where traditional food is abundant (“free”). Certain islands were thought to be adopting western cash values, though at a much slower pace than Guam.

Sally described the contrast in food acquisition between Guam and Chuuk. She described how easily she obtains food in her home island through foraging and family networks. On the other hand, she describes how hard obtaining food in Guam is, given the dependency on a cash economy.

Hard... Yeah, ‘cuz if we- if I work, I have food... ‘Cuz I go buy. But in Chuuk, free. I just stay home and like, think, “Oh, tomorrow, what I’m gonna eat? What I’m gonna give my family?” So I went to the jungle, I pick the stalk. I- like, I- my bro- if I have brother, “Oh, tomorrow I go get the... breadfruit, and you, you go to the water, go catch fish. So tomorrow we’ll barb- barbeque”... Yeah. But over here, hard, because we- we eat with money. We stay with money. We... we go- we go on the road with money... Everything money. But in Chuuk, free.

Tritee commented on the fact that she didn’t have to worry about food in Chuuk, since she had access to many of her favorite local produce. She really only frequented a store when she had money.

In Chuuk, I don’t have to worry ‘cuz there is any kind of food I can eat. Like, breadfruit, banana, taro, fish. That’s the most food I eat back there, not from the store. I don’t get from, sometimes, I get, if I have money to pay then I go get from the store. But, if I don’t have I just eat the local food.

Robert emphasized the cultural impact of a cash economy on Chuukese society, explaining that a loss of culture in almost every aspect occurs when money is relied on too heavily for things like food.

But back home, in Chuuk? Even if you don’t work, you still can... go get your own fish, get, you know, make coconut. I mean, the breadfruit... It’s not like

here that you pay rent, pay... so you- uh, it's- it's- different, you know. But nowadays that you're kind of adopting the... money is everything? So, it's kind of changing now. Kind of lo- loss... the respect... Yeah. Usually the eld- oldest of the family will be the one that... will be like... be the one that will be respected among all the 'cuz- but now? If the oldest is money-less? (laughs) And the younger has money? And he's the one that will get the res-respect. Not the older, uh, one. So that's- some families are like that now. In Chuuk.... 'Cuz especially when it comes to like... uh... you're the oldest, right? And my so- my daughter, one guy is asking for marriage, right? And usually, I'm not the one to be say yes. My oldest or my- my oldest sister or my oldest brother will be the one decide yes or no. For my kids... But now? It's changing, now... I think it's just because of the money... Ru- ruining the culture that money... Money is ruining it. Ruining it.

The shift in culture described by Robert shines a light on the difficulties many Chuukese migrants and their families face when adjusting to Guam's cash economy. The reliance on a cash economy coupled with the loss of access to land and fishing resources leads to a shift in traditional Chuukese values. When emphasis is placed on money and what it can provide for a food insecure family in a learning curve, all other subsistence values pale in comparison. As Goodenough (2002) describes, food was also used as a means to solidify one's position in the household, especially for men. A shift from food to money disrupts familial roles that were traditionally relied on. Therefore, Chuukese families are pushed to develop strategies that cope with the learning curve necessary to adapt to Guam's cash economy.

4.3.2.1 Lowering Food Costs

Strategies utilized to lower food costs included purchasing cheaper foods and comparing food prices between stores. Participants often preferred, and most often were

forced to, purchase cheaper foods when shopping. Such foods named included canned goods, such as canned mackerel, as well as chicken leg quarters, turkey tails, rice, and packaged ramen. Because of the demands of a cash economy, participants prioritized affordability. Thus, cheaper foods were all they could afford. Participants also noted that cheaper foods tend to have a longer shelf life, which help extend periods of food security. The same strategies described by participants were echoed in a study conducted by Kempson et al. (2003), which studied coping strategies identified by low-resource individuals and nutrition educators. Kempson et al. (2003) identifies similar strategies that were categorized as shopping strategies that lowered food costs. Such strategies include but are not limited to shopping for low-cost and value foods in the form of bulk foods inexpensive foods sale items, expired items and items covered by coupons.

Robert described the Chuukese community's affinity for rice, and compared its price and shelf life to that of pounding *kon*, a traditional Chuukese breadfruit dish, which is much more expensive on Guam and can only feed so many.

Bag of rice is what, twenty five? Twenty six? These- these Chuukese, they don't really like any other rice than the Diamond G (laughs) I don't know why (laughs)... And if you get that... three or two *kon*? Sometimes they se- five, dollars, six dollars, so you get four, but you- you only eat those in two days. But the fifty pound rice, for two weeks, one week? And it's (laughs) everybody share the rice.

Kisha described a time in her life in which whatever money was left from paying the bills, was used on bread, although rice and ramen were always available.

Because at that time I feel like we were only focusing on bills, and very small extra money to get food or things that we need for the house... Sometimes if there's a little money, we would just get bread for breakfast. If there is none that day we just eat rice with whatever is there. With ramen or, um... Yeah. Soy sauce.

Amelia, when asked what her favorite foods are, briefly stated, “I mostly live off canned goods (laughs) ‘cuz that’s what we can afford.”

4.3.2.2 Comparing Food Prices

Moreover, participants compared food prices at different stores to obtain the best deals at the cheapest price. This, in turn, required participants to travel to multiple stores when food shopping. A similar strategy is described by Zenk et al. (2011), in which participants travel farther distances to obtain cheaper foods. A difference noted here, as travel times or distances were not described by this study’s participants as any kind of a hindrance or cause of stress. Participants described comparing sale prices at numerous stores in order to obtain the best price, and favoring certain stores for specific food items. The same strategy is described in the study conducted by Kempson et al. (2003), in which participants purchased food from low-cost sources like discount stores.

Sally described her process of comparing food prices at different stores when food shopping. She explained how she checks the prices of certain foods at different stores, then buys from the most affordable location based on sale offerings.

I go like... I go to Payless? It’s... the just uh, about the chicken. The case of chicken. Or case of spareribs. Payless, twenty seven. And I oh, I go check, I don’t have enough for that one. So I went to the... went to the American Grocery. So that one is twenty seven, American Grocery, twenty- twenty four ninety. And I, okay, I buy here ‘cuz that’s the cheaper one. So the cheap,.. Payless, cheaper. ‘Cuz every, sometimes they put down sixty- sixty ninety nine, Payless it’s thirteen ninety nine. So I check. I re- I go to the other store, go, go to the other one and uh, other store too, so if it’s same? But the first one I saw it’s cheaper? Next day, I go back to the other store.

Lorna briefly described a similar process in which she frequents different stores for different purchases depending on price. When asked what stores she goes to when her food

stamps come in, she said, “American Grocery and Payless... ‘Cuz uh, Payless? I like their vegetables? And their meat, ‘cuz it’s fresh.. Uh... American Grocery, that’s the cheapest, um, place to by the canned meat (laughs)”.

Like Sally and Lorna, Amelia described favoring American Grocery, in particular, for their affordable canned goods. She even described not minding the drive, as the distance between her residence and American Grocery is a little over seven miles.

‘Cuz we get [sausage] in a box from... um, American Grocery... That’s where we mostly get our canned goods. ‘Cause it’s cheaper there... So we could get like, a month worth of food supply from there for one hundred- below one hundred... And sometimes, we even have, we go to the next month having the same amount of canned goods we bought... Yeah, we’ve- even experienced or experimented with other, like, you know, buying from other and we’ve spent more than one hundred, than when we’ve, um, American Grocery?... But we don’t mind the drive.

4.3.2.3 Expensive Traditional “Local” Food

Finally, the price differences between traditional (“local”) Chuukese food sold in Guam and of that sold in Chuuk were noted by participants. Local Chuukese food was much more expensive in Guam, with reasons reported as: lack of available tools and expensive ingredients. Due to the price, participants were unable to afford local Chuukese food, which was preferred and more nutritious than cheaper foods they must purchase and consume during times of food insecurity.

Amelia explained the portion differences in traditional Chuukese food sold in Guam and in Chuuk. Her opinions lend her to prefer to cook local Chuukese food at home when she can, rather than purchase it. She also noted the high cost of tools needed to cook local food.

But it’s also crazy, though, how much they sell it here? And the portion they sell it here ‘cuz it’s- that’s crazy, you could- Okay, so you could get like, a, a,

pounded bre-breadfruit the size of the folded paper?... For like, what, eight dollars?... on Guam. You can buy- Buy um, at the side- of the size of the plastic bag in Chuuk for that price... So that was- that's crazy. So, some... like, for- for me, we'd rather make it... Than to go out and buy it. 'Cuz that's just crazy.... I don't know... Because you... you can't- it's hard to do it here. Like, even the way- have- do you know *kon* is?... So, the process of it is not easy... You have tools and um, we don't have tools here- those tools here... Only... like, the supermarkets that sell do sell those? They have the tools, so. It's kind of... that's one of the barriers to getting..."

Sally expressed a similar sentiment regarding the traditional Chuukese dish *kon*, in particular. She explained how *kon* is sold at a much higher price in Guam than in Chuuk.

Yes, I'm really miss. But if- if I want the local food from here? Expensive. They sell very expensive. The fe- small like, pounding *kon*?... In Chuuk, they sell that, like two dollars.... From those, they don't have plant. So over here, they sell very small like, only one person, only like, two- three-, they- we eat like, three times, they sell like, seven, eight dollars.

Several strategies utilized by participants arose out of their unavoidable participation in Guam's cash economy. As described by participants, subsistence culture was still practiced in their home islands. Given their inability to grow their own produce in Guam, participants expressed their difficulties with navigating its cash economy. Thus, participants utilized strategies that aimed to lower food costs. Such strategies included purchasing cheaper foods and canned goods, such as canned mackerel, rice, and instant ramen. Participants also described comparing food prices at different stores to obtain the best sales.

Moreover, participants emphasized several obstacles to obtaining traditional Chuukese food in Guam, all of which stem from the difficulties of navigating Guam's cash economy. Given the lack of available local produce and the lack of access to land to cultivate

it, traditional food sold among the Chuukese community was notably more expensive than local food sold in Chuuk. Also more expensive were the tools used to cook traditional dishes. Therefore, many participants described refraining from purchasing and consuming local food in favor of more affordable store bought foods.

4.3.3 Entrepreneurship

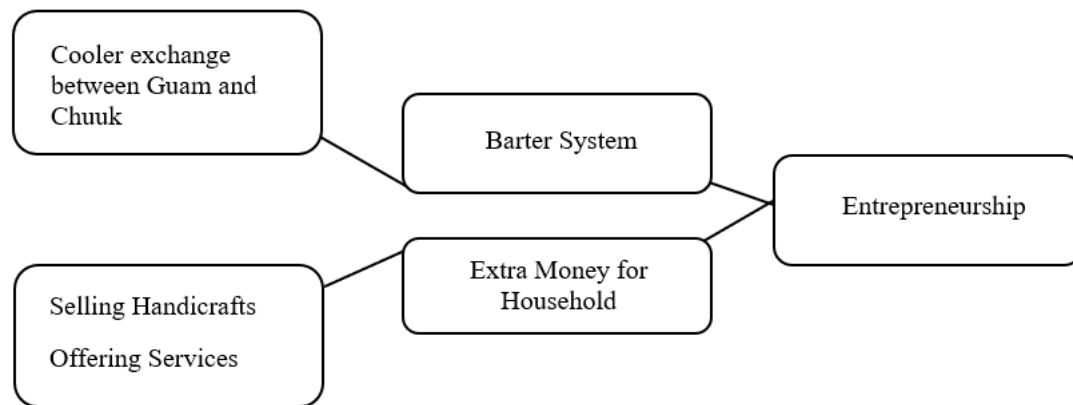


Figure 4. Dendrogram illustrating entrepreneurial strategies

Participants utilized strategies that applied entrepreneurial efforts to increase money or food items coming into the household. Some strategies were straightforward in that participants sell items they create themselves, while other strategies involved a type of barter system that exchanged lower valued food items for higher valued food items. This barter system took advantage of the dichotomy between Western cash economy prices and traditional Chuukese subsistence culture prices. The affordability of Western canned goods and the high price of traditional (“local”) Chuukese food in Guam was different in Chuuk, where foods from the grocery store were expensive while local food was easily obtainable. The system developed to capitalize on the value contrast is described below.

4.3.3.1 Barter System

The barter system utilized by many Micronesians made use of coolers. When a family member or friend travelled between Guam and Chuuk, they took along a cooler packed with items that were to be given to family members or friends in the island they arrived on. In

return, a separate cooler was packed with items that were then given to those in the island the traveler returned to. Coolers traveling from Guam usually contained Western items, such as potato chips, while coolers returning from Chuuk usually contained traditional Chuukese cuisine, such as crabs, fish, and local produce. The process was entirely reciprocal, as such exchange items are of high value to each receiver. As described by participants, the process was an agreement between the giver and receiver, as well as an act of cultural responsibility that ensured prosperity was well distributed.

Lorna explained how her family takes advantage of her father's frequent travels between Guam and Chuuk to request for local Chuukese food. She then described how her sister also sends local food to Guam whenever someone she knows is travelling in exchange for things she needs.

And... sometimes, the market, they're out of the local food. So, we ask our (laughs) we ask our dad to go to Chuuk so he can get us (laughs) local food. Yeah. 'Cuz he only travel every like, when he wants to go and then he- he went. So yeah. (laughs) He went to Chuuk and get us local food. Then bring it out. Or, ask- 'cuz um, my second sister? She, she went back to Chuuk?... We usually call her and, can you get us food? Local food? It's like, oh I'm gonna give to- just go ask the people, they came out (laughs) They want to travel out to Guam (laughs) [She said], "Okay, I'll go try my best." If she found like, if she see somebody to bring? Then, yeah. But if she doesn't know anybody to bring our local food? We ask our dad, can you go Chuuk? 'Cuz you're free on the airplane? (laughs)... If my sister needs something? Then we, um, my sisters and my brothers? We have to get the cooler, put stuff, whatever she wants. Like chips (laughs) pancake, the pancake mix... canned meat for her kids. Yeah... In the cooler. You can bring two cooler. One for fish, one for only the local food. Yeah. We know that, dad is coming like, today.

We all get ready to fix food for dad to eat? The one we cook here? And we're gonna go finish out the (laughs) food in the cooler (laughs)

Sally briefly described not needing to buy local Chuukese food in Guam when her family or friends come to visit, as they bring a cooler filled with fish, lemmal, and bananas. She said, "Over here, I need to buy the local food. But if I have friend, I don't have- I don't need to buy. If my family came from Chuuk, they bring, I don't need to buy. I eat free... Like, one cooler? Have fish, have the pounding lemmal, uh, banana." She further elaborated on her own experiences transporting coolers to Chuuk for others and the process that is involved.

Like... just example like, me, right? If I'm gonna go to Chuuk, so you, you know, oh, you going Chuuk tomorrow? And I, yes. Oh, can I, uh, pay the fifty dollars for one cooler? And you bring to my family? And I, oh, okay, okay, no problem. So you pay the cooler, I check on my name, I bring to Chuuk. So, I just telling you, so you call your family to go to airport, look for me there. So how I, that's how I do it like that. I don't uh, send. I wait for somebody leave to Chuuk? So I ask them to bring...

4.3.3.2 Selling Handicrafts and Services

Other entrepreneurial strategies were more straightforward in that participants sold items or offered services in exchange for money. Items sold were specifically described as cultural adornments, such as traditional Micronesian headpieces called *mwar mwar* or traditional floor mats. Many participants described such sales as helpful in making just enough money to pay for immediate needs, such as bottles of drinking water or household bills. A similar strategy of pawning or selling items to supplement financial resources is described by a study conducted by Kempson et al. (2003). However, many similar strategies identified by the participants of the Kempson et al. (2003) study were not echoed by this study's participants, such as begging and panhandling, providing foster care, gambling,

earning unreported income, participating in research, selling one's blood, and engaging in illegal activities.

Kisha described creating and selling *mwar mwar* on social media for extra money. She explained that the money obtained from the sales help cover household expenses, such as water.

And then me, for example, I'm making the *mwar mwar*?... Yeah. The lei? 'Cuz some people, they like to use it to match to their outfit? Go to church and stuff like that?

Yeah.. Yeah. So I if- so I made it out of the foam sheets? And then I will sell it. Let me see if I have pictures, I'll just show you.. Um, I do that like, and it comes in really, um, good on a- on hand because sometimes when I need water, money for water, it helps also.

Mary Ann echoed a similar practice in which Chuukese community members make and sell "handicrafts", such as clothes and sitting mats. She said, "Um... They try their best. To have food. Uh, they make some handicraft. To sell... And they have money and buy food. They uh, you know the clothes? They sewing clothes? They make uh, some mat from their own hands, they make."

Tritee described offering massages out of her home for money to pay for her meals. She briefly said, "Uh, sometimes I'm, 'cuz sometimes when I'm, there's people come to me to asking for help like massage? Yeah, I massage them and they give me some cash. Mm, so, that's what I use to pay my meal."

Entrepreneurial strategies described by participants allowed for an influx of additional income or resources into the household. Some strategies were more straightforward in that participants sold handicrafts as supplemental income. Such income was useful in paying household bills or purchasing immediate necessities. Other strategies included a barter system developed by the participants and their family and friends residing in Chuuk. This barter

system is common throughout Micronesia. Coolers packed with inexpensive Western goods, or items of low value in Guam, are traded with coolers packed with local produce and foods, or items of high value in Guam. Participants make use of frequent flights between Guam and their home islands.

4.3.4 Managing Food Supply

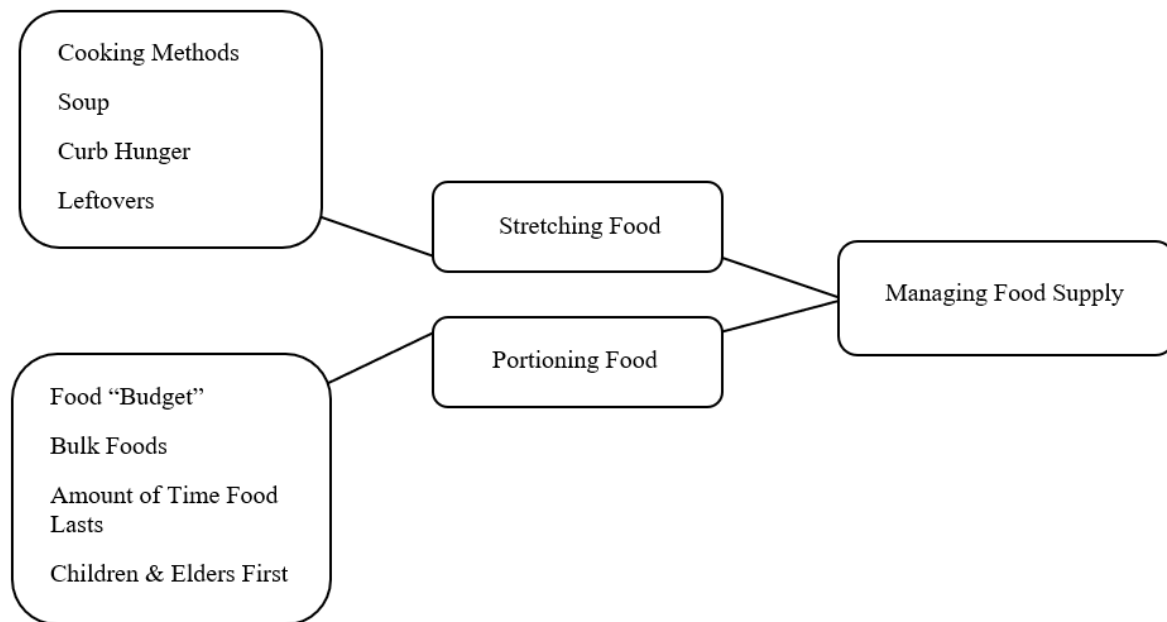


Figure 5. Dendrogram illustrating strategies that manage food supply within the household

Strategies that required participants to manage food supply took place within the household with readily available food. Such strategies required participants to “stretch” food with specific cooking methods and recipes that maximized food servings while limiting the amount of food purchased. They also required participants to portion food amounts among household members, which sometimes resulted in certain members eating less than others. Ultimately, the goal of strategies that manage food supply was to ensure that the household has enough food supply to last until the next anticipated time of plenty.

4.3.4.1 Cooking Methods

One way participants stretched the amount of food they have to last during times of

food shortage was by cooking specific meals or using specific recipes that not only utilized less food, but also stretched what little they have. The term “stretch” was derived from a study conducted by Hoisington et al. (2002) that identifies coping strategies and nutrition education needs among pantry users. The Hoisington et al. (2002) study identifies various ways participants stretch meat and vegetables in dishes, such as cooking pizza and tacos. Participants in this study described a similar process of cooking “soup” with rice and whatever meat is available. As rice was a cheaper food that can be purchased in bulk, it was commonly found in food insecure households. By adding more water to rice, a type of “soup” was created from a relatively small portion that is thus stretched to satisfy the entire household. To improve the taste, participants described adding various condiments, such as soy sauce or sugar.

A similar process is briefly described in a study conducted by Kempson et al. (2003), in which participants dilute meals. In comparison to this study, it was noted that the use of soup was as much cultural as it was strategic based on participant descriptions. It was the only dish participants consistently referred to as a strategy of stretching resources that was practiced in both Guam and Chuuk. However, it is imperative to note that both this study and the Kempson et al. (2003) study found instances in which such dilutions affected participants’ nutritional intake.

Mary Ann described her cooking process for soup, which involves the rice cooker. She also described the consistency she aims for.

Um, when I cook the rice? I, you know the rice cooker? The rice cooker, four cup, four water. Four rice, four water. So me? I will take two cups, four water. It means, soup! The rice is getting bigger... That, I eat... Soup. (laughs) The soup, only the rice? Um, the water? I think it’s two cup rice? Two cup rice. The cooker cup? It’s too little. So I will use the cup rice? Four water. Two cup rice and four water. Match, then put on the

stove. Then the rice, it's getting bigger. Bigger than the rice cooker I put four cups, four water. So, two cup rice, four cup water, join together, it's very big. So it's soup. Not hard. Uh, it's soft. Yeah. So, you know the bread? The flour. The flour? I will cup, one cup rice? And, um, two cup water. Put in the pot. So when it's uh, what's that? Cook! So, I will cup the flour? Only one? And put inside? So, the rice, it's not soft. It's very big, but it's um, little hard. Because the flour. Mix together with the rice. So it's soup but it's not soft. It's not too much water.

However, Mary Ann also noted the effect soup had on her body and overall physical wellbeing. Given the ingredients she uses, the satiety she felt is short lived, and left her feeling weak and hungry still.

Because when I have rice? I cook rice cooker. I need to cook the rice so I'm very healthy when I'm eating. So, when I use soup, when I cook I use soup. Uh, it's little healthy. My body, it's little healthy. Because it's different. The soup and the rice... Yeah. My body, it's not good. Yes, I will eat the soup. It's make me, strong but not strong... Yeah. When I eat rice? Uh, from the rice cooker. I will uh, in the morning till lunch. So if I eat soup, in the morning, uh, eight o'clock. So, ten o'clock or eleven o'clock, mm, I'm hungry.

Sally described a similar process of mixing rice with water to create soup. However, she preferred to add sugar to improve the taste, especially when meat, a more substantial food, was not available.

Well, we just use the our custom. If we, if we don't have meat? We just get the rice, put the water, and put sugar. Like, the soup. So we just mix it and eat (laughs) no meat (laughs)... Because if they don't have meat? And... we cannot feel like eat straight the rice, eat straight. So, we put water inside the cook rice, and we make it soft, put the

sugar? Mix with the sugar and then, that's all we feel like it's taste good to eat. Like, we already eat meat with the rice but no, only the water and sugar (laughs)

4.3.4.2 Soup

Participants described using soup as a strategy during times of food insecurity while living in Chuuk. Laila described a time of food insecurity that occurred after a family celebration in Chuuk that unexpectedly left many visiting family members living with her and her immediate family for a couple of months. With the influx of mouths to feed, her family used soup to stretch what little food they had.

Like that for three months for that amount of people. So... sometimes we would just um, you know, cook food and um, like we have this- we cook soup? Yeah. To, you know, for- so that it- it'll be enough for everything... Um... like, fam- like we lessened the... not lessened but my parents can only afford this much to, um, you know, for all of us and we have to, you know, um, like what I said, the- cook soup? So that everyone can, um, be able to, you know, get a little (laughs) and eat.

Robert described a time living in Chuuk during his youth where his mother would make soup to stretch the resources they had. Given the amount of extended family members staying with them, he described how his mother had to stretch one can of mackerel with kang kong (Chinese water spinach) to feed the entire household.

But if she has to... like, soup. Mix, soup out of it so it can be enough for everybody... Like one, one can of mackerel. Mackerel, just for example. 'Cuz usually we (coughs) can of mackerel, every meal, one. And then she will mix it with uh... I don't know what you call this. You know the s- the long, green, they have like, like a hole in it? ...So, four of us? So, and then, or my first cousin, he's... see, he stay with us until he pass away. And we're still young and he was already there. He's older than me. So like,

six of us, in the house. Oh, plus my grandma. So.. that's why have to make big pot out of can of mackerel (laughs)

4.3.4.3 Curb Hunger

Participants also briefly mentioned intentionally consuming specific foods that curbed their appetite and gave them energy. It was suggested that by consuming such foods, participants stretched their more substantial food items.

Laila described only consuming soft drinks to give her energy throughout the day. It is important to note that the lack of transportation and tight schedules she described was due to her being a student living in the university dorms.

...it's like, sometimes we would only like, eat... something from our fridge like... um... eat soft drink (laughs) Just drinks. Like sometimes we would do that and like for me, because um... especially like that we don't get um transportation and our schedules are like... um, very uh, tight? So we don't have time to go to the store or to ask somebody to come and we'll just, you know, try to grab something and just, munch on it (laughs) To be... to have energy throughout the day.

Sally described the popularity of coffee among her friends and family. She attributed its appeal to its ability to curb appetites, which allowed for more food to be saved or stretched. She said, "Like, they really- yeah, they really like the coffee 'cuz... they don't waste the food to eat... If they drink coffee, they don't need to eat (laughs)."

Also briefly mentioned was participants' use of leftovers to stretch food and resources. Participants described not only leftovers they had from their own meals, but also leftovers they took from work or family functions.

Amelia described using leftovers to conserve food, specifically rice, within the household.

Because, if, for example, we cook three cups of rice... and, we don't eat all of it? That leftover piece? We take it out, put it in the fridge... Just to save... or- con- yeah, conserve. So, the next day, someone has or wants to eat rice? We take it out, microwave it. That's how we save our rice.

Sally described saving food from work, which allowed her to save or stretch the food she already had within her house.

Everyday when I uh, go home? Like the... the, the, their food they don't eat so my boss gave me, oh, you can get this one, you get this one, you don't need to cook. So everyday. Sometimes they don't have, uh... to eat he- uh, at their house? So I don't get from here uh, from the- my boss. So if they eat next day? They share with me next day. But everyday when I come to work, they always give me the, their leftover.

Kisha briefly described a similar process, in which she and her mother would eat food from her mother's work. She said, "Like whatever is the leftover, we will just preheat it and eat. Or, sometimes when she goes to work. She comes home with some leftover food of what they ate at- at work. And that's what we will eat..."

4.3.4.4 Food "Budget"

Participants also intentionally portioned food amounts based on specific time periods, such as the amount of days until the next pay day. The portioning process began with participants estimating, or calculating, how much food they must consume (and save) daily until they can acquire more food. Participants described this calculation as a food "budget", which pertained to the food itself rather than a budget of financials. As an aside, participants did not describe budgeting their financials. A study by Kempson et al. (2003) also finds that few participants reported budgeting due to monthly cycle of bills and government assistance schedules.

The food item's shelf life dictated its potential to be portioned and saved. That is, if instant ramen can be kept for several months, participants mentally noted that a box of can last the household until the next time of plenty. From that point of mental calculation and preemptive planning, buying low price packaged food in bulk and forming a stockpile (when possible) was determined to be the most economic decision.

Sally described her process of portioning a case of chicken for one month's time. She cooked half the case for the first half of the month, then saved the other half for the remaining weeks. She described prioritizing her children's portions.

Uh... If I feel like I'm not- I'm gonna sort for food for the, like, one month? So... I- I save like, I buy, like, case chicken, the meat for my kids. So, I save the chicken for-half the chicken for like, uh, the middle to end. So... for like, me and my boyfriend, my dad, I put aside for me and my dad to like, just make it plenty cook but the food I save, I save for my kids. Like, for Monday, Tuesday, they're going to have enough food for the other week when I have enough money to pay.

Laila described the portioning process her brother employs with his family when they find themselves short of food before their food stamp schedule.

So- but sometimes it like... it... they're out of food before. So they just... I don't know how we do it. But... even the littlest things they, you know, try to be very, um... careful. Like that little things but the food that they make, they would limit it. And then just cook a little so that they can, you know, survive day by day. Until the next one comes out... Yeah. If they see that it cannot last until the next um, next round to come in? So, um, they just make a little... like, until that day.

Briefly describing her portioning process, Trittee said, "I just cook whatever- uh, what is- whatever is enough to me for like, breakfast? Lunch, and dinner. I don't cook that much. If it's fish, I just... during cook, fry half?" Because Trittee lived alone and did not require as

much food as a larger household, she was able to closely monitor her food portions and knew what size portions would satisfy her.

4.3.4.5 Bulk Foods

Finally, participants also planned ahead by purposely purchasing bulk items of cheaper foods, such as canned mackerel, sausage, and instant ramen, to not only increase the amount of food within the household, but to also capitalize on sale prices often offered for such items.

As times of plenty usually corresponded with pay days or government assistance schedules, purchasing in bulk ensured that the household had enough food to last until the next time of economic inflow. It was common that when bulk items were purchased, they too were portioned according to household anticipated needs.

Laila described she and her sister's preference for instant ramen, which tended to last them a couple of weeks. She said, "Mm. Like... we just eat, like, ramen? 'Cuz usually that's what we get, because, you know, like box of ramen. So it can last more. More than two weeks (laughs) Yeah."

Amelia described a similar preference, in which her household consumed instant ramen as much as canned goods. As she was in charge of food purchases, she made sure to buy ample amounts of instant ramen, in particular. When describing this preference, she said, "um, ramen. Uh, 'cuz we- we go for the canned good first, then the ramen. So- we'd have some kind of ramen. And I try to get two b- um, two cases... So one would be ichiban and the other would be the bowl ramen."

4.3.4.6 Children & Elders First

Households containing children, elders, or even visitors showed high levels of portioning, as such categories were given special consideration. As such, many household members who did not fall in those three categories sometimes went without eating or reduced

the amounts they ate in order to preserve food portions. A similar strategy is found in the study conducted by Kempson et al. (2003) where participants report restricting personal food intake by depriving themselves for others, going completely without food, or limiting number of eating occasions. However, other strategies that are described by Kempson et al. (2003) were not echoed in this study, such as overeating, eating expired food, obtaining free samples or roadkill, or eating on a monthly cycle that limited foods near the end of the month.

Sally described purposely portioning food specifically for her dad, regardless of his protests to save more for her own family. This sentiment hinted at the assumption that food portions may extend beyond the immediate household, given cultural ties to family.

Uh... like... because I cannot eat without my dad. Yeah. So if- if like, very small the... food. So I cannot eat... only me and my kids and my boyfriend? And I, oh, nevermind my dad 'cuz my dad very strong. No. (laughs) I, I share 'cuz I really uh, love my dad to just whatever me and my kids and my boyfriend eat? We just share with my dad... Sometimes my dad don't eat and I ask him, oh, you- did you eat? Oh, no, I save for your kids. No, you come, you eat. If we eat, uh, you have to eat with them. No, 'cuz not enough. No, no, you come, I give you. You eat (laughs)

Laila described a time when she and her family in Chuuk housed many visitors, which strained her own family's food security. To ensure that the visitors had enough to eat, Laila described restricting her own portions for the sake of everyone else.

Um, yeah we wouldn't eat. Like... just so that they could, you know, get food, you know, be fed... Those people... I think it's because, um, we're family? Like, we stay there and we, um, we'd rather have them- have the people that come to our house um, you know, fed and um, just experience a good living there? And but it's okay, we can come last (laughs)

Participants described strategies that took place within the household and focused on managing existing food supply. Some strategies described by participants resulted in processes that “stretch” food. Such processes included using specific cooking methods and recipes that maximize food servings with limited inputs. One particular cooking method described by all participants was the use of soup. Participants described mixing water with rice and various other ingredients to create a type of soup that stretched inexpensive food items. Other stretching strategies included the use of leftovers, and the consumption of certain foods to curb hunger.

Participants also described strategies that required the portioning of food amounts with household members in mind. Food portions allowed for meals to be allocated among household members more efficiently. However, this strategy also resulted in certain household members, those who were not children nor elders, to limit their own portions or refrain from eating altogether. Strategies of food portioning also involved the use of bulk foods, which were budgeted accordingly to last periods of food insecurity.

5. Conclusions and Recommendations

This study was conducted with three main objectives in mind. The first objective aimed to explore the adaptive strategies traditionally used in Chuuk, while the second aimed to explore the strategies currently used in Guam. Strategies identified by participants were categorized by four main themes: 1) optimizing resources outside the household; 2) cash economy; 3) entrepreneurship and; 4) managing food supply. Table 4 outlines the adaptive strategies identified by participants as being traditionally used in Chuuk, and the strategies identified as being currently used in Guam. The strategies that have been used in both Chuuk and Guam are also included in the table.

Table 4. Adaptive Strategies Traditionally Used in Chuuk and Currently Used in Guam (Objectives 1 and 2)

Location Used	Adaptive Strategy	Theme Category
Traditionally Used in Chuuk	Subsistence Farming	Optimizing Resources Outside the Household
	Fishing	
	Gifting/Sharing	
	Asking Others	
	Soup	Managing Food Supply
Currently Used in Guam	Gathering/Foraging	Optimizing Resources Outside the Household
	Asking Others	
	Church Groups	
	Food Banks	
	Government Assistance	
	Cheaper Foods	Cash Economy
	Canned Goods	
	Comparing Food Prices	
	Cooler Exchange Between Guam and Chuuk	Entrepreneurship
	Selling Handicrafts	
	Offering Services	
	Cooking Methods	Managing Food Supply
	Soup	
	Curb Hunger	
	Leftovers	
	Food “Budget”	
	Bulk Foods	
Traditionally Used in Chuuk and Currently Used in Guam	Gathering/Foraging	Optimizing Resources Outside the Household
	Asking Others	
	Soup	Managing Food Supply
	Children & Elders First	

This study’s third objective of finding ways in which the participants’ adaptive strategies can be better incorporated in food security education and support programs is addressed in the following recommendations. That is, the recommendations developed by this study aim to offer suggestions for policies and programs that support the traditional values and adaptive strategies developed in a subsistence economy, shared by the participants, given the obstacles they currently face within their food environment in a cash economy.

From the findings of this study, it is apparent that key recommendations for increasing

food security within the study community should be based on supporting agricultural practices they are familiar with. Subsistence practices, such as farming, foraging, gathering, and fishing, were not only reminisced of by participants as common practices in their home island, but also noted to be the preferred methods of achieving food security in Guam. However, because of a lack of access to land, participants almost always followed their description of subsistence practices with reasons as to why it is difficult to achieve. The following recommendations seek to address such barriers to subsistence practices in Guam. Moreover, recommendations rooted in nutrition and education described by participants in similar studies from the mainland U.S. are also further discussed.

The desire to practice subsistence farming in Guam was echoed by every participant. In addition to the desire to engage in subsistence production, the participants also possessed the knowledge and experience to do so. A majority of participants described not only utilizing private plantings in Chuuk to support their households, but also relying on such resources when purchased foods were unobtainable. Studies show that investing in subsistence practices and local production improves the food environment in under-resourced communities (Drescher et al., 2006; Zenk et al., 2011)

The primary barrier to subsistence practices identified by the participants was the lack of access to available land. Although participants of other studies conducted in the mainland U.S. identified lack of available land when asked about the viability of subsistence practices, they also identified a lack of knowledge, time, and transportation as compounding obstacles (Fish et al., 2013). Some studies ignore the possibility of subsistence activities altogether when in an urban landscape (Taylor & Ard, 2015). The participants of this study, on the other hand, spoke of the lack of available land, or access to land, as impediments to subsistence practices. As an example, the majority of the participants lived in government funded housing, which prohibits most gardening practices that would aid in food security.

Therefore, to support the subsistence aspirations of the participants and to address the barriers identified, one recommendation is accessible land plots via community allotment gardens. Originating in Europe, allotment gardens are a component of urban agriculture that allocates parcels of land to households for subsistence use (Drescher et al., 2006). Unlike community gardens, which are managed by several households within a community, allotment gardens are allocated by government or private entities and are each individually tended to by a household (Holmer et al., 2003; Drescher et al., 2006). As transportation and time were not indicated as hindrances by participants, the availability of land may not be limited by proximities, but by sufficient space and water access. Although, the closer the land to the household, the better for all parties involved.

The success of allotment gardens lies in its dependency on public administration. That is, the regulations behind garden allotments are standardized for each household. Decisions on how to run an allotment are guided by a greater association that encompasses all participating households. As such, each allotment differs from a home garden in that they are not entirely independent. When allotment gardens are properly institutionalized and integrated into community planning, resources are better regulated and accessed (Drescher et al., 2006). The types of production and management systems used are determined by the governing associations and local agricultural professional support agencies.

Often, due to the advocacy and collaboration between authorities, interest groups, and residents, community empowerment becomes a relevant output of allotment gardens (Drescher et al., 2006). Successful implementation of subsistence practices within low-income and low-resource communities refocuses food production and consumption from corporate, or cash driven, food supply to local food economies (Allen, 2010; Meenar & Hoover, 2012). Given that many participants expressed difficulties in navigating Guam's cash economy in terms of food acquisition, in contrast to their lived experiences with a

subsistence economy, enabling these individuals to engage in subsistence practices would allow these communities to draw on their intrinsic resources to dramatically increase their food security.

A similar recommendation is the implementation of urban food forestry via small-scale edible landscapes in public spaces. Urban food forestry combines the elements of urban agriculture, urban forestry, and agroforestry with the use of perennial food-producing trees and shrubs (Clark & Nicholas, 2013). As green infrastructure programs, such as urban forestry, are usually large scale endeavors and involve the collaboration of numerous stakeholders (McClain et al., 2012), small-scale edible landscapes in public spaces may be easier to implement and maintain in Guam. Such edible landscapes can be as simple as park and parking lot perimeters of breadfruit and other fruit trees that replace current ornamental landscapes that dominate government spaces.

Urban food forestry implemented at an institutional level will also ensure regulations based on best management practices. That is, regulations would promote proper cultivation and resource management while assuring that low-resource households enrolled in government programs have controlled access to fruits and leafy greens. Since many participants described foraging and gathering practices in Guam, institutional plantings would increase access to local produce in a process already practiced by low-resource households. Public landscapes maximized for low maintenance sustainable agro-forests not only integrate multiple ecosystems, but also improve urban resiliency and well-being (Clark & Nicholas, 2013).

Moreover, common obstacles to food cultivated in public settings are averted through the use of perennial landscapes. Perennial plants live for years, and produce abundant food in the same or less labor time than required for small common garden plants. The use of multi-crop systems in agro-forests have reduced impact of pests and diseases in comparison to

monocultures. Environmental benefits include soil and water conservation, increased biodiversity, and nutrient capture. Guam has agricultural support professionals and programs promoting these practices, which can help ensure knowledgeable cultivation and management practices.

Other agriculturally backed recommendations focus on the gardening limitation of Guam's government housing entity, the Guam Housing and Urban Renewal Authority (GHURA). One simple policy recommendation is for GHURA to encourage selective planting by its clients. Although government housing communities may be limited by space, planting shade giving fruit trees in an organized manner would provide both shade and fruit for residents. If managed correctly, fruit trees support community beautification guidelines. GHURA regulations may be put into place to ensure that housing residents are the sole receivers of fruit produced.

Low-resource households residing in Section 8 housing offer a different set of obstacles in practicing subsistence agriculture. Residents in Section 8 housing are not only limited by GHURA regulations, but also that of their land lords as well. Therefore, a policy recommendation for both Section 8 housing and GHURA communities alike is to allow the use of container gardens beside each residence. Container gardens mitigate the lack of available land resources. Although container gardens may not be optimal for growing fruit trees, other popular subsistence crops such as taro and sweet potatoes could be easily cultivated by residents. Container gardens may be adjusted to fit the requirements of many housing arrangements, adding to its diversity and ease of application.

It is important to note recommendations described by similar studies conducted in the mainland U.S. that have already been implemented in Guam's food security environment. Participants of other studies expressed interest in education and training on how to purchase cheaper foods (Hoisington et al., 2002) and how to better maximize such foods through

cooking methods and recipes (Joy et al., 1994; Hoisington et al., 2002). The University of Guam offers several Community Nutrition Education Programs (CNEP) that promote such knowledge on healthier meals and behaviors for limited resource households.

One example is UOG's Expanded Food and Nutrition Education Program (EFNEP). EFNEP is a U.S. Department of Agriculture (USDA) supported program that promotes nutrition education for limited resource households. Participants of other mainland U.S. studies desired resources and education on healthier meals with cheap ingredients. The EFNEP provides Guam's low-resource communities with this information. Another example of a UOG program that conducts outreach education for cost effective nutrition is the Supplemental Nutrition Assistance Program – Education (SNAP-Ed). SNAP-Ed is the family education implement of the Supplemental Nutrition Assistance Program (SNAP), which many of the study's participants were enrolled in. In addition to nutrition education, SNAP-Ed also teaches food budgeting and meal planning. Participants of other U.S. mainland studies indicated a preference for cost effective shopping techniques and food alternatives. Both outreach programs effectively ease the strain of limited purchasing and preparation options, as well as fulfill the need for Guam's low-resource communities.

The dissemination of the study's findings to other sectors beyond sustainability and nutrition is also recommended. Other sectors, such as healthcare and early intervention, may benefit from the study's findings by possibly applying them in updates to current practices. For example, the Guam Department of Public Health and Social Services Nutrition Health Services/Women Infant Children (WIC) Program provides supplemental nutrition education and support for women, infants, and young children. Such a program may benefit from a recent update of current food habits and obstacles to adequate nutrition reported by a low-resource community.

The final recommendations involve the need for further research on this topic. First, as the USDA 18-Item Household Food Security Survey Module was used solely as a filtering tool for the qualitative phase of this study, no further statistical analyses were conducted. However, preliminary results of the survey not only placed participants in their respective food insecurity categories, but also indicated the collective presence of food insecurity within the study community overall.

A next step would be statistical analyses of the survey results obtained in this study to establish levels of significance and confidence intervals in the formation of preliminary estimates of food insecurity among Guam's Chuukese population. Earlier studies were conducted in Guam by the Children's Healthy Living Program (CHL) for Remote Underserved Minority Populations in the Pacific Region (Acosta et al, 2017) that used a scale of the USDA Household Food Security Survey. Baseline survey results reported by CHL (Acosta et al, 2017) indicates a high prevalence of food insecurity among the study's Guam participants, many of whom were of low income and of multiple ethnicities.

These results could be used as justification for further studies of Guam's population, with appropriate samples, using the USDA 18-Item Household Food Security Survey Module. Moreover, compounded evidence of the actual levels of food insecurity on Guam, even among those receiving government assistance, may justify the need for food cost surveys to be conducted in Guam by the USDA. Such surveys may lead to adjustments in award amounts for island school lunch programs, or even family food stamp benefits. Such adjustments may better reflect the levels of inflation, prices of goods, and the buying power of the food insecure.

Finally, research on the adaptive strategies to food insecurity utilized by other communities in Guam should be conducted. Findings suggested a large influence of traditional culture on adaptive strategies. Perceptions on how traditional practices clashed

with Guam's more western values in terms of food security were also reported. Given the uniqueness of Guam's multiple resident cultures, further research on similar communities may not only support the findings of this study, but may also reveal aspects of the food insecurity experience that were not detected by this study.

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**U.S. HOUSEHOLD FOOD SECURITY SURVEY MODULE:
THREE-STAGE DESIGN, WITH SCREENERS**

Transition into Module (administered to all households):

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

USDA Food Sufficiency Question/Screeners: Question HH1

HH1. Which of these statements best describes the food eaten in your household in the last 12 months: —enough of the kinds of food (I/we) want to eat; —enough, but not always the kinds of food (I/we) want; —sometimes not enough to eat; or, —often not enough to eat?

- ☐ [1] Enough of the kinds of food we want to eat
- ☐ [2] Enough but not always the kinds of food we want
- ☐ [3] Sometimes not enough to eat
- ☐ [4] Often not enough to eat
- ☐ [] DK or Refused

Household Stage 1: Questions HH2-HH4

HH2. 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 July.

The first statement is “(I/We) worried whether (my/our) food would run out before (I/we) got money to buy more.” Was that often true, sometimes true, or never true for (you/your household) in the last 12 months?

- ☐ [] Often true
- ☐ [] Sometimes true
- ☐ [] Never true
- ☐ [] DK or Refused

HH3. “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 true
- ☐ [] Sometimes true
- ☐ [] Never true
- ☐ [] DK or Refused

HH4. “(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

Screeners for Stage 2 Adult-Referenced Questions: If affirmative response (i.e., "often true" or "sometimes true") to one or more of Questions HH2-HH4, OR, response [3] or [4] to question HH1, then continue to ***Adult Stage 2***; otherwise, if children under age 18 are present in the household, skip to ***Child Stage 1***.

Adult Stage 2: Questions AD1-AD4

AD1. In the last 12 months, since last July, 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 AD1a)
- ☐ DK (Skip AD1a)

AD1a. [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

AD2. 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

AD3. In the last 12 months, were you every hungry but didn't eat because there wasn't enough money for food?

- ☐ Yes
- ☐ No
- ☐ DK

AD4. In the last 12 months, did you lose weight because there wasn't enough money for food?

- ☐ Yes
- ☐ No
- ☐ DK

Screeners for Stage 3 Adult-Referenced Questions: If affirmative response to one or more of questions AD1 through AD4, then continue to ***Adult Stage 3***; otherwise, if children under age 18 are present in the household, skip to ***Child Stage 1***.

Adult Stage 3: Questions AD5-AD5a

AD5. In the last 12 months, did (you/you or other adults in your household) ever not eat for a whole day because there wasn't enough money for food?

- ☐ Yes
- ☐ No (Skip AD5a)
- ☐ DK (Skip AD5a)

AD5a. [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

Child Stage 1: Questions CH1-CH3

For households with no child under age 18, this is the end of the survey.

Transition into Child-Referenced Questions:

For these statements, please tell me whether the statement was OFTEN true, SOMETIMES true, or NEVER true in the last 12 months for (your child/children living in the household who are under 18 years old).

CH1. “(I/we) relied on only a few kinds of low-cost food to feed (my/our) child/the children) because (I was/we were) running out of money to buy food.” 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

CH2. “(I/We) couldn’t feed (my/our) child/the children) a balanced meal, because (I/we) couldn’t afford that.” 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

CH3. “(My/Our child was/The children were) not eating enough because (I/we) just couldn't afford enough food.” 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

Screeners for Stage 2 Child Referenced Questions: If affirmative response (i.e., "often true" or "sometimes true") to one or more of questions CH1-CH3, then continue to ***Child Stage 2***; otherwise this is the end of the survey.

Child Stage 2: Questions CH4-CH7

CH4. In the last 12 months, since July of last year, did you ever cut the size of (your child's/any of the children's) meals because there wasn't enough money for food?

- ☐ Yes
- ☐ No
- ☐ DK

CH5. In the last 12 months, did (you child/any of the children) ever skip meals because there wasn't enough money for food?

- ☐ Yes
- ☐ No (Skip CH5a)
- ☐ DK (Skip CH5a)

CH5a. [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

CH6. In the last 12 months, (was your child/were the children) ever hungry but you just couldn't afford more food?

- ☐ Yes
- ☐ No
- ☐ DK

CH7. In the last 12 months, did (your child/any of the children) ever not eat for a whole day because there wasn't enough money for food?

- ☐ Yes
- ☐ No
- ☐ DK

[END OF SURVEY]

Kapas Eis Fan Itan Noninenasini Ese Naaf Meon Mongo Non Eu Me Eu Famini Non Merica:

Unungat Kinikinin Nios Epwe Ngeni Chon Nengeni Fichi Ewe Angangen Kutta Non Pekin Aninisin Moni, USDA

Akkasiwini ngeni eu Sakkun Kinikin (einet ngeni eu me eu famini):

Ekkei kapas eis epwe eis ussun sakkopatin mongo, en me om famini ukan mongo non ekkewe engon me ruu (12) maram, poputa seni ewe maram a no, ika ami mi kan naaf ren kamo mongo.

Kapas Eis Fan Iten Mongo Seni USDA Mi Somwono/ Chon Nengeni Fichi: Kapas Eis HH1

HH1. Menni neiin ekkei wewe a pwarata usun met chon om famini rekan ani non ewe ier are non ekkewe engon me ruu (12) maram a no: ---Mi naaf ekkewe sakkun mongo ikan/am ukan mwon; ---mi naaf, nge napengeni esap ekkewe sakkon mongo ukan mwon; ---fan ekkoch ese naaf mongo; ---napengeni fan chomong ese naaf anem mongo?

- [1] Mi naaf ekkewe sakkun mongo am ukan mwon.
- [2] Mi naaf nge napengeni esap ekkewe sakkun mongo ukan mwon.
- [3] Fan ekkoch ese naaf mongo.
- [4] Napengeni fan chomong ese naaf.enem mongo
- [] Ise sinei ika usap penuwani

Tetenin Famini Nampa 1: Kapas Eis HH2 – HH4 (tingor ngeni eu me eu famini oupwe afinini menni nein ekkei a affata usun en/om famini).

HH2. Ren ekkei kinikin kapas eis, kose mochen kopwe fini menni nein ekkei poroaus a wewen ngeni om we famini non ekkewe engon me ruu (12) maram a no, pop seni ewe maram a keran no, ika fan chomong mi pung, fan ekkoch mi pung, ese pung, are ise sinei ika use mochen penuwani.

Nampa euwin poroaus “Ngang/Am ukan auuresi ika anem/anei mongo epwe iteno me mwan an epwe wor moen mongo. Met finiom nein ekkei: fan chomong mi pung, fan ekkoch mi pung, are ese pung, ise sinei ika usap penuwani, ngeni ai/am famine non ekkewe engon me ruu (12) maran a no?

- [] Fan chomong mi pung
- [] Fan ekkoch mi pung
- [] Ese pung
- [] Ise sinei ika isap penuwani

HH3. “Ekkewe mongo (I/am) am are ukan meoni ese mow pwongi nge a iit, ese wor moni (ai/am) upwe pwan kamo sefan mongo.” Met mefiom, fan chomong mi pugn, fan ekkoch mi pung, ese pung ngeni chon ai/am famine non ekkewe engon me ruu (12) maram a no?

- ☐ Fan chomong mi pung
- ☐ Fan ekkoch mi pung
- ☐ Ese pung
- ☐ Ise sinei ika usap penuweni

HH4. “(I/U) se naf ngeni ai upwe kamo mongo mi aunusa faitamin.” Met mi fan chomong pung, fan ekkoch pung, are ese pung ngeni chon non (om/ami) famine non ekkewe engon me ruu (12) maram a no?

- ☐ Fan chomong mi pung
- ☐ Fan ekkoch mi pung
- ☐ Ese pung
- ☐ Ise sinei ika isap penuweni

Chon Nengeni Fichi Teten Nampa 2 Kapas Eis Fan Itan Menuk: Ika pun penuwan ekkewe kapas ies era (awewe, "Fan chomong mi pung" ika "fan ekkoch mi pung") mi napeseni fan eu me ruu, oh are penuwan ewe kapas eis nampa HH1 era 3 are 4 iwe kopwene nuchang ngeni Tetenin Menuk nampa 2, nge ika pun mi wor semirit non om famini mi ier kukun seni engon me wanu (18) ier, iwe nuchang ngeni Tetenin Semirit nampa 1.

Kapas Eis AD1 – AD4 Fan Iten Tetenin Menuk Nampa 2:

AD1. Mi wor nein ekkewe menuk non om ewe famine mi kan achun, ese mongo fan iten ese naf meon mongo non ekkewe engon me ruu (12) maram a no?

- ☐ Ewer
- ☐ Apw (Nuchang seni AD1a)
- ☐ Ise sinei (Nuchang seni AD1a)

AD1a. [Ika pun penuwan ewe kapas eis asan era ewer, Eis] Fan fite ekan fis? Napengeni iteitan maram, ekkoch chok meram nge esap pwal iteitan meram, ika non eu ika ruu meram?

- ☐ Napengeni iteitan meram
- ☐ Ekkoch chok meram nge esap pwal iteitan meram
- ☐ Non 1 ika 2 meram
- ☐ Ise sinei

AD2. Mei wor fan eu ka ekukunano enom mongo fan iten ese naf meon mongo non ekkewe ukukun engon me ruu (12) meram a no?

- ☐ Ewer
- ☐ Apw
- ☐ Ise sinei

AD3. Mei wor fan eu ka mefi echik nge kose mongo fan iten ese wor meon mongo?

- ☐ Ewer
- ☐ Apw
- ☐ Ise sinei

AD4. Non ekkewe engon me ruu (12) meram a no, en mi mefi pwe kemen chuchuno fan iten ese naf meon mongo?

- ☐ Ewer
- ☐ Apw
- ☐ Ise sinei

Chon Nengeni Fichi Kapas Eis Fan Iten Tetenin Menuk Nampa 3: Ika pun penuwan kapas eis nampa AD1 tori AD4 era ewer, iwe sapweno ekkewe kapas eis non tetelin menuk nampa 3, nampa AD5 tori AD5a, nge ika pun mi wor semirit kukun seni ier engon me wanuu (18) non ei famine, iwe nuchang nengeni Tetenin Semirit Nampa 1.

Kapas Eis Non Tetenin Menuk 3: Nampa AD5 tori AD5a:

AD5. Mei wor neimi menuk non om we famine mi kan achun non eu unusan ran fan iten ese naf meon mongo non ekkewe engon me ruu (12) meram a no?

- ☐ Ewer
- ☐ Apw (nuchang seni AD5a)
- ☐ Ise sinei (nuchang seni AD5a)

AD5a. [Ika Pun Penuwan En Kapas Eis Asan Era, EWER, Kopwe Eis] Fan fite ekan fis en sakkun ukan achuun – napengeni iteiten meram, ekkoch chok meram, nge esap pwan iteiten meram, ika fen non 1 ika 2 meram?

- ☐ Napengeni iteiten meram
- ☐ Ekkoch chok meram nge esap pwan iteiten meran
- ☐ Non 1 ika 2 meram
- ☐ Ise sinei

Kapas Eis Nampa CH1 – CH3 Fan Iten Tetenin Semirit: Eu me eu famine e ese wor semirit e ier kukun seni ier engon me wanuu (18), a iei nesopwonon ach kapas eis.

Fini menni e pungengeni iteiten chochon menuk me semirit non om famine.

Ekke Siwini Nengeni Kapas Eis Fan Iten Semirit:

Ren ekkei kapas eis fan iten ussun ekewe engon me ruu (12) meram a no, kose mochen kopwe penuweni ekkei kapas eis ika pun fan chamong mi pung, fan ekkoch mi pung, are ese pung, fan iten ekkewe (semirit mi kukun seni ier engon me wanuu (18) mi nom non ei famini).

CH1. “(Ngang/Ukan) chok kamo mongo mi kotur are mo kukun pwe anan nei (we/kewe) semirit fan iten a iit noum monin kamo mongo.” Non ekkewe engon me ruu (12) meram a no, met mefiom ren non om famine, napengeni fan chomong mi pung, fan ekkoch mi pung, ese pung?

- ☐ Napengeni fan chomong mi pung
- ☐ Fan ekkoch mi pung
- ☐ Ese pung
- ☐ Ise sinei ika usap penuweni

CH2. “(Ngang/U) ise kan amwongeoni (nei/neum) kewe semirit mongo mi unusoach non faitamin, fan iten mi kan mo mong, am use naf ngeni ukukun meon.” Non ekkewe engon me ruu (12) meram a no, mi kan napengeni fan chomong mi pung, fan ekkoch mi pung are, ese pung?

- ☐ Napengeni fan chomong mi pung
- ☐ Fan ekkoch mi pung
- ☐ Ese pung
- ☐ Ise sinei ika isap penuweni

CH3. "(Nei/Neum we/kewe semirit non am ei famini ese kan naaf met upwe amwengoni ngenir pun ese naaf meon mongo." Non ekkewe engon me ruu (12) meram a no, kan napengeni fan chomong mi pung, fan ekkoch mi pung, ese pung ngeni non om famine

- ☐ Napengeni fan chomong mi pung
- ☐ Fan ekkoch mi pung
- ☐ Ese pung
- ☐ Ise sinei ika isap penuweni

Chon Nengeni Fichi Kapas Eis Fan Iten Tetenin Semirit 2: Ika pun penuwen kapas eis nampa CH1 tori CH3 (era, napengeni fan chomong mi pung,” are “pwan fan ekkoch mi pung) iwe sapweno Tetenin Semirit 2, nge ika pwe apw, iwe a iei nesoponon are muchun ach kapas eis.

Tetenin Kapas Eis nampa CH4 fori CH7: Fan Iten Semirit 2:

CH4. Mi wor fan eu non ewe ier a no,(poputa seni ewe maram a no) kemen kan ekisano ukukun enen (noum we/noum kewe) semirit fan iten ese naaf meon mongo?

- ☐ Ewer
- ☐ Apw
- ☐ Ise sinei

CH5. Mi wor fan eu non ewe ier a no(Itan Noum we/ese nifinifin semirit) ese mongo fan eu fan iten ese naaf meon mongo?

- ☐ Ewer
- ☐ Apw (Nuchang Seni CH5a)
- ☐ Ise Sinei (Nuchang seni CH5a)

CH5a. [Ika pun ke penuweni en kapas eis asan pun EWER, kopwe eis] Fan fite ekan fis non ewe ier a no – Napengeni iteitan meran, ekkoch chok meram nge esap pwan iteitan meran, ika fan 1 ika 2 meram?

- ☐ Napengeni iteitan meram
- ☐ Fan ekkoch nge esap pwan iteitan meram
- ☐ Fan 1 ika 2 meran
- ☐ Ise sinei

CH6. Non ekkewe engon me ruu (12) a no (noum we semirit/noumi kewe semirit) mi kan echik nge ese kan mongo fan iten ese wor meon mongo?

☐ Ewer

☐ Apw

☐ Ise sinei

CH7. Non ekkewe engon me ruu (12) meram a no (noum we semirit/ekewe semirit) mi kan achuun ususen ran fan iten ese naaf meon mongo?

☐ Ewer

☐ Apw

☐ Ise sinei

[SAPWONON KAPAS EIS]

Appendix III. Interview Guide

- [Demographics] Can you tell me about yourself and your household?
 - Probe: Any kids?
 - Probe: Do the people staying here change? (visitors, relatives, etc.)
 - Probe: How do meals go? Does everyone eat together? Who prepares and serves the meals?
 - Can you tell me about your favorite things to eat?
- Can you tell me about a period in time (or period in your life) when you felt like you had enough food to eat/times of plenty?
 - Probe: What was going on in your life that made the food plenty?
 - Probe: What kind of foods? Where did they come from?
 - They might identify a location qualifier here → if story is on Guam, ask about Chuuk or reverse
- Can you tell me about period in time (or period in your life) that you felt like you didn't have enough to eat?
 - Probe: Tell me more about this time. How long did this last?
 - Probe: What causes this? Why?
 - Probe: How did it change? What did you do to find food or make the food you had last longer?
 - Probe: How does it feel when this happens?
 - They might identify a location qualifier here → if story is on Guam, ask about Chuuk or reverse
- In your opinion, what do other Chuukese do in these situation?
 - Probe experiences, knowledge of aid/programs
 - Might identify location qualifiers → if story is on Guam, ask about Chuuk or reverse
- Are there any traditional ways of acquiring food in your culture that you know of/are familiar with/regularly practice/wish you could practice if you could?
- Are there any other questions you think I should've asked? // Anything I missed?

Appendix IV. Code Tables

A. Codes Under Category: Optimizing Resources Outside the Household Theme

- Strategies that optimize resources outside the household make use of available resource pools and entail the active pursuit of food or resources.

A1. Codes Under Subcategory: “Local Food” Abundant in Chuuk

- Strategies that are directly adopted from traditional Chuukese subsistence culture. Due to the participants’ use of subsistence practices in Chuuk, the sentiment of local Chuukese food being abundant, or “free”, in Chuuk is common.

Subsistence Farming – Crop cultivation for household needs	
Document	Quotation Content
Mary Ann Interview 3.11	<p>M: Yeah! On my island, I will make food. Taro. Breadfruit.</p> <p>H: So, tell me more. Like, in- in Chuuk, right, when- tell me more about a time when you had enough to eat. You didn’t have to worry.</p> <p>M: Yeah, I didn’t have to worry when when I have food. Mm. I just happy in my life. Mm... Happy.</p> <p>H: Was it all the time that you had food?</p> <p>M: On my home island? Yeah. All the time. It’s depend on me. If I want all the time? I will cook, prepare everything I have on my home island. Taro. Breadfruit. Mm. Pumpkin. Any kind of food, I have on my home island. I will go and get some and cook for me. Mm. It’s not cost money. On my home island. So, everyday I’m very glad. Happy. On my home island.</p>
Mary Ann Interview 3.11	<p>M: Yeah. When I’m getting the food? Not easy. It’s too hard. Mm. Because, mm... I didn’t use car. Just use my own leg, go far away, and get some taro in the taro patch? It’s too, danger? And difficult to get the taro. It’s depend on my body. If I strong? I have plenty to get. Mm. I get some fish, and the sun is very hot? It’s my body. So, on my home island, I feel strong. Because I do everything. Mm. I cook rice, I didn’t use stove. Just make fire and wood. Mm... Uh, breadfruit? I will call my son to climb on the breadfruit? I will collect them and cook on fire. Fish, on fire. Taro, on fire. Not on stove. On my home island? We use fire to cook. So, I will go and gather some sticks to put under my pot and cook. So, I’m happy.</p>
Laila Interview 1.29	<p>L: I would say um... Like, plant- I don’t know. Um, ‘cuz back home we, like we plant our own food. And we cut the, the taro, the breadfruit, and then we fix it. And here... they have to pay for it. Because um, you don’t have land. And it’s really hard to get land here. Most Chuukese are just staying in the apartments, you know, and, yeah. I feel like it would be easier if, you know, we have our land here. Which I don’t think that even makes sense ‘cuz this is not our place</p>
Laila Interview 1.29	<p>L: So they prefer like, local food. And- but back home? I mean not, back home, but um, on the main island? We have to... purchase. Like, the local food.</p> <p>H: Okay.</p> <p>L: Yeah. Because, um, that’s before- now, we have like a land. But that’s before we have the land so we cannot grow our own crops. So, that to</p>

	purchase the food- um the local food and back home sometimes like the local food it's like it's crazy how they (laughs) yeah.
Amelia Interview 12.20	L: Um, no. H: No? L: Yeah. Because if we did, it's either we resort to what we planted or we tell our cousins to get fish
Laila Interview 1.29	L: But, I think most especially, like the most important thing is to have a land? That you can be able to grow your own food. Yeah.
Sally Interview 12.17	H: Do you just know where to look or you have someone that grows it? S: Like, I went the, like, they went- if they have their own plant? They eat from the- their plant. But if they don't have their plant? They go ask. H: They ask. S: Ask the neighbor if they can pick two or three- they have enough for that. They cook, they slice it down, they...
Sally Interview 12.17	S: No. If me- just like... me, right? My property, I have plant, different plant. So I don't need to go there, "Can I buy this? I need to eat." No. I just go pick and bring it to my family.
Mary Ann Interview 3.11	M: Uh... if I have ranch, wow. More, more, work! I will do plant some banana, some taro, some pumpkin, any kind. Even though um, head cabbage. That I will started to plant on my ranch. Mm. Coconut tree. Plenty. Um. Tapioca. Potato. I will. So, I don't have ranch...
Sally Interview 12.17	H: Yeah, so how- how is it different? Or, are there any ways to get food on Chuuk that you either- S: Over here? H: Uh huh. S: Hard. H: Hard to get food here? S: Yeah, 'cause if we- if I work, I have food. H: Okay. S: 'Cause I go buy. H: Uh huh. S: But in Chuuk, free. I just stay home and like, think, "Oh, tomorrow, what I'm gonna eat? What I'm gonna give my family?" So I went to the jungle, I pick the stalk. I- like, I- my bro- if I have brother, "Oh, tomorrow I go get the... breadfruit, and you, you go to the water, go catch fish. So tomorrow, we'll barb- barbeque." H: Interesting. S: Yeah. But over here, hard, because we- we eat with money. We stay with money. We... we go- we go on the road with money. H: So everything's money. S: Everything money. But in Chuuk, free.
Laila Interview 1.29	But now you guys have land? L: Mhm. And there's um, breadfruit, taro, banana, coconut, yeah

Robert Interview 2.15	<p>H: who- do you make the local food or?</p> <p>R: Uh.. s- not all the time? But like, bananas? Just buy the whole and then I cook it myself or my wife cook it... Breadfruit, usually, we buy. 'Cuz, in Chuuk, we make (laughs) our own. 'Cuz we have b- banana tree in our own. But here, we have to buy</p>
Robert Interview 2.15	<p>H: And it's, here? The breadfruit is more expensive than the rice.</p> <p>H: Is it?</p> <p>R: Yeah.</p> <p>H: Compared to-</p> <p>R: Because you get- yeah, if you live in the- on the main island? You have to buy. But if you're on your own island? You have tree. You can pick (laughs)</p> <p>H: You don't need money.</p> <p>R: Yeah. Don't need money to get it. (laughs)</p>
Robert Interview 2.15	<p>R: Sometimes the potato?</p> <p>H: Uh huh.</p> <p>R: Chop it down and throw it in.</p> <p>H: Were these things that she found? Or she had to buy this, too.</p> <p>R: Little, yes. Sometimes she buy. But sometimes she- she- we kind of grow what's at the house. But not big. But v- no, just (clears throat) but like, she, she has her own tapioca.</p>
Robert Interview 2.15	<p>R: But... growing up was ca- getting better. Getting okay. But back then, it's very hard... Nowadays, is not as hard as before. 'Cuz before, very few people have boats? And uh... those are the only people that they can go out and fish. They catch plenty... And then they sell. But if you don't have money, cannot have (laughs)</p>
Tritee Interview 3.4	<p>H: Can you tell me more about that? Why don't you have to worry about getting the local food?</p> <p>T: Where?</p> <p>H: In Chuuk. Like..</p> <p>T: No I don't, I don't, I'm not worried. 'Cuz there is a lot of planting...</p>
Tritee Interview 3.4	<p>H: Do you, do you go out and... what's the process of that? Do you go out and find them or...</p> <p>T: Yes, I go out and pick them like, the breadfruit, banana, like, the taro-harvest. That's the, harvest. The banana? I mean, the taro and the...</p> <p>H: Okay. So you harvest them, okay. Are these your own plants? Your own land?</p> <p>T: Yes.</p>

Tritee Interview 3.4	H: What about in Chuuk? Do you know what they might do in Chuuk? T: I think they just gonna do the same thing I'm doing. 'Cuz back there it's, its, easy. We don't have to worry about our food 'cuz we are... each family, they have their own land. So... it's that the... income? The one who were... were kind of uh, it's hard for us 'cuz the minimum wage there is so low. I think some, like if they're get their only like, rice? They're not have enough with the minimum wage if they gonna buy rice? And whatever.
Tritee Interview 3.4	H: Any traditional ways of getting food um, that you wish you could do here on Guam that you can't? T: Yeah.. the, it's, the plant it's, too hard.
Tritee Interview 3.4	T: I wish I can... uh... planting... banana, tapioca, taro. Those thing, it's easy for me to get it to eat. H: So you wish you could plant here. T: Mm. H: Why, why can't you? T: Because where I live now, it's under GHURA. And they're strict.
Tritee Interview 3.4	And remind me, what would you want to plant, again? T: Banana, taro, tapioca, breadfruit. H: Okay. T: Yam. H: Are those your favorite? T: Mm.
Epot Interveiw 3.9	E: And if, sometimes if they don't, we don't have the food? For like, for the far- farm? If they don't have something ready to get to eat... If we cannot catch the fish, if the... the weather is bad... Like, the (indiscernible) if there is a bad weather, we cannot go out to fish, we cannot catch the fish... And, we're like... the local food? If they're not ready yet to eat? It be the time we don't have enough food. Don't have food (laughs)
Epot Interveiw 3.9	H: Do you, back then in Chuuk, you guys, um, had your own plantings? E: Yeah, like, tapioca, banana, poletto (?),
Mary Ann Interview 3.11	M: Oh, yeah, I have. On my home island? I have. Even only uh, coconut tree? Uh, taro patch? Breadfruit? Not mix. H: And that's what you can't do on Guam. M: No. Cannot. I can't... we don't have money to buy one ranch (laughs) H: And GHURA, you can't plant, right? M: No! By the law, no more. No more. GHURA, they don't want.
Mary Ann Interview 3.11	M: Uh, we cannot go anywhere and plant some. No. Because that, we don't have ranch, we don't have uh, land to grow some. No more.

Mary Ann Interview 3.11	<p>M: Only money. I have money, I will go and buy food. That's it. Oh, even uh, you know the tree? Mangos tree? Oh, if I see my friends, my relative, they have mango beside their house? I will go and ask, can I have some?</p> <p>H: So it's when you see that your friends or your neighbors have um, their own fruit trees.</p> <p>M: Um, when I go there. When I uh, I want to go to my friend. So when I go there wi- uh, in their home? I'm looking. Oh, no more. So if I go there, I see mango tree, apple tree, can I have some. Yes.</p>
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Gathering/Foraging – Obtaining food grown in nature	
Document	Quotation Content
Robert Interview 2.15	<p>H: Where- where did you get the breadfruit back then?</p> <p>R: Oh- uh- Sometimes the- (coughs) in Piti? Those like, big- you see the big bomb? Is that a bomb or like, the one in- the one where they go jogging?</p> <p>H: Yes, the- yes! I know what you're talking about.</p> <p>R: You see the- and then there's a lot of breadfruit trees? Some-</p> <p>H: Oh, I didn't know- yes!</p> <p>R: Sometimes- sometimes we go there and we're just pretending that nobody is (laughs) back there. We're kind of stealing (laughs). Right?</p>
Mary Ann Interview 3.11	<p>M: Look around. They will go and get fish? Uh, they will go and looking around. Uh, breadfruit, they will get from higher. They will get down. They will get some banana everywhere. To have banana, they grow up. And papaya. Any kind of food. They will go and get. Looking around and get.</p>
Sally Interview R2 2.14	<p>S: Sometimes they don't have food... They... hard. Very hard. But, very hard if they like, lazy to go look for food. But, easy. Uh, in Chuuk, hard. Hard for them. Rice, chicken, the one for the grocer, the store. But easy food in Chuuk because they're free. They eat free. Lemmai, uh, taro, fish, they don't need to buy that, those. They just went out and get it. So, the one they, they really like... stay long here? They go to Chuuk, they say oh, very hard in Chuuk, 'cuz if we don't have money, we don't have food. Uh, if we don't work, we don't have food. So means they don't like our... food in Chuuk. They just uh, fond of the American food,</p>
Sally Interview 12.17	<p>H: So where do you- where do you look for the lemmal and the tapioca?</p> <p>S: The jungle (laughs)</p> <p>H: Oh (laughs) Do you just know where to look or you have someone that grows it?</p> <p>S: Like, I went the, like, they went- if they have their own plant? They eat from the- their plant. But if they don't have their plant? They go ask.</p> <p>H: They ask.</p> <p>S: Ask the neighbor if they can pick two or three- they have enough for that. They cook, they slice it down, they...</p>

Sally Interview 12.17	<p>H: Yeah, so how- how is it different? Or, are there any ways to get food on Chuuk that you either-</p> <p>S: Over here?</p> <p>H: Uh huh.</p> <p>S: Hard.</p> <p>H: Hard to get food here?</p> <p>S: Yeah, 'cause if we- if I work, I have food.</p> <p>H: Okay.</p> <p>S: 'Cause I go buy.</p> <p>H: Uh huh.</p> <p>S: But in Chuuk, free. I just stay home and like, think, "Oh, tomorrow, what I'm gonna eat? What I'm gonna give my family?" So I went to the jungle, I pick the stalk. I- like, I- my bro- if I have brother, "Oh, tomorrow I go get the... breadfruit, and you, you go to the water, go catch fish. So tomorrow, we'll barb- barbeque."</p> <p>H: Interesting.</p> <p>S: Yeah. But over here, hard, because we- we eat with money. We stay with money. We... we go- we go on the road with money.</p> <p>H: So everything's money.</p> <p>S: Everything money. But in Chuuk, free.</p>
Tritee Interview 3.4	<p>H: So, if you can't plant those on Guam, where do you get them?</p> <p>T: I go ask people where I see where they plant. I can go and ask them if I can get some to plant.</p>
Tritee Interview 3.4	<p>H: Do you do that often? Like, ask someone to pick their breadfruit or, anything like that and then cook your, cook your food?</p> <p>T: For breadfruit, yeah. I ask my neighbor if I can pick some.</p> <p>H: Okay... So your neighbor kind of... helps, too.</p> <p>T: Mm.</p> <p>H: Okay...</p> <p>T: Even let me.. I don't need to ask him, I have- if I see it's ready, I'm just gonna pick.</p>
Epot Interview 3.9	<p>H: so my next question, is um, can you think about a time when you felt like you didn't have enough to eat? So not enough to eat.</p> <p>E: Like... don't feel comfortable, we try to look somewhere to get something to eat. Like, in Chuuk? We go fishing... we go catch the crab... We go picking the breadfruit, the banana, or sometimes we ask our friends? Brothers and sister if they have enough so we can have some (laughs)</p> <p>H: So in Chuuk</p> <p>E: Mm</p> <p>H: When you don't have enough, you fish, you look for crabs</p> <p>E: Mm</p> <p>H: And you ask... Can I... what kind of food do you ask from your brothers and sisters?</p> <p>E: Just, whatever they have. If they have, rice, or local food? Fish...</p>

Epot Interview 3.9	A: What happens that makes you guys feel like you don't have enough? E: Mm... If, in Chuuk? If we don't go to get the food, or... if we don't have money to buy, cash to go fishing, or sometime to catch the fish... uh... if we c- if we don't like, want to go... get something to eat or if we just want to stay home or (indiscernible), we don't go to look for food? I think that's (laughs)
Epot Interview 3.9	E: And if, sometimes if they don't, we don't have the food? For like, for the far- farm? If they don't have something ready to get to eat... If we cannot catch the fish, if the... the weather is bad... Like, the (indiscernible) if there is a bad weather, we cannot go out to fish, we cannot catch the fish... And, we're like... the local food? If they're not ready yet to eat? It be the time we don't have enough food. Don't have food (laughs)
Epot Interview 3.9	E: Same. They ask food or money? To buy their food? H: Same in Chuuk and in Guam? E: Yeah. H: Yeah. Okay. What else? E: I think they gonna look around (laughs)
Mary Ann Interview 3.11	M: There, they will go to see their relative? And they will ask if they have much food? Mm. They will go and bring their own food they have on their island. They will get some food from breadfruit. They will go and gather all the food and they have food. They will cook them... Some, they don't have because they, they don't want to go. They have lazy. That's why they don't have. So on my home island? Always we have food. So if we have lazy, that's the day we don't have food...

Fishing – Catching fish and other seafood from nature	
Document	Quotation Content
Laila Interview 1.29	L: Only if you can just go out wherever? Here? And get fish? That would be good. But um, those are, like, um, my brother used to do that another man? And they said like, they have to like, ride on the car to go to a place. Because there are certain parts that are restricted? From fishing? Here. That's I think- that's sad.
Amelia Interview 12.20	L: Just in my area. We have our own banana, we have our own breadfruit. My... my little cousins go fishing. Or- just 'cuz we live right next to the sea. So they... they go out- H: That's nice. L: And just like, get fish and um, so I've- that's a good question
Amelia Interview 12.20	H: so when you were in Chuuk, like what were- did you have times of, where you felt like you didn't have that much to eat? L: Um, no. H: No? L: Yeah. Because if we did, it's either we resort to what we planted or we tell our cousins to get fish

Robert Interview 2.15	<p>H: -you just, ate what you had.</p> <p>R: Yeah. Whatever we have. We have no choice. (laughs) But back home, in Chuuk? Even if you don't work, you still can... go get your own fish, get, you know, make coconut. I mean the, breadfruit.</p>
Epot Interview 3.9	<p>H: so my next question, is um, can you think about a time when you felt like you didn't have enough to eat? So not enough to eat.</p> <p>E: Like... don't feel comfortable, we try to look somewhere to get something to eat. Like, in Chuuk? We go fishing... we go catch the crab... We go picking the breadfruit, the banana, or sometimes we ask our friends? Brothers and sister if they have enough so we can have some (laughs)</p> <p>H: So in Chuuk</p> <p>E: Mm</p> <p>H: When you don't have enough, you fish, you look for crabs</p> <p>E: Mm</p> <p>H: And you ask... Can I... what kind of food do you ask from your brothers and sisters?</p> <p>E: Just, whatever they have. If they have, rice, or local food? Fish...</p>
Robert Interview 2.15	<p>R: And before? The... it's very... very- no, it's, it's kind of not really good ripe, or good, I mean, if you have stuff. You know, we're neighbors, right, because usually, all family, right? And-</p> <p>H: All family surrounded?</p> <p>R: Yeah, yeah. So if you come from the main island and you have something that... then you don't share? And they know, people will oh, how come she, he's... but usually they come and oh, call, come! Take one bag of bread. Everyone take few. They open the bag and give. Back then they... most people they do that. But nowadays? It's changing.</p> <p>H: Okay. How so?</p> <p>R: They don't- they don't really give no more.</p> <p>H: Share-</p> <p>R: They don't share. Not like before. Especially when you go fishing, come home, you catch plenty, oh, everybody, every house. They give. They don't have to buy. But if- but now? (laughs)</p> <p>H: Money?</p> <p>R: You pay- you pay, you, you get. (laughs)</p>
Epot Interview 3.9	<p>E: And if, sometimes if they don't, we don't have the food? For like, for the far- farm? If they don't have something ready to get to eat... If we cannot catch the fish, if the... the weather is bad... Like, the (indiscernible), if there is a bad weather, we cannot go out to fish, we cannot catch the fish... And, we're like... the local food? If they're not ready yet to eat? It be the time we don't have enough food. Don't have food (laughs)</p>

Epote Interview 3.9	E: Yeah but, back in Chuuk when they make the kon? The breadfruit? They cook and they share, too. The family. Even the fish, when they come back from catching fish? They like, share. That's why in Chuuk, they still, but here? I think we don't have enough to share (laughs)
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A2. Categories Under Subcategory: External Aid

- Strategies that make use of familial and communal resource pools

Asking Others – Asking family members and friends for food and/or money	
Document	Quotation Content
Robert Interview 2.15	<p>R: When I don't have enough money. (laughs)</p> <p>H: Okay. Um-</p> <p>R: For payday, or...</p> <p>H: Could you-</p> <p>R: After you pay your rent and (laughs)</p> <p>H: So does this happen regularly?</p> <p>R: Not really. Because sometimes when we're- we're in that kind of situation, we have families here. So we can call and ask, can I- can I have money for this? And they- they just c- give you. What you need. So it's not really... that hungry hungry (laughs) Or...</p> <p>H: Okay. So can you just tell me about this time where you said it was p- before or after payday or before payday or-</p> <p>R: Yeah. Yeah. So you have billings to pay and you don't have enough, so you just buy a little bit to, just to survive, you know.</p>
Laila Interview 1.29	<p>L: Oh okay. Um... in Chuuk? In Chuuk, um, well they-</p> <p>H: Wherever</p> <p>L: They ask. Ask um, um, the people- Like, for our family? Um... we don't have a lot of people to ask because, um, most of my aun- aunts and uncles they're off island? So, for the... for that time, we usually just... try to get as (laughs) you know, just even if it's little, we try to, you know, be content with it. And for- but there's lot of people that usually um, you know, ask? Um, like our other relatives, they would ask, you know, their relative for food. And then, yeah. That usually happen back home.</p>
Sally Interview R2 2.14	<p>S: I, 'cuz... before, long time? Not. But now? When I work? So I have enough 'cuz if I ran out from my house? I bring my food from my boss.</p> <p>H: Mhm.</p> <p>S: So, if I uh, if I don't bring food from my boss, I ask my boss to help me to like, give me money for my food to go buy. So, she helped me to give me money and I go buy food for my house.</p>
Kisha Interview 2.26	<p>K: When they don't have enough food? (clears throat) Um, sometimes calling relatives? And ask for help or, oh no, um... like do you have um, extra rice, I can just get few cups? Or, a pack of chicken... Yeah.</p> <p>H: Okay, so it's-</p> <p>K: 'Cuz even salt, you know? Hey, do you have uh, extra salt? (laughs)</p>
Epote Interview 3.9	<p>H: Can you tell me more about asking others? Like who, who do you ask and, what, what kind of food do you ask for?</p> <p>E: Rice, chicken... that's it. Not plenty, only just for us to like, survive</p>

	<p>to the time we're gonna get money for food. Just enough to that time.</p> <p>H: And who do you, who do you ask?</p> <p>E: 'Scuse me?</p> <p>H: Who do you ask? For the food..</p> <p>E: Uh, my parents? My brothers and sisters? And, sometimes if we're out of food but if there's something like flour, small rice? I like, I make it... like, soup? The rice, make it soup. So it's gonna be more to enough for my family. And the flour I make pancake? Make soup?</p>
Laila Interview 1.29	<p>L: Cuz you don't have- well sometimes we just, you know... we just ask. Ask around. Who has some... who has like um, those coffee pot? That you can, you know (laughs), heat water and cook your ramen. Sometimes you go out and just get food from your...</p> <p>H: From?</p> <p>L: From campus.</p> <p>H: Oh. The cafeteria?</p> <p>L: Yeah. Cafeteria.</p> <p>H: And the food-</p> <p>L: Or the food court. Food trucks.</p>
Tritee Interview 3.4	<p>H: how- how were you able to get enough from like, your daughter helping you or people giving you enough for food? Like, what was it about that time?</p> <p>T: Hmm.. I don't, I don't how to say for that, the beginning of the month?</p> <p>H: Okay. Why is it the beginning of the month?</p> <p>T: Because like I said, I make sure I have enough food to, uh, for the whole month? Because I... in the, like, first week in the month? I'm asking my daughter to, if she can spare me some food.</p>
Tritee Interview 3.4	<p>H: Okay um... so you ask your daughter to, for food. Hm... let's see like... you mention that you do ask her for rice.</p> <p>T: Mm.</p> <p>H: Are there any other foods that you ask from her? Or ask her to help with?</p> <p>T: Yeah. If I'm tired of uh, rice? I ask her to buy me fish and pounding breadfruit in the market.</p>
Epot Interview 3.9	<p>H: So my next question, is um, can you think about a time when you felt like you didn't have enough to eat? So not enough to eat.</p> <p>E: Like... don't feel comfortable, we try to look somewhere to get something to eat. Like, in Chuuk? We go fishing... we go catch the crab... We go picking the breadfruit, the banana, or sometimes we ask our friends? Brothers and sister if they have enough so we can have some (laughs)</p> <p>H: So in Chuuk</p> <p>E: Mm</p> <p>H: When you don't have enough, you fish, you look for crabs</p> <p>E: Mm</p> <p>H: And you ask... Can I... what kind of food do you ask from your brothers and sisters?</p> <p>E: Just, whatever they have. If they have, rice, or local food? Fish...</p>

Laila Interview 1.29	L: Um, our friends, they- you know like, in the beginning I said they ask, like, do you guys need something or um... they would just come and pick us up to go somewhere? And then we'll just ask them to stop by stores and we can get food.
Robert Interview 2.15	R: But, in- in my... my, situation, right. But there's... I know some, some friends and even my relatives, some... they're, when they're don't have anything? And they're ashamed to ask. And those are... they can go hungry for... they don't. 'Cuz they- they're ashamed to ask. H: Why? R: I don't know. There are just some people like that. H: Okay. R: That's why sometimes, when we see somebody that- that, I know situation, we don't, just give. Don't, we don't talk too much. We just give. 'Cuz we know they cannot ask. (laughs)
Robert Interview 2.15	R: Yeah. But, some they- they're even... you're my sister? Still I cannot ask you (laughs) H: Why? R: I don't know. They're... I don't- I don't really understand why they're so- they just, don't have, uh... what do you- what- they- they cannot ask. But when, you know, we visit? And we see- we see- we see what's going on? Sometimes you open the fridge and nothing? And the kids are crying, you know. We just go and b- if we have money? Just go buy something to eat and give them. That happens to some families.
Robert Interview 2.15	R: They repossess their car. I have cous- my wife's cousin, happened to her- him. H: Uh oh. R: Last year. H: That must have been hard. R: Yeah. H: Yeah. R: I told my wife, if he comes and asks for money? Say no. I don't want my- I work hard for my money? And I don't want my money to go into the machine. (laughs)
Epot Interview 3.9	H: So, can you tell me more about the time on Guam when you felt like you didn't have enough to eat? E: Same. I'm, I'm trying to look. Sometimes when my, my experience? When uh, we gonna find the food? I usually go to the store in the Piti? The one they give out food for free? In Piti? And also in uh... Social Catholic? That's what I usually do when we kind of out of food? And then I ask my mom and dad if they have food.
Epot Interview 3.9	H: Okay. So, next question is, um, what do other Chuukese families do when they don't have enough food? In your opinion, or in your experience. E: Same. They ask food or money? To buy their food? H: Same in Chuuk and in Guam? E: Yeah.

Mary Ann Interview 3.11	<p>M: Yeah. I didn't happy. Um, my face, it show that I'm not happy. Sad face. Fear. Mm. Sometimes I will get mad... I will try my best...</p> <p>H: You said fear</p> <p>M: Yeah. Fear. I'm fear when I don't have food. I'm fear. Because I know that I don't have food, I will hungry... Mm... On my home island, if I don't have enough food? I will go to my sister and my brother, do you have food? Can I have some? On my home...</p> <p>H: But on Guam...</p> <p>M: Oh, on Guam, sometimes.</p> <p>H: Why only sometimes?</p> <p>M: Because if I have money? Not...</p>
Mary Ann Interview 3.11	<p>M: Uh, sometimes when I don't want to go get food? I will go to my sister. You have food? Okay, can you give me some? And my brother, I will go and ask them, do you have food? Do you have taro? Do you have breadfruit? Do you have fish? Okay, can you give me some?</p>
Mary Ann Interview 3.11	<p>M: Oh, yeah. They don't have enough food? They, they ask their relative. To share. So, some of the relatives? They have love? Okay, they will give them. Some? It's depend on the money. I don't have much money? No more food.</p>
Mary Ann Interview 3.11	<p>M: Yeah. On Guam, they ask relative. They borrow some money and go and buy food? That means they looking around. They, uh, ask their friend, can I borrow twenty dollar? And they buy food. When they got their paycheck? They will pay back...</p>
Lorna Interview 3.10	<p>H: (laughs) So you're saying people come and ask and then, they pay later?</p> <p>L: Yes</p> <p>H: Okay</p> <p>L: Like their credit. The credit. 'Cuz- but we usually don't do that 'cuz some, some they do pay but some, some run away. Oh my gosh. But if we have um, we have uh, food? We have a lot of food like uh, taro? Breadfruit, banana, tapioca. If we have those, we share. Yeah. We give them some. Even though they credit? We just give them some. 'Cuz we know that they, they need food. Yeah.</p>

Mary Ann Interview 3.11	<p>M: First when I see my cupboard and my, my refrigerator, no more? Almost empty? So, I pray first to God.</p> <p>H: And then, what do you do after that?</p> <p>M: After that? I stay in my house? I just waiting, waiting for somebody to come and give me food.</p> <p>H: Tell me more about that. You- you're- first you pray? And then you-</p> <p>M: Pray. Sometimes when I finish pray, sometimes, I have food.</p> <p>H: Where- where does the food come from?</p> <p>M: Uh, the food come from- from my family? My husband family. They bring food... Even my friends? They know that I, I don't have food? They give me food.</p> <p>H: How do they know you don't have food?</p> <p>M: My friends, they call me on phone.</p>
Mary Ann Interview 3.11	<p>H: You said sometimes you, you sit in your house and you wait for the food and then it comes. What did you mean by that?</p> <p>M: Oh, when my friends call me I said, oh, I don't have food. So they come. They bring food to me.</p> <p>H: Wow.</p> <p>M: I'm very happy 'cuz I have food.</p>
Mary Ann Interview 3.11	<p>M: Only money. I have money, I will go and buy food. That's it. Oh, even uh, you know the tree? Mangos tree? Oh, if I see my friends, my relative, they have mango beside their house? I will go and ask, can I have some?</p> <p>H: So it's when you see that your friends or your neighbors have um, their own fruit trees.</p> <p>M: Um, when I go there. When I uh, I want to go to my friend. So when I go there wi- uh, in their home? I'm looking. Oh, no more. So if I go there, I see mango tree, apple tree, can I have some. Yes.</p>

Gifting and Sharing – Utilizes communal networks and directly correlates with traditional Chuukese subsistence culture

Document	Quotation Content
Laila Interview 1.29	<p>L: oh, I don't remember after what, but um, we have like, food already, um, in the fridge, like frozen meat and even we prepare food and then um... what's that, we have like this other family that came to our, um, just drove up to our place and give us like uh, an ice chest full of fish and then uh.. What's that, like a big... basin you would call that? (laughs) Like uh... with taro, they have- they brought taro, breadfruit-like just, out of nowhere. They just brought those so I felt... blessed</p>

Laila Interview 1.29	<p>L: They just said for, um, their... their gratitude? Like just thanking our um, especially our, uh, dad? For helping them? I don't know. (laughs) So it's... like, wow. (laughs) You know, you never know what you will get for helping other people you know. Especially when you don't expect things in return, it's just like, wow.</p> <p>H: So your dad helped them.</p> <p>L: Yeah.</p> <p>H: Like regularly or just- was there something that...</p> <p>L: I wasn't really sure what he helped them with, yeah.</p>
Kisha Interview 2.26	<p>K: There was one time, I think in.. uh... I need to remember the year... I think it was 2005. Um, someone just call us and... um, tell us to meet her at the store, and she load our cart with food. And I feel like it's a- you know, it's a blessing because we're not expecting... and so that time, I feel like there is enough because it feels up the freezer, the cabinets, you know. Uh, from frozen to dry food, it was filled up and... I feel like, I mean that's the time that I would always recall. That's the time we had enough- we would have- we have enough, uh, food in the house. Yeah. So it was a great blessing for us.</p> <p>H: So can I ask a little bit more about that time? Like who, who was this person? And why?</p> <p>K: Um, she is, so my mom used to work at, there was this school that called Southern Christian Academy? And so it's the principal's daughter. She just... she says she feel like she had a lot, and she just want to bless. So she called three different people to meet her at the store. And that's what she just did. Fill up the c- our carts with food and... so I was... I mean, my mom told me about it, we just cried (laughs) Yeah.</p> <p>H: Wow. So... it was your mom's employer. Daughter.</p> <p>K: Yeah.</p> <p>H: Mom's boss's daughter. And she called three specific people. Do you know why she chose to call your mom?</p> <p>K: Um.. the people that she call are the single mothers. Yeah. So she was- she was- she wanted to help, help the single mothers.</p>
Lorna Interview 3.10	<p>H: Um, what else did you have to do during that time? 'Cuz it sounds like a very hard time.</p> <p>L: Ye- yes. That's right (laughs) That's right. I was- it's, it's hard. 'Cuz uh, my, when my husband asks me like, why I didn't ask my sister to get, even though it's only the five pound rice? I'm like, no. I- we have to wait until our food stamp. He said, why? I said, remem- I remember what my dad told me... So I have to learn what my mistake for last month. So my older sister, the one- the one she came? She came to my house and she s- she knows that I don't, we didn't have rice. We didn't- she noticed. Why you didn't call me and ask me? I'm like, it's okay. We- we got it. We still got it. Tomorrow, I'll bring up our ta- our- my papers. She said, no, I'll- I have to go buy. So she get us food- food. She buy us rice, and then um, can- canned meat for my kids? Oh, thanks a lot. (laughs) Yes, like, are you crazy? Like, no. I am not. I know what</p>

	my- I still remember what dad told us. But at least just one thing. Just ask me one thing. Alright (laughs) Yeah.
Epote Interview 3.9	<p>H: Give out (laughs) to- So everyone's giving each other</p> <p>E: Yeah</p> <p>H: That's good, okay. So that's- you said sometimes that happens on Guam? Or, not that much.</p> <p>E: Yeah, sometimes.</p> <p>H: Sometimes? Do you think it happens less on Guam than back in Chuuk?</p> <p>E: No, I think in Chuuk it's... uh, in Chuuk, they still, but maybe here, like less. Because we have plenty (laughs) uh, things to do, mm.</p> <p>H: Plenty things to do like? Like what do you mean?</p> <p>E: Like... like plenty (indiscernible) plenty problem (laughs)</p> <p>H: (laughs) Oh, problems?</p> <p>E: Like, someone died, party... or, wedding...</p> <p>H: And that's why you can't- or that's why here, less. It's done less, 'cuz there's plenty to do, like you said.</p> <p>E: Yeah, plenty to do.</p>
Epote Interview 3.9	<p>E: Yeah but, back in Chuuk when they make the kon? The breadfruit? They cook and they share, too. The family. Even the fish, when they come back from catching fish? They like, share. That's why in Chuuk, they still, but here? I think we don't have enough to share (laughs)</p>
Sally Interview R2 2.14	<p>S: Like, what they do? What uh, what they... No. 'Cuz, they don't have enough food 'cuz they're plenty have inside the house. Plenty adult, plenty kids. So one case chicken, not enough for three days. Only... uh, o- two days only for one case chicken. So... if like, somebody working... he buy food, they have enough. But, only one person working that time. So when they don't have enough food? They like, they don't share. They don't. They just, make uh, save for the one important for them like, oh, we save this one because he's working with our family. Uh, no eat this one 'cuz he stay or maybe just, he just make his. Eat the rice with the sugar and water 'cuz he stay home but we have to make, save the meat for the other person 'cuz he work for us to pay something for our house to stay</p>

Sally Interview R2 2.14	<p>S: In, because my family, first time I saw like that. But if my family, if even though not enough the meat? But we just make it all to feed all the people. Not only, uh, like, three, we, nevermind this one, they don't need to eat. But if like, me, right? I cannot eat... and my kids don't eat what I eat. If one piece chicken? I cut it small, I make it soup. Put what- what is gonna make it big. So I share with my kids. But my life before? First time I saw that. But in my, my family side, no. Not like that. Even though they don't have, they work together to make enough the food, uh, and they eat together. They don't like- 'cuz, if I, if we stay together, and I have my rice and my chicken, and I give you the, the rice to you to eat? So I'm the one eat t- the meat so you gonna think oh, she's very stingy. She don't want to share with me the meat. So that's the happen before. So I really fight to myself to stand 'cuz I really don't like. So how I really, like, before I very suffer? So I don't need to... like, do what they want, they do to me before. I help them. Yeah. I saw, I see how they do to me? So, I don't care, I help them. Because I, oh, maybe I help them 'cuz they do like this to me, I'm not gonna do that. I help them, 'cuz if I, if I do same? That's not good. So they- if uh, I do different? I good to them? They gonna feel... oh, the- why- why she's very nice to us to give us food but before we don't do that to her. That's why I don't like to do that.</p>
Sally Interview R2 2.14	<p>S: Before when I don't place? That's how I live now because I work. With my boss, I find place, I have money to buy my house. So the people, they don't treat me good? I saw them, I'm, I'm nice to them. I say, oh, I can buy you this one, you have food? If they don't say oh, I don't have, okay I can buy for you this chicken or you- rice (laughs) If even though I don't have enough money but I just share. Like, if twenty dollars? I give them ten dollars, I'll use ten dollars</p>
Kisha Interview 2.26	<p>K: I... the only one that I remember? Is like, every Saturday? They would go and get food. Like, they will prepare uh, breadfruit, and taro, um, (clears throat) and then they will go fishing on Saturday. So it's like, I'm looking at it because every Saturday, they will like, prepare food. Not just, not just my family, but the whole- the whole island? They prepare food on Saturday. I think it's because on Sunday, we're not allowed to cook on the fire. 'Cuz it's Sunday, so we're supposed to rest, right? So they're following the tradition. Um, they could only wake up in the morning and cook food? But they will cook food for the whole day. 'Cuz we're not supposed to make fire in the middle of Sunday. So only morning and afternoon. Late afternoon. We can make fire. So, I think that time is the time that I'm trying, like sometimes I re- kind of like, think about it? You know, because here on Guam, we don't, you know, but back home, that's what we will do. Prepare food. And then we don't just prepare it for our house, but we also like, share it to relatives, with dif- that's lives like, few houses down, or. So like uh, get breadfruit and taro, fish, and then give it them and then they will give us other- our own so. It's like, exchanging food.</p>

Epot Interview 3.9	<p>E: When we buy food for us? We buy for our parents? And our brothers and sister... Oh, if- if we have, we buy food, then we kind of, this is for my mom, my brother, my sister. That's how our culture in Chuuk? When we have food, we kind of share...</p> <p>H: So what- what food do you normally share?</p> <p>E: Anything, yeah.</p>
Epot Interview 3.9	<p>E: Yeah I think, sometimes if we have... like, much or more? That time, I think, for me? When I have something uh, someone give me? Like, my friends, they give me plenty things? That time I, this is for my brother, this is for my sister, this for my mom and dad. (laughs)</p>
Mary Ann Interview 3.11	<p>M: A lot of work. A lot of family. We share. We share when we have uh, taro? We share. Mm. Not only me. My family. My big family. My family, it's me and my husband and my daughter. My family. Big family, my mom, my dad, even my sister, my brother. We share food.</p> <p>H: Can you tell me more about sharing food?</p> <p>M: Yeah! Sharing food when I have uh, one sack of rice. So I will cook and scoop the rice to my sister, my big sister? For you and your daughter and your baby. And my brother, you- you have food? No. Okay, come. I- I have one sack of rice. That's sharing. Even my mom and dad? I cook, and I get some and give it to them. That's sharing. That's our custom. Till today... When I have money- according to my husband, when he go to work, when he got fifty dollar, so I will give twenty for my mom. Mm...</p>
Mary Ann Interview 3.11	<p>M: On Guam, we didn't share. We follow the... when we stay on Guam. I buy rice, only me and my daughter. So even my relative come to my house? That's the- they will eat. So it's different. My home? I cook food? I go there with their house, give it to them. So on Guam, if they come? They eat.</p> <p>H: You said on Guam you follow, and then you didn't finish. What do you mean you follow?</p> <p>M: On Guam, I didn't see they share. I didn't see.</p> <p>H: Okay... so that's what you follow. 'Cuz when you came here, you didn't see everyone sharing so you just-</p> <p>M: Mm.</p> <p>H: Okay.</p> <p>M: When we have party? That's we share.</p>
Lorna Interview 3.10	<p>H: What kind of food did they bring you?</p> <p>L: They bring us uh, rice? And al- like any kind of vegetable, any kind of fruits, chicken, mm, even the... the (laughs) the (indiscernible 30:43) shoyu ramen, like, any different of canned meat, yeah. (laughs)</p> <p>H: What kind of canned meat?</p> <p>L: Like, spam, tuna, sardine, mm, sausage, kimchee, the one in the can...</p>

<p>Lorna Interview 3.10</p>	<p>L: They bring us uh, rice? And al- like any kind of vegetable, any kind of fruits, chicken, mm, even the... the (laughs) the (indiscernible 30:43) shoyu ramen, like, any different of canned meat, yeah. (laughs)</p> <p>H: What kind of canned meat?</p> <p>L: Like, spam, tuna, sardine, mm, sausage, kimchee, the one in the can...</p> <p>H: Wow</p> <p>L: I know! I was like, I couldn't.... It's an uh, for me? It's unexpected. (laughs) Yeah. 'Cuz I didn't- when I went to school, I didn't even like, um, I forgot that we- we pray for uh, we asked for food for the next day. And the other day. And when I went to school, I forgot. And then when I come back- came- come back from school, I'm like wow! (laughs) I was like, wow! And they're like, laughing at me. They told me to pray. 'Cuz me, only me and only my parents and my two brothers. And... but the others, they're in their house.</p>
<p>Lorna Interview 3.10</p>	<p>H: So do you know why they brought it? Did you ever find out?</p> <p>L: Um... yes, I asked why. And um, you know, my dad? He... he didn't have a job? 'Cuz he said he wants- he wanna work for church. Like, he wanna preach the word of God. That's why he quit. He don't- he doesn't wanna go work. 'Cuz he, he wanna spend time, uh, to preach the word of God. So, maybe, no- no- they- no, it's not maybe. They, they said, they, they have a feeling they have to, yeah, they have to get food? And then bring it to the pastor. 'Cuz they know that he's not working. Yeah. And all the kids, they're not U.S., they're FSM, they don't have food stamp to buy their... Even, mm, even money. 'Cuz, uh, he's not working but only, the church pay like uh... mm, one thousand five hundred? Uh, we pay rent. We pay power and water. And we pay internet. That's not enough for, the pay, the church- church, they pay it. So, we were lacking of paying the bills. So, he keeps starting praying... So on- one night, he, after dinner, so we pray, said, we pay this, we pay this, this is the only bill we didn't even pay. So we have to pray 'cuz you know, we cannot go ask. Ask somebody or people. For help. The thing we have to is, we have to pray. Then, we prayed. The next day, I think our power was two- two hundred some? Or one hundred some. And, mmm, the next day? One of our church member came. Because I think he has some tax refund and then he wants to donate one thousand. I'm like, oh my gosh. Maybe... said, see? That's why you guys have to be in church. Because even though he- you don't have enough money for your job. But if you just ask God, God will provide for you. Yeah... Yeah... I learned. That's why, when I got- when I move- move off from my parents? That's what I told my husband. You know what? The only one working in the house, so we have to go church. We pray. We have to believe 'cuz you know how struggle... and I will, like, it's... it's not good... It was really... It was true. 'Cuz, I really see? I see what God provide for us. When I wou- when I stay with my parents. That's why, some people? They said they don't believe in God. Yeah. And last night, we were gathering outside, I was like, we have to pray, because you guys know.</p>

	You guys watch all the news for the sick, for the virus? So, for now on, we have to pray, 'cuz only God protect us from the virus. Yeah...
Mary Ann Interview 3.11	<p>M: First when I see my cupboard and my, my refrigerator, no more? Almost empty? So, I pray first to God.</p> <p>H: And then, what do you do after that?</p> <p>M: After that? I stay in my house? I just waiting, waiting for somebody to come and give me food.</p> <p>H: Tell me more about that. You- you're- first you pray? And then you-</p> <p>M: Pray. Sometimes when I finish pray, sometimes, I have food.</p> <p>H: Where- where does the food come from?</p> <p>M: Uh, the food come from- from my family? My husband family. They bring food... Even my friends? They know that I, I don't have food? They give me food.</p> <p>H: How do they know you don't have food?</p> <p>M: My friends, they call me on phone.</p>
Mary Ann Interview 3.11	<p>H: You said sometimes you, you sit in your house and you wait for the food and then it comes. What did you mean by that?</p> <p>M: Oh, when my friends call me I said, oh, I don't have food. So they come. They bring food to me.</p> <p>H: Wow.</p> <p>M: I'm very happy 'cuz I have food.</p>

Church Groups – External resource pool that involves charity from religious groups	
Document	Quotation Content
Kisha Interview 2.26	<p>K: There was one time, I think in.. uh... I need to remember the year... I think it was 2005. Um, someone just call us and... um, tell us to meet her at the store, and she load our cart with food. And I feel like it's a- you know, it's a blessing because we're not expecting... and so that time, I feel like there is enough because it feels up the freezer, the cabinets, you know. Uh, from frozen to dry food, it was filled up and... I feel like, I mean that's the time that I would always recall. That's the time we had enough- we would have- we have enough, uh, food in the house. Yeah. So it was a great blessing for us.</p> <p>H: So can I ask a little bit more about that time? Like who, who was this person? And why?</p> <p>K: Um, she is, so my mom used to work at, there was this school that called Southern Christian Academy? And so it's the principal's daughter. She just... she says she feel like she had a lot, and she just want to bless. So she called three different people to meet her at the store. And that's what she just did. Fill up the c- our carts with food and... so I was... I mean, my mom told me about it, we just cried (laughs) Yeah.</p> <p>H: Wow. So... it was your mom's employer. Daughter.</p> <p>K: Yeah.</p> <p>H: Mom's boss's daughter. And she called three specific people. Do you know why she chose to call your mom?</p>

	<p>K: Um.. the people that she call are the single mothers. Yeah. So she was- she was- she wanted to help, help the single mothers.</p>
<p>Lorna Interview 3.10</p>	<p>L: And my, my parents? They said, we have to pray 'cuz if we if we- if- even though we don't have food? But God use people to bring us food. But that's true. Yeah...</p> <p>H: So how come you started worrying at sixteen?</p> <p>L: Um... I was like... I think that's when I was, I learned. That's when I learned what life is. (laughs) Yeah...</p> <p>H: And then you said you guys pray.</p> <p>L: Yeah</p> <p>H: That someone brings the food and then you said, it's true.</p> <p>L: Yes, that's right.</p> <p>H: So, can you tell me more about that? Like, what made praying true? I mean like, you prayed for someone to... bring food?</p> <p>L: Yes. First thing? Um, when they said- when my parents, 'cuz every night before we go to sleep, that's what we, that's what we do. We pray? And then, um, they told us that we have to pray 'cuz uh, we don't have enough money to pay the bills? And we don't have enough food for the next few days. And then... yeah. For our safety. We also have to pray for our safety. And... yeah. Every night we did that, 'cuz after we came from church, we ate dinner, and then before we go to sleep, we pray together. And... I didn't even um, I was just praying? But, yes I did believe but, for like, I didn't expect that. To receive it. Yeah. 'Cuz um, when we pray for like, uh... for, yeah. For the food? For the, like, for few days? So, like, I went to school, I came back, and I see a lot of stuff in our kitchen. Like, mom, where this food come from? Said, pray, and thank God that we have food. Like, who bought this? And like, the church member. They bring up the food. Yeah. They bring us food. That's why you have to believe in God. 'Cuz whatever you don't have? You have to believe? And pray? He will provide for you... Oh, wow. That was, I was so happy and I- I was, excited. Yeah.</p>
<p>Lorna Interview 3.10</p>	<p>L: They bring us uh, rice? And al- like any kind of vegetable, any kind of fruits, chicken, mm, even the... the (laughs) the (indiscernible 30:43) shoyu ramen, like, any different of canned meat, yeah. (laughs)</p> <p>H: What kind of canned meat?</p> <p>L: Like, spam, tuna, sardine, mm, sausage, kimchee, the one in the can...</p> <p>H: Wow</p> <p>L: I know! I was like, I couldn't.... It's an uh, for me? It's unexpected. (laughs) Yeah. 'Cuz I didn't- when I went to school, I didn't even like, um, I forgot that we- we pray for uh, we asked for food for the next day. And the other day. And when I went to school, I forgot. And then when I come back- came- come back from school, I'm like wow! (laughs) I was like, wow! And they're like, laughing at me. They told me to pray. 'Cuz me, only me and only my parents and my two brothers. And... but the others, they're in their house.</p>

Lorna Interview 3.10	<p>H: So do you know why they brought it? Did you ever find out?</p> <p>L: Um... yes, I asked why. And um, you know, my dad? He... he didn't have a job? 'Cuz he said he wants- he wanna work for church. Like, he wanna preach the word of God. That's why he quit. He don't- he doesn't wanna go work. 'Cuz he, he wanna spend time, uh, to preach the word of God. So, maybe, no- no- they- no, it's not maybe. They, they said, they, they have a feeling they have to, yeah, they have to get food? And then bring it to the pastor. 'Cuz they know that he's not working. Yeah. And all the kids, they're not U.S., they're FSM, they don't have food stamp to buy their... Even, mm, even money. 'Cuz, uh, he's not working but only, the church pay like uh... mm, one thousand five hundred? Uh, we pay rent. We pay power and water. And we pay internet. That's not enough for, the pay, the church- church, they pay it. So, we were lacking of paying the bills. So, he keeps starting praying... So on- one night, he, after dinner, so we pray, said, we pay this, we pay this, this is the only bill we didn't even pay. So we have to pray 'cuz you know, we cannot go ask. Ask somebody or people. For help. The thing we have to is, we have to pray. Then, we prayed. The next day, I think our power was two- two hundred some? Or one hundred some. And, mmm, the next day? One of our church member came. Because I think he has some tax refund and then he wants to donate one thousand. I'm like, oh my gosh. Maybe... said, see? That's why you guys have to be in church. Because even though he- you don't have enough money for your job. But if you just ask God, God will provide for you. Yeah... Yeah... I learned.</p>
Kisha Interview 2.26	<p>K: And then you can see everybody like, the whole island is like, walking around with the, stick to g- to get the breadfruit, all these things. It's like everybody's busy on that day, you know? Yeah.</p> <p>H: Okay. So it's like a big.. Kind of-</p> <p>K: Preparation day.</p>
Mary Ann Interview 3.11	<p>M: First when I see my cupboard and my, my refrigerator, no more? Almost empty? So, I pray first to God.</p> <p>H: And then, what do you do after that?</p> <p>M: After that? I stay in my house? I just waiting, waiting for somebody to come and give me food.</p> <p>H: Tell me more about that. You- you're- first you pray? And then you-</p> <p>M: Pray. Sometimes when I finish pray, sometimes, I have food.</p> <p>H: Where- where does the food come from?</p> <p>M: Uh, the food come from- from my family? My husband family. They bring food... Even my friends? They know that I, I don't have food? They give me food.</p> <p>H: How do they know you don't have food?</p> <p>M: My friends, they call me on phone.</p>

Food Banks – Non-profit organizations that distribute food to the food insecure	
Document	Quotation Content

Epot Interview 3.9	<p>H: So, can you tell me more about the time on Guam when you felt like you didn't have enough to eat?</p> <p>E: Same. I'm, I'm trying to look. Sometimes when my, my experience? When uh, we gonna find the food? I usually go to the store in the Piti? The one they give out food for free? In Piti? And also in uh... Social Catholic? That's what I usually do when we kind of out of food? And then I ask my mom and dad if they have food.</p>
Epot Interview 3.9	<p>H: What kind of food do they give you?</p> <p>E: Mm, beans... milk, cereal, rice, only the bag, small bag. Uh, fruits? Like, canned food, uh, fruit cup, yeah. That's it. No more meat like, chicken and uh, no more canned meat.</p>
Epot Interview 3.9	<p>H: And then also um, Catholic Social Services.</p> <p>E: Social Services.</p> <p>H: They give you food, too?</p> <p>E: Yeah. Small bag of rice? Uh, sometimes they give us the cup noodle? Uh, some canned meat? Like sausage? Spam?</p>
Lorna Interview 3.10	<p>H: and how long did this last for? This time where you were scared and worried that the food wouldn't last?</p> <p>L: How long? Mm... It's like... um, wait... ten, eleven... it's like, three days. Three days I was worried. Yeah. Oh, when I remember the, the one they- we usually go to get food? The one at Piti? That's when I remember. I said, okay, we have to go to Piti and get food.</p>
Lorna Interview 3.10	<p>H: Okay... okay sorry (laughs) just to go back real fast-</p> <p>L: Okay</p> <p>H: -from when you said you get your Piti, too.</p> <p>L: Yes</p> <p>H: When you need to. Just what- real fast, what kind of food are you able to get from there?</p> <p>L: Uh, they give out like uh, mm... mango juice? Spaghetti? And some uh, their f- fruit mix? Corn uh, now, apple juice? Beans...</p>

Government Assistance – Use of government funded programs such as SNAP, Section 8, etc.

Document	Quotation Content
Laila Interview 1.29	L: It's like they live for the food? They live by the... they live ON the food stamp
Kisha Interview 2.26	K: And so, it's, it's, it was a hard time before we, was having a hard time um, try to catch up with bills at the same time there's no extra money for food... Yeah. And, so am- at the time it's like, we didn't really have you know the government help for the housing and something like that. Like we were not, we weren't, we didn't have the idea of that there is like a housing and stuff like that.
Lorna Interview 3.10	<p>H: So for Guam, right, when you get the food stamps and you're able to get enough canned meat and frozen meat for your family, how does that feel?</p> <p>L: I f- I was, I feel happy. 'Cuz I was worried about my kids 'cuz</p>

	<p>you know it's, our, their food stamp is on the tenth. So I have to make uh, get their food so next month, they still have it until the food stamp come on for next month. (laughs)</p>
Kisha Interview 2.26	<p>K: You know, like how they do GHURA housing? Um... because I think... few years after that then we applied for uh, Section 8. Then we were able to get into one. And that's when everything started to balance out with us slowly coming in... because of the... I heard from friends about the Section 8 housing. So I try- I went ahead and try to fill out application. So after that then we were able to drop our, you know, our paycheck comes then we're able to pay off rent, and buy food, and yeah.</p> <p>H: Okay, so when you moved here in the late '90s, up until 2005-ish, you guys weren't on public assistance-</p> <p>K: No</p> <p>H: You didn't have-</p> <p>K: No, no.</p> <p>H: And it's because you, you guys just didn't know about it?</p> <p>K: Yeah. We didn't know until like, uh, met a friend of mine and then she told me where she works. And I said, what is that? So she started ex- explaining and she goes, do you want one? Do you want an application? I can bring application for you. And, and that, see I was looking at that time too because, she can bring the application to me. But then, later one I found out that I'm supposed to go in and get it myself, you know? So I was just looking at those, at the- at the, you know, the trails of getting into those uh, helps? 'Cuz I felt like, I didn't know about it but then she bring it to me so I all- all I had to do was just give it to her. When I finish fill it, I give it to her. And then she called me for my appointment and stuff like that. So I was like, oh, that's why when I fill out one for my mom? Last Oc- two years ago? I didn't know anything about mass screening, about, uh, voucher screening. I didn't know anything that because I didn't go through that (laughs) so uh, it was, I, I was thinking that I thought that I had the experience of applying and stuff like that? But I didn't because I have short cuts (laughs) So, with my mom, I went through every steps so, you know? Of the.. Uh, GHURA housing. Yeah. So from then, that's when we were able to get into a housing</p>
Tritee Interview 3.4	<p>T: Because on Guam it's kind of hard for me 'cuz I can't even work 'cuz I have... sickness... My daughter said I cannot work... And now I'm under... GHURA? So, every, every month I have allowance from GHURA. They send me to, to pay my... power? If I... hundred fifty, ah? If I power, hundred? Then the fifty I, pay some food for me...</p> <p>H: Okay... Allowance from GHURA-</p> <p>T: Mm.</p> <p>H: -you said, okay. Can I ask what, what's your sickness?</p> <p>T: Heart. Heart problem.</p>
Epote Interview 3.9	<p>E: I'm happy? (laughs) Yeah, 'cuz we, I have food for my kids? And I feel comfortable?</p> <p>H: So can you tell me, when did this happen? Tell me about a time</p>

	<p>when that happened.</p> <p>E: Uh, when we receive the food stamp? We have the food stamp, we go buy food?</p> <p>H: And when, when do you get the food stamps?</p> <p>E: Fifth. On the fifth.</p>
Lili Interview 12.20	<p>L: I don't know if it answers your question but sometimes our aunt would bring us food?</p> <p>H: Yeah!</p> <p>L: Like, 'cuz she has food stamp?</p>
Lili Interview 12.20	<p>L: She'll come and drop food. Yeah.</p> <p>H: Is it food that she cooks or?</p> <p>L: No, no, no. It's uh, food stamp food. Like, canned goods. (laughs)</p>
Lili Interview 12.20	<p>L: Some just go crazy and buy all these unnecessary things. Like, I don't know if you know, but, we- we have these fundraisings or not me 'cuz we don't do them but, they have fundraisings for like, gatherings and they will use those food stamps for those. So it-it's- I know!</p> <p>H: What are they fundraising for? Like medical?</p> <p>L: Sometimes medical, sometimes church, sometimes school, yeah. I know.</p> <p>H: They use their food stamps? For-</p> <p>L: Yeah.</p> <p>H: I mean, if you're-</p> <p>L: Parties! Parties!</p> <p>H: (laughs) Oh my God.</p> <p>L: And you go to these parties and you- I'm so- no, it's... I know. I'm very critical on how I look at what they're doing because-</p> <p>H: No, go ahead!</p> <p>L: being raised... we were taught very differently. On how to... we- we don't like to take advantage of what- what we have.</p> <p>H: Right.</p> <p>L: So to- to be able to come here and see that, it's... it makes me angry. Like-</p> <p>H: Yeah.</p> <p>L: Like, you have all these opportunities and you're taking advantage. That's why there's always... we're always on the news. So, like, when I go to parties and I see... I know where they live. And I know what assistance they get. And then they choose to take advantage and just blow it out.</p>
Sylvia Interview 12.17	<p>S: Before, when I buy, I use my food stamp. Only fish, pounding kohn, uh... yeah. I spend more than \$200. But very small. Yeah. Like five- five lemmi? And... twenty- um... how many piece, the fish. I spend two hundred some. So, now I stop.</p>

Laila Interview 1.29	<p>L: Food stamp!</p> <p>H: Okay, okay, okay.</p> <p>L: (laughs)</p> <p>H: Okay.</p> <p>L: So, so yeah, they get that and then they um, like they purchase enough food to last until the next food exam- exam! (laughs)</p> <p>H: (laughs)</p> <p>L: Food stamp comes out.</p>
Laila Interview 1.29	<p>L: So- but sometimes it like... it... they're out of food before. So they just... I don't know how we do it. But... even the littlest things they, you know, try to be very, um... careful. Like that little things (48:47) but the food that they make, they would limit it. And then just cook a little so that they can, you know, survive day by day. Until the next one comes out.</p> <p>H: Okay. So... for the ones on food stamp they buy a lot when the new round comes in?</p> <p>L: Yeah.</p> <p>H: And then to make it last, they... only make a little bit of it?</p> <p>L: Yeah. If they see that it cannot last until the next um, next round to come in? So, um, they just make a little... like, until that day</p>
Sally Interview R2 2.14	<p>S: Because if like... food stamp, if I buy on food stamp, it's- they make it lower than, if I buy on cash, very expensive. Very small, the pounding kon. They sell it on.. Like, almost eight dollars or seven, but very small. Like uh, bread. So if I buy on food stamp, they have the other price like, five dollar, four ninety nine, three ninety nine. Yeah. So... I can afford if I use food stamp to buy. But if I use money, I cannot afford that one.</p>
Tritee Interview 3.4	<p>T: Is it gov- government? Or federal, that GHURA</p> <p>H: GHURA. Is it... what- what kind from GHURA? The Section 8 or-</p> <p>T: Yes. Section 8.</p>
Tritee Interview 3.4	<p>H: how- how were you able to get enough from like, your daughter helping you or people giving you enough for food? Like, what was it about that time?</p> <p>T: Hmm.. I don't, I don't how to say for that, the beginning of the month?</p> <p>H: Okay. Why is it the beginning of the month?</p> <p>T: Because like I said, I make sure I have enough food to, uh, for the whole month? Because I... in the, like, first week in the month? I'm asking my daughter to, if she can spare me some food.</p>
Tritee Interview 3.4	<p>T: I wish I can... uh... planting... banana, tapioca, taro. Those thing, it's easy for me to get it to eat.</p> <p>H: So you wish you could plant here.</p> <p>T: Mm.</p> <p>H: Why, why can't you?</p> <p>T: Because where I live now, it's under GHURA. And they're strict.</p>

Epot Interveiw 3.9	<p>H: And if you don't mind me asking, are you guys on any government assistance?</p> <p>E: Yes. Our house is Section 8? And we're receiving, food stamp? And the, medicaid, MIP?</p>
Epot Interveiw 3.9	<p>H: So do you think, on Guam, do you think a lot of Chuukese families, do you think they know about um, food stamps? That they can go on food stamps when they're hungry or do they know about Section 8?</p> <p>E: Yeah.</p> <p>H: They do?</p> <p>E: I think so. There's plenty already, already plenty Chuukese.</p> <p>H: Just wondering 'cuz um, some of the other interviews that we've done, a lot of them didn't know about it when they came here.</p> <p>E: Oh, the first time they came- I think, yeah. They don't know the... first time...</p> <p>H: So how do they come to learn about it?</p> <p>E: Um, family or friends? If they tell them...</p>
Lorna Interview 3.10	<p>H: Okay. Okay. And can I ask, are you guys on any kind of government assistance?</p> <p>L: Mm... Like um...</p> <p>H: Like Section 8, or-</p> <p>L: Yes. That Section 8.</p> <p>H: Section 8? Okay. And you rent, with Section 8.</p> <p>L: Yes</p> <p>H: Okay. What about food stamps?</p> <p>L: Yes, we do.</p>
Lorna Interview 3.10	<p>H: So, during this time when you had the canned meat and the frozen meat, um... where, where did they come from? Where did you get it?</p> <p>L: I bought them when I receive my kids' uh, FS?</p> <p>H: F?</p> <p>L: The food stamp. (laughs)</p> <p>H: And when do you get your food stamps?</p> <p>L: On the tenth.</p>

Lorna Interview 3.10	<p>H: Okay... So does this happen often?</p> <p>L: Um... Sometimes...</p> <p>H: Why only sometimes?</p> <p>L: 'Cuz um... when I said la- sometimes, because last month February, I didn't get their um, food stamp on time? 'Cuz I have a pending to submit for my renewal? Yeah. So we're out of rice, and I don't want to ask, you know, I don't want to ask people for- I don't want to ask my sister, I don't want to ask my brother. 'Cuz I have to, mm, fight for my struggle. I have, I have to fight it. So... yeah. I try, I try, I try my best and I, I'll fix all my document and then I'll bring it up. I ask my kids, where is this, I really need it, mostly for the medicaid, right? The insurance for my kids. Then, the next day, we have it.</p> <p>H: The next day, what?</p> <p>L: The next day like, af- um, February twenty some? Almost end of the month.</p>
Lorna Interview 3.10	<p>L: Mm... the Section 8, I think they saw it on uh, facebook or news, yeah. 'Cuz they only post it on news. If they're opening. Or their friends tell them... Yeah. But, yeah, the food stamp? Only for the U.S. citizen. Yeah. Even if we have, we have kids, they're born here? That's when they get food stamp.</p>
Mary Ann Interview 3.11	<p>H: And if you don't mind me asking, are you on any um, like Section 8 or food stamps or-</p> <p>M: Oh, we don't have food stamp.</p> <p>H: What about, like the housing?</p> <p>M: Yeah, we stay in the housing.</p> <p>H: Like Section 8? Or the GHURA-</p> <p>(Translator): Yeah</p> <p>M: Public housing, GHURA.</p>

B. Codes Under Category: Cash Economy

- Strategies that directly result from participants' identified susceptibility to food insecurity due to the cash economy employed in Guam. Strategies aim to lower food costs for the household. Guam's cash economy also exacerbates participants' ability to obtain traditional ("local") Chuukese food.

B1. Codes Under Subcategory: Lowering Food Costs

- Strategies that lower the cost of food coming into the household. Because of the pressures of a cash economy, participants prioritize affordability.

Cheaper Foods – Foods participants prefer, or are forced to, purchase to lower food costs	
Document	Quotation Content
Amelia Interview 12.20	A: I mostly live off canned goods (laughs) 'cause that's what we can afford.
Amelia Interview 12.20	L: And sausage. H: Okay. L: 'Cause we get it in a box from... um, American Grocery. H: American Grocery? L: That's where we mostly get our canned goods. 'Cause it's cheaper there.
Amelia Interview 12.20	L: Um, ramen. Uh, (indiscernible) 'cuz we- we go for the canned good first, then the ramen. So- we'd have some kind of ramen. And I try to get two b- um, two cases. H: Uh huh. L: So one would be ichiban and the other would be the bowl ramen.
Laila Interview 1.29	L: Um, so we have canned meat, um, usually canned meat we- yeah. Get canned meat and um, ramen. Mm, those two. And then sometimes um, we get, if we have ride? We go get um, rice, and, yeah. Very few times we get like frozen meat.
Sally Interview 12.17	S: But the Payless, they sell the family bag H: Mhm S: Like, \$2.99 or \$3.99, so I just buy the family bag.
Laila Interview 1.29	L: So we don't, like, if it's not, we don't like the food? Then we'll just, you know, eat ramen.
Laila Interview 1.29	L: 'Cuz you don't have- well sometimes we just, you know... we just ask. Ask around. Who has some... who has like um, those coffee pot? That you can, you know (laughs), heat water and cook your ramen. Sometimes you go out and just get food from your... H: From? L: From campus. H: Oh. The cafeteria? L: Yeah. Cafeteria. H: And the food- L: Or the food court. Food trucks.

Kisha Interview 2.26	<p>K: Because at that time I feel like we were only focusing on bills, and very small extra money to get food or things that we need for the house... Sometimes if there's a little money, we would just get bread for breakfast. If there is none that day we just eat rice with whatever is there. With ramen or, um...</p> <p>H: So bread, ramen, rice</p> <p>K: Yeah. Soy sauce (laughs)</p>
Epote Interview 3.9	<p>E: Oh, I go to American Grocery? Cost-U-Less, Seven Day. That's the three store I usually go to. To buy kimchi bowl (laughs) canned meat, chicken, rice, uh, fruits, vegetable...</p> <p>H: Okay</p> <p>E: Yeah</p> <p>H: What, what kind of canned meat?</p> <p>E: Uh, uh, vienna sausage? Or (laughs) and, corned beef? Ox & Palm? And the black label.</p>
Tritee Interview 3.4	<p>H: What about in Chuuk? Do you know what they might do in Chuuk?</p> <p>T: I think they just gonna do the same thing I'm doing. 'Cuz back there it's, its, easy. We don't have to worry about our food 'cuz we are... each family, they have their own land. So... it's that the... income? The one who were... were kind of uh, it's hard for us 'cuz the minimum wage there is so low. I think some, like if they're get their only like, rice? They're not have enough with the minimum wage if they gonna buy rice? And whatever.</p>
Epote Interview 3.9	<p>E: Oh, I'm just talking about like, we don't have uh, no one working? We don't have money? So we don't have money to buy canned meat from the store? But according to those have money? They buy canned f- canned meat? Like ramen? The kimchee bowl? In store. Uh, buy chicken? And save it. But according to those are not working, no more money, no more fridge to store food? ...</p>
Mary Ann Interview 3.11	<p>H: so, what kind of food do you have when you're happy and you have a lot of it?</p> <p>M: Um, only rice, especially. Only rice everyday. Rice, um, even canned meat? Just little...</p> <p>H: Just a little canned meat?</p> <p>M: Yeah. Not much. Because canned meat, it's too expensive. That's why it's little. Um, chips? Drinks. Mm.</p> <p>H: Okay... so, what kind of canned meat?</p> <p>M: Um, spam.</p>

Robert Interview 2.15	<p>H: So that was the period um, where you felt like you had a lot of food was the parties- like that- in Chuuk?</p> <p>R: Yeah, yeah, yeah.</p> <p>H: Okay.</p> <p>R: Some parties here is like that, too.</p> <p>H: Okay, can you tell me about the ones on Guam?</p> <p>R: That's- they even, they even, like- 'cuz back in Chuuk? They have to, like the family of the... the- the, the bride? Will uh, provide like, fish. Now, chicken. Turkey tail. And uh, the man? Will provide like, taro, banana, breadfruit, coconut, you know, all that. Papaya, you know. You know, so they will bring and the family of- they like, exchange. When they leave, they bring the, they leave that. But here it's rice, chicken. (laughs) Ramen. (laughs) Noodles, you know, the case. Drinks.</p> <p>H: So it's- here, it's not so much the local food?</p> <p>R: Yeah.</p> <p>H: Like it's-</p> <p>R: They use those.</p> <p>H: Why? Why do you think?</p> <p>R: Just- that's how they... 'cuz it's like a culture, you know.</p> <p>H: On Guam.</p> <p>R: Oh, it's-</p> <p>H: Oh</p> <p>R: In Chuuk.</p> <p>H: In Chuuk, okay.</p> <p>R: And they- they do that here, also. But, it's the, they use the chicken and the rice and...</p> <p>H: Okay.</p> <p>R: Instead of the fish, coconut, I mean the- banana, the breadfruit, taro.</p> <p>H: It's the chicken.</p> <p>R: Chicken and rice. (laughs)</p>
Robert Interview 2.15	<p>R: Sometimes I feel like, especially the st- the steak? Oh. (laughs)</p> <p>H: Steak. (laughs) Yes, I know that-</p> <p>R: It's- it's more- very expensive here. But in the states, when I was there? That's when I got... maybe because I, it was cheaper there? And I can go and buy and... but here it's... very hard to buy and then barbeque. So expensive. (laughs)</p>
Robert Interview 2.15	<p>R: Or, the young papaya. The white one. Just cut it down, make mix it (laughs)</p> <p>H: Mix with the canned good?</p> <p>R: You can have- yeah. Or, sometimes, if we're... 'cuz usually she feel, we make her happy? That's when we eat corned beef (laughs)</p> <p>H: So that was a treat?</p> <p>R: It's- yeah, something like that.</p> <p>H: Oh</p> <p>R: Or spam or, but still, meat. You know, but, mix it with vegetables so we can have- and, a lot of juice (laughs)</p>

Robert Interview 2.15	<p>R: Bag of rice is what, twenty five? Twenty six?</p> <p>H: The big one</p> <p>R: These- these Chuukese, they don't really like any other rice than the Diamond G (laughs) I don't know why (laughs)</p> <p>H: (laughs) Okay</p> <p>R: And if you get that... three or two kon? Sometimes they s- five dollars, six dollars, so you get four, but you- you only eat those in two days. But the fifty pound rice for two weeks, one week? And it's (laughs) Everybody share the rice.</p>
Sally Interview R2 2.14	<p>S: All of them, they, even the other island, they like to drink coffee. If they don't have coffee? They just get tea.</p> <p>H: Tea.</p> <p>S: Yeah, the cheaper one. They boil the water, they sit down, and they drink the tea. But the coffee, that's the best for them</p>
Sally Interview R2 2.14	<p>S: I go like... I go to Payless? It's... the just uh, about the chicken. The case of chicken. Or case of spareribs. Payless, twenty seven. And I oh, I go check, I don't have enough for that one. So I went to the (background noise intensifies, minor pause), went to the American Grocery. So that one is twenty seven, American Grocery, twenty- twenty four ninety. And I, okay, I buy here 'cuz that's the cheaper one. So the cheap,.. Payless, cheaper. 'Cuz every, sometimes they put down sixty- sixty ninety nine, Payless it's thirteen ninety nine. So I check. I r- I go to the other store, go, go to the other one and uh, other store too, so if it's same? But the first one I saw it's cheaper? Next day, I go back to the other store.</p>
Lorna Interview 3.10	<p>H: And what, are there any like, specific stores you go to?</p> <p>L: Um, yes. American Grocery and Payless.</p> <p>H: Okay... why those two?</p> <p>L: 'Cuz uh, Payless? I like their vegetables? And their meat, 'cuz it's fresh... Uh... American Grocery, that's the cheapest um, place to buy the canned meat. (laughs)</p>

Canned Goods – Common affordable foods purchased by participants	
Document	Quotation Content
Amelia Interview 12.20	A: I mostly live off canned goods (laughs) 'cause that's what we can afford.
Amelia Interview 12.20	<p>A: Um, ramen. Uh, (indiscernible) 'cuz we- we go for the canned good first, then the ramen. So- we'd have some kind of ramen. And I try to get two b- um, two cases.</p> <p>H: Uh huh.</p> <p>L: So one would be ichiban and the other would be the bowl ramen.</p>
Laila Interview 1.29	L: And, um, because we felt like we, like, we have nothing in the fridge when they left. So... uh, sometimes we just, like after that, we have to eat just canned meat. Because we cannot afford like the... you know, um... cases of chicken and cases of, so, um, with that... like, he had time to you know, save up for more?

Tritee Interview 3.4	<p>H: So, when you have all this food, what- what kind of food does she bring you? Or what kind of food do you get during this time?</p> <p>T: I buy... a sack of rice</p> <p>H: Mhm</p> <p>T: Canned meat, or frozen meat.</p>
Amelia Interview 12.20	<p>A: And, sometimes we even have, we go to the next month having the same amount of canned goods we bought.</p>
Amelia Interview 12.20	<p>H: American Grocery?</p> <p>L: That's where we mostly get our canned goods. 'Cause it's cheaper there.</p>
Amelia Interview 12.20	<p>L: She'll come and drop food. Yeah.</p> <p>H: Is it food that she cooks or?</p> <p>L: No, no, no. It's uh, food stamp food. Like, canned goods. (laughs)</p>
Laila Interview 1.29	<p>L: (clears throat) Um... well... it- if we get food from the... from the LSG, from the kitchen, then yeah, we usually eat like rice... beef- there's different kinds. But then we usually, um, just eat canned meat? And rice. Like, yeah.</p>
Robert Interview 2.15	<p>R: But whatever she provide? Just, that's all we have. No complaint. (laughs)</p> <p>H: What- what kind of food did she prepare for you guys?</p> <p>R: This... like... yeah, I think it's like, not... once- once in awhile, we- we will have like, chicken. But almost everyday, can. Canned good. Canned meat. But if she has to... like, soup. Mix, soup out of it so it can be enough for everybody.</p>
Robert Interview 2.15	<p>H: Oh, okay. So she would use the canned goods-</p> <p>R: Yeah, to make the mackerel soup (laughs)</p> <p>H: Okay. And it- and she made the soup-</p> <p>R: Yeah</p> <p>H: -to be able to-</p> <p>R: Make- make it bigger so we can enough for all of us.</p> <p>H: Oh. Okay so-</p> <p>R: For one meal.</p> <p>H: Got it. So one can all of a sudden becomes-</p> <p>R: Yeah, we share to make.. To make it enough for everybody</p>
Amelia Interview 12.20	<p>L: And, um, I eat, um, kimchi. The- the one in the canned good? Yeah.</p> <p>H: Oh! Canned kimchi?</p> <p>L: Yeah! You've never had it?</p> <p>H: No.</p> <p>L: I love it! I get it from the Korean stores.</p>
Amelia Interview 12.20	<p>L: No, no, no. It's uh, food stamp food. Like, canned goods. (laughs)</p> <p>H: Oh! (laughs) Okay!</p> <p>L: Canned goods. Um, ramen. She knows what we like, so she- eggs, bread, cereal, milk. Yeah.</p>

Amelia Interview 12.20	<p>L: So I'm... for my brothers, they're like, the cereal type, the eggs, bread. I'm always the canned good.</p> <p>H: Mm.</p> <p>L: Me and my sister. We're the canned goods. And rice</p>
Laila Interview 1.29	<p>Um, so we have canned meat, um, usually canned meat we- yeah. Get canned meat and um, ramen. Mm, those two. And then sometimes um, we get, if we have ride? We go get um, rice, and, yeah. Very few times we get like frozen meat.</p>
Laila Interview 1.29	<p>L: Yeah. It's only the small ones so, our, inside? You know, those small freezer, very small so (laughs) It cannot fit anything in there (laughs) We just get like um... hot dogs (laughs) Yeah. Those things that can fit in there. But that's why we usually eat canned meat.</p>
Laila Interview 1.29	<p>H: Okay. So during this period of time where you don't have enough to eat, it's just either ramen or-</p> <p>L: Canned</p>
Epot Interview 3.9	<p>E: Oh, I go to American Grocery? Cost-U-Less, Seven Day. That's the three store I usually go to. To buy kimchi bowl (laughs) canned meat, chicken, rice, uh, fruits, vegetable...</p> <p>H: Okay</p> <p>E: Yeah</p> <p>H: What, what kind of canned meat?</p> <p>E: Uh, uh, vienna sausage? Or (laughs) and, corned beef? Ox & Palm? And the black label.</p>
Lorna Interview 3.10	<p>H: Um... what kind of foods were there? During that time, where you had food in front of you.</p> <p>L: Oh, oh you were asking... what kind of food I have?</p> <p>H: Yes, when you have enough to eat.</p> <p>L: Um... like, canned meat?</p> <p>H: Okay</p> <p>L: Yeah. And uh, frozen meat?</p> <p>H: What kind of canned meat?</p> <p>L: Um, black label, spam, mm, tuna, sausage, and sardine.</p>
Robert Interview 2.15	<p>R: Or, the young papaya. The white one. Just cut it down, make mix it (laughs)</p> <p>H: Mix with the canned good?</p> <p>R: You can have- yeah. Or, sometimes, if we're... 'cuz usually she feel, we make her happy? That's when we eat corned beef (laughs)</p> <p>H: So that was a treat?</p> <p>R: It's- yeah, something like that.</p> <p>H: Oh</p> <p>R: Or spam or, but still, meat. You know, but, mix it with vegetables so we can have- and, a lot of juice (laughs)</p>

<p>Robert Interview 2.15</p>	<p>R: Yeah, I just talk- we were talking before I come here, ‘cuz I remember back then, I think ‘70s, was one guy, we- we’re kind of the guy, the guy that was telling the story about him, because he really, he saw- he was the one that saw it but(phone rings)</p> <p>H: Oh, excuse me</p> <p>R: He- he use it as a joke but, it wasn’t really a joke.</p> <p>H: Okay.</p> <p>R: ‘Cuz it was true. (clears throat) He came (clears throat) to the house and then the stepmother told him oh, check the leftover mackerel because your brother ate and I don’t know if he leave something for you. They didn’t have rice. Only kon. So he went, went check the, ‘cuz usually the big (phone rings) what you call the-</p> <p>H: The-</p> <p>R: The basin, the, instead of the, like, screen? Using to cover the food?</p> <p>H: Mhm.</p> <p>R: You will- we use like, big basin or something like that. To cover the leftover food and so when he open up the, only the kon. Nothing. And then he get the bowl of to ch- make that sa- sauce, kind of sauce, and then he asked the stepmother, where is the can of the mackerel? She goes, I don’t- I don’t know, check outside. So he, the, their house is like, on s- it’s not on- on the ground but there is like</p> <p>H: Raised?</p> <p>R: Concrete- yeah, concrete post? So he look under the house and he saw the- the, the can. So he went down there and took it. And look it’s still like, there’s some rea- you know, leftover in it?</p> <p>But... (clears throat) so he (laughs) and then take the kon, put it in the sauce, and then s- sniff the can. And then my cousin came, he was the one who saw it. (laughs) Do that (laughs)So he went and... tell, you know, just like a joke or, but it wasn’t really a joke.</p> <p>H: Oh.</p> <p>R: He was... you know, he didn’t have, so he just sniff it and then eat the kon (laughs)</p> <p>H: Okay so-</p> <p>R: Just get the smell of the mackerel from the can (laughs)</p>
<p>Kisha Interview 2.26</p>	<p>H: Okay. So the pregnancy kind of dictates what-</p> <p>K: Yeah. So I kind of like, looking at the difference. Before I’ll be driving in the car with open chips or something just to munch on. But then now it’s like, nah, don’t like that anymore (laughs) So I’m mostly now eat- snacking with on um, cucumbers and watermelon. But, everything else is like, only if I feel like it, you know? And, when it comes to the meal, like the food? I would s- I would want to eat something like, rice with maybe a can of sardine or tuna? But they had to- I had- I have to have, ask them to open it and let it air out (laughs) so I don’t smell the smell and then afterwards I will go and eat. But if they will just open it in front of me and the smell comes, oh, that throws me off. So I couldn’t eat it. (laughs)</p>

Lorna Interview 3.10	<p>H: What kind of food did they bring you?</p> <p>L: They bring us uh, rice? And al- like any kind of vegetable, any kind of fruits, chicken, mm, even the... the (laughs) the (indiscernible) shoyu ramen, like, any different of canned meat, yeah. (laughs)</p> <p>H: What kind of canned meat?</p> <p>L: Like, spam, tuna, sardine, mm, sausage, kimchee, the one in the can...</p>
Mary Ann Interview 3.11	<p>H: so, what kind of food do you have when you're happy and you have a lot of it?</p> <p>M: Um, only rice, especially. Only rice everyday. Rice, um, even canned meat? Just little...</p> <p>H: Just a little canned meat?</p> <p>M: Yeah. Not much. Because canned meat, it's too expensive. That's why it's little. Um, chips? Drinks. Mm.</p> <p>H: Okay... so, what kind of canned meat?</p> <p>M: Um, spam.</p>

Comparing Food Prices – Participants compare food prices at different stores to obtain the best deals at the cheapest price

Document	Quotation Content
Sally Interview 12.17	<p>H: How do you- how do you know when they have the sale?</p> <p>S: I went, I check.</p> <p>H: You check.</p> <p>S: Yeah. The price, I go to the other store, so, if it's cheaper from the other store, I buy but if it's expensive, I go the other one.</p>
Sally Interview R2 2.14	<p>S: I go like... I go to Payless? It's... the just uh, about the chicken. The case of chicken. Or case of spareribs. Payless, twenty seven. And I oh, I go check, I don't have enough for that one. So I went to the (background noise intensifies, minor pause), went to the American Grocery. So that one is twenty seven, American Grocery, twenty- twenty four ninety. And I, okay, I buy here 'cuz that's the cheaper one. So the cheap,.. Payless, cheaper. 'Cuz every, sometimes they put down sixty- sixty ninety nine, Payless it's thirteen ninety nine. So I check. I r- I go to the other store, go, go to the other one and uh, other store too, so if it's same? But the first one I saw it's cheaper? Next day, I go back to the other store.</p>

<p>Amelia Interview 12.20</p>	<p>L: 'Cause we get it in a box from... um, American Grocery. H: American Grocery? L: That's where we mostly get our canned goods. 'Cause it's cheaper there. H: Cheaper. L: So we could get like, a month worth of food supply from there for \$100- below \$100. H: No way L: Yes. H: A month? L: Yeah. H: For less than \$100? L: Yes. Be- Or, it could be because there's only five of us in the house? H: That's a lot! L: That's a lot but we don't- we all work. H: Mm. L: So we're barely in the house H: Mm, right, right. L: And, sometimes we even have, we go to the next month having the same amount of canned goods we bought. H: Wow. L: Yeah.</p>
<p>Lorna Interview 3.10</p>	<p>And what, are there any like, specific stores you go to? L: Um, yes. American Grocery and Payless. H: Okay... why those two? L: 'Cuz uh, Payless? I like their vegetables? And their meat, 'cuz it's fresh... Uh... American Grocery, that's the cheapest um, place to buy the canned meat. (laughs)</p>

B2. Codes Under Subcategory: Access to Traditional (“Local”) Chuukese Food in Guam

- Local Chuukese food in Guam is more expensive than that in Chuuk, lowering participants’ accessibility to it.

Expensive Traditional (“Local”) Produce – The price of local Chuukese food sold in Guam is more expensive than that sold in Chuuk	
Document	Quotation Content
Amelia Interview 12.20	<p>L: But it’s also crazy, though, how much they sell it here? And the portion they sell it here ‘cuz it’s- that’s crazy, you could-</p> <p>H: Okay, no, talk about that, yeah!</p> <p>L: Okay, so you could get like, a, a pounded bre- breadfruit the size of the folded paper?</p> <p>H: Okay.</p> <p>L: For like, what, \$8?</p> <p>H: On Guam.</p> <p>L: On Guam.</p> <p>H: Uh huh.</p> <p>L: You can buy-</p> <p>H: Just this? (referring to folded paper)</p> <p>L: Buy um, at the side- of the size of the plastic bag in Chuuk for that price.</p>
Sally Interview 12.17	<p>S: Yes. I’m really miss. But if- if I want the local food from here? Expensive. They sell very expensive. The fe- small like, pounding kohn?</p> <p>H: Pounding?</p> <p>S: Kohn.</p> <p>H: Kohn. Kohn!</p> <p>S: (indistinct) In Chuuk, they sell that, like, \$2,</p> <p>H: Uh huh.</p> <p>S: From those, they don’t have plant. So over here, they sell very small like, only one person, only like, two- three, they- we eat like, three times, they sell like, \$7, \$8.</p>
Robert Interview 2.15	<p>R: Bag of rice is what, twenty five? Twenty six?</p> <p>H: The big one</p> <p>R: These- these Chuukese, they don’t really like any other rice than the Diamond G (laughs) I don’t know why (laughs)</p> <p>H: (laughs) Okay</p> <p>R: And if you get that... three or two kon? Sometimes they s- five dollars, six dollars, so you get four, but you- you only eat those in two days. But the fifty pound rice for two weeks, one week? And it’s (laughs) Everybody share the rice.</p>

Amelia Interview 12.20	<p>L: So that was- that's crazy. So, some... like, for- for me, we'd rather make it.</p> <p>H: Yeah.</p> <p>L: Than to go out and buy it. 'Cuz that's just crazy.</p> <p>H: Yeah.</p> <p>L: I don't know.</p> <p>H: Why do you think they sell it so high here?</p> <p>L: Because you... you can't- it's hard to do it here. Like, even the way- have- do you know kón is?</p> <p>H: I'm starting to learn that.</p> <p>L: Okay.</p> <p>H: In every interview they mention that. Where you pound-</p> <p>L: Yeah.</p> <p>H: Uh huh.</p> <p>L: So, the process of it is not easy.</p> <p>H: Uh huh.</p> <p>L: You have tools and um, we don't have tools here- those tools here.</p> <p>H: Interesting.</p> <p>L: Only... like, the supermarkets that sell do sell those? They have the tools, so. It's kind of... that's one of the barriers to getting...</p>
Sally Interview 12.17	<p>S: Because they're- Micronesian, here? Very hard to find their local food.</p> <p>H: Oh.</p> <p>S: That's why the market, they sell it? They just knew they gonna pay. Even though expensive? They just pay.</p>
Sally Interview 12.17	<p>S: Yeah, too expensive the... local food</p>
Sally Interview 12.17	<p>S: From those, they don't have plant. So over here, they sell very small like, only one person, only like, two- three, they- we eat like, three times, they sell like, \$7, \$8.</p>
Sally Interview 12.17	<p>S: Before, when I buy, I use my food stamp. Only fish, pounding kohn, uh... yeah. I spend more than \$200. But very small. Yeah. Like five- five lemmi? And... twenty- um... how many piece, the fish. I spend two hundred some. So, now I stop.</p> <p>H: (laughs)</p> <p>S: (laughs) Too expensive</p>
Robert Interview 2.15	<p>H: who- do you make the local food or?</p> <p>R: Uh.. s- not all the time? But like, bananas? Just buy the whole and then I cook it myself or my wife cook it... Breadfruit, usually, we buy. 'Cuz, in Chuuk, we make (laughs) our own. 'Cuz we have b- banana tree in our own. But here, we have to buy</p>

Robert Interview 2.15	<p>R: But back home, in Chuuk? Even if you don't work, you still can... go get your own fish, get, you know, make coconut. I mean the, breadfruit.</p> <p>H: Okay. Can you tell me more about that? In Chuuk? How it's different, you think?</p> <p>R: It's not like here that you pay rent, pay... so you- uh, it's- it's- different, you know. But nowadays that you're kind of adopting the... money is everything? So, it's kind of changing now. Kind of lo- loss... the respect.</p>
Robert Interview 2.15	<p>R: And it's, here? The breadfruit is more expensive than the rice.</p> <p>H: Is it?</p> <p>R: Yeah.</p> <p>H: Compared to-</p> <p>R: Because you get- yeah, if you live in the- on the main island? You have to buy. But if you're on your own island? You have tree. You can pick (laughs)</p> <p>H: You don't need money.</p> <p>R: Yeah. Don't need money to get it. (laughs)</p>
Robert Interview 2.15	<p>R: Yeah... That's why the... those people selling the kon here? They're m- they're making really good money.</p> <p>H: It's a lot?</p> <p>R: Oh, yes... I, sometimes they go get their breadfruit from the, from you guys, sometimes they just give it for free or just, ten dollars, twenty dollars, but when they make it and sell it, they can make hundred, two hundred dollars.</p>
Robert Interview 2.15	<p>R: But the kon only few, few people will eat. That's why I say it's expensive</p>
Sally Interview R2 2.14	<p>S: Because if like... food stamp, if I buy on food stamp, it's- they make it lower than, if I buy on cash, very expensive. Very small, the pounding kon. They sell it on.. Like, almost eight dollars or seven, but very small. Like uh, bread. So if I buy on foodstamp, they have the other price like, five dollar, four ninety nine, three ninety nine. Yeah. So... I can afford if I use foodstamp to buy. But if I use money, I cannot afford that one.</p>
Sally Interview R2 2.14	<p>S: But if- if uh, to sometimes I don't need to eat... my... the local food. 'Cuz too expensive. 'Cuz only small local food... that's the price for one case chicken. I can eat the case of chicken for like, two weeks? But the local food, only one. Uh, only one for dinner. Or, yeah. But the- same price for the chicken. If like, one fish? Very small? Twenty some dollars. Too expensive</p>

Lorna Interview 3.10	<p>H: Um, were there ways of getting it in Chuuk, that you can't get it here on Guam?</p> <p>L: Yeah 'cuz, um, mostly the, only the market? They sell it? At the... local food? And... sometimes, the market, they're out of the local food. So, we ask our (laughs) we ask our dad to go to Chuuk so he can get us (laughs) local food. Yeah. 'Cuz he only travel every like, when he wants to go and then he- he went. So yeah. (laughs) He went to Chuuk and get us local food. Then bring it out. Or, ask- 'cuz um, my second sister? She, she went back to Chuuk? 'Cuz um, we build our house? And, my dad said, it's.. It's wasted 'cuz we build the house. Nobody stay inside the house. So if nobody's stay in the place? People there gonna come and break in 'cuz they know that nobody there. So that's why my sister decide, okay I'll go stay in Chuuk (laughs) So yeah. We usually call her and, can you get us food? Local food? It's like, oh I'm gonna give to- just go ask the people, they came out (laughs) They want to travel out to Guam (laughs) Okay, I'll go try my best. If she found like, if she see somebody to bring? Then, yeah. But if she doesn't know anybody to bring our local food? We ask our dad, can you go Chuuk? 'Cuz you're free on the airplane? (laughs) Yeah.</p> <p>H: S- what kind of local food do you ask him for?</p> <p>L: Um, I don't know what's the, I don't know what's- what it called. The- the other local food. Epot? (laughs) That's my favorite one. Yeah.</p>
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Lack of Tools – One of the main reasons as to why traditional local Chuukese food is expensive in Guam	
Document	Quotation Content
Amelia Interview 12.20	<p>H: Why do you think they sell it so high here?</p> <p>L: Because you... you can't- it's hard to do it here. Like, even the way- have- do you know kón is?</p> <p>H: I'm starting to learn that.</p> <p>L: Okay.</p> <p>H: In every interview they mention that. Where you pound-</p> <p>L: Yeah.</p> <p>H: Uh huh.</p> <p>L: So, the process of it is not easy.</p> <p>H: Uh huh.</p> <p>L: You have tools and um, we don't have tools here- those tools here.</p> <p>H: Interesting.</p> <p>L: Only... like, the supermarkets that sell do sell those? They have the tools, so. It's kind of... that's one of the barriers to getting...</p>

Robert Interview 2.15	<p>R: But it's uh, it's not really hard now. But... to get it? If you don't have those tools? You get it if you pay for it (laughs) If you have money (laughs)</p> <p>H: The kon.</p> <p>R: The kon, yeah. But if you have it? Then it's not that hard for you 'cuz all you do is just get the breadfruit? And you can make plenty (laughs) for yourself (laughs)</p>
Robert Interview 2.15	<p>R: It's like fifteen minutes ride on the boat.</p> <p>H: Okay so um, my next question is are there- well you kind of discussed it a little but, are there any uh, traditional, right, Chuukese traditional ways of getting food that uh, you know of or that you're familiar with that you wish you could do on Guam, right now, that you can't do?</p> <p>R: Before, yes. It was hard 'cuz you cannot- you don't have the tools for to make the pounding breadfruit. Now, plenty here.</p> <p>H: Plenty tools?</p>
Epot Interview 3.9	<p>How do you um, either make the food last longer... um, you said it was difficult to explain in Chuuk.</p> <p>E: Yeah because don't have like some, like, the local food? ... I think we cannot s- it cannot stay long. It would stay long maybe it's gonna be bad? And the fish? We don't have like, freezer. We just salt (laughs) put more salt to keep it stay long. But sometimes, it's good. Sometimes, it's bad.</p>
Epot Interview 3.9	<p>E: And the fish? We don't have like, freezer. We just salt (laughs) put more salt to keep it stay long. But sometimes, it's good. Sometimes, it's bad.</p>
Robert Interview 2.15	<p>H: Why still eat it if it doesn't taste good?</p> <p>R: (clears throat) I don't know that's.... Especially the, the older, older than me? They don't care if it's three days, they still eat it. (laughs)</p> <p>H: Why?</p> <p>R: I don't know. Maybe because they used to it. They get used to it. They don't have fridge. They don't have, you know, it's not new to them. (laughs)</p>

C. Codes Under Category: Entrepreneurship

- Strategies that apply entrepreneurial efforts to increase money or food items coming into the household

C1. Codes Under Subcategory: Barter System

- Strategic process of exchanging low-value Western food/items for high-value traditional Chuukese food through coolers shipped via airline flights

Cooler Exchange Between Guam and Chuuk – Barter system that makes trades low-value Western foods/items for high-value traditional Chuukese food	
Document	Quotation Content
Sally Interview 12.17	<p>S: Yeah. Over here, I need to buy the local food. But if I have friend, I don't have- I don't need to buy. If my family came from Chuuk, they bring, I don't need to buy. I eat free.</p> <p>H: Good! How often do they bring food over?</p> <p>S: Mm... Like, one cooler? Have fish, have the pounding lemmal, uh, banana.</p>
Sally Interview R2 2.14	<p>S: Oh. Like... just example like, me, right? If I'm gonna go to Chuuk, so you, you know, oh, you going Chuuk tomorrow? And I, yes. Oh, can I, uh, pay the fifty dollars for one cooler? And you bring to my family? And I, oh, okay, okay, no problem. So you pay the cooler, I check on my name, I bring to Chuuk. So, I just telling you, so you call your family to go to airport, look for me there. So how I, that's how I do it like that. I don't uh, send. I wait for somebody leave to Chuuk? So I ask them to bring...</p>
Lorna Interview 3.10	<p>H: Um, were there ways of getting it in Chuuk, that you can't get it here on Guam?</p> <p>L: Yeah 'cuz, um, mostly the, only the market? They sell it? At the... local food? And... sometimes, the market, they're out of the local food. So, we ask our (laughs) we ask our dad to go to Chuuk so he can get us (laughs) local food. Yeah. 'Cuz he only travel every like, when he wants to go and then he- he went. So yeah. (laughs) He went to Chuuk and get us local food. Then bring it out. Or, ask- 'cuz um, my second sister? She, she went back to Chuuk? 'Cuz um, we build our house? And, my dad said, it's.. It's wasted 'cuz we build the house. Nobody stay inside the house. So if nobody's stay in the place? People there gonna come and break in 'cuz they know that nobody there. So that's why my sister decide, okay I'll go stay in Chuuk (laughs) So yeah. We usually call her and, can you get us food? Local food? It's like, oh I'm gonna give to- just go ask the people, they came out (laughs) They want to travel out to Guam (laughs) Okay, I'll go try my best. If she found like, if she see somebody to bring? Then, yeah. But if she doesn't know anybody to bring our local food? We ask our dad, can you go Chuuk? 'Cuz you're free on the airplane? (laughs) Yeah.</p> <p>H: S- what kind of local food do you ask him for?</p> <p>L: Um, I don't know what's the, I don't know what's- what it called. The- the other local food. Epot? (laughs) That's my favorite one. Yeah.</p>

Lorna Interview 3.10	<p>H: Um, so when your dad brings coolers here, do you ever send coolers back?</p> <p>L: Yes. If my sister needs something? Then we, um, my sisters and my brothers? We have to get the cooler, put stuff, whatever she wants. Like, chips (laughs) pancake, the pancake mix... canned meat for her kids. Yeah...</p>
Lorna Interview 3.10	<p>H: Um, so when your dad brings coolers here, do you ever send coolers back?</p> <p>L: Yes. If my sister needs something? Then we, um, my sisters and my brothers? We have to get the cooler, put stuff, whatever she wants. Like, chips (laughs) pancake, the pancake mix... canned meat for her kids. Yeah...</p>
Lorna Interview 3.10	<p>L: Yes. In the cooler. You can bring two cooler. One for fish, one for only the local food. Yeah. We know that, dad is coming like, today. We all get ready to fix food for dad to eat? The one we cook here? And we're gonna go finish out the (laughs) food in the cooler (laughs) Yeah</p>

C2. Codes Under Subcategory: Extra Money for Household

- Strategies that utilize entrepreneurial efforts to raise extra money for the household

Selling Handicrafts – Selling handmade items in exchange for money	
Document	Quotation Content
Kisha Interview 2.26	<p>K: Mm... uh... And then me, for example, I'm making the mar mar?</p> <p>H: Mar mar.</p> <p>K: Yeah. The lei? 'Cuz some people, they like to use it to match to their outfit? Go to church and stuff like that? Yeah.</p> <p>H: Could you tell me more about that? You said you do it yourself?</p> <p>K: Yeah. So I fi- so I made it out of the foam sheets? And then I will sell it. Let me see if I have pictures, I'll just show you.</p> <p>H: Okay.</p> <p>K: (laughs) Um, I do that like, and it comes in really, um, good on a- on hand because sometimes when I need water, money for water, it helps also.</p>
Kisha Interview 2.26	<p>H: Do you, do you think you know, you making your sales, it really helped when you needed-</p> <p>K: At time, yes. At time, like because like, sometimes I don't make but then when we need something? That's when I would just make and so, it comes to the time where we need it, then we use it. Them, you know, we, it's like, I sell it on the right time of the time that we need. So I feel like at some point? Yes.</p>

Mary Ann Interview 3.11	<p>M: Yeah. Uh, they will, um, looking for their job... They have job and they will buy food. Mm. The Chuukese, they very smart. They looking for job. Yeah. Go to school. Mm...</p> <p>H: Is there anything else?</p> <p>M: Um... They try their best. To have food. Uh, they make some handicraft. To sell... And they have money and buy food. They uh, you know the clothes? They sewing clothes? They make uh, some mat from their own hands, they make.</p>
Kisha Interview 2.26	<p>H: So who, could you tell me more about that? Like who do you sell it to?</p> <p>K: Um, (clears throat) sometimes it- oh, so it's like, my relatives? And my husband's relatives? Or just friends on facebook? When they see it on facebook then they will ask about it and then they'll ask to, you know, or sometimes they order for what oc- occasion they have? And stuff like that... And sometimes uh... my auntie also order for graduation?</p>
Kisha Interview 2.26	<p>K: And in my head I said, I need to make something (laughs) Yeah. So that's like, me, that's what I would do to um, you know, get what, what do I think, what do I say, for, in order for me to get some um, money to pay for, for food or something like that. Yeah.</p> <p>H: So can I ask, when did you first start doing that?</p> <p>K: This?</p> <p>H: Mhm</p> <p>K: Um</p> <p>H: Selling it, I mean</p> <p>K: Uh... I think it, I just started if not last year then the end of the year before. The end of the, the end of '18.</p>
Kisha Interview 2.26	<p>K: I mean I, I just... a cousin of mine was living in the states and she would post her, her stuff and I was just asking her question about a, what kind of materials do you use? They look nice. And so she went ahead and gave me, just go ahead and look for this, this, this, this, and then you make your own design. I said okay. So I didn't really think, but then it comes to the, we're heading to Christmas, and then we are um, planning to have exchange gift, and I'm thinking to myself, how am I gonna get the exchange gift (laughs) So, a lot of things comes into mind like, car wash, sell stuff, you know. So then the- I guess that's the only thing I can do, you know. Stay home and do something. Where I can also use to help and support family.</p>
Kisha Interview 2.26	<p>H: Okay, um, so can I ask, like how ab- like roughly how much were you able to make off of those?</p> <p>K: So (clears throat) I think it depends on, 'cuz I sell the one for the heads, seven dollars. And then the long ones, I sell it for fifteen. Yeah. So if... if they order a lot then it's, you know, but sometimes they only get the- a set? One for the top and one for bottom, so. Yeah. Like right now, I only have an order for one. For the head. So that's seven dollars. Yeah. For March. Yeah.</p>

Kisha Interview 2.26	<p>H: So can I ask, when you say at the time when you need it</p> <p>K: Because sometimes we, like, our water is low? Drinking water? And (clears throat) and then I'm in the process of making one and one is done, I would just take picture and post and say, um, just finish or uh, all done, or something like that. And then somebody will say, uh, can I buy that? You know? So then, I feel like, you know, okay, there's the wat- the money for the water, you know?</p>
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Offering Services – Offering services in exchange for money	
Document	Quotation Content
Kisha Interview 2.26	K: And then some, they offer to, like cut grass or um, do something to help other people so they can get like, at least twenty dollars for, you know, the food or, something they need...
Tritee Interview 3.4	T: Uh, sometimes I'm, 'cuz sometimes when I'm, there's people come to me to asking for help like massage? Yeah, I massage them and they give me some cash. Mmm, so, that's what I use to pay my meal.
Mary Ann Interview 3.11	<p>M: Yeah. Uh, they will, um, looking for their job... They have job and they will buy food. Mm. The Chuukese, they very smart. They looking for job. Yeah. Go to school. Mm...</p> <p>H: Is there anything else?</p> <p>M: Um... They try their best. To have food. Uh, they make some handicraft. To sell... And they have money and buy food. They uh, you know the clothes? They sewing clothes? They make uh, some mat from their own hands, they make.</p>
Kisha Interview 2.26	<p>H: And then offering work or services. Do they, is it, do they offer their, you know, any type of work just to relatives or</p> <p>K: Uh, sometimes could be like their neighbors? Or, um, friends? They'll just help them like clean their hou- yard, or... yeah.</p>

D. Codes Under Category: Managing Food Supply

- Strategies that “stretch” food with specific cooking methods and recipes to maximize food servings while limiting the amount of food purchased. Participants also portion food amounts among household members.

D1. Codes Under Subcategory: Stretching Food

- Use of specific cooking methods and recipes to maximize food servings while limiting the amount of food purchased

Cooking Methods – A way to stretch food using specific meals or recipes	
Document	Quotation Content
Kisha Interview 2.26	K: Um... Sometimes I have to, you know how we do, we cook pancit or vegetables? More vegetables and less meat. Like if I have some vegetables in the fridge, I will mix it whatever meat is there just to make it enough.
Kisha Interview 2.26	K: So... that's what- like, so- we will have rice? But meat and stuff, that's the part that we don't have. Sometimes we just use soy sauce. And then I think that's when we start experimenting and we use the butter with the hot rice and soy sauce and then we eat (laughs).
Kisha Interview 2.26	K: And then we uh, you know how they make arroz caldo? But we just soup the rice with coconut milk. Yeah. H: So you made soup with rice and coconut milk. But it's not the same as arroz caldo- K: No H: -like you're saying K: Yeah. It's the- it's just soy- it's just the rice that we uh, soup it and then put coconut milk in it, and if there's no meat to eat with, we just put soy sauce.
Lorna Interview 3.10	H: Is there anything else you can remember that you did back then to- L: Uh- H: -make sure you had? L: Um... well, I have uh, the flour? The flour? Yeah. I make that also. And a different kind. It's like a, pancake? But it's local. It's, we- yeah. (laughs) And also make uh, we also fix that, I don't know what to call it, but it's like a soup. We make it and then it's, it's, it's good. (laughs) H: So the local pancake L: Yeah H: What do you- L: That one, we only use uh, flour and the water, sugar. That's what we use it for. (laughs)
Amelia Interview 12.20	L: I miss being- just being able to go around and see the ripe bananas and ha- um, cutting it down, cooking it myself the way I like it.
Amelia Interview 12.20	H: Yeah. I was gonna- One of my questions is like, are there any ways of getting food, that you would do in Chuuk, that you wish you could do here? L: I did it once. I really wanted banana with coconut milk.

	<p>H: Oh.</p> <p>L: So I went to, like I was telling you, how it's different? The bananas here-</p> <p>H: Yeah.</p> <p>L: So I went to Payless and I was like, these aren't the kind of bananas (laughs)</p> <p>H: (laughs)</p> <p>L: I mean, if you cooked it the way we- uh- how we cooked it, and then with the banana uh, with the coconut milk, it wouldn't taste the same.</p> <p>H: Mhm.</p> <p>L: So, it- it was kind of hard.</p>
Robert Interview 2.15	<p>R: Some- some people, they don't have meat. They just eat rice with.. Sometimes they- if they have sugar, put water and sugar and then they just, if there is no meat. And if there is kon, or the local food, they will make like a bowl, put water, lemon, salt, and they just... eat with, eh, with it.</p> <p>H: The kon, lemon, water, salt.</p> <p>R: Mm. Like a, a bowl, put water, salt, big, and then put lemon, then pick the kon, put in there (laughs)</p> <p>H: They dip it?</p> <p>R: Dip it, yeah (laughs)</p>
Epot Interview 3.9	<p>H: Tango... So what is that? That's bread? Small bread?</p> <p>E: Yeah, we make a ball, like a ball? And we cook in water and uh, coconut milk.</p> <p>H: That sounds yummy</p> <p>E: It's good (laughs)</p> <p>H: (laughs) So you do that on Guam</p> <p>E: Yeah... when I see we don't have food to eat, I'll just make that so we can eat...</p>
Robert Interview 2.15	<p>Just like the fish. When we first went to the states? Oh, the fish there is different taste (laughs)</p> <p>H: Different taste.</p> <p>R: Yeah.</p> <p>H: In the states.</p> <p>R: Mm. But after awhile, I got used to it... I make my own mash potatoes. (laughs) Looks like kon. (laughs)</p>

Amelia Interview 12.20	<p>L: We'd have to cook it some way. Yeah. Or just like just pre-heating it.</p> <p>H: Yeah, can you give me an example?</p> <p>L: Like... um... say, spam.</p> <p>H: Mhm.</p> <p>L: My brothers don't like eating it.. they have a certain way of cutting it?</p> <p>H: Mhm.</p> <p>L: So they like it really thin?</p> <p>H: Mm.</p> <p>L: Yeah, and they... whenever we finish, um, frying it, so what-we'll cut it into thin pieces, fry it, like really fried, like over cooked fried (laughs) like crispy, really crispy, and then- you see how there's oil, right?</p> <p>H: Uh huh.</p> <p>L: We get napkin and try to soak out the oil.</p> <p>H: That's good!</p> <p>L: Like really, really, just let it sit there for awhile. Or they'll damp it (claps)</p>
Laila Interview 1.29	<p>L: No, no, no, it's- it's coconut milk, but it's like a (laughs) you have to grind it, and then, you know.</p> <p>H: Okay.</p> <p>L: (laughs)</p> <p>H: So-</p> <p>L: (laughs) squeeze the milk out.</p>
Robert Interview 2.15	<p>R: Yeah. And the other kind, made from breadfruit but we call it epot</p> <p>H: Epot? Oh-</p> <p>R: S- same thing as the kon. You know kon right?</p> <p>H: Yeah, the pounding-</p> <p>R: The pounded breadfruit</p> <p>H: Yes.</p> <p>R: Yeah. But the other one is... we preserve in the ground for like, ten months? Then take out and it tastes kind of sour. Different taste (laughs)</p> <p>H: So you do that on Guam?</p> <p>R: Oh, yeah.</p> <p>H: You have the-</p> <p>R: You can use- no, no, they just bring the... thing from Chuuk and they cook it here.</p> <p>H: Oh.</p> <p>R: But it's- it's- kind of long process than the kon.</p>
Robert Interview 2.15	<p>R: Sometimes the potato?</p> <p>H: Uh huh.</p> <p>R: Chop it down and throw it in.</p> <p>H: Were these things that she found? Or she had to buy this, too.</p> <p>R: Little, yes. Sometimes she buy. But sometimes she- she- we kind of grow what's at the house. But not big. But v- no, just (clears throat) but like, she, she has her own tapioca.</p>

Robert Interview 2.15	<p>R: I remember, because I did that sometimes. Not everyday, but there were some days that we have to... use, I mean, and also, drink uh, you know, mango season?</p> <p>H: Mango season?</p> <p>R: Mm. We- that's- you- we eat the mang- the mango with the kon (laughs)</p> <p>H: Okay.</p> <p>R: No meat? We just mango, kon. Uh... that's when I was in elementary school.</p>
Tritee Interview 3.4	<p>H: What about um, with the rice?</p> <p>T: I just cook it, uncut only?</p>
Tritee Interview 3.4	<p>T: Yeah, I like to... uh, cook that yam with the chicken? And make kadun manok?</p>
Epote Interview 3.9	<p>E: And the fish? We don't have like, freezer. We just salt (laughs) put more salt to keep it stay long. But sometimes, it's good. Sometimes, it's bad.</p>

Soup – A dish made with diluted rice to stretch food servings	
Document	Quotation Content
Mary Ann Interview 3.11	<p>M: Yeah. Little by little. I make soups, any kind of cook, I will use because the s- the rice will stay long (laughs)</p> <p>H: Tell me more about that! The- what you cook with the rice.</p> <p>M: Um, when I cook the rice? I, you know the rice cooker? The rice cooker, four cup, four water. Four rice, four water. So me? I will take two cups, four water. It means, soup! The rice is getting bigger... That, I eat.</p> <p>H: Tell me more about the soup. What do you-</p> <p>M: Soup. (laughs) The soup, only the rice? Um, the water? I think it's two cup rice? Two cup rice. The cooker cup? It's too little. So I will use the cup rice? Four water. Two cup rice and four water. Match, then put on the stove. Then the rice, it's getting bigger. Bigger than the rice cooker I put four cups, four water. So, two cup rice, four cup water, join together, it's very big. So it's soup. Not hard. Uh, it's soft. Yeah.</p> <p>H: Do you-</p> <p>M: So, you know the bread? The flour. The flour? I will cup, one cup rice? And, um, two cup water. Put in the pot. So when it's uh, what's that? Cook! So, I will cup the flour? Only one? And put inside? So, the rice, it's not soft. It's very big, but it's um, little hard. Because the flour. Mix together with the rice. So it's soup but it's not soft. It's not too much water.</p> <p>H: Do you put anything else in your soup?</p> <p>M: Um, according if I have can of sardine but sometime I don't have. Mm. If I have chicken? Okay, I will put little chicken inside the rice.</p>

Mary Ann Interview 3.11	<p>H: Okay... and during this time when you're hungry and your friends bring you food and you have to make the soup, how does it feel?</p> <p>M: Oh, different. Because when I have rice? I cook rice cooker. I need to cook the rice so I'm very healthy when I'm eating. So, when I use soup, when I cook I use soup. Uh, it's little healthy. My body, it's little healthy. Because it's different. The soup and the rice.</p> <p>H: So your body feels it</p> <p>M: Yeah. My body, it's not good. Yes, I will eat the soup. It's make me, strong but not strong.</p> <p>H: Sounds very hard.</p> <p>M: Yeah. When I eat rice? Uh, from the rice cooker. I will uh, in the morning till lunch. So if I eat soup, in the morning, uh, eight o'clock. So, ten o'clock or eleven o'clock, mm, I'm hungry.</p>
Sally Interview 12.17	<p>S: When they don't have enough food, like, if we still have the bag of the rice, they, they get soup. Only put water, they cook, so they- when it's cooked, it's really big but small rice they cook like soup. Like the chicken soup, the- what's the- I forgot. So they... when they cook the rice when they don't have food. So they give the one of the family. So they put the sugar, they mix it</p>
Sally Interview 12.17	<p>H: So they make soup out of rice?</p> <p>S: Yes. Only rice, just straight rice. With the water.</p> <p>H: And sugar.</p> <p>S: Yes.</p> <p>H: So it's like a porridge, like a... and then they mix that with chicken?</p> <p>S: No, not even-</p> <p>H: Oh.</p> <p>S: -chicken.</p> <p>H: Just rice.</p> <p>S: Only the rice.</p>
Sally Interview 12.17	<p>S: If they don't have that, they collect the water..</p> <p>H: Uh huh.</p> <p>S: They have enough to buy the flour, so they cook the taro with only water and they make it to soup to...</p>
Laila Interview 1.29	<p>L: Like that for three months for that amount of people. So... sometimes we would just um, you know, cook food and um, like we have this- we cook soup? Yeah. To, you know, for- so that it- it'll be enough for everyone</p>
Sally Interview R2 2.14	<p>S: Mm... like... (laughs) because when we like, if I have meat with my rice? I really enjoy to eat my food. But if, if I don't have the meat to eat with my rice? I don't feel like, mm, I like to eat my rice. So, I'm thinking, oh, what I'm gonna really uh, good to eat, finish my rice. Oh, maybe I put the sugar with the water? Or, I just put- pour the soy sauce on top the rice. So, I fi- finish all my rice. If I don't have meat. (laughs)</p>

Sally Interview R2 2.14	<p>S: Well, we just use the our custom. If we, if we don't have meat? We just get the rice, put the water, and put sugar. Like, the soup. So we just mix it and eat (laughs) no meat (laughs)</p> <p>H: Yes! Tell me about that. Why, why put sugar and just tell me more about that soup.</p> <p>S: Because if they don't have meat? And... we cannot feel like eat straight the rice, eat straight. So, we put water inside the cook rice, and we make it soft, put the sugar? Mix with the sugar and then, that's all we feel like it's taste good to eat. Like, we already eat meat with the rice but no, only the water and sugar (laughs)</p>
Sally Interview 12.17	<p>S: No, that's our... our custom in Chuuk. If we don't have food, they do that. But... if nobody working? They only eat the local food.</p>
Laila Interview 1.29	<p>L: Um... like, fam- like we lessened the... not lessened but my parents can only afford this much to, um, you know, for all of us and we have to, you know, um, like what I said, the- cook soup? So that everyone can, um, be able to, you know, get a little (laughs) and eat</p>
Robert Interview 2.15	<p>R: But whatever she provide? Just, that's all we have. No complaint. (laughs)</p> <p>H: What- what kind of food did she prepare for you guys?</p> <p>R: This... like... yeah, I think it's like, not... once- once in awhile, we- we will have like, chicken. But almost everyday, can. Canned good. Canned meat. But if she has to... like, soup. Mix, soup out of it so it can be enough for everybody.</p>
Robert Interview 2.15	<p>R: Like one, one can of mackerel.</p> <p>H: Mackerel.</p> <p>R: Mackerel, just for example. 'Cuz usually we (coughs) can of mackerel, every meal, one. And then she will mix it</p>
Robert Interview 2.15	<p>R: So, four of us? So, and then, or my first cousin, he's... see, he stay with us until he pass away. And we're still young and he was already there. He's older than me. So like, six of us, in the house. Oh, plus my grandma. So.. that's why have to make big pot out of can of mackerel (laughs)</p>
Robert Interview 2.15	<p>H: Oh, okay. So she would use the canned goods-</p> <p>R: Yeah, to make the mackerel soup (laughs)</p> <p>H: Okay. And it- and she made the soup-</p> <p>R: Yeah</p> <p>H: -to be able to-</p> <p>R: Make- make it bigger so we can enough for all of us.</p> <p>H: Oh. Okay so-</p> <p>R: For one meal.</p> <p>H: Got it. So one can all of a sudden becomes-</p> <p>R: Yeah, we share to make.. To make it enough for everybody</p>

Robert Interview 2.15	<p>R: Yeah, we share to make.. To make it enough for everybody.</p> <p>H: Soup...</p> <p>R: 'Cuz... when I was like, el- elementary school? Very hard 'cuz big family. Everybody's in house. Like... five families. So I remember the, the pot it's like this big (laughs)</p>
Kisha Interview 2.26	<p>K: And then we uh, you know how they make arroz caldo? But we just soup the rice with coconut milk. Yeah.</p> <p>H: So you made soup with rice and coconut milk. But it's not the same as arroz caldo-</p> <p>K: No</p> <p>H: -like you're saying</p> <p>K: Yeah. It's the- it's just soy- it's just the rice that we uh, soup it and then put coconut milk in it, and if there's no meat to eat with, we just put soy sauce.</p>
Epot Interview 3.9	<p>H: Who do you ask? For the food..</p> <p>E: Uh, my parents? My brothers and sisters? And, sometimes if we're out of food but if there's something like flour, small rice? I like, I make it... like, soup? The rice, make it soup. So it's gonna be more to enough for my family. And the flour I make pancake? Make soup?</p>
Epot Interview 3.9	<p>H: You make soup</p> <p>E: Soup like arroz caldo. For the rice and the flour? Like Chuukese, we make a ball like the bread? We fix it? Into we call tango.</p>
Epot Interview 3.9	<p>H: Okay... so for the soup, arroz caldo, you said, is there anything else you put in the soup?</p> <p>E: Uh..</p> <p>H: Besides rice?</p> <p>E: Yeah, if I have chicken? Chicken. If I don't have, only the rice? And the coconut milk?</p>
Lorna Interview 3.10	<p>Okay so, you mentioned that you made bread and soup with-</p> <p>L: Yeah</p> <p>H: with the rice?</p> <p>L: Yes</p> <p>H: What- what else goes in the soup? Can you tell me more about the soup?</p> <p>L: Uh.. I bought chicken 'cuz we still have like uh, one bag of chicken. And, yeah...</p>
Mary Ann Interview 3.11	<p>M: Yeah. My friends, when they come, they bring me rice. Only thing I will use? Soup.</p>
Mary Ann Interview 3.11	<p>M: So soup? Not healthy when I eat. Too much eating soup? Not healthy</p>

Curb Hunger – Intentionally consuming specific foods that curb appetite or provide energy

Document	Quotation Content
Laila Interview 1.29	L: But here it's like, sometimes we would only like, eat... something from our fridge like... um... eat soft drink (laughs) Just drinks. Like sometimes we would do that and like for me, because um... especially like that we don't get um transportation and our schedules are like... um, very, uh, tight? So we don't have time to go to the store or to ask somebody to come and we'll just, you know, try to grab something and just, munch on it. (laughs) To be... to have energy throughout the day.
Laila Interview 1.29	L: For us... I don't know for us. (laughs) We just try to get... eat as, anything that we can (laughs) you know, be able to, um, get by through the day. Even if it's just um, just, like a- a bread? Yeah. Just so that we can have energy.
Sally Interview R2 2.14	S: That's why, that's the really their favorite in Chuuk. The coffee. If they, they really know somebody gonna fly to Chuuk, oh, can you please at least give them like, two, two coffee for me? 'Cuz uh, when they drink coffee, when like, the group... they make- they boil the water, they sit down, and they drink the coffee, they don't need to put the rice, the all the food, they don't need to put that. Only the coffee they drink. So... when they like, if I have meeting, oh, we make coffee. And we make sandwich because tonight we're gonna have meeting. Okay, so, if- if I make the sandwich, they don't eat the sandwich. 'Cuz they just talk and drink the coffee
Sally Interview R2 2.14	S: Like, they really- yeah, they really like the coffee 'cuz... they don't waste the food to eat... If they drink coffee, they don't need to eat.
Sally Interview R2 2.14	S: Because sometimes, me, right? If I drink the coffee, I feel like, full. I don't need f- I don't need to eat. So, sometimes, I really want like, oh, I'm not gonna drink coffee 'cuz if I drink the coffee I'm not gonna eat (laughs) Make me st- uh, strong, yeah.
Sally Interview R2 2.14	H: So they like the coffee, because when they're drinking it, they feel like, they don't have to- S: Eat. H: -eat S: 'Cuz they already- H: Full S: They just drink and then, okay, lets go sleep (laughs) H: Sleep? S: Sometimes they don't sleep (laughs)

Leftovers – Food saved from prior meals or taken home from work or family functions

Document	Quotation Content
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Amelia Interview 12.20	<p>L: Yeah. Because, if, for example, we cook three cups of rice... and, we don't eat all of it? That leftover piece? We take it out, put it in the fridge</p> <p>H: Uh huh.</p> <p>L: Just to save... or-</p> <p>H: Uh huh.</p> <p>L: Con- yeah, conserve.</p> <p>H: Uh huh.</p> <p>L: So, the next day, someone has or wants to eat rice? We take it out, microwave it. That's how we save our rice.</p>
Sally Interview 12.17	<p>S: If I buy the, like, the whole thing? The big one? So I sit down, put salt, put inside the tupperware and I put it in refrigerator. So like, I eat today, go work, come back from work, I eat again, I lay down, I get up again, I eat again (laughs)</p> <p>H: (laughs)</p> <p>S: Maybe like, one week, I save that to eat all the week</p>
Sally Interview R2 2.14	<p>S: Everyday. Everyday when I uh, go home? Like the... the, the, their food they don't eat so my boss gave me, oh, you can get this one, you get this one, you don't need to cook. So everyday. Sometimes they don't have, uh... to eat he- uh, at their house? So I don't get from here uh, from the my boss. So if they eat next day? They share with me next day. But everyday when I come to work, they always give me the, their leftover.</p>
Kisha Interview 2.26	<p>K: Like whatever is the leftover, we will just preheat it and eat. Or, sometimes when she goes to work, she comes home with some leftover food of what they ate at- at work. And that's what we will eat... So those times, I feel like when can we find, you know? Uh, extra money to get food or... but then, when we started to think that way, then we just... pray and, eat what we have that day. And it's like, the next day, something else comes, you know, just enough for that day. So... we learn to be thankful for whatever is there. During that time.</p>
Robert Interview 2.15	<p>R: Well after birthday party or wedding party we have plenty leftover so (laughs)</p> <p>H: Yeah? So is there, um-</p> <p>R: 'Cuz you know how the Chuukese, when they really have party they, they don't... limit. But they just wanna make more food for everybody (laughs)</p> <p>H: Okay, yeah-</p> <p>R: And then everybody go home with a lot of food (laughs)</p> <p>H: Yeah, tell me- tell me more about that, the parties.</p> <p>R: That's one.</p> <p>H: Mhm.</p> <p>R: Sometimes... it's not- it's more than enough, so we have to... it's better to give away than throw it away. You know, garbage.</p> <p>H: Uh huh.</p> <p>R: But he- it happens sometimes. Not all the time, but sometimes.</p>

Robert Interview 2.15	<p>R: Not everybody bring the- but the family of the... like the, the bride and the groom. They will b- yeah. But the guests just, you can just get whatever food is on the table. But it's sometimes more than enough. Some- sometimes, it's not...</p> <p>H: Sometimes it's not?</p> <p>R: It's not- you just eat whatever is there and then not enough to bring home. Everybody are not the same. So there's some people that have big family, and they have money? That's when the party's big. (laughs)</p>
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D2. Code Subcategory: Portioning Food

- Strategies that portion food amounts among household to ensure that there was enough food supply to last until the next anticipated time of plenty.

Food "Budget" – Participants' calculation of food portions	
Document	Quotation Content
Sally Interview 12.17	<p>S: I'm gonna sort for food for the, like, one month? So... I- I save like, I buy, like, case chicken, the meat for my kids. So, I save the chicken for- half the chicken for like, uh, the middle to end. So... for like, me and my boyfriend, my dad, I put aside for me and my dad to like, just make it plenty cook but the food I save, I save for my kids. Like, for Monday, Tuesday, they're going to have enough food for the other week when I have enough money to pay.</p>
Sally Interview 12.17	<p>S: They buy the case of turkey tail. So, they slice it, put salt, they put inside the tupperware so like, one day take out five, soup or barbeque. Next day, take out five. They don't cook the whole case 'cause-</p> <p>H: Oh!</p> <p>S: -they calculate how many days they can have enough for them.</p>
Sally Interview 12.17	<p>S: So I was... I really feel like, long time, that's why I know how they- when they ran out for- they don't have budget for food, they don't have food, so, now I know how to like, save food for my family. 'Cause I already know, long time, like, I- I already learn when I stay with the other family.</p> <p>H: When you were with the other family.</p>
Sally Interview R2 2.14	<p>S: Okay. If like, I'm- I- uh, really like uh, think like uh... I see oh, I save my food? To, it's gonna be going to the other month? And I have, uh, I work for my other food to cover the one for the like, if I don't have enough for the other month. So, I'm planning to like... oh, maybe we gonna make uh, big dinner. 'Cuz we're gonna waste this. 'Cuz already passed this uh, we still have it. So uh... I just like, planning with my kids like, oh, we gonna have barbeque 'cuz I- I don't work 'cuz I already have the one I pack my... so, when I have big dinner, I still have the one I already... cover for like, the other month but my food I keep save it for the, this month? Like this month? I going to the, my food like, going to the other month. 'Cuz when I really worry about my food not enough? I'm really, uh, like... if my like, bag of rice, the fifty pound rice. Everyday I come home uh, get off from work? I just like, look, oh, okay, I know ho- how much I, I'm gonna buy</p>

	<p>another one 'cuz I don't have enough for next month. So... mm... that's how I (laughs)</p>
Laila Interview 1.29	<p>L: So- but sometimes it like... it... they're out of food before. So they just... I don't know how we do it. But... even the littlest things they, you know, try to be very, um... careful. Like that little things but the food that they make, they would limit it. And then just cook a little so that they can, you know, survive day by day. Until the next one comes out.</p> <p>H: Okay. So... for the ones on food stamp they buy a lot when the new round comes in?</p> <p>L: Yeah.</p> <p>H: And then to make it last, they... only make a little bit of it?</p> <p>L: Yeah. If they see that it cannot last until the next um, next round to come in? So, um, they just make a little... like, until that day</p>
Lorna Interview 3.10	<p>H: What about in Chuuk?</p> <p>L: In Chuuk? Where we like, have a f...</p> <p>H: Enough to eat, yeah.</p> <p>L: Enough to eat... okay... um, usually we have fish? We have banana. You know, my dad knows how to save... save this one, and then cook this one (laughs) Yeah... Mm... Um, taro...</p>
Sally Interview 12.17	<p>S: Rice, chicken, sometimes the canned food like, uh, spam, corned beef. If we don't have enough for that, we just buy the whole chicken</p> <p>H: Uh huh</p> <p>S: and I save it in the 'frigerator so I cook like, three piece, four piece, I make soup.</p> <p>H: Soup.</p> <p>S: So all the family eat.</p>
Epot Interveiw 3.9	<p>H: How do you make sure that food lasts you long enough so you don't feel hungry again?</p> <p>E: Can I have...</p> <p>H: No, take your time</p> <p>E: I think, um, in Chuuk it's kind of hard to, me to explain but, here in Guam? When we like, having something to buy the food? I'm... I usually like, buy food for all the way to the next pay? So we can have food for... like, we buy more and save it? For the whole month? So we could not uh, have the food uh, again (laughs)</p>
Laila Interview 1.29	<p>H: Do you remember what in particular, or like can you tell me a little bit more about that, like his saving or your family saving like, was it going to a specific thing? Or...</p> <p>L: Um, our food in particular. And, um, because we felt like we, like, we have nothing in the fridge when they left.</p>

Sally Interview R2 2.14	S: 'Cuz when I really worry about my food not enough? I'm really, uh, like... if my like, bag of rice, the fifty pound rice. Everyday I come home uh, get off from work? I just like, look, oh, okay, I know ho- how much I, I'm gonna buy another one 'cuz I don't have enough for next month.
Sally Interview R2 2.14	S: Yeah, sometimes, if I have uh, plenty food to save? 'Cuz everyday like, when like work like, somebody give me the little bit money? I go buy. But if I still have food I just buy only small to put, to save it for the next month
Epote Interview 3.9	E: Oh- Oh, oh, excuse me? Like what did you ask happen often? For out of food or, oh, sometimes. Sometimes if... we didn't like, budget our things. We eat more and (laughs)... H: Okay... So not all the time- E: Yeah H: Only when, you said- E: Only sometimes if we... if we, uh, if we careful about what we have to...
Sally Interview R2 2.14	S: If I buy like... one? Like this? (motions with hands) this one? H: What is that one? S: The, the bottle for the- H: Oh S: -and I use the scoop, small spoon... So, I make it enough for next day. The other day. I, I make the coffee enough for like, one week? And we, I sit down with my friend, okay, we drink coffee. How- how many of us? Oh, six. So I scoop six scoop so I mix the big uh, coffee maker? And then I pour. For them. And then next day again, oh let's go, we drink coffee
Tritee Interview 3.4	H: So, next question, um, can you tell me about a time in your life um, when you felt like you had enough food to eat? You didn't have to worry about food. T: Yeah, I didn't have to, I didn't have to worry about food... If I have enough food? Yeah, I make sure that I... it's gonna last me at least one month?

Bulk Foods – Cheaper foods bought in bulk to increase amount of food within the household and to capitalize on sale prices	
Document	Quotation Content
Sally Interview 12.17	S: I'm gonna sort for food for the, like, one month? So... I- I save like, I buy, like, case chicken, the meat for my kids. So, I save the chicken for- half the chicken for like, uh, the middle to end. So... for like, me and my boyfriend, my dad, I put aside for me and my dad to like, just make it plenty cook but the food I save, I save for my kids. Like, for Monday, Tuesday, they're going to have enough food for the other week when I have enough money to pay.

Sally Interview 12.17	S: They buy the case of turkey tail. So, they slice it, put salt, they put inside the tupperware so like, one day take out five, soup or barbeque. Next day, take out five. They don't cook the whole case 'cause- H: Oh! S: -they calculate how many days they can have enough for them.
Laila Interview 1.29	L: Mm. Like... we just eat, like ramen? 'Cuz usually that's what we get, because, you know, like box of ramen. So it can last more. More than two weeks (laughs)
Robert Interview 2.15	That's why... actually, the rice is almost everyday. You see the rice. You know, there- 'cuz it's... we buy the fifty pound (laughs) so it's- we always have (laughs)
Epot Interveiw 3.9	E: Buy uh, I usually buy two for one month. Two rice for one month. H: Two rice. The... E: Fifty pound. H: And then the chicken, is it the frozen? E: The leg quart- yeah. The leg quarter?

Children & Elders First – Households containing children, elders, and sometimes even visitors, saw high levels of portioning.	
Document	Quotation Content
Sally Interview 12.17	S: Every month when, like, if I don't, like, when I pay all my bills so I can like, little, so, that's the time I don't have like, enough food for- so I just save like, for my kids, I only eat small, I save it for my-
Sally Interview 12.17	S: I'm gonna sort for food for the, like, one month? So... I- I save like, I buy, like, case chicken, the meat for my kids. So, I save the chicken for- half the chicken for like, uh, the middle to end. So... for like, me and my boyfriend, my dad, I put aside for me and my dad to like, just make it plenty cook but the food I save, I save for my kids. Like, for Monday, Tuesday, they're going to have enough food for the other week when I have enough money to pay.
Laila Interview 1.29	L: we cook soup? Yeah. To, you know, for- so that it- it'll be enough for everyone but sometimes, I think because those people were they thought like we have a lot? So they would get like a lot of food and sometimes some of us like for me and my sister we wouldn't eat. Like, we would just get like some little things because we want them to eat first like, we want them to, you know... um, eat. (laughs) And sometimes we wouldn't eat
Laila Interview 1.29	L: Um, yeah we wouldn't eat. Like... just so that they could, you know, get food, you know, be fed... Those people...

Laila Interview 1.29	L: I think it's because, um, we're family? Like, we stay there and we, um, we'd rather have them- have the people that come to our house um, you know, fed and, um, just experience a good living there? And but it's okay, we can come last (laughs)
Laila Interview 1.29	L: So, um, I don't know about the other two, but for me and my sister sometimes we just like, okay just... let them eat.
Laila Interview 1.29	L: But, um, yeah... Just uh, and those people they, they don't work 'cuz they stay- they live, they stay, no they live, um, in the outer islands? So, yeah. They just... yeah. (laughs). I don't know. Like, um... like in the morning we just have this little breakfast, just so that people can- like, all of us can eat something... yeah.
Sally Interview R2 2.14	H: So when you save food for you kids and save food for them, the adults, like, how do you do that? Like what's the process of that? S: Uh... like... because I cannot eat without my dad. Yeah. So if- if like, very small the... food. So I cannot eat... only me and my kids and my boyfriend? And I, oh, nevermind my dad 'cuz my dad very strong. No. (laughs) I, I share 'cuz I really uh, love my dad to just whatever me and my kids and my boyfriend eat? We just share with my dad... Sometimes my dad don't eat and I ask him, oh, you- did you eat? Oh, no, I save for your kids. No, you come, you eat. If we eat, uh, you have to eat with them. No, 'cuz not enough. No, no, you come, I give you. You eat
Sally Interview R2 2.14	S: But whe- he stay in Chuuk but I still send him food for- 'cuz every, not every day, every week? I check on him. Did you eat? 'Cuz I know how to, how they live in Chuuk. I ask him if he eat, oh, no 'cuz I don't go to the water, I'm tired. So, I'm planning okay I'm gonna buy food for my kids, I get the, I save this one for my dad to send it to Chuuk. So, I make enough for my kids for like, one month? And I take out half for my dad to eat in Chuuk.
Epot Interveiw 3.9	H: Are there, do you have like, any relatives that come to stay with you sometimes or visitors? E: Yes. H: Yes? E: Sometimes if my, uh, relatives? H: Relatives? E: Yeah H: Okay... Do they stay, or do they come stay with you often? Like regularly? Or just... for, you know, for special occasion or- E: Yeah, just special occasion. H: Okay. And, how long do they usually stay with you? E: Like uh, once in a year. H: Oh E: Like when we have that big occasion to do? So they come and stay to attend? H: Okay. But- so when they come to stay with you, how long do they stay? Like, just one week or- E: Yeah. One week.

Lorna Interview 3.10	<p>H: Can I ask why, like for what reason are they staying with you?</p> <p>L: Uh, my dad, my auntie, that one she came... she usually stay for like, one week, 'cuz she's not living, she didn't even stay here, she live at um, Pohnpei. So she just came to visit.</p>
Lorna Interview 3.10	<p>L: Um, when I was thinking that we didn't have enough food to eat for the next day or the few days? I was worried.</p> <p>H: You wanna tell me more about being worried? Like, what were you worried about and...</p> <p>L: I was worried about my kids, that they're hungry, that they didn't have anything to eat. Nothing in the, the f-, next day and the few days. Um, yeah. I was scared. (laughs) Yeah.</p>
Lorna Interview 3.10	<p>L: So what I did, I only, um, for my kids to eat? I make bread. We have only small rice, I make it like a soup so they can eat today, tomorrow...</p> <p>H: Okay</p> <p>L: Yeah. I learned this 'cuz my dad told me that I have to survive myself. Think that I don't have any family here on this island. Yeah. I have to think about that so I have to learn...</p>
Mary Ann Interview 3.11	<p>H: Okay, and do you ever have um, visitors or relatives that come to stay with you for long, long time?</p> <p>M: Yeah</p> <p>H: Can you tell me a little bit more about that? Like. why do they come and-</p> <p>M: Oh. My son, uh, he come to live with me because uh, she need, um, I mean, he need uh, some protection. Yeah. From, uh, to protect their kids? And, to watch their kids. About feeding uh, food, take care for them, because they went to work sometimes, and they leave the kids with me. So sometimes, we run out of food, for the kids. Uh, it's so suffering...</p>
Mary Ann Interview 3.11	<p>M: So, uh, I have plenty relative when they came from Chuuk. Sometimes they stay with me, uh, about three days or two. And they went to another country to looking for job... but me, when my own family? Sometimes we run out of food. It's depend on my husband when she- when he got money? That's the day we buy food. So, mm, sometimes we, we don't have much money? To buy food or drink? Um, some items, we want? So we don't have much to buy.</p>

AUTHORIZATION MEMO

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May 19, 2020

DATE