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## **Cultural Food Habits as a Social Factor of Health Among Immigrants in New Haven, Connecticut: A Focused Ethnographic Study**

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Cultural Food Habits as a Social Factor of Health Among Immigrants  
in New Haven, Connecticut: A Focused Ethnographic Study

by

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Honors Thesis and University Scholar Project

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### ***Acknowledgements***

“Food is everything we are. It's an extension of nationalist feeling, ethnic feeling, your personal history, your province, your region, your tribe, your grandma. It is inseparable from those from the get-go” – Anthony Bourdain, the late chef, author, TV star, and amateur food anthropologist, *Slate* magazine (Schulz, 2010).

This thesis would not have been possible without the contributions of numerous others. First and foremost, I would like to thank all of the clients at IRIS’s weekly food pantry who gave their consent and time for me to ask them about their stories of food. Their anecdotes, observations, and insights gave this project its substance.

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Smith, my Honors advisor in Anthropology, has also always been supportive and expressed personal interest in my project. If it were not also for the opportunities provided by UConn's Honors Program and University Scholars Program this project never would have come to be.

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I would like to honor the participants in this study, and immigrants like them, for all they have added our food system through sharing their culture and food. In addition to them, I recognize the migrants at all stages of our food system whose labor, by choice or necessity, makes sure society remains fed due to our dependency on a globalized, exploitative food system. May a more just and equitable food system be in the future for migrants everywhere.

Additionally, I would also like to honor my personal inspiration, the late Anthony Bourdain, and people like him who have spent their lives spreading cultural understanding across borders using food.

Lastly, I would like to thank my family, including my mother, Chris, my late father, Jeff, my brother, Erik, and my sister-in-law, Victoria, and my other friends for all their continual social and emotional support, to which I credit much more than this thesis. To all, thank you for the support and inspiration which allowed this project to come to fruition.

## *Chapter 1: Introduction*

### **Purpose of the Research**

There is a long history of over a century of applying anthropological theory and methodology to research advancing work done in the field of community nutrition. Gretel Pelto notes that this research has had a wide breadth of impacts, from informing the development of new public health policies to aiding the design and implementation of new nutrition interventions to evaluating the effectiveness of current programs (2017). Pelto was a foundational researcher in the field of nutritional anthropology during her tenure at the University of Connecticut and a Visiting Professor at Cornell University's College of Human Ecology.

The food security framework has become increasingly popular in recent years for understanding how people experience different forms of hunger and how different communities are affected by disparities in diet-related diseases and chronic health conditions. The United Nations defines food security broadly as “when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (U.N. Food and Agriculture Organization, 1996). Furthermore, a more ideal condition of community food security (CFS), which is more specific in incorporating more social and economic determinants of health, is defined as: “a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice” (Hamm & Bellows, 2003). In the effort to achieve CFS, it is hypothesized that immigrant communities have a unique experience obtaining culturally acceptable or culturally suitable food to maximize self-reliance and remain connected to their own culture and community due to their experience of being integrated into the culture of a new country.

This study also identifies immigrants as a population that is likely to be at higher risk of being negatively affected by diet-related health disparities. There is little data pertaining specifically to health disparities affecting immigrant populations in Connecticut, as few public health studies there have collected and published data on participants' nationality or place of origin. However, the Connecticut Department of Public Health has identified immigrants as a population at particularly high risk in their definition of health disparities based on what is already known about health disparities in Connecticut (Stratton, Hynes, & Nepaul, 2007). They are likely to be of high risk, as health disparities discriminate along the lines of social determinants of health like socioeconomic status and race.

The Zwick Center for Food and Resource Policy's reports on food insecurity and obesity incidence in Connecticut has consistently found low income minority communities, such as those in the cities like Bridgeport, New London, Waterbury, Hartford, and New Haven, to be among the highest risk of food insecurity and obesity (Rabinowitz & Martin, 2012; Boehm, Martin, Foster, & Lopez, 2019). Obesity is a primary risk indicator for diet-related chronic conditions such as type 2 diabetes and cardiovascular disease. Additionally, the Connecticut Department of Public Health's Behavior Risk Factor Surveillance Survey (BRFSS) has corroborated these findings. BRFSS has identified racial minority (specifically non-Hispanic Black and Hispanic) and low income (less than \$35,000 annually) adults to be among the highest risk in Connecticut for reporting fair or poor overall health, having obesity, having no leisure activity, having cardiovascular disease and pre-diabetes or diabetes, and having poor access to healthcare. BRFSS also identified adults without health insurance and those with a high school education or less to be at significantly greater risk of poor health, including in these areas (Zheng & Jorge, 2018). Given that many immigrants have difficulty gaining healthcare coverage and have not



received degrees of higher education from western universities, this is also relevant to note when thinking about why immigrant populations are likely to be at higher risk for poor health.

More broadly, some have researched culturally informed health interventions for refugees across the country known to be at higher risk for cardiovascular disease and type 2 diabetes. For information on health disparities relevant to immigrants in Connecticut, it is mostly only documented on the national scale in the United States that immigrants or refugees as specific groups are more vulnerable to these diet-related health disparities (Wagner, et al., 2015). Lastly, there has been at least one major study that has identified these health disparities specifically in a local immigrant population resettled in a western country. The Impact of Migration and Ethnicity for Diabetes in Malmö (MEDIM) project at Lund University in Lund, Sweden has identified an Iraqi immigrant population which is at significantly higher risk relative to the native Swedish population for developing diet-related chronic health conditions, such as obesity, type 2 diabetes, and cardiovascular disease (Bennet, Groop, Lindblad, Agardh, & Franks, 2014; Bennet, Franks, Zöller, & Groop, 2018). The findings of the MEDIM project inspired and informed the conception of this study.

As income is one of the most significant factors in food security, it is relevant to note that Connecticut is the state with the third highest wealth inequality in the United States, only behind the District of Columbia, New York, and Louisiana, as measured by the Gini index tabulated from the 2009 American Community Survey (United States Census, 2014). This is indicative of the high relative risk of the aforementioned at-risk communities, of which many of the state's immigrants are a part. Some have shown that even social determinants such as stigma, which heavily scapegoated immigrant communities experience greatly, have health-harming consequences that contribute to health disparities (Hatzenbuehler, Phelan, & Link, 2013). Thus,

interventions to address health disparities through reductive biomedical interventions that are less informed by economic and social determinants of health, are likely to fail. Less informed interventions to address diet-related diseases and chronic conditions, such as diabetes, cardiovascular disease, and obesity, may include education on the nutritional quality of certain foods, how to shop for or prepare healthier meals, or even how to read nutrition labels on prepackaged foods. That is not to say that these interventions cannot still be effective for much of the target population.

This research explores the unique relationship a cohort of immigrants served by Integrated Refugee and Immigrant Services (IRIS) in New Haven, Connecticut have with the food they consume, particularly foods from their own cultural background. Gathered data will help shed light on the social role of their dietary habits in their communities. These findings can then be used to help better inform more holistic and effective health promotion programs at IRIS and, though not fully generalizable, in immigrant communities elsewhere. IRIS already has numerous methods of engaging its clients through food in a culturally sensitive manner in order to help integrate them with the community. These include encouraging community co-sponsors to learn from immigrants' cultures and food and welcoming new immigrant families with "culturally appropriate ready to eat food" to express hospitality, in accordance with a State Department rule established in 1980 with the passage of the Refugee Act (IRIS, 2019; Sterling, 2019). On the other hand, some of IRIS's programs are less culturally specialized and are more focused on alleviating basic needs and simply teaching skills. For instance, IRIS's weekly food pantry focuses primarily on evenly distributing food provided by the Connecticut Food Bank to its clients and its "Mommy and Me" classes include lessons teaching immigrant mothers and children skills, such as grocery shopping in an American grocery store and reading food nutrition

labels (IRIS, 2020; Stannard, 2017). Regardless, all of these initiatives' effectiveness could likely be improved by being more informed by understanding clients' cultural relationships to their food.

This research hypothesizes that exploring the nature of people's relationship to food from their home cultures can help inform programs and initiatives to address diet-related health disparities that often poor, non-white immigrant communities disproportionately experience. Some key themes that are explored through this project's research methods are how and why immigrants in this cohort of participants acquire, prepare, and use cultural foods; the nature of these people's connection to foods from their cultural background relative to other foods; and their experiences expressing identity and establishing belonging and community through food.

## **Methodology**

The methodology for the research conducted for this project was approved by the Institutional Review Board of the University of Connecticut (protocol H19-087). The principal investigator for this protocol was Dr. Pamela Erickson and Luke Anderson was the student investigator.

Ethnography, the hallmark of anthropology, is the systematic study of cultural phenomena through embedding oneself in the lives of a studied population. In this focused ethnographic study, mixed quantitative and qualitative data collection methods were used to quickly collect an adequate amount of information in order to analyze a group's perspective and experiences. Methods employed for this study were drawn from anthropological cultural domain analysis (Bernard, 2017). These include free listing, pile sorting, and semi-structured interviews. Such methods, are noted as a key component of a nutrition-based focused ethnographic study

(Pelto, Armar-Klemesu, Siekmann, & Schofield, 2013; Pelto, 2017). These methods were divided into two rounds of semi-structured interviews. The first round of interviews included free listing to generate a cultural domain of “foods regularly eaten” and questions generally more broad in their scope to probe the nature of the community’s relationship with their food and their conceptualization of what nutritious food is. The second round of interviews included pile sorting of selected items from the previously listed domain of “foods regularly eaten” and generally more specific questions about participants’ personal relationship to food. The breakdown of participants into these two rounds of interviews is discussed in the following section titled “Participants.”

Data analysis was performed in a variety of ways. The semi-structured interview notes were compiled, organized, and qualitatively analyzed for emergent themes and notable anecdotes from participants. The free list and pile sort data were analyzed through the use of the cultural domain analysis software ANTHROPAC and UCINET. Pile sort data were analyzed using multidimensional scaling (MDS), which generates a two (or higher) dimensional plot where items more commonly grouped together are plotted more closely together (**Figure 3.1** in Chapter 3); and Johnson’s hierarchal clustering (JHC), which aggregates items sorted into successive clusters based on their similarity to each other (**Figure 3.2** in Chapter 3). Multiple studies have used very similar methods to analyze cultural perceptions surrounding sexual health among minority populations in Hartford, Connecticut (Macauda, Erickson, Singer, & Santelices, 2011; Singer, et al., 2006). This study applies these methods to cultural perceptions around food among immigrants in New Haven, Connecticut.

## **Context**

This research project was undertaken at IRIS in New Haven, Connecticut where the researcher has prior connections. The data were collected on Wednesday mornings over the summer of 2019 when IRIS held their weekly food pantry service for their clients. The student researcher was able to use a conference room in IRIS's office in the East Rock neighborhood of New Haven to interview participants who were waiting to receive their food from the food pantry. Those facilitating the food pantry would send participants one at a time to the researcher while they were waiting in line for their food.

## **Participants**

All but three participants in this study were immigrant clients of IRIS's weekly summer food pantry. It is relevant to note that these three participants moved from Puerto Rico and though are not, by definition, immigrants, are at similarly high risk and still served by IRIS. Thus, their perspectives were important to include in this research. Even though the participant population is referred to throughout this thesis as an immigrant or migrant population, this is not to undermine the work that many Puerto Ricans still have to do to reaffirm their citizenship status as Americans. The only prerequisites for participation in the study were that participants were at least 18 years old and were comfortable conducting an interview in English. To avoid collecting any identifiable information that might have posed a risk to participants, as some may have been particularly vulnerable due to their immigration or citizenship status, interviews were not recorded and the only demographic information collected was participants' self-reported gender identity and country or place of origin.

Descriptive statistics about this study's participants are shown in **Figure 1.1** below.

Descriptive Statistics

<b>Sample Size</b>	26
<b>Number of Interviews</b>	40
<b>Gender Identity</b>	
Male	11 (42.3%)
Female	15 (57.7%)
<b>Place/Country of Origin</b>	
Iraq	8 (30.8%)
Sudan	5 (19.2%)
Syria	4 (15.4%)
Afghanistan	4 (15.4%)
Puerto Rico*	3 (11.5%)
Congo, Democratic Republic of the Dominica	1 (3.8%)
<b>Interview Breakdown</b>	
Only 1 <sup>st</sup> Round/Free List	4 (15.4%)
Only 2 <sup>nd</sup> Round/Pile Sort	8 (30.8%)
Both	14 (53.8%)

\* - Although Puerto Ricans have U.S. citizenship and are not immigrants by definition, they are a population still at high risk, many of whom are served by IRIS.

**Figure 1.1. Participant Descriptive Statistics**

As this research did not use a formal translator, its participants were limited to those who were comfortably fluent enough in English to participate in the semi-structured interviews. 21 out of 26 of the participants in this study (80.8% of participants) had immigrated from a country in or bordering the geographic region of the Middle East, including Iraq, Sudan, Syria, and Afghanistan. This proportion is likely largely because the majority of IRIS's clientele migrated from countries in and around the Middle East (About IRIS, 2020). However, the bias toward participants from this region could also be because this study did not use an English-Spanish translator and, therefore, some Latin American immigrants served by IRIS's food pantry who were not comfortably fluent in English were unable to participate. This is a bias in participant selection that may be further exacerbated by the fact that the English proficiency of immigrants in the United States is inversely proportional to the age at which they migrated, and all

participants in the study had to be at least 18 years old (Bleakley & Chin, 2010).

It is also relevant to note that since the participation in this study was determined by those who attended IRIS's food pantry during a particular week of interviews, there is some inconsistency in who participated in which interviews. 4 participants only participated in the first round of semi-structured interviews with the free list exercises. 8 participants only participated in the second round of semi-structured interviews with the pile sort exercises. The final 14 participants participated in both rounds of interviews and contributed to the data collection of both exercises. The timing of the decision to switch from the first round of interviews to the second round of interviews was largely determined by the time constraints of the study, as all data had to be collected prior to the end of the summer. Finally, participants were compensated \$20 in cash for each interview in which they participated. Most participants were clear that this compensation motivated them to participate even though it meant spending additional time at the food pantry that morning.

### **Structure of the Thesis**

This thesis is divided into four subsequent chapters in addition to this introduction. The first three of these chapters address the findings of this research as they were grouped under three separate themes or concepts: *Food Insecurity Among Immigrants*, *Food Categorization*, and *The Social Role of Food*.

*Food Insecurity Among Immigrants* addresses how disparities in food security uniquely impact immigrants, particularly in terms of access to a culturally appropriate or culturally suitable diet. It briefly describes the two governmental food assistance programs participants mentioned using, the Special Supplemental Nutrition Program for Women, Infants, and Children

(WIC) and the Supplemental Nutrition Assistance Program (SNAP). It presents analyses of participants' interview responses about their experiences trying to eat in a healthy manner and about accessing foods from their cultural background.

*Food Categorization* explores the use of food to express identity and how participants conceptualized cultural foods relative to other foods. It uses the cultural domain of foods participants recalled eating generated through the free lists and analyzes of pile sort items in that cultural domain using multi-dimensional scaling and Johnson's hierarchical clustering to visualize how participants conceptualized the relationship between these foods.

*The Social Role of Food* examines food from participants' cultural background's social role in their lives. Some participants, though not all, shared experiences of using food from their cultural background to retain cultural knowledge in their families or connect with broader community and establish a sense of belonging in the New Haven area.

The fifth and final chapter synthesizes the conclusions reached by the student researcher and how these findings provide practical insight for informing nutrition health promotion programs and food service programs for the clients served by IRIS and for immigrants elsewhere. Moreover, these conclusions address broader, more systemic implications of this research for immigrants everywhere and raise additional questions that can be addressed by further research. Following the conclusions is the thesis's bibliography and appendices containing the data from the projects free lists and the codes used for the pile sort data.



## ***Chapter 2: Food Security Among Immigrants***

### **Introduction**

Before being able to understand the social importance of food in the lives of immigrants in this cohort from IRIS, it is relevant to understand the context of what sort of food security they do or do not experience. Under the more broadly informed definition of CFS which goes further beyond the biomedical model of nutrition, food a community has access to must be culturally acceptable or suitable as well as safe and nutritionally adequate. Following this literature review of many of the different facets of food security among immigrant populations is an analysis of participants' expressed experiences accessing safe, nutritious, and culturally acceptable foods and conclusions drawn from their experiences.

### **Literature Review**

#### *Part of the Right to Health*

Food security being formally used on an international scale to measure hunger and nutritional health goes back to the 1996 World Summit on Food Security in Rome. Here the United Nations drafted their definition of food security (U.N. Food and Agriculture Organization, 1996). Though less inclusive of additional social determinants of health than CFS, this definition specifies that food must be physically and economically accessible and must accommodate people's preferences. Since the World Summit on Food Security, mitigating food insecurity has been acknowledged as crucial for actualizing people's right to access food that meets their nutritional needs and their right to health as a whole. The United Nations has also drawn attention to historically marginalized groups, such as ethnic minorities, as populations that bear a disproportionate share of the health problems of malnutrition (U.N Office of the High

Commissioner for Human Rights, 2008).

Furthermore, as much as food is a component of the right to health, the right to adequate food is recognized as a right independent of the right to health. The Right to Adequate Food was adopted at the Twentieth Session of the Committee on Economic, Social and Cultural rights in 1999. Under its adoption, the right to adequate food implies that food is “[available] in a quantity and quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture” (U.N. Committee on Economic, Social and Cultural Rights, 1999).

Actualizing the right to health, including attaining food security for local communities, is mired in the upstream political and structural determinants which shape health disparities. Such systemic root problems require broader, more collaborative solutions (Willen, Knipper, Abadía-Barrero, & Davidovitch, 2017). Megan Carney, a medical anthropologist specialized in migrant health and food systems, describes food security as inherently biopolitical in her ethnography *The Unending Hunger*, about migrant Hispanic women’s experiences with food insecurity in Santa Barbara, California (2015). These broad social determinants of food security and nutritional health are why the CFS definition recognizes the need for food systems to be in line with social justice, a facet of CFS outside the scope of this research. However, human rights literature has also identified well-informed, community-based initiatives as crucial to the formation of more effective programs and policies which can accommodate the individualized needs and experiences of local, marginalized communities (Libal & Harding, 2015). This is the connection between culturally informative research and the actualization of health and food security as a human right for local immigrant populations.

*Food Insecurity Among Immigrants*

Though lacking in data specific to Connecticut, the literature on experiences of food insecurity among immigrants and their families is broad, covering different disciplines, immigrant communities, and facets of the definition of CFS. As a whole, immigrants have been identified alongside households with children, veterans, college students, members of the lesbian, gay, bisexual, and transgender (LGBT) community, and older adults as being at elevated risk for being food insecure by the United Nations' definition of food insecurity (McGuire, 2015). This subsequently puts these populations at higher risk for the health effects of food insecurity, including obesity, diabetes, and hypertension (Flores & Amiri, 2019). The aforementioned at-risk groups overlap putting some at even higher risk than others. Low-income immigrant households with children have been documented as being at very high risk of food insecurity in the United States, children and mothers being impacted the most (Chilton, et al., 2009). However, citizenship status is a notable protective factor for many of these same low-income immigrant households, with a possible exception for Hispanic immigrants (Potochnick & Arteaga, 2018). This is likely in part because citizenship is a requirement to qualify for many food assistance programs. Each of these many risk factors and the social structures around them compound to shape the complex health disparities impacting immigrants as a whole and some more than others.

Research on immigrant communities' access to culturally suitable food and the relevance of that aspect of CFS to these groups is less frequently cited but increasingly explored in recent years. Due to the selectivity of who is actually able to immigrate to western countries like the United States and Canada, there is documentation of a "Healthy Immigrant Effect" where upon arrival immigrants often have lower rates of chronic health conditions than the native population. Nevertheless, this effect is most often negated and even reversed through the process of

acculturation, suggesting that the state of nutrition among immigrant communities is in large part cultural (Steffen, Smith, Larson, & Butler, 2006). Some cultural factors suggested to contribute to this effect are communities' use of ethnic foods, mechanisms of food choice in immigrant families, and effectiveness of health promotion and education programs (Sanou, et al., 2014). Recent research has hypothesized that low-income immigrants and refugees have culturally-specific foodways that must be addressed when promoting food security. Moffat, Mohammed, and Newbold, following this hypothesis, found that immigrants in Canada identified several of their own barriers to CFS that others did not, including lack of high quality, fresh foods, food nostalgia for food from their home country, and difficulties shopping for and using new foods (2017). Consistently, low income and high food prices are reported among the greatest barriers to immigrants accessing the foods they desire most.

### *Food Assistance*

As food assistance programs in the United States are very complex and often vary by state and multiple participants in this study mentioned being recipients of one or more food assistance programs, it is important to contextualize them. The United States Department of Agriculture (USDA) Food and Nutrition Service oversees 15 programs to alleviate food insecurity for low-income citizens and residents. Two of the most used programs, and the two identified by participants in this study, are SNAP and WIC.

SNAP, or Food Stamps as it is more commonly known, is an entitlement program, meaning that as long as one meets its eligibility qualifications, they will receive its benefits. SNAP provides recipients with a debit card (EBT) valid for the purchase of most food items in participating grocery stores, pharmacies, and convenience stores. To qualify, applicants must fall at or below 130% of the Federal Poverty Level for their household size, often meet work and

other requirements, and almost always have citizenship. Only certain noncitizens, such as those who have been granted asylum, those who are Lawful Permanent Residents and meet specific additional qualifications, or those targeted for relief under a past food assistance act, may qualify for SNAP (USDA Food and Nutrition Service, 2013). It has only been since the Personal Responsibility, Work, and Reconciliation Act (PRWORA) in the 1990s that noncitizens have been excluded from federally funded food assistance such as SNAP, resulting in more disproportionate food insecurity among many immigrants and their children (Van Hook & Balistreri, 2006). Excluding groups from federal food assistance has happened other times as well, restricting food access for citizens and refugee families alike based on family members' eligibility. More recently, "able-bodied adults without dependents" were also excluded from qualifying for SNAP if they are unemployed (D'Angelo, Libal, Seymour, & Hamel, 2017).

Data from major cities across the country shows that though SNAP participation for immigrant families has increased steadily over the past decade and a half it has dropped sharply in recent years, especially among recently arrived immigrants (Bovell-Ammon, et al., 2019). The Hunger in America Report speculates on reasons for not participating in SNAP, noting that citizenship statuses are rarely a primary reason for not using SNAP. However, the report also notes that it is a reason that is likely underreported due to the topic's sensitivity (Weinfield, et al., 2014). Additionally, determining whether one meets eligibility requirements for SNAP is often regarded as a confusing process with a learning curve that acts as a significant barrier for new immigrants (Eslami, Filion, & Strayer, 2011; Stelfox & Newbold, 2019).

WIC is not an entitlement program as it is dependent on grants; however, it is likely for one to receive it in the state of Connecticut as long as they qualify. Not being an entitlement program that is funded like SNAP also means that WIC does not fall under PRWORA. WIC is

designed to accommodate for the higher vulnerability of pregnant and postpartum women, infants, and children up to 5 years of age to food insecurity. It provides participants with food checks/vouchers or EBT for certain foods and requires that participants participate in nutrition education while providing the option of breastfeeding support. To qualify, one must fall under one of the three target demographics of the program, be at or below 185% of the Federal Poverty Level, be at nutritional risk, and be a resident of Connecticut (CT Department of Public Health, 2020). As WIC in the state of Connecticut has no requirement for citizenship or immigration documentation and has less strict requirements overall, it is more accessible for qualifying immigrant women and children.

A major gap in the current model of government food assistance is that eligibility is primarily based on income. Hadley, Patil, and Nahayo showed that while income is a major constraint for refugees in the United States, there are other significant non-income factors that cause refugees to remain food insecure (2010). It is likely that among these are cultural factors, related to culturally-specific foodways, keeping immigrant groups from attaining CFS. These factors need to be accounted for by quality nutrition education upon resettlement paired with culturally informed and accommodating interventions (Burge & Dharod, 2018; Moffat, Mohammed, & Newbold, 2017). As state-funded assistance rarely accounts for these factors it often falls to community organizations and agencies such as IRIS to fill in the gaps. Fortunately for many of IRIS's clients, it has several programs designed to do so, such as nutrition education classes and services to help clients determine eligibility and apply for food assistance programs like SNAP and WIC.

## **Original Research**

### *The Interviews*

The semi-structured interviews conducted for this research were designed to more deeply understand participants' experiences with food security. Returning to the definition of CFS, a community must have access to "a safe, culturally acceptable, nutritionally adequate diet" to attain food security (Hamm & Bellows, Community food security and nutrition educators, 2003). For this reason, the interviews addressed experiences obtaining and consuming both safe, nutritious food and culturally suitable food. This used conversation guiding questions and more specific prompts like: "what does it mean to live healthily?"; "when do you usually eat \*insert ethnicity\* (e.g. Iraqi, Syrian) foods?"; or "describe your regular routine getting food for yourself and others." However, interviews diverged to multiple other topics noted by the interviewer and some participants elaborated on their experiences more than others.

This background information informing these interviews was drawn from data on numerous different immigrant populations in order to contextualize the sorts of social factors of food insecurity and nutritional health that can affect potentially at-risk immigrant populations (Potochnick & Arteaga, 2018; Moffat, Mohammed, & Newbold, 2017). This is important as the participants in this study migrated from seven different places around the world. However, Serene Murad found in her master's thesis from Wesleyan University that even Iraqi and Syrian refugee groups integrating to life in Connecticut differed significantly in their engagement with their own ethnic communities (2018). Therefore, it was reasonable to assume perceptions of food and experiences with it may vary between participants, and even more between participants from different ethnic backgrounds. This was the importance in semi-structured interviewing which does not restrict participants from openly sharing their experiences.

*Safe and Nutritious Food*

Across the 40 interviews with 26 different participants a few themes about their perceptions of their own health and access to healthy food emerged. To begin with, 6 out of 26 participants reported having to specially monitor their own food or the food they get because they or a close family member is diabetic. One Iraqi man shared that he also has gout and had gone out of his way to seek dietary advice from a health professional, who advised him to avoid red meat. Two Sudanese women, one of which had also sought dietary advice, shared that they are responsible for getting most of their families' food and have to monitor what they get because their husbands are diabetic. Interestingly, the other Sudanese woman was one of only two participants who specifically mentioned believing that they personally did not eat healthily; the other was a Syrian man. A Puerto Rican woman recalled her difficulty losing weight to control her obesity as well. The last two participants who mentioned having to watch what they eat because they are diabetic are a Syrian woman and a Puerto Rican man.

The Iraqi man with gout was the only participant who explicitly used the word "hunger" to describe his experiences, but he attributed this more to his diabetes than his access to food. He described a habit of purposefully buying less food to control his blood sugar. He was one of 14 who participated in both interviews. In his previous interview, he had mentioned that he was not a very picky eater because of his background experiences with food insecurity.

While he was the only one to mention hunger, three interviewees mentioned having used a government food assistance program (i.e. SNAP or WIC). A Sudanese woman shared that she could no longer receive SNAP because they were just over the income level required for their family size. An Afghan man gratefully recounted having eligibility for SNAP in his family and had used WIC to help adequately feed his baby after immigrating five months prior to the



interview. One Iraqi woman merely mentioned that she did not qualify for SNAP and was not asked to elaborate any further. While parenthood is a risk factor for food insecurity, one Afghan woman and one Iraqi man mentioned that being married made food access easier because the role of getting food could be shared with their spouse. Additionally, three participants felt that their status as an immigrant had not been a barrier to accessing food, one of which was the Afghan man whose family used WIC. The number of those who have used government food assistance could easily be higher as no participants were asked directly about their use of food assistance, though they were all utilizing IRIS's food pantry.

Twenty-two out of 26 participants (84.6%) expressed the importance of IRIS's food pantry when asked about their experience getting easier access to food. While many were getting food for families as well, one Iraqi man specifically mentioned using the pantry to get food for his sister who was also grateful for IRIS's services. Another Iraqi woman stated that IRIS's food pantry was the primary place she got fresh vegetables.

Fourteen participants referred to specific foods or food groups when asked about what it means to eat healthily and what a healthy diet was. For the most part these healthier diets were characterized by: green foods; fresh fruits and vegetables; fewer meats, with fish and chicken being preferable over red meats; and fewer grains and breads, with whole grains being preferable. Less frequently mentioned as part of a healthy diet were: dairy products, such as milk and yogurt (3 participants); regular exercise, such as going on walks (2 participants); cooking regularly (2 participants); and eating cultural dishes, such as fattoush, mujaddara, and lamb or goat biryani (3 participants).

When describing challenges accessing healthy foods, 10 participants described lacking accessibility to fresh, less processed, or chemical-free foods. The Iraqi woman who did not

qualify for SNAP recollected how food was much more seasonal in Iraq and how much that affected her cooking. The Iraqi man who has gout recalled moving from California after first immigrating to the United States and the lack of fresh foods in Connecticut relative to there. An Afghan woman simply expressed annoyance that fresh food is so much less affordable than more processed foods.

Two participants expressed personal difficulty with getting safe, fresh food because they had little means to keep it from expiring. The Iraqi woman who said that IRIS was the main place she got fresh vegetables was one, and the Afghan man whose baby qualified for WIC was the other.

#### *Culturally Acceptable Food*

When it comes specifically to accessing culturally acceptable food, many mentioned smaller grocery stores or markets where they liked to go that had access to most foods they wanted. Eleven participants mentioned Arab/halal markets in West Haven, CT and Orange, CT and the India Market in Orange as places that often had any desired culturally suitable foods. West Haven and Orange are towns bordering New Haven to the southwest. Understandably, all participants who mentioned one of these places were from Iraq, Syria, Sudan, or Afghanistan. One Iraqi man added that he could not go to these ethnic markets as much as he would like because he did not have reliable transportation. Another Sudanese woman described Sudanese food as very inaccessible for her and therefore did not eat much of it at home. Both of these participants described eating halal in the United States as a challenging adjustment and were among an Iraqi woman and Syrian man in wishing culturally suitable food was more accessible. Other participants said that they did their grocery shopping more exclusively at large grocery store chains, such as Walmart, Price Chopper, Stop and Shop, ShopRite, Costco, or Aldi or

occasionally at convenience stores.

Access to land was a topic that came up only once. A Syrian man mentioned the importance of having his own garden he could grow food in. Having a garden had allowed him to have better access to healthier, fresh produce as well as culturally acceptable food he did not have to learn to prepare from more processed foods. He also had some hens and was able to provide his own eggs.

Nine interviewees described there being plenty of food in the United States compared to the situation they were coming from when they immigrated. Multiple participants mentioned problems despite such availability though. A Syrian man expressed how access to food was not the issue, access to healthy food, which is often much more expensive, was the issue. Most affordable food is much less fresh. Two Iraqi immigrants, a woman and man, described how they felt there were too many food options. She elaborated that options were limited in Iraq but most food was seasonal and therefore fresher. She associated the availability of fresh foods with the ability to prepare culturally acceptable foods. After, she added that even fresh produce does not expire for longer here and tastes different. Other produce is entirely different from what she was used to. This was something she had to adapt to in her cooking. A different Iraqi man and a Puerto Rican woman added that with so much food it becomes difficult to diet and know how to eat healthy. He said the price and taste make products like fast food and soda hard to resist, and she recalled how food in the supermarket is less fresh here than in Puerto Rico because there are so many more small farms there. Four other interviewees said that cost made them avoid eating at sit-down restaurants entirely or only eat at them on the weekends. One Sudanese woman, whose family never eats out, went as far as to say that she did not trust food at restaurants.

Nutrition and cooking classes are a way to bridge cultural knowledge gaps for those

acculturating, learning both how to access and prepare foods in a new culture. Seven participants mentioned attending some sort of nutrition or food classes taught by people from IRIS or from somewhere nearby such as Yale University. Five of these interviewees enjoyed classes at IRIS and recalled learning good tips about how to shop and eat healthier for themselves and their children. An Iraqi woman found the classes to be a good opportunity to practice her English as well. Two of those who attended classes at IRIS had very different impressions, despite being from the same country. One Afghan woman felt that the class was less personalized to her own background and diet and did not know how she personally could be eating more healthily; on the other hand, the Afghan man who used WIC had an opportunity to prepare Afghan food for his class and loved the experience. One Puerto Rican woman had attended cooking classes elsewhere and enjoyed helping teach others how to cook. Three others expressed interest in going to nutrition or food classes but had not gone yet. Two said that they were scheduled at inaccessible times for them.

## **Conclusion**

Participants in this study identified multiple previously documented risk factors for food insecurity within their own experiences accessing healthy and culturally acceptable food. Being a parent and having to provide for children, having to manage diabetes, obesity, and gout, having low income, potentially citizenship status (depending on the Iraqi woman's reason for being ineligible for SNAP), and ethnicity (e.g. one woman's lack of access to Sudanese food) were all risk factors that negatively impacted some participants' abilities to attain CFS. Having the means to properly store food to keep it from expiring was an early issue for a couple immigrants' access to safe food as well. Food insecurity is not simply experiencing hunger but rather a complex,

multifaceted issue which manifested itself differently for many who participated in this study.

They also recalled several other barriers to more holistic food security. In doing so, they also corroborated the findings of Moffat, Mohammed, and Newbold's research on cultural factors of food insecurity among immigrants and refugees in Canada (2017). Several mentioned difficulties shopping for or using new foods, suggesting cultural knowledge gaps that are not always filled by otherwise informative nutrition classes. Many said that the lack of availability of fresh, less processed foods, especially at a low-income, was more of an issue than lack of availability itself. This is a gap that multiple participants value IRIS's food pantry for filling. Availability of fresh foods seems to be connected to people's ability to prepare foods from their own culture as they learned to prepare them. Several, primarily from Iraq, Syria, and Puerto Rico, expressed food nostalgia, recalling the availability of fresh, seasonal foods to prepare with. On the other hand, a few participants specifically included cultural dishes as part of a healthier diet. If preparing cultural dishes is more associated with using fresher ingredients than relearning to use more processed ones, this is understandable. Others included regular exercise and cooking itself as important behaviors to coincide with a healthy diet.

However, none of these particular perspectives were shared with all participants across the study. Almost all participants had their own unique experiences trying to attain what would be defined as facets of CFS. The need to account for such individualized experiences of food insecurity has implied to some researchers that social workers have an important role in developing holistic measures of CFS (Kaiser, 2017). Some participants noted very few issues with food insecurity. For one participant, being able to qualify for and receive benefits from both SNAP and WIC was very important. From another participant's account, the act of growing one's own food is expected to increase access to both nutritious and culturally appropriate, fresh

food.

### ***Chapter 3: Food Categorization***

#### **Introduction**

Better understanding how participants experience and perceive food insecurity, including access to safe, nutritious, and culturally appropriate food, this thesis now examines participants' relationships to certain foods themselves, prior to exploring food's role in participants' relationships to others. Because of food's well-documented connection to culture and identity it is hypothesized that immigrants in this study have a unique relationship to or understanding of foods from their own cultural background. Next, is a review of some of the literature on the connection between food and identity. Following that, is an analysis of free list and pile sort data which visually show how interviewees conceptualize and categorize food along with some interview accounts. These data allow some relevant conclusions to be drawn.

#### **Literature Review**

##### *Food Culture: A Social Determinant of Nutrition*

It is evident from the literature that immigrant communities are at a greater health risk for a variety of diet-related diseases and chronic health conditions. However, it is generally through acculturation that these population health disparities start to emerge and become more prominent as these disparities are strongest among immigrants who have lived in a western country for longer (Steffen, Smith, Larson, & Butler, 2006). There are many different factors that likely contribute to this phenomenon, including the numerous ways in which immigrant populations are often socioeconomically disenfranchised. Other factors have been suggested though. Some of these have to do with the reality of being someone from a very different cultural background adapting to life in a new country (Sanou, et al., 2014). The link between food insecurity and

negative health outcomes exists among immigrant populations as a whole, but it is also reported that the strength of this connection between food hardship and poor health varies across immigrant subgroups. For instance, in the greater Boston area, low-income Haitian immigrants reporting food insecurity are more likely to be obese than other low-income immigrants from elsewhere or those born in the U.S. who are food insecure (Caspi, et al., 2017).

Considering these varying health disparities across subgroups makes questions about immigrant communities' use of ethnic food, their mechanisms of food choice, and whether those factors have any significant bearing on the populations' nutritional health far more nuanced. Some of these questions include: What role does food from people's own cultural backgrounds have in their life now that they live in an entirely new culture? What is the nature of their connection to these foods compared to more generic foods or foods attributed to or adapted by other cultures? How might such unique, cultural relationships shape the types of food choices immigrants make? If this is significant for a particular community, is it protective of their health, harmful to it, or both? This last question can only be speculated on from the findings of this research.

Stelfox and Newbold recognize how "food is not only relevant for health and nutrition, but it is a vital component of one's cultural and emotional wellbeing" (2019). CFS is relevant to health and nutrition and is dependent on access to culturally suitable food. Food is also a vital component of an individual or a group's culture. Therefore, it would follow that communities' food cultures are a social determinant of their health.

### *Food and Identity*

One's cultural upbringing is critical to shaping their identity and how they express and embody that identity. Furthermore, early food exposure and consumption is integral to identity



formation. This is likely because taste, smell, and memory formation are neurologically interconnected and early memory formation is crucial to acculturation. The way people eat, then, reasserts the oneness or otherness between them. On an individual level, people are shaped biologically, psychologically, and socially in this way by the food they eat throughout their life (Fischler, 1988). Within the field of food studies, it is understood that people's food choices reveal a lot about them, both at an individual and a group scale. Almerico, who was inspired by researching food habits in Italy, describes the usefulness of analyzing groups' food choices of what to eat and not eat and their relationships to those foods saying, "food choices tell stories of families, migrations, assimilation, resistance, changes over times, and personal as well as group identity" (2014).

For immigrant groups, perceptions of food's connection to identity and how that connection is then used to express identity provides insight into how they may use food to navigate expressing their ethnic identity in a new country. Earlier research in food studies has concluded that the way people, especially those in ethnic minorities experiencing assimilation, choose their food structures and personal interactions in a manner that perpetuates or reduces cultural difference (Kalčík, 1984, p. 45). Maintaining one's cultural identity and assimilating to a new food culture are both critical in establishing a new life as an immigrant.

Due to culturally specific, gendered social roles around food, the way one interacts with food is also indicative of how one navigates expressing their gender identity. Across cultures, the responsibilities of different genders in the processes of obtaining, preparing, and consuming certain foods are often specific and particular to each food culture (Counihan & Kaplan, 2013). One ethnographic account followed Tejano migrant farmworker families in the United States and explored how women would feed their husbands tamales. In this case, tamales became a medium

through which they could reaffirm their identity and support their families (Williams, 1984). The use of ethnic food can simultaneously reaffirm ethnic and gender identity. The connection between immigrants' relationships to particular foods, their food habits, and their nutrition is not well-documented in the literature.

## **Original Research**

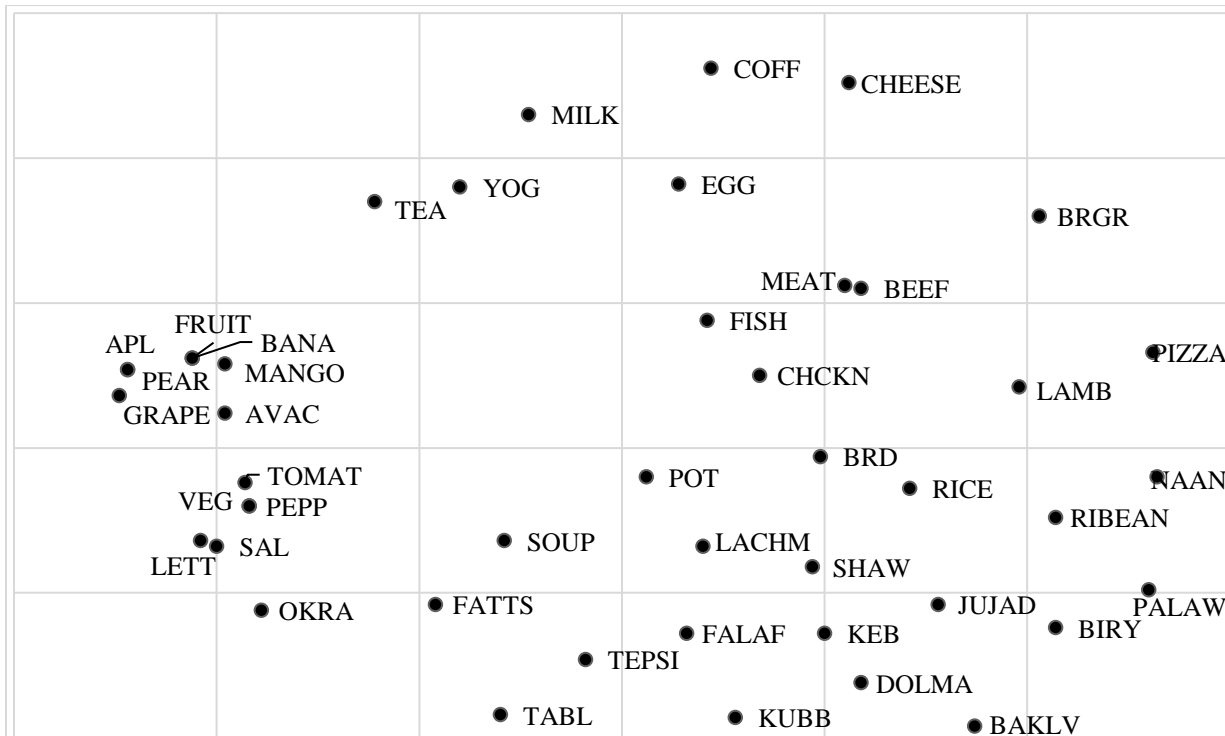
### *Cultural Domain Analysis*

This study examines participants' identification with certain foods. This was done by analyzing how participants categorize the different foods they eat using a methodology known as cultural domain analysis. This included methods of free listing, to construct a "cultural domain" of foods the participants regularly eat, and pile sorting, in which participants sorted foods within this cultural domain according to how they best went together. Pile sort data were further analyzed using multidimensional scaling (MDS) and Johnson's hierarchical clustering (JHC). Participants' comments about pile sorting and their identification with food are noted as well.

The first round of interviews began with free listing. With no data on dietary composition in this population, this cultural domain was constructed broadly, to see which foods are most salient for these people. 18 participants were asked to list any foods they could think of that they would eat most regularly. This included individual food items, specific dishes, and beverages among whatever foods participants felt were important to include. Listed items were then compiled and sorted by frequency and salience (see **Appendix 1** for data). Frequency is a metric of how many different participants listed the same item. Salience measures both frequency and how early in their list participants mentioned a certain item. It is representative of the importance interviewed individuals attribute to said item (Chaves, Nascimento, & Albuquerque, 2019).

The 45 most common and salient items were used to construct a smaller domain for pile sorting. Studies have shown that, given enough time to complete the exercise, a reasonable upper bound on the number of cards participants can be expected to sort is 40-60 (Blanchard & Banerji, 2016). These food items were printed on cards with a color photo of the food item on them. For the pile sorting exercise at the beginning of the second round of interviews, 22 participants were asked to sort the food items into groups by the foods' similarity, or how they best went together. The only constraint was that participants had to sort into more than one pile. Participants were asked to label the piles of food items, if possible, which informed category names.

Collected pile sort data of how food items were categorized together were analyzed using MDS and JHC. MDS data is depicted in **Figure 3.1** below. The stress of this data plotted in two dimensions indicated enough agreement between participants to establish significant findings (Sturrock & Rocha, 2000). Codes to identify foods in the MDS plot can be found in **Appendix 2**.



**Figure 3.1. MDS: regularly eaten foods (N=22) (Stress in 2 dimensions is 0.164)**

The MDS plot groups items in the domain based on similarity. Items grouped the most closely together are the most similar while items across the plot from each other are the most dissimilar. This plot indicates a few different themes in how participants categorized food items.

Fruits and vegetables, which were foods most mentioned when participants were asked to describe a healthy diet, were the most distinct groups, from the other groups and between the two groups. Of these foods, okra was the most dissimilar. It is more similar to ethnic dishes grouped across the bottom and bottom right of the plot. One Sudanese woman in her interview described how her diabetic husband loved her okra soup, which was a family recipe from Sudan.

Dairy, eggs, and other beverages such as coffee and tea make up a distinct group. Of those, tea, yogurt, and milk are the most similar to the fruits and vegetables. This is understandable as they were also described by some as being components of a healthy diet. Meats were dissimilar to fruits and vegetables; however, fish and chicken were more similar.

Burgers and pizza were among the furthest from the fresh fruits and vegetables. They were identified by some as more “Americanized” foods. More ethnic dishes across the bottom of the plot are all relatively distinct from each other and varying in their perceived relationship to the other foods. For example, fattoush and tabbouleh are both Arab salad dishes and were more similar to vegetables. Nevertheless, they were also grouped similarly to other ethnic foods. Overall, data suggests that this population of participants conceptualizes foods along multiple dimensions. These included perceived cultural connection, perceived healthiness, and “food group” (e.g. fruits, vegetables, grains, meat, dairy, etc.).

JHC is a form of cultural domain analysis which groups items into successive clusters based on similarity to each other. JHC data is depicted in **Figure 3.2** on the following page along with the abbreviated codes for each food item to allow for easier comparison to the MDS data.

Listed regularly eaten foods	Abbreviations
Rice	RICE
Rice and Beans	RIBEAN
Bread	BRD
Potato	POT
Palaw	PALAW
Mujaddara	JUJAD
Biryani	BIRY
Naan	NAAN
Kebab	KEB
Falafel	FALAF
Dolma/Yalanji	DOLMA
Kubbeh/Kibbeh	KUBB
Tepsi	TEPSI
Lahmacun	LACHM
Shawarma	SHAW
Soup	SOUP
Baklava	BAKLV
Chicken	CHCKN
Fish	FISH
Meat	MEAT
Beef	BEEF
Lamb	LAMB
Pizza	PIZZA
Burger	BRGR
Banana	BANA
Fruit	FRUIT
Apple	APL
Pear	PEAR
Grapes	GRAPE
Mango	MANGO
Avocado	AVAC
Peppers	PEPP
Vegetable	VEG
Tomato	TOMAT
Lettuce	LETT
Salad	SAL
Okra	OKRA
Tabbouleh	TABL
Fattoush	FATTS
Milk	MILK
Yogurt	YOG
Cheese	CHEESE
Eggs	EGG
Tea	TEA
Coffee	COFF

\*Lines and shading represent divisions between items above and below the line. Thicker, darker lines represent greater differences.

**Figure 3.2: JHC: regularly eaten foods (N=22)**

While MDS data better shows the relationships between foods and how they are conceptualized among a population, JHC data more clearly depicts the categories those foods are clustered into. The five most distinct categories have been labeled: grains; Arab and South Asian ethnic dishes; meats and Americanized foods; fruits and vegetables; and dairy, eggs, and beverages. There are numerous notable smaller distinctions between how closely foods are connected to each other, indicated by thinner, more lightly shaded lines.

Within the grains, ethnic rice-based dishes (palaw, mujaddara, and biryani) and naan, derived from the Persian word for bread, were distinct from other, more generic grains. Within ethnic dishes, soup and baklava (a sweet pastry) were more distinct from the other items. Meats and American foods both composed their own subcategories of their larger, combined group. Fruits and vegetables were also categorized distinctly from each other but to a lesser extent. Though tabbouleh and fattoush were categorized as more similar to the vegetables, they were less similar to the other vegetables due to several participants grouping them with other ethnic foods. Lastly, tea and coffee were distinct from dairy and eggs, meaning milk was perceived to be more similar to eggs than tea or coffee.

Participants from around the Middle East were more likely to sort ethnically Arab or South Asian dishes separately. Regardless, most participants sorted into piles by multiple characteristics. For example, one Iraqi woman sorted most foods by food group but grouped ethnic dishes together separately. When asked her rationale, she expressed that those foods belonged separately. This same rationale was not universal across participants from the region. Another Iraqi woman sorted foods according to how often she would use or prepare them in her own cooking. Similarly, a Syrian man and woman both sorted foods by how frequently they would eat them. A Sudanese woman said she sorted based on a combination of both how much

she liked the food and how healthy she perceived the food to be.

Other participants, including two from Puerto Rico, a woman from the Democratic Republic of the Congo, and a man from Dominica expressed a lack of familiarity with these items and tended to group them by picture with whatever food group or other category they felt these items belonged to best. According to participants' rationales, characteristics of foods used to group items included: food group, perceived healthiness, how often the food was cooked or eaten at home, ethnic association with the food, and once, whether a participant simply liked or disliked the food.

### *Expression of Identity*

Many participants shared their own personal connections to some of the food items as they sorted them. The Iraqi woman who sorted the foods by how frequently she would cook them would recall the last time she cooked a food for her family or remark about how she should prepare a food again soon throughout the pile sort. A Puerto Rican woman noted that rice and beans are a staple food on the island and fondly recalled the fresher mangos and avocados there.

One elderly Iraqi man worked for the U.N. World Food Programme helping to mitigate food insecurity in Iraq earlier in his life. He would pick up cards one at a time and every time he reached an Arab dish, he would share an anecdote about some time he had eaten it or on what sorts of occasions people would eat that dish then set that item to the side. While he was sorting through the cards, he attributed having a carefully planned diet to his father's longevity. Evidently, his father was the sheikh of a tribe in Iraq and lived into his hundreds. He ultimately ended up sorting foods solely by whether he had personal connection to them. During this process he shared that, despite having to be very careful with his diet, he enjoys eating Iraqi cuisine whenever he can because it helps him feel connected to his culture and the rest of his

family back in Iraq. He had to leave his family to seek asylum in the United States.

All participants were asked in the second interview round to name some of their favorite and least favorite foods, if they had any. Only 2 of the 22 participants in this round did not have any particular favorites or least favorites. Only 4 of the remaining 20 had any least favorites, namely potatoes, spaghetti, and raw vegetables. Of the 20, however, 8 specified that their favorite foods were foods that they associated with their cultural upbringing. These included: two Puerto Ricans who said their favorite foods included pastelles, avocado, and mango; the one Dominican said his favorites were “island food” like fish, curried goat, and jerk chicken; two Sudanese people mentioned a Sudanese lamb dish and okra soup; and three Iraqis’ favorites were tepsi, baklava, and kebab.

Sixteen of the 18 participants in the first round, when asked about the meaning behind trying to include foods from their cultural background in their diet, stressed that it was very important to still be able to eat those foods, even though some are not able to as much as they would like. Eleven of these participants also added that it was very important for them to still eat these foods with their families.

## **Conclusion**

The way foods are categorized maintains people’s perceptions of the similarities and differences between those foods. This categorization further informs how people choose what they eat when given a choice, beyond physical constraints such as cost or allergy. There are many different ways people categorize food. Some significant ways participants in this study did, which are supported in MDS and JHC data, are according to the perceived ethnicity or culture of a food and participants’ personal experiences with the food. These aspects were used alongside



other characteristics, such as the food group a food was thought to belong to or that food's perceived healthiness, to sort items within the population's identified cultural domain of foods they would regularly eat.

Food is closely connected to one's own cultural identity. Quantitative and qualitative data suggest that for this immigrant population customs and habits around a socially constructed category of ethnic food is a means of expressing that identity. Many participants expressed the personal importance of including foods from their own cultural background in their diet. Numerous participants also stressed how that importance extends to their family's diet. Qualitative findings suggest that sharing cultural food customs and habits is probably a common means of extending cultural identity within immigrant families. As food's sentimental value is socially constructed, sharing these customs is likely to socialize family members into having a similar conceptualization of ethnic food.

## ***Chapter 4: The Social Role of Food***

### **Introduction**

Food is biological and it is cultural, but it is also social. Commensality, or the act of eating together, is one of many ways people interact with each other through food. Knowing that participants have a unique connection to food from their cultural background, it is worthwhile to understand how that relationship is extended to other people through the social use of food. The last piece of CFS among this cohort of immigrants at IRIS addressed by this research was that the food a group has access to “maximizes community self-reliance” (Hamm & Bellows, 2003). Next, is a literature review of food’s role in establishing community, including in immigrant communities. Participants’ responses during both rounds of interviews identify some ways participants use food, particularly cultural food, in their interactions with others.

### **Literature Review**

#### *Self-Reliance and Acculturation*

The CFS framework focuses on “community self-reliance” as a means of achieving food security. In this context, community self-reliance is about using social connections to give communities more control over their access to and use of food. Among at-risk communities with access to the land, time, and resources necessary, this can mean engaging in small-scale food production to allow communities to be less dependent on the food system. Community self-reliance can also look very different though. Activities that help to retain and improve food production knowledge, from planting to cooking, and those that support community resource-sharing are also means of improving community self-reliance in regard to CFS (Hamm, 2009).

Just as experiences with food access and food identification vary across subpopulations

of immigrants, social roles around and experiences with using food toward community self-reliance vary as well. Immigrant and refugee women are often at higher risk of food insecurity due to unique challenges with motherhood and caregiving (Stelfox & Newbold, 2019). Among the challenges as an immigrant caregiver are a relative lack of established community and a lack of traditional cultural foods, often resulting in high sugar and fat consumption (Popovic-Lipovac & Strasser, 2015). The role of caregivers in providing food also makes their access to cultural food important for their control of dietary acculturation, the process of adapting traditional beliefs and practices related to food and nutrition to life within a new cultural context (Bhugra, 2004).

A “scape” refers to the fluid, irregular “landscapes” of cultural characteristics around the world. These cultural “landscapes” are a key concept in anthropologist Arjun Appadurai’s framework for understanding how cultural customs are born of the historical, linguistic, and political perspectives of many different social actors, including states, municipalities, kin, social movements, diasporic communities, etc. (1996, p. 33). “Foodscape” is derived from Appadurai’s definition of a cultural scape and used to describe how this concept is relevant to differing cultural customs around food across geographic landscapes (Brembeck, et al., 2013).

Immigrants’ foodscapes change as they move across borders and to other cultures, shaping the context of dietary acculturation.

The process of dietary acculturation can have a significant impact on groups and individuals’ sense of belonging, or feeling of acceptance and establishment of community, as migrants in a new country. Earlier writing in the field of food studies describes the connection between the “Americanization” of immigrants and their food saying, “the very processes of Americanizing ethnic foods and ethnicizing American foods parallel what happens to the

immigrant groups that come to this country” (Kalčík, 1984, p. 60).

*Sharing Food and Creating Belonging*

Ajay Bailey is an ethnographer of population health at the University of Groningen in the Netherlands. In his research he has described the importance of commensality, an act of community resource-sharing and thus self-reliance, in establishing belonging and maintaining community amidst dietary acculturation for Indian migrants in the Netherlands (Bailey, 2017). Overall, the literature on food and belonging has numerous cases of diasporic communities from all around the world using nostalgic, cultural food through cooking and commensality to reconstitute their own identities (Bardenstein, 2002; Ferrero, 2002; Mannur, 2009). This social use of shared, cultural food is used to create belonging among immigrant populations.

Multiple services and organizations for immigrant and refugee aid have incorporated into their programs an understanding of culturally acceptable food’s value in communities they serve. IRIS, in accordance with a federal regulation, has a program to welcome new immigrants with the sharing of a culturally appropriate hot meal. The Executive Director attributed this program to an American culture of hospitality saying, “this is in that great American tradition of welcoming people with a meal, using food to express your hospitality” (Sterling, 2019). Elsewhere in the western world, a woman from Stockholm has started an initiative to cook and share culturally informed meals with immigrants in predominantly ethnic minority neighborhoods to help integrate the diasporic community and the native Swedish community (Daley, 2014). Previous literature has suggested that programmatic solutions to food insecurity among immigrant populations should be developed in a culturally informed manner that helps to foster social connectivity among the population and other communities. However, the same research has critically suggested that these programs should remain adaptable in order to address

the complex experiences of dynamic and diverse immigrant populations and to avoid becoming too simplistic and inefficient (Hammelman, 2018).

## **Original Research**

### *Strengthening Community Through Food*

To help health promotion programs improve CFS while fostering community, this thesis further analyzes participants' responses during semi-structured interviews pertaining to their social use of food to connect with others. Across the 40 interviews, participants shared numerous stories that could be identified as food habits to maximize community self-reliance. Some of these stories were examples of efforts to retain "food production knowledge," such as participants getting their families to participate more in cooking cultural food and passing down that food to children. Others were examples of "resource-sharing," such as sharing their own cultural food to establish and strengthen connections with others and build community.

### *Retaining Cultural Food Knowledge*

A theme that came up across the interviews when talking with participants about the role of cultural food in their lives was the personal importance of continuing to prepare and eat their traditional foods after immigrating, especially with their families. As mentioned in the previous chapter, 16 of the participants stressed that cooking cultural meals at home was really important to them. Six of these participants further added that it was important in their household for everyone to participate in preparing cultural foods. One Syrian woman remarked that it was really important to her to raise her two children how she was raised and keep family traditions, including teaching her son how to cook the things she learned to cook. She also mentioned always trying to cook for her family the way her mother did for her during holidays. A Syrian

man and Afghan woman similarly said that their families cook together whenever they can, and they both teach their children how to cook foods from their cultural background. The Syrian man added that other food customs, such as eating on the floor, were also important for their family to keep. One Iraqi woman emphasized that cooking together was something she shared with her daughter. Likewise, a young Iraqi woman from a different family mentioned that she cooks Iraqi food with her mother frequently. She said it was an activity that helped them feel more connected and one that her mother preferred to eating out at a restaurant.

Five participants, an Afghan woman, a Syrian woman, an Iraqi woman, an Iraqi man, and a Puerto Rican woman, expressed difficulty and frustration with their children not wanting to eat foods from their cultural backgrounds. Instead, their children preferred fast food and other “more American” foods, like burgers and pizza. The Afghan woman, Syrian woman, and Iraqi woman were the same who liked to teach their children to cook. Their children’s food preferences may have been further motivation for them to cook with them. The Iraqi woman said that she and her daughter would sometimes forego cooking Iraqi food in favor of cooking other foods which her children were more willing to eat and were fresher than the fast food they preferred. The Iraqi man said that he and his wife were the only ones who still ate Iraqi food in their household because their children preferred more Americanized food. He showed some concern that his children might lose that part of their culture, something that was hard for him. The Puerto Rican woman said that she cannot always worry about feeding her daughter Puerto Rican foods because she has to monitor her own diet to control her weight.

The Afghan man whose baby qualified for WIC mentioned that when he immigrated with his baby five months prior to the interview, even though he had relatively good access to food, his baby did not like the food in the United States to begin with. He said that this was a difficult

adjustment for him and expressed his own nostalgia for the food in Afghanistan. He missed being able to grow food and experiencing food as it grows on the plant as opposed to just how the food appears in the grocery store aisle. Others made comments related to this Afghan man's nostalgia for fresher food. A Syrian man, an Afghan woman, and a Sudanese woman all said that eating cultural foods was huge for them and their families, but they could not make foods the same here. The Syrian man and Afghan woman both said this was due to poor access to a lot of the same fresh produce as was available to them prior to migrating.

As much as some experienced new difficulties with preparing and getting their families to eat traditional food in the New Haven, numerous participants expressed much less difficulty providing these foods. These participants reaffirmed the importance of eating traditional foods and passing on cultural food habits to their families. Two Sudanese women mentioned that they prepare a lot of Sudanese food for their families and that this was very important to them. An Iraqi woman said that her family eats a lot of Iraqi food as well and that this was important to her for staying connected to their Iraqi culture. A Syrian woman stressed that she prepares Syrian food for her family every day and that they eat more Syrian food than non-Syrian food in their household.

Regardless of degree of dietary acculturation, two Iraqi participants shared that retaining cultural food habits was important for their sense of connectivity. One woman's family has difficulty getting around because she is the only one fluent in English while they only speak Arabic. She said she felt pressure to adopt American food habits but had to balance that with her own family's customs. She specifically tried to avoid American habits of eating too much. An Iraqi man who has lived in the United States for 20 years said that at this point it is hard for him to avoid eating mostly American, processed foods because those are the most available.

Nevertheless, he finds Iraqi food comforting and still eating it is important to him.

### *Sharing of Cultural Food*

Maintaining cultural food habits and traditions is important for a lot of immigrants and their families. Sharing cultural food itself has an important role, too, in connecting with others who do not share their cultural background. 14 participants across both rounds of interviews mentioned that sharing food from their culture has helped them to make new friends and connect with the local community since immigrating.

Many interviewees shared specific stories of how food sharing had helped them to establish community. One Iraqi woman shared that even though she had difficulty getting her children to want to eat Iraqi food as much as she would like she was grateful to still have the opportunity to share Iraqi food with others. She specifically mentioned cooking Iraqi foods for a potluck during her adult education class. This helped her connect more closely with that community while she was studying for her citizenship.

The Afghan man whose baby was on WIC excitedly shared a story toward the end of his interview about one of the food classes he attended at IRIS. IRIS's clients were asked to bring in some foods from their home cultures. He recalled how it meant a lot to him when the teacher of the class loved the Afghan dish he prepared.

The Syrian woman who stressed the importance of raising her two children the way she was raised loved sharing her food as well as her traditions around it. She found sharing food with people in New Haven to be a great way to connect with others and said people are usually excited to try Syrian food. This connection with the community prompted her to start her own catering business. In her experience, sharing food was rewarding for helping to establish both a community and a career. Another Syrian woman said that she would host regular dinners at her



house with both students from Yale University as well as people from IRIS. She mentioned that this had helped her build connections with the broader New Haven community and that she had fun hosting people and feeding them Syrian food.

A few other interviewees mentioned sharing food with some of the closest friends they had made since immigrating to the United States. An Iraqi man observed that some people in the area appreciated trying Arab cuisine while others did not like it as much. One of his closest friends happened to be an American with whom he loves to eat lamb biryani. The man from Dominica also shared that he loves sharing “island food” with people he has met here, adding that he had shared Dominican food with some of his closest friends since immigrating. The younger Iraqi woman who connected with her mother by cooking Iraqi food together recalled a program from when she was in school which she thought she remembered being called “traditional night.” The program allowed students to try traditional foods from a variety of cultures. She added that she made friends through trying Syrian and Egyptian foods.

Still, several participants expressed that they do not share cultural food as much as they would like to. One Sudanese woman makes her own yogurt and wished she shared her food more often. As of her interview, she was planning to bring Sudanese pancakes and a bean soup to people at IRIS to express her gratitude. An Iraqi woman also expressed a wish to share her food with others more often. Two of the participants who wished they shared cultural food more often were among those who expressed concerns about their access to culturally acceptable food. The Puerto Rican woman who mentioned the lack of fresh foods here compared to where she was in Puerto Rico near a lot of small farms wished that she shared more cultural food. This was despite mentioning she had sometimes shared rice and beans, pastelles, and flan with people in the area. She added that she was motivated by her Christian faith to share more. The other participant who

wished she shared more cultural food with people was the Sudanese woman who had found Sudanese food to be inaccessible and had found eating halal to be an adjustment after immigrating. She also said that when she can share food is good for connecting with people.

For some, the ability to share food was correlated with insufficient CFS. For others, sharing food was a way to maintain connections that helped them monitor and improve their physical health. One Puerto Rican woman had a friend with whom she would share cultural recipes on Facebook. They would then keep their own food logs, compare diets, and challenge each other to eat more healthily. The elderly Iraqi man who worked for the World Food Programme back in Iraq would eat and go for walks with a group of friends he had met by sharing food. A Sudanese woman shared a habit of going for walks regularly with family and friends after sharing meals with them.

## **Conclusion**

Socially, food is used to reinforce and retain culture and identity for groups as well as individuals. Food can also be very useful to connect across communities and build new relationships. This was not universal across participants in this study but for many it was found to be a meaningful medium for establishing belonging in an entirely new culture. Retaining cultural food knowledge and forming connections through food are means of maximizing community self-reliance in this population which also contributes toward people's general sense of belonging.

The retention of cultural knowledge and consumption of food is important for many immigrant groups, especially families. This can look like parents deliberately teaching their children to prepare, or at least be exposed to, foods from their cultural background and families

practicing the customs that surround those foods. For some, this retention is a meaningful means of passing on the expression of cultural identity. For others, it is also adaptive to the Americanization of their and their children's diets. Regardless, participants' individual and family experiences with this vary significantly, with several experiencing difficulties like children's food preferences or a lack of the proper culturally appropriate fresh foods.

Food was also found to be important for establishing community connections for a majority of immigrants who participated in this study. Participants shared stories of making valuable connections with people through sharing food from their cultural background with everyone from their classes and people at IRIS to the broader New Haven community to individuals who became some of their closest friends. For a few participants, having connections through food gave them relationships with people who helped them to adopt a healthier lifestyle by working on their diet or walking together. Others reiterated the importance of connecting through food but did not do it as much as they wished they did, either due to lack of accessible cultural food or for reasons unaddressed in these interviews.

## *Chapter 5: Discussion*

### **Conclusions**

Throughout this thesis many different aspects of food's intimate connection to people's lives are discussed in the context of immigration. These aspects range from food insecurity and access to healthy and culturally acceptable foods to people's unique relationship with foods from their own cultural background to how those foods help to establish community, both within families by extending cultural customs and with the broader community where people have resettled. Depending on the degree of this research's generalizability, there are several conclusions that can be drawn about immigrants' experiences with food:

1. Food insecurity among immigrants is associated with difficulty adapting to and navigating the food environment of a new country and the poor availability of fresh, less processed foods. Both of these are connected to one's ability to prepare cultural foods, something associated with a healthier diet. Food assistance program eligibility and the ability to grow one's own food are protective factors against food insecurity.
2. People conceptualize food from their own cultural background in a unique way from other foods. Customs around these foods are important for reconstituting identity and passing on this identification with certain foods.
3. Cultural food has two very important social roles for immigrant communities that were identified in this study. One of these roles is retaining knowledge about the food itself, its preparation, and customs around it within immigrant families, a process associated with the retention of cultural identity. The other role is the sharing of ethnic food to connect with communities outside of one's own and establish a broader sense of belonging in a new country.

4. Community food security is a complex, multifaceted issue. Individuals' and groups' experiences with CFS are diverse and require holistic and adaptable solutions which value the importance of cultural food for people's social well-being, especially for immigrants experiencing acculturation.

Together, these findings provide useful insights into what more culturally informed nutrition and CFS interventions might look like in at-risk immigrant communities. These recommendations, as well as a brief discussion of some broader implications of these findings, follow the discussion of study limitations.

#### *Study Limitations*

Biases in participation may limit the relevance of findings to immigrant populations not represented by this study. Participation was significantly biased toward those from in or near the Middle East (80.8% of participants) but was also slightly biased toward women (57.7% of participants). This could be because the acquisition and preparation of food is a social role typically gendered to women. Therefore, women were probably more likely to be the ones getting food from IRIS's food pantry. Additionally, since interviews were conducted at the food pantry, there is a likely bias in participant selection toward low-income immigrants.

As Murad (2018) found, social experiences of immigrants within their own ethnic communities can vary significantly across ethnicity. In not controlling for participant demographics, this study limited its ability to make claims about a particular subpopulation of immigrants. For instance, the analysis of people's conceptualization of food using MDS and JHC may have been able to produce clearer, more significant results had all participants been of the same or similar ethnic background. Even greater attention to discrepancies between immigrant populations' experiences than this research could provide is likely to improve effectiveness of

more focused community interventions.

As with all research, the role and positionality of the researcher should be addressed as a confounding variable influencing both how the study was conducted and its findings. As a white male with little understanding of Arabic, Pashto, or Spanish, the first languages of participants who were not native English speakers, and who had no established relationship with any of the participants prior to beginning interviews and volunteering with IRIS that summer, data were likely biased by my relative position as an outsider. For instance, some participants may have been less comfortable disclosing information about their experiences with hunger or food insecurity if those were perceived to be sensitive subjects. An even more subtle case included one Iraqi woman who initially referred to feteer as naan because she had found naan was a more familiar, comparable description (depending on how the foods are prepared) to those not familiar with Arabic foods. This was an assumption she had made because of her own perception of me and my unfamiliarity with the food.

Furthermore, interview data were not as comprehensive as they could have been. As this study was conducted with participants who were at IRIS for its weekly food pantry, interview length was limited by the structure and length of the food pantry's operation. Additionally, there was a greater language barrier with some participants than others. These factors resulted in less elaboration and some interviews being shorter than they could have been.

## **Praxis & Implications**

### *Applications of This Research*

Services such as food pantries and nutrition classes satisfy some of the gaps in CFS experienced by a lot of immigrants. These include access to fresh foods and helping mitigate

some cultural barriers like learning how to shop. They are not effective solutions to these issues though. Numerous participants still expressed these concerns.

Ensuring access to fresh, less processed foods was a salient concern for participants in this study. This is primarily a cost barrier for most. From one participant's own experience access to land, private or shared, to practice gardening one's own food is an effective way to mitigate that form of food insecurity which is not reliant on eligibility for food assistance. Community gardening or similar initiatives which allow people control over their own food source can help address this. Others associated the availability of fresh foods with their access to culturally appropriate foods. Education for service providers on the foodscapes and cuisines of immigrants' cultures could help bridge this gap further by making sure that what food is able to be provided helps also to improve access to culturally acceptable food. As for assisting immigrants' adaptation to a new food culture, many enjoyed food and nutrition-related classes they had attended, but others felt they needed more. Some found classes to be at inaccessible times while one woman felt that the class could have been more personalized to her experience.

Overall, the current western model for food assistance and nutrition does not incorporate the values and perspectives of other cultures as well as it could. Within at-risk communities, long-term improvements to CFS must include reducing structural barriers to food access while encouraging the development of community self-reliance in other ways. For immigrants within this population, their cultural connection to food is a notable factor in how they categorize food, likely influenced by this food's connection to their identity and sense of belonging. For them, support of community self-reliance may include valuing the retention of cultural food knowledge within families and supporting the sharing of food within and between communities. Services which aim to help immigrants attain CFS should support immigrants' access to culturally

acceptable foods which maintain these very important social roles. One means of modifying current food and nutrition education strategies to be more culturally informed among immigrant populations is to implement more developed peer education programs for clients to be able to share and reproduce their own cultural food knowledge in a supportive setting.

Nutrition researchers Judy Perkin and Stephanie McCann describe the faults of the current food assistance model in regard to respecting groups' freedom to access foods that are culturally suitable to them saying that food program education must "begin with a recognition of ethnic food habits and beliefs." They add that, "people should be helped to choose an adequate diet within the context of foods and practices that are familiar to them." Ultimately, it is important for members of cultural groups to have representation in the decision-making processes of food assistance programs designed to help them to avoid monolithic recommendations from those who do not share their food customs and traditions (Perkin & McCann, 1984, p. 254)

#### *Broader Implications of This Research*

The last aspect of CFS that was not discussed previously in this thesis was that food should be provided through a sustainable food system (Hamm & Bellows, 2003). While it was outside of the ability for this study to address, it is an increasingly relevant issue for migrant populations. Current trends in immigrant food insecurity and health disparities in their communities are expected to only be further exacerbated by accelerating climate change and increasing economic instability and social inequalities. Each of these factors will drive rising rates of global migration and put our globally interdependent food system at risk (Maynard, et al., 2019). Additionally, in the midst of the COVID-19 pandemic, there is a lot of uncertainty about how immigrant communities' food access and use of food will be affected.



These facts exemplify why CFS is dependent on a food system that is sustainable. With global environmental, economic, and social issues that will continue to impact the global food system and all who depend on it, it is important to develop local alternatives to food production that are environmentally, economically, and socially sustainable. In light of findings from this research, failure to adapt could have dramatic consequences not just for immigrant populations' health but also their identities and ability to effectively establish community and belonging because of poorer access to culturally acceptable foods.

### **Future Research**

Though this research has yielded some useful conclusions and provided some practical insights from its findings, it has also raised a number of questions raised by its limitations which can be addressed in future research.

As CFS is a complex issue experienced differently by different groups of people, further local research with specific immigrant populations is necessary for informing more effective solutions to immigrant communities' experiences with food insecurity and its subsequent health risks. This research explored immigrants' experiences of CFS at the local scale. Systemic solutions are required to restructure a more just food system that does not put such populations at risk. Therefore, larger-scale research on how to accommodate the social role of cultural food in multicultural, at-risk immigrant communities would help better inform less focused policy transformations. Both of these can help to further culturally informed and effective large- and small-scale interventions. This further research should also engage facets of food insecurity and health disparities that were not discussed in depth in this project (e.g. how people's exercise habits have changed through immigrating to the United States).

As this research was conducted over a relatively short time period during the summer of 2019, it lacked the emic understanding of a community and its culture that comes from long-term fieldwork, such as is documented in Dr. Carney's ethnography of poor Mexican and Central American women's experiences with food insecurity in California (2015). Additional thorough ethnographic studies on immigrant populations and their experiences with cultural food can help deepen understanding of the cultural paradigm of immigration, community food security, health, and belonging which informs and will continue to inform food interventions and aid in immigrant communities.

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*Appendices***Appendix 1. Free List Data (N=18)**

Sorted by Frequency then by Saliience

Listed Items	Frequency (#)	Frequency (%)	Average Rank	Saliience
Rice	15	83.3	2.60	0.696
Chicken	13	72.2	4.08	0.482
Vegetable	8	44.4	5.13	0.269
Fruit	8	44.4	5.75	0.245
Salad	6	33.3	4.67	0.230
Kebab	6	33.3	3.50	0.208
Fish	5	27.8	4.20	0.189
Soup	5	27.8	5.00	0.175
Milk	5	27.8	7.00	0.120
Bread	5	27.8	8.40	0.082
Meat	4	22.2	3.25	0.173
Apple	4	22.2	8.50	0.102
Eggs	4	22.2	10.25	0.068
Banana	3	16.7	4.67	0.128
Tabbouleh	3	16.7	5.33	0.106
Dolma*	3	16.7	5.33	0.087
Potato	3	16.7	6.33	0.075
Beef	3	16.7	6.33	0.062
Palaw	3	16.7	9.33	0.043
Kubbeh*	2	11.1	1.00	0.111
Lamb	2	11.1	3.50	0.091
Falafel	2	11.1	4.00	0.084
Fattoush	2	11.1	4.00	0.080
Naan	2	11.1	3.00	0.067
Tea	2	11.1	5.00	0.066
Okra	2	11.1	7.50	0.062
Shawarma	2	11.1	6.00	0.061
Mango	2	11.1	8.50	0.059
Tomato	2	11.1	8.50	0.059
Mujaddara	2	11.1	5.50	0.056
Grapes	2	11.1	8.50	0.055
Yalanji*	2	11.1	5.50	0.053
Yogurt	2	11.1	7.50	0.048
Biryani	2	11.1	8.00	0.026
Burger	2	11.1	10.00	0.020
Pizza	2	11.1	11.00	0.010
Rice and Beans	1	5.6	2.00	0.052



Avocado	1	5.6	2.00	0.051
Baklava	1	5.6	3.00	0.043
Tepsi	1	5.6	5.00	0.042
Lettuce	1	5.6	4.00	0.039
Lahmacun	1	5.6	4.00	0.039
Cheese	1	5.6	5.00	0.038
Pear	1	5.6	6.00	0.038
Peppers	1	5.6	7.00	0.035
Coffee	1	5.6	5.00	0.033
Kibbeh*	1	5.6	8.00	0.031
Cauliflower	1	5.6	6.00	0.028
Fasoulia	1	5.6	6.00	0.028
Spinach	1	5.6	7.00	0.028
Green Beans	1	5.6	10.00	0.024
Aushak	1	5.6	10.00	0.024
Beans	1	5.6	11.00	0.021
Black Cherry	1	5.6	7.00	0.019
Oatmeal	1	5.6	7.00	0.019
Tahini	1	5.6	10.00	0.017
Kabseh	1	5.6	12.00	0.017
Onion	1	5.6	12.00	0.017
Strawberry	1	5.6	13.00	0.014
Goat	1	5.6	13.00	0.014
Lemon	1	5.6	13.00	0.014
Mint	1	5.6	11.00	0.013
Barbecue	1	5.6	11.00	0.013
Pita	1	5.6	8.00	0.012
Brown Rice	1	5.6	9.00	0.011
Orange	1	5.6	9.00	0.011
Blueberry	1	5.6	14.00	0.010
Flour	1	5.6	12.00	0.009
Watermelon	1	5.6	8.00	0.007
Ribs	1	5.6	15.00	0.007
Feteer	1	5.6	13.00	0.004
Turkey	1	5.6	16.00	0.003

\* - Dolma and Yalanji as well as Kubbeh and Kibbeh were combined for the pile sort, as they are regionally different names for the same two dishes.

**Appendix 2. Pile Sort Codes for MDS Plot**

<b>Response</b>	<b>Code</b>
<b>Rice</b>	<b>RICE</b>
<b>Chicken</b>	<b>CHCKN</b>
<b>Fruit</b>	<b>FRUIT</b>
<b>Vegetable</b>	<b>VEG</b>
<b>Salad</b>	<b>SAL</b>
<b>Kebab</b>	<b>KEB</b>
<b>Fish</b>	<b>FISH</b>
<b>Soup</b>	<b>SOUP</b>
<b>Milk</b>	<b>MILK</b>
<b>Bread</b>	<b>BRD</b>
<b>Meat</b>	<b>MEAT</b>
<b>Apple</b>	<b>APL</b>
<b>Eggs</b>	<b>EGG</b>
<b>Banana</b>	<b>BANA</b>
<b>Tabbouleh</b>	<b>TABL</b>
<b>Dolma/Yalanji</b>	<b>DOLMA</b>
<b>Potato</b>	<b>POT</b>
<b>Beef</b>	<b>BEEF</b>
<b>Palaw</b>	<b>PALAW</b>
<b>Kubbeh/Kibbeh</b>	<b>KUBB</b>
<b>Lamb</b>	<b>LAMB</b>
<b>Falafel</b>	<b>FALAF</b>
<b>Fattoush</b>	<b>FATTS</b>
<b>Naan</b>	<b>NAAN</b>
<b>Tea</b>	<b>TEA</b>
<b>Okra</b>	<b>OKRA</b>
<b>Shawarma</b>	<b>SHAW</b>
<b>Mango</b>	<b>MANGO</b>
<b>Tomato</b>	<b>TOMAT</b>
<b>Mujaddara</b>	<b>JUJAD</b>

<b>Grapes</b>	<b>GRAPE</b>
<b>Yogurt</b>	<b>YOG</b>
<b>Biryani</b>	<b>BIRY</b>
<b>Burger</b>	<b>BRGR</b>
<b>Pizza</b>	<b>PIZZA</b>
<b>Rice and Beans</b>	<b>RIBEAN</b>
<b>Avocado</b>	<b>AVAC</b>
<b>Baklava</b>	<b>BAKLV</b>
<b>Tepsi</b>	<b>TEPSI</b>
<b>Lettuce</b>	<b>LETT</b>
<b>Lahmacun</b>	<b>LACHM</b>
<b>Cheese</b>	<b>CHEESE</b>
<b>Pear</b>	<b>PEAR</b>
<b>Peppers</b>	<b>PEPP</b>
<b>Coffee</b>	<b>COFF</b>