How does a 3-week nutrition course affect the eating behaviors of parents among migrant farmworker families in Michigan?

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How Does A Three-Week Nutrition Course Affect The Eating Behaviors Of Parents Among Migrant Farmworker Families In Michigan?

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Honor Thesis submitted to the faculty of Western Michigan University in partial of the fulfillment of the requirements for the degree of Bachelor of Science in Dietetics In Family and Consumer Sciences

Jou-Chen Chen, Chair
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Abstract

Childhood obesity is a health concern in the United States, putting children at risk for serious health problems. Although there has been significant research of childhood obesity, less is known about how eating behaviors and parenting styles of Hispanic and Latino parents impact the health problems (e.g., obesity) of children. Literature demonstrates that Latina and Mexican American cultures shape parents’ feeding practices but most research fails to recognize the contexts of feeding practices within Latino community (Slusser, Neumann, Cumberland, Renenger, Fischer, & Frankel, 2012). As such, the purpose of this study is to identify the use of different parenting styles and eating behaviors among migrant farm worker parents.

This study used a quasi-experimental pre- and post-test research design to assess the effectiveness of a three-week nutrition course for migrant farm worker parents. Thirty-three migrant farm worker parents who reside in the state of Michigan and had children who attend to Telamon Sodus Migrant Head Start at Sodus, Michigan, were recruited for this study. Eight mothers (72.7 %) and three fathers (27.3%) with an average age of 30.64 (SD = 11.68) participated in this study. Results shows that, in this sample, mothers are likely to practice permissive parenting styles than fathers ($p < .01$). Results suggested an increase intake of healthy foods (e.g., fruits and vegetables) and a decrease intake of unhealthy foods (French fires) during the three-week nutrition course. These findings suggested the nutrition course to be effective; however, limitations of the study include the low number of participants and the need for survey questions to be culturally adaptive to reflect the authenticity of food preferences among Mexican and Latino families.
TABLE OF CONTENTS

TITLE PAGE.................................................................................................................... i
ABSTRACT..................................................................................................................... ii

CHAPTERS

1. INTRODUCTION........................................................................................................... 1
   Introduction .................................................................................................................. 1
   Theoretical Framework ............................................................................................... 2
   Background ................................................................................................................... 4
   Statement of Purpose and Hypotheses ....................................................................... 5

2. LITERATURE REVIEW ............................................................................................. 7
   Migrant Farmworker Families .................................................................................... 7
   Health Conditions Among Hispanics ......................................................................... 8
   Health Conditions Among Migrant Children ............................................................. 8
   Feeding Styles and Eating Diet and Behaviors ........................................................... 9

3. METHODOLOGY...................................................................................................... 12
   Methodology and Research Design ........................................................................... 12
   Sampling ................................................................................................................... 13
   Recruitment and Data Collection .............................................................................. 14
   Data Analysis ........................................................................................................... 20

4. RESULTS.................................................................................................................. 21
   Overview ................................................................................................................... 21
   The Effectiveness of Nutrition Course and Eating Behaviors ................................ 21
   The Associations Between Parenting Style, Gender, and Age .................................. 25
   Summary ................................................................................................................... 26

5. DISCUSSION............................................................................................................ 27
   Overview ................................................................................................................... 27
   The Effectiveness of Nutrition Course on Healthy Eating Behaviors ...................... 27
   Parenting Style and Eating Behaviors ..................................................................... 28
   Parenting Style, Gender, and Age .......................................................................... 29
   Limitation .................................................................................................................. 29
   Recommendation ...................................................................................................... 31
   Future Research ....................................................................................................... 31

REFERENCES.............................................................................................................. 32

APPENDICES A to P .................................................................................................... 37-103
Chapter One

Introduction

During the stage of childhood, parents are fundamental in shaping the home environment and children’s dietary choices in the years when lifelong habits develop (Alm, Olsen, & Honkanen, 2015). The family’s food choices play a significant role in the food intake of a child (Alm et al., 2015). In addition, parents tend to have higher control over children’s eating behavior, eating styles, food preferences and selections, and overall food intake of the children’s age (Howenstein, Kumar, Casamassimo, McTigue, Coury, & Yin, 2015; Melbye & Hansen, 2015).

Childhood is also a critical stage in the development of what might become a chronic disease (e.g., obesity), and eating habits and patterns developed during childhood often persist into later life (Betoko, Charles, Hankard, Forhan, Bonet, Saurel-Cubizolles, De Lauzon-Guillain., 2013; Pérez-Rodrigo, & Aranceta, 2003). Therefore, the parenting style(s) and feeding style(s) that parents practice(s) have a huge impact on children’s food intake and preference. Research demonstrates that when parents and children interact during mealtimes, children will establish healthier eating habits and are at lower risk for chronic disease such as obesity and diabetes (Ziegler, Hanson, Ponza, Novak, & Hendricks, 2006). It is very important for parents to understand that parental practices and food behavior impact the food choices throughout children’s life and weight outcomes, even at a young age (Alm et al., 2015). Therefore, it is crucial for parents and caregivers to pay close attention to the food choices and parenting styles practice at home. As eating habits are developing at young age, it is necessary that parents provide the adequate food portions and meet the nutritional needs of children (Alm et al., 2015). Feeding style not only affects the food preference throughout children’s lives but also affects the
development of children’s healthy or unhealthy habits (Hetherington, Cecil, Jackson, & Schwartz, 2011). Alm et al.’s study demonstrated that a healthy diet in children’s lives can prevent children from obesity and weight-related disease such as type-two diabetes, chronic under-nutrition, physical and cognitive growth problems, as well as iron-deficiency anemia (Alm et al., 2015).

Theoretical Framework

Diana Baumrind is a well-known psychologist who developed a parenting typology by using two dimensions, responsiveness and dimensions, to classify parenting behaviors in four patterns: authoritative, authoritarian, permissive, and neglectful (see Figure 1). Based on these parenting styles, parental feeding practices are classified into feeding styles that correlate with Baumrind’s taxonomy of parenting styles (Howenstein et al., 2015; Tait Hubbs, Kennedy, Page, Topham, & Harrist, 2008).

In Baumrind’s theory, two dimensions of parenting are responsiveness (or nurturance) and demandingness (or control). Responsiveness refers to “the extent of which parents foster individuality and self-assertion by being attuned, supportive and acquiescent to children’s requests,” while demandingness refers as “claims that parents make on children to become integrated into society through behaviors regulation direct confrontation, maturity demands and supervision of children activities” (Tait Hubbs et al., 2008, pp. 4-5).

Authoritarian.

Authoritarian parents have higher demands and expectations for their children and when food is associated, they tend to control the amount and portion of the food. Authoritarian parenting style can result in health effects on children, such as obesity or overweight, because
authoritarian parents tend to pressure and restrict children to eat certain foods and disregard children’s food preference (Tait et al., 2008).

**Authoritative.**

Authoritative parenting is known as the appropriate parenting feeding style because parents tend to have a structure during mealtime and provide positive reinforcement throughout the meals (e.g., tangible reinforcement such as stickers and non-tangible reinforcement such as praise). Authoritative parents do not pressure nor force their children to eat but allow their children to eat based on their own appetite. Studies have demonstrated that authoritative parents are less likely to raise overweight or obese children (Tait Hubbs et al., 2008).

**Permissive.**

Tait Hubbs and her colleagues (2008) indicated that parents who practice a permissive parenting style often grew up in poverty and/or lack of resources and were the children of parents who were very demanding. Due to this reason, permissive parents tend to compensate their children by offering what they could not have had as a child. As a result, permissive parents do not set limits, have fewer rules, and have little control during mealtimes; therefore, children decide when and what to eat during the mealtimes. Further, children with permissive parents are less likely to accept responsibility and appear to be immature. Permissive parents usually practice unhealthy eating behaviors that are associated with obesity or overweight.

**Neglectful.**

Neglectful parents tend to have no structure during mealtime so children can eat whatever they want (Tait Hubbs et al., 2008). Tait Hubbs et al. (2008) continued to discuss that most of the time neglectful parents and children do not know when the next meal will be served or neglectful parents tend to “forget” to feed their children. Usually, neglectful parents do not serve parental
roles well, and have an empty refrigerator or grocery shopping irregularly are common for neglectful parents’ households. As a result, children tend to increase their consumption on foods that are high in fats, sugar, and salt (e.g., junk food, candy chips, and sweetened beverages) and decrease their consumption on healthy foods (Tait Hubbs et al., 2008).

Figure 1 Baumrind’s Parenting Typology

Figure 1 above shows the relationship between the two dimensions: demandingness and responsiveness in explaining the concept of four parenting styles of Baumrind’s parenting typology.

**Background**

Throughout the development of a child, it is important that parents cultivate a healthy diet for the optimal growth of a child (Alm et al., 2015). During first several years of children’s life, parents become the role models for children’s diet and have a great influence on children’s eating behaviors as well (Alm et al., 2015). Parents’ behaviors and methods influence the food consumption of children (Holsten, Deatrick, Kumanyika, Pinto-Martin, & Compher, 2011). In addition, family environment influences children’s overall food intake. Children cannot consume foods that are not accessible to them. Because parents buy the grocery food for their children and
are responsible for children’s access to food so parents play an important factor of the family environment (Johnson, Van Jaarsveld, & Wardle, 2011).

Children of migrant farmworkers families face a variety of challenges related to malnutrition due to food insecurity or severe living conditions where living space is shared with multiple families. Also, children suffer from economic constraints and food-related challenges that are due to the disadvantages of the rural living and legal status. These disadvantages may include migrant parents are unaware of the eligibility for accessing government food safety net programs, language barriers, and economic hardship and low parental educational levels (Quandt, Grzywacz, Trejo, & Arcury, 2014).

Migrant farm worker families experience many disadvantages and barriers (e.g., access to health services and language barriers), as well as numerous healthy consequences such as obesity (Quandt et al., 2014). The number of obese children among Mexican Americans in the U.S. is increasing (Quandt et al., 2014). Hence, there is an urgent need to identify the risk factors associated with obesity in this target population (Quandt et al., 2014). An important key factor that plays a crucial role on children’s weight is parental practices. Existing literature demonstrated that parental practices influence children’s weight through children’s eating behavior and nutritional intake; however, few studies have specifically focused on Hispanic and Latino families (Quandt et al., 2014).

**Purpose of Statement and Hypotheses**

The purpose of this study is to examine which parenting style migrant farmworkers practice more often with their children and if the parenting style affects the eating behaviors of the children. The first objective hypothesizes parenting style (authoritative, authoritarian, permissive, and neglectful) within the migrant farmworker community affects the eating
behavior of parents and children. The second objective hypothesizes that there is a relationship between four different parenting styles and the gender and age of parents within migrant farmworker community.
Migrant Farmworker Families

The population of Hispanics and Latinos is one of the largest ethnic groups in the United States. According to the Center for Disease Control and Prevention (CDC, 2016), Hispanic origin includes Mexicans while Latinos includes Puerto Ricans, Dominicans, and Central America individuals such as Colombians, Guatemalans, Hondurans, Ecuadorians, Salvadorans and Peruvians. Hispanics and Latinos are considered as one of the largest ethnic groups in the United States, and, as defined by the Census Bureau (2016), the estimated population of Hispanics in the United States as of July 1, 2016 was 57.5 million. Further, the population of Hispanics in the United States for 2060 is expected to increase to 28.6% percent of the U.S population, which is approximately 119 million persons added to current population of the U.S. (Census Bureau, 2016).

Migrant farm workers are agriculture employees that cultivate and harvest fruits and vegetables in the United States. Although migrants and seasonal farm workers play an important role in fruits and vegetables production in the U.S., the annual income is below the national poverty level (Horton & Stewart, 2012).

Most seasonal or migrant workers in the U.S. are Hispanics (Finch & Vega, 2004). U.S. migrant farm workers face many barriers such as inadequate or limited access to health care, unsanitary conditions (e.g., unclean water), poor working environments, overcrowded housing, and language barriers (Finch & Vega, 2004). In addition, migrant farm workers tend to avoid applying for food assistance programs due to lack of documentation, fear of deportation, or lack of time and transportation (Finch & Vega, 2004). Although migrant farm worker parents have
access to food assistance programs, it seems they are not aware of the existence of these free food assistance programs due to lack of information and knowledge (Bhattarai, Gandhi Raj, Duffy, Patricia A., & Raymond, Jennie, 2005).

**Health Conditions Among Hispanics**

According to the American Obesity Association (Wei & Wu, 2014), Hispanics are at higher risk of being overweight, being obese, and suffering from obesity-related diseases such as diabetes and heart disease compared to non-Hispanic, white Americans in the U.S. (Quandt, Grzywacz, Trejo, & Arcury, 2014). In the same way, Latino American adults are more likely to have Type-2 diabetes than non-Latino whites (CDC, 2016; Quandt et al., 2014).

Unfortunately, Latino children are following the same steps as Latino adults, which then causes a higher incidence of obesity among Mexican-American children when compare with non-Mexican counterparts (Quandt et al., 2014). Further, the risk does not stop at the emergence of obesity but now the occurrence of obesity-related health problems (i.e., Type-2 diabetes) among Latino children and adolescents in the U.S. (CDC, 2016; Quandt et al., 2014).

**Health Conditions Among Migrant Children**

The most common nutrition health problems found in children of seasonal migrants include obesity, diabetes, anemia, and cardiovascular disease (Horton & Stewart, 2012). Also, migrant children have a higher incidence of asthma (Quandt et al., 2014) and baby bottle tooth decay and cavities (Horton & Stewart, 2012). In addition, migrant farm worker children tend to have malnutrition problems due to food insecurity, which affects the growth and proper development of migrant children (Kilanowski, 2012).
Feeding Styles and Eating Diet and Behaviors

According to the American Dietetic Association (2016), the impact of parents and guardians on children’s eating habits is a major component of childhood obesity. Existing literature demonstrated that child feeding practices is a positive way in which parents and guardians make an impact on the child’s nutrition status (Hughes, Power, O’Connor, Orlet Fisher, & Chen, 2016). Feeding practices have been shown to influence children’s food preference and intake (Hughes et al., 2016).

Parenting style has an impact on children’s likelihood of becoming overweight or obese. For example, a study showed that stricter parents increase children’s chance to become overweight (Golan & Crow, 2004). However, when parents monitor the diet and physical activity of the children, the risk of children becoming obese or overweight is reduced. Furthermore, parents’ use of rewards or tangibles reinforcements to increase children’s consumption of healthier foods may also reduce the risk of children becoming obese (Golan & Crow, 2004).

In Hispanic and Latino cultures, parents tend to use strict parenting styles, which focuses on children’s respect of parents’ authority. However, Mexican American parents tend to use different parenting styles. A study of Hispanic and Latino parents found that monitoring children’s food intake and reinforcing healthy eating behaviors was positively related to children’s consumption of healthy foods. Hispanic and Latino parents who practice discipline on children’s food intake and healthy eating behaviors had significant effects on children’s diet but did not have a significant impact on children’s eating habits or physical activity (Ayón et al., 2015).

Additionally, several studies demonstrated that the impact and relationships among obesity, overweight and feeding strategies vary differently between cultures (Birch, Johnson, &
Fisher, 1995). For example, the perspective of overweight in Latinos is a sign of good health. A study conducted in Mexico demonstrated that Latino parents who have obese children did not identify obesity as a health problem or being overweight; further, Latino parents also viewed food pressuring (i.e., require children to finish all the food on the plate) as an act of showing parents’ love and care (Ayón et al., 2015). White et al. (2013) found that when children of non-Latino groups were not hungry or were feeling full with food left still left on a plate were considered by parents to be bored, full, or wanting something else to eat; in contrast, in Latino families, children who are not hungry and leave food on the plate are viewed as sick or being ill.

Hughes et al. (2008) conducted a study in Mexico and examined the parenting styles of three different ethnicities. The study found that one third of Hispanic parent’s practice authoritarian parenting and feeding style. Authoritarian feeding style includes restrictive feeding and pressure to eat. Hughes et al. (2008) also found that Hispanics tend to use permissive parenting style more than any other ethnic groups. Permissive parenting style is likely to affect the health status negatively since parents allow them (children) to eat anything they request. Further, permissive parents are less likely to demand or pressure children to eat. Therefore, it is important for parents to monitor children’s eating habits and behaviors because a lack of structure during mealtime can cause unhealthy eating habits and lead to being overweight or obese during adulthood.

Vereecken, Legiest, De Bourdeaudhuij, and Maes (2009) addressed that authoritative feeding is the most effective feeding style to use when parents are trying to help children to consume healthy foods (e.g., fruits and vegetables). The study also showed that parents who practice authoritative feeding style are more likely to have multiple attempts and invest more time in encouraging children to increase the intake of healthy foods such as fruits and vegetables (Vereecken et al., 2009).
A study that focused on the diet rather than the eating behaviors or parenting styles of Hispanics and Latinos demonstrated that Hispanics’/Mexicans’ diet consists more of rice, fruits, and vegetables while Puerto Ricans have a higher consumption of fruits and Cubans consume a higher amount of vegetables than Hispanic Americans born in the U.S. (Gordon-Larsen, Harris, Ward, & Popkin, 2003). Hispanics born in the home country tend to have a traditional diet includes low-fat foods, beans, tortillas, and rice (Gordon-Larsen et al., 2003). The study also indicated that, unfortunately, it is challenging for Hispanics and Latinos to continue the traditional diet when they move to the U.S due to the lack of certain fruits and vegetables that are not available in the U.S. (Ziegler, Hanson, Ponza, Novak, & Hendricks, 2006). As a result, Hispanics and Latinos are forced to adapt a new diet and eating behaviors after migration and thus resulted in worsening health outcome (Ziegler et al., 2006).
Chapter 3

Methodology

This chapter will provide an outline of the research method that was used in this study. Information is given on how and where participants were sampled and the reason and purpose of the chosen research design. Also, the instruments and measurements will be discussed as well as the producers and methods that were used for data collection and data analysis.

Methodology and Research Design

Methodology.

A research design consists of a structure and systematic plan to organize demographic characteristics (i.e., answer research questions, selecting subjects, data collection, and date of birth) of a research study (Monsen, Van Horn, & American Dietetic Association, 2008). Also, a research design serves as a bridge between the research question and the research strategy (Monsen, Van Horn, & American Dietetic Association, 2008). In this study, we applied quantitative methodology by using the cross-sectional, quasi-experimental pre- and post-tests research design.

Research Design.

Cross-sectional studies are studies that all variables are measured at the same point in time (exposure and outcomes) and are evidence for possible risk factors (Monsen, Van Horn, & American Dietetic Association, 2008). The advantages of cross-sectional studies are inexpensive cost and findings and outcomes can be analyzed to develop new studies (Monsen, Van Horn, & American Dietetic Association, 2008). The disadvantages of cross-sectional studies are that it cannot determine cause and effect and it cannot be used to analyze behavior over a period of time. The typical findings are associated between risk factors, exposure, disease, or conditions.
In this cross-sectional study, we will analyze how participants differ in the variable of interest but share other demographic characteristics (i.e., age, sex, and date of birth).

Further, a pre-and post-test study intervention is also known as one of the quasi-experimental design (Monsen, Van Horn, & American Dietetic Association, 2008). It evaluates interventions without using randomization (Monsen, Van Horn, & American Dietetic Association 2008), which aligns with the goal of this study: to investigate the outcome of an intervention. While a pre- and post-test will be used to measure the variable before the first session and after the last session of the nutrition program, the goal of the pre-and post-tests for the present study is to compare and measure the differences of both pre- and post-surveys. The pre-and post-test will show if there was an increase in healthier food choices within the three-week nutrition course. Study findings will allow us to know if the adopted curriculum for the three-week nutrition course is effective.

**Sampling**

The study was conducted at Sodus Migrant Head Start, where the participants’ children were enrolled. Participants in this study include migrant farm workers who reside in the state of Michigan in late summer and early fall 2017. Requirements of study participation included: migrant farm workers who were parents and had children enrolled at the local Head Start program; who were low-income Mexican or Latin American migrant workers living in farm camps for four months.

**Demographic Characteristics**

Demographics of the participants of the study was collected, including age, sex, and ethnicity. Table 1 shows a summary of demographic characteristics of migrant farm worker parents.
Table 1 *Demographic Characteristics of Participants*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>20-30 years</td>
<td>8</td>
<td>72.7%</td>
</tr>
<tr>
<td></td>
<td>31-40 years</td>
<td>2</td>
<td>18.2%</td>
</tr>
<tr>
<td></td>
<td>61-70 years</td>
<td>1</td>
<td>9.1%</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td>Female</td>
<td>8</td>
<td>72.7%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>3</td>
<td>27.3%</td>
</tr>
<tr>
<td><strong>Ethnicity group</strong></td>
<td>Mexican</td>
<td>10</td>
<td>90.9%</td>
</tr>
<tr>
<td></td>
<td>Latino (a)</td>
<td>1</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

**Gender.**

A total of eight mothers (72.7 %) and three fathers (27.3%) participated in the study (See Table 1). Overall, a total of 11 (N=11) migrant farmworker parents participated in the three-week nutrition course. [Does participating in the nutrition course also mean participating in the study?]

**Age.**

The average age of the participants was 30.64 ($SD = 11.68$), and most study participants ($N = 8$) were from the age group of 20 to 30 (72.7 %). Two participants represented 18.2% of the study participants, were in the age group of 31 to 40. Only one participant was from the age group of 61 to 70, which represents 9.1% of the study sample.

**Recruitment and Data Collection**

**Recruitment.**

A Recruitment flyer was given to thirty-three parents when they picked their children up from or dropped their children off at the Migrant Head Start program. The flyer contained information about the nutrition course: time, address, duration, nutrition course themes, and a phone number to call if interested (see Appendix K). Spanish version of the recruitment flyer, consent form and multimedia-released form were translated by investigator (Keren Reyes) and back translated to English to ensure the construct validity and transparency of Spanish version of
the forms. The Spanish translation was examined by Dr. Angel Gullon-Rivera who is a Spanish native speaker and is also a faculty member at Family Science program at WMU (see Appendix D).

Interested parents had the options to call the phone number provided on the flyer or sign-up at the school’s office on the sign-up sheet (see Appendix K for and see Appendix P for sign-up sheet). When a participant called the phone number listed on the flyer, the Project L.E.A.N. (Linking Education, Activity and Nutrition) Nutrition Educator (i.e., the investigator) scheduled a phone call appointment to talk about the nutrition course. The investigator (Nutrition Educator) discussed and explained the informed consent and multimedia release permission during the beginning of the first class. If parents were still interested in participating in the study after explanation, parents would sign the informed consent and multimedia-released forms and returned them (informed consent and multimedia release forms) to the investigator during the first class meeting of the nutrition course (see Appendix F for informed consent form and see Appendix M for multimedia release). Participants kept a copy of the signed consent form while the other copy of the signed consent form was collected by investigator. The signed consent form and collected survey data was kept in a separate sealed envelope with a signed sticker on each envelope. Both sealed envelopes were locked overnight in the trunk of the car of the investigator before the sealed envelopes were carried to primary investigator’s office at WMU campus. Only the investigator had the key to the car and kept data secure in the locked trunk. Only the investigator and her faculty advisor, Dr. Jou-Chen Chen, were allowed to open the sealed envelopes to access the collected surveys, forms and data when the data is carried to primary investigator’s office at WMU campus.
After, parents signed the informed consent (see Appendix F) and multimedia release (see Appendix M) parents were invited to participate in the three-week nutrition course. Parents did not being penalized when they decided to withdraw from the study before, during, and after attending the nutrition courses. In the study, thirty-three parents were invited to participate; however, only eleven parents participated in the study and attended to all the tree-week nutrition course. Also, during the three-week nutrition course, parents received free food during each nutrition course, handouts, and free giveaways such as kitchen utilizes, physical activity equipment, and nutrition books from Project L.E.A.N (see Appendix C)

**Data collection: Measurements and instrumentation.**

Each class meeting lasted for an hour except for the first and last class meeting, both class meetings would last for 1.5 hours to include pre- and post-tests. Spanish version of the pre- and post-tests (see Appendix N) and closed-ended survey (see Appendix O) were translated by investigator (Keren Reyes) and back translated to English to ensure the construct validity and transparency of Spanish version of the forms. The Spanish translation was examined by Dr. Angel Gullon-Rivera who is a Spanish native speaker and is also a faculty member at Family Science program at WMU (see Appendix D). Survey questions asked about participants’ food and nutrition consumption as well as participants’ nutrition knowledge based on topics covered in the nutrition courses, including beverages, fat, child development knowledge (i.e., your growing child), food safety and storage, and the shopping strategies (i.e., smart shopper). In addition to collect numerical data using close-ended survey questions, two open-ended survey questions were used in the study. Qualitative questions were asked to collect parents’ perceptions and practices of their parenting styles based on Baumrind's parenting typology in the second class meeting of the nutrition course, titled “Your Growing Child”. The open-ended survey (see
Appendix O) would take approximately 10 minutes. Quantitative data was collected via survey during the first and last class meetings, which consists of 19 multiple-choice questions and seven additional questions about gender, birth month, date, age, middle initial, and ethnicity. Parents were given a paper survey and pencil, which took approximately 20 to 30 minutes to complete the survey (see Appendix N).

*Simply Good Eating.*

Simply Good Eating curriculum (Gromberg & Wells, 1997) employed by the present study was adapted from Project L.E.A.N and modified from a six-week course to a three-week course due to migrant farm workers’ work schedule. The curriculum was used in the present study for two reasons. First, the investigator (Keren Reyes) teaches Simply Good Eating curriculum for Project L.E.A.N during the summer to Mexican and Latino parents. Secondly, in 2012, the University of Minnesota Extension did a study based on the Simply Good Eating curriculum (Sherman, Lovett, Barno, Gold, Ali Hurtado, & Ri Joeng, 2012). The objective of the study was to evaluate if the design of the nutrition program is effective for English Language Learners. The study included multiethnic, multilingual and 72% low-income women in urban and rural settings. In addition, the nutrition program covered six nutrition lessons (i.e. physical activity, fruits and vegetables intake, beverages, fat, smart shopping and food safety) of 6.5 hours of instructions during a time frame of three months. Each nutrition lesson included hands-on activities by using visual and actual food products. The overall results of the study determine that the Simply Good Eating curriculum demonstrates positive dietary outcomes based on the number of attendance of each nutrition lesson (Sherman, et al., 2012).

The lead author of the Simply Good Eating curriculum is Jill Gromberg, a Register Dietitian who has a Master’s in Public Health Nutrition and a professional extension educator at
the University of Minnesota (University of Minnosta, 2009). The curriculum was developed by
the University of Minnesota Extension and created in 2005 after a large population of
immigrants migrated from South America, Southeast Asian, African, and Eastern European
settled in Minnesota. Nutrition educators at the University of Minnesota Extension were
frustrated because they (nutrition educators) couldn’t understand the needs and diet of the newly
arrived immigrant families at Hennepin County in Minnesota (University of Minnosta, 2009).
Due to these reasons, the nutrition educators from the University of Minnesota Extension created
a new version of the curriculum in 2009 for English Language Learners and was adapted from
the original Simply Good Eating curriculum developed by Gromberg and Wells in 1997. The
newer version of the curriculum consisted of thirteen lessons (i.e. variety, beverages, fats,
species, your growing child, fruits and vegetables, preparing safe food, microwave safety,
calcium, iron and the smart shopper) of 45 minutes to 2.5 hours each class (University of
Minnosta, 2009). The purpose of these curriculum is to increase the consumption of five cups of
fruits and vegetables, cook and prepare healthy food, food safety, how to read food labels and
how to shop smart (University of Minnosta, 2009).

In the present study, Simple Good Eating curriculum was used to create six nutrition
course lectures and the topics covered by the classes were similar to the study from the
University of Minnesota Extension. However, this study didn’t include the physical activity
topic, instead the study covered the topic “Your Growing Child. The topic “Your Growing Child
was use in this study since it covered the important roles of adults and children feeding. The
present study didn’t use the original length of the lecture and course (6.5 hours of instructions
during a time frame of three months), instead this study used a 30-minute lecture and a 30-
minute hands-on activity for three weeks. The reduction of weeks didn’t affect the curriculum
since the study used the same amount of weeks and lessons from Project L.E.A.N, which also proved to be an effective curriculum. However, due to migrant farm workers’ work schedule the nutrition classes were taught twice a week for three weeks instead of once a week for six weeks. Although, the present study did not use the same amount of nutrition courses (six nutrition classes) that Project L.E.A.N and the University of Minnesota used, this study used the same combination of a lecture and hands-on-activity from Project L.E.A.N and the University of Minnesota.

The first section of the survey is adapted from Project L.E.A.N, which includes a pre-and post-survey of 19 multiple choice questions about beverages, fat, child development knowledge (i.e., “your growing child”), food safety and storage, and shopping strategies (i.e., “smart shopper”). Survey questions ask about portion sizes of their usual intake of the five food groups (fruit, vegetables, protein, dairy, and grains) during the past weeks. An additional seven questions about the participant’s demographics characteristics were included at the end of the. The second section of the survey is an open-ended question based on Baumrind’s Parenting Typology (Luther, 2007).

The open-ended section (see Appendix O) of the survey was given to participants during the second-class meeting of the nutrition course. In class, parents and nutrition educator discussed about the four different parenting styles from Baumrind’s Parenting Typology, then each parent created and performed a skit portraying one of the four parenting style. After, each parent performed their parenting style skit, parents were given a survey based on Baumrind’s Parenting Typology. The survey included a definition of each parenting style and parents had the opportunity to choose and write down which parenting style(s) (authoritative, authoritarian, permissive, and neglectful) they practice more frequently with their children. In the same way,
the survey included an option for parents that identify themselves with more than one parenting style.

**Data Analysis**

In this study, SPSS 25.0 was used to run statistics analyses. Paired sample T-tests and Pearson’s Correlation were employed for data analysis. Descriptive statistics for demographic characteristics (i.e., age, sex, and date of birth) and paired-sample t-test were used for pre-post-test to compare participant’s scores on the same variable at two different times. Also, Pearson’s correlation was used to understand the associations between different study variables.
Chapter Four

Results

This chapter discusses study results based on qualitative and quantitative data collected from 11 migrant farmworker parents (n=11) between September and October in 2017. Data was analyzed to identify, describe and explore the relationship between parenting style and parents eating behaviors among migrant farm worker families. SPSS 25.0 was employed for data analysis and discussions about study findings in this chapter will be guided by the proposed research questions based on the results of descriptive analysis, correlation, and paired-sample t-test. Descriptive analysis was used in this study to describe the participant’s demographic characteristics while Pearson’s correlation was used to analyze and explore the relationship between three variables: sex, age, and parenting styles. Paired-sample t-test was used to discover if a significant difference is indicated between the results of pre- and post- tests (see Appendix N for a copy of the pre- and post- test).

Ethnicity.

The majority of participates identified as Mexicans (90.1%, N=10), while one parent identified as Latino who comes from Colombian (9.1%, N = 1). The majority of the participants were between the ages of 20 to 30 and identified as Mexican females.

The Effectiveness of Nutrition Course and Eating Behaviors

Further analysis of the overall results for the pre-test and post-test was done through the paired sample t-test statistics to compare the means of two groups’ (pre-test and post-test) test scores. The paired sample t-test was carried out to gather overall differences in the pre-test and post-test results for the parenting styles and eating behaviors of migrant farmworker parents. As presented in the Table 2, there were significant differences for most of the test items before and
after taking 3-week nutrition course at the 0.05 significance level. Results displayed in Table 2 showed that there were significant increases in the consumption, amount, and variety of fruits, lettuces, vegetables, beans, and white potatoes. Results also suggested that there were significant decreases in drinking juice (not 100% juice) and eating French fries after taking the nutrition course.

Study results indicated that mean juice intake significantly differed before taking ($M = 3.55, SD = 1.92$) and after taking the nutrition class ($M = 2.00, SD = 1.61$) as displayed in the pre-test and post-test scores for Juice intake at the 0.05 level of significance ($t = 4.95, df = 10, n = 11, p < .01$). The mean of the amount of juice intake decreased significantly after taking nutrition course ($M = 1.27, SD = 0.65$); the mean of the amount of juice intake before class was 2.00 ($SD = 1.18$). Table 2 displays the mean difference in juice intake before and after the course is significant ($t = 1.9, df = 10, n = 11, p = .70$).

Fruit intake showed an increase between the pre- and post-test results; the means before nutrition course ($M = 4.55, SD = 1.51$) and after nutrition course ($M = 6.5, SD = 1.37$) were significantly different from each other ($t = -4.0, df = 10, n = 11, p < .01$). The overall results of the amount of fruit intake also demonstrated significant increase ($t = -9.0, df = 10, n = 11, p < .01$) after taking the nutrition course with a mean of 2.36 ($SD = 0.67$) before class and 3.64 ($SD = 3.64$) after nutrition course. Results for lettuce intake indicated a significant increase ($t = 6.7, df = 10, n = 11, p < .001$) before taking nutrition course ($M = 2.73, SD = 1.56$) and after taking nutrition courses ($M = 6.55, SD = 1.21$) as well. In addition, the amount of lettuce intake also demonstrates a significant increase ($t = -6.7, df = 10, n = 11, p < .001$) before nutrition courses ($M = 1.64, SD = 0.81$) and after nutrition courses ($M = 3.00, SD = .89$).
Study results for consumption of French fries’ intake indicated that the mean significantly decreased \((t = 5.3, df = 10, n = 11, p < .001)\) from before taking the nutrition class \((M = 2.64, SD = 1.03)\) to after taking the nutrition class \((M = 1.00, SD = .000)\). However, interestingly, the results of the amount of French fries’ intake demonstrated no increase nor decrease \((t = 1.9, df = 10, n = 11)\) before taking the nutrition class \((M = 1.27, SD = 0.47)\) and after taking the nutrition class \((M = 1.00, SD = .000)\).

Further, the results of the amount of potato intake also demonstrated a significant increase \((t = -2.9, df = 10, n = 11, p < .05)\) after taking the nutrition course with a mean of 2.36 \((SD = 0.51)\) before class and a mean of 1.91 \((SD = 0.54)\) after class. However, white potato intake did not show a significant increase between the pre- and post-test results indicating the mean before nutrition course \((M = 2.55, SD = 1.37)\) and after nutrition course \((M = 3.18, SD = .41)\) are not different from each other \((t = -1.6, df = 10, n = 11, p = .629)\).

Results for bean intake indicate a significant increase \((t = -6.3, df = 10, n = 11, p < .001)\) before nutrition course \((M = 3.73, SD = 1.10)\) and after nutrition course \((M = 5.4, SD = .82)\) as well. In addition, the amount of bean intake also demonstrates a significant increase \((t = -6.5, df = 10, n = 11, p < .001)\) before nutrition course \((M = 1.73, SD = 0.47)\) and after nutrition course \((M = 2.91, SD = .31)\).

Vegetable intake showed an increase between the pre- and post-test results indicating the mean before nutrition course \((M = 3.09, SD = 2.39)\) and after nutrition course \((M = 5.9, SD = 1.51)\) are significantly different (increase) from each other \((t = -5.1, df = 10, n = 11, p < .001)\). The overall results of the amount of vegetable intake also demonstrated significant increase \((t = -6.5, df = 10, n = 11, p < .001)\) after taking the nutrition course with a mean of 1.55 \((SD = 0.69)\) before class and 2.82 \((SD = .60)\) after nutrition course.
Results for tomato sauce intake, the amount of tomato sauce intake, vegetable soup intake, as well as the amount of vegetable soup intake all showed that the means are not significantly different from each other before taking the nutrition course and after taking the nutrition course.

Results of mixed vegetable showed an increase between the pre- and post-test results indicating the mean before nutrition course ($M = 4.18, SD = 2.14$) and after nutrition course ($M = 6.36, SD = 1.50$) are significantly different from each other ($t = -5.8, df = 10, n = 11, p < .001$).

In summary, 12 out of 19 items yielded significant difference while 7 items (100% juice intake, amount of French fries, white potato intake, intake and amount of tomato sauce, as well as the intake and amount of vegetable soup) yield insignificant results.

Table 2 *Results of Paired Sample t-test for Eating Behaviors Among Migrant Farmworker Families*

<table>
<thead>
<tr>
<th>Outcome Variables</th>
<th>Pretest</th>
<th>Posttest</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Juice Intake</td>
<td>11</td>
<td>3.55</td>
<td>1.92</td>
<td>2.00</td>
</tr>
<tr>
<td>100% Juice Intake</td>
<td>11</td>
<td>2.00</td>
<td>1.18</td>
<td>1.27</td>
</tr>
<tr>
<td>Fruit Intake</td>
<td>11</td>
<td>4.55</td>
<td>1.51</td>
<td>6.5</td>
</tr>
<tr>
<td>Fruit Intake Amount</td>
<td>11</td>
<td>2.36</td>
<td>0.67</td>
<td>3.64</td>
</tr>
<tr>
<td>Lettuce Intake</td>
<td>11</td>
<td>2.73</td>
<td>1.56</td>
<td>6.55</td>
</tr>
<tr>
<td>Lettuce Intake Amount</td>
<td>11</td>
<td>1.64</td>
<td>0.81</td>
<td>3.00</td>
</tr>
<tr>
<td>Fries Intake</td>
<td>11</td>
<td>2.64</td>
<td>1.03</td>
<td>1.00</td>
</tr>
<tr>
<td>Fries Intake Amount</td>
<td>11</td>
<td>1.27</td>
<td>0.47</td>
<td>1.00</td>
</tr>
<tr>
<td>White Potato Intake</td>
<td>11</td>
<td>2.55</td>
<td>1.37</td>
<td>3.18</td>
</tr>
<tr>
<td>White potato Intake Amount</td>
<td>11</td>
<td>1.91</td>
<td>0.54</td>
<td>2.36</td>
</tr>
<tr>
<td>Bean Intake</td>
<td>11</td>
<td>3.73</td>
<td>1.10</td>
<td>5.45</td>
</tr>
<tr>
<td>Bean Intake Amount</td>
<td>11</td>
<td>1.73</td>
<td>0.47</td>
<td>2.91</td>
</tr>
<tr>
<td>Veggie Intake</td>
<td>11</td>
<td>3.09</td>
<td>2.39</td>
<td>5.91</td>
</tr>
<tr>
<td>Veggie Intake Amount</td>
<td>11</td>
<td>1.55</td>
<td>0.69</td>
<td>2.82</td>
</tr>
<tr>
<td>Tomato Sauce Intake</td>
<td>11</td>
<td>3.55</td>
<td>1.97</td>
<td>2.55</td>
</tr>
<tr>
<td>Tomato Sauce Intake Amount</td>
<td>11</td>
<td>1.36</td>
<td>0.67</td>
<td>1.00</td>
</tr>
<tr>
<td>Veg Soup Intake</td>
<td>11</td>
<td>4.00</td>
<td>1.67</td>
<td>3.18</td>
</tr>
<tr>
<td>Veg Soup Intake Amount</td>
<td>11</td>
<td>1.64</td>
<td>0.67</td>
<td>1.09</td>
</tr>
<tr>
<td>Mix Veg Intake</td>
<td>11</td>
<td>4.18</td>
<td>2.14</td>
<td>6.36</td>
</tr>
</tbody>
</table>
Note. *p < .05, **p < .01, ***p < .001

The Associations between Parenting Styles, Gender, and Age

In addition to using a paired-sample t-test, Pearson’s correlation analysis was utilized to determine the associations between four parenting styles and gender as well as four parenting styles and age. Results of Pearson’s correlation are demonstrated in Table 3 and Table 4 below.

Study findings found that a permissive parenting style (authoritarian is coded as 1, authoritative is coded as 2, permissive is coded as 3 and neglectful is coded as 4) and gender (male is coded as 0 and female is coded as 1) is positively and significantly correlated with each other ($r = .67, p < .05$) while the other three parenting styles are insignificantly correlated with sex (see Table 3). This result means that mothers tended to practice permissive parenting style. Further, there are no significant correlations between four parenting styles and age (Table 4).

Table 3 Correlations Statistics for Four Parenting Style and Gender

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>Sex</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Authoritative</td>
<td>-.516</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Authoritarian</td>
<td>-.386</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Permissive</td>
<td>.671*</td>
<td></td>
<td></td>
<td>---</td>
</tr>
<tr>
<td>5</td>
<td>Neglectful</td>
<td>a</td>
<td></td>
<td></td>
<td>---</td>
</tr>
</tbody>
</table>

Note. *p < .05, a none of the participants reported practicing neglectful parenting style.

Table 4 Correlations Statistics for Four Parenting Style and Age

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Authoritative</td>
<td>-.075</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Authoritarian</td>
<td>.517</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Permissive</td>
<td>-.456</td>
<td></td>
<td></td>
<td>---</td>
</tr>
<tr>
<td>5</td>
<td>Neglectful</td>
<td>a</td>
<td></td>
<td></td>
<td>---</td>
</tr>
</tbody>
</table>

Note. *p < .05, a none of the participants report to practice neglectful parenting style.
Summary

The paired sample t-test demonstrated that during the three-week nutrition course, study participants decreased their intake of unhealthy foods (e.g., not 100% juice and French fries) and increased their consumption, quantity and variety of healthy food choices such as vegetables and fruits. In addition, the correlation analysis showed a positive association between permissive parenting style and gender while there is no significant result to support the association between four parenting styles and age.

In addition, six mothers practice permissive parenting styles ($r = .67, p < .05$) and two mothers practice authoritarian parenting styles, while two fathers practice authoritarian and one father practice authoritative. This study result suggests that mothers are less demanding for food consumptions whereas fathers are more demanding on food consumption when preparing food for children in the present study.

In response to the hypotheses of present study, results showed that during the three-week nutrition course, parents reported they increased the consumption of healthier food options in five food groups and decreased the consumption on foods that contain high amounts of fats, sodium, and sugar. Hence, study findings concluded that the three-week nutrition course is effective among migrant farmworker families who participated in the study.

Table 5 Hypotheses and Key Findings

<table>
<thead>
<tr>
<th>Research Questions and Hypotheses</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>What parenting style do migrant parents report using the most compare to the other parenting styles?</td>
<td>Results found that migrant farmworker mothers are most likely to report using a permissive parenting styles ($r = .671$),</td>
</tr>
<tr>
<td>There are associations between four parenting styles and the age and gender of migrant farmworker parents.</td>
<td>Results indicated that there is a positive association between permissive parenting style and gender but there is no significant association between four parenting styles and age.</td>
</tr>
</tbody>
</table>
Chapter 5

Discussion

Overview

In this chapter, study findings regarding the impact of parenting and feeding style on the eating behaviors of migrant farm worker families will be discussed based on the comparison between study results and existing literature. The implications, recommendations for future research and practice, and the limitations of the study will be discussed as well.

The Effectiveness of Nutrition Course on Healthy Eating Behaviors

In the present study, all migrant farmworker parents showed significant eating behavior change after participating in the three-week nutrition course. When the pre- and post-tests results were compared, parents also reported an increase in the consumption of healthy foods (e.g. fruits and vegetables) and a decrease in the intake of unhealthy foods (e.g., French fries).

Previous research demonstrated that nutrition education courses are effective. For example, in 2011 a nutrition education intervention was conducted at a California elementary school. The nutrition education intervention focused on increasing the knowledge of healthy eating, physical activity, and awareness of healthy eating behaviors and physical activities among kids and parents. Before and after the nutrition education course, children were given a survey to determine the effectiveness of the program. Later, parents were also given a survey at the end of the study. During the sixteen-week course, students were introduced to the healthy food through lessons, games, and food. The surveys showed that children and parents increased their consumption of healthy foods as a result of the nutrition education course (Carson & Reiboldt, 2011). Results demonstrated that nutrition education course has positive effects on children as well as the parents. The results of that study suggested that a family-based and
culturally relevant intervention can improve the dietary and physical activities and behaviors in ethnic and minority youths.

**Parenting style and Eating Behaviors**

In the present study, findings showed that mothers report using a permissive parenting style. While data on children’s food intake was not collected in this present study, according to Holtrop, Smith, and Scott (2015), permissive feeding practices are associated with a higher intake of unhealthy food; evidence from existing literature on Latino children suggested that those children who experience permissive parenting practices tend to consume higher consumption of calories causing overweight or obesity in children. The prevalence of obesity in Hispanics are higher than non-Hispanic white youth (Wei & Wu, 2014). During the early ages of a child, from ages 2 to 5, Hispanics are at higher risk of becoming obese or overweight due to their socioeconomics, feeding habits, parenting style and lack on physical activity, which increases obesity among Hispanics (Wei & Wu, 2014).

Future research also demonstrated that eating behaviors and parenting styles are important key factors on children’s weight (Quandt et al., 2014). Chaidez and Kaiser (2008) found that children of parents who practice permissive or neglectful parenting and feeding styles eat less fruit, vegetables and dairy products and drink less 100% juice. Further, Chaidez and Kaiser (2008) also found that Hispanic mothers who practice permissive parenting style are more likely to promote unhealthy food choices to their children while mothers who practice authoritative parenting style promote healthier food choices. According to these study findings and the results suggested by the present study (especially the results demonstrated in the pre-test before and after taking the nutrition course), parents increase significantly their eating behavior.
Parenting style, Gender, and Age

Findings of the present study indicated that mothers tend to practice permissive parenting style and there were no significant differences between age and four styles of parenting which does not support the findings suggested by existing literature: older parents are more likely using authoritative parenting style. Future research is required to explorations the cause of the inconsistency.

Chaidez and Kaiser (2008) found that Hispanic mothers are more likely to practice either permissive or authoritative parenting style, whereas Latino fathers tend to practice authoritative parenting style. Latino fathers demonstrated more discipline while mothers demonstrated more nurturing behaviors (Grossman, 1995). Several researchers found that children of permissive mothers are more likely to be overweight or being obese than children of mothers practiced authoritarian and authoritative parenting styles (Rhee, Lumeng, Appugliese, Kaciroti, & Bradley, 2006).

Therefore, this finding of the present study is consistent with the existing literature and yet the effectiveness of the three-week nutrition course implemented on Mexican migrant farmworker families in the present study helped shed light on the success and possibility of promoting changes in healthy eating behaviors within migrant farmworker community.

Limitations

One limitation of this study is the small sample size. During the summer and early fall, migrant farmworkers work for long hours (from morning to night) and they have different work schedules which make it difficult to arrange class meeting schedules for nutrition course. Also, during the late fall, migrant farmworkers begin to leave the state of Michigan to a different state
Because of the nature of the job. Thus, it is likely to affect the size of the study since participants were required to meet twice a week for two hours.

Another limitation of the study is that daycare was not provided for participants during the three-week nutrition course. This limitation may cause low participation rate because parents either left children at home or brought them to class.

Also, another limitation was that children’s food intake was not collected. The design of the nutrition course focused on eating behavior and knowledge about food acquired by parents not health outcomes among parents and children of migrant farm worker parents. Reasons of not collecting food intake from children as well as information of ealt outcomes among parents and children included limited time and difficulties to receive parents’ permission to collect data from children. In addition, other challenges for collecting those data included limited school staff because there were not enough school staff to help in the study, especially when each parent that participated in the study had two or more children, which would require additional staffing due to Telamon’s school policies.

Further, the political culture and social climate of current U.S. society increased the vulnerability of many study participants (i.e., migrant farmworker families). Study participants felt that they were at greater risk of outing their immigrant or undocumented statuses regarding the concerns of deportation even though the study did not request or collect their immigrant status. The concern of possibly outing participants’ status or chances of deportation when traveling appeared to reduce their willingness to participate in the study (Lindsay et al., 2018).
**Recommendations**

Additional research must be done regarding the relationships between eating behaviors and parenting practices among Hispanics and Latinos. While only a few research exists, the findings are often limited and mixed when it comes to the parenting and feeding styles and eating behaviors among Hispanic and Latino families (Holtrop, Smith, & Scott, 2015; Kasper et al., 2016). Future research in Mexicans and Latinos among migrant farm worker families are in need. Deeper understanding may assist successful implementation of interventions that promotes an increase of healthier food consumption and physical activities to prevent migrant farmworkers families from having chronic diseases (Kilanowski, 2012). Further, after taking the survey some participants (mostly mothers) reported that they had difficulty answering the questions sometimes because the food choices listed in the questions did not reflect the ethnicity and food culture of Mexicans and Latino families. Therefore, culturally adaptive survey questions should be developed to better reflect and capture the authenticity and accuracy of the food choices among Mexican and Latino families.

**Further Research**

Existing research demonstrated that parenting practice is a contributor for health problems (i.e. obesity) within the Hispanic and Latino community, but few studies have been done on how Hispanic and Latino parenting styles and eating behaviors affect the health outcomes of children. Almost all studies have focused primarily on White/Anglo parenting styles and eating behaviors (Arredondo, Elder, Ayala, Campbell, Baquero, & Duerksen, 2006; Lindsay et al., 2018). Therefore, it is necessary to encourage more research focuses on the parenting styles and eating behaviors among Hispanics and Latinos to provide better insights when serving this population.
References


Center of Disease Control and Prevention, 2016 [Online] Available at: https://www.census.gov/newsroom/facts-for-features/2016/cb16-ff16.html


Appendix A
IRB Approval Letters

Date: September 26, 2017

To: Jou-Chen Chen, Principal Investigator
   Keren Reyes, Student Investigator for thesis

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number 17-09-12

This letter will serve as confirmation that your research project titled “How the Impact of Parenting Styles and Eating Behavior Affect the Health Outcomes Among Young Children in the Community of Migrant Farm Workers in Michigan” has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., you must request a post approval change to enroll subjects beyond the number stated in your application under “Number of subjects you want to complete the study”). Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: September 25, 2018
### Logic Model

#### Migrant Families Parenting Eating Style

<table>
<thead>
<tr>
<th>Identified Needs and Assets</th>
<th>Desired Results</th>
<th>Indicators</th>
<th>Activities</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Needs</strong></td>
<td><strong>Short Term</strong></td>
<td><strong>Long Term</strong></td>
<td><strong>Long Term</strong></td>
<td><strong>Long Term</strong></td>
</tr>
<tr>
<td>- Proper Parenting Feeding Style</td>
<td>- 1. Decrease saturated fats</td>
<td>- 1. Migrant Parents Equipped with Appropriate Knowledge/Attitudes/Awareness of Food Preparation and Consumption as well as Child Development</td>
<td>- 1. Design a workshop about oils and fats with hands on demonstration. (This will include pros and cons of consuming healthy/unhealthy oils and fats and demonstrating how to cook meals with good oils).</td>
<td>- 1. Project L.E.A.N uses a curriculum about unhealthy and healthy fats and oils. These program can help provide with all the sources (including food and information material).</td>
</tr>
<tr>
<td>- Awareness of Child Obesity Health Issue</td>
<td>- 2. Increase veggie and fruit consumption</td>
<td>- 2. Eventually Reduce the Rate of Chronic Disease among Migrant Children</td>
<td>- 2. Create a fruit and vegetable garden for the migrant family community.</td>
<td>- 2. Project L.E.A.N. is also involve with the community and in the pass the have done community gardens. I been informed that Project L.E.A.N. can provide all the material to create the fruit and vegetable garden for the migrant families.</td>
</tr>
<tr>
<td>- Low Family Income</td>
<td>- 3. Increased frequency of physical activity</td>
<td>- 3. Monitor the time migrant families spend doing physical activity in a week.</td>
<td>- 3. Create soccer, volleyball, and basketball games in the migrant camps. (This will need sponsors to help with soccer nets, soccer cones, soccer balls, basketball hoops, basketballs, volleyball nets, volleyball balls)</td>
<td>- 3. Michigan State University Extension and Project L.E.A.N are willing to let me borrow their own material to have soccer, volleyball, and basketball games. However I will need to find sponsors to purchase soccer nets, basketball hoops, and volleyball nets.</td>
</tr>
<tr>
<td>- Language Barrier among Migrant Families</td>
<td></td>
<td></td>
<td>- 1. Create nutrition workshops for the migrant families and invite special guest such as: WIC Dietitian and Telamon Migrant Head Start teachers (where migrant families children assist).</td>
<td></td>
</tr>
<tr>
<td>- Low Educational Attainment</td>
<td></td>
<td></td>
<td>- Create one-on-one nutrition sessions. * Create a cooking book with traditional cooking meals within their culture. * Have cooking classes and grocery tours.</td>
<td></td>
</tr>
<tr>
<td>- Insufficient Knowledge about Nutrition and Health among Migrant Parents</td>
<td></td>
<td></td>
<td>- 2. Create physical activities such as field day (Increasing physical activity can reduce BMI along with a diet). For those who are underweight we will have to make a diet to increase their BMI.</td>
<td></td>
</tr>
<tr>
<td>- SNAP</td>
<td></td>
<td></td>
<td>- Have nutrition classes (small sessions by age) to increase the consumption of the five food groups (fruits, vegetable, grain, dairy, and protein).</td>
<td></td>
</tr>
<tr>
<td>- Food Stamp</td>
<td></td>
<td></td>
<td>- Have cooking classes (parents and children).</td>
<td></td>
</tr>
<tr>
<td>- Practitioner/Faculty/Scholars/Educators</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>- WIC: Nutrition Education Workshop/Breastfeeding Support Program/Referrals of Social or Physical Health Services</td>
<td></td>
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<tr>
<td>- Funding Sources</td>
<td></td>
<td></td>
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</tbody>
</table>
### Short-Term Desired Results:

<table>
<thead>
<tr>
<th>Indicators (Type of Data)</th>
<th>Source of Data</th>
<th>Time of Collection</th>
<th>Methods of Collection</th>
<th>Analysis</th>
</tr>
</thead>
</table>
| 1. Observe and measure the amount of oils and fats migrant families use in their meals. Then evaluate within 6 weeks for any changes.  
2. Evaluate the amount of fruit and vegetable intake from migrant families on a daily basis.  
3. Monitor the time migrant families spend doing physical activity in a week. | 1. Each family will use measuring cups to measure the amount of oil and fats they use in their meals.  
2. Families will keep a weekly agenda and record fruits and vegetables (including amount and size of fruits and vegetables)  
3. Provide families with walking distance monitors or download a walking distance app to monitor their physical activity. | 1. Families will record the amount of oil and fat used in breakfast, lunch, and dinner meals each day. Then, we will collect the amount of each oil and fat every family use. (collecting this information will allow us know which oils and fats migrant families use the most and the least and if it contributes to any chronic disease or obesity).  
2. Collecting on a daily basis the amount and size of fruits and vegetables on a weekly agenda. Will help understand if families are eating the recommended intake of fruits and vegetables. (collecting this information will help us understand if these families are at risk for vitamin and mineral deficiency or if they are replacing their intake with empty calories creating obesity).  
3. Monitoring how many steps a day migrant families walk a day will be collected to analysis if individuals and children increase their physical activity (will be comparing from the beginning until the end of the project and see if migrant families increase their physical activity. | 1. Observation/ Interview  
2. Activity logs/journals  
3. Observation |  

### Long-Term Desired Results:

<table>
<thead>
<tr>
<th>Indicators (Type of Data)</th>
<th>Source of Data</th>
<th>Time of Collection</th>
<th>Methods of Collection</th>
<th>Analysis</th>
</tr>
</thead>
</table>
| 1. Evaluate each migrant family (by doing a small survey) how much information do they know about food preparation, food consumption, and child development.  
2. Check BMI (Body Mass Index) and child’s weight to see if the child is overweight, obese, or underweight. | 1. Create a survey with questions about food preparation, food consumption, and child development. Migrant families will answer the questions from the survey at the beginning and then at the end of the research.  
2. Dietitians will measure the BMI of the children in three different occasions (throughout the research). In the begging, middle, and at the end of the research. | 1. Migrant families will answer the survey questions that will contain subjects such as food preparation, food consumption, and child development. This survey will be offered at the beginning and at the end of the research. Based on the their answers we will see if their knowledge has increase compare to the first survey they took. (collecting this information will help us understand if these families are learning/understanding and if their knowledge has increased in these subjects).  
2. Collecting three different measurements throughout the research will help us understand if the child BMI has increased or decreased during the research. (This information will give us important data especially if there is a kid who is overweight or underweight. We hope to see that kids who are overweight their BMI decrease and those who are underweight increase. In the future this could help these children to prevent chronic disease). | 1. Survey  
2. Activity logs/ journey |
Appendix C
Emails from Project L.E.A.N. Program Coordinator Mr. Richardson

PERMISSION!
Inbox
blueberry .k <reyeskeren55@gmail.com>
May 3

Hello Tom,

I'm getting a hold of you because I will be doing my thesis on how the impact of parenting styles and eating behavior effect the health outcomes among young children in the community of Migrant Farm workers in Michigan. Therefore, I'm emailing you to have your permission to use Simply Good Eating Book, fitness equipment, and if Project L.E.A.N. could also provide the food for the classes. In the same way, I would like you to share in this email about the consent form information you provided with me earlier. Thank you!

-Keren

Tom Richardson <trichardson@vbisd.org>
Attachments May 3

Hi Keren

We would love to support you in your thesis work. We can support your effort as long as 50% of the families in your intervention are SNAP-Ed eligible. If families qualify as "migrant" by Federal definition, they would qualify for our SNAP-Ed programming.

Please let me know what we can do to assist you in your efforts to work with our migrant families.

Have a wonderful evening.

Tom

PS I have attached a photo release form you can use if needed.
Appendix D
Email of translation agreement from Dr. Angel Gullion-Rivera’s

Spanish & English Translation Consultatio
Angel L Gullon-Rivera

Tue 5/16, 3:48 PM
Jou-Chen-Chen
Angel L Gullon-Rivera;
Keren Reyes

Hi Jou-Chen,

I will be happy to help. Once that Keren has finished translating them, send the documents to me
I will back translate to English.

Angel

Angel L Gullón-Rivera, Ph.D., CFLE
Assistant Professor, Family Science Program
Department of Family & Consumer Sciences
Western Michigan University
1903 West Michigan Ave.
Kalamazoo, MI 49008-5322
Office: 3218, Kohrman Hall
(269) 387-3715

Jou-Chen Chen
Thu 5/11, 4:10 PM
Dear Angel,

I would like to follow up with you for our previous conversation on language translation consultation. An undergraduate student (Keren Reyes) who work with me on her honor thesis is currently writing her IRB protocol for submission. Her thesis is titled "How Parenting Styles and Eating Behavior Affect the Health Outcomes Among Young Children in the Community of Migrant Farm Workers in Michigan" and is planned to recruit about 15 pairs of migrant farm worker parents to attend a 4-week nutrition class with the WIC program. These parents majorly speak Spanish so she plans to translate all materials that will be handed to them during the 4-week class (data collection), including recruitment flyers, informed consent form and media release form (for videotaping purposes), handouts for classes, and survey questions. She plans to finish translating these appendices early next week and we wonder if you will be available to cross-translate the materials from Spanish back to English to make sure her translation is accurate and transparent?
Me or both of us will be happy to meet with you in person or provide further details about her study if you want to have a better understanding of the study before you agree. I also include the student in our email conversation. Please let me know if you have any questions or concerns. Thank you and I appreciate your time and consideration.

Best,
Jou-Chen,

Jou-Chen Chen Ph.D. CFLE
Assistant Professor
Department of Family and Consumer Sciences
1903 W. Michigan Ave.
Western Michigan University
Kalamazoo, MI 49008-5322
Office location: 2508 Kohrman Hall
Office phone: 269-387-3727
Fax: 269-387-3353

We must accept finite disappointment, but never lose infinite hope
---Martin Luther King JR.
Appendix E
Email from site approval from Sodus Migrant Head Start

Hello Keren,

We would enjoy having you talk to our parents about nutrition and look forward to seeing you soon.
Please let me know of the dates and details.

Thank you,
Monica Garza

From: blueberry.k <reyeskeren55@gmail.com>
Sent: Thursday, June 8, 2017 10:50:37 AM
To: Monica Garza
Subject: Nutrition Classes

Good Morning Monica,

I'm emailing you because I would like to know if you are interested in six nutrition courses for the children's parents at your center. These nutrition classes are based on a study call how the impact of parenting styles and eating behaviors affect the health outcomes among young children in the community of Migrant Farm workers in Michigan. This study will focus on ten pairs of parents and six nutrition courses based on sugar beverages, good and bad fats, herbs and spices, your growing child, food safety and storage, and the smart shopper. The classes would consist of 30 minutes lecture and 30 minutes hands on activities. Everything will be provided for the parents and everything is FREE! Please let me know if your center is interested or if you have further questions. Please feel free to contact me via email at reyeskeren55@gmail.com or at my cell phone number 269-363-9565. Thank you!

Sincerely,
Keren Reyes

From: blueberry.k <reyeskeren55@gmail.com>
Sent: Tuesday, Sep 19, 2017 10:21:43 AM
To: Monica Garza
Subject: Please read

I'm emailing you to clarify that the nutrition courses are part of a research study. Therefore I'll be collecting data every 1 to 1.5 hour's class meeting from the migrant farm worker parents. The reason why I'm emailing you with this additional information is because in our last email on June 8, 2017 I didn't provided this information.
-Keren Reyes

Hello Keren,
Ok that will be fine, I think we discussed that when we spoke on the phone in the beginning.
Thank you for letting me know.
Monica
Appendix F
Informed Consent Forms

Western Michigan University
Family and Consumer Sciences

Principal Investigator: Jou-Chen Chen, Ph.D.
Student Investigator: Keren Reyes

Title of Study: How the impact of parenting styles and eating behavior affect the health outcomes among young children in the community of migrant farm workers in Michigan

You are invited to participate in a research project titled “How the impact of parenting styles and eating behavior affect the health outcomes among young children in the community of migrant farm workers in Michigan.” This project will serve as Keren Reyes thesis, for the requirements of her Bachelor’s degree. This document will clarify the main purpose of this research and will examine the following: time commitments, participation, cost, procedures, compensation for participation, data collection, and the risks and benefits to participate in this research. Please read this document cautiously and entirely and feel free to ask questions or additional information.

What are we trying to find out in this study?
The purpose of this study is to examine if the parenting styles and eating behaviors that migrant farm worker parents’ use affect the health of children. This study will examine if the health of children is affected by the parenting styles and eating behaviors parents use on their children regularly.

Who can participate in this study?
Any parent who is a migrant farm worker and has children who attend Telamon Sodus Migrant Head Start can participate in the study. Parents who are not migrant farmworker parents and don’t have children that attend Telamon Sodus Migrant Head Start will not be able to participate in the study.

Where will this study take place?
This study will take place at Telamon Sodus Migrant Head Start.

What is the time commitment for participating in this study?
The time commitment for participating includes 30 minutes of lecture and 30 minutes of hands-on activities for three weeks. During the three weeks, parents will only meet once a week at the Telamon Sodus Migrant Head Start. However, the first and last week of the course, parents will complete a pre- and post- survey, which will take approximately 20-30 minutes each time. Also, informed consents and permissions to videotape during each class attendance will be obtained from parents before class begins during the first class meetings.

What will you be asked to do if you choose to participate in this study?
Parents who decided to participate in this study will have two different ways to sign up: 1) contacting the phone number provided on the flyer, or 2) sign up at the Telamon Sodus Migrant
Head Start School’s office. After parents signing up, they will have the opportunity to attend the nutrition course once a week for three weeks. In each class, parents will participate in role-playing activities during the lectures and prepare healthy foods during the hands-on activates. Also, parents will participate in a pre- and post-survey as well as responding to an open-ended survey for data collection. An additional 30 minutes will be added to the first and the last class meetings to complete the pre- and post-survey.

**What information is being measured during the study?**
Both qualitative and quantitative data will be collected via surveys. The quantitative data will be collected by a survey that includes 19 multiple-choice questions about the consumption of the five-food group (fruit, vegetables, protein, dairy, and grains) during the past months, weeks, or days. The qualitative data will be collected by an open-ended survey regarding parenting styles of the parents.

**What are the risks of participating in this study and how will these risks be minimized?**
There will be minimal risk to participate in the study. The potential risk factors may include work schedule conflicts with course schedule because migrant farm workers often work for long hours during summer and early fall. However, the nutrition class meetings attempt to schedule around parents’ work schedules to prevent parents from getting less payment due to reduced working hours. Therefore, investigator will work with parents’ work schedules to avoid conflicts (e.g., evening) and strive to collaborate with school principal and program director to support and resolve the potential issues for attendance.

**What are the benefits of participating in this study?**
Parents who decide to participate in this study will benefit from increasing their knowledge in child development, parenting styles and nutrition after attending nutrition course. Also, parents will benefit from free meals, handouts, and free giveaways (i.e. nutrition books, kitchen utensils, and nutrition resources).

**Are there any costs associated with participating in this study?**
In this study, there is no cost associated with participating. Everything is provided at no cost!

**Is there any compensation for participating in this study?**
Yes, there are several compensations for participating in this study. First, a small gift will be given to the parents when they sign up for participation. Secondly, throughout three weeks of the nutrition course, free food, handouts, and free giveaways (i.e. nutrition books, kitchen utensils, and nutrition resources) will be provided to the parents. In addition, compensation does not depend on the completion of the study.

**Who will have access to the information collected during this study?**
The collected raw data will be anonymous and kept in a locked drawer at the office of the primary investigator. For electronic files, data will be saved in password-protected computers and only the study investigators will have the access to all types of data (paper-format and electronic files).
What if you want to stop participating in this study?
Parents who decided to stop participating in the study will have no penalty if they choose to withdraw before, during, and after participating in the study.

Should you have any questions prior to or during the study, you can contact Keren Reyes at 269-363-9565 or keren.reyes@wmich.edu or Dr. Jou-Chen Chen at 269-387-3727 or jou-chen.chen@wmich.edu. You may also contact the Chair, Human Subjects Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

Keren Reyes

Please Print Your Name

___________________________________   ______________________________
Participant’s signature               Date
Universidad de Western Michigan  
Ciencias de la Familia y del Consumidor

**Investigador Principal:** Jou-Chen Chen, PhD  
**Investigador del Estudiante:** Keren Reyes  
**Título del Estudio:** Cómo el impacto de los estilos de crianza de los hijos y el comportamiento alimentario afectan los resultados de salud entre los niños pequeños en la comunidad de trabajadores agrícolas migrantes en Michigan

Usted está invitado a participar en un proyecto de investigación titulado "Cómo el impacto de los estilos de crianza de los hijos y el comportamiento de comer afecta los resultados de salud entre los niños pequeños en la comunidad de los trabajadores agrícolas migrantes en Michigan". Este proyecto servirá como el tesis de Keren Reyes, para los requisitos de la licenciatura. Este documento aclarará el propósito principal de esta investigación y examinará lo siguiente: compromisos de tiempo, participación, costo, procedimientos, compensación por participación, recolección de datos y los riesgos y beneficios para participar en esta investigación. Lea este documento con cuidado y por completo y no dude en hacer preguntas o pedir información adicional.

**Qué estamos tratando de averiguar en este estudio?**  
El propósito de este estudio es examinar si los estilos de crianza de los hijos y los comportamientos alimentarios que usan los padres trabajadores agrícolas migrantes afectan la salud de sus hijos. Este estudio examinará si la salud de los niños está siendo afectada debido a los estilos de crianza y comportamientos de alimentación que los padres usan diariamente con sus hijos.

**Quién puede participar en este estudio?**  
Cualquier padre que sea trabajador agrícola migrante y tiene hijos que asistan a Telamon Sodus Migrant Head Start puede participar en este estudio. Padres que no sean trabajadores agrícolas migrantes y no tengan hijos que asistan a Telamon Sodus Migrant Head Start no podrán participar.

**Dónde se llevará a cabo este estudio?**  
Este estudio se llevará a cabo en Telamon Sodus Migrant Head Start.

**Cuál es el compromiso de tiempo para participar en este estudio?**  
El compromiso de tiempo para participar incluye 30 minutos de lectura y 30 minutos de actividades prácticas por seis semanas. Durante las tres semanas los padres solo se reunirán una vez a la semana en Telamon Sodus Migrant Head Start. Sin embargo, la primera y última semana de la investigación los padres completarán una encuesta previa y posterior que tomará aproximadamente 20-30 minutos. Además, se obtendrán consentimientos informados y permisos para filmar durante cada clase de asistencia de los padres antes de que comience la clase durante las reuniones de primera clase.
Qué se le pedirá que haga si decide participar en este estudio?
Los padres que decidan participar en este estudio tendrán dos formas diferentes de inscribirse: 1) contactando el número de teléfono que está en el folleto o 2) inscribirse en la oficina de la escuela de Telamon Sodus Migrant Head Start. Después, los padres que se inscribieron tendrán la oportunidad de asistir a las clases de nutrición una vez por semana durante tres semanas. Durante las clases de nutrición los padres participarán en actividades de juego de roles durante las lecturas y prepararán alimentos saludables durante las actividades de partícips. Además, los padres participarán en una encuesta previa y posterior y en una encuesta abierta. Se añadirán 30 minutos adicionales en el primer y última clase de nutrición para completar la encuesta previa y posterior.

Qué información se está midiendo durante el estudio?
Los datos cualitativos y cuantitativos se recogerán a través de encuestas. Los datos cuantitativos incluirán 19 encuestas de elección múltiple sobre el consumo de los cinco grupos de alimentos (frutas, hortalizas, proteínas, productos lácteos y granos) durante los últimos meses, semanas o días. Los datos cualitativos serán una encuesta abierta sobre los estilos de crianza de los hijos.

Cuáles son los riesgos de participar en este estudio y cómo se minimizarán estos riesgos?
Habrá riesgo mínimo de participar en el estudio. Los factores de riesgo potenciales pueden incluir conflictos de horario de trabajo con el horario del curso porque los trabajadores agrícolas migrantes a menudo trabajan durante largas horas durante el verano. Sin embargo, las clases de nutrición se intentan programar alrededor del horario de trabajo de los padres para evitar que los padres pierdan horas de trabajo, lo que puede reducir su sueldo. Por lo tanto, el investigador trabajará con el horario de trabajo de los padres para evitar conflictos (por ejemplo, por la tarde) y se esforzará en colaborar con el director de la escuela y el director del programa para apoyar y resolver los problemas potenciales entre la asistencia.

Cuáles son los beneficios de participar en este estudio?
Los padres que decidan participar en este estudio se beneficiarán al aumentar sus conocimientos sobre los estilos de crianza y nutrición. Además, los padres se beneficiarán de comidas gratuitas, folletos y obsequios gratuitos (libros de nutrición, utensilios de cocina y recursos nutricionales).

Hay algún costo asociado con participar en este estudio?
En este estudio no hay costo asociado con la participación. Todo se ofrece sin costo alguno!

Hay alguna compensación por participar en este estudio?
Sí, hay varias compensaciones por participar en este estudio. Primero, se les dará un pequeño regalo a los padres cuando se inscriban para participar. En segundo lugar, a lo largo de las seis semanas habrá comida, folletos, y obsequios gratuitos (libros de nutrición, utensilios de cocina y recursos de nutrición) y en tercer lugar, la compensación no depende completar el estudio.

Quién tendrá acceso a la información recolectada durante este estudio?
Toda la información de los datos serán anónimo y guardados en un cajón protegido con llave en la oficina del investigador principal. Para los archivos electrónicos, los datos estarán protegidos por contraseñas y sólo los investigadores del estudio tendrán acceso a todo tipo de datos (formato en papel y archivos electrónicos).
**Qué pasa si desea dejar de participar en este estudio?**
Los padres que decidan dejar de participar no tendrán penalización si deciden retirarse antes, durante y después de participar en el estudio.

Si tiene alguna pregunta antes o durante el estudio, puede ponerse en contacto con el investigador principal, Keren Reyes al 269-363-9565 keren.reyes@wmich.edu o Dr. Jou-Chen Chen al 269-387-3727 o jou-chen.chen@wmich.edu También puede comunicarse con el Presidente, de Sujetos Humanos de la Junta de Revisión Institucional al 269-387-8293 o al Vicepresidente de Investigación en 269-387-8298 si surgen preguntas durante el curso del estudio.

Este documento de consentimiento ha sido aprobado para su uso por un año por los sujetos humanos Junta de Revisión Institucional (Junta de Revisión Institucional) (HSIRB) según lo indicado por la fecha sellada y la firma del presidente del consejo en la esquina superior derecha. No participe en este estudio si la fecha de estampillado es anterior a un año.

-------------------------------------------------------------------------------------------------------------------

He leído este documento de consentimiento informado. Los riesgos y beneficios me han sido explicados. Acepto participar en este estudio.

Por favor de imprimir su nombre

___________________________________   ______________________________
Firma del participante Fecha
## Summer Programming 2017

### Simply Good Eating

<table>
<thead>
<tr>
<th>Sodus</th>
<th>Lesson – Simply Good Eating</th>
<th>Hands on Activity</th>
<th>Food Tasting</th>
<th>Handouts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Beverages – compare sugar beverages.</td>
<td>Making healthy beverages</td>
<td>Beverage prepared in the hands-on activity.</td>
<td>Sugar chart</td>
</tr>
<tr>
<td>Week 1</td>
<td>Fats – identify not so good fats, good fats, best fats, and no fats.</td>
<td>Cooking with good fats</td>
<td>Food item prepared in the hands-on activity.</td>
<td>Fats Chart</td>
</tr>
<tr>
<td>Week 2</td>
<td>Spices – recognize different herbs and species use in meals.</td>
<td>Cooking with herbs and spices</td>
<td>Food item prepared in the hands-on activity.</td>
<td>Herbs and spices chart</td>
</tr>
<tr>
<td>Week 2</td>
<td>Your Growing Child – prepare adequate portion size base on children age</td>
<td>Prepare healthy snacks according to child’s age</td>
<td>Snack items prepared in the hands on activates</td>
<td>Parents will be given a children’s divided plate</td>
</tr>
<tr>
<td>Week 3</td>
<td>Food Safety and Storage – properly storing food items correctly.</td>
<td>Prepare a fruit and bean salad</td>
<td>Fruit and bean salad</td>
<td>Refrigerator storage chart</td>
</tr>
<tr>
<td>Week 3</td>
<td>The Smart Shopper- how to shop healthy groceries on the budget</td>
<td>Prepare a healthy meal within $10</td>
<td>Food item prepared in the hands-on activity.</td>
<td>A goody bag with cooking utensils</td>
</tr>
</tbody>
</table>
Programación del verano 2017

Simplemente Comiendo Bien

<table>
<thead>
<tr>
<th>Sodus</th>
<th>Lección – Simplemente comiendo bien</th>
<th>Actividades de Practicas</th>
<th>Prueba de bocados</th>
<th>Folletos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semana 1</td>
<td>Bebidas - comparar las bebidas azucaradas</td>
<td>Hacer bebidas saludables</td>
<td>Bebidas preparadas en la actividad practica</td>
<td>Folleto de azucar</td>
</tr>
<tr>
<td></td>
<td>Grasas - identificar grasas no tan buenas, buenas grasas, las mejores grasas y sin grasas</td>
<td>Cocinar con grasas buenas</td>
<td>Alimentos preparados en la actividad practica</td>
<td>Folleto de grasas</td>
</tr>
<tr>
<td>Semana 2</td>
<td>Especias - reconocer diferentes hierbas y especies de uso en las comidas.</td>
<td>Cocinar con hierbas y especias</td>
<td>Alimentos preparados en la actividad practica</td>
<td>Folleto de hierbas y especias</td>
</tr>
<tr>
<td></td>
<td>Su hijo en crecimiento - prepare un tamaño de porción adecuado para la edad de los niños</td>
<td>Preparar bocadillos saludables según la edad del niño</td>
<td>Bocadillos preparados en la actividad practica</td>
<td>A los padres se les dará un plato dividido para niños</td>
</tr>
<tr>
<td>Semana 3</td>
<td>Seguridad y Almacenamiento de Alimentos - Almacenar adecuadamente los alimentos correctamente</td>
<td>Preparar ensaladas de frutas y frijoles</td>
<td>Ensalada de frutas y frijoles preparada en la actividad practica</td>
<td>Folleto del almacenaje del refrigerador</td>
</tr>
<tr>
<td></td>
<td>El comprador inteligente - cómo comprar alimentos saludables en el presupuesto</td>
<td>Prepare una comida sana dentro de $ 10</td>
<td>Alimentos preparados en la actividad practica</td>
<td>Bolsa de obsequios con utensilios de cocina</td>
</tr>
</tbody>
</table>
Appendix H
Class Handouts (Two versions: English and Spanish)

Sugar chart

4 grams = 1 teaspoon
8 grams = 2 teaspoon
12 grams = 3 teaspoon
16 grams = 4 teaspoon
20 grams = 5 teaspoon
24 grams = 6 teaspoon
28 grams = 7 teaspoon
32 grams = 8 teaspoon
36 grams = 9 teaspoon
40 grams = 10 teaspoon
44 grams = 11 teaspoon
48 grams = 12 teaspoon
52 grams = 13 teaspoon
56 grams = 14 teaspoon

Initially translated by English and is back translated by Dr. Angel Gullion-Rivera’s for accuracy and transparency of Spanish

Las medidas de la azucar

4 gramos = 1 cucharadita
8 gramos = 2 cucharadita
12 gramos = 3 cucharadita
16 gramos = 4 cucharadita
20 gramos = 5 cucharadita
24 gramos = 6 cucharadita
28 gramos = 7 cucharadita
32 gramos = 8 cucharadita
36 gramos = 9 cucharadita
40 gramos = 10 cucharadita
44 gramos = 11 cucharadita
48 gramos = 12 cucharadita
52 gramos = 13 cucharadita
56 gramos = 14 cucharadita

[https://www.extension.umn.edu/family/health-and-nutrition/toolkits-and-resources/simply-good-eating-for-english-language-learners/]
Fat Chart

<table>
<thead>
<tr>
<th>Not so Good Fat</th>
<th>Good Fat</th>
<th>Best Fat</th>
<th>No Fat</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Lard</td>
<td>-Sesame Oil</td>
<td>-Olive Oil</td>
<td>-Non-Stick Spray</td>
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<tr>
<td>-Ghee</td>
<td>-Corn Oil</td>
<td>-Canola Oil</td>
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<td>-Coconut Oil</td>
<td>-Most Vegetable Oils</td>
<td>-Peanut Oil</td>
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<td>-Light Vegetable Oil</td>
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<td>-Butter</td>
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<tr>
<td>-Stick Margarine</td>
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</table>

Not so Good Fats is “saturated fat”

Contained in highest amounts in animal fats such as butter or the fat on meats. The hardest fat at room temperature. In scientific terms, it is a fatty acid, with all carbons saturated with a hydrogen atom. While trans-fat is not technically a saturated fat, it is considered a Not So Good Fat.

Good Fat is “polyunsaturated fat”

Contained in highest amounts in vegetable fats and oils. Soft or liquid at room temperature. In scientific terms, this fatty acid lacks at least four hydrogen atoms.

Best fat is “monounsaturated fat”

Contained in highest amounts in vegetable fats and oils. Often soft or liquid at room temperature. In scientific terms, this fatty acid lacks at least two hydrogen atoms.

No Fat

Contains no fat

Tipos de grasas

<table>
<thead>
<tr>
<th>No tan buenas grasas</th>
<th>Grasas buenas</th>
<th>Grasas muy buenas</th>
<th>No son grasas</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Manteca de cerdo</td>
<td>-Aveite de seasamo</td>
<td>-Aceite de oliva</td>
<td>-Aceite en spray</td>
</tr>
<tr>
<td>-Aceite de coco (aunque se metaboliza de forma diferente en el cuerpo de otras grasas no es una grasa tan buena)</td>
<td>-Aceite de maíz</td>
<td>-Aceite de canola</td>
<td></td>
</tr>
<tr>
<td>-Mantequilla</td>
<td>-La mayoría de los aceites vegetales</td>
<td>Aceite de cacahuate</td>
<td></td>
</tr>
<tr>
<td>-Margarina en barra</td>
<td>-Aceite vegetal ligero</td>
<td></td>
<td></td>
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</tbody>
</table>

Las grasas que no son tan buenas están hechas de “grasas saturadas”

Contiene las cantidades más altas en grasas animales tales como mantequilla o la grasa en la carne. La grasa más dura a temperatura ambiente. En términos científicos, es un ácido grasoso, con todos los carbonos saturados y con un átomo de hidrógeno. Mientras que la grasa trans no es grasa, se considera una grasa no tan buena

Las buenas grasas son grasas “poliinsaturada”

Contiene las cantidades más altas en grasas y aceites vegetales. Usuallymente suave o líquido a temperatura ambiente. En términos científicos, este ácido grasoso carece de al menos cuatro átomos de hidrógeno

Las mejores grasas son las grasa “monoinsaturada”

Contiene las cantidades más altas en grasas y aceites vegetales. Usuallymente suave o líquido a temperatura ambiente. En términos científicos, este ácido grasoso carece de al menos dos átomos de hidrógeno

Sin grasa

No contiene grasa

Cooking with herbs and spices

<table>
<thead>
<tr>
<th>Herb</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Jengibre: Ginger</em></td>
<td>Ginger is used to treat the nausea and vomiting associated with pregnancy.</td>
</tr>
<tr>
<td><em>Pimiento de cayena: Cayenne pepper</em></td>
<td>Cayenne pepper reduces the likelihood of developing fibrinolytic activity. Fibrinolytic activity refers to the ability to prevent the formation of blood clots, which can lead to a heart attack, stroke, or pulmonary embolism.</td>
</tr>
<tr>
<td><em>Curcuma: Turmeric</em></td>
<td>Turmeric is used as an anti-inflammatory agent and in treatment of numerous conditions including menstrual difficulties, hemorrhage, bruises, and chest pain.</td>
</tr>
</tbody>
</table>
Cocinando con hierbas y especias

<table>
<thead>
<tr>
<th>Hierbas y especias</th>
<th>Propiedades y uso</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jengibre: Ginger</td>
<td>El jengibre se usa para tratar las náuseas y los vómitos asociados con el embarazo.</td>
</tr>
<tr>
<td>Pimienta de cayena: Cayenne pepper</td>
<td>Pimienta de cayena reduce la probabilidad de desarrollar actividad fibrinolítica. La actividad fibrinolítica se refiere a la capacidad de prevenir la formación de coágulos sanguíneos, lo que puede conducir a un ataque cardíaco, un accidente cerebrovascular o una embolia pulmonal.</td>
</tr>
<tr>
<td>Curcumina: Turmeric</td>
<td>La curcumina se utiliza como un agente antiinflamatorio y en el tratamiento de numerosas afecciones incluyendo dificultades menstruales, hemorragia, moretones y dolor en el pecho.</td>
</tr>
</tbody>
</table>

https://books.google.com/books?isbn=0743474023
Refrigerator storage chart

- Ready-to-eat food
- Seafood
- Whole cuts of beef and pork
- Ground meat and ground fish
- Whole and ground poultry

Almacenamiento del refrigerador

- Alimentos listos para comer
- Mariscos
- Cortes enteros de carne y puerco
- Carne molida y pescado molido
- Aves de corral enteras

[Link to Google Books](https://books.google.com/books?isbn=0133883507)
Appendix I
Simply Good Eating Curriculum

Week 1A: Beverages
Where Is the Sugar?

Handout: “Sugar Chart” (double-sided and then cut up)

Materials:
o Enlarged beverage label with the “carbohydrate” and “sugar” listings highlighted
o Food model of a serving size of juice
o Sugar
o Clear plastic container
o Teaspoons
o Paper cups
o Empty cans, containers, and labels from a variety of beverages that participants drink, including various sizes of some beverages

Preparation
Make double-sided copies of the “Sugar Chart” handout. Then cut up the copies, so everyone will have a small, pocket-sized reference.

1. Introduction
Show the enlarged beverage label. Explain what the Nutrition Facts label is used for and where to find it on a beverage container. Point out where sugar is listed on the label (under carbohydrates), the serving size, and servings per container. Discuss the meaning of “serving size” and “servings per container” so participants understand. Show an example of a serving size of juice (food model).

2. Demonstration
Pass out the small, pocket-sized references you made from the handout “Sugar Chart.” Demonstrate and explain to participants that 4 grams of sugar is equal to 1 teaspoon. Together, look at a sample beverage container. Ask participants, “How many grams of sugar per serving are there?” Then help participants calculate how many teaspoons of sugar are contained in one serving. Participants may use the handout or do the math in their heads to calculate the number of teaspoons. Together, measure the correct amount of sugar into a clear plastic container.

3. Participant Activity
   a. Pass out the beverage containers and labels. Ask participants to choose their favorite beverages, if possible. Give everyone a paper cup and teaspoon. Help participants find the word “sugar” on their beverage labels and the number of grams of sugar. Then tell them to refer to their “Sugar Chart” to calculate how many teaspoons of sugar are in their drinks. Ask participants to measure the amount of sugar found in their drinks into cups. Remind them that a beverage container may have more than one serving and that the amount of sugar listed on
the label is for one serving only. Encourage participants to look at the amounts of sugar on other labels when they are done.

b. After measuring the sugar content for one beverage, ask participants to measure the amount of sugar for all the beverages they would drink in a day. If they have a child and time allows, ask them to measure the amount of sugar for the beverages their child would drink in a day. Remind them to include the juice the child drinks. Point out, “While juice does contain vitamin C, usually only 6 ounces of juice a day is needed to get the 100% Daily Value. [Remind them what a serving of juice is by showing the juice food model.] When a child drinks much more than that, it is really just adding more sugar.”

c. Ask, “Does anyone drink coffee or tea?” If anyone does, ask “How many cups do you usually drink every day?” Ask those participants who responded to measure the amount of sugar they would put in one cup of tea or coffee. Next, ask them to measure the amount for an entire day. Help them do the math, if needed.

4. Call to Action
Ask participants, “What did you find out today? Do you think you drink a lot of sugar? Do your children drink a lot of sugar?” After discussing how much sugar participants consume, ask, “Do you want to make any changes in the next week? What are they?” Remind participants, “Too many sugary drinks, including juice, can harm our teeth, keep us from eating healthier foods and give us too many Calories that make us gain weight.”

Https://www.extension.umn.edu/family/health-and-nutrition/toolkits-and-resources/simply-good-eating-for-english-language-learners/
Week 1B: Fats
Choosing Healthy Fat

Handout: “Fats Chart”

Materials:
- Headers: “Not So Good Fat,” “Good Fat,” “Best Fat,” and “No Fat”
- Fat product samples or labels
- Overhead transparency of the handout “Choosing Healthy Fat”

Preparation
Arrange the headers “Not So Good Fat,” “Good Fat,” “Best Fat,” and “No Fat” on a display board, felt board, or table so everyone can see them.

1. Introduction
Explain that there are different kinds of fat. Some are better than others when it comes to preventing heart disease and clogged arteries. Repeat, “With all fats, less is best.”

2. Participant Activity
a. Pass out fat products or labels from fat products. Ask participants, one by one or in groups, to put the products into the correct categories, using the headers. If you color coded the headers, be sure to explain the colors to participants. Ask them to say the name of each fat product and how they might use it.

Next, pass out copies of the handout “Fat Chart”. Start with the Not So Good Fats.

You may need to explain now:
- Not So Good Fat is more “artery clogging” than some of the Good Fat and Best Fat.
- Name-brand fats are not always better than generic fats.
- Cholesterol is only in animal products. The only products discussed in this activity that contain cholesterol are butter and ghee. All other products come from plants.

3. Summary
Tell participants, “It is healthier to use smaller amounts of the Not So Good Fats and to use more of the Best Fats or Good Fats. However, the goal is to use less of all kinds of oils and fats and to cook using No Fats.”

Week 2A: Spices and Herbs
What Is This Spice Called?

Handouts: “Herbs and Spices”

Materials:
o Samples of herbs and spices listed on the handout
o Containers of seasoning in the handout

Preparation
We recommend copying the handouts back to back. Then participants will have the English names of herbs and spices and suggestions for using them on one sheet of paper, for later reference.

1. Introduction
Ask participants, “In your own language, can you say the names of some of the herbs and spices you use in cooking? Do you know their names in English? Is it easy to find those herbs and spices in stores in the United States? In this lesson, we are going to talk about using herbs and spices to flavor food.”

2. Participant Activity
a. Herbs and Spices: On a table, place the vials or plastic bags of herbs and spices, each labeled with its English name and a number (e.g., “1 – cinnamon”). Pass out the handout with the side for “Know Your Herbs and Spices” facing up. Invite participants to come and smell the herbs and spices. Ask them to find the name of each herb or spice on the handout and write down its correct number. Ask participants to also write down the name of each herb or spice in their first language if they know it.
b. Herbs and Spices Handouts: Go over the handout and ask participants how they have used these herbs and spices and if there are any herbs and spices they have wondered about. Explain, “Cooking with herbs and spices helps us cut back the amount of fat and sodium we use in cooking, because herbs and spices add flavor to lower-fat, lower-sodium foods.”

3. Summary
Ask participants, “It tastes good to use herbs and spices that bring memories of home and family. Did you learn the English names today for any herbs or spices you already use? When you use the English words, it will be easier to find them in the store. Also, it may be easier to find powdered or dried herbs and spices. Are there any new herbs or spices you would like to try in your cooking? Remember, you can cut back the amount of sodium and fat you add to your cooking by using herbs and spices. This will be good for you and your family.”

Https://www.extension.umn.edu/family/health-and-nutrition/toolkits-and-resources/simply-good-eating-for-english-language-learners
Week 2B: Your Growing Child
Big Food, Little Food

Materials:
- Large platter
- Serving fork and spoon
- Large cup or glass (44+ ounces)
- Towel
- Actual foods or food models
- Child-size plates
- Child-size cups
- Child-size spoons and forks
- Portion of food for a two-year-old

Preparation
Set a table with oversized tableware. Use a serving platter as a plate, a large cup or glass (44+ounces), a serving fork and spoon as utensils, and a towel as a napkin. Fill the plate with food or food models. Be sure to include something that most people don’t eat, such as dog bones or packing peanuts. If possible, put a small chair for the “child” at the table.

Participant Activity
a) Explain to participants, “Today we are going to see what eating is like for a child and how we can encourage our children to eat.” Invite participants to come and sit at the table as if they were children. You are the parent. Encourage participants (in the child role) to eat. Make the same kinds of comments as participants might make to their children. To get a discussion going, ask, “How did you feel? What did you notice? Did you enjoy your mealtime?” Participants may begin to discuss the things they do to get their children to eat more food. If this happens, do not judge participants, even if some of their methods may not work well and may actually discourage their children from eating. Instead, help the group to think of better ways to encourage children to eat. c) Review with participants the correct portion sizes for children. Set the table a second time, using child-size plates, cups, and utensils. Demonstrate a reasonable portion or serving for a two-year-old (2 tablespoons per serving to start).

2. Summary
Say, “Children are small. They do not always know how to use plates, cups, spoons, and forks well. There are many foods they have never eaten. Large portions and strange food can discourage them. To help them be successful, keep portions small and include variety at every meal. When you serve the same new food many times, you increase the chance that your child will eat it. For some children, you may have to offer a new food 15 times before they accept it!”

**Week 3A: Food Safety and Storage**
Where Would You Put This Food?

**Handouts:** “Refrigerator Storage”

**Materials:**
o Enlarged pictures of bacteria
o Pictures of foods placed in grocery bags
o Four large envelopes labeled “refrigerator,” “freezer,” “counter,” and “cupboard” (one word and picture of each storage place per envelope)

1. **Introduction**
Explain, “After buying food at the grocery store, it is important to know where to put it when you get home. Food safety in the kitchen begins with food that is stored in the right place and in the right way. Food that is stored correctly will last longer and stay fresher. It will keep your family healthier and help save you money.” Then ask, “When you bring fresh vegetables home from the store, where do you keep them? What about canned food? What about meats?” Do not correct participants’ answers at this time. Use their responses to the questions, right or wrong, to lead to the next step.

**Demonstration**
a. Go over the handout “Refrigerator Storage” explain how to correctly store food in the refrigerator.
b. Show participants the pictures of bacteria. Ask, “What are these?” [Response: Bacteria.] If participants seem confused, explain, “Bacteria are very small. This picture of bacteria makes them look larger so we can see them.” Then ask, “Where can bacteria grow?” [Response: On food.] Tell participants, “When food is not properly stored, bacteria grow on the food. Bacteria grow fast when food reaches an unsafe temperature. Room temperature, or any temperature between 40°F (4°C) and 140°F (60°C), is an unsafe temperature for most foods. If you eat food with a lot of bacteria in it, you may get a foodborne illness.”
c. Use dramatic body language to demonstrate the effects of foodborne illness: nausea, fever, stomach pain, and diarrhea. Ask, “Have any of you eaten food and gotten sick? How did you feel? How long did it last? You can prevent foodborne illness by handling food and storing it properly.”

3. **Participant Activity**
a. Place the four labeled envelopes on a display board, felt board, or wall so everyone can see them. Put participants into pairs or groups. Give each group a grocery bag containing pictures of foods. To begin, have the groups discuss where they think the foods should be stored. When participants are ready, ask them to take turns naming a food, putting it into the right envelope, and explaining why it is stored there. Assist as needed. Be sure to cover the following points:
   • After opening cans or jars, store the remaining food in the refrigerator. With cans, take the remaining food out and put it in a storage container
before refrigerating it.  
• After food is cooked, put it in the refrigerator within two hours. Do not leave it out on the counter or stove. Store cooked foods in shallow (short), covered containers, not large pots.  
• Use foods stored in the refrigerator within 2-5 days, depending on the type of food.  
• When buying large packages of food, such as meat, divide the food into smaller portions and freeze the portions that you don’t use right away.

4. Summary  
Ask, “Why do you need to know where to store foods and how long to keep them?” In their responses, make sure participants mention the main points about foodborne illness (bacteria grow on food that is not stored safely, bacteria grow fast, bacteria on food can make us sick, etc.). Add to the answers as needed.

Https://www.extension.umn.edu/family/health-and-nutrition/toolkits-and-resources/simply-good-eating-for-english-language-learners/
Week 3B: The Smart Shopper
Where Do I Find It?

Materials:
o Aisle signs with the main grocery store category headings
o Dairy Council food cards or empty product packages
o Index cards labeled to match the food cards or packages

Preparation
Set up the room to look like a grocery store, using the aisle signs and chairs or tables to create aisles.

1. Introduction
Explain to participants, “Grocery stores in the United States are usually organized into departments such as produce (fruits and vegetables), meats, dairy, canned foods, and baking. Can you name any more? There are big signs at the ends of each aisle showing what is in that aisle. If you can match the food you are looking for to the right aisle, it is easier to find things.”

2. Participant Activity
a. Pass out to each participant one or more food cards or food packages. Tell them, “Put your food where you think you would find it in a grocery store.” You can also assign one or two participants the role of store clerk, so the “shoppers”/“customers” can ask for help if needed.

After participants stock the shelves, have them reverse the process. Give each participant an index card with the name of a food on it. Explain, “I am giving you part of my shopping list. Please find the food in the store. You can ask someone for help if you need it.” This repetition is especially helpful for participants with a lower English language level.
c. Before concluding, ask, “Are there any foods that you still think you would have trouble finding at the grocery store?” Ask the other participants to identify the correct aisle, if possible. Point out that, in some grocery stores, numbers are used to identify aisles. For example, if a shopper asks for flour, the store clerk might say, “14,” meaning that flour is found in aisle number 14.

3. Summary
Explain, “We all feel safer and more comfortable when we can find the foods we are looking for. If you ever have a problem, find an employee and say, ‘Excuse me, can you please show me where to find the (honey)?’ Most employees are happy to help.”

Https://www.extension.umn.edu/family/health-and-nutrition/toolkits-and-resources/simply-good-eating-for-english-language-learners/
Appendix J
Class recipes (Two versions English and Spanish)

Week 1A: Healthy drinks

Raspberry peach smoothie

Serves: 2
Ingredients

- 1 cup frozen raspberries
- ¾ cup chopped fresh peaches
- ¼ cup vanilla greek yogurt
- ½ cup vanilla almond milk

Instructions

1. Place all ingredients in blender and blend until smooth, adding a bit more almond milk as needed if the smoothie is too thick. Serve and enjoy!

Http://therecipecritic.com/2017/01/raspberry-peach-smoothie/
Week 1B: Cooking with good fats

Ground beef

Yields: 3 Servings

Ingredients
- Ground beef
- 2 chile jalapeño
- 2 tomatoes
- 1/2 cup of onion
- 2 cups of onion
- Water or vegetable oil

Instructions
1. Cook meat with water or vegetable oil
2. Add salt and pepper
3. When the meat is cooked 3/4 add chile, tomato and onion
4. Let the stew mixed and served

Http://www.lasrecetasdelaura.com/receta/carne-molida-nopales/
Week 2A: Cooking with herbs and spices

Honey Mustard Grilled Chicken

Yield: 4 servings
Ingredients

- 1/2 cup honey
- 1/4 cup Dijon mustard
- 1/4 cup lemon juice
- 1/4 cup soy sauce
- 2 cloves garlic, minced
- 4 boneless, skinless chicken breasts

Instructions
1. Combine honey, mustard, lemon juice, soy sauce and garlic. Pour over chicken. Refrigerate at least 2 hours.
2. Prepare grill. Remove chicken from marinade. Place on grill and cook for 12 to 15 minutes, until no longer pink

Week 2B: Healthy snacks for children

Banana Cereal Snack

Yield: 2-3 servings

Ingredients
- 2 Bananas
- Peanut butter
- 1 cup Cereal (I used toasted rice cereal)

Instructions
1. First peel the bananas and cut them into thirds.
2. Then dump some cereal onto your wax paper, smear the bananas in peanut butter, and roll the peanut butter bananas in the cereal. That's it! You're done!

http://www.thegraciouswife.com/banana-cereal-snacks/

Peanut Butter and Banana Roll-Ups

Yield: 2 servings

Ingredients
- 1/4 cup Peter Pan® Creamy Peanut Butter
- 2 whole wheat flour tortillas (8 inch)
- 2 tablespoons honey
- 1/4 cup low-fat granola
- 2 bananas

Instructions:
1. Spread peanut butter evenly over each tortilla. Drizzle honey on top of peanut butter; sprinkle with granola.
2. Place a banana in center of each tortilla. Fold in opposite sides; roll up burrito-style. Cut in half to serve.

Week 3A: Preparing fruit and bean salad

Melon and pineapple fruit salad with honey, lime, and mint dressing

**Yield:** About 12 servings

**Ingredients**
- 1 mini seedless watermelon, diced into small cubes (5 cups)
- 1 cantaloupe, diced into small cubes (5 cups)
- 1 honeydew, diced into small cubes (5 cups)
- 1 pineapple, diced into small cubes (3 1/2 cups)
- 1/3 cup honey
- 1/4 cup fresh lime juice
- 1/4 cup chopped fresh mint

**Directions**
1. Dice fruit (drain of any excess liquid) and add fruit to a large salad bowl. In a jar or bowl whisk together honey, lime juice and mint. Pour over fruit and toss to evenly coat. Serve immediately.

Week 3B: Eating within the budget

Red enchiladas with chicken

Yield: About 12 servings

Ingredients
- 10 chile guajillo
- 2 garlic clove
- 1/4 tsp cumin powder
- 1/4 tsp oregano
- 2 cups of water
- 100 gr fresh cheese
- 300 gr cooked and shredded chicken
- 6 corn tortilla
- 1 onion chopped onion
- 2 teaspoon of Greek yogurt
- 1 cinnamon branch

Directions
1. Toast the guajillo chilies and the cloves of garlic in the comal
2. Place the peppers in hot water, and let them soak for 5 minutes
3. Place in the blender the soaked chiles, the roasted garlic, the water (at the time), the spices and salt to taste. Blend very well.
4. Go through a strainer (optional) to remove the pulp
5. Bring the sauce to the boil with a cinnamon stick. Add more water if you want
6. Bring to a boil for 5 minutes and set aside.
7. Heat the tortillas a little in the comal and boil them in the sauce
8. Add chicken to the tortilla than dipped in sauce, and fold tortilla
9. Add a little more sauce on top. Repeat the process with each tortilla and place in the dish
10. Add chopped onion and fresh cheese to taste. Garnish with Greek yogurt diluted with a little water.
11. Accompany with a good portion of salad and enjoy!

Http://www.lasrecetasdelaura.com/receta/enchiladas-rojas/
Semana 1A: Bebidas saludables

Smoothie de durazon y frambuesa

Porciones: 2
Ingredientes

• 1 taza de frambuesas congeladas
• ¾ taza de durazon frescos picados
• ¼ taza de yogurt griego vainilla
• ⅓ taza de leche de vainilla de almendras

Instrucciones

1. Coloque todos los ingredientes en la licuadora y mézclelos hasta que quede suave, agregando un poco más de leche de almendra según sea necesario si el batido es demasiado espeso. ¡Servir y disfrutar!

Http://therecipecritic.com/2017/01/raspberry-peach-smoothie/
Semana 1B: Cocinar con grasas buenas

Carne de res

Porciones: 3
Ingredientes

- Carne molida
- 2 chile jalapeño
- 2 tomates
- 1/2 taza de cebolla
- 2 tazas de cebolla
- Agua o aceite vegetal

Instrucciones

1. Cocine la carne con agua o aceite vegetal
2. Agregue la sal y pimienta
3. Cuando se cocina la carne 3/4 agregue chile, tomate y cebolla
4. Deje que se mezcle y sirva

Http://www.lasrecetasdelaura.com/receta/carne-molida-nopales/
Semana 2A: Cocinar con hierbas y especias

Pollo asado a la mostaza de miel

**Rendimiento:** 4 porciones

**Ingredientes**
- 1/2 taza de miel de abeja
- 1/4 taza de mostaza de Dijon
- 1/4 taza de jugo de limón
- 1/4 taza de salsa de soja
- 2 dientes de ajo picados
- 4 pechugas de pollo y sin piel

**Instrucciones**
1. Combine miel, mostaza, jugo de limón, salsa de soja y ajo. Derramar sobre el pollo. Refrigere por lo menos 2 horas.
2. Prepare la parrilla. Retire el pollo del adobo. Colocar en la parrilla y cocinar por 12 a 15 minutos, hasta que ya no este color rosa

Semana 2B: Bocadillos saludables para los niños

Bocadillo de cereales de plátano

Rendimiento: 2-3 porciones  
Ingredientes
- 2 plátanos  
- Mantequilla de maní  
- 1 taza de cereal (he usado cereal de arroz tostado)

Instrucciones
1. Primero pelar los plátanos y cortarlos en tercios.  
2. Luego arroje un poco de cereal en su papel de cera, embarre los plátanos en la mantequilla de maní, y rodar los plátanos de mantequilla de maní en el cereal. ¡Eso es! ¡Ya terminaste!

Http://www.thegraciouswife.com/banana-cereal-snacks/

Mantequilla de maní y rollos de plátano

Porciones: 2  
Ingredientes:
- 1/4 taza de mantequilla de maní cremosa Peter Pan®  
- 2 tortillas de harina de trigo integral (8 pulgadas)  
- 2 cucharadas de miel  
- 1/4 taza de granola baja en grasa  
- 2 plátanos

Instrucciones:
1. Separe la mantequilla de maní uniformemente sobre cada tortilla. Rocíe la miel encima de la mantequilla de cacahuates; Espolvorear con granola.  
2. Coloque un plátano en el centro de cada tortilla. Doble en lados opuestos; Enrollar en estilo de un burrito. Corte a la mitad para servir.

Semana 3A: Preparación de la ensalada de frutas y judías

Melón y piña ensalada de frutas con miel, lima y aderezo de menta

Porciones: 12

Ingredientes
• 1 mini sandía sin semillas, cortada en cubitos pequeños (5 tazas)
• 1 melon verde, cortado en cubitos pequeños (5 tazas)
• 1 melón, cortado en cubitos pequeños (5 tazas)
• 1 piña, cortada en cubitos pequeños (3 1/2 tazas)
• 1/3 taza de miel
• 1/4 taza de jugo de limón fresco
• 1/4 taza de menta fresca picada

Direcciones
1. Corte la fruta (escurrir de cualquier exceso de líquido) y agregue la fruta a un tazón grande de la ensalada. En un tarro o un tazón batir juntos miel, jugo de limón y menta. Derrame sobre la fruta y mezcle uniformemente. Servir inmediatamente.

Http://www.cookingclassy.com/melon-pineapple-fruit-salad-honey-lime-mint-dressing/#more-23646
Semana 3B: Comer dentro del presupuesto

Enchiladas rojas con pollo

Porciones: 12

Ingredientes
- 10 chili guajillo
- 2 diente de ajo
- 1/4 cucharadita de polvo de comino
- 1/4 cucharadita de orégano
- 2 tazas de agua
- 100 gr de queso fresco
- 300 gr de pollo cocido y desmenuzado
- 6 tortillas de maíz
- 1 cebolla cebolla picada
- 2 cucharaditas de yogurt griego
- 1 rama de canela

Direcciones
1. Tostar los chiles guajillo y los dientes de ajo en el comal
2. Coloca los chiles en agua caliente y dejarlos reposar durante 5 minutos
3. Coloca en la licuadora los chiles remojados, los ajos tostados, el agua (al tiempo), las especias y sal al gusto. Licua muy bien.
4. Pase por un colador (opcional) para sacar la pulpa
5. Pon a hervir la salsa con un palo de canela. Añade más agua si lo deseas
6. Dejar hervir durante 5 minutos y reservar.
7. Calienta un poco las tortillas en el comal y báñalas en la salsa
8. Agrega el pollo desmenuzado a la tortilla bañada en salsa, y dobla la tortilla
9. Agrega un poco más de salsa encima. Repita el proceso con cada tortilla y coloque en el plato como se ilustra en la foto
10. Añade cebolla picada y queso fresco al gusto. Decora con yogurt griego diluido con un poco de agua.
11. Acompaña con una buena porción de ensalada y disfruta!

Http://www.lasrecetasdelaura.com/receta/enchiladas-rojas/
Appendix K
Recruitment flyer (Two versions: English and Spanish)
Initially translated from English and is back translated by Dr. Angel Gullion-Rivera’s for accuracy and transparency of Spanish.
Hello, my name is Keren Reyes from Project L.E.A.N and a student at Western Michigan University (WMU). I will be conducting six nutrition classes at Sodus, Michigan. The nutrition classes are part of a research project, which is my undergraduate honor thesis for graduation at WMU! This study has been approved by Human Subject Institute Review Board (HSIRB) at WMU with the IRB No. 17-09-12 to protect your rights, privacy and confidentiality. If you have questions during the course of the study (i.e., before, during, and after attending three nutrition classes), please feel free to call HSIRB at 269-387-8293 or 269-387-8298. Also, you may contact me and my professor Dr. Jou-Chen Chen, at 269-363-9565 and 269-387-3727.

The nutrition classes will be held at your child’s school at the Telamon Sodus Migrant Head Start. These classes are once a week for three weeks and the duration of each class will be for an hour. The nutrition classes are a combination of a 30-minute lecture and a 30-minute hands-on activities. These classes will consist of six different nutrition topics including, beverages, fats, spices, your growing child (e.g., child development), food safety and storage, and the smart shopper (e.g., how to be a smart shopper). In this study there are no cost associated with participating. Everything is provided at no cost! You have no penalty if you choose to withdraw before, during, and after participating in the study (i.e., attending classes).

In this study both qualitative (e.g., your words, stories, and descriptions) and quantitative data (e.g., your answers for questionnaires with scoring and ranking using numbers) will be collected via surveys. The quantitative data will include 19 multiple-choice survey about the consumption of the five food group (fruit, vegetables, protein, dairy, and grains) during your past months, weeks, or days. The qualitative data will be an open-ended survey of parenting styles. All collected raw data will be anonymous and kept in a protective locked drawer at the office of the primary investigator (i.e., the locked cabinet at my professor’s office). For electronic files, data will be protected by passwords and only the study investigators (both my professor and I) will have the access to all types of data (paper-format and electronic files).

Throughout the study, I highly encourage you to actively participate in the lectures and hands-on activities. Feel free to respectfully express your own ideas and opinions throughout the three nutrition classes. Your opinions are very important and helpful in this research. I hope throughout the course of the nutrition classes we can both learn and enjoy together!

Please feel free to ask any questions or concerns you may have?
Initially translated from English and is back translated by Dr. Angel Gullion-Rivera’s for accuracy and transparency of Spanish.

Hola, mi nombre es Keren Reyes del Proyecto L.E.A.N y un estudiante en la Universidad de Western Michigan. Estaré llevando a cabo las seis clases de nutrición en Sodus, Michigan. Las clases de nutrición son parte de un proyecto de investigación, que es mi tesis de honor para la graduación en la Universidad de Western Michigan! Este estudio ha sido aprobado por la Junta de Revisión del Instituto de Asuntos Humanos (HSIRB) con el número de IRB17-09-12 para proteger sus derechos. Si tiene preguntas durante el curso del estudio (es decir, antes, durante y después de asistir a las tres clases de nutrición), siéntase libre de llamar a HSIRB al 269-387-8293 o al 269-387-8298. También, usted me puede contactar me o a mi profesora Dr. Jou-Chen al 269-363-9565 y 269-387-3727.

Las clases de nutrición se llevarán a cabo en la escuela de su hijo(a) en Telamon Sodus Migrant Head Start. Estas clases son una vez por semana durante tres semanas y la duración de cada clase será de una hora. Las clases de nutrición son una combinación de una lectura de 30 minutos y 30 minutos de actividades de prácticas. Las clases consistirán de seis temas diferentes de nutrición incluyendo, bebidas, grasas, especias, su niño en crecimiento (por ejemplo, desarrollo infantil), seguridad y almacenamiento de alimentos, y el comprador inteligente (por ejemplo, cómo ser un comprador inteligente). En este estudio no hay costo asociado con la participación. Todo se ofrece sin costo alguno! Si usted decide dejar de participar, no tendrá penalidad si decide retirarse antes, durante o después de participar en el estudio (es decir, asistiendo a clases).

En este estudio se recopilarán datos cualitativos (por ejemplo, sus palabras, historias y descripciones) y cuantitativos (por ejemplo, sus respuestas para cuestionarios con calificación y clasificación mediante números) a través de encuestas. Los datos cuantitativos incluirán 19 encuestas de elección múltiple sobre el consumo de los cinco grupos de alimentos (frutas, verduras, proteínas, productos lácteos y granos) durante los últimos meses, semanas o días. Los datos cualitativos serán una encuesta abierta sobre estilos de crianza. Los datos serán recogidos anónimos y guardados en un cajón protegido con llave en la oficina del investigador principal. Para los archivos electrónicos, los datos estarán protegidos por contraseñas y sólo los investigadores del estudio tendrán acceso a todo tipo de datos (formato en papel y archivos electrónicos).

A lo largo del estudio los invito a participar activamente en las lectura y actividades de prácticas. Siéntase libre de expresar respetuosamente sus propias ideas y opiniones a lo largo de las tres clases de nutrición. Sus opiniones son muy importantes y útiles en esta investigación. Espero que a lo largo de las clases de nutrición podamos aprender y disfrutar juntos!

Por favor, no dude en hacer cualquier pregunta o preocupaciones que pueda tener?
Appendix M
Multimedia Release (Two versions: English and Spanish)

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I am 18 years of age and am competent to contract in my own name. I have read this release before signing below and I fully understand the contents, meaning, and impact of this release.
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Nombre del Evento o del Proyecto                                               Fecha del Evento

______________________________
Nombre del Participante (en letra de molde)

______________________________                          __________________________
Firma del Participante                                                                    Fecha

(Firma del Padre / Tutor si es menor de 18 años de edad)

Dirección: ________________________________        Ciudad: __________________________

Estado: ________________________________        Código Postal: __________________________
Appendix N
Quantitative Survey Questions (Two versions: English and Spanish)

¡Welcome to the Fruit and Vegetable Survey!

When answering the questions, please think about all the fruits and vegetables that you ate last month. Include those that were

- raw and cooked
- eaten as snacks and at meals
- eaten at home and away from home (restaurants, friends, take-out), and
- eaten alone and mixed with other foods.

Please answer as honestly and accurately as you can. Your answers are voluntary and private.

1. Over the last month, how many times per month, week, or day did you drink 100% juice such as orange, apple, grape, or grapefruit juice? Do not count fruit drinks like Kool-Aid, lemonade, Hi-C, cranberry juice drink, Tang, and Twister. Include juice you drank at all mealtimes and between meals.

   - Never
   - 1-3 times last month
   - 1-2 times per week
   - 3-4 times per week
   - 5-6 times per week
   - 1 time per day
   - 2 times per day
   - 3 times per day
   - 4 times per day
   - 5 or more times per day

2. Each time you drank 100% juice, how much did you usually drink?

   - Less than 3/4 cup (less than 6 ounces)
   - 3/4 to 1 1/4 cup (6 to 10 ounces)
   - 1 1/4 to 2 cups (10 to 16 ounces)
   - More than 2 cups (more than 16 ounces)

3. Over the last month, how many times per month, week, or day did you eat fruit? Count any kind of fruit - fresh, canned, and frozen. Do not count juices. Include fruit you ate at all mealtimes and for snacks.

   - Never
   - 1-3 times last month
   - 1-2 times per week
   - 3-4 times per week
4. Each time you ate fruit, how much did you usually eat?

- Less than 1 medium fruit
- 1 medium fruit
- 2 medium fruits
- More than 2 medium fruits
- Less than 1/2 cup
- About 1/2 cup
- About 1 cup
- More than 1 cup

5. Over the last month, how often did you eat lettuce salad (with or without other vegetables)?

- Never
- 1-3 times last month
- 1-2 times per week
- 3-4 times per week
- 5-6 times per week
- 1 time per day
- 2 times per day
- 3 times per day
- 4 times per day
- 5 or more times per day

6. Each time you ate lettuce salad, how much did you usually eat?

- About 1/2 cup
- About 1 cup
- About 2 cups
- More than 2 cups

7. Over the last month, how often did you eat French fries or fried potatoes?

- Never
- 1-3 times last month
- 1-2 times per week
- 3-4 times per week
- 5-6 times per week
- 1 time per day
8. Each time you ate French fries or fried potatoes, how much did you usually eat?

- Small order or less (About 1 cup or less)
- Medium order (About 1 1/2 cups)
- Large order (About 2 cups)
- Super-Size order or more (About 3 cups or more)

9. Over the past month, how often did you eat other white potatoes? Count baked, boiled, and mashed potatoes, potato salad, and white potatoes that were not fried.

- Never
- 1-3 times last month
- 1-2 times per week
- 3-4 times per week
- 5-6 times per week
- 1 time per day
- 2 times per day
- 3 times per day
- 4 times per day
- 5 or more times per day

10. Each time you ate these potatoes, how much did you usually eat?

- 1 small potato or less (1/2 cup or less)
- 1 medium potato (1/2 to 1 cup)
- 1 large potato (1 to 1 1/2 cups)
- 2 medium potatoes or more (1 1/2 cups or more)

11. Over the last month, how often did you eat cooked dried beans? Count baked beans, bean soup, refried beans, pork and beans and other bean dishes.

- Never
- 1-3 times last month
- 1-2 times per week
- 3-4 times per week
- 5-6 times per week
- 1 time per day
- 2 times per day
- 3 times per day
- 4 times per day
- 5 or more times per day
12. Each time you ate these beans, how much did you usually eat?

- Less than 1/2 cup
- 1/2 to 1 cup
- 1 to 1 1/2 cups
- More than 1 1/2 cups

13. Over the last month, how often did you eat other vegetables? Do not count: lettuce salads; white potatoes; cooked dried beans; vegetables in mixtures such as in sandwiches, omelets, casseroles, Mexican dishes, stews, stir-fry, soups, etc.; rice. Count: all other vegetables - raw, cooked, canned, and frozen.

- Never
- 1-3 times last month
- 1-2 times per week
- 3-4 times per week
- 5-6 times per week
- 1 time per day
- 2 times per day
- 3 times per day
- 4 times per day
- 5 or more times per day

14. Each of these times that you ate other vegetables, how much did you eat?

- Less than 1/2 cup
- 1/2 to 1 cup
- 1 to 2 cups
- More than 2 cups

15. Over the last month, how often did you eat tomato sauce? Include tomato sauce on pasta or macaroni, rice, pizza and other dishes.

- Never
- 1-3 times last month
- 1-2 times per week
- 3-4 times per week
- 5-6 times per week
- 1 time per day
- 2 times per day
- 3 times per day
- 4 times per day
- 5 or more times per day
16. Each time you ate tomato sauce, how much did you usually eat?
   o About 1/4 cup
   o About 1/2 cup
   o About 1 cup
   o More than 1 cup

17. Over the last month, how often did you eat vegetable soups? Include tomato soup, gazpacho,
    beef with vegetable soup, minestrone soup, and other soups made with vegetables.
   o Never
   o 1-3 times last month
   o 1-2 times per week
   o 3-4 times per week
   o 5-6 times per week
   o 1 time per day
   o 2 times per day
   o 3 times per day
   o 4 times per day
   o 5 or more times per day

18. Each time you ate vegetable soup, how much did you usually eat?
   o Less than 1 cup
   o 1 to 2 cups
   o 2 to 3 cups
   o More than 3 cup

19. Over the last month, how often did you eat mixtures that included vegetables? Count such
    foods as sandwiches, casseroles, stews, stir-fry, omelets, and tacos.
   o Never
   o 1-3 times last month
   o 1-2 times per week
   o 3-4 times per week
   o 5-6 times per week
   o 1 time per day
   o 2 times per day
   o 3 times per day
   o 4 times per day
   o 5 or more times per day
What is your gender?
  o Male
  o Female

What is your birth month and date?
  o Month:
  o Date:

How old are you?

What is your middle initial?

Are you Hispanic or Latino?

What race best describes you?
  o American Indian or Alaska Native
  o Asian
  o Black or African American
  o Native Hawaiian or Other Pacific Islander
  o White
  o Multiracial
  o Other:

Which of the devices below are you using to take this survey?
  o Cell phone
  o Home computer
  o Tablet or Ipad
  o Other:

Questions are adapted from Simply Good Eating questionnaire, which can be retrieved from: Http://bit.ly.1WaLdkw
Bienvenidos a la Encuesta de Frutas y Verduras!

Al responder a las preguntas, piense en todas las frutas y verduras que comió el mes pasado. Incluya los alimentos que fueron

• crudos y cocidos
• comido como aperitivos y en las comidas
• comido en casa y fuera de casa (restaurantes, con amigos, comida para llevar), y
• comido solo y mezclado con otros alimentos.

Por favor, responda con la mayor honestidad y exactitud posible. Sus respuestas son voluntarias y privadas.

1. Durante el último mes, ¿cuántas veces al mes, semana o día bebió jugo de fruta 100%, natural como naranja, manzana, uva o jugo de toronja? No cuente las bebidas de frutas como Kool-Aid, limonada, Hi-C, jugo de arándano beber, Tang, y Twister. Incluya el jugo que bebió en todas las comidas y entre las comidas.

   o Nunca
   o 1-3 veces el mes pasado
   o 1-2 veces por semana
   o 3-4 veces a la semana
   o 5-6 veces a la semana
   o 1 vez al día
   o 2 veces al día
   o 3 veces al día
   o 4 veces al día
   o 5 o más veces al día

2. Cada vez que bebías jugo 100% natural, cuánto bebías?

   o Menos de 3/4 taza (menos de 6 onzas)
   o 3/4 a 1 1/4 taza (6 a 10 onzas)
   o 1 1/4 a 2 tazas (10 a 16 onzas)
   o Más de 2 tazas (más de 16 onzas)

3. Durante el último mes, cuántas veces al mes, semana o día comió frutas? Cuente cualquier tipo de fruta - fresca, enlatada y congelada. No cuente los jugos. Incluya fruta que comió en todas las comidas y para bocadillos.

   o Nunca
   o 1-3 veces el mes pasado
   o 1-2 veces por semana
4. Cada vez que comía fruta, ¿cuántas comía normalmente?

- Menos de 1 fruta media
- 1 fruta media
- 2 frutas medianas
- Más de 2 frutas medianas
- Menos de 1/2 taza
- Aproximadamente 1/2 taza
- Aproximadamente 1 taza
- Más de 1 taza

5. Durante el último mes, ¿con qué frecuencia comió ensalada de lechuga (con o sin otras verduras)?

- Nunca
- 1-3 veces el mes pasado
- 1-2 veces por semana
- 3-4 veces a la semana
- 5-6 veces a la semana
- 1 vez al día
- 2 veces al día
- 3 veces al día
- 4 veces al día
- 5 o más veces al día

6. Cada vez que comía ensalada de lechuga, ¿cuánto comía normalmente?

- Aproximadamente 1/2 taza
- Aproximadamente 1 taza
- Aproximadamente 2 tazas
- Más de 2 tazas

7. Durante el último mes, con qué frecuencia comió papas fritas?

- Nunca
- 1-3 veces el mes pasado
- 1-2 veces por semana
8. Cada vez que comía papas fritas, ¿cuánto comía normalmente?

- Pequeña orden o menos (aproximadamente 1 taza o menos)
- Orden mediana (cerca de 1 1/2 tazas)
- Orden grande (cerca de 2 tazas)
- Orden de tamaño súper o más (cerca de 3 tazas o más)

9. Durante el mes pasado, ¿con qué frecuencia usted comió otras papas blancas? Cuente horneado, hervido y puré de papa, ensalada de papas y papas blancas que no estaban fritos.

- Nunca
- 1-3 veces el mes pasado
- 1-2 veces por semana
- 3-4 veces a la semana
- 5-6 veces a la semana
- 1 vez al día
- 2 veces al día
- 3 veces al día
- 4 veces al día
- 5 o más veces al día

10. Cada vez que usted comía estas papas, ¿cuánto comías normalmente?

- 1 papa pequeña o menos (1/2 taza o menos)
- 1 papa mediana (1/2 a 1 taza)
- 1 papa grande (1 a 1 1/2 tazas)
- 2 papas medianas o más (1 1/2 tazas o más)

11. Durante el último mes, ¿con qué frecuencia comió frijoles secos cocidos? Cuenta frijoles al horno, sopa de frijoles, frijoles refritos, cerdo y frijoles y otros platos de frijoles.

- Nunca
- 1-3 veces el mes pasado
- 1-2 veces por semana
- 3-4 veces a la semana
- 5-6 veces a la semana
- 1 vez al día
12. Cada vez que comía estos frijoles, cuánto comía normalmente?

- Menos de 1/2 taza
- 1/2 a 1 taza
- 1 a 1 1/2 tazas
- Más de 1 1/2 tazas

13. Durante el último mes, con qué frecuencia comió otras verduras? No cuente: ensaladas de lechuga; Papas blancas; Frijoles secos cocidos; Verduras en mezclas como en sándwiches, tortillas, comidas caseras, platos mexicanos, guisos, sofreh, sopas, etc.; arroz. Cuente: todos los demás vegetales - crudos, cocidos, enlatados y congelados

- Nunca
- 1-3 veces el mes pasado
- 1-2 veces por semana
- 3-4 veces a la semana
- 5-6 veces a la semana
- 1 vez al día
- 2 veces al día
- 3 veces al día
- 4 veces al día
- 5 o más veces al día

14. Cada una de las veces que comió otras verduras, cuánto comió?

- Menos de 1/2 taza
- 1/2 a 1 taza
- 1 a 2 tazas
- Más de 2 tazas

15. Durante el último mes, ¿con qué frecuencia comió salsa de tomate? Incluya salsa de tomate en pasta o macarrones, arroz, pizza y otros platos.

- Nunca
- 1-3 veces el mes pasado
- 1-2 veces por semana
- 3-4 veces a la semana
- 5-6 veces a la semana
- 1 vez al día
- 2 veces al día
- 3 veces al día
16. Cada vez que comía salsa de tomate, cuánto comía normalmente?
   o Acerca de 1/4 taza
   o Aproximadamente 1/2 taza
   o Aproximadamente 1 taza
   o Más de 1 taza

17. Durante el último mes, ¿con qué frecuencia comió sopa de vegetales? Incluya sopa de tomate, gazpacho, carne con sopa de verduras, sopa minestrone, y otras sopas hechas con verduras.
   o Nunca
   o 1-3 veces el mes pasado
   o 1-2 veces por semana
   o 3-4 veces a la semana
   o 5-6 veces a la semana
   o 1 vez al día
   o 2 veces al día
   o 3 veces al día
   o 4 veces al día
   o 5 o más veces al día

18. Cada vez que comió sopa de vegetales, cuánto comió normalmente?
   o Menos de 1 taza
   o 1 a 2 tazas
   o 2 a 3 tazas
   o Más de 3 tazas

19. Durante el último mes, ¿con qué frecuencia comió usted mezclas que incluían verduras? Cuente alimentos tales como sándwiches, guisados, estofados, sofreh, tortillas, y tacos.
   o Nunca
   o 1-3 veces el mes pasado
   o 1-2 veces por semana
   o 3-4 veces a la semana
   o 5-6 veces a la semana
   o 1 vez al día
   o 2 veces al día
   o 3 veces al día
   o 4 veces al día
   o 5 o más veces al día
Cuál es su género?
   - Hombre
   - Mujer

Cuál es su mes y fecha de nacimiento?
   - Mes:
   - Fecha:

Cuántos años tienes?

Cuál es su inicial del medio?

Eres hispano o latino?
   - Mexicano-Americano
   - Mexicano
   - Puertorriqueño
   - Perunao
   - Colombiano
   - Argentino
   - Dominicano
   - Otro:

Qué raza te describe mejor?
   - Indio Americano o Nativo de Alaska
   - Asiático
   - Negro o Afro Americano
   - Nativo de Hawai u otro Isleño del Pacífico
   - Blanco
   - Multirracial
   - Otro:

Cuál de los siguientes dispositivos está usando para realizar esta encuesta?
   - Teléfono celular
   - Computador de casa
   - Tableta o Ipad
   - Otro:

Http://bit.ly.1WaLdkw
Appendix O
Qualitative Open-Ended Survey Questions (Two versions: English and Spanish)

Parenting Styles Scenario Sheet

Parenting Styles

1. **Authoritative:**
   Child: “I do not want spinach. It is nasty”
   Parent: “We do not talk bad about food like that. You do not have to eat spinach if you do not want. There are plenty other food on the table you can eat”.

2. **Authoritarian:**
   Child: “I do not want to eat spinach!”
   Parent: “Well if you don’t eat your spinach you won’t go outside and play with your friends.”

3. **Permissive:**
   Child: “I do not want to eat spinach!”
   Parent: “Okay so what do you want to eat? So I can make it for you”.

4. **Neglectful:**
   Child: “Mom, what time are we going to eat? I’m hungry.”
   Parent: “I do not know yet! I have things to do”.

Which parenting style did you find identify with: _______________________________

OR

Did you find yourself difficult to clearly identify which parenting style you use? If yes, which of the parenting styles do you feel in-between, or among 2-3 parenting styles do you find it difficult to clearly identify with: ______________________________

Could you briefly explain an example why you feel difficult to identify with more than one parenting style?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
Hoja De Escenario De Estilos De Crianza

Estilos De Crianza

1. **Autoritativo:**
   Niño: "No quiero espinacas. Son desagradable"
   Padre: "No hablamos mal de los alimentos de esa manera. No tienes que comer espinacas si no quieres. Hay muchos otros alimentos en la mesa que puedes comer".

2. **Autoritario:**
   Niño: "No quiero comer espinacas!"
   Padre: "Bueno, si no te comes tus espinaca no vas a salir a jugar con tus amigos".

3. **Permisivo:**
   Niño: "No quiero comer espinacas!"
   Padre: "Entonces, qué quieres comer? Así te puedo hacer otra cosa para ti".

4. **Negligencia:**
   Niño: "Mamá, a qué hora vamos a comer? Tengo hambre."
   Padre: "No lo sé todavía! Tengo cosas que hacer".

Con qué estilo de crianza se encontró identificado con:

____________________________________________________________________________

O

Encuentras difícil identificar claramente el estilo de crianza que usas? Si tu respuesta es sí, cuáles estilos de crianza usted se encuentra indeciso, o entre los estilos de crianza 2-3 le resulta difícil identificarse claramente: ____________________________________________

Podría explicar brevemente un ejemplo de por qué usted encuentra difícil identificarse con más de un estilo de crianza: ____________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________
Appendix P
Sign-up sheet (Two versions: English and Spanish)

Nutrition Classes

Are you interested in participating in nutrition classes? If your answer is yes, but you want to sign up on the sheet rather making a phone call, please enter your name and your phone number to obtain more information about these classes. Thank you!

1. __________________________
2. __________________________
3. __________________________
4. __________________________
5. __________________________
6. __________________________
7. __________________________
8. __________________________
9. __________________________
10. __________________________
Clases de Nutricion

Estas interesado en participar en las clases de nutrition? Si tu respuesta es si, pero desea inscribirse en la hoja en lugar de hacer un llamada telefonica, porfavor de escriber su nombre y su numero de telephono para obtener mas informacion sobre estas clases. Gracias!

1. _____________________________
2. _____________________________
3. _____________________________
4. _____________________________
5. _____________________________
6. _____________________________
7. _____________________________
8. _____________________________
9. _____________________________
10. _____________________________