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# The Meaning and Experiences of Healthy Eating in Mexican American Children: A Focused Ethnography

Alicia Kay Ribar

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THE MEANING AND EXPERIENCES OF HEALTHY EATING IN  
MEXICAN AMERICAN CHILDREN:  
A FOCUSED ETHNOGRAPHY

A Dissertation

Submitted to the School of Nursing

Duquesne University

In partial fulfillment of the requirements for  
the degree Doctor of Philosophy

By

Alicia Kay Johoske Ribar

May 2012

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Alicia Kay Johoske Ribar

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A FOCUSED ETHNOGRAPHY

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March 13, 2012

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## ABSTRACT

# THE MEANING AND EXPERIENCES OF HEALTHY EATING IN MEXICAN AMERICAN CHILDREN: A FOCUSED ETHNOGRAPHY

By

Alicia K. Johoske Ribar

May 2012

Dissertation supervised by Dr. Rick Zoucha

### *Purpose*

The purpose of this focused ethnography is to understand the meaning and cultural influences of healthy eating and the role of nursing in the promotion of healthy eating practices from the Mexican American child's point of view.

### *Background*

No current studies directly measure the meaning of healthy eating from the Mexican American child's perspective. Mexican American children have a unique perspective and understanding of the meaning of healthy eating and can help identify cultural norms and other factors that may be vital in directing culturally appropriate health promotion interventions.

### *Research Design*

A focused ethnography method using Leininger's four phases of data analysis was utilized.

### *Informants*

The researcher interviewed twenty-one children aged eleven to thirteen for the study. Fifteen individual interviews and two group interviews were completed.

### *Data Collection and Analysis*

Data gathering and data analysis occurred simultaneously. Leininger's four phases of qualitative data analysis and utilized NVivo9 qualitative data management software.

### *Results*

The data emerged into three themes within the culture. *Theme one:* Mexican American children connect healthy eating with familiar foods in the context of their Mexican American culture. *Theme two:* Foods that provide feelings of happiness and well being are essential for healthy eating. *Theme three:* Sources of food and health information education are valued when provided by familiar and trusted sources.

### *Conclusions and Implications*

For the informants of this study the meaning of healthy eating is closely tied to the cultural life ways learned and valued by the Mexican American culture. Culture cannot be separated from the child when considering the meaning of healthy eating. Mexican American children view healthy eating within the context of culture, associating familiar foods that provide a feeling of happiness and well being with healthy foods.

Mexican American children view eating habits as healthy when taught by familiar and trusted sources.

This study provides nurses an enhanced understanding of the meaning of healthy eating and valuable information to improve nutritional health education and promotion activities, better assists children and their families to improve and maintain health and provides culturally congruent care that is valued by the population.

## DEDICATION

To begin I would not be at the completion of this study and the beginning of my research career without the guidance and support of my dissertation chair, Dr. Rick Zoucha. I will not forget the impact of your insights and direction during this process, thank you. To Dr. Melanie Turk and Dr. Jill Kilanowski for your expert feedback and time you have both spent in guiding this research in am grateful.

To my family, my parents Todd and Sherry Johoske, thank you for your support throughout my life and educational endeavors. To Joe and Eileen Ribar, Kris Clum, Mike Johoske, Joe and Marylou Ribar, and Mark Ribar, and all my nieces and nephews and special friends I am grateful. Cohort 14 thank you all for climbing the stairs with me!

Finally, to my children, Sophia, Luke and Katheryn, I hope the sacrifice you have made for me I can repay in my love and support as I see each of you grow – I love you all and Mama will not be in her office as much! To my husband David, without you I would not be here, I can never put into words how your unending support has been my rock, my sounding board, my partner, my love – we made it, finally!

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## **CHAPTER 1**

### **1.1 Introduction**

Overweight and obesity levels in the United States (U.S.) and globally have reached epidemic proportions over the past decade. An estimated twenty-two million children under age ten are overweight worldwide (The Obesity Society, 2008). According to the U.S. Centers for Disease Control (CDC) and Prevention (2011a), about 17% of children and adolescents are obese, and another 15% are overweight in the U.S. alone. Additionally, 66% of these overweight children will become overweight adults (CDC, 2011a). This raises concern about the health of these youth as they approach adulthood. As with adults, children who are overweight stand an increased risk of developing a number of health conditions and diseases such as diabetes, hypertension, polycystic ovarian syndrome and increased cholesterol levels (CDC, 2011a). Combined, these issues call for researchers to explore factors to decrease obesity levels in children in order to improve the health of children in the U.S. and globally. Childhood obesity is a very complex problem, and research is vitally needed to stave off this epidemic.

Body Mass Index (BMI) is an indicator of body fatness based on weight and height measures. BMI measures are calculated using weight in pounds by height in inches squared and multiplying by a conversion factor of 703. Obese is defined as having a BMI at or above the 95th percentile based on age and gender-specific growth charts. Children between the 85th and 94th percentile of BMI are considered overweight (CDC, 2011b). Overweight and obesity in the U.S. occur at higher rates in racial and ethnic minority populations such as African Americans and Mexican Americans, compared with Caucasian Americans (CDC, 2011a). In Mexican American children, overweight levels

are nearly 21 % of the population (Ogden, Carroll, & Feghel, 2008). The influences of the home and community are closely tied to food preferences in children. How children develop eating habits and beliefs about healthy eating may affect dietary habits into adulthood (Olvera & Power, 2009). Obesity in Mexican American children is reaching epidemic proportions, and knowledge about the meaning and the cultural influences on the meaning of healthy eating is lacking. This study will focus on knowledge development to understand the meaning of healthy eating, the influence of the culture on this meaning and what role nurses play in supporting healthy eating in Mexican American children between the ages of eleven to thirteen years.

## **1.2 Background**

As stated, the CDC (2011a) reported that about 17% of children and adolescents are obese and another 15% are overweight in the U.S. alone. This percentage equates to approximately 12.3 million American children aged 2 years and older who have BMI at or above the 85<sup>th</sup> percentile. Levels of overweight vary greatly between race and gender (CDC, 2011a).

Persons of Mexican American descent make up a significant portion of the U.S. population and have a higher incidence of obesity. According to the 2000 U.S. Census, 17% of the population in America is comprised of people of Hispanic heritage, and Mexican Americans make up 64% of the Hispanic American population. Currently, 9% of the populations in the U.S. or about 28.3 million persons are Mexican American (U.S. Census Bureau, 2008). Hispanics, according to the U.S. Census Bureau, include Mexican, Central and South American, Puerto Rican, Cuban and other groups. Mexican Americans had the highest percentage of persons living in the U.S. under the age of 18

(37.1%) of all the Hispanic populations (Ramirez & de la Cruz, 2003). While the report notes that 15 million (40.2%) Hispanics are foreign born and 52.1% entered the U.S. between 1990 and 2002, it does not separate out the category based on region of birth such as Mexico (Ramirez & de la Cruz, 2003). Fifteen percent of the U.S. childhood population is of Mexican descent (U.S. Census Bureau, 2008). A study by Olvera and Power (2009) indicated that 17% of Caucasian American children are at risk for overweight or overweight as compared to 38% of Mexican American children. Among children, Mexican American boys have the highest levels of overweight in the U.S., and Mexican American girls are second only to Black American girls. Mexican American boys aged 2 to 19 years have a higher overweight rate at 22.7% as compared to Mexican American girls of the same age at 16.2% (Flegal, Ogden, & Carroll, 2004).

All children spend large portions of time at school and in before- and after-school programs; as a result, children often consume at least two meals and two snacks a day within these settings. What foods children have available to them in the school setting and how they learn about nutrition in the school setting can have a direct impact on the weight and ultimately the health of these children. Several studies are available investigating factors influencing healthy eating in children, but most have employed a quantitative approach (Davis, Curtis, Tweed, & Patte, 2007; Gorden-Larson, 2001; Stice, Presnell, Shaw, & Rohde, 2005). While the aim of these studies is similar, identification of modifiable risk factors for obesity, they do not seek to understand healthy eating from a child's perception nor take into account how the child's culture affects this meaning (Brunstrom, Rogers, Pothos, Calitri, & Tapper, 2008; Burger, Kern, & Coleman, 2007;

Frobisher & Maxwell, 2003; Gorden-Larson, 2001; Huang, Howarth, Lin, Roberts, & McCrory, 2004).

The culture of the U.S. encourages excess food intake; this combined with sedentary lifestyles promotes obesity in the population. As a result, several interventions aimed at decreasing childhood obesity in the U.S. have been instituted. For example, the United States Department of Agricultural (USDA) has developed recommendations about healthy eating practices for children and school meal programs (2009). These recommendations, however, are based on common food preferences that are familiar to and preferred by many people of the dominant culture in the U.S. (Birch & Fisher, 1998; Carrera, Gao, & Tucker, 2007). While schools are required to offer meals that meet the USDA nutritional guidelines, schools often fail to consider the cultural food preferences of their students. Therefore, the ability of many minority populations to adapt these guidelines to cultural food preferences may be difficult. With acculturation taking place more readily in child and adolescent populations, as well as the compounding factors for Mexican American children of parental obesity, low socioeconomic status (SES), recent immigration, and limited health insurance coverage, these children are at extreme risk of even higher obesity levels and poor health states than already reported (Delva, O'Malley, & Johnston, 2007). Childhood obesity, particularly in minority populations such as Mexican Americans, is a very complex problem, and research that is culturally congruent is vitally needed to stave off this epidemic.

### **1.3 Domain of Inquiry**

The domain of inquiry of this study is the meaning and experiences of Mexican American children with healthy eating. Understanding the meaning of healthy eating,

how culture may affect the meaning and experience of healthy eating, and the role nursing takes in the promotion of healthy eating from the perspective of the Mexican American child was sought. Research literature is lacking on the meaning of healthy eating and the nursing role in health promotion within this childhood population. Results from this study will help to tailor developmentally appropriate health promotion efforts by nurses, taking into account the culture of healthy eating from the child's perspective. Understanding and clarifying the meaning of healthy eating, held by children in the Mexican American culture, is a vital component to the delivery of care for nurses. Understanding the child's unique perspective on healthy eating will give nurses valuable information to better assist children and their families to improve and maintain health. Health promotion efforts that are derived from this study will enable culturally congruent care delivery that is valued by the population, resulting in improved health outcomes and lower healthcare costs in the population.

#### **1.4 Purpose**

The purpose of this focused ethnography is to understand the meaning and cultural influences of healthy eating and the role of nursing in the promotion of healthy eating practices from the Mexican American child's point of view. Many health behaviors have their origins in childhood and can have effects across the lifespan (The Obesity Society, 2008). The experiences we have in childhood relating to consumption of food affect our perspective on food consumption in later life (Barasi, 2003). The prevalence of obesity among children is a major public health concern (CDC, 2011b; Olshansky et al., 2005). Childhood obesity has risen dramatically worldwide and specifically in the Mexican American culture. Mexican American children have a 21%

higher incidence of overweight than Caucasian children of the same age (CDC, 2008; Ogden et al., 2008).

Culture may determine beliefs, values and behaviors that influence basic needs such as eating. Healthcare that is culturally congruent may be beneficial and meaningful to Mexican Americans (Delva et al., 2007). Understanding the cultural meaning of healthy eating in Mexican American children may allow for the development of interventions that are both culturally congruent and developmentally appropriate. This study provides knowledge that is currently lacking considering the child's unique cultural view and identified meaning of healthy eating, thus allowing nurses to provide culturally congruent care. As a result, nurses will be better equipped to provide nutritional interventions and education that is valued by the population and in turn may prevent and reduce the possible effects of obesity.

### **1.5 Research Questions**

1. What is the meaning of healthy eating in eleven to thirteen year old Mexican American children?
2. What are the cultural influences of healthy eating for eleven to thirteen year old Mexican American children?
3. What is the role of the nurse in promoting healthy eating for eleven to thirteen year old Mexican American children?

### **1.6 Orientational Definitions**

1. Mexican American – any person who was born in Mexico or has Mexican heritage, identifies them self as Mexican or Mexican American and currently resides in the United States.

2. Children – any participant of this study between the ages eleven and thirteen at the onset of the study.
3. Culture – the beliefs, behaviors, values and life ways associated with a particular group of people that are passed on from one generation to the next generation.

### **1.7 Assumptions**

The following are assumptions underlying this study:

1. Informants will give truthful answers during the interview process.
2. The Mexican American culture has influence on the participant's life experiences and habits such as eating beliefs.
3. Foods offered in the school lunch program are foods from the USDA food pyramid and menus that are based on typical American eating preferences.
4. Mexican American eating preferences may differ from Anglo American eating preferences.
5. Offering healthy food choices that are not congruent with one's culture and familiar to children may deter healthy eating.
6. Offering food choices that are congruent with one's culture may increase the likelihood of healthy food selection by a child.

### **1.8 Significance to Nursing**

All studies conducted need to demonstrate their significance to the discipline of study. Qualitative studies improve understanding of the views of the study population (Creswell, 2009). Nonetheless, there are few studies available that investigate how children perceive healthy eating, and no studies were found focusing on views from Mexican American children. This study will seek emic views of the children, generate

knowledge related to the meaning of healthy eating, and inform nursing by providing an understanding of the Mexican American child's view in order to deliver culturally congruent nutritional care. Healthy eating is a basic health promotion activity, and children provide a unique perspective on healthy eating (Hesketh, Waters, Green, Salmon, & Williams, 2005). Understanding how culture influences this perspective could have a direct long term impact on healthy eating behaviors and give context to changes in lifestyle and eating habits in the Mexican American culture. Without an understanding of healthy eating from a Mexican American child's perspective, nurses may be unable to effectively provide care, because care may not be valued if it does not address beliefs held by the culture.

Furthermore, the financial impact of obesity and its effects pose a significant financial burden on the U.S. healthcare system. According to one study by Finkelstein, Fiebelkorn, and Wang (2003), 78.5 billion dollars or 9.8% of the health care expenditures for 1998 were spent nationally as a direct result of overweight and obesity in the U.S. alone. This study only accounted for direct health care dollars expended and did not take into account indirect costs of obesity such as missed work, lower productivity, decreased life expectancy and decreased life quality. Understanding the meaning of healthy eating in Mexican American children can allow nurses to promote a lifetime of wellness for this population, which can directly impact the problem of obesity in children and families, as well as the costs associated with the sequelae of obesity.

## **1.9 Summary**

Healthy eating is important for acquiring and maintaining good health. This focused ethnography allowed the researcher to gain contextual understanding of the

meaning and culture of healthy eating in Mexican American children. Seeking the emic views, from the Mexican American child, will provide an understanding that is pertinent and valued within the population and lead to significant insights for nurses in planning health education and promotion activities for this population. Additionally, understanding the perceptions and meaning of healthy eating in Mexican American children may have a direct, long-term impact on overall lifetime healthy eating behaviors, lower healthcare costs as well as help direct future studies on contributing factors related to healthy eating in children.

## **CHAPTER 2 Review of Literature**

### **2.1 Introduction**

Childhood obesity is a very complex problem. With approximately twelve million children and adolescents between the ages of 6 and 19 years either currently obese or overweight, obesity has become an emergent epidemic affecting American children today (CDC, 2011a). A variety of interventions to decrease obesity rates in children have been studied with many focusing on factors believed associated with obesity (The Obesity Society, 2008). Healthy eating and regular physical activity are important for acquiring and maintaining good health. The environment in which a child is raised also has influence on eating behaviors in children.

The influences of both the home and community are closely tied to food preferences in children (Olvera & Power, 2009). How children develop eating habits and beliefs about healthy eating may affect dietary habits into adulthood. Although, the United States Department of Agriculture (USDA) has developed recommendations about healthy eating practices for children, these recommendations are based on common American food preferences (Birch & Fisher, 1998; Carrera, Gao, & Tucker, 2007). As such, the ability of many minority populations to adapt these guidelines to cultural food preferences may be difficult.

With the rising obesity rates nearing epidemic proportions in Mexican American children, significant knowledge is lacking on the meaning of healthy eating in this population (CDC, 2008). Understanding the meaning of healthy eating and the cultural influences on the meaning of healthy eating may assist nursing in providing culturally competent care. This literature review will present an ethnohistory of Mexican

Americans; assess the current state of knowledge about the epidemiology of obesity and its consequences; and present healthy eating perceptions and the meaning of healthy eating. Specifically, the epidemiology of obesity globally, and in the Mexican American culture will be discussed. Current research on eating beliefs and the health beliefs of the Mexican American culture will also be explored, and the knowledge gaps regarding the meaning of healthy eating will be identified.

## **2.2 Ethnohistory of Mexican American Culture**

Mexico has a complex culture influenced by a long history of immigration, migration, politics and religion (Samora & Simon, 1993). Mexicans are proud of their country, and preservation of culture and lifestyle is highly valued. Therefore, even while many Mexicans migrate to the U.S. and adopt some U.S. customs, preservation of many Mexican cultural customs is common (del Castillo, Griswold, & de León, 1996).

### *Ancient Mexico and Mexican Immigration*

The Mexican American culture is influenced by many factors. Mexico, which developed into unique tribal societies, was first thought to be inhabited by Asian hunters. Many early societies thrived in Mexico, such as the Aztec and Mayan civilizations, developing a rich culture of commerce, art and architecture. In the early 1500's, Spanish explorers landed in Southern Mexico eventually conquering these early societies. Spanish colonies in Mexico were termed "New Spain," and much of Mexico remained under colonial rule until the mid-1820s. The colonization created vast disparities in wealth that eventually lead to social unrest and revolt against Spanish rule. This successful revolt all but ended "new Spain's" rule, and the effects of colonization had a major role in the

development of the modern Mexican culture. Cultural influences included those of language, religion, food and dress (Samora & Simon, 1993).

One significant political figure, General Antonio López de Santa Anna, played a vital role in the migration of Mexicans north into the Lone Star Republic, the present day Texas. Although, this migration was encouraged by Santa Anna, his restriction on trade between Anglos and Mexicans living in the Lone Star Republic lead to many battles including the infamous military action at the Texas Alamo. In an attempt to decrease tensions in the territory, General Santa Anna and the President of the Lone Star Republic, David Burnet, agreed to the Velasco Agreement. This agreement was to lead to the independence of the Lone Star Republic (Vento, 1997). Although controversy about this agreement ensued, the Lone Star Republic became Texas and joined the United States of America in 1845. As a result of the controversial Velasco Agreement, border clashes between Mexican and U.S. forces continued leading to the Mexican and United States War, which ended after the invasion of Mexico City and signing of The Treaty of Guadalupe Hidalgo in 1848. The treaty required Mexico to surrender 890,000 square miles of land in the Texas territory and preserved land rights of those Mexicans living on the territory. Another 30,000 square miles of present day Northwestern Texas were purchased from Mexico in 1854 via the Gadsden Treaty. These two treaties played a significant role in the development of Mexican American culture. At the time of the treaty over 80,000 Mexicans resided in these lands, and only about 2000 returned to native Mexico. Those that choose to stay became permanent U.S. residents. Additionally, the gold rush of 1849 and copper rush of 1860 in the western U.S. drove Mexicans north in search of work and wealth (Samora & Simon, 1993).

Other significant factors lead to increased Mexican U.S. migration in the early 1900s. The Reclamation Act of 1902, which supplied land parcels for farming to settlers of the Western U.S. territory, increased the need for farm laborers. The political instability created from policies of General Victoriano de la Huerta, a repressive military dictator, and the subsequent Mexican Revolution of 1910 further spurred Mexican migration to the U.S. (del Castillo & de León, 1996). During the 1930s and 1940s, migration into the U.S. slowed because of the establishment of the first Border Patrol to monitor immigration from Mexico and the U.S. economic depression that made jobs more difficult to find (Samora & Simon, 1993). In the latter half of the 1900s, immigration from Mexico rivals the pre-1920s numbers. It is estimated that from 1980 to 1990 over one million legal Mexicans migrated to the U.S., and equal numbers were deported during the same time period (Kanellos, 1993).

#### *Typical Patterns of Migration*

The promise of work or higher wages was most notably the common reason many Mexicans traveled north to the U.S between 1900 and 1930 (Vento, 1997). Initially, often men would come to the U.S. to work and return to Mexico when money was sufficient. Once the border patrol was formed and migration back and forth from Mexico became more difficult, men often stayed and sent money to their families hoping to return to Mexico someday. Many of these workers never sought residency and fewer sought U.S. citizenship. For those that did establish residency and travel back to Mexico to bring their families north, they often planned to return to Mexico and continued to send money to family members remaining in Mexico (Vento, 1997). “It is estimated that between 1917

and 1929 Mexican workers residing in the U.S. sent \$10 million dollars to family members at home in Mexico” (Meier & Rivera, 1993, p. 129) .

This trend to work without seeking residency caused a significant problem for many Mexicans living in the U.S. in the 1930s. It was during this time that the Repatriation Program forced one-half a million Mexican Americans to leave the country because of insufficient documentation to live or work in the U.S. (del Castillo & de Leon, 1996).

During the early 20<sup>th</sup> century, many Mexicans settled in the rural Southwestern U. S., but industry and migrant farming jobs during World War I encouraged further migration north in the U.S. and to urban areas such as Los Angeles, Chicago and Manhattan (McWilliams, 1990). Over the century, migration of Mexican American has continued throughout the U.S. according to the U.S. Census Bureau (2008). Of all Hispanic persons living in the U.S., 64.9% are Mexican; of these, 44.2% reside in the Western U.S. with the majority residing in California, Texas, Arizona, New Mexico and Washington (Ramirez & de la Cruz, 2003).

#### *Migration to Central Ohio*

While many Mexican immigrants settled in “traditional” states like California and Texas. Similar to other immigrant groups during the last two decades, Mexican immigrants have begun moving to "nontraditional" settlement areas (Paral, 2009). These areas include states in the Midwest, such as Ohio. Overall, only 20% of the U.S. population lives in the Midwest, down from 30% in the early twentieth century (Paral, 2009). Conversely, the percentage of Mexicans living in the Midwest has increased during the same period from 1% to 10% of the population (Paral, 2009). These recent

migration trends are most often spurred by job creation. In the Midwest, jobs requiring little skill or experience are available in agriculture, construction and manufacturing and provide to be sources of employment that encourage many Mexicans to settle in the area (Paral, 2009). Central Ohio over the past decade follows this trend.

According to the American Community Survey by the U.S. Census Bureau (2008), the Hispanic population in Ohio has grown by 22.4% since 2000. Of the 250,000 persons of Hispanic descent who reside in Ohio, about 137,000 claim Mexican heritage. Greater than 20,000 people have migrated from Mexico to Ohio since 2000 (U.S. Census Bureau, 2008).

#### *Family Life - la familia*

Mexicans and Mexican Americans exhibit strong family ties. Mexican American families tend to be larger when compared to other Hispanic cultures and certainly to those of non-Hispanic cultures. According to the U.S. Census Bureau, 30.8% of Mexican families consisted of five or more members compared to 10.8% of non-Hispanic families; 73.5% of these families were headed by married couples and 19.1% by single females (Ramirez & de la Cruz, 2003). Family is a central bond in the Mexican and Mexican American culture.

The extended family, or *la familia*, includes multiple generations of immediate family, aunts, uncles, cousins, grandparents, as well as those persons who may not be direct relatives but are considered family in the Mexican culture. *Compadres*, or co-parents, are often an integral part of Mexican families. *Compadres* are often close, personal friends of the mother or father of a child; the *padrinos* (Godfathers) or *madrinas* (Godmothers) developed a special relationship with their *ahijados* (Godchildren). From

the children's baptism forward the *compadres* provide emotional advice and often financial assistance to their *ahijados* as well. They are also essential participants in all events of social or religious importance. Compadres, as any other immediate family member, contribute to the strong Mexican family unity (del Castillo & de Leon, 1996).

This close-knit family structure is of great value and significance particularly in times of crisis. If an individual in the family unit faced a problem, the entire group would be called on for support and counsel about the resolution. The good of the group is always considered over the individual good (Ramirez & de la Cruz, 2003). Social and religious traditions and practices changed very little from one generation to the next because of the value placed on these by the family group as vital to cultural heritage (del Castillo & de Leon, 1996).

A system of male dominance or patriarchal hierarchy was common in the traditional Mexican American family (Sobralake, 2006). The husband is the sole money-maker in the family, and if the wife worked outside the home it was only in certain roles and dictated by economic hardships. The husband also had domain not only over economic matters but also over social matters. Women did have domain over household concerns but would be submissive and obedient to their husbands' decisions. This behavior is traditionally taught to children based on gender roles from an early age. For a woman, there would be no greater goal than that of motherhood. *Machisimo* is a commonly held belief in the culture (Sobralake, 2006). The term has a wide range of interpretations from traditional male dominance and protecting one's masculinity at all cost even at the sacrifice of family and job status; to the more modern day belief that true *machisimo* is attained by protection and care of the family. Either way, a male sense of

*machisimo* is a central influence in the Mexican American culture and helps bring a sense of belonging within the community (Sobralke, 2006).

Today, while the role of the family – *la familia* most often still includes extended family members and the value of family is still held in high regard, ideals have softened in some aspects of Mexican American family life. For example, while newly arrived immigrants generally continue to seek out relatives in the U.S. and may rely upon these individuals and their families for temporary assistance, each successive generation born in the U.S. tends to exhibit reduced dependence on extended kin. Gender roles are not as gender prescriptive as in the past (Sobralke, 2006).

### *Religion*

Religion plays an important part in the lives of Mexicans and Mexican Americans. Religious celebrations are common practice and are often times central in both the family structure and the community. About 80% to 90% of Mexicans and Mexican Americans practice Roman Catholicism and are ardent believers who hold religious practice as a personal experience (Kemp, 2005). Stemming from their Spanish history, traditional Catholic practices are intertwined with folk religious practices of their Aztec ancestry. For example, Our Lady of Guadalupe is thought to represent both the Mexican goddess Tonantzin and the Virgin Mary and is a common religious icon in the culture (Poole, 1996). Spirits and the spirit world, as well as saints, are often the focus of complex rituals and offerings in order to receive favor and blessings in life. Home shrines are often the religious center in many Mexican Americans homes (Kemp, 2005). Statues and candles are often used for shrines, and many Mexican Americans in the southern U.S. use *Milagros* – small gifts to adorn the shrine in order to petition the saints.

For many, these religious practices are very personal and blend Catholic teachings with folk practices and often result in new family traditions if prayers are granted. Often personal religious items are thought to grant a person protection from harm and ill will. Many Mexican Americans place symbols of protection in children's bedrooms, cars, their work places or carry them in their purses or wallets (Poole, 1996).

### *Health Beliefs and Practices*

Not only does ancient Aztec culture influence religious practices, but it also has a basis in traditional health beliefs and practices within the culture (Kanellos, 1993). As discussed, many traditional Mexican American families tend to be more patriarchal, but the women are the primary members of the family who oversee the health issues while still seeking approval of the treatments in many cases from the man (Castro, Furth, & Karlow, 1984). While modern conventional treatments are the primary source for most Mexican Americans today, folk practices are often used in conjunction or turned to when traditional medical interventions fail (Zavaleta, 2000). Folk practices aimed at physical, psychological, emotional as well as spiritual problems are known as *curanderismo* and are often addressed by *Curanderas* or *Curanderos*. These healers use a combination of supernatural and natural or herbal remedies to provide comfort and healing from *mal natural* (naturally occurring) and supernatural related ailments and are valued in the culture. *Mal natural* causes of illness include such factors as air and water pollutants and emotional factors such as stress and worry. *Mal puesto* (witchcraft), *mal de ojo* (evil eye), and *real puesto* (hex) fall into supernatural causes of illness (Molina, Zambrana, & Aguirre-Molina, 1994). Other folk healers such as *parteras* (midwives), *yerberso* (herbalists) and *sobadores* (massage therapists) perform vital functions related to health

and wellbeing within the culture. Certain teas, rice water, eggs, holy water and votive candles are often used as *remedies caseros* or home remedies to treat or prevent illness (Molina et al., 1994). In one such practice, a *barrida* (sweeping), eggs and often lemons and other herbs are swept over the ill person's body. The egg is placed under the person's bed, and if the egg appears cooked or blood tinged the next day the ritual was successful in healing the person of illness (Kemp, 2005). Higginbotham, Trevino and Ray's study in 1990 of 3,623 Mexican Americans found that while less than 5% relied on *curanderas* for their only sources of health care, the majority would seek out *curanderas* in conjunction or after traditional medical opinions failed and often traveled great distances to find healing from the *curanderas*.

Some Mexican health beliefs are based on a mix of Greek, Spanish and Aztec ideals of blood, phlegm, black bile and yellow bile and evolved over time to a belief of a balance between hot and cold factors. If one factor is out of balance, illness will occur, and the balance needs to be restored to regain health. A hot treatment should be used for a hot disease and cold treatment for a cold disease. Traditionally, cold diseases are thought of as those with more silent symptoms such as earache or arthritis, while hot disease are those with more apparent signs such as the stomach flu (nausea and vomiting). The definitions of hot and cold diseases and treatments vary within the culture but still influence how Mexican Americans view and value healthcare practices even today (Lujan & Campbell, 2006).

#### *Food Practices and Beliefs*

Food beliefs and practices play a role in health beliefs as well as religious practices within the Mexican American culture. Stemming from the belief of hot and cold

illnesses, foods are often used as a treatment for these imbalances. Cold foods are used to treat cold ailments and hot foods for hot ailments. The temperature or spiciness of the foods does not determine their hot or cold status, and hot and cold foods can vary within the culture. Certain food remedies can assist with healing, such as treating conjunctivitis with a special diet of vegetable soup and fresh fruit (Kemp, 2005).

Traditional Mexican diets are low in fat and high in fiber-rich foods. Beans are a common staple in the diet and are often consumed at two to three meals per day. Rice, fresh fruits and vegetables are also a Mexican staple food for many. As acculturation has occurred, many Mexican Americans are consuming a more traditional U.S. diet that is high in fat and low in fiber (Kulkarni, 2004). Many Mexican American parents view weight as a status of health and prosperity. Plump babies are viewed as healthy in the culture (Kulkarni, 2004). As a result, prolonged formula feeding is common for children two and three years of age in addition to table foods. The introduction of solid foods is found to begin at earlier ages in the population, often as early as 1 to 2 months of age (Kulkarni, 2004). Also breastfeeding is less often initiated and is of shorter duration in Mexican American mothers as compared to Mexican born mothers. All three factors have been positively associated with increased weight in children (Kimbrow, Lynch, & McLanahan, 2008; Zive et al., 1992).

Food and drinks become a central theme in many traditional Mexican American celebrations. *Dia de los Muertos* or the Day of the Dead celebrated on November 1<sup>st</sup> and 2<sup>nd</sup> combines the history of the Spanish conquistadores and Aztec society, as well as the Roman Catholic observations of All Saints and All Souls days. This festival celebration

uses such food items as marzipan, tamales, and the *Pan de Muerto* or sweetbread as offerings to assist deceased loved ones on their spiritual journey (Kulkarni, 2004).

### *Summary of Ethnohistory*

The Mexican American culture is a blend of Mexican history and influences of the American culture. The Mexican American people are a proud and complex but fun loving group in which family traditions and practices are highly valued and cultural pride dictates practices even today. Religion, family, health and food practices are unique to the culture and should be preserved and valued for the roles and influences they play within that culture.

### **2.3 Overweight and Obesity Defined**

Obesity is an excess in body fat. Failure to reach consensus about cut points for evaluation of body fatness and how body fatness is measured have limited the definition and evaluation of overweight and obesity in research literature (Dehghan, Akhtar-Danesh, & Merchant, 2005; Ebbeling, Pawlak, & Ludwig, 2002). Measurement of body fatness can be performed by direct or indirect measures and varies based on setting and population. For clinical and large sample research purposes, BMI is the indirect measure of body fatness typically employed. In children, BMI percentiles are calculated based on weight, height, age and gender (CDC, 2011b). Although BMI percentiles do not measure body fat directly, research has shown that BMI percentiles correlate to direct measures of body fat, such as underwater weighing and dual energy x-ray absorptiometry [DXA](Flegal et al., 2004). Therefore, BMI can be considered an alternative for direct measures of body fat and is a reliable indicator of body fatness for most children. BMI

measurements are an inexpensive and easy-to-perform method of screening for weight categories that may lead to health problems (Flegal et al., 2004).

Although BMI is calculated the same way for children and adults, the criteria used to interpret the meaning of the BMI number for children are different from those used for adults. For children, BMI age- and sex-specific percentiles are used for two reasons: the amount of body fat changes with age, and the amount of body fat differs between girls and boys. It is only in 2008 in the U.S. that the CDC developed standard definitions for childhood weight classifications and measurement. The BMI-for-age-and-gender growth charts were originally developed in 2000 by the CDC and have undergone some revision for clinical use as recently as 2009. The use of the term 'obese' has come and gone in the CDC interpretation guidelines because of feared self-esteem issues related to an obese classification for children. Originally, no childhood classification for obesity was defined, instead the terms 'overweight' and 'at risk for overweight' were outlined in the *Use and Interpretation of the CDC Growth Charts* as recently as 2008, although obese language and overweight/obese classifications could still be found on the CDC websites. As a result, in early 2009, the CDC again revised the interpretive guidelines for the existing 2000 BMI-for-age-and-gender-growth charts (CDC, 2011b). Obese is defined as having a BMI at or above the 95th percentile based on age and gender-specific growth charts. Children between the 85th and 94th percentile of BMI are considered overweight. Children between the 5th and 84<sup>th</sup> percentiles are considered normal weight and those below the 5<sup>th</sup> percentile are considered underweight. These changes now reflect similar language that the World Health Organization (WHO) is using in growth charts developed in 2007.

The WHO developed and released two BMI charts for use in children from birth to 5 years of age and from 5 to 19 years of age (WHO, 2007). According to the WHO standards, in children aged 0 to 5 years and 5 to 19 years, obesity is a BMI level that is greater than 2 standard deviations above the mean, overweight is a BMI that is greater than 1 standard deviation above the mean on the z-score graph. A z-score graph shows the BMI as a range from +3 to -3 of the mean BMI percentile for age and gender. A BMI that is within 1 standard deviation greater than or less than the mean is normal weight (WHO, 2007).

While a vast body of research on childhood obesity exists, BMI interpretive language has not always been consistent. The use of both the CDC and WHO BMI charts in obesity literature worldwide and inconsistent defining language of obesity makes it difficult to compare research globally.

#### **2.4 Epidemiology of Obesity**

As discussed, childhood overweight and obesity levels can be difficult to generalize on a global scale. According to the WHO, over the past 30 years, the obesity rate of preschool children and adolescents has more than doubled (WHO, 2008). An estimated 75 million children are overweight worldwide. Additionally, 66% of these overweight children will become overweight adults (The Obesity Society, 2008). Overweight levels in the U.S. have reached epidemic proportions over the past decade. According to the CDC (2011a), about 17% of children and adolescents are obese, and another 15% are overweight in the U.S. alone. This percentage equates to approximately 12.5 million American children aged 2 to 19 years old who have BMI at or above the 85<sup>th</sup>

percentile (Crespo & Arbesman, 2003). Levels of overweight vary greatly between race and gender.

According to the U.S. Census, Mexican Americans currently comprise 9% of the population in the U.S., or about 28.3 million persons and make up 64% of the Hispanic American population (U.S. Census Bureau, 2008). Children of Mexican descent make-up 15% of the U.S. childhood population (U.S. Census Bureau, 2008). Olvera and Power (2009) found that 17% of Caucasian American children are overweight or at risk for overweight as compared to 38% of Mexican American children. Mexican American boys have the highest levels of overweight in the U.S., and Mexican American girls are second only to Black American girls. Mexican American boys aged 2 to 19 years have a higher overweight rate at 22.7% as compared to Mexican American girls of the same age at 16.2% (Flegal et al., 2004).

Wang and Beydoun (2007), identified important variations in overweight and underweight by socioeconomic status, rural-urban residence and the globalization or moderation of the nation. This study did not, however, address how cultural influences of food impact obesity levels in the populations. Since children and adolescents tend to participate in global culture more quickly than their parents, they more readily adapt to trends that will shape their eating, activity levels and consequently their body weights (Ackard & Neumark-Sztainer, 2001; Bramble, Cornelius, & Simpson, 2009). This adaptation or acculturation is the phenomenon of the adoption of the customs of a new culture by immigrants in a new country (Kandula et al., 2008). With acculturation taking place more readily in child and adolescent populations, today's children are likely to be the first generation to live shorter, less healthy lives than their parents (Ackard &

Neumark-Sztainer, 2001). Childhood obesity, particularly in minority populations such as Mexican Americans, is a very complex problem, and research is needed to stave off this epidemic.

## **2.5 Consequences of Obesity**

Overweight children and adolescents are at increased risk for several health complications. During their youth for example, they are more likely to exhibit risk factors for cardiovascular disease (CVD) including hypertension, polycystic ovarian syndrome, dyslipidemia, and type 2 diabetes; compared with normal weight individuals (Artinian, Schim, Vander Wal, & Nies, 2004; Dugas et al., 2008; Glaser & Jones, 1998). Additional health complications associated with overweight children include sleep apnea, asthma, and liver damage (Dietz & Gortmaker, 2001). Furthermore, overweight children and adolescents are more likely to become obese adults. For example, one study found that approximately 80% of children who were overweight at 10 to 15 years old were obese at 25 years of age (Flegal et al., 2004). Another study found that 25% of obese adults were overweight as children (Ebbelling et al., 2002). This study also concluded that if overweight begins before 8 years of age, obesity in adulthood is likely to be more severe. Finally, childhood overweight has psychological and emotional consequences. Overweight children are at an increased risk of teasing and bullying, low self-esteem, and poor body image (Ebbelling et al., 2002; Flegal et al., 2004).

In the Mexican American culture, the rates of diabetes, high cholesterol and hypertension are over three times that of their Caucasian counterparts. In newly diagnosed diabetic cases in children, Type 2 diabetes represented the majority of cases, and 90% of those children were overweight (Johnston et al., 2007; Neufeld, Raffel,

Landon, Chen, & Vadheim, 1998). In adolescents, the rates of diabetes vary greatly among different ethnic groups, ranging from 6% among non-Hispanic whites to 22% in Hispanic, 33 % in African American, 40% in Asian-Pacific Islander and 76% in American Indian children, clearly documenting at-risk populations (Ogden, Carroll, & Flegal, 2008). As a result, the American Diabetes Association (2009) has recommended all overweight children of American Indian, African, Hispanic, Asian/South Pacific Islander decent be screened regularly for insulin resistance and diabetes.

Many factors compound the increase obesity rates seen in certain ethnic groups, but identification of all the factors is difficult to pin point. Individual behaviors along with social, cultural, and environmental factors play important roles. It is likely that a gene-environment interaction, in which “genetically susceptible individuals respond to an environment with increased availability of palatable energy-dense foods and reduced opportunities for energy expenditure,” contributes to the high prevalence of overweight and diabetes seen in the population (Boutelle, Birkeland, Hannan, Story, & Neumark-Sztainer, 2007, p. 249). Reductions in physical activity and changes in energy intake contribute to the obesity epidemic in children but are difficult to effectively measure. Poor eating habits often are established during childhood, and children often do not consume healthy diets. How children acquire eating habits, particularly in susceptible populations such as Mexican American children, is largely unknown. Formal educational efforts as well as environmental influences such as food availability and cultural norms may play a role in how children establish dietary habits.

## **2.6 Nutrition Interventions**

Racial and ethnic minorities who face barriers to food availability and have cultural eating norms that differ from the dominant culture of the U.S. are at a distinct disadvantage in terms of health. Studies show that barriers to health care exist, such as linguistic, cultural, and socioeconomic limitations, for Mexican Americans as a group (Delva et al., 2007; Vaga & Amaro, 1994; White, 2002). These barriers may place Mexican Americans at increased risk for obesity and cardiovascular disease (Dalton, Johnston, Foreyt, & Tyler, 2008). Thus, as the Mexican American population grows, the necessity for culturally specific and language appropriate programs increases as well. According to The Obesity Society (2008), the combination of proper nutrition and regular physical activity is the most effective intervention for weight loss and maintenance of weight loss. Effective culturally competent interventions must include the appropriate language translation or interpretation services, targeting specific habits, and consideration of the subjects' culture (Posten et al., 2001). There is a need for culturally appropriate nutritional interventions. For instance, a meta-analysis of 92 studies regarding the efficacy of behavioral dietary interventions to modify cancer risk was performed by the Agency for Healthcare Research and Quality (AHRQ). The AHRQ (n.d.) found that very few studies were appropriately designed or reported their findings to permit interpretation of the evidence for the efficacy of interventions by subgroups, particularly low-income or ethnic groups. In their analysis of programs in existence, the AHRQ found that programs that employed "interaction with food" were among the most effective. In a baseline analysis of participants in the Cholesterol Screening and Education Project in New England, funded by the National Institutes of Health, differences were found in food

behaviors by ethnic group (Gans, Burkholder, Risica, & Lasater, 2003). Hispanics (n=1,425) were more likely than Whites (n=7,817) and Blacks (n=561) to eat fruits and vegetables as desserts, and as a means to avoid fat (Gans et al., 2003). Hispanics along with Blacks were more likely to fry foods than Whites however, and Hispanics were the least likely group to use nutrition facts labels (Gans et al., 2003). The authors suggested that differences in existing food behaviors among ethnic groups must be acknowledged and incorporated into interventions, and culturally appropriate interventions should be further researched (Gans et al., 2003). While the study by Gans et al. (2003) discussed foods likely to be eaten by particular ethnic groups, it did not explore how these groups define healthy eating or the cultural meaning of healthy eating. Furthermore, only adults participated in the research study, limiting the application to childhood populations even in the same ethnic group.

## **2.7 Nutrition Policies in Public Schools**

Food is usually available for sale in schools either through meal programs, vending machines, snack shops, school stores, or bake sales. School lunch, breakfast, and after school snack programs are offered by state school systems, which, in coordination with the USDA Food and Nutrition Service (FNS), set nutritional guidelines for meal programs in the nation's public school system. The USDA/FNS subsidize schools if their meal programs meet national nutrition guidelines and offer free or reduced cost meals to children from low-income households. Schools that participate in the federal school lunch or breakfast programs are required to follow the USDA's Dietary Guidelines (USDA, 2009). Although the Dietary Guidelines for Americans were updated in 2005, the USDA/FNS school meal program has yet to adopt the newer recommendations. Instead

the USDA has asked the Institutes of Medicine (IOM) to provide recommendations for change to the national school meal program. The IOM Committee recommendations are pending, resulting in a continuation of the current meal plan recommendations by the USDA. Moreover, these guidelines do not apply to foods sold à la carte, or those sold in snack bars and vending machines. Commonly referred to as competitive foods, these foods and beverages are often low in nutrients and relatively high in fat, sugars, and calories (Trust for American Health (TFAH), 2008). To encourage healthier eating among school children, several states have developed policies that establish school nutritional standards, restrict the sale of competitive foods and beverages, and ban or limit the sale of certain items in vending machines. These initiatives are tracked and reported yearly in the TFAH report (TFAH, 2008).

Unfortunately, nutritional programming developed by the USDA and tracked by the TFAH does not consider the cultural aspects of eating and food preferences. While the USDA does provide the My Food Guide Pyramid in English and several translated languages, the food examples given are constant throughout each language and not tailored to food preferences of the culture for which they are directed. This failure to consider culturally relevant food preferences may limit the usefulness of the USDA guidelines in culturally diverse populations. Furthermore, while the TFAH does track obesity and food preferences in school-age children, it does not take into account the cultural influences in food selection or the cultural meaning of food.

## **2.8 Healthy Eating Beliefs in Children**

Several studies investigated factors influencing healthy eating in children, but most have employed a quantitative approach (Calderon, Johnston, Lee, & Haddad, 1996;

Davis et al., 2007; Stice et al., 2005). While the aim, in these studies was similar, identification of modifiable risk factors for obesity, they did not seek to understand healthy eating from a child's perspective. Rather these studies identified factors common to adults for study in children such as: serving size and food pyramid knowledge, as well as physical factors such as satiety, body mass index and food likeability ratings (Brunstrom et al., 2008; Burger et al., 2007; Frobisher & Maxwell, 2003). Brunstrom et al. (2008) found no significant positive relationship between BMI and serving size self-selection of snack foods, main dishes, or side dishes except in the rice category ( $p < 0.05$ ). Participants with a lower BMI self-reported eating a larger portion of rice than those with a higher BMI ( $t = -2.4$ ;  $p = .018$ ). However two studies, Burger et al (2007) and Frobisher and Maxwell (2003), found that serving size self-selection increased, independent of food pyramid knowledge, when physical factors such as satiety level and food likeability ratings were researched. Conversely, Stice et al. (2005) found no relationship between satiety, body mass index, food pyramid knowledge and serving sizes in children aged 12-18 years.

While knowledge levels of nutritional serving sizes, food pyramid, and physical factors such as satiety, food likeability and BMI influence obesity levels in children, these factors alone do not solely influence obesity levels in children. One aspect missing in all of the aforementioned studies was the cultural aspect of the meaning of healthy eating and how culture may influence eating behaviors.

While one study investigated Mexican American and Asian American populations, the meaning of healthy eating and the cultural influence on healthy eating was not directly studied (Calderon et al., 1996). Instead, factors such as physical activity,

and dietary knowledge were investigated. The serving frequency of food, physical activity and eating timing were shown to influence obesity levels in the participants (Caldren et al., 1996).

As discussed, until recently studies dealing with healthy eating in children focused on quantitative measures of knowledge outcomes or factors that may influence portion selection. Reasons for limited qualitative research studies in children are identified by Ireland and Holloway (1996) as: the child's developmental state, need for voluntary participation, parental and informants' permission, as well as the asymmetrical relationship dynamics between researcher and informants that exist because of age. In spite of these obstacles, qualitative studies are vitally needed to explore the perceptions and meaning of healthy eating in children in order to better understand and direct preventative education efforts. While qualitative studies have been conducted, none have been found to date that explore the meaning of healthy eating from the Mexican American child's perspective. However, studies that seek to understand which foods are viewed as healthy and unhealthy do exist from Australia and England.

Gosling, Stanistreet and Swami (2008) used a qualitative approach to investigate the perceptions of physical activity and healthy eating among English school children. The phenomenological study employed a focused group design to discuss physical activity and healthy eating with 32, 9 and 10 year olds from a Year 5 class in northwest England. The children were randomly assigned to one of four focus groups, and questions pertaining to their views on physical exercise or food and eating were evaluated. Findings emerged from the data through a thematic analysis. The study found that while children acknowledge peer and parental influences play a role in healthy eating

perceptions, children feel they hold primary control in determining healthy eating. Informants were able to identify healthy and unhealthy foods as well as factors that may affect the ‘healthiness’ of foods such as cooking technique and portions of food. Their relationship to food and food choices were not dictated by self-restriction of healthy eating. Eating foods, even those foods perceived as not healthy, was rationalized by the informants, because they liked the foods or as a result of influence from peers (Gosling et al., 2008). This is significant, because it supports theories about health beliefs in that ‘being healthy’ is not a primary motivator for behavior (White, 2002). A similar study of Australian children and parents identified that “preventative health strategies incorporating the views of target participants have improved the likelihood of success” of the preventive educational programs (Hesketh et al., 2005, p. 19). This qualitative study explored “child and parent views regarding social and environmental barriers to healthy eating, physical activity and child obesity prevention programs, acceptable foci, and appropriate modes of delivery” (Hesketh et al., 2005, p. 19). An indirect focus of the study was the meaning of healthy eating in the population. The study was conducted in three demographically diverse primary schools in Victoria, Australia. Children in grade 2 (aged 7–8 years) and grade 5 (aged 10–11 years) participated in semi-structured focus groups of three to six children; 119 children participated in total. Parents were also interviewed in separate semi-structured focus groups of eight and nine each; 17 parents participated. After recording and coding the informants’ comments, themes were extracted using a grounded theory methodology. Children were generally well informed about the healthiness of foods; they were able to identify healthy and unhealthy foods and were aware of the nutrients contributing to their perception of foods being more or less

healthy. Many mentioned food labels as a source of information on the health value of foods, and some discussed the health consequences of eating healthy. Interestingly, younger children often used the ability to identify the food source such as ‘milk is healthy, because it comes from cows’ as an indicator of healthiness. Also, in this younger age group, foods without packaging, even if the informants did not know the source, were viewed as healthy – such as a pineapple or banana. However, many children found combination ‘healthy’ and ‘unhealthy’ foods, for example chocolate milk as well as food preparation methods confusing (Hesketh et al., 2005). One theme that emerged was coded as Myths. These myths emerged in both the children's and parents' discussions. Children believed that products labeled ‘diet’ were healthy, and that foods derived from natural products were healthy regardless of the content of the final product, for example fruit juice. Beliefs existed that poor people cannot afford healthy food and the lack of healthy food available was because farmers do not grow enough. Furthermore, children reported that eating fruit before junk food counterbalances the effects of junk food and salt is good because it helps your blood flow. Parents and children also reported that healthy eating could be done most of the time. Snacking and poor food choices, if only indulged once a day, would be off-set by healthy eating during the remaining meals. Despite the high levels of child and parent knowledge about healthy foods and activities, clearly the understanding of other aspects was lacking as described in the myth reporting. Additionally, while food identification was high, this knowledge confusion still remained about combination eating and did not consistently translate into reports of healthy behaviors (Hesketh et al., 2005).

While the aforementioned studies sought to understand healthy eating behaviors and influences on this behavior, limitations in the studies existed. First, the study populations included the parents of children not just the children themselves. While certainly parental influences should not be minimized in studies regarding children's behaviors, seeking the information from the child and parent may affect the child's response. Secondly, while research has begun to identify factors that affect healthy eating and factors that may affect eating practices, to date no data are available in the literature addressing the influence culture plays in the meaning of healthy eating for children, particularly Mexican American children who clearly are at grave risk for overweight and the consequences associated with overweight.

## **2.9 Immigrants and Food Acculturation**

Acculturation is the phenomenon of the adoption of the customs of a new culture by immigrants in a new country. The term 'dietary acculturation' has been used to describe the process of adopting the food behaviors of the host culture (Satia-About, Patterson, Neuhouser, & Elder, 2002). One study of Mexican immigrants residing in Washington state showed that higher degrees of acculturation in the U.S. of the immigrants corresponded to decreased consumption of fruits and vegetables and increased consumption of fat (Neuhouser, Thompson, Coronado, & Solomon, 2004). Existing research recommends that dietitians and health care professionals encourage Mexican Americans to maintain their healthy eating habits in regards to fruit and vegetable consumption, while adjusting to the U.S. culture (Neuhouser et al., 2004).

In the U.S., the Mexican American community is the fastest growing segment of the total population. Projected to become one-third of the total population in the next 100

years, health issues affecting the Mexican American community, such as childhood obesity, are a national concern (U.S. Census Bureau, 2008). Currently the largest minority group in the U.S., this population suffers a disproportionately large percentage of nutrition-related diseases, such as obesity, cardiovascular disease, and diabetes (CDC, 2008; Delva et al., 2007). Minority health is a great concern for the U.S. Department of Health and Human Services which developed, along with the Healthy People 2010 guidelines, an initiative called ‘Eliminating Racial and Ethnic Disparities in Health.’ With U.S. acculturation, Mexican Americans become more obese. After five years in the U.S., the percentage of obesity among all Mexican Americans is 14.5% (Kaplan, Huguet, Newsom, & McFarland, 2004). After ten years, the number increases to 21%, and the number continues to increase to 24.2% at 15 or more years of residence in the U.S. (Kaplan et al., 2004).

This raises concern about the health of Mexican American youth as they approach adulthood. As with adults, children who are overweight stand an increased risk of developing a number of health conditions and diseases, such as diabetes, hypertension, polycystic ovarian syndrome and increased cholesterol levels (Ebbelling et al., 2002). These combined factors call for researchers to explore factors to decrease childhood obesity levels in order to improve the health of children in the U.S.

## **2.10 Knowledge Gaps**

Children in at risk populations such as Mexican Americans have a unique perspective and understanding of the meaning of healthy eating and can help identify cultural norms and other factors that may be vital in directing culturally appropriate health promotion interventions. Studies are scant in the qualitative literature dealing with

this topic as well as the population age. While studies exist about perceptions of healthy eating in children from the caregiver perspective, little to no input from the children themselves has been sought. No current studies directly measure the meaning of healthy eating from the Mexican American child's perspective. Studies focusing on the perception and meaning of healthy eating may be the first step in tailoring obesity prevention and health promotion education to specific populations such as Mexican American children. As presented, childhood obesity and its consequences are at epidemic proportions in the Mexican American community. Action must be taken to prevent obesity and its sequelae in Mexican American children. Encouraging Mexican Americans to maintain their healthy eating habits in regards to fruit and vegetable consumption while adjusting to the U.S. culture is vital. Alarming, culturally appropriate nutritional interventions, considering the eating beliefs of these children, are lacking. Therefore, research is vitally needed to determine the meaning and experiences of healthy eating in Mexican American children.

## **2.11 Summary**

Obesity is near epidemic proportions among Mexican American children. Research to identify amendable factors that may influence these levels is a vital component needed for nurses to stave off this epidemic and promote healthy lifestyles within this population. Studies demonstrate that obesity has a dramatic affect on health. In the Mexican American population, traditions are a valued aspect, and food is part of these traditions. Understanding how Mexican American children view healthy eating while acclimating to the U.S. culture may lead to interventions that can positively affect the health of these children.

## **CHAPTER 3 Method**

### **3.1 Introduction**

Ethnographic study allows a researcher and others to understand how a particular people think, behave and act within a culture (Clifford & Marcus, 1986). This chapter will present the ethnographic research method, study setting informants and the researcher's history in the community. Finally, the method of data analysis will be outlined.

### **3.2 Method**

Ethnography is a qualitative research method that formally began in the early 19<sup>th</sup> century in the anthropology field and almost always includes some form of participant observation. Often ethnography is employed to study a culture, people or practice and utilizes fieldwork and participant observation (Clifford & Marcus, 1986). For this study, a focused ethnography was employed to examine Mexican American children's meaning and experiences of healthy eating as well as how nurses can facilitate healthy eating within the population age group. A focused ethnography method was selected, because ethnography research is used to understand a group or cultural phenomena from a personal perspective (Creswell, 2009). A focused ethnography studies a specific "situation within a larger social scene" (Munhall, 2007, p. 311). Ethnography allowed the researcher to gain contextual understanding of Mexican American children's meaning and experiences of healthy eating. Emic (or insider) views were sought from within the culture. Understanding the children's meaning and experiences with healthy eating is integral to understanding the culture of healthy eating within the selected population.

### **3.3 History in the community**

Ethnography dictates the researcher become an active participant in the culture of interest. The researcher has lived and worked as a nurse practitioner in a primary pediatric setting in the community for a decade and had initial interactions with Mexican American families within the settings providing primary care. The researcher has been an active volunteer within the school district for the past two years by volunteering with the wellness committee and during “Take a Taste Thursdays.” This “Take a Taste Thursday” program occurs once a month during the lunch hour, and the researcher has been an active volunteer meeting the children within the school district. During these experiences, the researcher has had the opportunity to meet and establish trusting relationships at the study site schools and within the Mexican American community. Additionally, the researcher has been an active volunteer with the summer lunch program at a local church, which provides no cost lunches to families during the summer school break. While the program serves all members with low incomes within the community, several Mexican American families have become regular visitors as well as volunteers for the program, thus providing the researcher the opportunity to observe and get to know many of the families.

The fieldwork allowed the researcher to become familiar with the school systems and several church and shopping settings frequented by the local Mexican American community. The result of this fieldwork has allowed the researcher to meet primary gatekeepers within the community at the local schools and one Mexican American librarian, “Maria,” at the local library branch. Aside from making contacts with gatekeepers in the community, these interactions allowed the researcher to begin to

observe Mexican American families and contemplate how the Mexican culture blends with local American culture.

The Mexican American families tend to live in the southern part of the proposed study community. This area of town has two Mexican markets and three churches that provide religious services in Spanish. Additionally, a free health care clinic was recently opened in a neighboring city just to the south of the community that provides healthcare services to the larger Latino population. As the researcher's involvement in the schools expanded during the study and introductions are made by "Maria," and "Mona," a gatekeeper at the school, opportunities to observe and participate in the Mexican American community outside the schools evolved. The researcher provided two health education classes about infant feeding and immunization schedules at the community center, participated in library programs, and volunteered at the local health center. These activities provided the researcher opportunities to observe Mexican American families, and allowed community members to become familiar with the researcher.

### **3.4 Age Selection for Informants**

Informants were Mexican American children aged eleven to thirteen years. The age range was selected for four primary reasons. In the community settings for the study, this is the age when students in the local school systems are able to make independent food choices from the school menu including al la cart items. The researcher has experience caring for children of this age range and has volunteered for a variety of activities in the community and school settings for this age student. Finally, as assent is required for any study involving children, the study age range is well within the guidelines for study assent. Additionally, children of this age, according to famed

developmental psychologist Erik Erickson (Erickson, 1968), are beginning to establish a philosophy of life and to discover who they are as individuals and as members of a wider society. Piaget (1971) classified this age as the end of the concrete operational phase and beginning of the formal operational stage in which children master logical comprehensive conversation and begin to develop abstract thinking. The selection of the population age was determined after consultation with school officials and the researcher's experience as a nurse practitioner. The assent guidelines provided by the American Academy of Pediatrics (AAP, 2007) were used in the final consideration.

### **3.5 Ethical Considerations**

Studying children's perceptions of healthy eating, while valuable, is also fraught with many ethical issues. According to Ireland and Holloway (1996), at the forefront of ethical considerations must be the relationship between the researcher and participant. Asymmetrical relationships emerge because of the age of participants. As such, the researcher must take great care to involve the children in the decision to participate and arrange interviews in comfortable settings for the children (Ireland & Holloway, 1996).

The principle investigator obtained approval from Duquesne University's Internal Review Board (IRB, Appendix A) and an agreement from the school district administrators prior to beginning the study (Appendix B). This study only included informants, who gave assent with parental consent, and all interviews were conducted in a setting of the parent's and child's choosing. After the initial recruitment of informants, contact was made with the parent/guardian of the potential participant to arrange a meeting to discuss the research study. This meeting provided the participant and parent/guardian an opportunity to ask questions about the proposed study. All meetings

were held at a time and place mutually convenient to the participant and parent/guardian. The informant and parent/guardian were given a complete explanation of the study, and had questions answered prior to the consent and assent forms being reviewed. The assent and consent forms were available in both English and Spanish (Appendix C). The assent and consent forms were translated into the Spanish versions by a native speaking certified translator and then were linguistically checked by a native Spanish speaker within the study community. Although offered, only three parents and no informants desired a translator to assist with the explanation of the proposed study. Three parents did sign the Spanish consents, while all twenty-one informants signed the English assent.

Both the consent and assent forms were explained in detail to the participant and parent/guardian prior to either signing the documents. Explanation of the consent and assent forms included the study title, funding source for the study, requirements for the study and the purpose of the study. Additionally, the benefits and risks to the participant were reviewed, and the informant's right to withdrawal from the study at any time was outlined. Lastly, information was included about how the participant could obtain the study results and contact information for the researcher and the faculty advisor.

The researcher was able to obtain the signed informed consent and assent forms in person from all study informants and parents/guardians. In all but three cases, the researcher was able to meet with only the mom of the study informant and one parent/guardian was needed to give informed consent for the minor to participate in the proposed research study.

After completely explaining the study aims and data collection techniques to the parent/guardian and obtaining informed consent, assent was sought from the child.

Parents must give consent and informants must give assent for participation, because the study focuses on a minor population. The AAP position paper, *Informed Consent, Parental Permission, and Assent in Pediatric Practice* (2007), recommends assent be obtained from children over the age of seven who participate in research studies. Additionally, the National Commission for Protection of Human Subjects of Biomedical and Behavioral Research established age eight as a reasonable minimum age for involving children in some kind of assent process. It is thought that most children this age can understand information tailored for their knowledge and developmental level.

While research by questioning is described by medical guidelines as posing minimal harm, this can only be considered if interviews are carried out in a non-threatening and sensitive manner (Ireland & Holloway, 1996). This was accomplished by requiring informant assent, providing familiar interview settings and allowing individuals to choose a one-on-one or a group setting interview to help facilitate a non-threatening and sensitive experience for the informants. Furthermore, these factors may help to offset the asymmetrical power balance created by age in the study.

Finally, providing anonymity for the informants in the data making process is essential to create an environment of comfort. Pseudonyms were chosen by the informants for the interviews, data analysis and final ethnography. In the findings section, responses to questions may appear as de-identified quotes, and any responses that could identify the informant, or anyone else the informant refers to, has been removed. The de-identified responses may also be shared with the chair and members of the dissertation committee. Only the chosen pseudonyms are linked to the information, and data were kept secure throughout the research process. The pseudonyms were never linked to the

children's true names during the study. An electronic transcript of the interview was transcribed by a certified transcribing service. All interviews were done in English, and no interpreter was used during the interview process. All written material and consent/assent forms were kept together and stored in a locked, fireproof box. All electronic data were stored on a password protected external hard drive, and the NVivo9 system was available only to the researcher. All study forms, field notes, and data materials will be destroyed after all aspects of the research are completed.

### **3.6 Method of Data Analysis**

Leininger's Phases of Qualitative Data Analysis (1991) were used for data analysis during fieldwork and participant interviews. Data gathering and data analysis will occur simultaneously. Leininger's four phases of qualitative data analysis (1991) will be used for this study. This four-step process of data analysis begins with the collection, identification, and listing of raw data. Phase two combines related data into meaningful categories, and phase three contextualizes categories into broader patterns. Finally, phase four groups contextualized patterns that are inherent in the data into themes within the culture (Leininger, 1991). During the data analysis, patterns and themes may be validated by the informants during follow-up interviews if indicated.

After study approval was granted by Duquesne University's IRB, initial observations were followed by continued participation in the wellness committees at the two school study sites. The study schools' wellness committees were comprised of teachers, the school nurse, parents, community health professionals and administrators who plan and implement wellness activities at the school. Participation in the wellness committees allowed the researcher to form relationships with gatekeepers within the

schools and understand the culture of the schools. The researcher continued participant observations during the “Taste Test Thursday.” The program provides short interactive, nutritional education in the classroom and free samples of healthy, but typically unfamiliar, food to children during lunch times in the cafeteria. Participation in the program allowed the researcher to observe Mexican-American school children in the classroom and cafeteria settings. Field notes were recorded in a field journal during and immediately following the program. After each day’s interactions, the field journal notes and informal interactions were reviewed and research observations were verbally recorded to a digital recorder. All data were reviewed using comparative analysis that occurred after each day’s interactions. The process of comparative analysis lead to a preliminary mapping of culture features. As features began to emerge, participant recruitment by gatekeeper referral and flyer distribution began (Appendix D). Initially, informants were asked a series of guided interview questions that sought to understand the meaning and experiences of healthy eating within the Mexican American culture, interview questions evolved over the course of the interview process as guided by the informant’s responses. The initial interview guide was developed after consultation with experienced nurse researchers (Appendix E). Dr. Rick Zoucha, expert in ethnographic and transcultural research, Dr. Melanie Turk, experienced obesity researcher and Dr. Jill Kilanowski, certified pediatric nurse practitioner and expert in Mexican American migrant children and mothers. Additional informants were sought for interviews based on initial informant’s recommendations. The researcher interviewed twenty-one informants, fifteen individual interviews and two focus-groups of three members each. The focus-groups were utilized per participant request. After the initial interviews,

second interviews were sought with six informants for data clarification or confirmation. Data collection and analysis continued concurrently until saturation of the data occurred.

### **3.7 Summary**

This focused ethnography examined the meaning and experiences of healthy eating in Mexican American children aged eleven to thirteen years and how nurses can facilitate healthy eating within the population. Field notes and participant interviews were analyzed using Leininger's four phases of data analysis. History within the community facilitated entry into the field of study, and a focused ethnography approach allowed for the thickest description of the meaning of healthy eating within the culture to emerge.

## **CHAPTER 4 Results and Findings**

### **4.1 Introduction**

This chapter presents the findings from the study: *The Meaning and Experiences of Healthy Eating in Mexican American Children: A Focused Ethnography*. The study sought to understand the meaning and cultural influences of healthy eating and the role of nursing in the promotion of healthy eating practices from the Mexican American child's point of view. The research questions helped to guide the study to explore the meaning of healthy eating, the cultural influences of healthy eating as well as the role of the nurse in promoting healthy eating for eleven to thirteen year old Mexican American children.

The setting and demographic information of the informants is discussed as well as the researcher's experiences with entry into the field. The data collection and analysis process is described. Research findings will be presented discussing each phase of data analysis using Leininger's Phases of Qualitative Data Analysis (1991). This four-step process of data analysis began with the collection, identification, and listing of raw data. Phase two combined related data into meaningful categories, and phase three contextualized categories into broader patterns. Finally, phase four groups contextualized patterns that were inherent in the data into themes within the culture (Leininger, 1991). The resulting categories, patterns and themes of the study will each be discussed.

### **4.2 Setting**

The site for the study was a suburban setting located near a major central Ohio city. The population of approximately 25,000 people, included Hispanics at 4.6%, of those 3.3% report Mexican heritage; Caucasian races made-up 82% of the population, and African Americans or Blacks comprised 4.2%. Approximately 6015 families have a

median household income of \$80,000 annually, and only about 3% of the population reported incomes below the U.S. poverty level. Young working families are attracted to the area, with 74.5% of the population being less than 50 years old, and the median age is 35.9 years (U. S. Census, 2010).

The community is serviced by one public and two private school systems, one community center, a public library branch and eighteen area churches, one of which is Catholic. In the study area, Mexican American families tend to live in the southern part of the community. This area of town had two Mexican markets, and three churches that provide religious services in Spanish. Additionally, a free health care clinic recently opened in a neighboring city just to the south of the community.

Informants' interviews occurred in one of four areas; in the school setting, church setting, public library setting, and three interviews occurred in the participant's home. Initial interviews lasted one to one and half hours, and six second interviews with key informants lasted 30 to 45 minutes each. A total of twenty-one informants who met the study criteria were interviewed. Six of the informants were key informants and fifteen were general informants. Key informants were those informants who shared a broad and in-depth knowledge about the cultural aspects pertaining to the domain of inquiry, most of the key informants. Individual or group interview techniques were employed during the study and selected by the study informant. Fifteen individual interviews and two group interviews of three informants each were completed. Ten children who sought to be interviewed did not meet the study criteria age range and were excluded.

After the initial informants were identified, the snowball method was used for further identification of study informants. These informants attended local churches,

other schools or other community activities. All informants met the age and ethnicity criteria outlined in the study inclusion criteria.

Sixteen of the informants were born in the United States, four in the general study area, and the remaining five were born in Mexico. The nine boys and twelve girls reported speaking both Spanish and English. Nineteen reported attending church services regularly while two did not attend church (Appendix F). All informants reported living with family except one who reported living with a foster mother. Most informants reported living with just parents and siblings but five reported having grandparents, aunts, uncles or cousins also living in the home.

### **4.3 Entry into the Field**

In all ethnographic studies, the researcher must gain entry into the community of study. Knowledge of the community and key informants can facilitate entry into the community (Clifford & Marcus, 1986). The researcher has lived in the community for a decade and has done preliminary fieldwork in the community and school settings for graduate courses in 2008 and 2009. This fieldwork allowed the researcher to meet primary gatekeepers within the community at the local schools and one Mexican American librarian at the local library branch, “Maria,” and a gatekeeper at the school system “Mona.” The researcher, after consultation with the school gatekeepers sent a flyer describing the study to all students at the entry site schools. The flyers were sent home with all students in the home/school folders that are checked and initialed daily by a parent or guardian. Additionally, the researcher posted and distributed the flyer describing the study to any interested student during lunch times at the schools. The flyer

gave a brief overview of the study, inclusion criteria, as well as methods for the child and parent/guardian to contact the researcher with questions.

In addition to the school system, the researcher provided the local library, two Mexican grocers and three local churches with the study flyers for distribution. One thousand eighty-four flyers were distributed in the general community. While fieldwork observations in the schools during lunch and recess time and in one primarily Mexican American church were done by providing health information to new families in the church, “Maria” introduced the researcher to a family whose child then became the initial informant for the study. Also “Mona” introduced the researcher to three families at a school event. The remaining informants were recruited via the snowball method from these contacts. All study informants’ families made initial contact with the researcher.

#### **4.4 Data Collection**

The principle investigator obtained approval from Duquesne University’s IRB and an agreement from the school district administrators prior to beginning the study. Care was taken by the researcher to protect the minor informants. After identification of study informants, the researcher contacted the parent or guardian of the child to schedule an appointment to explain the study in detail, obtain informed consent and assent, as well as conduct the initial interview. A mutually agreed comfortable environment was utilized for conducting interviews. All interviews involved only the child. None of the parents/guardians wished to be present during the interview. No parents were directly present during the interview process, although often the parents were in a nearby room. No indirect or direct questions about the study topic were sought from the parents/guardians. Digital recordings of the researcher’s field notes and observations

from the informant's interviews were transcribed into NVivo9. All field notes, journals and transcripts were password protected in the NVivo9 system to further protect informants' identities, and pseudonyms were used when needed.

Data gathering and data analysis occurred simultaneously. Leininger's four phases of qualitative data analysis (1991) were used for this study. This four-step process of data analysis began with the collection, identification, and listing of raw data. Phase two combined related data into meaningful categories, and phase three contextualized categories into broader patterns. Finally, phase four groups contextualized patterns that were inherent in the data into themes within the culture (Leininger, 1991). During the data analysis, the key informants validated patterns and themes during follow-up interviews to support credibility of the study and confirm understanding by the researcher. Peer debriefing was used to enhance the rigor of the study. The interpretive data-making process was shared with the chair researcher to verify the accuracy of the emerging categories, patterns and themes. Finally to ensure accuracy, all field notes were transcribed verbatim within 72 hours.

As a focused ethnography, only specific aspects of the culture were sought in context of the larger social scene that is predetermined by the researcher (Munhall, 2007). In this case, the cultural components of interest were the children's meaning and experiences with healthy eating behaviors as viewed within the context of Mexican American culture and role of nursing in promoting healthy eating practices.

#### **4.5 Presentation of the Findings**

Nvivo9 qualitative software management system and Leininger's four phases of qualitative data analysis (1991) was used for this study. The findings of this study are

presented according to Leininger's four phases of data analysis. Phase one was collection, identification, and listing of raw data. Raw data included transcribed observations, field notes and informant interviews. Phase two combined related raw data into twelve categories, and phase three contextualized the twelve categories into five broader patterns. Finally, phase four grouped the five contextualized patterns that were inherent in the data into three meaningful themes within the culture (Leininger, 1991). The findings of each of the four phases are presented below.

#### **4.6 Phase One – presentation of the raw data**

Raw data collected in phase one, consisted of participant interviews and researcher observation field notes. Self-selected pseudo names were used during the data collection for each informant. After transcription, raw data were loaded into NVivo 9 software to aid the researcher with data management during the study. Raw data analysis identified recurrent descriptors which were placed in created NVivo 9 nodes and notes were placed in memos to aid the researcher with descriptor identification. NVivo9 nodes were labeled as categories for consistency with Leininger's data analysis process. This analysis continued throughout the study until no new categories were identified.

#### **4.7 Phase Two - presentation of the categories**

Phase two combined the related raw data into twelve categories. This was done by examining the raw data for common phases and common relationships which were documented in the memos. The memos allowed for consistency in evaluating the data as they related to the emerging categories which added to the rigor of the study. This process continued until all of the twelve categories emerged. The twelve categories were

family, trust, learning, health, healthy eating, healthy foods, unhealthy foods, American food, Mexican food, special food, health education, role of nursing.

### *Family*

The importance of *family* was a central category discussed by informants. One key informant, Lilly stated “My family is everything and is involved in all aspects of my life...my family are my parents and sisters but also my aunts, uncles cousins as well as some people who go to our church, such as my *padrinos* (godparents).” All informants discussed how family members still in Mexico remained active in the family structure via email or phone calls. General informant, Joana stated “Every week we talk to our family in Mexico and my grandmother comes for the summer every year to watch my sister, brother and I and teach us about our heritage – she is wonderful and cooks us homemade meals we all love.” Car, a general informant said “For me family is not just my brother and dad and mom, we have many friends and aunts and uncles who are family some live near us some do not but that doesn’t really matter – my mom says it is a matter of heart not location.”

### *Trust*

The idea of how trust is incorporated into the informants’ thoughts and many examples of how *trust* is woven into daily life were illustrated by the informants. Trust helps to form the ideas of many of the informants. Key informant, Charlie stated “I trust my coach to help me learn about healthy foods, he wants me to have a strong body to run well and the school you know, I eat breakfast and lunch here and they (the school) would not give me foods that were not good for me.” Jellyfish, a general informant, explained “It doesn’t matter if it is about foods, health or what to do with my friends, my trust

comes from knowing my family, trusting they want what's best for me sometimes I don't always want to do what they say but when it comes down to it I trust them.”

### *Learning*

The informants discussed *learning* as rooted in family and going beyond the traditional classroom setting. Many described the aspect of learning as going beyond what is taught at school and explained *learning* also takes place at home and church. One key informant Josh stated, “Sure I learn things from teachers at school, I am not really sure about the nurse – is she here? The teachers I learn the most from understand me they want to teach me I feel happy to be in class or be on their team like my coach. I know it is important to listen to my parents and my grandma; they have ideas about what I should do in school, with sports and at home, like trying my best and being respectful.” Alley, a general informant, described, “I learn things from my sister since she is older and knows what I should do with school and eating and things like that.”

### *Health*

The views of *health* discussed by the informants focused on exercise, sports, eating habits and happiness. Health was described as not only a physical state but also a mental state. Most informants described health as how the body looks, what they are able to do and their state of mind. Key informant, Richard described *health* as “How I think, how I eat and doing things that make me happy. If you think and act happy you will be healthy, not because someone else tells me I am.” Health is a state of mind which can be attributed to many factors according to general informant Jellyfish, “I can be healthier if I play sports and eat foods good for me, and all these activities make me feel strong and happy.” Jam, a general informant, stated “health is about if you feel good, you know;

happy, strong and you can get health by eating well, exercise and praying, plus my grandma says if I am good boy for my parents – that may be true.”

### *Healthy Eating*

*Healthy Eating* for the informants encompasses thoughts about portion sizing, who was serving the foods and if foods could be easily identified. Matt, a key informant stated “when I am trying to eat healthy, I try to not eat big portions and eat foods my mom or grandma makes for me – they tell me what foods will help me grow. My brother is good at soccer; he helps me figure out what I should eat. If a food makes you feel strong, it is healthy and feeling strong will help me be better at soccer like my brother. So healthy eating is about the food I eat but also how it makes me feel and if my family says it is healthy.” One general informant, Sara, said “I eat healthy at school, when I am trying to eat healthy I eat breakfast and lunch at school, because school is where I learned about healthy eating so I trust that the food is healthy. They (the school) serve us food that is not fried and only a set amount, if you eat foods that are not fried and smaller amounts you are eating healthy.”

### *Healthy Foods*

Informants’ discussions about *healthy foods* focused on type of foods eaten and where food was eaten. Josh, key informant, “I think healthy foods are easy to separate and we learn about the food groups in school. I know if you eat a lot of food it can be unhealthy, so healthy foods are smaller servings and are foods like fruits, salad and veggies - things that are not fried. I eat things like an apple, hot dogs and corn, it is easy to tell what food groups these belong in and that is how foods are healthy – if you can tell where they fit (in the food pyramid).” General informant, Aley, stated, “Healthy food

makes me feel good, if I eat food I think are healthy foods that makes me feel good, like when I eat at school and at home but eating out, those foods are not healthy.”

During one group interview, the researcher observed the three informants actively supporting each other’s comment when discussing how home cooked Mexican foods taste, smell and make you feel.

### *Unhealthy Foods*

Informants described unhealthy foods as to the amount of food eaten, the way the foods were cooked, such as fried vs. baked and the ease of identifying the food within the four food groups. Such as Charlie, a key informant, described “If you fry foods that is not healthy, grilling and baking are much better for you. If you eat out you can’t trust the food is healthy – you don’t know who made the food and you can’t choose how much you get to eat – if you eat too much that is not healthy.” Sally, a general informant, stated, “Foods mixed together may not be healthy; it is hard to tell if you can’t tell what is in the food. Pizza is easier but because you can see the toppings and know if they are healthy but sometimes it is hard to tell like with *pozole* (a traditional Mexican stew) – it can be made with many things so you can’t always be sure.”

### *American Foods*

*American foods* were described by the informants as foods we eat out or at school. Key informant, Josh, described *American foods* as “what we learn about the four food groups – I typically eat American foods like pizza, hot dogs, and sandwiches at school and when I go out with friends. American food is separate, you know bread, meat, a banana, it is not like what I eat at home.” Sierra, a general informant, stated “Foods I learn about at school I think of as American, I have to go home and teach my mom about

mac and cheese and tell her how to make it. I like American food, I think it is simple – you know everything is separate.”

### *Mexican Foods*

All informants referred to *Mexican food* and the types of foods they considered Mexican. Tortillas, rice beans, fruit, eggs were given as examples of typical Mexican foods always on hand. A key informant, Mary, described *Mexican food* as “The food I eat at home every day I consider Mexican. I typically eat eggs, melon and tortillas. My grandma makes me *horchata* – rice milk with cinnamon. I eat beans and chicken, goat and steak. My mom makes a mole sauce she uses with many dishes. Typically, at home this is what I eat and many dishes are mixed together like rice, beans, veggies with a tortillas and sauce – that is different than what I eat at school; most American foods don’t have sauces.” Taco, a general informant, described “Eating out at Mexican places here is not like the food I eat when I am in Mexico visiting my grandma or what my parents make at home. Typically, my dad fries meat like chicken, white fish or goat in oil and I can mix beans or veggies with my meat. In Mexico we pick our fruit fresh in town or get veggies out of my grandma’s garden and just eat them without cooking them. My grandma serves us about five different plates at dinner. At the Mexican restaurant they don’t even have veggies or fruit to eat – plus you just get one plate – not at all the same as at home.” Amy, another general informant, stated “Foods I grew up with at home make me feel good – when I feel good I am happy and that makes me healthy.”

### *Special Foods*

Most informants discussed that in their families food takes on a special role during celebrations such as holidays and religious rites such as baptism or first

communion. Also foods are used during illness to restore health. Many also described special foods by the feeling it gave them. Lilly, a key informant, stated “We have certain foods that we eat for birthday celebrations in our family and we celebrate *Dia de la Candelaria* (blessing of Jesus). My family gets together and everyone makes tamales – we make them together after church, it is fun and a nice way to see everyone in my family.” Amy, a general informant, remembered when her great aunt came to visit she brought her mom special teas. “My great aunt told my mom my grandma had these mixed by the *curanderes*, (Mexican healer). My mom gives them to us kids if we get sick to our stomach – they taste OK, some are cinnamon flavored.” Sally, a general informant, stated “Foods are a center to our family celebrations whether it is birthdays or Christmas, my grandma also gives me certain foods when I have a cold, these make me feel good and that help me get better. They make me feel happy; you know I am comfortable with these foods so they make me feel better.” During this interview the researcher observed the mother listening to the conversation from another room, and she was nodding her head and smiling at her daughter’s response.

### *Health Education*

Health Education was described by informants as how they learn about health. While described by many as a class they take in school, several key and general informants also described *health education* as the way they learned about general health – how to care for oneself when ill, how to improve health, for example to improve athletic performance or how to look good. Mary described learning about ways to maintain health that she has learned from her family, “I have had education about health at school but my family has also helped me to learn about health. I trust what they tell me more than what I

learn at school, they know me and understand what I like and what I want to achieve with my sport, so I follow their suggestions.” A general informant, Alex, stated, “I have had education from my coach about to keep my body fit and ready to run. He (my coach) gives us lists of foods that will be easy to eat before we run and teaches us how to do warm ups and cool down which is important to keep yourself from being injured, I look up to my coach and know he wants me to be healthy so I can run well.”

### *Role of Nursing*

For the informants the role of nursing in helping with health matters and education was vague. Most informants knew a nurse either through school or church, but most could not reflect on how a nurse had or could impact their health or education about health. Many expressed surprise that nurses could help with health education, such as what you should eat to stay healthy and how to best avoid illness. Charlie, a key informant, who expressed knowing the school nurse stated “She is at the school to help the sick kids; she gives them medicine or helps them until their parents can arrive to take them home.” Charlie goes on to say she has not had an experience when a nurse had given her health advice or education, “Do nurses do that kind of thing?” Luis, a general informant, stated “Nurses could help us to learn what to eat and how to take better care of ourselves if they knew me, but I usually can learn this from my teachers or family, I know them and trust them.” Alex, general informant, also stated “Nurses typically help sick people right?”

### *Summary*

During the study 21 informants were interviewed after parental consent and informant assent was obtained. Raw data from the interviews, observations and field

notes were analyzed and the twelve categories presented. The analysis revealed insights into the domain of inquiry of the meaning and experiences of healthy eating in Mexican American children. Further analysis teased out five patterns within the data and three themes presented below.

#### **4.8 Phase Three – presentation of the patterns**

Phase three of data analysis, contextualized the categories in broader patterns related to the domain of inquiry (Leininger, 1991). Patterns emerged from commonalities among the related categories. Five patterns within the data categories emerged and are presented below.

##### *Pattern one*

*A pattern that foods are thought of in the context of either being Mexican food or American food.*

Pattern one is supported by the categories American and Mexican foods, special foods, and unhealthy foods. All of the informants referred to foods as Mexican or American during interviewing. American foods were often discussed as foods ate at school or when socializing with American friends. Examples of American foods were items such as hot dogs, pizza and hamburgers. Most of the children discussed Mexican foods in the context of the home environment. Mexican foods were further explained as foods eaten everyday at home such as eggs, fruit or tortillas. Informants also associated Mexican foods with special events such as holidays or family birthday celebrations. Lilly, a key informant stated “Foods are different here we have American foods at school, at home my family eats foods we have always eaten what I grew up with, like beans, eggs, tortillas, rice, fruit – my mom teaches us how to cook and eat well.” A general informant,

Amy, discussed “We (Mexicans) enjoy foods we celebrate with them at home and at my church. I know sometimes it (the foods) is not healthy but that is OK for special events, right?”

*Pattern two*

*A pattern that food is central to family and celebration.*

Pattern two is supported by the categories of family, special foods, health education, learning, healthy foods, and unhealthy foods. Within the culture, food plays a vital role within the family. Family and religion were thought of as a source of kinship for many of the informants. Often foods were associated with the context of the family or religious event. Richard, a key informant, described “family is everything; I trust they help me to learn what choices to make especially since I came here and I help my parents too, I help with money and English. We try to keep things like they were before moving to the U.S., like with Christmas – the things we do and eat are special, it is fun.” Charlie, another key informant, added, “I learn about how to eat healthy and not because of what my parents and brother teach me, also at school the foods I get there are healthy because why else would they give them to us.”

*Pattern three*

*A pattern of trusting in those with knowledge as being essential for education, health beliefs and eating practices.*

Pattern three is supported by categories trust, health, healthy eating, health education and learning. Informants described trust as a central component in the Mexican American culture. The ability to trust the source of the information is needed. Throughout the interviews, the informants placed a high value on information coming

from sources of trust. Most described learning information about health or eating from family members with whom that have trusting relationships. Many also cited teachers and coaches with whom they trust as a valuable source of knowledge. Matt, a key informant, said “I depend on my family and friends, I value their opinion the best, they are important, like my friends, trusting in what they say I can learn, you know about sports, eating and others things. If my parents tell me to do something I do because that is what I should do, my sister is the same way.” Luis, a general informant, described “Trust is a feeling, I know who I should trust and can trust, it’s just how it has always been – I just know.”

#### *Pattern four*

*A pattern that healthy foods are viewed in the context of what and how they make you feel.*

Pattern four is supported by the categories of healthy foods, unhealthy foods, healthy eating and trust. Informants described feelings associated with eating healthy. Many related the emotional aspect of food and being with family or friends when describing healthy foods. Foods that were associated with the informant having feelings of well being were often viewed as healthy. For example, many would describe the setting that foods were consumed. If a particular dish was served during family celebrations, that food was thought of as healthy. Healthy foods were foods that not only made the body well but were also associated with happy emotions. Josh a key informant, described “at special times in my family we eat *tamales*, we are all together and my brothers, sisters and cousins all get together to cook and eat – this is great, I like to eat these foods they taste good and make me feel happy and this is healthy for you.” The

general informant, Maryann, describes “healthy eating makes me feel good, I can eat healthy anywhere but mostly I eat better at home when my mom cooks for me, better than I do if I go out with friends, it is not the same as eating at home.”

#### *Pattern five*

*A pattern that the role of the nurse is not familiar to Mexican American children.*

Pattern five is supported by categories learning and role of nursing. Only two of the informants, believed a nurse could help them to understand healthy eating, although none were familiar with the role of the nurse. Most informants were not aware that nurses educate people about health issues, such as healthy eating and exercise. Most mentioned not knowing any nurses outside of the school nurse, and believed that nurses only cared for the sick – not the healthy. Matt, a key informant, stated “Nurses take care of old people, like when you are sick. I don’t know any nurses who teach people. Mostly my family and friends teach me about health or my coach has helped so I know what to eat when I play soccer. I am not sure that nurses would be able to teach me about eating – do they know that kind of thing?” Snickers, a general informant, said “Nurses are nice, if I knew them I could ask them about eating – I guess.”

#### *Summary*

Five patterns within the data categories emerged. The five patterns presented were identified from the categories pertaining to the domain of inquiry of the meaning and experiences of healthy eating in Mexican American children.

### **4.9 Presentation of Themes**

Three themes related to the domain of inquiry were derived from the data. Leininger’s (1991) phase four grouped the five contextualized patterns that were inherent

in the data into three meaningful themes within the culture. Each theme will be described below.

*Theme one*

*Mexican American children connect healthy eating with familiar foods in the context of their Mexican American culture.*

Throughout the interviews when discussing foods, informants consistently, referred to “Mexican” and “American” foods and discussed foods in the context of American or Mexican culture. When discussing healthy foods, examples of Mexican meals were consistently given by the informants. Many distinguished Mexican foods as what they eat at home or during special occasions and described American foods as foods eaten at school, with American friends or foods eaten while dining out with family.

Richard, a key informant, spoke about foods saying, “Mostly I prefer Mexican foods – you know like rice, beans, eggs, fresh fruit and veggies. We eat them at every meal but Grandma cooks them up so many different ways. Like American food is just the same thing – pizza, French fries and hot dogs. Just eating American food would be boring; I mostly eat this at school or when I hang out with my American friends or sometimes my family will eat out at places like Red Robin or Max and Erma and eat American foods.”

Informants described learning about American foods from school. Most expressed learning about the food groups and being instructed about serving sizes and examples of foods from each food group, but all stated that only American food examples were taught in school. Many went on to say while they liked American foods, and even asked to be served these foods at home, only a few felt the American foods they ate were healthy.

Lilly, a key informant, said, “I eat American food because many of my friends that is all

they eat, we have it at school, I guess it could be healthy but when I eat it I don't feel good, not like when I eat what my mom cooks then I feel good, you know healthy."

Matt, a key informant, said, "Sure I know the food groups and understand what American foods fit in which group, but I don't always see us having those foods at school. This is where I mainly eat American foods. I tell you the pizza we have everyday tastes good but I don't think it is healthy and it doesn't make me feel good after I eat it. I just eat it because that is what everyone else is eating and it doesn't taste bad but I don't really think American food is typically healthy."

### *Theme two*

#### *Foods that provide feelings of happiness and well being are essential for healthy eating.*

Foods that provide internal feelings of happiness and give the informants a sense of well being are essential for healthy eating practices of Mexican American children. Foods should provide goodness to the body and the soul. Most described the feelings and thoughts associated with eating Mexican foods. In describing Mexican foods, the informants would lean forward and smile, many shared stories of wonderful family events and described how the foods tasted, smelled and gave the informant feelings of joy. Even in times of illness or sadness informants described how foods were valuable. Matt, a key informant, described how at the wake for his grandma who had died recently, he was feeling sad, and missing her throughout the day. When he arrived home after the church service, he walked in and "just the smell of the food cooking lifted my spirits. I walked into the kitchen and many women from the church had been there cooking, like my godmother. I just stood there watching and smelling and it made me happy. I could remember cooking with my grandma at Christmas, it helped me feel better." All the

informants ate typical American foods, but when describing American foods none described the feelings or connection described when talking about Mexican foods. A key informant, Lilly, stated “Mexican foods are fresh; we want to eat to make our bodies healthy, but also make us feel happy. American foods it seems can’t do both (make you healthy and feel happy) I know what American foods are healthy because I learn about the food groups at school, but Mexican foods I know they are healthy because of how it makes me feel inside, that is very healthy.”

### *Theme three*

*Sources of food and health information education are valued when provided by familiar and trusted sources.*

Within the culture, all of the informants described learning as an act forged from a trusted source. The foremost examples were parents, grandparents, siblings, aunts, and uncles. Other sources of trusted knowledge were teachers and coaches or perhaps friends. While many acknowledged being given information from many sources the knowledge they valued and in turn learned or followed came from trusted sources, Matt, a key informant, stated “I learn about the most important things from my family or teachers I trust. I want to learn from them I respect adults but really listen to the ones I trust the most.” It was not enough to simply be given information, particularly when it comes to areas they view as personal such as exercise, health, habits and behavior. According to the informants trust is a vital component for them to learn and ultimately value information. In school, they describe needing to learn lessons. Snickers, a general informant said, “While I need to learn lessons at school like science and math, when it

comes to health, like eating right, that personnel type stuff, I listen to my family first. They love me and I them and I trust what they tell, they want what is best for me.”

#### **4.10 Summary**

This focused ethnography examined the meaning and experiences of healthy eating in Mexican American children aged eleven to thirteen years and how nurses can facilitate healthy eating within the population. Informed consent from the participant’s parent or guardian as well as informed assent from the minor participant was obtained prior to beginning the study. Informants were initially sought from two suburban schools in central Ohio, through introduction from gatekeepers. The snowball method provided access to informants from the larger community by the snowball method. Field notes and informant interviews were analyzed using Leininger’s four phases of data analysis revealing twelve categories, five patterns and three cultural themes consistent with the domain of inquiry of the study.

## CHAPTER 5

### 5.1 Introduction

In chapter four of the study the categories, patterns and themes were presented as analyzed using Leininger's Four Phases of Data Analysis (1991). The categories identified were *family, trust, learning, health, healthy eating, healthy foods, unhealthy foods, American food, Mexican food, special food, health education, and the role of nursing*. Five patterns were revealed in the data and included: *Pattern one*: A pattern that foods are thought of in the context of either being Mexican food or American food. *Pattern two*: A pattern that food is central to family and celebration. *Pattern three*: A pattern of trusting in those with knowledge as being essential for education, health beliefs and eating practices. *Pattern four*: A pattern that healthy foods are viewed in the context of what and how they make you feel. *Pattern five*: A pattern that the role of the nurse is not familiar to Mexican American children. Three themes were inherent in the data: *Theme one*: Mexican American children connect healthy eating with familiar foods in the context of their Mexican American culture. *Theme two*: Foods that provide feelings of happiness and well being are essential for healthy eating. *Theme three*: Sources of food and health information education are valued when provided by familiar and trusted sources.

This chapter presents the three themes with further detail. The extent of how these themes relate to the domain of inquiry the research questions and current literature is presented.

## 5.2 Theme One

*Mexican American children connect healthy eating with familiar foods in the context of their Mexican American culture.*

In this study, Mexican American children view foods in the context of culture. All the informants described foods as either Mexican or American. When asked, “Tell me about the foods you eat?” all the informants replied, “Do you mean Mexican or American foods.” Many went on to give examples of American foods and Mexican foods. The descriptions of American foods were often lists of foods. Many gave examples of foods consumed at school, such as pizza, hot dogs or French fries – American fast foods. Most did not spend time describing the American foods or explain why they ate the foods they listed. Conversely, when talking about Mexican foods all the informants gave a list of foods, and often described the foods, how the foods were made, and who cooked the foods in the family.

Food and drinks are a central theme in many traditional Mexican American celebrations. Most of the informants describe traditional dishes served at weddings and other holiday celebrations. All described the foods and most talked about the kinship of cooking and eating the foods together. In observation of the culture, the researcher observed many occasions centering on food. During one particular interview done in the informant’s home, the researcher had the opportunity to observe a meal being prepared for the family dinner. At one point the informant went to help her mom and sister with the food preparation. The informant and her family discussed the day’s happenings. The informant cooked *Arroz a la Mexicana*, a traditional tomato rice dish. While cooking the mom was observed placing a hand on her daughter’s shoulder, placing her hand on her

daughter's hand to guide her in chopping and tasting the rice, after which she praised her daughter. After the observation, the informant appeared relaxed and was smiling. She went on to explain how most nights she and her mom and sister all cook together. She said that preparing meals together is what they have always done, and it gives them a chance to learn from their mom about cooking and get advice about growing up and other life lessons. For Mexican American children, Mexican food is viewed as the type of foods and as foods prepared together in the family home.

### **5.3 Theme Two**

*Foods that provide feelings of happiness and well being are essential for healthy eating.*

Health beliefs and practices play a role in food beliefs within the Mexican American culture. The meaning of healthy eating for the Mexican American child is influenced by the feelings experienced while eating foods. All the informants describe their perception of healthy eating is not just derived from the actual food source but is also tied to the feelings experienced while eating particular foods. These feelings are a result of the interplay of several factors. The type of foods, when the foods are consumed, and who prepares and serves the foods all influence the feelings associated with a certain food. Foods associated with celebrations, served as comfort when ill or prepared for family events were most often associated with feelings of well-being and happiness. If eating these foods did not provide an internal feeling of well-being, the foods were less likely to be perceived as healthy. While most of the informants reported having instruction in healthy eating and food choices, this instruction alone was not enough for the informants to identify healthy foods. None of the informants reported learning about

examples of healthy foods common in the Mexican American culture. Most reported that not having examples of foods commonly consumed at home decreased the value of learning healthy eating habits at school.

Healthy food choices do not always equate to healthy eating for the population. In the Mexican American culture family is valued, and the kinship provided in the family setting is often associated with feelings of happiness and well-being. Healthy eating is a total of foods, feeling and the culture of the food for the informants. During a group interview, three informants described that while food choices are an important factor for healthy eating, for them the kinship and subsequent feeling derived from the experience of eating is vital for healthy eating. This was validated by the group via head nods and agreements with all three sharing stories of how foods evoke feeling and how these feelings play into healthy eating.

For nursing, understanding the context of healthy eating and the value of feelings associated with healthy eating will assist in designing nutritional education by integrating foods that are associated with comfort and well being. Assessing the nutritional value and preparation techniques of commonly believed healthy foods and modifying these foods in a way that optimize the nutritional values would be one example of how knowledge from this study could be applied to increase nutritional health in the population.

#### **5.4 Theme Three**

*Sources of food and health information education are valued when provided by familiar and trusted sources.*

Kinship and family are a vital component in the Mexican American culture. Foods often symbolize love and unity with a family or group. It is not unusual that food and health beliefs are closely tied to one's family of origin and culture. These ideas hold

true for the informants of this study as well. All the informants reported valuing the most information given to them by familiar or trusted sources. All referred to a family member; parents, siblings, or grandparents as a trusted source of food or health information. Many also cited teachers or coaches as a familiar trust source as well. In more than one case, the informants viewed teachers as a collective, as a representative of the school. They went on to explain that the school was a familiar and somewhat trusted source of information but only to a limit. While many cited learning about healthy eating, they also said often times what they learn at school is not always followed by the school. One informant went on to explain that, while they learn to eat fresh fruit and vegetables, very little fresh produce is served during the school day. Some even told about how they were not allowed to have water bottles or snacks during class times and that an even day staple in the café is pizza. While most informants trust the school, the lack of consistency between nutritional education and action limits this trust for some in the study population.

During the interviews none of the informants cited nurses as a source of health information. When asked, most commented that they were unfamiliar with the role of the nurse in education. Some did go on to say that, while they knew a nurse, they viewed him/her only in the role of a caretaker not an educator, thus limiting the nurses' effectiveness as a trusted source for health education.

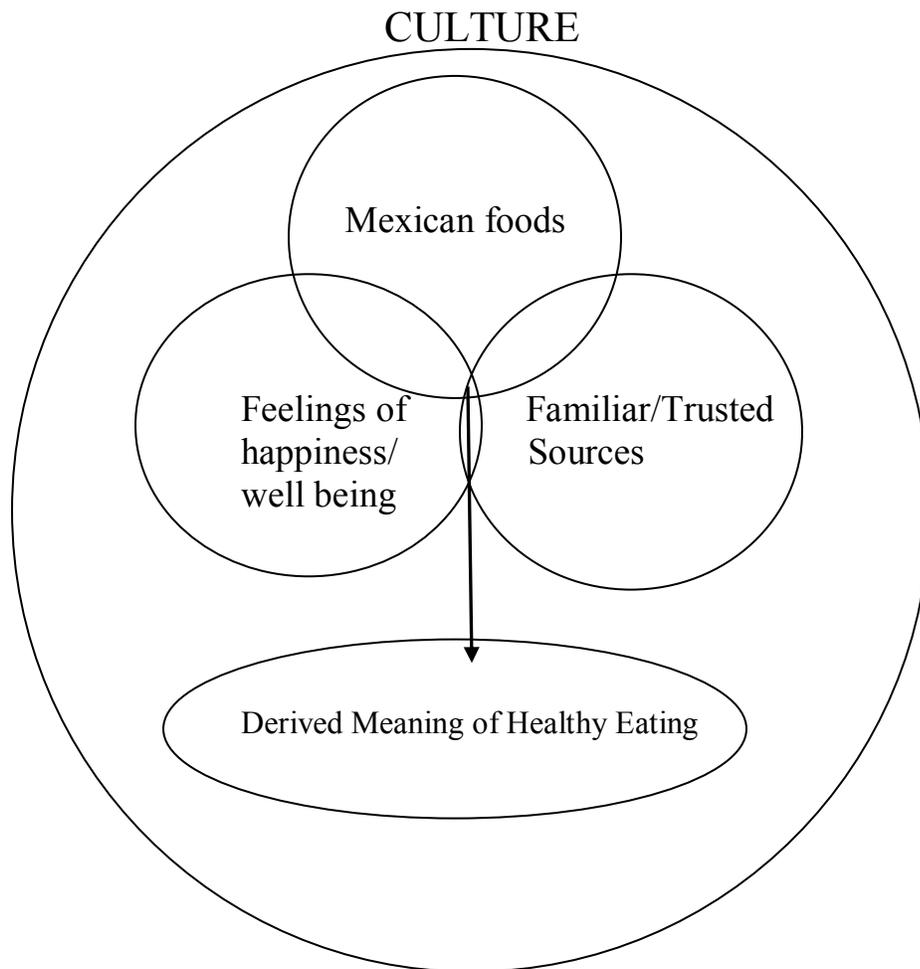
## **5.5 Summary**

This study sought an emic view of the meaning of healthy eating for Mexican American children. After researcher immersion, observation and informant recruitment, data were analyzed using Leininger's Four Phases of Data Analysis (1991). The results of the analysis yielded three themes: *Theme one* Mexican American children connect

healthy eating with familiar foods in the context of their Mexican American culture.

*Theme two* Foods that provide feelings of happiness and well being are essential for healthy eating. *Theme three* Sources of food and health information education are valued when provided by familiar and trusted sources.

### 5.6 Themes Pictorially Conceptualized



Three distinct yet interconnected themes combine to form the meaning of healthy eating within the population. Mexican American children contextually view Mexican foods as healthy because they provide feelings of happiness and well being and eating

habits as healthy, when taught by familiar and trusted sources. These beliefs are shaped from within the context of the culture which is ever present and is the underlying basis for life beliefs.

### **5.7 Discussion of Findings**

The domain of inquiry of this study was the meaning and experiences of Mexican American children with healthy eating. The purpose of this focused ethnography was to understand the meaning and cultural influences of healthy eating and the role of nursing in the promotion of healthy eating practices from the Mexican American child's point of view. Understanding the meaning of healthy eating, how culture may affect the meaning and experience of healthy eating, and the role nursing takes in the promotion of healthy eating from the perspective of the Mexican American child was sought. Knowledge obtained from the study explains how food is used in the context of culture and the beliefs associated with healthy food within the Mexican American study population. The study found that food habits and eating behaviors are largely related to cultural patterns and family preferences. As a result, nurses have a better understanding to provide culturally focused nutritional interventions and education that is valued by the population and in turn may prevent and reduce the possible effects of obesity.

In chapter four, the categories, patterns and themes were presented as analyzed using Leininger's Four Phases of Data Analysis (1991). The categories identified were *family, trust, learning, health, healthy eating, healthy foods, unhealthy foods, American food, Mexican food, special food, health education, and the role of nursing*. Five patterns were revealed in the data and included: *Pattern one*: A pattern that foods are thought of in the context of either being Mexican food or American food. *Pattern two*: A pattern that

food is central to family and celebration. *Pattern three*: A pattern of trusting in those with knowledge as being essential for education, health beliefs and eating practices. *Pattern four*: A pattern that healthy foods are viewed in the context of what and how they make you feel. *Pattern five*: A pattern that the role of the nurse is not familiar to Mexican American children. Three themes were inherent in the data: *Theme one*: Mexican American children connect healthy eating with familiar foods in the context of their Mexican American culture. *Theme two*: Foods that provide feelings of happiness and well being are essential for healthy eating. *Theme three*: Sources of food and health information education are valued when provided by familiar and trusted sources.

Many factors which may contribute to environmental influences on obesity have been investigated (Birch & Davison, 2001; Brownson, Boehmer, & Luke, 2005; Glanz, Sallis, Seelens & Frank, 2005; Swineburn et al., 1999; Trust for Americans Health [TFAH], 2008). Most environmental research to date has investigated community or macro-environments such as schools and neighborhoods. Policy studies such as TFAH (2008) support changes to the macro-environments such as school meal food availability, physical education policies and activity-friendly community planning to encourage for example, bike and walking path accessibility. Similarly, Brownson et al. (2005) showed that Americans over the past fifty years reported declining physical activity associated with the work, home and transportation environments; as well as increasing sedentary activities increased the risk of obesity for the American population in general. The study however did not assess the actual obesity levels by weight or BMI levels associated with specific activity reported by any one individual or group of individuals nor did this study take into account culture or eating beliefs (Brownson et al., 2005). Culture may determine

beliefs, values and behaviors that influence basic needs such as eating. Healthcare that is culturally congruent may be beneficial and meaningful to Mexican Americans (Delva et al., 2007). Understanding the cultural meaning of healthy eating in Mexican American children will allow for the development of interventions that are both culturally congruent and developmentally appropriate. The results of this study provide valuable knowledge that is currently lacking considering the child's unique cultural view and identified meaning of healthy eating, thus allowing nurses to provide culturally congruent care.

The identified themes that relate to the meaning of healthy eating in Mexican American children are all interwoven within the context of culture. Mexican American children view food as Mexican or American and overall, Mexican foods were identified not only by food type but how foods made the child feel and if the foods were from a trusting source. Mexican foods were inherently viewed as healthier than American foods because of the cultural beliefs of trust and feelings associated with the foods. Mexican American children healthy food selection may be based on these underlying food beliefs. The importance of these beliefs are of value because, as with adults, child and adolescent populations who are overweight stand an increased risk of developing a number of health conditions and diseases; such as diabetes, hypertension, polycystic ovarian syndrome and increased cholesterol levels. Furthermore, an overweight child who becomes an overweight adult is at increased risk and severity of obesity related illness (CDC, 2008).

The informants of this study were all native born or first generation Mexican American children. A report by Caprio et al. (2008) supports that enculturation can affect obesity rates by affecting the held beliefs of the traditional ideas of eating and food preferences. Mexican diets are typically high in fiber and fresh fruits and vegetables

unlike the diets of most U.S. adolescents. The belief held by the population that home foods are healthier than foods at school are consistent with finding in a 2007 study by Allen et al. that found that first generation Latino children had a higher frequency of fruit and vegetable consumption and native U.S. children and a closer tie to traditional food preferences of their Mexican heritage than subsequent generations of Mexican American children.

The results of this study are consistent with the perspective of Pena, Dixon and Taveras (2012) when recommending that primary care providers should assess the “culturally specific beliefs and practices” of minority children to provide culturally appropriate medical care for overweight children (2012, p.24). Not only is it vital for primary care providers to recognize the cultural perceptions of health and illness, but it is but also the perceptive meaning when education is offered about healthy food choices and how food choices affect health. This call for understanding of the cultural beliefs with ethnically diverse population is also supported by the Latino Coalition for a Healthy California. The report *Obesity in Latino Communities: Prevention, Principles and Action* address a wide range of factors contributing to the obesity epidemic in the Latino culture in California. Among the many factors are the underlying cultural beliefs and values of the community that may contribute to the obesity epidemic (Woodward- Lopez & Flores, 2006).

Interventional obesity studies have begun to address the influence of culture on weight and educational programming. A study by Fitzgibbon and Beech (2009) investigated cultural considerations of BMI screening programs. Parents often fail to perceive the weight status of their child correctly and school based BMI programs seek to

improve this awareness. Fitzgibbon and Beech (2009) investigated the cultural basis for weight perceptions. For example, African American and Latino parents view weight differently than white parents. This cultural view of weight may lead parents to falsely perceive their child's weight status. Understanding the culture view and context is vital when presenting BMI education to parents. Conclusions of this study found that BMI materials "congruent with the social and cultural values and practices of the target audience are more likely to maximize program effectiveness" (Fitzgibbon & Beech, 2009, p. 50).

Understanding the contextual view of healthy eating, feeling associated with healthy eating as well as the aspect of trusted and familiar sources when designing nutritional counseling for the target population is consistent with the findings of the BMI program study. Both studies address the influence of culture on the belief systems of the target populations. Understanding these beliefs systems is an important aspect when designing obesity educational interventions.

The Expert Committee (Barlow & the Expert Committee, 2007) presented clinical practice recommendations for primary care providers. The *Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity* addressed ten assessment, seven treatment and a two tiered preventative approach addressing two individual and two community/practice level recommendations. These guidelines were created to provide an evidence base for clinicians when assessing, treating, and planning preventive programs addressing child and adolescent obesity. While the guidelines encompasses a wide berth of clinical issues from BMI screening frequency and interpretation to qualitative dietary evaluations it falls short in addressing

its recommendations for cultural assessments or integration of cultural congruent educational recommendations.

Findings from *the Meaning and Experiences of Healthy Eating in Mexican American Children* begin to show that food beliefs and associated feeling attached to foods, as well as the perceived value of educational interventions are grounded in a cultural context that cannot be separate from the individual. Without taking cultural into account any treatment, assessment or preventive measures may fall short of their intended goal.

An important finding of this study was that food and health information education are valued when provided by those who are familiar and trusted. Bleich, Blendon, & Adams, (2007) in a cross cultural study found that recommendations regarding obesity and nutritional counseling were highly regarded when coming from trusted scientific experts and that higher levels of mistrust of scientific experts were found in Hispanic populations and the elderly than in white or African American populations. The importance of the information or care source is further supported by prior studies that have investigated aspects of culturally congruent care within the Mexican American culture. Previous studies have found that for Mexican American's, some aspect of trust is an essential component for care to be valued (Stasiak, 1991; Warda, 2000; Zoucha, 1998). While these studies describe a more complete preference of cultural values during nursing care delivery and focus on adult perceptions, the aspect of trust in the nurse or nurse practitioner was revealed. The informants of this study are only beginning to think abstractly and trust is a know and concrete version of the more abstract thinking presented in previous findings.

One of the most critical gaps in addressing the problem of obesity in Mexican American children aged 11 to 13 years was understanding the meaning of healthy eating within the culture. This study improved understanding of the cultural beliefs from the participant's perspective related to diet beliefs. Increased understanding and tailoring culturally specific ways to intervene to prevent obesity is vital in combating the obesity epidemic.

### **5.8 Nursing Implications**

All studies performed need to demonstrate significance to the discipline of study. The following sections will examine the implications and future research recommends as they relate to nursing theory, education and practice, and research and policy.

### **5.9 Implications for Nursing Theory**

Many nursing professionals will agree that cultural competence and culturally relevant care is valuable. Many models and concepts for implementation of care have been introduced in the literature but disagreement still exists on the most effective means for nurses to achieve cultural competence (Gieger et. al, 2007). The findings of this study support Leininger's belief that culture is a frame for the delivery of care and a backdrop for solving problems and that care delivery cannot occur outside of the context of culture. The study provides an understanding of the ethnohistory of the Mexican American culture pertaining to eating beliefs from the children's perspective. An ethnohistory, as defined by Leininger (1991), is an understanding of the experiences of members of a culture, the "human lifeways".

Until this study, no studies were identified in the current literature that examined the Mexican American child's perspective about the meaning of healthy eating. Without

an emic view of the culture, nursing care directed at the culture will not be valued by the population and will fail to achieve the goal of the nursing community. Studies are needed that focus on the emic view of at risk and vulnerable populations such as Mexican American children. Specifically, further study is needed within this population that address the influence of psychological development and the blended cultural influence the meaning of healthy eating and the action of healthy food choices within the population.

### **5.10 Implications for Nursing Education and Practice**

The prevalence of obesity among Mexican American children is a major public health concern. Most research to date has investigated community or macro-environments such as schools and neighborhoods, or knowledge levels of nutritional serving sizes, food pyramid groups and physical factors. While factors such as satiety, food likeability and BMI influence obesity levels in Mexican American children, these factors alone do not solely influence obesity levels. Knowledge was lacking on individual beliefs and cultural norms that impact healthy eating within the Mexican American culture. Viewing Mexican American children from a cultural perspective as an individual, a family member and finally part of a larger cultural group is vital. Care that is delivered in the context of culture should be a cornerstone of all healthcare disciplines (Meleis, 1999). Healthy eating is important for acquiring and maintaining good health particularly in children. This study provides enhanced understanding of the meaning of healthy eating for Mexican American children. This enhanced understanding gives nurses insights of how culture affects health. An increased understanding can begin to focus health education and promotion activities for the population. Additionally, understanding

the meaning of healthy eating in Mexican American children can have a direct long term impact on overall lifetime healthy eating behaviors, and help direct future cultural studies on contributing factors related to healthy eating in children and adults. Further study is needed to explore the social influences on eating behaviors. These encompass the influences of community, home and school cultures with the changes from the healthy food pyramid guide to the MyPlate Plan(CDC, 2011c) . Of interest is how children perceive home and school cultures and the influence these play in eating behaviors. For example, children tend to eat in social groups of friendly peers that may affect food choices and enculturation.

For nurses to be effective sources of health education within the population they must become familiar to the population. All of the informants stated that trust or a familiar source was vital. Nursing needs to understand that the role while familiar to those within healthcare is not familiar to many. Educating nurses to become familiar with and trusted by their targeted population may help the populations value educational programs.

Establishing a rapport with clients is not a new concept to nursing. For the school nurse, this study highlights the need for increased interaction and exposure to the student populations. Interacting with students not only for health related issues but also to providing educational programming during class times or club activities could allow the nurse to become familiar to the population and provide a basis to establish the trusting relationship identified as important to the informants in this study.

### **5.11 Implications for Nursing Research and Policy**

The growing prevalence of obesity among children and adolescences is of major concern. Over the past 30 years, the obesity rate of adolescents nationwide has more than doubled. Today's children are likely to be the first generation to live shorter, less healthy lives than their parents. Approximately 25 million American children are already obese or overweight (CDC, 2011a). This steadily increasing incidence raises concern about the health of Mexican American youth as they approach adulthood. The U.S. Department of Agriculture (USDA) Food Commodities Program now referred to as USDA Foods has reported that overall school-aged children are not meeting the *Dietary Guidelines for Americans* (Food and Nutrition Service, 2008).

During the study, the informants reported learning the food pyramid and examples of healthy foods. While learning this information from trusted sources is valued within the population, examples of healthy foods common to the cultural eating norms of the populations were not addressed. Most state learning curricula mandate nutritional education for public school children; they do not however address culturally appropriate nutritional examples. Of note, after the completion of the study, the CDC introduced the MyPlate food education program. The MyPlate program utilizes a plate pictogram to teach the five healthy food groups and portion sizes recommended (CDC, 2011c). While education is vital, not providing Mexican American children with examples of commonly eaten foods and how they fit into the food pyramid devalues this important educational programming. Since 2003, legislation that impacts nutrition in schools has been tracked by Trust for Americans Health. School-based programs have been shown to have the potential to yield positive results in preventing and reducing obesity (Veugelers &

Fitzgerald, 2005). Policy should address tailoring educational efforts to address nutritional cultural norms of the population of interest. Improving the quality of food sold in schools and limiting sales of less nutritious foods have been the focus of emerging guidelines being school-based efforts. Changing school lunch policy to reflect nutritional taught in the schools could provide an improved backdrop to highlight educational efforts, and would allow for improved programming that is valued and has an increased chance of affecting change within the Mexican American community. This study helps to validate the need for culturally specific programming and is a call for further culturally relevant research.

Further research is needed based on the findings of this study examining if the identified belief that foods from trusted sources are healthy. The home environment is of particular research interest for school-age children within the culture who may continue to rely on caregivers for food availability and environmental choices.

The research literature began to describe obesogenic micro-environments for the past decade (Glanz, Sallis, Saelens, & Frank, 2005; Swineburn, Egger & Raza, 1999). Factors influencing home eating practices are described as eating setting and eating occasions. Research about family food environment (FFE) was reported by Campbell, Crawford and Ball (2006) but did not include the influence of culture health beliefs. While research has begun to identify factors that affect healthy eating and factors that may affect home eating practices and promote obesogenic environments, none view these practices within the aspect of culture. Children's beliefs need to be taken into account during the research process. One newly developed tool for investigating these factors has been cited in the literature. The Home Healthy Survey (Bryant, et.al, 2008) is a

questionnaire that collects data on four topical areas including; general demographic, neighborhood environment, health behaviors, eating practices and home environment. Further research is needed investigating health beliefs and healthy eating practices and actual obesity levels within the population.

### **5.12 Limitations of the Study**

All studies have limitations for the transferability of the findings to populations outside the study sample. Allowing the informants to select an interview location that best fit their comfort and time constraints often lead to children being interviewed in the school setting during study halls or lunch times. This restricted the time of the interview and in four cases required the researcher to return the following day to complete the interview process. This setting also limited observations of the home environment and culture. Interviews that took place in the home setting provided the research a greater opportunity to observe the family setting and greater flexibility in the length of the interview. Additionally, BMI calculations were not obtained for any informant during the research study. Further study is needed to determine if BMI affects the meaning and experiences of healthy eating within the population.

### **5.13 Conclusions**

This study sought to answer the three research questions. What is the meaning of healthy eating in eleven to thirteen year old Mexican American children? What are the cultural influences of healthy eating for eleven to thirteen year old Mexican American children? What is the role of the nurse in promoting healthy eating for eleven to thirteen year old Mexican American children? For the informants of this study the meaning of healthy eating, is closely tied to the cultural life ways learned and valued by the Mexican

American culture. Culture cannot be separated from the child when considering the meaning of healthy eating. Mexican American children contextually view foods as primarily Mexican or American, which provides a feeling of happiness and well being, and are taught by familiar and trusted sources.

#### **5.14 Summary**

The researcher has lived and worked as a nurse practitioner in a primary pediatric setting in the community for a decade and often taught children how healthy eating and regular physical activity are important for acquiring and maintaining good health. After observing children, in particular Mexican American children, in the clinical setting continuing to gain weight even after educational efforts were employed, the researcher's interest was piqued. Research literature was lacking on the meaning of healthy eating and the nursing role in health promotion within the Mexican American childhood population.

This focused ethnography examined the meaning and experiences of healthy eating in Mexican American children aged eleven to thirteen years and how nurses can facilitate healthy eating within the population. Twenty-one informants were interviewed for the study. Informed consent from the informant's parent or guardian as well as informed assent from the minor participant was obtained prior to beginning the study. Informants were initially sought from two suburban schools in central Ohio, through introduction from gatekeepers. The snowball method provided access to informants from the larger community by the snowball method. Field notes and informant interviews were analyzed using Leininger's four phases of data analysis revealing ten categories, five patterns and three cultural themes consistent with the domain of inquiry of the study. The

categories identified were *family, trust, learning, health, healthy eating, healthy foods, unhealthy foods, American food, Mexican food, special food, health education, and the role of nursing*. Five patterns were revealed in the data and included: *Pattern one* A pattern that foods are thought of in the context of either being Mexican food or American food. *Pattern two* A pattern that food is central to family and celebration. *Pattern three* A pattern of trusting in those with knowledge as being essential for education, health beliefs and eating practices. *Pattern four* A pattern that healthy foods are viewed in the context of what and how they make you feel. *Pattern five* A pattern that the role of the nurse is not familiar to Mexican American children. Three themes were inherent in the data: *Theme one* Mexican American children connect healthy eating with familiar foods in the context of their Mexican American culture. *Theme two* Foods that provide feelings of happiness and well being are essential for healthy eating. *Theme three* Sources of food and health information education are valued when provided by familiar and trusted sources.

This study provides enhanced understanding of the meaning and perceptions of healthy eating from the perspective of Mexican American child. Understanding and clarifying the meaning, held by children in the Mexican American culture, of healthy eating is a vital component to the delivery of care for nurses. This insight gives nurses valuable information to improve nutritional health education and promotion activities, better assists children and their families to improve and maintain health and provides culturally congruent care that is valued by the population.

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Appendix A



DUQUESNE UNIVERSITY  
INSTITUTIONAL REVIEW BOARD

424 RANGOS BUILDING PITTSBURGH PA 15282-0202

Dr. Paul Richer  
Chair, Institutional Review Board  
Human Protections Administrator  
Phone (412) 396-6326 Fax (412) 396-5176  
e-mail: [richer@duq.edu](mailto:richer@duq.edu)

November 26, 2010

Dr. Rick Zoucha  
School of Nursing  
Duquesne University  
Pittsburgh PA 15282

**Re: The meaning and experiences of healthy eating in Mexican American children: a focused ethnography (Protocol # 123)**

Dear Dr. Zoucha:

Thank you for submitting the research proposal of your student, Ms. Alicia Johoske-Ribar, to the IRB.

After review by IRB members, Dr. Kathleen Sekula and Dr. Karen Paraska, along with the entire Board, the study is approved under the federal Common Rule, specifically 45-Federal Code of Regulations 46.101 and 46.111. In addition, the study meets requirements set forth in subpart D, 46.404 (research with minors not involving greater than minimal risk). Permission and assent forms are stamped with IRB approval and one-year expiration date. Ms. Johoske-Ribar should use the stamped forms as originals for copies that she displays or distributes.

The approval must be renewed in one year as part of the IRB's continuing review. You and Ms. Johoske-Ribar will need to submit a progress report to the IRB in response to a questionnaire that we will send. In addition, if the permission and assent forms are still in use in one year, they will need to be renewed by our office. In correspondence please refer to the protocol number shown after the title above.

If, prior to the annual review, you propose any changes in procedure or consent process, you must inform the IRB of those changes and wait for approval before they are implemented. In

addition, if any unanticipated problems or adverse effects on subjects are discovered before the annual review, they must be reported to the IRB Chair before proceeding with the study. When the study is complete, please provide us with a summary, approximately one page. Often the completed study's Abstract suffices. You or Ms. Johoske-Ribar should retain a copy of research records, other than those that have been destroyed for confidentiality, over a period of five years after the study's completion.

Thank you for contributing to Duquesne's research endeavors.  
If you have any questions, feel free to contact me at any time.

Sincerely yours,

A handwritten signature in blue ink that reads "Paul Richer". The signature is written in a cursive style with a large initial "P" and "R".

Paul Richer, Ph.D.

C: Ms. Alicia Johoske-Ribar  
Dr. Kathleen Sekula  
Dr. Karen Paraska  
IRB Records

## Appendix B



Hilliard City Schools

September 27, 2010

To: Alicia K. Ribar, MS, CNP

From: Mr. Bruce Stepnic , Principal, Hilliard Station Sixth Grade  
Ms. Kori Kindel, Principal, Tharp Sixth Grade

RE: Study, The Meaning And Experiences Of Healthy Eating In Mexican American Children:  
A Focused Ethnography

Ms. Ribar:

Your request to use the sixth grade schools for observation and recruitment of study volunteers is granted for the 2010-2011 school year. As per district policy when on schools grounds your Hilliard City School volunteer badge must be worn at all times. Please notify us once the study will begin. We wish you success in your study.

Sincerely,

Handwritten signature of Bruce Stepnic.

Mr. Bruce Stepnic

Principal, Hilliard Station Sixth Grade

Lh/BS/KK

Handwritten signature of Kori Kindel.

Ms. Kori Kindel

Principal, Tharp Sixth Grade

## Appendix C



# DUQUESNE UNIVERSITY

600 FORBES AVENUE ♦ PITTSBURGH, PA 15282

### STUDENT ASSENT TO PARTICIPATE IN A RESEARCH STUDY

**TITLE:** The Meaning and Experience of Healthy Eating in Mexican American Children: A Focused Ethnography

**INVESTIGATOR:** Alicia K. Ribar, MS, CNP  
3753 Dayspring Drive  
Hilliard, Ohio 43026  
614-823-1253  
ribara@duq.edu

**ADVISOR:** Rick Zoucha, PhD, APRN, BC, CTN  
Duquesne University School of Nursing  
526 Fisher Hall 600 Forbes Avenue  
Pittsburgh, PA 15282  
412-396-6545  
Zoucha@duq.edu

**SOURCE OF SUPPORT:** This study is being funded in part by Otterbein College's Sabbatical Research Funding.

**PURPOSE:** You are being asked to take part in a research project to explore the meaning and experience of healthy eating in Mexican-American children. As part of this project you will talk to the nurse. You will be asked to join in at least one individual meeting and maybe one to two additional meetings or a focus group, which is a group interview with your peers.

The meetings will be taped and will be typed into a written form. Meetings may last one to two hours.

These are the only things you will need to do to be involved in the project.

**RISKS AND BENEFITS:**

There is no more risk of bad things that may occur to you than those that could occur in everyday life if you agree to take part in the study. If you choose not to take part, it will in no way affect any grade or class standing at your school. The good things of the study will be better understanding of healthy eating for Mexican American children so nurses can help children eat healthy.

**COMPENSATION:**

You will not receive money for being in the study. Also, choosing to be in the study will not cost you money. A stamped envelope is provided for return of you and your parents/guardian's permission form to the investigator, if needed.

**CONFIDENTIALITY:**

Your name will never appear on any materials used for this study. Your responses to questions may appear as de-identified quotes, after anything that could identify you or anyone you refer to has been removed, in the findings section should I present the study results at professional conferences or in professional publications. Your de-identified responses may also be shared with the chair and members of my dissertation committee. All written materials and permission forms will be stored in a locked file. All materials will be destroyed after all aspects of the study are done.

**RIGHT TO WITHDRAW:**

You do not have to take part in this study, and you are free to choose to not be in the study at any time.

**SUMMARY OF RESULTS:**

A summary of the results of this research will be given to you and your parent/guardian at no cost, by asking the investigator at the completion of the study.

**VOLUNTARY ASSENT:**

I have read the above statements and understand what is being requested with my being in this study. I also understand that participation is voluntary and that I am free to withdraw from the study at any time, for any reason. I have read (or someone has read to me) this form and I am aware that I am being asked to take part in a research study. On

these terms, I certify that I am willing take part in this research project.

I understand that should I have any further questions about my participation in this study, I may call Alicia K. Ribar, MS, CNP, Principal Investigator 614-823-1253, Dr. Rick Zoucha, Advisor 412-396-6545, and Dr. Paul Richer, Chair of the Duquesne University Institutional Review Board 412-396-6326.

\_\_\_\_\_  
Participant's Name (Printed)

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Researcher's Signature

\_\_\_\_\_  
Date



# DUQUESNE UNIVERSITY

600 FORBES AVENUE ♦ PITTSBURGH, PA 15282

## PARENT CONSENT TO PARTICIPATE IN A RESEARCH STUDY

- TITLE:** The Meaning and Experience of Healthy Eating in Mexican American Children: A Focused Ethnography
- INVESTIGATOR:** Alicia K. Ribar, MS, CNP  
3753 Dayspring Drive  
Hilliard, Ohio 43026  
614-823-1253  
ribara@duq.edu
- ADVISOR:** Rick Zoucha, PhD, APRN, BC, CTN  
Duquesne University School of Nursing  
526 Fisher Hall 600 Forbes Avenue  
Pittsburgh, PA 15282  
412-396-6545  
Zoucha@duq.edu
- SOURCE OF SUPPORT:** This study is being funded in part by Otterbein College's Sabbatical Research Funding.
- PURPOSE:** Your child is being asked to participate in a research project that seeks to investigate the meaning and experiences of healthy eating in Mexican American children. Your child will be interviewed during the research study. Your child will be asked to participate in at least one individual interview and possibly one to two additional interviews or a focus group.
- The interviews will be taped and will be typed into a written form. Interviews may last one to two hours. These are the only requests that will be made of your child.

- RISKS AND BENEFITS:** There are no risks greater than those encountered in everyday life. The benefit of the study will be increased understanding of healthy eating beliefs for the purpose of educational programming that is culturally specific to Mexican American children.
- COMPENSATION:** There will be no monetary compensation for participation in the study. However, participation in the project will require no monetary cost to you. A stamped envelope is provided for return of your consent and your child's assent to the investigator.
- CONFIDENTIALITY:** Your child's name will never appear on any survey or research instrument used for this study. Your child's responses to questions may appear as de-identified quotes, after anything that could identify your child or anyone your child refers to has been removed, in the findings section should I present the study results at professional conferences or in professional publications. Your child's de-identified responses may also be shared with the chair and members of my dissertation committee. All written materials and consent/assent forms will be stored in a locked file in the researcher's home. All materials will be destroyed after all aspects of the study are completed.
- RIGHT TO WITHDRAW:** Your child is under no obligation to participate in this study and you are free to withdraw your consent for your child to participate at any time.
- SUMMARY OF RESULTS:** A summary of the results of this research will be supplied to you and your child, at no cost, upon request to the investigator at the completion of the study.
- VOLUNTARY CONSENT:** I have read the above statements and understand what is being requested of my child. I also understand that participation is voluntary and that I am free to withdraw my consent at any time, for any reason. On these terms, I certify that I am willing to consent to my child's participation in this research project.

I understand that should I have any further questions about my child's participation in this study, I may call Alicia K. Ribar, MS, CNP, Principal Investigator 614-823-1253, Dr. Rick Zoucha, Advisor 412-396-6545, and Dr. Paul Richer, Chair of the Duquesne University Institutional Review Board 412-396-6326.

\_\_\_\_\_  
Participant's Parent/Guardian Name (Printed)

\_\_\_\_\_  
Participant's Parent/Guardian Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Researcher's Signature

\_\_\_\_\_  
Date



# DUQUESNE UNIVERSIDAD

600 FORBES AVENUE • De PITTSBURGH, PA 15282

## DICTAMEN CONFORME DEL ESTUDIANTE PARA PARTICIPAR EN UN ESTUDIO DE INVESTIGACIÓN

- TITLE:** El significado y la experiencia de una alimentación saludable en el niño estadounidense mexicana: A focused etnografía
- INVESTIGADOR:** Alicia K. Ribar, MS, CNP  
Unidad de Dayspring de 3753  
Hilliard, Ohio 43026  
614-823-1253  
ribara@duq.edu
- DIRECTOR:** Rick Zoucha, PhD, APRN, BC, CTN  
Escuela de enfermería de la Universidad Duquesne  
526 Fisher Hall 600 Forbes Avenue  
Pittsburgh, PA 15282  
412-396-6545  
Zoucha@duq.edu
- FUENTE DE ASISTENCIA TÉCNICA:** Este estudio está financiado en parte por fondos de investigación sabáticos del Otterbein Universidad.
- PROPÓSITO:** Se piden a tomar parte en un proyecto de investigación para explorar el significado y la experiencia de comer sano en los niños de México-Estados Unidos. Como parte de este proyecto hablará a la enfermera. Se le pedirá a participar en al menos una reunión individual y tal vez dos o tres reuniones adicionales o un grupo de discusión. Las reuniones serán ser grabadas y se escriba en forma escrita. Las reuniones pueden pasada una o dos horas. Estas son las únicas cosas que necesita hacer para participar en el proyecto, un grupo entrevista con sus pares.
- RIESGOS Y BENEFICIOS:** Allí no es más riesgo de cosas malas que pueden producirse a usted que las que podría ocurrir en la vida cotidiana, si usted está de acuerdo a tomar parte en el estudio. Si decide

no participar, será no afectará cualquier grado o clase de pie en su escuela. Las cosas buenas del estudio será una mejor comprensión de la alimentación sana para niños y adolescentes estadounidenses por lo que el personal de enfermería puede ayudar a los niños a comer sano.

**UNA INDEMNIZACIÓN:** No volverá a recibir dinero por estar en el estudio. También, eligiendo a estar en el estudio no le costará dinero. Un envoltente de estampado se proporciona para el regreso de usted y formulario de permiso de sus padres o tutores el investigador, si es necesario.

**CONFIDENCIALIDAD:** Su nombre nunca aparecerá en cualquier material utilizado para este estudio. Sus respuestas a las preguntas pueden aparecer como comillas de-identified, después de todo lo que pudieron identificar a usted o cualquier persona que se hace referencia a ha sido eliminado, en la sección de conclusiones debo presentar los resultados del estudio en jornadas profesionales o en publicaciones profesionales. Sus respuestas de-identified también pueden ser compartidas con el Presidente y los miembros de la Comisión de mi tesis. Todo escritos materiales y formas de permiso se almacenarán en un archivo bloqueado. Todos los materiales se destruirán después de que se llevan a cabo todos los aspectos del estudio.

**DERECHO A RETIRAR:** No tienes que tomar parte en este estudio, y usted es libre de elegir a no estar en el estudio en cualquier momento.

## **RESUMEN**

**DE RESULTADOS:** Un resumen de los resultados de esta investigación se dará a usted y a su padre o tutor, sin costo alguno, preguntando por el investigador en la realización del estudio.

## **DICTAMEN CONFORME VOLUNTARIAS:**

He leído las declaraciones anteriores y comprender lo que se solicita con mi ser en este estudio. También entiendo que la participación es voluntaria y que soy libre a retirarse el estudio en cualquier momento, por cualquier motivo. He leído ( o alguien ha leído a mí) este formulario y soy consciente de que me pide a tomar parte en un estudio de investigación. En estos términos, certifico que estoy dispuesto a participar en este proyecto de investigación.

Entiendo que debo tiene más preguntas acerca de mi participación en este estudio, puedo llamo Alicia K. Ribar,

MS, CNP, investigador principal 614-823-1253, Dr. Rick Zoucha, Asesor de 412-396-6545 y el Dr. Paul Richer, Presidente de la Junta de revisión institucional de la Universidad de Duquesne 412-396-6326.

\_\_\_\_\_  
Nombre del participante (impreso)

\_\_\_\_\_  
de firma del participante

Fecha \_\_\_\_\_

\_\_\_\_\_  
de firma del investigador

Fecha \_\_\_\_\_



# DUQUESNE UNIVERSIDAD

600 FORBES AVENUE • De PITTSBURGH, PA 15282

## CONSENTIMIENTO DE LOS PADRES A PARTICIPAR EN UN ESTUDIO DE INVESTIGACIÓN

- TITLE:** El significado y la experiencia de una alimentación saludable en el niño estadounidense mexicana: A focused etnografía
- INVESTIGADOR:** Alicia K. Ribar, MS, CNP  
Unidad de Dayspring de 3753  
Hilliard, Ohio 43026  
614-823-1253  
ribara@duq.edu
- DIRECTOR:** Rick Zoucha, PhD, APRN, BC, CTN  
Escuela de enfermería de la Universidad Duquesne  
526 Fisher Hall 600 Forbes Avenue  
Pittsburgh, PA 15282  
412-396-6545  
Zoucha@duq.edu
- FUENTE DE ASISTENCIA TÉCNICA:** Este estudio está financiado en parte por fondos de investigación sabáticos del Otterbein Universidad.
- PROPÓSITO:** Se pide su pabellón de niño a participar en un proyecto de investigación que pretende investigar el significado y las experiencias de una alimentación saludable en niños y adolescentes estadounidenses. Su sala de niño se entrevistó durante el estudio de investigación. Se pedirá su pabellón de niño a participar en al menos una entrevista individual y posiblemente dos o tres entrevistas adicionales o un grupo de enfoque. Las entrevistas se ser grabadas y se escriba en forma escrita. Entrevistas de mayo pasada una o dos horas. Se trata de la única pide que se hará de su hijo.
- RIESGOS Y BENEFICIOS:** No existen riesgos superiores a los que se producen en la vida cotidiana. El beneficio del estudio se incrementará la comprensión de las creencias de comer sanas con el

propósito de los programas educativos que es culturalmente específica a mexicano estadounidense de los niños.

**UNA INDEMNIZACIÓN:** Allí no será ninguna indemnización monetaria por la participación en el estudio. Sin embargo, la participación en el proyecto no requerirá costo monetario para usted. Un envoltorio de estampado se proporciona para el regreso de su consentimiento y aprobación de su hijo para el investigador.

**CONFIDENCIALIDAD:** Nombre de su niño nunca aparecerá en cualquier instrumento de estudio o investigación utilizado para este estudio. Respuestas de su hijo a las preguntas pueden aparecer como de-identified de cotizaciones, después de todo lo que pudieron identificar a su hijo o cualquier persona que su hijo se refiere a ha sido retirado, en la sección de conclusiones debo presentar los resultados del estudio en jornadas profesionales o en publicaciones profesionales. Las respuestas de de-identified de su hijo también pueden ser compartidas con el Presidente y los miembros de la Comisión de mi tesis. Todo escritos materiales y formas de consentimiento/asentimiento se almacenarán en un archivo bloqueado en casa del investigador. Todos los materiales se destruirán después de que se hayan completado todos los aspectos del estudio.

**DERECHO A RETIRAR:** Su sala de niño no está obligado a participar en este estudio y eres libre de retirar su consentimiento para su niño participar en cualquier momento.

**RESUMEN DE RESULTADOS:** Un resumen de los resultados de esta investigación se suministrarán a usted y a su niño, sin costo alguno, a petición para el investigador en la realización del estudio.

**CONSENT VOLUNTARIAS:** Han leído las declaraciones anteriores y comprender lo que se está solicitando de mi sala de niño. También entiendo que la participación es voluntaria y que soy libre a retirar mi consentimiento en cualquier momento, por cualquier motivo. En estos términos, certifico que estoy dispuesto a dar su consentimiento a mi niño la participación en este proyecto de investigación.

Entiendo que debo tener más preguntas acerca de mi niño la participación en este estudio, puedo llamo.

Alicia K. Ribar, MS, CNP, investigador principal 614-823-1253, Dr. Rick Zoucha, Asesor de 412-396-6545 y el Dr. Paul Richer, Presidente de la Junta de revisión institucional de la Universidad de Duquesne 412-396-6326.

\_\_\_\_\_  
del participante Parent/Guardian (impreso)

\_\_\_\_\_  
de firma del participante Parent/Guardian

\_\_\_\_\_  
Fecha

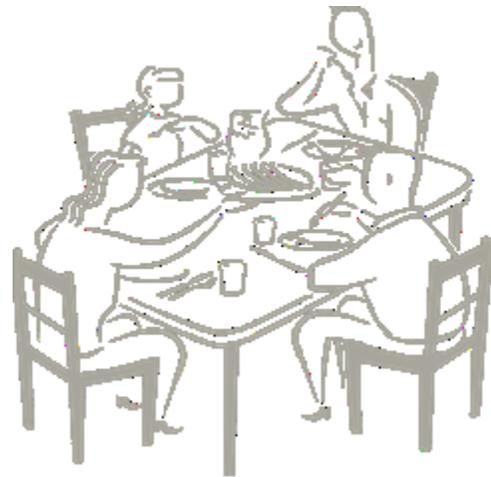
\_\_\_\_\_  
de firma del investigador

\_\_\_\_\_  
Fecha

# Help Wanted

**Are you between the age 11 and 13?**

**Are you Mexican American?**



If so then I am interested in  
your opinion!

Your opinion could be included in a research project  
that will explore cultural, family and eating customs  
for Mexican American children aged 11 years to 13 years.

Some questions about family may be considered private to the family.

If you and your parent/guardian would like  
more information on this free study please contact

Alicia K. Ribar, MS, CNP at [ribara@duq.edu](mailto:ribara@duq.edu) or 614-562-9916 for more information.

**Your voice matters, together we can make a difference.**

## Appendix E

### Pre-interview Process

*The interview will begin with an introduction and an explanation of the interview process. An explanation of the recording and note taking procedures will be reviewed and the participant will select a name to be used during the interview. You may at any time decline to answer any questions you wish without affecting your participation in the interview.*

Name selected \_\_\_\_\_

### Demographic Data questions to be asked of the participant by the researcher

1. *Your age: \_\_\_\_\_ years*
  2. *Boy or Girl \_\_\_\_\_*
  3. *Grade level in school \_\_\_\_\_*
  4. *Where were you born? \_\_\_\_\_*
  5. *If born outside the United States how long have you lived here? \_\_\_\_\_*
  6. *How long have you lived in (name of the community)? \_\_\_\_\_*
  5. *What language(s) do you speak? \_\_\_\_\_*
  6. *What language do your parents talk to you in at home?: \_\_\_\_\_*
  7. *Who lives in your home?: \_\_\_\_\_*
- 
8. *Do you go to church services? \_\_\_\_\_ If so, where? \_\_\_\_\_*

### Semi-Structured Interview Guide

Family

*Tell me about your family?*

*Who do you consider family? Prompt Anyone else?*

*Where does your family live? Prompt*

*What does your family do when you get together? Prompt i.e. celebrations, weekends, (happy or sad) Prompt What do you eat?*

*Can you tell me about a specific celebration and any special meal you eat? Prompt birthday, holidays funerals*

*Do you make or buy the food for your get together? Prompt Tell me about this?*

*Are the foods you make or eat at these events healthy?*

*Which foods are do you think are healthy?*

*Tell me why the foods are healthy?*

*Which foods do you think aren't healthy?*

*Tell me why the foods are not healthy?*

**Food**

*Tell me about your favorite foods?*

*What makes them your favorite?*

*Where/when do you eat these foods?*

*Who cooks or makes these foods?*

*When shopping for food what is in your families shopping cart? What do you put in what does mom put in?*

*What foods do you eat at school?*

*Do you buy or bring your lunch to school?*

*Tell me about the snacks you eat after school?*

*You have told me about foods you like eat which of these foods do you think are healthy?*

*Tell me why the foods are healthy?*

*Which foods do you think aren't healthy?*

*Tell me why the foods are not healthy?*

*Are there any other things that you think make a food healthy?*

Health

*Tell me about what health means to you?*

*What do you eat when trying to be healthy?*

*What things can affect health? Prompt What about eating?*

*How would you define healthy eating?*

Healthcare

*Where do you learn about healthy eating?*

*What do you think is the best way to learn about healthy eating?*

*I am a nurse as you know, how might I help kids eat healthy?*

## Appendix F

### Participant Demographics

Pseudonyms	Age in Years	Gender M = male F = female	Attends Church Services Regularly Y = Yes N = No	Place of Birth
<b>Key Informants</b>				
Matt	11	M	Y	Ohio
Lilly	12	F	Y	Mexico
Josh	12	M	Y	Florida
Charile	11	F	Y	Ohio
Mary	12	F	Y	California
Richard	13	M	Y	Mexico
<b>General Informants</b>				
Sara	12	F	Y	Texas
Luis	12	M	Y	Mexico
Alex	11	M	Y	Mexico
Sierra	11	F	N	Michigan
Jellyfish	13	F	Y	Mexico
Joana	12	F	Y	Texas
Dave	13	M	N	New Mexico
MaryAnn	13	F	Y	Florida
Snickers	13	F	Y	New York
Amy	12	F	Y	Ohio
Jam	11	M	Y	Texas
Car	12	M	Y	Arizona
Aley	11	F	Y	New Jersey
Sally	12	F	Y	Michigan
Taco	13	M	Y	Ohio