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## Unhealthy Weight Control Strategies: An Outcome of Body Image and Eating Tensions in Women of Mexican Origin Living in Rural Farming Communities

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#### Abstract

Unhealthy eating and weight control behaviors (UEWCB) are important but modifiable factors that contributes to obesity in majority and minority populations. Studies suggest that these behaviors are common in Mexican American women but most studies completed to date have focused on college enrolled MA women. Little is known about body weight concerns, eating and weight control behaviors in low acculturated immigrant Mexican women. This qualitative descriptive study utilized two focus groups with 15 women to identify and describe body weight and shape thoughts related to eating and weight control of low acculturated MA living in disadvantages economic situations. Conventional content analysis was used to analyze data and three main themes were identified: 1) Body weight values and concerns, 2) Eating and food, 3) Weight loss strategies and consequences. The first two themes, shared five subthemes including emotion, health, age, family and culture. Results suggest MA women experience weight concerns that are in conflict with food/eating values and experiences. This conflict is influenced by cultural, family and inter/intrapersonal factors and contributes UEWCB. The transition and assimilation to the U.S. is complex and dynamic, thus understanding how the conflict regarding body weight and food influence MA women's health behaviors is important and provides valuable knowledge essential to guide further research and intervention development.

#### **Keywords**

Weight concerns and eating/food values; unhealthy eating and weight control behaviors; Mexican Women; Immigrant Women; Unhealthy Weight Control Strategies: An Outcome of Body Image and Eating Tensions in Women of Mexican Origin Living in Rural Farming Communities

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Reflects equal contribution and alphabetical order.

## Introduction

According to the United States Census Bureau, 17% of the U.S. total population is Hispanic and 64% of all U.S Hispanics are of Mexican decent (2008). Numerous health disparities have been identified within Mexican populations living in the United States. Among these disparities is obesity. Obesity prevalence among adult female Mexican American's (MA) is larger compared to white, non-Hispanic females (The Center for Disease Control Health Disparities & Inequalities Report - United States, 2013). Approximately 69% of MA women (20–39 years) are overweight or obese compared to approximately 51% in Non-Hispanic white women in the same age range (Flegal, Carroll, Kit & Ogden, 2012). Furthermore, rates of obesity in MA women are consistently higher among those with less than high school education (Bates, Acevedo-Garcia, Alegria & Krieger, 2008). Not surprisingly, obesity related chronic disorders, including diabetes and cardiovascular disease, are also disproportionately high in women of Mexican origin living in the U.S. (Hertz, Unger, Carlos & Ferrario, 2006; Pandey, Labarthe, Goff, Chan & Nichaman, 2001).

Body weight perceptions have been identified as an important factor determining dietary intake and weight control behaviors (Lemon, Rosal, Zapka, Borg & Andersen, 2008). Studies have shown in both male and female samples, persons who perceive themselves to be overweight or obese engage in unhealthy eating and weight control behaviors (UEWCB). For example, a study using the Youth Risk Behavior Survey data showed that adolescent males and females who perceived themselves as overweight had significantly greater odds of skipping breakfast, fasting, using diet pills and purging to lose or control their weight compared to those who perceived themselves as normal weight (Zullig, Ubbes, Pyle, & Valois, 2006). However, objectively overweight males and females who perceived themselves as normal weight were significantly less likely to engage in weight loss activities over the last year (Duncan et al., 2011)

Historically Mexican cultural norms favored rounded, fully body shapes for women (Chang, & Christakis, 2003). MA women when compared to non-Hispanic white women, identify a larger body size as ideal and are less likely to define themselves as overweight despite objectively being overweight or obese. Yet studies suggest these norms may be changing. Study results indicate that MA women, particularly more acculturated women, do internalize prevailing western cultural ideals of thinness, experience high levels of body dissatisfaction (Cachelin, Monreal & Juarex, 2006) and engage UEWCB (Stein, Chen, Corte, Keller & Trabold, 2013). Emerging evidence suggests less acculturated samples of MA women also experience high levels of body dissatisfaction and engage in a diverse range of UHWCB (Lindberg, Stevens, Elder, Funk, DeBar, 2013), suggesting that Western body weight standards may be effecting the health behaviors of this segment of MA women as well.

The purpose of this study was to identify and describe body weight and shape *perceptions* of low acculturated MA women living in rural farming communities of Western New York and understand women's thoughts and behaviors related to eating, weight loss and maintenance. All participants lived in rural communities located in Western New York. Immigrant/migrant farm workers spend many hours, preparing the fields, planting, harvesting, and processing

crops. They often reside in overcrowded substandard trailers where they work, earn income below the poverty level, and are concerned about their immigration status.

#### **Methods**

## Design

A qualitative descriptive design involving two focus groups with MA women was used to develop a more comprehensive understanding of body weight and shape perceptions, eating and weight control behaviors in this understudied group.

## Sample

Purposeful recruitment occurred through bilingual (Spanish/English) community leaders, one leader was a Mexican women who is well-known community advocate and the other a nutritionist from a local health center who has lived and worked in Central America. Both were employed as members of the research team. These community leaders identified potential participants through various community groups and agencies. Announcements about the study including verbal descriptions and informational flyers were given to potential participants. If interest was expressed, more detailed information about study including the time and date of the focus groups were provided. Eligibility criteria included non-pregnant females between the ages of 18 and 45 years, self-identified as Mexican and living in rural western New York. Women interested in participating were informed about one of the two scheduled focus groups.

#### Data collection

Two focus group comprised of 7 and 8 women respectively were facilitated by the two bilingual team members described above. Meetings were held on the weekend at convenient community locations and were conducted in Spanish. Free child care was provided. Because of issues related to immigration status, no identifying data was collected and verbal consent was obtained after review and discussion of procedures to protect anonymity and informed consent were completed. A semi-structured interview format was followed, with specific probes to allow for open ended discussion. Interview questions were generated by the research team based on the study aims, and were designed to explore and describe what Mexican women think about eating, their bodies and what they do to control their weight or shape. A few examples of questions include: "Can you please tell me what worries women have about their body shape and weight? Can you please tell me about how women might control their weight and shape?" Each group was audio taped and lasted approximately 90 minutes. The study was IRB approved. Participants were provided \$15 dollars for their time.

#### Data analysis

Audiotapes were transcribed verbatim in Spanish by a multilingual transcription company. Transcripts were translated into English by a native English speaking translator who holds an undergraduate degree is Spanish. The translator completed a master's degree in Mexico (all in Spanish) and worked professionally while residing there for over five years. The translated transcripts were reviewed and verified for accuracy by the bi-lingual community leaders who facilitated the groups. A descriptive qualitative design was used to further

understand facts and details regarding eating and weight control behaviors in MA women. Descriptive procedures are the preferred method when description of phenomena are desired {{294 Sandelowski, Margarete 2000}}(Sandelowski, 2000). Conventional content analysis was used to analyze the data (Hsieh & Shannon, 2005). Content analysis is an iterative and an interactive process driven by the data. Codes are generated from the data with the intent of providing an informational summary (Sandelowski, 2000). Two investigators (KFS, NT) participated in the data coding and analysis for consistency reliability {{295 Pope,C. 2000}}. Transcripts were read to achieve initial understanding and followed by a line by line review to derive codes and themes that reflect concepts and thoughts. After all transcripts were coded individually, the two investigators met to discuss discrepancies in codes, cluster codes into meaningful categories and discuss potential relationships. To ensure the rigor of study procedures, the study team documented the process of coding, analysis and coding decisions. All coding decisions were done by consensus {{293 Rodgers, Beth L 1993}}.

#### Results

#### **Participants**

There were 13 participants ranging in age from 18–45, who identified themselves as being of Mexican origin. All participants were first or second generation immigrants to the United States. Spanish was their primary language, and only one participant was able to communicate in English. The majority worked in the agriculture industry (i.e. picking crops, processing crops or working on dairy farms). All participants lived in rural communities located in Western/Central New York and participants lived and socialized with other Mexican families.

#### **Themes**

Three main themes were identified in our data: 1) Body weight values and concerns, 2) Eating and food, 3) Weight loss strategies and their consequences. For the first two themes, five shared subthemes were identified including emotion, health, age, family and culture. A summary of the themes can be found in table 1.

#### **Body Weight Concerns and Values**

In response to our queries about women's thoughts and feelings about their bodies, the theme of "being too fat" was dominant. Virtually all of the participants agreed they and their friends are concerned about their weight and many described themselves and their friends as being "overweight", "a bit fat or plump, as we say".

"Oh, she doesn't look good" or "she has love handle" or *like*... I don't like to go out because I don't feel comfortable in my clothing or things like that. Or I don't want to eat in front of people because they think: "*Oh, this is* why she is fat" ..." (Group 1)

Many of the participants' concerns about weight and body image reflected an intersection with other aspects of their experience including emotions, culture, health, age and family.

**Emotion**—Participants' descriptions of themselves as overweight or fat often were linked to emotions of frustration, discouragement and low self-esteem. However, the nature of the relationship between emotions and body weight varied. In some instances, participants stated their body weight caused emotional reactions, whereas other described emotional reactions stemming from not being able to lose weight. Others described emotion as the cause of their weight gain and high body weight.

"...many times, it is the depression that one has and when...instead of...of trying to put a stop to being overweight, one makes it worse more." (Group 2).

I think, at times I insist it's stress or psychological, when one wants to go down, on the contrary, it's when one gains the most.

**Age**—Women also talked about their body weight in relation to their age. Women talked about being thin when they were younger and identified pregnancy and childbirth as the transition point to weight gain. Women stated it was much easier to lose weight when younger and indicated their current weight goals have to take into account age. Group members agreed that weight gain and difficulty losing weight were part of the aging process.

"Therefore, like, I ate a lot, lot, lot and like, and never, and never got fatter; the problem was when I started to have my first baby. ... Therefore, like, when I am pregnant I start to gain a lot of weight. *Eh*, and after when, when like, the babies are born I remain with a bit of, of extra pounds." (Group 1)

**Culture**—The discussions about body weight reflected women's awareness of the effects of ethnicity and culture. Women talked about characteristics that distinguish their body shape from white women, describing their own bodies as "wide" and stating that they because of this ethnic difference they cannot expect to be thin like white women. Women also talked about differences in the meaning of motherhood in terms of body weight in the US and Mexico. They stated in Mexico, it was normative for mothers to be overweight. Women expressed surprise that in America women who were mothers were concerned about their body weight and many remained thin.

"In the time I lived in Mexico, people, when they got married and were mothers, they tended to get fat. It was the most normal thing, the most traditional thing. When we came here, we are seeing that a woman, just because she is a mother or has kids or is grown-up, it doesn't mean that one has to be fat. It's not normal." (Group 2)

Culturally shaped gender norms were also identified as an important influence on women's body weight and their attitudes towards their bodies. One participant talked about gaining weight and being fat as a reaction to norms related to the man as the head of the household and associated low self-esteem. However, when we directly queried Mexican men's preference for women's body shape, women distinguished between the men's preference for women on TV and their own wives.

"I think the majority of men; it's that, to see a hot woman, that's what is best for them...well formed, yes with curves, a skinny waist and a good body." (Group 1)

"I also think the Mexican man is a little bit "*machista*", because he doesn't want his woman to look really like model and all though, because somebody else is going to see her."(Group 1)

**Health**—Although many concerns about body weight focused on appearance, women also talked about it in relation to their health. They talked about themselves and family members who had chronic illnesses caused by being overweight and talked about maintaining their body weight as a means to stay healthy.

"I think it's lacking that they educate further Hispanic Mexican women regarding the fact that being overweight harms our health. Because when I became overweight, I began to get...like one works on their feet for a long-time, standing-up....the varicose veins..." (Group 2)

**Family**—In addition to concerns about being overweight themselves, participants addressed a variety of concerns about their children and family members related to body weight. Several participants talked about their children being worried about their weight and engaging in weight control behaviors at young ages. Others described their children as being heavier than their classmates and teased because of their weight. Women also talked about family members criticizing and teasing them about their weight. Stories were told about siblings and husbands making hurtful comments about being overweight.

"...they [girls] are always looking at themselves in the mirror, at their tummies and they say: "Look, I'm so fat" and "look I'm so fat", and they are just eight or nine years-old. "(Group 2)

"I have a brother ... and at times, he send me text messages. He says "Hi Precious". One day I ask him, why do you call me precious. He says it's because you are a little bit fat. And he says, Precious is the name of the whale in the movie Ice Age, the fourth..." (Group 2)

#### **Eating and Food**

Women talked about their struggles with eating and food. Often women described their eating behaviors as out of their control or controlled by their bodies rather than themselves.

"I don't want to eat anymore but my body is accustomed to it, eating too much and I am always hungry." (Group 2)

Many described a complicated relationship with food and often engaged in various eating behaviors that were driven by emotion, age, culture, health, and family.

**Emotion**—Worry, anxiety and other emotions were identified as both a cause and an outcome of eating behaviors. Women described, stress as causes of overeating episodes. However, eating and overeating were identified as a source of guilt and embarrassment. Women talked about a cycle of overeating when distressed and immediately feeling guilty and embarrassed after the eating episode.

"And this is because many Mexican women have a lot of stress, well personally that's what happens to me. I get home and with the stress, one doesn't realize what

they eat. For example, I get home I'm cooking, I'm washing the clothes, I'm washing the dishes, I serve my kids their food, and I'm eating at the same time... there are times and I don't even realize that I'm eating." (Group 1)

"Guilty... because at times one is quite hungry and 'with this I will be able to fill up' but, you feel that need to eat more and you eat more an you eat more and after you say: 'but there wasn't any need for that...you should wait for the food to go down...because after you feel the food is...you don't feel at ease and you feel guilty for having eaten so much." (Group 2)

**Age**—Women discussed eating behaviors and weight gain in terms of a life course trajectory, with pregnancy identified as the significant point of transition. Although women did not define youth in terms of a specific age range, several women talked about eating more when they were younger but not gaining weight. While developmental events were identified as transition points, women reported that eating and weight gain changed with age. Women noted less food is needed and calories are more difficult to burn as one ages.

"...when one is younger the body burns calories faster than when one is, like well is becoming everyday older it's more difficult to burn calories that one has. ". (Group 1)

**Health**—Women described health and well-being impacting eating behaviors in a positive and negative way.

"well I have heard, when one doesn't sleep the hours they should sleep, the body is fatigues and this fatigue is represented with anxiety for food....I sleep very little, so then I wake and I'm so tired and I start to eat, starting early I eat, eat and eat."

(Group 1)

"...And if you continue being overweight, well, then there [are] also times the cholesterol and other sicknesses. ...one should themselves should be able to tolerate the diet but not to look good but rather for...for our physical well-being....but we want to be healthy inside." (Group 2)

**Family**—Family and family relations were something the women talked about a great deal, and discussed how family was influential in how women ate. Both children and husbands were influential in eating behaviors. Women also spoke of the effects of their eating behaviors on their children. In terms of their husbands, several women stated that their husbands both called them names because of their weight and also encouraged and tempted them to eat and eat.

"...Mexicans don't worry, they don't worry because we come with beliefs first come the children, the husband and not until last is you. Therefore, when one does, one eats and eats and does not worry nor think of [their] health or anything of that and this is even truer in Mexico." (Group 1)

"My oldest girl is eight years old...she is going to turn eight, and she is chubby. In her classroom, there isn't any girl like that, all of them are skinny...and she comes home and she says: 'mommy, this girl said I am ugly, that I am fat....'no' I say to

her, 'you need ....we need to stop eating, that's all.' But at the same time, that's not good...it's not a good thing that I am saying to my daughter, 'we need to stop eating,' because that's not the solution. "(Group 2)

**Culture**—Women drew many comparisons between their Mexican culture and beliefs surrounding food. Differences in access to food due to limited financial resources was one factor believed to contribute to eating behaviors, because families in Mexico had little money, foods such as pizza and hamburgers were limited in quantity and considered a luxury. Women expressed pleasure in the fact they now have money to buy what they want and don't want to limit their children or themselves.

"... in Mexico things are a bit, the food is limited and here you come and there is an abundance, and you say, "oh". I had, personally I love pizza. In Mexico, for me, the money that I had from working only was enough for a piece of pizza. But here, I buy a [sheet]."(Group 1)

"Because before our mothers would say, "man", they say, "eat because you are growing. I am worried because you are developing and you need to eat." And now on the contrary, the mothers. "Don't eat because you are going to get really fat." (Group 2).

## Weight Loss Strategies and Their Consequences

In response to questions about efforts to lose or control weight, participants spontaneously described a variety of weight loss strategies as attempts, sometimes desperate, to cope with feelings of fatness and struggles with food/eating. One participant reported that for her, feelings of fatness led to sense of desperation and a decision to purchase and use pills advertised on television that promised quick and easy weight loss. Another participant described a cyclical pattern of over eating and restricting, "that's what I do, I eat a lot, then I don't eat, I eat a lot and then I don't eat". Another stated that her 17 year old daughter misinterpreted physical maturity as "getting fat" and responded by refusing to eat. "She doesn't want to eat food, no tortilla or anything like that because it makes you fat".. Another woman stated that she did not gain much weight with pregnancy but after "I started to eat more and more, and it was then that I started to get fatter". She responded to her weight gain by "putting on oil or cream and girdle myself", which she described as an effective approach to lose the undesired weight.

In the context of describing their struggles with fatness and eating, women described a broad collection of behaviors, such as increased exercise, altering the content and pattern of food intake in healthy (reducing calories/skipping meals). These behaviors included many forms of "dieting" such as limiting amount, eliminating specific types of food and "stop eating" for a specified period of time or part of the day. Many women also spoke of increasing the amount of water consumed as a way to control weight. Women reported eating special diets that either limited intake to a specific food or small selection of foods as a means to lose weight (tuna diet – tuna and vegetables; tomato diet – pure tomatoes for 3 days). Women also described the use of external substances/devices to change their shape were also described.

#### Increased Physical Activity/Exercise.

"...what I tell them is I always do my exercises...where I work I always am, even I do, sometimes, there are people that say, I...if you want, I will help you to, for example carry the plant. No I say, I will do it. There are times I get tired but I prefer to continue to walk and to not stop because I say, if I stand still, I am afraid personally, I'm afraid I will gain weight." (Group 1)

#### Reduced Caloric Intake.

"... Yes, if I am to eat, let's say, if I served myself two helpings, well now I'm only going to have one helping, but I'm never going to stop eating what I am accustomed to." (Group 1).

#### Diet: Altering Content.

"... another friend lost a lot of weight with a tomato diet: you have to only drink tomato for three days, as a shake, as water, well in different forms but pure tomato for three days. "(Group 1).

#### Diet: Altering Pattern of Intake.

"You get obsessed and you want to do things like this, instead of eating something that will help you, one stops eating. Then you don't want even one soda, then you don't want anything." (Group 2).

Internal and External Remedies—The use of internal substances such as homemade and purchased weight loss products were common. Pills, drops and powders were described as frequently used methods of weight loss. Although brand names of some products were mentioned, the type of substance (laxative, diuretic, diet pill) was not addressed and products were often described by what they did to the body, for example, "fix your metabolism so you go to the bathroom," "burn fat of the belly." Homemade remedies were often used to lose weight, including homemade recipes for teas, tonics and shakes. The use of girdles, often along with body creams or wraps of plastic were also described as a common approach used to lose fat, weight or regain one's shape by participants in group 1. Creams applied before putting on a girdle were used to "make you sweat" or "to make you firm." Plastic wraps both alone or under girdles and plasters were used during exercise to increase sweating and help lose weight.

**Internal Purchased Remedies—**"Or *pills* from the pharmacy, my sister, I have a sister that, it's that the pharmacy has pills to lose weight, that are said *to clean you*, they have recommended them to me." (Group 1).

"I bought something that they announce on television, that is called....from Dr. Ming...the Chinese tea...This makes it so you eat and then you go to the bathroom. You become anemic because you evacuate everything so quickly." (Group 2).

Internal Homemade Remedies.

"My mom, she supposedly, like you take off the, um, the like the pineapple's, the skin, just the skin and you put it into water and you boil it. Supposedly it makes you lose weight or something." (Group 2).

**External Remedies**—".. speaking of that, many in our culture, the majority believe that using a girdle...I know a lot of people that believe that if we use girdles, we are going to lose weight. I believe that the majority of women that we have lived in this country, we have used or use a girdle." (Group 1)

## **Discussion**

This study aimed to identify and describe body weight and shape values and concerns among rural dwelling low acculturated MA women and to explore thoughts and behaviors related to food, eating, and weight management. The data presented suggest MA women in our sample experience an active and pressing conflict between body weight concerns and food/eating, Furthermore, participants reported their perceptions and experiences related to both body weight and eating/food were shaped and influenced by cultural, familial and inter/intrapersonal factors including age, emotions and concerns related to health. Somewhat surprisingly, although women were primarily non-English speaking, living and working in isolated rural farming communities, and their social network was primarily with other Mexican people, the thoughts, experiences and values shared in the groups reflected internalization of US cultural weight related values, norms and experiences.

A prevailing view in the literature is people of Mexican origin prefer a plump, curvaceous body shape signifying health, wealth and femininity (Diaz, Mainous & Pope, 2007; Romo, Mireless-Rios & Hurtado, 2015). Contrary to that view, participants in our study strongly and unanimously agreed that women of Mexican origin – members of their family, their friends and themselves - have significant concerns about their shape and worry about being overweight. Participants described themselves as plump, too fat and having love handles and indicated that these concerns were also experienced by their children. Women reported their children, as young as 8 years, experienced similar worries about weight and described their adolescent and school-aged children, both males and females, as defining themselves as fat and engaging in unhealthy weight control behaviors. Interestingly, women expressed body weight concern, conflicts and tensions consistent and normative for women living in the U.S (Rodin, Silberstein & Striegel-Moore, 1984, Salk & Engeln-Maddox, 2011), specifically negative affect associated with feeling fat, worries about gaining weight with age, and failing efforts to lose weight, recurring cycles of eating followed by guilt and frequent dieting type behaviors to lose or control their weight. Perhaps most impressive among our findings is women did not describe worries as novel or foreign but rather conveyed their concerns as ego-syntonic or as an integrated normative aspects of the self.

An important characteristic of the discussions in both focus groups was that content related to body weight was closely and repeated linked to food/eating. Women thoughts shifted spontaneously between these two topics such that a comment about one's body weight precipitated thoughts about eating and food, and vice versa. For example, women talked about periods in their lives when they were "skinny" despite regularly consuming large

quantities of food. Conversely, many women talked about the desirability of food, which immediately led to thoughts about overeating, feelings of guilt and weight gain. Although it is plausible that the consistent association between thoughts about body weight and food simply reflects women's knowledge of the relationship between nutrition and body weight, the negative emotions typically associated with the association suggest a persistent level of conflict between body weight concerns and the value of eating and food.

Thoughts and experiences related to body weight and food and eating were addressed within a complex web of conflicting emotions, family relations and cultural contexts. Culture specific values related to the mothering role, prioritization of the needs of others, and appropriate social behaviors clashed with their internalized Western body image standards. For example, women commented that they no longer encouraged children to eat more, as was a Mexican mothering tradition, but now worry that their children eat too much. Similarly they described how friends expectations that a generous host provides bounties of food and a respectful guest eats with gusto, clashes with weight reduction efforts and the desire to be thin. In yet another example, women described how highly valued ethnic food were identified both as a source of pleasure and enjoyment as well as remorse and guilt. Clearly the observed internalization of American standards of the thin ideal, body weight and norms about body weight and shape were situated, and at times, in conflict with intersecting influences of family and their cultural specific values, attitudes and norms.

Although the women did not describe their Westernized body weight concerns as foreign or as in active conflict with co-existing Mexican norms, one notable feature of the group discussions was the shifting back and forth between life as it was in Mexico compared to life now in the US. Experiences were described sequentially, with stories from Mexico, contrasted with their experience living in the U.S. Women recalled the traditional ways of eating in Mexico, which entailed more of a focus on fruit and vegetables, larger mid-day meals, less access to energy dense foods such as pizza and hamburgers. Mexico was also described in terms of limited resources that necessitated physical activity as a part of the daily routine and created barriers to energy dense foods. Women described themselves when in Mexico as thin, without worries about weight and they attribute their body weight to limited access to resources and foods while living in Mexico. In stark contrast living in the U.S. was associated with having more money and access to desired foods. Yet in this context of bounty, weight gain and body shape became problematic. Their conversations about both body weight and shape and food and eating were often told as stories of before and after, that is how things were in Mexico compared to how they changed since living in the United States. The women's discussions of culture appeared to be a pivotal factor on how weight and eating behaviors were influenced personally and within their families, suggesting there is an important socio-cultural influence on eating behaviors beyond inter/intra personal factors in this population (Hesse-Biber, et al., 2006)

Consistent with results of other studies of MA adult populations, women in our study also conceptualized their body weight concerns and eating behaviors within the context of health. Literature indicates MA women are at an increased risk for obesity and its related health effects, and has identified that MA women are aware of the health risks associated with being overweight and understand that maintaining weight was important for disease

prevention (Lindberg & Stevens 2011). Study participants also talked about their concern with their health and the influences of eating behaviors, and being overweight on disease risk.

In response to high levels of distress related to body weight and conflicts related to eating/ food, women turned to alternative diets, traditional Mexican remedies, and commercial products to lose or control their weight. Approaches ranged from exercise, changes in content (e.g. tuna diet) and timing and amount of dietary intake (e.g. skipping meals, dieting), to drinks made of natural products (lemon juice, vinegar, boiled pineapple skins), teas, pills, girdles, creams, body wraps and commercial products such as diet pills and metabolism boosters. Access to weight loss strategies and substances occurred primarily through informal networks of families and friends. As a result, women appeared to have little understanding of what they were taking, how it would affect their bodies and potential side effects and risks. Failed weight loss attempts motivated a continuous but changing pattern of weight loss behaviors.

Although the majority of studies completed to date suggest that low acculturated immigrant Mexican women living in the U.S. retain native values related body weight shape, an emerging body of literature suggests that at least a subset of this population does experience appearance related worries related to being overweight and engage in health threatening weight control behaviors. For example, results of a population based case control study of neural tube defects in offspring of MA women living 14 counties in Texas bordering Mexico showed that over 15% of the total sample reported dieting to lose weight during the 3 months before conception and approximately 7% reported using diet pills during the same pre-pregnancy period (Suarez, et al., 2012). Other studies indicate that low acculturated Mexican immigrant women use a diverse array of unhealthy weight control behaviors when discouraged by healthy eating approaches (Lindberg & Stevens, 2011). However, these results have generally received little attention and are generally overlooked as potentially serious health risk behaviors. Evidence suggests that unhealthy weight control behaviors become persistent behavioral patterns that endure over time and contribute to weight gain (Low, et al., 2013) and compromised physical and emotional health. When considered together, evidence is mounting to suggest that body weight concerns, conflicts related to eating and food manifest in a diverse array of UHWCB. Together these attitudes and behaviors pose a significant health risk for low acculturated women of Mexican origin that requires careful clinical assessment and intervention, as well as ongoing research to more fully understand these experiences in this population.

## Limitations

Results of this study are based on a small sample of MA women living in a specific geographical region, thus the extent these findings generalize to other immigrant/migrant MA women is not clear. There may be within group differences based on the region in Mexico where our participants resided before immigration to the U.S. Additionally, the lack of more specific demographic information about our participants further limits our findings. Participants were recruited from farming communities where a large percentage of Mexican families had undocumented immigration status. Researchers were sensitive to this

vulnerability and its potential negative effect on participants' willingness to talk to researchers. Consequently, no demographic information, name or signatures were sought during this study. It's important to note women in our sample may differ from groups who came to US at an older age, who may not have children who act as a bridge to new cultural standards. For older populations' body weight values and dietary intake patterns may be more similar to Mexican native standards. Results should be interpreted with caution and may not apply to older Mexican women who immigrate to the U.S.

#### Conclusion

This study shed light on the transition and assimilation to the U.S. culture. It was described as a dynamic process, which was sequentially discussed through comparisons between life in Mexico, particularly growing up there to their current experiences living in the U.S. that was set within individual, family and cultural factors. The contrasts drawn were related to access to foods, women's normative body weight across the lifespan, parenting behaviors related to food and eating, patterns of food preparation and family meals, health and men's conceptions of feminine beauty. Although women in these focus groups tended to be isolated, the majority white cultural norms and values related to body weight, and beliefs were able to not only permeate their lives, but become intrinsic and syntonic ways of defining themselves. Understanding how the move from Mexico to the U.S. provided stress and conflicted perceptions due to an almost truncated acculturation process provides an interesting opportunity for further research and intervention development to assist women, in a culturally relevant/sensitive way. Considering the transition to the U.S. appears to be an active process, women may be open to new information and this may be a "window of opportunity" for interventions to promote healthy body weight/shape norms and healthy approaches to U.S. food and eating behaviors.

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Table 1

## Themes and Sub-Themes

Body Weight Concerns and Values	Eating and Food	Weight loss strategies and Their Consequences
Emotion		Reduced Caloric Intake
Age		Diet: Altering Content
Culture		Diet: Altering Pattern and Intake
Health		Internal and External Remedies:
Family		Internal Purchased Remedies
		Internal Homemade Remedies
		External Remedies