

UNIVERSITY OF WISCONSIN-LA CROSSE

Graduate Studies

ASSESSING AND ADDRESSING THE NUTRITION-RELATED NEEDS OF
HMONG AMERICANS LIVING IN LA CROSSE, WI

A Graduate Project Report Submitted in Partial Fulfillment of the Requirements for the
Degree of Master of Public Health

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August, 2013

ASSESSING AND ADDRESSING THE NUTRITION-RELATED NEEDS OF

Tiku, S. *Assessing and Addressing the Nutrition-Related Needs of Hmong Americans Living in La Crosse, WI*. MPH in Community Health Education, August 2013, 115pp. (G. Gilmore)


HMONG AMERICANS LIVING IN LA CROSSE, WI

By Shailja Tiku

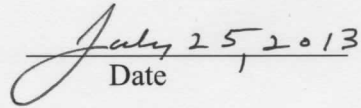
The purpose of this project was to assess the nutrition-related needs of Hmong American community living in La Crosse, Wisconsin, and to develop, implement, and evaluate a resource entity that can assist the community in making informed and healthier decisions regarding their dietary choices. A training manual entitled "A Training Manual for Nutrition Education" was developed. This training manual has been used by the organization(s) and/or person(s) who will develop, implement, and evaluate nutrition education program(s) serving the Hmong community living in La Crosse, Wisconsin.

We recommend acceptance of this project report in partial fulfillment of the candidate's requirement for the degree of Master of Public Health in Community Health Education.

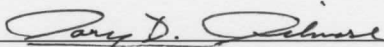
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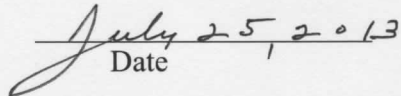
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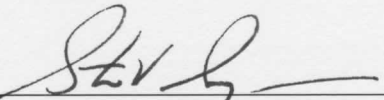
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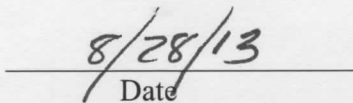
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ABSTRACT

Tiku, S. Assessing and addressing the nutrition-related needs of Hmong Americans living in La Crosse, WI. MPH in Community Health Education, August 2013, 115pp. (G. Gilmore)

The purpose of this project was to assess the nutrition-related needs of Hmong American community living in La Crosse, Wisconsin, and to develop, implement, and evaluate a resource entity that can assist the community in making informed and healthful decisions regarding their dietary choices. A training manual entitled "*A Training Manual for Nutrition Education with the Hmong American Community in La Crosse, Wisconsin*" was developed and evaluated on the basis of dietary patterns and related needs and capacities assessment of the Hmong community living in La Crosse, WI. This training manual has been designed to guide and share educational approaches with the organization(s) and/or person(s) who will develop, implement, and evaluate nutrition education program(s) serving the Hmong community living in La Crosse, Wisconsin.

ACKNOWLEDGMENTS

First, I want to thank my project advisor, Dr. Gary Gilmore, for his guidance and valuable suggestions every step of my way, his encouraging words, his patience, and last but not least for having faith in my abilities. Thank you very much, Dr. Gilmore. Your support will never be forgotten. I would also like to thank these people for their helpful insights: Dr. Bee Lo, Ms. Lynette Prieur Lo, Ms. Maichor Lee, Ms. Maomoua Vue, Ms. Va Thao, and Ms. Xong Xiong.

I would love to thank my mom and dad, Nancy and Bhushan, for their unconditional love and support, always and at every step of my way. I owe thanks to my wonderful husband, Amit, for supporting my efforts and to my darling son, Arin, whose one smile would melt away all my cares. Finally, I want to thank my friends and family who had faith in me and encouraged me all the way. Thank you all - I could not have done it without you!

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INTRODUCTION AND OVERVIEW

Statement of Purpose

The purpose of this project was to assess the nutrition-related needs of Hmong community living in La Crosse, Wisconsin, and to develop, implement, and evaluate a resource entity that can assist the community in making informed and healthful decisions regarding their dietary choices. The resource entity, which was designed based on assessment of dietary patterns and related needs and capacities of the Hmong community living in La Crosse, WI, includes content regarding appropriate nutrition education and training for skill building opportunities that can help the Hmong community members to make informed and healthful decisions regarding their diet-related choices.

Rationale and Need for Conducting the Project

According to the 2010 U.S. Census, Hmong population in United States is 260,076. According to the Hmong American Partnership (2009), the three states with largest Hmong population are California (91,224), Minnesota (66,181), and Wisconsin (49,240). In the period from 1990 to 2000, Hmong population in Wisconsin grew by 106% versus only a 4.8% increase in population for whites, the largest racial group in Wisconsin (2000 Census of Population and Housing, U.S. Census Bureau). In addition, Hmong persons represent 32.9% of Wisconsin's total Asian population, which is more than

double the proportion of each of the next two largest Asian subgroups in Wisconsin, Asian Indian and Chinese. La Crosse County is one of only three counties in Wisconsin where Hmong population exceeds 2% of total county population, the other two counties being Marathon and Sheboygan (2000 U.S. Census of Population and Housing, U.S. Census Bureau).

According to Harrison, Kagawa-Singer, Foerster, Lee, Pham Kim, Nguyen, Fernandez-Ami, Quinn, & Bal (2005), programs are required to prevent changes in diet and physical activity that are related to acculturation in the U.S., among Asian Americans and Pacific Islanders, and also to recognize and reinforce the healthier aspects of their traditional lifestyle. According to Merriam-Webster (2013), “acculturation is defined as cultural modification of an individual, group, or people by adapting to or borrowing traits from another culture.” Immigrant groups bring with them to United States comparatively healthy dietary and physical activity patterns that deteriorate with the passage of time in the U.S. The longer the passage of time lived in the U.S., the greater the deterioration of their diet and physical activity patterns. While under-nutrition is not a problem for them anymore, these immigrant groups face a new set of risks including gain in weight, reduction in physical activity, and increased access to foods high in fat and sugar. As an example, Japanese women living in San Francisco (U.S.) have a five times greater risk of developing breast cancer as compared to Japanese women living in Japan. Further, the breast cancer incidence rates in Japanese women living in San Francisco are higher than that of non-Hispanic white women living in San Francisco (Harrison et al., 2005). According to Centers for Disease Control and Prevention (CDC) [2007], incidence is defined as, “a measure of the frequency with which new cases of illness, injury, or other health condition occurs among a population

during a specified period.” Further, according to Minnesota department of Health (2003), the rate of diabetes in Hmong adults living in United States is twenty times greater than the rate for Hmong adults living in Thailand.

Asian Americans have a greater tendency for central fat distribution, which appears to be a higher risk for both cardiovascular diseases, as well as impaired glucose tolerance at lower Body Mass Index (BMI) compared to other ethnic groups (Harrison et al., 2005). Impaired glucose tolerance is a condition in which an individual’s blood glucose level is higher than normal but lower than the level that is diagnostic of diabetes and this condition is a significant risk factor for future development of diabetes. Impaired glucose tolerance is defined as two-hour glucose levels of 140 to 199 mg per dl on the 75-g oral glucose tolerance test (American Academy of Family Physicians, 2004). According to CDC (2011), BMI is a number calculated from a person's weight and height and is useful to screen for weight categories that may lead to health problems. The formula for BMI is weight in kilograms divided by height in meters squared (2011).

According to Yang & Mills (2008), Hmong Americans are at an increased risk for obesity and obesity-related chronic diseases such as diabetes, hypertension, stroke, and cancer, which may be due to their altered dietary pattern and reduction in physical activity. Studies conducted by Franzen & Smith (2009) and Vue, Wolff, & Gotto (2011) are congruent with similar findings. Review of the literature suggests that Hmong children and adolescents in the U.S. also appear to be at an increased risk for obesity (Stang, Kong, Story, Eisenberg, & Neumark-Sztainer, 2007; Voorhees, Goto, Bianco-Simeral, & Wolff, 2011; Mulasi-Pokhriyal, Smith; Franzen-Castle, 2012).

While the author realized that both dietary as well as physical activity and inactivity patterns may be responsible for overweight and/or obesity and associated health outcomes in Hmong Americans, this study was delimited to focus only on the dietary patterns of Hmong Americans living in La Crosse, WI, with the purpose of keeping the study more focused.

Review of Literature

Demographics

According to Lin-Fu (1998), Asian Pacific Americans are one of the smallest, but fastest growing minority groups in the United States and in the ten years from 1970 to 1980, this population increased 142 percent (from 1.5 million to 3.7 million). Further, according to Harrison et al. (2005), Asian Americans currently constitute 4% of the U.S. population (10.6 million people), and are expected to comprise 11–12% of the national population by the year 2050. According to Stang et al. (2007), more than half of the Hmong population nationwide is younger than age 18 years (with the median age being 16.1 years) and because of this large proportion of young Hmong population, second and even third generations of Hmong are becoming more prevalent in United States.

Background

According to Gerdner, Yang, Cha, & Tripp-Reimer (2007), Hmong had been living in China since 2700 B.C. However, in the nineteenth century they migrated from China to Laos, Burma, Vietnam, and Thailand following oppression by dominant Han Chinese. During the Vietnam War, Hmong living in Laos were recruited both by the communist regime and by the United States Central Intelligence Agency (CIA). Hence, Hmong fought on both sides of the war. However, after the communist victory in 1975,

Hmong that were fighting for United States had to either flee their homeland or face death/persecution by the communist forces. This Hmong population crossed the Mekong River to reach Thailand from where they resettled to United States, Canada, Australia, and France. The Hmong migration to United States began in 1975 (Gerdner et al., 2007). According to Kou Yang (2001), the peak year of Hmong refugee resettlement in the U.S. was 1980 when about 27,000 Hmong immigrated to United States.

Health, Disease, and Treatment-Related Beliefs and Practices

According to Culhane-Pera, Her, & Her (2007), Hmong beliefs about health, disease, and treatment are “similar to Chinese concepts” (p. 180) of hot and cold elements. Disease is believed to be caused by an imbalance between hot and cold elements and balance between these elements must be restored to cure disease. Hmong use various methods for “treatment” of diseases such as “cupping, coining, massage, herbal medicines, modern medicines, and operations” (p.180). Cupping is a type of alternative medicine therapy in which cups (made of variety of materials including glass, bamboo, and earthenware) are placed on the skin to create suction. This is believed to mobilize blood flow to promote healing (WebMD, 2013). Coining is a procedure in which hot oil is rubbed on the skin (especially on the chest, back, or shoulders) followed by strongly rubbing a coin over the area until a red mark is seen. This red mark is believed to release wind (Zamani, n.d.). According to Helsel, Mochel, & Bauer (2005), traditionally the Hmong believe that illness can be caused by “natural” factors such as “spoiled food, exposure to the elements, fall, accident” or by “supernatural causes” such as “lost souls, offended spirits, malevolent spirits” (p. 150). Illnesses caused by “natural factors” can be treated by “cupping, massage, herbs, and

other non-spiritual” methods.

Illnesses caused by “supernatural” factors are perceived as being more “serious” and may involve “spiritual” treatment (p. 150). Shamans are the spiritual healers who are influential and respected members of the community (Helsel et al., 2005).

Nutrition Practices

According to Yang & Mills (2008), Hmong in the U.S. constitute a “natural laboratory” (p. 1259) for investigating health risk factors in a recent immigrant population coming from a region with low-risk for chronic disease to a region with high- risk for chronic disease. Studies show that Hmong adults in the U.S. are developing type 2 diabetes at a high rate and those with diabetes exhibit poor control of their blood glucose levels. (Culhane-Pera et al., 2007; Culhane-Pera, Peterson, Crain, & Center, 2005). According to Culhane-Pera et al. (2007), sixteen percent of U.S. Hmong adults in a clinic-based study and 13% to 42% in two community- based studies had diabetes, and these rates were higher than those for European-Americans and similar to the rates for Native-Americans. Hmong patients in the U.S. with diabetes on an average also have a glycosylated hemoglobin level higher than what is considered ideal.

Glycosylated hemoglobin is an indicator of blood glucose control over the preceding three months (Culhane-Pera et al., 2007). Diet may be one of the causes for the high rate of type 2 diabetes seen in Hmong adults in the U.S. (Culhane-Pera et al., 2005).

In a study conducted by Culhane-Pera et al. (2007), group discussions were conducted with Hmong adults in St. Paul, MN (U.S.), who had diabetes to gain insights about their notions regarding diabetes, including perceived causes, perceived symptoms, perceived course of the disease, and perceived treatment. In this study, the

participants reported that they “did not have” (p. 183) chronic diseases such as diabetes and hypertension in Laos. Another study conducted by Devlin, Roberts, Okaya, & Xiong (2006) that used focus group method of collecting data from Hmong adults with diabetes, living in or near Minneapolis or St. Paul corroborated the above stated finding.

In 2008, Detjen, Nieto, Young, Albanese, Wendland, Keller, & Krahn collected data via mailed surveys, regarding self-reported health outcomes in a random sample of Hmong adults living in Wisconsin (U.S.). These data were then compared with national estimates of population sub-groups and a community sample of Wisconsin adults. This study showed that Hmong had higher rates of overweight and hypertension compared to other groups and the risk of diabetes and overweight was two times higher in the Hmong study population compared with other Asian Americans. Hmong Americans have a “unique health profile” (p. 46) compared to other Asian Americans since they have lowest median age, lowest educational attainment, lowest English-speaking rate, highest poverty and unemployment rates, and largest average household size compared to other Asian American groups. In addition, many Hmong Americans have had experiences related to war and persecution that can have a negative impact on health-related outcomes (Detjen et al., 2008).

Studies on young Hmong children (less than five years of age) in the U.S. show that they are often overweight and short compared to their white and other Southeast Asian counterparts (Hyslop, Deinard, Dahlberg-Luby, & Himes, 1996; Gjerdingen, Ireland, & Chaloner, 1996). According to Voorhees et al. (2011), the rate of obesity is higher among Hmong youth in the U.S. compared to other Asian or non-Hispanic white youth. In a study conducted by Stang et al. (2007), food and weight-related behaviors were

assessed in Hmong adolescents and seen whether these were any different between Hmong and white teens or by country of birth (Hmong adolescents born in the U.S. versus those who were foreign born). This was a school-based cross-sectional study conducted in Minneapolis/St. Paul, Minnesota. In this study, it was found that Hmong male adolescents were more likely to be overweight compared to their white counterparts. However, no such difference was observed between female Hmong adolescents and their white counterparts. Fast food consumption was similar between Hmong and white adolescents with “about 20% of them reporting eating out three or more times per week” (Stang et al., 2007, p. 940). In the same study, female Hmong adolescents reported more snacking between meals than their white counterparts did. In addition, compared to their white peers, Hmong adolescents (both males and females) reported higher levels of body dissatisfaction (BD) and engagement in unhealthy weight control measures such as dieting, skipping meals, fasting, smoking, and using laxatives and diuretics. BD is the “degree to which individuals are unhappy with their own body and desire to resemble a figure closer to their ideal body” (Niide, 2007, p. 1). Around 19% of male Hmong adolescents (versus 4.9% of male white adolescents) and 22% of female Hmong adolescents (versus 17.2% of female white adolescents) reported dieting at least five times in the past year. For the purpose of this study, dieting was defined as changing the way the adolescents ate in order to lose weight. 57.3% of male Hmong adolescents (versus 24% of their white counterparts) and 70.5% of female Hmong adolescents (versus 53% of their white counterparts) reported engaging in unhealthy dietary practices, such as fasting, skipping meals, or smoking, to lose weight (Stang et al., 2007). The above findings regarding higher rate of body dissatisfaction among

Hmong adolescents are congruent with the findings of Mulasi-Pokhriyal, & Smith (2010). Stang et al. (2007) suggest that Hmong adolescents show risk factors for developing disordered eating pattern and “appropriate” (p. 941) health education and nutrition intervention methods could be beneficial for this population.

In a study conducted in northern California (U.S.) by Vue et al. (2011), Hmong women having young children (less than five years of age) were interviewed to gain insights regarding their food habits. All but one of these women had at least one young child. Hmong food was believed to be healthy and filling by most participants. Only one participant mentioned that Hmong food could be unhealthy due to “large quantity” (p. 200) of lard used in cooking. Hmong food was identified as consisting of primarily rice, vegetables, and “greens” (p. 200) and less meat. The term “American food” (p. 201) was used by many participants for fast food and processed food. American food was perceived as being unhealthy, but at the same time as being convenient, inexpensive, and having variety. American food was believed to be high in “sugar, fat, and salt” (p. 201) compared to Hmong food. The authors suggest that the participants may not be aware of healthy American food options. The participants reported that elders in the family expressed desire to eat Hmong food whereas children preferred American food. Mothers of young children described themselves as being “always busy and on the go” (p. 201). Many mothers, who were working outside of home, expressed a perceived lack of time to cook Hmong food. Some unhealthy practices such as giving soda to “soothe” (p. 203) children as young as three years old were also identified. Food security and availability of variety of food options in the U.S. were also identified as factors causing Hmong Americans to over consume food (Vue et al., 2011). The relationship between food

security and overconsumption of food in Hmong Americans is also supported by a study conducted by Franzen & Smith (2008). According to Vue et al. (2011), nutrition-related programs should focus on both the healthy aspects of Hmong food, as well as healthy American food options.

According to Yang & Mills (2008), in the Hmong culture overweight and/or obese persons are perceived as being healthy and strong, whereas thin persons are believed to have poor health. These findings are also supported by a study conducted by Culhane-Pera et al. (2007). Hmong Americans are encouraged to eat more by parents and close relatives (Yang & Mills, 2008). There is a widespread lack of nutrition knowledge among Hmong Americans and this has caused a significant increase in the consumption of processed and convenience food having low nutritional value, in the community (Yang & Mills, 2008).

In a study conducted by Franzen & Smith (2009), focus groups were conducted with Hmong adults living in Minneapolis and St Paul, Minnesota, to gain insights regarding their perceptions of how environment, moving to the U.S., and food insecurity influenced dietary pattern, weight, and health. Participants in this study reported absence of dessert in traditional Hmong diet. They also reported that snacking between meals was uncommon in Laos. A change in food preparation methods with moving to United States was also reported. Whereas in Laos food was usually boiled, in the U.S. Hmong preferred stir-fried food and this was attributed to increased availability and accessibility of oil. In addition, Hmong women working outside of home expressed a perceived barrier of lack of time to cook food and as an alternative switching to processed and convenience food. Participants identified American foods as “pizza, hamburgers, hot

dogs, meats and cheeses, steak and potatoes, spaghetti, hamburger helper, fast food, frozen, or premade foods, bread, and desserts” (Franzen & Smith, 2009, p. 178).

In a study conducted by Harrison, Kim, & Kagawa-Singer (2007) in California, (U.S.), focus group discussions were held with Hmong youth, aged 11-14 years, as well as Hmong parents who had children aged 5-14 years. In this study, participants identified some factors believed to have contributed to overweight and obesity in their community. The factors identified were increased availability and intake of food (increased portion sizes), increased intake of red meat especially pork, perceived higher cost of fruits and vegetables, perceived lack of time to cook food, increased fast food intake, perceived lack of time as well as, lack of adequate space to grow their own food and raise livestock, perceived lack of adequate nutritional information including information about portion/serving sizes, sedentary life style, low physical activity, and perceived lack of safe places for physical activity.

Hmong Americans versus Guianese Hmong

The adverse impact of changes in dietary pattern of Hmong Americans on health-related outcomes is clearly underscored in a study conducted by Clarkin in 2005. In this study, Hmong who have resettled in French Guiana beginning from 1977 were studied to find if Hmong life in French Guiana was less stressful than in United States. Hmong lifestyle in French Guiana is an interesting and striking contrast to Hmong life in the United States. French Guiana is located in tropical South America. Hmong living in French Guiana are primarily an agrarian community. However, they do not practice subsistence farming as in Laos. According to Merriam-Webster (2013), “subsistence farming is a system of farming that provides all or almost all the goods required by the

farm family usually without any significant surplus for sale.” In French Guiana, Hmong grow their own fruits and vegetables, both for their own consumption and for selling. Some Hmong people who are not full-time farmers work as teachers, business owners, or tailors, but they usually do farming at least part-time for their own consumption and/or selling. In addition, in French Guiana settlement for Hmong farmers is permanent unlike in Laos where soil exhaustion would force people to relocate. Farmers and their families work on an average 9-10 hours per day on fields (Clarkin, 2005).

Leisure activities for Hmong in French Guiana include camping, hunting, sports, television, keeping pets, and boating. Hmong in French Guiana have an active life style and eat a diet rich in fruits and vegetables, which is attributed to the plentiful supply of these foods. Though sodas, candies, and processed food are available, fresh fruits and vegetables are preferred over these foods by not only Guianese Hmong adults but also by the Guianese Hmong children (Clarkin, 2005). In this study, it was found that chronic diseases like hypertension, gout, and diabetes were uncommon in Guianese Hmong. A sample of U.S. Hmong adults living in Rhode Island, Massachusetts, Wisconsin, and Minnesota were compared with Hmong of same age group living in the villages of Cacao, Javouhey, and Regina in French Guiana. The results of the study showed striking differences between the two groups. The prevalence of hypertension in U.S. Hmong adults was 22.2% compared with 12.2% in Guianese Hmong adults. In addition, 3.4% of Guianese Hmong adults reported dissatisfaction with their lives compared to 16% of Hmong adults living in United States. Further, 12.9% of Guianese Hmong adults expressed desire to live in Laos permanently compared with 44.8% of U.S. Hmong adults who expressed their desire to return to Laos for good.

Definition of Terms:

Acculturation: According to Merriam-Webster (2013), acculturation is defined as cultural modification of an individual, group, or people by adapting to or borrowing traits from another culture.

Asian Americans: It is a group made up of immigrants or their descendants from dozens of countries in the Far East, Southeast Asia and the Indian subcontinent, each with a unique history, culture, language, and pathway to America (Pew Researcher Center, 2013). “Asian Americans are a diverse population, comprised of individuals of Chinese (24%), Filipino (18%), Asian Indian (16%), Vietnamese (11%), Korean (11%), Japanese (8%), and other Asian (13%) ancestry” (Mc Neely & Boyko, 2004, p. 66).

Asian American and Pacific Islander: The U.S. Census Bureau defines Asian as a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent. The U.S. Census Bureau defines Native Hawaiian and Other Pacific Islander as a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. Pacific Islander Americans include people of Polynesian, Micronesian, and Melanesian cultural backgrounds (NEA Human and Civil Rights, n.d).

Body Mass Index (BMI): According to CDC (2011), with the metric system, the formula for BMI is weight in kilograms divided by height in meters squared.

Glycosylated Hemoglobin: A test that measures the level of hemoglobin A1C in the blood as a means of determining the average blood sugar concentrations for the preceding two to three months. Hemoglobin A1C is formed when glucose combines with hemoglobin in the blood (Merriam-Webster, 2013).

METHODS

Needs Assessment

The author used the following methods to gain insights into the dietary pattern and related needs and capacities of the Hmong American community living in La Crosse, Wisconsin: review of relevant literature (secondary data), key informant interviews (primary data), and author's own observations (primary data). This study was approved by the Institutional Review Board of the University of Wisconsin-La Crosse, in accordance with the requirements pertaining to the study of human subjects.

Review of Literature

The author conducted a literature review to gain an overview of relevant literature published on the topic. Due to the author's previous experience of working with Hmong community living in La Crosse, Wisconsin, (during her graduate preceptorship) she was keen on working again with the community for her graduate capstone project. Being a physician, she was interested in researching about the health-related outcomes that were of concern in the Hmong American community. A review of Google Scholar and EBSCOhost literature was conducted using key words 'Hmong Americans diseases'. Studies (Devlin et al., 2006; Yang & Mills, 2008) revealed that Hmong Americans were at increased risk of chronic diseases that may be related to their altered diet and physical activity patterns after moving to United States. Being a future public health professional, the author wanted to gain further insights into preventable risk factors as well as

protective factors for chronic diseases in the community.

Though the author realized that both dietary and physical activity patterns were equally significant in the prevention of chronic diseases, she delimited the topic to researching about the dietary patterns of Hmong Americans living in La Crosse, with the purpose of keeping her study focused. Research on the dietary patterns of Hmong Americans was conducted via Google Scholar and EBSCOhost literature using key words 'Hmong Americans diet.' Several articles were found and cross-references were located through the articles themselves.

Key Informant Interviews

The author established and conducted interviews with the key informants. The purpose of the interviews was to gain insights into the dietary patterns, barriers to healthful eating, and the format of learning preferred by Hmong American community living in La Crosse, Wisconsin. The key informants were chosen based on recommendations made by community-based professionals along with the author's own assessment. Six key informants were chosen, that included Hmong community leaders, healthcare professionals, and agency personnel who worked closely with the community (such as staff at La Crosse Area Hmong Mutual Assistance Association, Inc. [HMAA]). The key informants were chosen because the author felt that their perceptions reflected the perceptions related to dietary needs and capacities of the broader Hmong American community living in La Crosse, Wisconsin. The author stopped conducting interviews when no new information was forthcoming and redundancy was observed in data collection.

All of the key informants were fluent in English. The author started by first contacting the key informants via email or telephones in order to explain the purpose of the study to them. The author further asked them if they were willing to participate in the study. If they did express their willingness to participate, a voluntary informed consent form was emailed to them (see Appendix A). The participants were assured that the data gathered in the study would be confidential with respect to their personal identity, unless they specified otherwise. Before using the information provided by them, the participants were given the opportunity to look over any final draft that was produced from the interview, and to request changes (if any), which were then incorporated into the summary. The participants had the right to withdraw or refuse to answer any question without consequences at any time. They could also withdraw from the study at any time for any reason without penalty.

The author in person conducted all interviews with the key informants. The interviews were moderately scheduled. According to Gilmore (2012), a moderately scheduled interview is one in which the interviewer follows a set of questions and suggested follow-up questions, however the interviewer can use them differently during the interviewing process in order to discover information. The author chose moderately scheduled interviews as the preferred means of interviewing since the author felt that they “offer the opportunity to obtain more complete information” (Gilmore, 2012, p. 93). As an introduction to the interview sessions, the author made the following statement consistently:

“I will be talking with you about the dietary patterns and related needs and capacities of the La Crosse Hmong Americans. I wish to get your insights as well as the

insights of the community through your words so that the entire community is an integral part of the whole process, starting right from the needs and capacities assessment to the decision(s) regarding the best way(s) to meet those needs.”

Eight open-ended questions were asked. These questions were guided by a review of relevant literature, as well as author’s discretion about what information might be most useful.

1. What do you think are the top three health issues in La Crosse Hmong community that are of utmost concern?
2. How has the diet of Hmong Americans changed with immigration to United States? (Guided by studies conducted by Franzen & Smith, 2009; Vue et al., 2011)
3. How often do you see fast-food restaurants being used by Hmong people in the community? Which group is typically involved, based on your experience? (Guided by studies conducted by Vue et al., 2011; Yang & Mills, 2008)
4. Are there any issues of body dissatisfaction (being unhappy with their body) among Hmong adolescents that you are aware of? (Guided by studies conducted by Stang et al., 2007; Mulasi-Pokhriyal & Smith, 2010)
5. Who decides what food is to be purchased by the family?
6. Who prepares food in the family?
7. What do you think are the barriers to healthful eating in the family setting as well as outside the family setting?

8. What may be the best way (s)/resource(s) to assist people to eat healthfully,
- In a group setting and
 - At an individual level?

Each interview lasted approximately 45 to 60 minutes. The interviews were not recorded. The author took notes at the time of interview. After each interview was over, the author began to write down the details of the conversation using the notes taken during the interview as a guide. Later, the author mailed ‘thank you’ cards to all the key informants to express her appreciation for their participation in the study.

Author’s Observation

The author attended an event at the Hmong Cultural and Community Center in La Crosse, Wisconsin, on February 23, 2013. Dinner was served at the event and this event provided the author an opportunity to directly observe the dietary patterns of Hmong Americans living in La Crosse, WI. The author refrained from taking notes during the event to avoid any potential discomfort to the event attendees. After author left the event, she began writing a description of the relevant observations.

Data and Information Analysis

The author compared and contrasted the primary data (from key informant interviews and author’s observation) with secondary data (review of relevant literature) in order to analyze commonalities and variations between information from these data sources.

Table 1. Data and Information Analysis. Changes in the dietary patterns of Hmong Americans after moving to United States and La Crosse, WI (1996-2013).

Observation	Sources		
Increased consumption of meat.	Review of relevant literature (secondary data).	Key informant interviews (primary data).	Author's observation (primary data).
Decreased consumption of vegetables.	Review of relevant literature.	Key informant interviews.	Author's observation.
Increase in intake of foods high in sugar.	Review of relevant literature	Key informant interviews.	Author's observation.
Snacking between meals.	Review of relevant literature.	Key informant interviews.	
Increased consumption of fast food/processed food among adolescents and young adults	Review of relevant literature.	Key informant interviews.	
Soda consumption.	Review of relevant literature.	Key informant interviews	
Deep-frying food	Review of relevant literature.	Key informant interviews.	Author's observation.
Using sauces, curry, mayonnaise, and packaged seasonings that are high in sodium, sugar, and salt.		Key informant interviews.	

Resource Entity

The author determined the vehicle for conveyance of information to intended audience based on information gathered from the key informant interviews as well as a review of the relevant literature. Based on the key informant interviews (see Appendix B), the author concluded that group discussions, hands-on activities, and visual information were the “best” ways to convey information to the intended audience. This finding is complemented by review of relevant literature. Schermann, Bartz, Shutske, Moua, Vue, & Lee (2007) reported that in the Hmong culture, oral communication was preferred and focus group discussions were identified as accommodating both, the traditional oral communication and group learning styles of the Hmong. According to 2000 U.S. Census Bureau, older Hmong living in the U.S. often do not speak English and because written Hmong language has been developed recently (in the 1950s), they may be illiterate in the Hmong language. Hence, written materials are of not much use to Hmong people (Cobb, 2010).

Training Manual

The author developed a training manual to guide and share educational approaches with those person(s) and/or organization(s) who will develop, implement, and evaluate nutrition education program(s) to assist the Hmong community living in La Crosse, WI, to make informed and healthful decisions regarding their dietary choices. According to Cambridge University Press (2013), training manual is “a book or computer file containing information about how to do or use something.”

Based on key informant interviews, the author concluded that it is usually Hmong women who do the cooking and decide what food is to be purchased by the family. Review of literature also suggests that Hmong women are the primary cooks (Franzen & Smith, 2009) as well as purchasers of food in the family, except for those households where women speak little English (Franzen & Smith, 2008). “The age group of women who usually do the cooking is 30 years to as long as they are mobile” (M. Lee, personal communication, May 31, 2013). In addition, the author strongly feels that empowering women regarding healthy dietary choices is equivalent to empowering the entire family, especially in those cultures where women are the primary cooks and purchasers of food for the family (such as in the Hmong culture). Based on the above stated findings, the author chose Hmong women, 30 years of age and above, living in La Crosse, WI, as the intended audience. A Hmong educator who is fluent in both English and Hmong (language) will be preferred considering the entirety of age range of the intended audience. Having a Hmong educator may also improve the comfort level of the intended audience and attract more audience as compared to a non-Hmong educator.

Dissemination of the Training Manual

The training manual may be distributed electronically to La Crosse Area Hmong Mutual Assistance Association, La Crosse County Health Department, as well as to the two health systems in La Crosse - Gundersen Health System and Mayo Clinic Health System. A hardcopy version of the training manual may be distributed to popular Hmong leaders (both formal and informal), health educators, and highly regarded individuals in the La Crosse Hmong community. This manual may be used to guide and share educational approaches with those person(s) or organization(s) that intend to develop,

implement, and evaluate nutrition education programs designed to serve Hmong American community living in La Crosse, WI.

Timeline

Step 1: Research and review of literature.



Step 2: Key informant interviews.



Step 3: Developing, implementing, and evaluating the product.

The entire process was fluid, so the author went back and forth between these steps, hence the bidirectional arrows.

FINDINGS

Health-Related Concerns in the La Crosse Hmong Community

The key informants, via face-to-face interviews with the author (see Appendix B) identified the following (in alphabetical order) health-related concerns in the Hmong community living in La Crosse, Wisconsin:

- Cancer
- Diabetes
- Gout
- Heart disease
- High cholesterol level
- Hypertension
- Lack of nutrition education
- Stroke

The above findings are complemented by a review of relevant literature (Yang & Mills, 2008; Franzen & Smith, 2009; Vue, Wolff & Gotto, 2011; Wahedduddin, Singh, Culhane-Pera, & Gertner, 2010).

Two key informants stated that chronic diseases such as the ones listed above were “rare” in Laos. One of them (a Hmong healthcare provider) remarked that when Hmong arrived in the U.S. in 1975, they did not have chronic diseases such as diabetes, high

blood pressure, cancer, or stroke and that these diseases started “showing” in Hmong Americans thirty years later. The same key informant further remarked, “now almost every family has a member with hypertension and/or diabetes, these diseases are major shockers to the Hmong community.” This finding about chronic diseases being uncommon in Laos is corroborated by studies conducted by Culhane-Pera, Her, C., & Her, B. (2007); Devlin, Roberts, Okaya, & Xiong (2006).

Changes in Dietary Pattern of Hmong Americans

The author categorized the changes in dietary pattern of Hmong Americans living in La Crosse, as identified by the key informant interviews into two categories:

- Changes in pattern of food consumption, and
- Changes in food preparation methods.

Changes in Pattern of Food Consumption

The key informants identified following changes in pattern of food consumption by Hmong after moving to United States:

Increased consumption of meat. A common theme identified based on key informant interviews was a significantly greater consumption of meat by Hmong Americans after moving to the U.S. The key informants reported that in Laos Hmong ate “very little meat or no meat at all.” Meat was “expensive” in Laos and was eaten regularly by only the wealthy people. The key informants reported that meat was considered a rich man’s diet in Hmong culture. Eating meat was a sign of wealth and prosperity in the Hmong culture. One key informant (a Hmong health care provider) said, “now, they (Hmong Americans) eat meat for breakfast, lunch, and dinner”. Another key informant (who was a popular Hmong leader) reported that during Hmong feasts meats “dominate” the table.

The author's observations during the event (see Appendix C) at Hmong Cultural and Community Center in La Crosse, Wisconsin, were similar to the above findings from the key informant interviews. Dinner was served at this event. Though the event was open to all communities, all but very few people who attended the event were Hmong. The author observed that every main course dish, except rice, had meat. There was a deep-fried chicken dish, noodles with pork and vegetables, and a vegetable-chicken dish. The author observed a group of Hmong adolescents and young adults eating dinner. This group of persons appeared to enjoy the deep-fried chicken dish. Many of them did not eat the vegetable-chicken dish and some of them who ate it, intentionally left out the vegetable part and ate only the chicken. A review of relevant literature also corroborates this finding about increased consumption of meat by Hmong Americans after moving to the U.S. (Vue et al., 2011; Franzen & Smith, 2008).

Decreased consumption of vegetables. All the key informants reported that whereas in Laos Hmong had a diet rich in vegetables, in the U.S. consumption of vegetables by Hmong had significantly reduced. One key informant (a popular young Hmong leader) remarked, "they (Hmong Americans) are like- if vegetables are also as expensive as meat, why not eat meat?" Another key informant (a Hmong health care provider) said, "they (Hmong in Laos) used to eat about 90 % of their diet from vegetables and very little meats, only during special occasions."

The key informants also reported that the climate in Laos was conducive to growth of vegetables, all year round. People grew their own vegetables and access to fresh vegetables was abundant. Some key informants mentioned that although fresh vegetables were an important part of Hmong diet in Laos, fruit was however, not

consumed frequently in Laos and was considered as a “high status diet.” The finding about decreased consumption of vegetables by Hmong Americans after moving to the U.S., are also congruent with studies conducted by Franzen & Smith (2009); Yang & Mills (2008) & Vue et al. (2011).

Increase in intake of foods high in sugar. The key informants reported that Hmong diet in the U.S. was high in sugar compared to their diet in Laos. One key informant (who was a Hmong and worked as a health educator) informed that whereas in Laos, sugar was “only a treat”, in the U.S. Hmong ate “lot” of sugar.

The author’s observations at the community event at Hmong Cultural and Community Center in La Crosse support the above finding. At the event, the author observed that on every dinner table, there were candies and chocolates. The author also observed that there were about six to seven varieties of dessert available at the event. As mentioned earlier, the author observed a group of Hmong adolescents and young adults eating dinner. Most people in this group ate all the six to seven varieties of dessert and many of them had more than one serving. The author also observed mothers of young children eating chocolates and different varieties of dessert, while also feeding their children the same. At this event, one Hmong attendee informed the author that whereas in Laos Hmong did not eat dessert, dessert had become an important part of Hmong diet in United States. The finding about increase in intake of foods high in sugar by Hmong Americans after moving to the U.S. is corroborated by a study conducted by Franzen & Smith (2009).

Snacking between meals. Another theme identified by the author based on the key informant interviews was the absence of snacking between meals in Laos. One key informant (who was a Hmong and worked as a dietician) mentioned, “in Laos, there was no concept of snacking; in United States we (Hmong) snack on chips, cookies, donuts, and ice creams.” Further, at the community event at Hmong Cultural and Community Center in La Crosse, one Hmong attendee remarked, “snacking has become common in United States whereas it was rare in Laos.” The above finding about snacking between meals in Hmong Americans after moving to United States is also corroborated by a study conducted by Franzen & Smith (2009).

Increased consumption of fast food/processed food by Hmong adolescents and young adults. Three of the six key informants (all of them were working mothers) reported that Hmong women who were the primary cooks in the family, usually worked outside of home and experienced a perceived lack of time to cook Hmong food, making fast food and processed food an “easy” choice for them and their families. One key informant pointed out, “fast food is quick and easy, they (Hmong Americans) are like-how can you afford not to take advantage of a \$2 burger?” However, the key informants reported that fast food consumption was usually seen in Hmong adolescents and young Hmong adults (forty years of age and below). The finding about increased consumption of fast/processed food by Hmong Americans is also supported by studies conducted by Franzen & Smith (2009); Stang, Kong, Story, Eisenberg, & Neumak-Sztainer (2007); & Vue et al. (2011).

Soda consumption. Another finding based on the key informant interviews was the increased consumption of soda by Hmong in United States. One key informant (a popular Hmong leader) remarked, “during Hmong gatherings, you have to make a conscious choice to not drink soda.” Yang & Mills (2008) suggest that Hmong in the U.S. should be encouraged to drink traditional chicken or vegetable broths as beverage.

Changes in Food Preparation Methods

The changes in food preparation methods as identified by key informants were: deep-frying food in the U.S. versus boiling and/or cooking over fire in Laos, as well as using sauces, curry, mayonnaise, and packaged seasonings that were high in sodium, sugar, and fat after moving to United States. This finding about altered methods of food preparation by Hmong in the U.S. is also corroborated by a study conducted by Franzen & Smith (2009).

Table 2. Findings. Changes in the dietary patterns of Hmong Americans after moving to United States and La Crosse, WI (1996-2013).

Source of information	Changes in pattern of food consumption	Changes in food preparation methods
Review of relevant literature.	Increased consumption of meat. Decreased consumption of vegetables. Increase in intake of foods high in sugar. Snacking. Increased consumption of fast food/processed food (adolescents and young adults). Soda consumption.	Stir-fried food versus boiled food in Laos.
Key informant interviews, conducted in La Crosse, WI.	Increased consumption of meat. Decreased consumption of vegetables. Increase in intake of foods high in sugar. Snacking. Increased consumption of fast food/processed food (teens and young adults). Soda consumption.	Deep-fried food versus food boiled/cooked over fire in Laos. Using sauces, curry, mayonnaise, and packaged seasonings that are high in sodium, sugar and fat.
Author's observation at a community event in La Crosse, WI.	Preference for meat. Less preference for fruits and vegetables. Preference for dessert(s). Preference for candies and chocolates.	Meat added to all main course dishes, except rice. Chicken was deep-fried.

Findings Regarding the Appropriate Format for Nutrition Education

According to key informant interviews, the following (in alphabetical order) were identified as “best ways” to assist Hmong community living in La Crosse, WI, to make informed and healthful decisions regarding their dietary choices:

- Cooking demonstrations
- Dissemination of information through Hmong radio
- Food-tasting activity
- Group discussions
- Hands-on activities
- Visuals such as food models and real food to show serving sizes
- Workshops having different tables with different food groups

Group discussions, hands-on activities, and visual information were recurring themes that were identified via key informant interviews as the “best means” to convey information to Hmong audience. One key informant (a Hmong health care provider) remarked, “a lot of them (Hmong) don’t read, oral communication is the main communication. If you send an invitation, they do not come. If you call, they come.” Another key informant (a health educator) pointed, “visuals with very little words are important.” Review of relevant literature corroborates the finding that Hmong prefer learning in a group setting with visual and auditory delivery (Schermann, Shutske, Moua, Vue, & Lee, 2007).

Findings Regarding Hmong Perception about Body Weight and Illness

Almost all the key informants reported that overweight and/or obese persons were considered as being healthy and good-looking in the traditional Hmong culture and that being overweight was a sign of wealth and prosperity according to Hmong cultural beliefs. One key informant (who was a Hmong and worked as a dietician) reported that a “chubbier” daughter-in-law was preferred in the Hmong culture over a “thin” daughter-in-law. A “chubbier” daughter-in-law was believed to be “strong and able to bear children.” This key informant also added, “I used to be chubby. In the eyes of Hmong women, I was good. Now I have lost weight and they are like-you look old, wrinkled. Are you sick? So losing weight to be healthy is not a concept.” Similar finding about preference for overweight/obese body types in the Hmong culture is also corroborated by studies conducted by Yang & Mills (2008) and Culhane-Pera et al. (2007).

Further, three of the six key informants reported that although Hmong in the U.S. were concerned about the rise of chronic diseases such as diabetes, hypertension, and stroke in their community, they did not link these diseases to overweight and/or obesity. According to these key informants, Hmong did not understand the concept that food can be a cause of illness. One key informant (a Hmong health care provider) remarked, “they (Hmong) have seen more people dying from malnutrition. They have never seen obesity-related diseases and have never heard too much food can cause chronic illnesses. The challenge is to tell them that food can be the underlying cause of diseases and health problems.”

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary and Conclusion

From a Professional Perspective

Hmong community living in the U.S. (and in La Crosse) is at an increased risk of overweight and/or obesity and associated health-related outcomes. This may be attributed to changes in their dietary and physical activity patterns after moving to United States. In Laos, Hmong diet comprised mainly of rice, vegetables, and very little meat or no meat at all. Meat was considered expensive in Laos and was eaten only on special occasions. In addition, small portions of meat were consumed. For example, a family of 10- 15 people consumed one chicken. In addition, eating dessert was uncommon in Laos. Snacking between meals was also not a usual practice in Laos. Further, in Laos Hmong grew their own rice and vegetables to eat, and processed food/fast food was not a part of their diet. On the other hand, in United States the relative accessibility and affordability of meat(s) and foods high in sugar, salt, and fat has caused a major change in the diet of Hmong Americans. In addition, mothers of young children are usually working outside of home and experience a perceived lack of time to cook food. As a result, they are switching to “easier and convenient” options such as processed food and fast food. Hmong adolescents also appear to consume significant amounts of fast food and processed food.

There has also been a significant reduction in physical activity in the Hmong community after moving to United States. In Laos, Hmong were an agrarian community and worked at farms, which required intensive manual labor. In addition, there was absence of motorized transportation. Hence, people walked from their homes to farms and back home. Hmong led an active lifestyle across all age groups in Laos. On the other hand, in the U.S., because of technological advancements Hmong live sedentary lifestyles. Further, the importance of physical activity is not emphasized in the Hmong culture. A possible reason for this may be that physical activity was a natural part of traditional Hmong lifestyle.

Hmong community in United States (and in La Crosse) is facing a new set of challenges. Whereas in Laos, under-nutrition was a concern, in the U.S. Hmong are experiencing chronic diseases related to over-nutrition and/or lack of sufficient physical activity. Chronic diseases such as diabetes, hypertension, and stroke are commonly seen in Hmong living in the U.S. whereas these diseases appeared to have been uncommon in Laos. In addition, Hmong cultural beliefs do not appear to link diseases to overweight and/or obesity. On the other hand, in the Hmong culture overweight persons are perceived to be healthy and strong whereas thin persons are believed to have poor health. In Hmong culture, being overweight is believed to be a sign of “wealth and prosperity.” Hmong view illness as being a consequence of under-nutrition rather than over-nutrition. It may be challenging to convince them that overweight and/or obesity may be a contributing factor for many chronic diseases that the Hmong community in United States is experiencing.

From a Personal Perspective

This project helped me grow, both as a person and as a health educator. I realized that it is not sufficient to know about or simply be aware of an individual's or group's cultural beliefs. It is very important to appreciate the similarities and differences between and within various cultural groups and recognize the problem-solving strategies of different cultural groups. It is also important to recognize one's own biases pertaining to other cultures. I feel that for a health education intervention to be successful, it is important for health educators to understand and respect the cultural beliefs and practices of their intended audience and work with those beliefs and practices rather than go against them. I also feel that it is helpful to build on the prior knowledge and skills of your intended audience, to the maximal extent possible. Similarly, any health education materials need to be culturally appropriate and sensitive with due consideration of cultural beliefs, practices, and preferences of the intended audience. This requires spending a significant amount of time understanding your group's cultural beliefs and values, as an integral part of needs and capacities assessment of the group. However, there is no doubt that this will be time well spent.

After completing this project, I feel confident and comfortable about working with different ethnic and cultural groups. In addition, I feel I am in a position to appreciate the difference(s) between my own cultural beliefs and practices and those of other cultures, better than before. I feel that after completing this project I can work more effectively in cross-cultural situations than before.

Recommendations

Hmong living in United States (and in La Crosse) have undergone not only a change in their dietary patterns but they have also undergone significant changes in their physical activity pattern. It may be helpful to conduct needs and capacities assessment regarding the physical activity pattern of Hmong Americans living in La Crosse as well as, to look into the barriers to physical activity within different age groups in the community and recommend ways to overcome those barriers.

Hmong women (in La Crosse) having young children usually work outside of home, and experience a perceived lack of time to cook food. They opt for “convenient” options like processed food and fast food. It may be helpful to provide knowledge and skills to this group regarding inexpensive, easy to cook, and healthful food options and recipes.

Further, Hmong adolescents in La Crosse appear to eat at fast food restaurants frequently. It may be helpful to conduct a needs and capacities assessment regarding dietary patterns of Hmong adolescents living in La Crosse followed by the development, implementation, and evaluation of health education intervention(s) specifically tailored for this age group, such as interventions using cell phones, internet, and other technology.

Based on insights gathered from key informant interviews conducted by the author along with review of the literature (Yang & Mills, 2008), it appears that overweight body images are preferred in the Hmong culture. It may be interesting to find whether the second and/or third generations of Hmong teens (born in the U.S.) also prefer overweight body images (as their parents and grandparents do). In addition, as of now

no studies have been conducted to see if there are any issues of body dissatisfaction in Hmong adolescents living in La Crosse. This may be a good area for future studies.

Gout appears to be a health concern in the La Crosse Hmong community. Future studies may be conducted to find if gout is more prevalent in the Hmong community living in La Crosse compared to the general population in La Crosse and if it is so, it may be interesting to look into the causal factors accounting for the higher prevalence of gout in Hmong Americans compared with the general population.

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APPENDIX A
CONSENT FORM

CONSENT FORM

Proposed project: Assessing and Addressing the Nutrition-Related Needs of

Hmong Americans Living in La Crosse, Wisconsin

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Purpose and Procedure

- The purpose of this study is to assess the nutrition-related needs of Hmong community living in La Crosse, Wisconsin, and to assist them in informed decision making concerning their dietary choices.
- My participation will involve one (or more) 45to 60 minute face-to-face interview with the principal investigator. The interview will not be recorded.

The

principal investigator will take written notes during the interview.

- My participation is voluntary.
- I can withdraw or refuse to answer any question without consequences at any time.
- I can withdraw from the study at any time for any reason without penalty.
- The results of this study may be published in scientific literature or presented at professional meetings.
- If I so choose, the notes taken during the interview will be kept

anonymous, without any reference to my identity, and my identity will be concealed in any reports written from the interviews.

- No publications or reports from this project will include my identifying information without my signed permission, and after I review the materials.
- Participation in this study will involve no costs or payments to me.
- There are no known risks associated with participation in the study.

Questions regarding study procedures may be directed to the principal investigator,

Shailja Tiku (608-316-2042). Questions regarding the protection of human subjects may be addressed to the UW- La Crosse Institutional Review Board for the Protection of Human Subjects (608-785-8124 or irb@uwlax.edu).

Participant Signature:

Date

APPENDIX B
SUMMARY OF INTERVIEWS

SUMMARY OF INTERVIEWS

1. Summary of face-to-face conversation with Maichor Lee, Community Health Educator working at La Crosse County Health Department, on September 4, 2012, in her office.

Maichor is Hmong and a health educator at La Crosse County.

Author: What do you think are the top three health issue(s) in the La Crosse Hmong community that are of utmost concern?

Maichor: Cancer, I think. Once the doctor diagnoses them with cancer, they do not believe the doctor. They wait because they have no symptoms. Later when they go for treatment, by that time cancer has already spread. One woman I know had stomach cancer and this is not the only case. The doctor said ‘you have cancer, let us do chemotherapy.’ She did not believe the doctor. One year went by; she went again to the doctor. By that time cancer had spread, it was too late. She died at the age of 46 or 47 in June 2012. Back in Laos, cancer is unheard of because there were not many doctors and Hmong people do not use doctors very much. Nutrition is also important. I think we need to educate people about healthy food and healthy eating habits, about calories, and about reading food labels. Younger people do not put much into cooking or do not have time to cook healthy foods. Gout is another growing problem in Hmong community.

Author: How has the diet of Hmong Americans changed with immigration to United States?

Maichor: It has changed a lot. The only thing that has not changed is rice. In Laos, people had rice and vegetables with very little meat or no meat at all. Now they eat lot of meat. Back home, sugar was only a treat. Now we eat lot of sugar. Food back home was lot healthier. People eat more at McDonald’s and Burger king or the fast food

restaurants. We tend to eat more sweets, oils, meats, and deep fried foods. This is due to easy accessibility of these foods. Back in Laos, you had to raise your own cow or pig, buying meat would be very expensive. Same for sugar, only rich people could afford sweets. If you have elders living with you, meals include many vegetables. Younger people have less time, they are busy. They are like 'let's do something quick.' They eat out more. When you get home especially on a Friday night, you are like 'let's go to Olive Garden or somewhere.' I feel that it is definitely the younger generation that needs to change their habit of eating. They need to increase vegetable/fruit intake, lessen meat, sugar, and oil intake. We tend to eat more fattening foods.

2. *Summary of face-to-face conversation with Va Thao, Hmong Elder*

Caregiver Specialist working at La Crosse County Aging Unit, at her office on September 4, 2012.

Author: What do you think are the top three health issues in La Crosse Hmong community that are of utmost concern?

Va: Diabetes- how to prevent it and for those who have it- how to manage it (with diet and exercise), hypertension, cholesterol, heart attacks, and strokes at younger age.

Diabetes and hypertension were not heard of in Laos, chronic diseases were rare in Laos. Many people in the community have gout. Some people have to retire early and are not able to work due to gout. These are mostly men in their 50s and 60s. They need more information and education about gout. There are many myths out there too; they need to be educated about facts.

Author: How has the diet of Hmong Americans changed with immigration to United States?

Va: People in Laos ate light food and lots of vegetables. Here more sweets, more fattening food is consumed. In Laos, people were farmers and did gardening. There is not much work here.

Author: Is it any different for younger versus older people?

Va: Older people eat lot more vegetables, younger people eat more fried food and sweets. However, majority of seniors live with their adult children and eat whatever daughter-in-law cooks for them. I think they need to be educated about what healthy food is and how to cook it. As far as physical activity is concerned, senior and older adults (forty years and above) need to be more educated about it. The younger groups

have opportunities to learn. Seniors (age 65 and above) do not work usually. They stay home with kids and baby-sit them.

Author: How often do you see fast-food restaurants being used by Hmong people in the community? Which group is typically involved, based on your experience?

Va: Fast foods restaurants are being used more often now in the Hmong community because of convenience. It is usually young people and young adults with small children.

Author: Are there any issues of body dissatisfaction (being unhappy with their body) among Hmong adolescents that you are aware of?

Va: I would say that there are still issues with body images due to the media and peer pressure, I think.

Author: What may be the best way (s)/resource(s) to assist people to eat healthfully, in a group setting and at an individual level?

Va: Nutritional education to the entire community is very important. Nutritional education should be directed to both men and women. Men also cook food. In addition, if men are educated they will understand why woman is cooking healthy food.

Everybody should be on same page, maybe in different ways, even the little ones. Best way to teach them is through hands-on activity.

*3. Summary of face-to-face conversation with a popular Hmong leader on
Feb 22, 2013*

This person did not want his/her identity to be revealed, so the author used a pseudonym, Keej.

Author: What do you think are the top three health issues in La Crosse Hmong community that are of utmost concern?

Keej: For the elders, in the Hmong world there is a balance for everything. That balance comes with the understanding that there is a balance to fat, sugar etc. They came from a land where there was a balance. In the United States, things are out of balance. Even things that we eat, there are sugars and fat added to them, without them knowing that those things are added to make it taste good. When they eat it, they still believe that they are eating the item and no other ingredients added to it. Being out of balance causes them to believe that western medicine is unbalance. In United States, Hmong have access to sugar and fats. Therefore, they are like “if I can eat, why not?” Bigger person means healthy and beautiful. A little bit of overweight is fine with them. They do not trust the western medicine. They think they are being experimented on.

Author: How has the diet of Hmong Americans changed with immigration to United States?

Keej: There is a huge change in how we eat. In Laos, we ate meat once in a long time. There was little access to meat. Meat was expensive. In the tropical climate of Laos, vegetables grew all year round. First generation adults grew up with almost no meat. Now they are like “if vegetables are also as expensive as meat, why not eat meat?” During Hmong feasts, meats dominate the table. Non-meat dishes are literally rare.

We had this concept in Laos that if you do not eat meat you are poor. Soda is consumed a lot too. During feasts and gatherings, you have to make a conscious choice not to eat meat and drink soda. I think the elders need more nutritional information than younger people do, since younger people get it in schools and are exposed through work places but elders have no such exposure. Young mothers are either going to school or working full-time while also taking care of their families. They do not have the time to cook, so they make noodles, eggs etc. that is easy to cook. They need knowledge and skills on how to cook cheap and healthy foods. Hmong Americans are not engaged in a lot of physical activity. The barriers being climate, transportation, language, and cultural barriers.

Author: How often do you see fast-food restaurants being used by Hmong people in the community? Which group is typically involved, based on your experience?

Keej: Not usually. Hmong usually cook food at home because of large family sizes and the relative expense of buying food from outside for large families. The folks who eat at fast food restaurants are mostly teens or people in their late 20's. They probably eat at fast foods about 2 to 3 times a week.

Author: Are there any issues of body dissatisfaction (being unhappy with their body) among Hmong adolescents that you are aware of?

Keej: A huge percentage of the Hmong population is obese. It is much easier for the older people to deal with it because they still view slightly overweight people as good looking. However, it is hard for the teens and younger adults because they all want to be a size 0 or 1 and in reality, it is impossible for all of them to be a size 0 or 1. There are folks who are bulimic or anorexia but do not know where to get help.

4. Summary of face-to-face conversation with Maomoua Vue, a Hmong Dietitian at La Crosse County Health Department on March 1, 2013.

Author: How has the diet of Hmong Americans changed with immigration to United States?

Maomoua: Back in Laos, you physically worked hard at the farm. You walked a lot, grew your own vegetables, and raised your own animals. In Laos, weather is conducive to growing vegetables all year round. Even saturated fat intake was balanced out because of physical activity. Eggs were expensive, like a dollar for two eggs. We ate rice. Fruit was a high status food. We ate many vegetables, meat rarely. Meats eaten were chicken and pork mostly. Hmong women in Laos wanted to be chubby. It was a sign of wealth. You have to have more meat on your body. A skinny daughter-in-law was not preferred. A chubbier daughter-in-law was preferred. She was considered strong; she could carry weight and bear children. People would buy supplements to gain weight. Here in United States, first and second generation Hmong have different perceptions of body image compared to teens. Overweight images are preferred over normal by the first and second generation Hmong. Maomoua added, "In Laos one small chicken was eaten by 10-15 people, here 1-2 people eat it. Meat was boiled or cooked over fire. Traditionally we do not add sauce to food. Now they eat deep fried food, sauces, mayonnaise, curry, and packaged seasonings, which are higher in sodium, sugar, and fat. In Laos, there was no concept of snacking. In United States we snack on chips, cookies, donuts, and ice creams.

Author: What do you think are the top three health issues in La Crosse Hmong community that are of utmost concern?

Maomoua: They are concerned about chronic diseases like diabetes and hypertension, not their weight. If you could link chronic diseases with weight, they would be concerned. They know good foods will link to good health, but more education is needed to identify what foods are good. The third generation college students will pose major health problems. There is lack of time, they are too busy in school, they have the knowledge but there is a missing link between knowledge and practice. This generation is overweight, maybe obese. There is lack of physical activity. They go for convenient foods. Regular soda intake may be high in this group. They are influenced by commercials on T.V. They have very little concept of what constitutes a serving size. They are less concerned about getting adequate fruits and vegetables in their diet. Physical activity may not be on their priority list.

Author: How often do you see fast-food restaurants being used by Hmong people in the community? Which group is typically involved, based on your experience?

Maomoua: Younger generation: probably daily, older generation: special occasions.

Author: Are there any issues of body dissatisfaction (being unhappy with their body) among Hmong adolescents that you are aware of?

Maomoua: This issue has not been discussed with Hmong adolescents. This may be an area we need to survey.

Maomoua added, “For Hmong physical activity is a play thing. It is important to incorporate physical activity as part of their routine. It is important they understand the concept of balanced diet, eating adequate amounts not overwhelming. Eat to live and not live to eat. After eating American food, say a hamburger, Hmong do not feel satisfied, they will still eat rice and this means doubling calories. Hmong need education about serving size, portion size, nutrition education as to -why eat healthy, why eat a variety? There is no concept of food labels. They need shopping ideas. Taste is preferred over healthy food. Financial constraint is a barrier too. Brown rice is expensive, fruits and vegetables are expensive.

Author: Who cooks food in the family?

Maomoua: I would say it depends; women aged 20 years all the way to 49 years.

Author: What would be the best way to educate this group?

Maomoua: Group discussions and group presentations- hands-on activities like making food, talking about label reading, food-tasting tips on how to eat healthy, affordable, and tasty food. They have little concept of calories or fat. At WIC, they ask us “why WIC does not give us good cereal, the sugared ones taste better.” Once when I made salad and used olive oil, people were like “it smells bad, next time use other vegetable oils.” The community is less motivated to make changes. Education and work are two major priorities for Hmong families. I used to be chubby. In the eyes of Hmong women, I was good. Now I have lost weight and they are like “you look old, wrinkled. Are you sick?” So losing weight to be healthy is not a concept. I think education can change people’s behavior. We are chasing the American dream and have forgotten to take care of ourselves.

5. *Summary of face-to-face conversation with Ms. Lynette Prieur Lo on March 7, 2013 at her office.*

Ms. Lo works as a Multicultural Academic Advisor at Student Support Services, UW-La Crosse. Ms. Lo is also wife of Dr. Bee Lo who is a popular Hmong doctor practicing in Onalaska.

Author: Can you please talk about the dietary changes in Hmong Americans after moving to United States?

Lynette: Increased meat intake- in Laos more vegetables, rice, and hot sauce was eaten. In U.S. with access to meats, there is increased meat consumption. Young people are eating at McDonald's, having pizzas, fried chicken, and desserts. Healthy homegrown organic food is lost. Even in Laos, there would be a desire to have meat. There is a prestige in Hmong culture around meat. So you do not want to appear poor, you want to have that status. In U.S., there is increased accessibility to meat. Healthier organic food costs more money. Fast food is quick and easy, they are like- how can you afford not to take advantage of a \$2 burger? Hmong people are not even recognizing how valuable their cultural traditions are. In addition, alcohol is a big deal among older men.

Lynette added, "In the past twenty years I have seen changes at food events. There is more chicken, more desserts. Health issues from gout, diabetes, and stroke are showing up."

Author: What do you think are the barriers to healthful eating in the community?

Lynette: Time and convenience. Women are working inside and outside of home. If you are a traditional person, your entire Saturday and Sunday may go by attending funerals, weddings, soul calling events, HMAA service organization etc.

Lynette added, “Hmong people believe that if you are too thin, you are not eating well. For example, if they see a newly married man who is thin, they may say something like ‘your wife is not taking care of you.’ That is the cultural norm.”

Author: What do you think are the top three health issues in La Crosse Hmong community that are of utmost concern?

Lynette: People are hungry to understand why it is happening- diseases like diabetes, gout, and stroke. Why are we going through this? They think that health issues happen when you do not have enough food. They are like ‘now I go to a buffet it’s all good.’ The old way of thinking is if you have a lot, it is good.

Author: What may be the best way (s)/resource(s) to assist people to eat healthfully, in a group setting and at an individual level?

Lynette: There is rejection of cultural value in younger people. Standard American diet is more flashy and acceptable to them. There needs to be a reconnection to those traditional values. Why those traditions are here? They need to know how to balance the demands of western culture. What serving sizes are good? How to cook cheap, healthy food? Maybe you could utilize influential Hmong women. If somebody coming from outside teaches them to cook, I do not know how it would work.

6. Summary of face-to-face conversation with Dr. Bee Lo, ND, on March 22, 2013 at his clinic in Onalaska.

Dr. Lo is an acupuncturist and a naturopathic physician with his private medical practice in the La Crosse area for 15 years and has seen many Hmong patients with cardiovascular disease, diabetes, gout, stroke, and more. Thus, he is well known in the Hmong community and is quite familiar with the common health problems that the Hmong people have.

Dr. Lo: Many of our older Hmong persons still hold the old belief that being skinny is unhealthy and gaining some weight is a healthy sign. This was the way they grew up with and remembered that poor people are skinny and have many malnourished illnesses whereas rich people whom were not skinny do not have these malnourished health issues. They have seen more people dying from malnutrition health issues, thus they think gaining some fat is a healthy thing and being too skinny is not a healthy sign. They have never seen obesity-related diseases and have never heard too much food can cause chronic illness such as white rice is not good for diabetes but only know some foods may cause mild stomachache and food allergies, they don't understand the concept that foods can cause diseases such as high blood pressure and high cholesterol (They do not understand the concept that obesity contributes to a lot of health problems). For them food is a sign of wealth and prosperity that associated with good health. They used to eat about 90% of their diet from vegetables and very little meats only during special occasions. They used to grow their own foods from natural and organic resources and do not know the concept of processed foods with lots of unhealthy chemicals and preservatives that are bad for the body. In the USA now, they have access to lots of

unhealthy food and meats- foods that have chemicals, additives, flavors, hormones, and colors added that could cause health problems, which they are still very unaware of yet. With more access to meats, sugar, fat, salt, and alcohol, now they eat meat for breakfast, lunch, dinner, and drink sodas and alcohol in weekly gatherings. They eat too much meat and sugar because these are prosperity foods to them and they used to see people with wealth ate regularly which they only wished they could eat like that. Their physical activities have changed dramatically too, from walking about 10-20 miles per day to do their daily work to a very sedentary lifestyle in the USA. When they came to U.S. in 1975, they had no diseases such as high blood pressure, high cholesterol, stroke, diabetes, and gout; there was hardly anyone with these diseases or cancer in their circles of community. The Hmong have always lived very closely with one another due to family ties in clans. Thirty years later, these diseases have come up regularly in family conversations. Now almost every family has a member with hypertension and/or diabetes, these diseases are major shockers to the Hmong community and they call them, “the diseases of the new country.” The challenge is to tell them that food can be the underlying cause of the above diseases and health problems.

Author: What are the top three health related concerns of the community?

Dr. Lo: New diseases like diabetes and its complications of dialysis, poor vision, body aches; the drugs one has to take and their side effects; cancer; and stroke are very hard for the Hmong to comprehend. Dr. Lo added, “The Hmong only see the physical symptoms, do not understand internal medicine. They feel there is no need to see the doctor until there are physical symptoms of internal illnesses. The concept of annual checkups is a new idea to them. If you are not sick, why go?”

Dr. Lo: If you tell them to peel off the skin on the chicken away, they will ask ‘why? That is a waste.’ It is hard to convince them. Younger people, forty and below, eat lots of American food. They eat out a lot and they eat many junk foods. They consume lots of soda, hamburgers, cheese, pizza, alcohol, desserts, overeat, and over-snack.

Author: What may be the best way (s)/resource(s) to assist people to eat healthfully, in a group setting and at an individual level?

Dr. Lo: Through HMAA, Hmong radio-lots of them listen to it, community type of set up, workshops with different tables with different food groups - protein on one table, salt on one table, sugar on one table, group discussion. A lot of them don’t read- oral communication is the main communication. If you send an invitation, they do not come. If you call, they come. Educate them about bad and good food. The more they listen and hear to others, the better.

Dr. Lo: They mistrust Western medicine. They feel they are trying to use them as guinea pigs with so many visits and prescribed so many drugs. Hmong diabetic and stroke patients travel to Laos and China to find cures. Many times, they would listen to older women or traditional healers, rather than to an American expert’s opinion. I tell them “you are getting diseases of rich people, go back and eat the old ways - more vegetables, less eating, more exercise, less alcohol, less soda. Stay away from hamburgers, fried chicken, and pizza.” They are getting new diseases in the new world. They did not have these diseases in Laos. My mom lives in Laos, she is sixty, healthy, less stressed, and eats healthier foods. I tell them “don’t go to buffet restaurants. If you go, just eat one plate.” However, they want to get worth for their money by eating more. When you go to Hmong gatherings, they are talking about either life stress in America or diseases. We

have to do something. It is a difficult challenging transformation for the older Hmong people because many of them do not understand the stressful life style in this world.

7. Summary of face-to-face conversation with Maomoua Vue on April 26, 2013 at her office.

Author: Who decides what food is to be purchased by the family?

Maomoua: Females usually do the grocery shopping.

Author: What do you think are the barriers to healthy eating in the family setting as well as outside?

Maomoua: It does not matter what the setting. Whether home or outside, lean meats, fruits, and vegetables are more expensive. They may not be able to eat fruits because of the high cost. There is lack of education in reading food labels. There is lack of education in understanding nutritional value of foods. There is lack of education regarding portion sizes.

Author: What may be the best way (s)/resource(s) to assist people to eat healthfully,

- A. in a group setting and
- B. at an individual level?

Maomoua: For younger generation, one-on-one on-line technology. For older generation, a group setting where people can share information, hear what other people are saying, group discussion. Activity is important- samples, visuals, hands-on activity, something that they see, taste-testing recipes such as making high-fat and low-fat recipes and show them the difference. Let the group share ideas of recipes. Talk from traditional background and tie to diet and sedentary lifestyle.

8. Summary of face-to-face conversation with Maichor Lee on May 31, 2013, at her office.

Author: Who decides what food is to be purchased by the family?

Maichor: The mom decides that.

Author: Who prepares the food in the family?

Maichor: Mostly women do the cooking. The age group of women who usually do the cooking is 30 years to as long as they are mobile.

Author: What do you think are the barriers to healthy eating in the family setting as well as outside the family setting?

Maichor: In the family setting, it is lack of time. When you get home from work, you are hungry and grab anything. You do not have the time to cook food. Outside of family setting, I do not think there are any barriers except like if some of the restaurants may not have healthy food such as the 500 club by Gundersen Health system.

Author: Are there any issues of body dissatisfaction (being unhappy with their body) among Hmong adolescents that you are aware of?

Maichor: I think I have seen many overweight Hmong adolescents in La Crosse but not too many obese. I do not think body dissatisfaction is an issue among them. I have not heard of anybody that has such a concern. I have not come across anybody, no, not in La Crosse.

Author: What may be the best way (s)/resource(s) to assist people to eat healthfully,

A. in a group setting and

B. at an individual level?

Maichor: For Hmong people, visuals with very little words are important. Food models, real food, showing serving sizes would be helpful. For younger people, educational brochure may be important too. For older people (45 years and over), video would be a good choice. Telling them why to eat healthy food and how to cook quick, healthy meals is important.

APPENDIX C

AUTHOR'S OBSERVATION

AUTHOR'S OBSERVATIONS

Event at Hmong Cultural and Community Center in La Crosse, Wisconsin, on Feb 23, 2013.

On Feb 23, 2013, the author attended an event at the Hmong Cultural and Community Center in La Crosse, WI. Dinner was served during this event. Though the event was open to all communities, all but very few people who attended the event were Hmong. The author felt that this event was a good opportunity for her to network with members of La Crosse Hmong community as well as to directly observe the dietary preferences of the community. The author spent approximately two hours at the event, from 5pm to 7pm.

The author observed that every main course dish that was served (except rice), had meat. The noodles had pork and vegetables added. There was deep-fried chicken dish. There was one vegetable dish but that had chicken added to it as well. The author also observed that on every dinner table there were candies and chocolates. Another thing that she observed was the different varieties of dessert that were available at dinner. There were about six to seven different varieties of dessert and there was some fruit (bananas and oranges). However, the author pointed out that it is possible that the food available at the event did not represent typical Hmong American food but was an occasional or party food.

The author observed a group of Hmong adolescents and young adults eating dinner, taking utmost care to respect the privacy of these individuals. These young people appeared to enjoy the deep-fried chicken dish. The vegetable-chicken dish was not eaten by many and some of them who ate it, intentionally left out the vegetable part and ate

only the chicken. This group of persons also appeared to enjoy dessert(s). Most of them ate all six or seven varieties of dessert and many of them had more than one serving. Only a few ate fruit in addition to dessert. The author also observed mothers of young children eating chocolates and different varieties of dessert, while also feeding their children the same.

The author spoke with two community members over dinner. They were a married couple, probably in their late thirties or early forties. The husband was Hmong and the wife was non-Hmong. The couple informed the author that the Hmong American community has undergone “drastic” changes in their dietary patterns after migration to the United States. They said that although people are concerned about the rise of chronic diseases such as diabetes and hypertension in the community, they do not see the connection between diet and these diseases. The man remarked, “at least one member in every family has diabetes. For Hmong if a person is healthy on the outside and they have no symptoms they feel they have no disease. Snacking has become common in United States whereas it was rare in Laos. People are eating lot of meat. That is a big change. In Laos, they only had homegrown organic and fresh vegetables, they ate meat sometimes. Meat was boiled and not fried like here in United States. Young people are eating lot of processed, convenience, and fast food. They do not even have the time to think about food. Children are teaching parents how to eat a pizza. In Laos, we did not eat dessert, now dessert is an important part of Hmong diet. There was lot of physical activity in Laos, here there is none. In addition, Hmong people have a lot of stress adapting to a new culture and because of their culture melting away.

A TRAINING MANUAL

FOR NUTRITION EDUCATION WITH THE HMONG AMERICAN
COMMUNITY IN LA CROSSE, WISCONSIN

Shailja Tiku

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ABSTRACT

TIKU, S. A training manual for nutrition education with the Hmong American community in La Crosse, Wisconsin. MPH in Community Health Education, August 2013, 42 pp. (G. D. Gilmore)

This training manual has been designed to guide and share educational approaches with the organization(s)/person(s) who will develop, implement, and evaluate nutrition education program(s) serving the Hmong community living in La Crosse, Wisconsin. The purpose of the nutrition education program(s) that may be guided by this manual is to facilitate the Hmong community living in La Crosse, to make informed and healthful decisions regarding their dietary choices.

ACKNOWLEDGMENTS

First, I want to thank my project advisor, Dr. Gary Gilmore, for his valuable suggestions and guidance, his encouraging words, his patience, and last but not least for having faith in my abilities. Thank you very much, Dr. Gilmore! Your support will never be forgotten. I would also like to thank these people for their helpful and valuable insights: Dr. Bee Lo, Ms. Lynette Prieur Lo, Ms. Maichor Lee, Ms. Maomoua Vue, Ms. Va Thao, and Ms. Xong Xiong.

I would love to thank my mom and dad, Nancy and Bhushan, for their unconditional love and support, always and at every step of my way. I owe thanks to my husband, Amit, for supporting my efforts and to my darling son, Arin, whose one smile would melt away all my cares. I also want to thank Marvin Labre for helping me with graphic designing for this manual. Finally, I want to thank my friends and family who had faith in me and encouraged me, all the way.

THANK YOU ALL -- I could not have done it without you!

***A leader is best known
when people barely know he
exists,
when his work is done,
his aim fulfilled,
they will say:
“we did it ourselves.”***

Tao Te Ching, 6th century BC by Lao Tzu

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INTRODUCTION

Hmong population in United States is 260,076. The three states with largest Hmong population in the U.S. are California (91, 224), Minnesota (66,181) and Wisconsin (49, 240). La Crosse, WI MN Metro Area (which includes La Crosse County and Houston County [Minnesota]) has a Hmong population of 3,182. Hmong population in the City of La Crosse is 1,563 (Hmong American Partnership, 2009).


Hmong children, teens, and adults living in the U.S. are at an increased risk for obesity and obesity-related chronic diseases such as diabetes, hypertension, stroke, and cancer. This may be attributed in part, to the changes in their dietary pattern after moving to United States (Yang & Mills, 2008). These changes in the dietary pattern (in an alphabetical manner), based on the key informant interviews and a review of the relevant literature, include:

- **Increased consumption of fast food/processed food (usually seen among adolescents and young adults).**
- **Increased consumption of meat.**
- **Increase in intake of foods high in sugar.**
- **Decreased consumption of vegetables.**
- **Preference for deep-fried food.**
- **Snacking between meals.**
- **Soda consumption.**



The purpose of this training manual is to guide and share educational approaches with the organization(s)/person(s) who will develop, implement, and evaluate nutrition education program(s) that are designed to facilitate the Hmong community living in La Crosse, WI, to make informed and healthful dietary choices. This manual is however, not a blueprint to be followed exactly as written. Rather, it is a guide to help educators and audience plan and develop learning strategies that are relevant and appropriate to the audience. Educators may review the the workshop(s) and adapt them as required.

The author determined the vehicle for conveyance of information to the intended audience based on insights gathered from key informants in the community as well as review of relevant literature. The key informants included popular Hmong community leaders, healthcare professionals, and agency personnel who worked closely with the community. The key informants were so chosen because the author felt that their perceptions reflected the perceptions related to dietary needs and capacities of the broader




Hmong American community living in La Crosse. Group discussions, hands-on activities, and visuals were recurring themes that were identified in key informant interviews as the “best means” to convey information to our Hmong audience.

Two overarching goals (as identified by the author based on dietary needs and capacities assessment from key informant interviews as well as scientific studies) for nutrition education programs that may be guided by this manual are:

It is important to provide minds-on, as well as hands-on learning experience to the audience.

- 1. Increase awareness of the importance of fruits and vegetables in one’s diet and enhance motivation to consume them on a regular basis.**
- 2. Increase awareness about the serving size of meat(s) and frequency of consumption.**

“In Laos, we (Hmong) ate meat once in a long time. There was little access to meat. Meat was expensive. In the tropical climate of Laos, vegetables grew all year round. First generation adults grew up with almost no meat. Now they are like, ‘if vegetables are also as expensive as meat, why not eat meat?’ During Hmong feasts, meats dominate the table. Non-meat dishes are literally rare.”
– A key informant, Feb. 22, 2013.



Getting adequate amounts of fruits and vegetables in diet can help prevent chronic diseases such as heart disease, stroke, high blood pressure, and some types of cancer. In addition, fruits and vegetables are a source of essential vitamins, minerals, fiber, and other substances that are vital for good health.

Also, most fruits and vegetables are low in fat and calories and are filling (USDA, n.d).

According to Harvard School of Public Health (2013), the latest dietary guidelines recommend eating five to thirteen servings of fruits and vegetables a day (2½ to 6½ cups per day); depending on a person's caloric

intake. The American Cancer Society (2012) recommends eating at least 2½ cups of fruits and vegetables each day.

Women are usually the primary cooks in Hmong families, and they are the ones who mostly decide what food is to be purchased for the family. In addition, the author strongly feels that empowering women means empowering the entire family. The intended audience is Hmong women, 30 years of age and above, living in La Crosse, WI. Based on insights from key informant interviews, the author concluded that the age group of women who usually do the cooking is "30 years to as long as they are mobile."

SUGGESTIONS FOR THE GROUP LEADER

- Provide a welcoming start by greeting the group. Introduce yourself and clarify your competence and experience, so the group has confidence and trust in you.
- If appropriate (depending on the setting and size of the group), have the group members introduce themselves as well.
- Tell the group what they expect to gain from the workshop. Also, provide a succinct overview of the activities that you will be doing with your group.
- Assure your group that their opinions are extremely valuable and that their participation is highly encouraged.
- State that the key ground rules are to respect each other and the leader and to listen to each other. This will foster cooperative learning rather than competitive learning in the group.

- Listen to the group members carefully. Be warm and nonjudgmental. For example, instead of commenting that what a group member said was “not accurate or incorrect”, say something like “thank you for bringing up this point because many others also think the same way. However, studies have shown.....” or “I am glad it worked for you. However, the latest information on the topic is.....”
- Provide constructive feedback to your audience.
- Build on the individual or group’s previous knowledge/ experience.
- Try to avoid use of technical terms, yet make sure that you do not talk down to your group.
- Ask open-ended questions to allow ideas to flow in freely.
- Be respectful of each individual.
- Have faith in your group. They will not disappoint you!
- Finally yet importantly, make learning fun!



ABOUT THE GROUP LEADER(S) AND VENUE

A Hmong person who is trusted and highly regarded in La Crosse Hmong community and one who is fluent in both Hmong (language) and English may be the best choice for a group leader. The author feels that having a person from their own community will increase the comfort level of the group and attract more audience.

Hmong Cultural and Community Center in La Crosse

(situated at 1815 Ward Ave, La Crosse, WI 54601) may be a good place for conducting the workshop(s) since this place is familiar to most Hmong in La Crosse and the participants may feel a sense of familiarity and increased comfort level here.

WORKSHOP I

It is recommended that the participants attend this workshop prior to attending the workshop II and/or workshop III.

Rationale and Need for the Workshop

In any learning process, participants bring with them a fear of not being able to do what is suggested. It is important to help reduce this fear and create a learning environment where each group member feels confident and comfortable.

Estimated Duration 20 minutes

What is the Goal of the Workshop?

To help reduce participants' fear of not being able to do what is suggested in the workshops II and/or III.

Who Should Attend the Workshop?

Women who intend to attend Workshop II and /or Workshop III.

What is the Learning Objective?

At the end of the session, participants will have reduced fear of not being able to do what is suggested in the workshops II and/or III.

Overview of the Workshop

- Introduction
- Review why nutrition is vital for good health
- Preparation for change and feedback

Procedure


1. Introduction (3 minutes)

Arrange seating in a circle or half circle. It feels more intimate! Greet your audience with warmth and respect! Introduce yourself.

2. Review why nutrition is vital for good health (5 minutes)

Review these ten leading causes of death in United States as documented by the Centers for Disease Control and Prevention [CDC], 2013. (See: Resources for Workshop I, p.16)

- Heart disease
- Cancer
- Chronic lower respiratory diseases
- Stroke
- Accidents
- Alzheimer's disease
- Diabetes
- Nephritis, Nephrotic syndrome, and Nephrosis
- Influenza and Pneumonia
- Intentional self-harm

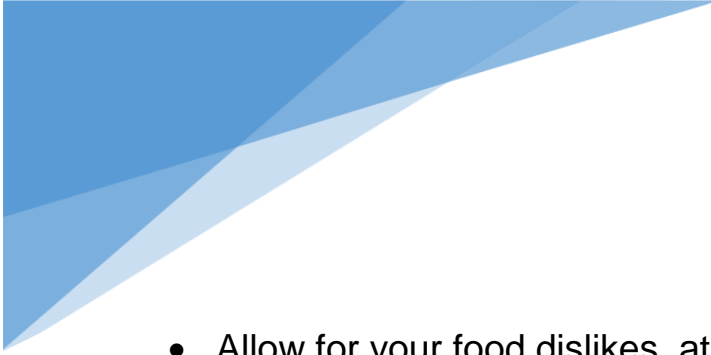


Inform your audience that four out of these ten leading causes of death are directly related to nutrition. (These four causes being: Heart disease, Cancer, Stroke, and Diabetes). Nutrition and health/longevity are indeed intricately related!

3. Preparation for change and feedback (10 minutes)

Tell your group that you will provide them the knowledge and skills required to make informed and healthful dietary choices. However, individuals are responsible for using this help only if they are willing to do so. Adult learners are the decision makers in their lives. Assure your group that change is always possible, if and when they choose to change. Give some suggestions to the group that may assist them in bringing a change in their dietary habits such as:

- Set goals that are attainable and realistic. For example, a person who eats half cup of fruits and vegetables a day, can start by adding one cup of fruits and vegetables to his/her daily intake and could work up to 2.5 cups (or more) over time.
- Take one-step at a time. Start by making small changes.

- 
- Allow for your food dislikes, at least initially!
 - Choose foods that are affordable and easily accessible.
 - Seek support from your friends and family.
 - Be flexible and ready to compromise in some situations such as at a party/get together. In such situations, you may also balance what you eat in your next meal.
 - Assure your group that you are there to assist them in finding more effective ways to attain their goals, if they are unable to do so.

Tell your group something like,

“I/we understand that life can be difficult at times. If, for whatever reason you are not in a position to take action now, do it in future when you are in a better position. Remember, change is always possible.”

Finally, open it up for questions and comments from the group.

Request the participants to give their feedback, written or oral, depending on what an individual prefers. (See: Evaluation for Workshop I, p.17)



RESOURCES FOR WORKSHOP I

Centers for Disease Control and Prevention. (2013). Deaths and Mortality. Retrieved from <http://www.cdc.gov/nchs/fastats/deaths.htm>

EVALUATION FOR WORKSHOP I

Please answer the following questions regarding the workshop that you attended:

For question 1, please use the scale below:

5 = Very high 4 = High 3 = Moderate 2 = Low 1 = Very low

NA = Not Applicable

1. To what degree did you find this workshop helpful in reducing fear about not being able to do what will be suggested in the workshops II and/or III? _____
2. Will you recommend this workshop to others before attending the workshops II and/or III? _____ Yes _____ No

Comments:

3. What recommendations do you have to improve this workshop?

WORKSHOP II

Why Fruits & Vegetables Matter?



Rationale and Need for the Workshop

An assessment of dietary patterns and related needs and capacities of Hmong Americans living in La Crosse (based on key informant interviews and supported by scientific studies) demonstrates that there has been a marked reduction in the consumption of vegetables in the community, after moving to United States.

- **Expected Duration** 90-120 minutes
- **What is the Goal of the Workshop?**

To increase awareness of the importance of fruits and vegetables in one's diet and enhance motivation to consume them on a regular basis.

- **Who is the Intended Audience?**

Hmong women 30 years of age and above, living in La Crosse.

Since this workshop involves a snack-preparation activity, an influential Hmong woman in the community may be the best choice as the group leader.

Overview of the Workshop

- Introduction and icebreaker
- Discussion
- Review of chronic diseases in Laotian Hmong vs. U.S. Hmong
- Review the benefits of eating at least five servings of fruits and vegetables each day and demonstration of serving size
- Snack preparing and taste-testing
- Brainstorming
- Sum-up discussion

This workshop intends to engage head, heart, and hands of the participants through various activities.

What is the Learning Objective?

At the end of session, participants (audience) will demonstrate skills regarding balanced fruit and vegetable selection each day.



Materials Required

- Chalkboard and chalk.
- Real food - fruits and vegetables, bowls, cups OR food models to demonstrate serving sizes
- Hand soap to wash hands before/after snack preparation; utensils and recipe ingredients for snack preparation; plates, forks, napkins to eat the prepared snack(s).
- “EAT 5-A-DAY” magnetic logos to take home. You can get these from ‘Serigraphic Screen Print, La Crosse, Wisconsin’ located at 2505 Larson Street, La Crosse, WI 54601 : Phone number: 608-781-5240, email: www.Serigraphic-Screen.com. OR you may order online at <http://www.fridgedoor.com/>
- Paper and pencils



Procedure

1. **Introduction and icebreaker** (10 minutes)

Arrange seating in a circle or half circle, it feels more intimate!

Greet your audience pleasantly and respectfully! Introduce yourself.

Introduce the topic. Tell the group that positive participation is highly encouraged! Also, let the audience know approximately how long the workshop will last. If appropriate (depending on the setting and size of the group), have the group members introduce themselves as well.

Icebreaker activity: Have each group member share her best moments and/or not so good moments from the previous week. The icebreaker activity will help the group open up to each other as well as to the group leader. However, if a group member(s) does not want to participate in the icebreaker activity, please honor her wish.

2. **Discussion** (8 minutes)

Ask the group to share their reasons for attending the workshop and what they are hoping to take away from it. List the reasons on a chalkboard (in English and Hmong) for the group to see. Assure participants that the workshop will be of immediate use to them!

3. **Review of chronic diseases in Laotian Hmong vs. U.S.**

Hmong (15-20 minutes)

Begin by reviewing how chronic diseases such as diabetes, hypertension, stroke, and cancer were rare in Laos and now have


become common in the U.S. Ask your group why they think these diseases are “showing up” in Hmong Americans, after moving to United States. Correct any misconceptions artfully and respectfully.

You may also ask the group members if they know someone who has or had diabetes, hypertension, stroke, or cancer and if they would so like, share the story about it with the group. Review information regarding the association of chronic diseases with dietary changes



Be focused:

Less can be more if it is well focused



after moving to United States. (See: Resources for Workshop II, p. 28). Open it to questions and comments from the audience. Correct any misconceptions respectfully.

4. Review benefits of eating at least five servings of fruits and vegetables each day and demonstration of serving size (15 - 20 minutes)

Review benefits of eating a diet rich in fruits and vegetables. Tell the group that it is also important to know how much we are eating when we have a portion of fruits and vegetables. (For example, 1/2 a cup is a typical serving size for fruits and vegetables. Raw leafy vegetables [such as salad greens] take a bit more – 1 cup. Dried fruit takes a bit less- 1/4 cup). (See: Resources for Workshop II)

Choose any of the two activities:

Activity 1: Divide the group into teams. Play a game to guess the serving size. Take prepared bowls filled with a variety of fruits and vegetables that have been previously measured for their portion size. Show each group the first bowl, for example filled with strawberries, and ask each group to guess how many servings are in the bowl. If

the bowl was filled with one cup of sliced strawberries, the group that guesses two servings will get a point. Continue the game with different fruits and vegetables and portion sizes and explain the serving sizes of fruits & vegetables as you go.

OR

Activity 2: Use food models to show serving sizes of fruits and vegetables.


Open it to questions and comments from the audience. Correct misconceptions respectfully and artfully.

5. **Snack preparing and taste-testing** (20 minutes)

Prepare and eat a snack. **Green Papaya Salad**, which is a popular Hmong dish, may be prepared. Other snack suggestions are: fruit salad, or veggies and dips!

Set up three to four snack-preparation stations (depending on the size of the group) with ingredients already measured out at each

For recipe of Green Papaya Salad go to:
<http://hmongcookbook.com/main/?p=127>



station so that group members may also participate in snack preparation. Enjoy the snack with your group!

Request the audience to share some fruit and vegetable recipes with other group members (if they would so like). Keep in mind that many women may have cooking experiences that can greatly enrich the session.

6. Brainstorming (15 minutes)

Ask the group members to share their perceived barriers to eating at least five servings of fruits and vegetables a day. Make a note of the perceived barriers. Now ask your group to suggest ways to overcome these barriers. Encourage all the group members to participate. Tell your group that ALL ideas count.

You may want to offer some suggestions as well! (See: Resources for Workshop II)

Discuss the practicality of the proposed ideas with your group. As a group, decide on the one or two best options, if the group is interested in taking action.

7. **Sum-up discussion and feedback** (15 minutes)


Get feedback from your group, written or verbal feedback depending on what an individual prefers. (See: Evaluation for Workshop II, p. 30)

Give each group member a “EAT 5-A-DAY” magnetic logo with pictures of fruits and vegetables that they can stick on their refrigerator as a reminder. Finally, thank the group for their participation.

Also, provide the group your contact information for any questions or other assistance that they may require in future.

RESOURCES FOR WORKSHOP II

- American Heart Association. (2013). What is a Serving? Retrieved from http://www.heart.org/HEARTORG/Caregiver/Replenish/WhatisaServing/What-is-a-Serving_UCM_301838_Article.jsp
- Centers for Disease Control and Prevention. (2013). Nutrition for everyone : Fruits and vegetables. Retrieved from <http://www.cdc.gov/nutrition/everyone/fruitsvegetables/>
- Centers for Disease Control and Prevention. (2012). Nutrition for everyone: What counts as a cup? Retrieved from <http://www.cdc.gov/nutrition/everyone/fruitsvegetables/cup.html>
- Culhane-Pera, K., Her, C., & Her, B. (2007). "We are out of balance here": a Hmong cultural model of diabetes. *Journal Of Immigrant & Minority Health*, 9(3), 179-190
- Franzen, L., & Smith, C. (2009). Acculturation and environmental change impacts dietary habits among adult Hmong. *Appetite*, 52(1), 173-183.
doi:<http://dx.doi.org/10.1016/j.appet.2008.09.012>
- Harvard school of Public Health. (2013). Vegetables and fruits: Get plenty every day. Retrieved from <http://www.hsph.harvard.edu/nutritionsource/vegetables- full-story/>
- Her, C., & Mundt, M. (2005). Risk prevalence for type 2 diabetes mellitus in adult Hmong in Wisconsin: a pilot study. *WMJ-MADISON-*, 104(5), 70
- NC SNAC. (2003). 5 A Day Serving Sizes and Recipe Criteria. Retrieved from http://www.fns.usda.gov/tn/healthy/5_Day/5_day_serving_sizes.pdf



Overcoming barriers to eating vegetables and fruit. Retrieved from www.peelregion.ca/health/shp/nutrition-month/.../barriers-eat-v-f.pdf

Texas Association of Counties.(2013). Retrieved from <http://www.county.org/pool-and-risk-services/group-health/healthy-county-program/5-A-Day-Challenge/Pages/Serving-Size.aspx>

Yang, R., & Mills, P. (2008). Dietary and lifestyle practices of Hmong in California. *Journal Of Health Care For The Poor & Underserved*, 19(4), 1258-1269

Young, L., 2013. Benefits of fruits and vegetables. Retrieved from http://www.huffingtonpost.com/dr-lisa-young/healthy-food_b_16

EVALUATION FOR WORKSHOP II

Please answer the following questions regarding the nutrition education workshop that you attended:

For questions 1 through 4, please use the scale below:

5 = Very high 4 = High 3 = Moderate 2 = Low 1 = Very low

NA = Not Applicable

1. To what degree did you find the workshop practical? ___
2. After attending the workshop, to what degree do you intend to eat at least five servings of fruits and vegetables each day? ___
3. What did you like most about the workshop?
4. What did you like least about the workshop?
5. What recommendations do you have to improve this workshop?

Please tell us about yourself:

Age:

Where do you live? (City, town)

Date:

WORKSHOP III

Serving Size of Meat-How Much Should I Eat?



Rationale and Need for the Workshop

An assessment of dietary patterns and related needs and capacities of Hmong Americans living in La Crosse (based on key informant interviews and supported by scientific studies) shows that there has been a significant increase in the consumption of meat(s) by the Hmong community after moving to United States.

- **Estimated Duration** 90 minutes
- **What is the Goal of the Workshop?**

Increase awareness about the serving size of meat(s) and frequency of consumption.

- **Who is the Intended Audience?**

Hmong women 30 years of age and above, living in La Crosse.

What is the Learning Objective?

At the end of the workshop, participants will be able to demonstrate how to appropriately detect serving size of meat(s) as well as the frequency of consumption.

Overview of the Workshop

- Introduction and icebreaker
- Discussion
- Review of serving sizes
- Activities
- Feedback and wrap-up

Through the various activities listed, this workshop intends to engage head, heart, and hands of the participants.

Materials Required

- Chalkboard and chalk
- Food models
- Familiar items (a deck of cards, a bar of soap, a checkbook)- to demonstrate serving sizes
- Clear tubing (available in a hardware store), solid cooking fat, red food coloring, funnel, large bowl and water OR Vegetable shortening, spoon, and plate (depending on the activity you choose to do with your group)
- Paper and pencils



Procedure

1. *Introduction and icebreaker* (15 minutes)

Arrange seating in a circle or half circle, it feels more intimate! Greet your group with warmth and respect! Introduce yourself. Introduce the topic. Tell the group that positive participation is highly encouraged! Also, let the audience know approximately how long the workshop will last.

Icebreaker activity: (You may also choose the icebreaker activity from Workshop II). Ask each member in the group to share:

- their names,
- two to three things about themselves, and
- reasons as to why they are attending this workshop.

Icebreakers help create a good atmosphere for learning and participation. If however, a group member(s) is not interested in answering any one or all of the questions, please honor her wish.

List the reasons group members give for attending the workshop on a chalkboard for everyone to see. Assure your group that the workshop will be of immediate use to them!

2. **Discussion** (15 minutes)

Ask the group:

- How many of you eat meat almost every day? (By show of hands)
- What type of meat do you prefer to eat- beef, chicken, pork, lamb, turkey? (By show of hands)

Carefully listen to the responses. (You may make a note)

3. **Review of serving sizes** (20 minutes)

Review: what constitutes red meat, what are lean meats, the recommended serving size of meat per person such as:

- 3 oz. meat (recommended serving size per meal) = size of a deck of cards or bar of soap or the size of palm of one's hand.



Be focused:
Less can be more if it is well focused.

- Red meat (beef, pork, lamb) - no more than two 3-ounce servings a week.
- 3 oz. fish (recommended serving size per meal) = size of a checkbook. (See: Resources for Workshop III, p. 39)

Demonstrate the serving sizes visually to the audience by showing food models and familiar items (deck of cards, bar of soap, size of palm, checkbook). Also, let the group members touch and see these items carefully!

Open it up for questions/comments from your group. Correct misconceptions respectfully and artfully.

4. **Activity** (20 minutes)


Review: saturated fat in red meat. Encourage the group members to avoid red meat or eat red meat occasionally (if they do eat at all)- no more than two 3-ounce servings a week. (See: Resources for Workshop III)

Choose any one of the two activities.

Activity 1: During this activity, the group members will visualize how blood vessels can be clogged by eating a diet high in red meat. Use a clear tubing (to serve as a blood vessel). Put some solid cooking fat in the tubing (to serve as saturated fat) to block it partially. Dissolve red food color in water (to serve as blood) and pour it through a funnel into the tube with a bowl ready to catch the colored water. Demonstrate the above activity first without any cooking fat in the tubing (to serve as healthy blood vessel), second time as given above (to serve as partially blocked blood vessel), and third time with the cooking fat completely blocking the tubing (to serve as completely blocked blood vessel).

OR

Activity 2: Show food models of cooked beef or pork to your group. You should know the amount of grams of saturated fat in real beef/pork of similar portion size. Convert those grams of saturated fat to teaspoons, and provide a visual representation when the total fat (in the form of vegetable shortening) teaspoons are spooned out onto plates.



Open it up for the group to ask questions. Correct misconceptions respectfully.

5. **Feedback and wrap-up!** (10 minutes)

Get feedback from your group, written or verbal feedback depending on what an individual prefers. (See: Evaluation for Workshop III, p. 40)

Finally, thank the group for their participation! Also, provide the group your contact information for any questions or other assistance that they may require in future.

Optional (but highly recommended): It may be helpful to provide handouts to your group regarding information about the serving sizes of meat(s). Suggest your group members to keep the handout at a place where they can see it every day, such as sticking it on the refrigerator. Make sure that you as the group leader, discuss the handout with your group and not simply give it away to them.

RESOURCES FOR WORKSHOP III

American Cancer Society. (2013). Controlling portion sizes. Retrieved from
<http://www.cancer.org/healthy/eathealthygetactive/takecontrolofyourweight/controlling-portion-sizes>

American Heart Association. (2013). Eat more chicken, fish, and Beans than red meat. Retrieved from
http://www.heart.org/HEARTORG/GettingHealthy/WeightManagement/LosingWeight/Eat-More-Chicken-Fish-and-Beans-than-Red-Meat_UCM_320278_Article.jsp

Breastcancer.org. (2013). Portion size. 2013. Retrieved from
http://www.breastcancer.org/tips/nutrition/healthy_eat/portions

Harvard School of Public Health, 2013. Protein. Retrieved from
<http://www.hsph.harvard.edu/nutritionsource/protein/>

EVALUATION FOR WORKSHOP III

Please answer the following questions regarding the nutrition education workshop that you attended:

For questions 1 through 4, please use the scale below:

5 = Very high 4 = High 3 = Moderate 2 = Low 1 = Very low

NA = Not Applicable

1. To what degree did you find the workshop practical? ___
2. After attending the workshop, to what degree do you intend to eat the recommended serving size of meat(s) during meals? ___
3. What did you like most about the workshop?
4. What did you like least about the workshop?
5. What recommendations do you have to improve this workshop?

Please tell us about yourself

Age:

Where do you live? (City, town)

Date:

EVALUATION FOR GROUP LEADER(S)

Please take a moment to take this survey.

For questions 1 and 2, please use the scale below:

5 = Very high 4 = High 3 = Moderate 2 = Low 1 = Very low

NA = Not Applicable

1. To what degree did you find this training manual helpful? ___

Comments:

2. To what degree did you find the content of this training manual relevant and appropriate with respect to the intended audience?

Comments:

3. Your suggestions/recommendations to improve this manual

Please return this feedback form to:

Shailja Tiku

135 Marcou road, apt.115, Onalaska ,Wisconsin, 54650

Email: shailjatiku16@yahoo.com

ADDITIONAL RESOURCES

- Clarkin, P. F. (2005). Hmong Resettlement in French Guiana. *Hmong Studies Journal*, 6, 1-27
- Contento, I. R. (2007). *Nutrition education: Linking research, theory, and practice*. Sudbury, MA : Jones and Bartlett Publishers.
- Gilmore, G. (2012). *Needs and capacity assessment strategies for health education and Health Promotion (4th ed.)*. Burlington, MA: Jones and Bartlett Learning.
- Yang, K. (2001). Research Note: The Hmong in America: Twenty-Five Years after the US Secret War in Laos. *Journal of Asian American Studies*, 4(2), 165-174.