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Community Based Efforts that Promote Healthier Diets for Low-Income Minnesotans

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Community Based Efforts that Promote Healthier Diets for Low-Income Minnesotans

GRSW Clinical Research Paper
Submitted by Stephanie K. Larson
May 2012

The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present their findings. This project is neither a Master's thesis nor a dissertation.

School of Social Work
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St. Paul, Minnesota

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David Roseborough, PhD (Chair)
Larry Hosch, MSW
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**COLLEGE OF ST. CATHERINE AND
THE UNIVERSITY OF ST. THOMAS
MSW PROGRAM**

**Community Based Efforts that Promote Healthier Diets for Low-Income
Minnesotans**

by Stephanie Karin Larson

Research Committee: Chair: David Roseborough, Ph.D., LICSW, (Chair)
 Members: Tracy Hinz, MSW, LICSW
 Larry Hosch, MSW

Abstract

The purpose of this study was to examine the challenges and successes community-based Minnesotan Programs have had in promoting low-income adults to eat healthier to avoid obesity and complications from obesity. This research highlighted factors associated with community based programs from the perspective of the professionals working with these programs. This study outlined the Centers for Disease Control and Prevention (CDC) definition of healthy diet and weight along with the current measurement of Body Mass Index (BMI). The conceptual framework utilizing the concepts developed by National Geographic researcher Dan Buettner through his book *The Blue Zones* showing it is possible to live a long healthy lifestyle. Using a qualitative research design, the researcher interviewed twelve professionals from various backgrounds invested in working with community-based programs that work with people living with limited incomes. Semi-structured interviews with open ended questions were chosen to better understand the successes and challenges the professionals face in their work and suggestions for future study. Six major themes emerged from the interviews:

- Generational Lack of Knowledge of How to Cook
- Competing Demands
- Sedentary & Convenience Lifestyles
- Lack of Available and Safe Streets and Neighborhoods to Move Freely
- Successes
- Challenges

This research suggests the need for individualized one-on-one education when working with populations of low income although current research states it does not work. This research suggests that offering people healthy options and changing their environments may work but telling people what to do does not. This study offers implications for social workers working with people with low income, as well as suggestions for future research.

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Introduction

Each holiday season and the beginning of a new year the weight loss frenzy begins anew as the overeating of the holidays subsides and millions of Americans resolve that this will be the year that the extra pounds will come off for good. Dieting has become one of the great American pastimes, and no matter what one's size, no one is immune to the messages that we are too fat or we better start worrying about being fat. People buy books with the latest diet fads, talk about dieting struggles, join gyms and enter our work weight loss contests. People may celebrate losing pounds, and commiserate about their eventual return. As people stand in line at the grocery store, they may scan the plethora of magazines telling them which celebrity is on the fat/thin rollercoaster this week and others promise that people can lose weight and keep it off, can have firm abs and thin thighs all before the snow melts in the spring.

The cultural ideal that anyone can successfully lose weight and keep it off with enough hard work and commitment is embedded in the American Dream. Yet, despite this cultural belief and the short term weight loss that occurs with just about any type of diet or weight reduction fad, the most frequently cited statistic is that 95 percent of dieters will regain lost pounds (Matz, 2011). A few who lose the weight will maintain weight loss and can claim success while the vast majority will regain the weight. "Although the blame, and shame, for the failure is usually placed at the dieter's doorstep, strong psychological, physiological, social and even economical forces make dieting a losing battle" (Matz, 2011).

Prentice & Jebb (2001) state that despite recent and growing media attention surrounding obesity in the United States, the obesity epidemic remains a contested

scientific and social fact. Body mass index (BMI) is the cornerstone of the current classification system for obesity and its advantages are shared across disciplines ranging from international studies to individual patient assessment. However, like all measurements, it is only a measure of body fat and does not the entire picture or measurement. Prentice & Jebb (2001) define obesity as an excess accumulation of body fat, and it is the amount of this excess fat that correlates with poor-health. Research suggests that measuring BMI exclusively can provide misleading information when applied to all situations with all people without taking into consideration factors including age; racial differences; athletes; access to grocery stores, weight loss with and without exercise; physical training; and special clinical circumstances (Prentice & Jebb, 2001).

The United States Center for Disease Control and Prevention (CDC) identifies waist circumference as another way to assess weight. Excessive abdominal fat is serious because it places one at greater risk for developing obesity-related conditions, such as Type 2 Diabetes, high blood cholesterol, high triglycerides, high blood pressure, and coronary artery disease (The Centers for Disease Control and Prevention, 2011A). The CDC (2011A) describes healthy eating involving many choices including a balanced diet or eating plan. A healthy eating plan includes an emphasis on fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products. The plan includes lean meats, poultry, fish, beans, eggs, and nuts which are low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugars and stays within daily calorie needs (The Centers for Disease Control and Prevention, 2011A). The CDC (2011A) suggests finding a balance of eating favorite foods that are high in calories, fat or added sugar only once in a while and balancing them with healthier foods and more physical activity at most of the time.

Grant & Boersma (2005) research discusses the possible causes for obesity as “genetics, environmental and familial factors, the effects of drugs, metabolic diseases, psychological factors such as stress, link to socio-economic status and even a personal moral issue” (p. 215). Additional factors of current times including environmental and societal changes leading to decreased physical activity, a rise in sedentary behavior and consumption of high fat and high energy foods (Grant & Boersma, 2005). Restaurants have also changed vastly since the 1950’s. About half are now fast food restaurants, a category that has developed quickly in recent decades (Lambert, 2011). The growth of fast food has increased the average consumers portion size and number of meals eaten out, and these circumstances can influence how restaurants persuade consumers to buy their products. Urban sprawl have made commute times longer and squeezed out time for breakfast at home so people leave for work at 6AM and eat on the road (Lambert, 2011). Willoughby (executive editor of Gourmet Magazine) states that it is “incredibly economical to prepare your own meals”. He goes on to say “You can spend \$1.50 to make your own sandwich, or buy one for \$10.00 (Lambert, 2011). In contrast, Willoughby states that on the fast food end with its large mass production mean that “you cannot cook more cheaply than a McDonald’s” (Lambert, 2011).

What about low income adults in Minnesota? What obstacles do they face and what can social workers and community-based programs do to support low income adults in having healthier diets and healthier weights? Minnesota has a high number of "food deserts" defined as an area or neighborhood in which healthy food sources are few and far between (Knuth, 2010). In other words, even if one wants to buy and eat fresh fruits and vegetables, they are not easily found in these communities. Knuth (2010) discusses the

physical lack of available healthy food is exacerbated in many cases by low “levels of financial access to healthy food, poor education about nutrition, and a lack of viable transportation options” (NP).

Researchers now blame some of Minnesota’s challenge with obesity on food deserts. Since 1995, Minnesota's rate of obesity has increased from 15 percent to 25 percent, bringing the total to roughly 1.3 million Minnesotans (Knuth, 2010). From a White House campaign to end childhood obesity to small-scale community programs, groups are working hard to reduce the number of food deserts across Minnesota. When it comes to improving food access, big cities share a common link with rural towns. In urban neighborhoods, zoning laws and real estate costs contribute to a lack of supermarkets. In rural communities, supermarket chains often find low-population areas unattractive. Both situations can lead to food deserts. However, suburban areas often historically enjoyed the benefits of low-cost real estate and growing populations; supermarkets are abundant and food is often more affordable.

Local Minnesota efforts have been aimed at expanding not only geographical access to healthy food, but financial access as well. Local Minneapolis communities are fighting to eliminate food deserts by increasing the number of urban gardens, farmers markets, and grocery stores, and are also investing in programs that incentivize buying healthier foods, such as fresh produce. Farmers markets in Minnesota have become more popular in recent years, and existing public programs are adapting to make these markets more accessible to lower-income buyers. SNAP, the United States Department of Agriculture (USDA) Supplemental Nutrition Assistance Program (commonly known as the food stamp program) is now working with farmers markets to allow for EBT (Electronic

Benefit Transfer) as payment (Knuth, 2010). In the Twin Cities, the Minneapolis Farmers Market, the Midtown Farmers Market, and the Northeast Minneapolis Farmers Market already accept EBT as a form of payment. Minneapolis has also initiated the Healthy Corner Store Program, a small-scale effort to put more fruits and vegetables on the shelves of neighborhood corner markets (Knuth, 2010).

The topic of healthy eating and obesity when working with low income people is complicated. This study is interested in the challenges and successes community-based Minnesota programs have had in promoting low income adults eat healthier to avoid obesity and complications from obesity related disorders. Using a qualitative, exploratory design, this study explored how community-based programs promote low income adults in Minnesota to have healthier diets, and therefore healthier weights, outlining emerging themes to be further explored in future research.

Literature Review

Introduction

According to reports from the United States Centers for Disease Control and Prevention (CDC), national obesity rates continue to rise with two-thirds of Americans living within obesity guidelines (Moore, 2011). In 2010, no state in the United States had a prevalence of obesity less than 20%, with thirty-six states having a prevalence of 25% or more, 12 of these states (Alabama, Arkansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Oklahoma, South Carolina, Tennessee, Texas, and West Virginia) having a prevalence of 30% or more (The Centers for Disease Control and Prevention, 2011B). According to the CDC 2010 report, Minnesota has an obesity prevalence of 24.8% along with Nevada, Arizona and New York. Statistics indicate that “32.2% of men and 35.5% of women” in the United States are obese with Non-Hispanic, Black, and Mexican-American women experiencing a greater prevalence of obesity than Caucasian women (Moore, 2011).

The obesity dilemma is further complicated with the potential to develop chronic non-communicable diseases such as diabetes, cardiovascular disease, cancer, gastrointestinal diseases, arthritis, psychological consequences including low self-esteem and depression (Smyth & Heron, 2005). Diabetes is considered one of the major causes of premature illness and death and creates a substantial financial burden to society (Smyth & Heron, 2005). The United States is third in the world to India and China with rates of diabetes among its populations (Smyth & Heron, 2005).

Evolutionary Origins of Obesity

Leonard (2002) produced research into the evolutionary origins of how humans developed over time and survived primarily based on our diets and activity levels. Humans once were pre-historic hunter and gatherers using large amounts of energy in daily living to survive on a singular “Paleolithic diet” (Leonard, 2002). Humans have evolved into flexible eaters with less need to use large amounts of energy to hunt or gather our food to meet our nutritional needs. Keiger & Lowery (1998) reported on the implications of globalization, defined as the integration of economics, cultures and International political processes that play a role in people’s everyday lives. Globalization can lead to urbanization, diseases of modern living, malnutrition, infectious disease, border protection, war, and technology leading to a variety of societal problems. The growing income disparities due to issues related to globalization across the globe have lead to “lifestyle” diseases relatively unknown decades ago, namely obesity, diabetes, hypertension, and stroke (Keiger & Lowery, 1998).

Bellisari’s (2007) research is aligned with Leonard’s (1998) showing that human body mass variation is now known to have a large genetic component, with “heritability estimates ranging from 30% to 70%”. A study done in 2007 by Bellisari identifies and evolutionary origin of obesity that has developed largely in industrialized societies. Bellisari (2007) believes it is the result of interaction between human biology and human culture over the long period of human evolution with humans having the capacity to store body fat when opportunities to consume excess energy arise. Over millions of years of human evolution have lost the need and opportunities to store fat in order to survive.

The Current Obesity Discussion

The World Health Organization (WHO) is the directing and coordinating authority for health within the United Nations system. The organization is responsible for providing leadership on “global health matters, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends” (World Health Organization, 2011). The WHO 2010 report that obesity and related non-communicable diseases including high blood pressure and stroke are largely preventable with supportive community efforts that could shape people’s food choices. The WHO offers suggestions on the individual, societal level and food industry levels to prevent or curb obesity:

“At the individual level, people can: limit energy intake from total fats; increase consumption of fruit and vegetables, as well as legumes, whole grains and nuts; limit the intake of sugars; engage in regular physical activity; achieve energy balance and a healthy weight. Individual responsibility can only have its full effect where people have access to a healthy lifestyle. Therefore, at the societal level it is important to: support individuals in following the recommendations above, through sustained political commitment and the collaboration of many public and private stakeholders; make regular physical activity and healthier dietary patterns affordable and easily accessible to all - especially the poorest individuals. The food industry can play a significant role in promoting healthy diets by: reducing the fat, sugar and salt content of processed foods; ensuring that healthy and nutritious choices are available and affordable to all consumers; practicing responsible marketing; ensuring the availability of healthy food choices and supporting regular physical activity practice in the workplace (The World Health Organization, 2011, p.61).

The government continues their efforts to educate and promote healthier options for Americans. The United States Department of Agriculture (USDA) issued new federally suggested dietary guidelines for Americans in January 2011 (United States Department of Agriculture, 2011B). The evidence-based nutritional guidelines are to promote health,

reduce the risk of chronic disease and reduce the occurrence of obesity through physical activity and proper nutrition. The USDA replaced the Food Pyramid and developed a nutritional teaching tool called *Choose My Plate* to educate Americans how to make better food choices (The United States Department of Agriculture, 2011B). The *My Plate* guidelines suggest making changes in three areas: balancing calories, foods to increase and foods to reduce during your day along with daily exercise for a healthier lifestyle. The image of *My Plate* from the *Choose My Plate* website and marketing materials gives a visual depiction of suggested food portions of desired food types on a plate that can be used as a poster in a school lunch room or in a work place.

The U.S. government also promotes the ability to eat healthy on a budget using tools including The 3 P's – plan, purchase, and prepare food, smart shopping for veggies and fruits and sample seven day menu plans for individuals and families available on their website (The United States Department of Agriculture, 2011C). *My Plate* developers are continuing their efforts to include developing nutrition and budget conscious information for specific populations including those who want to lose weight, kids, and pregnant mothers.

The prevalence of obesity in America allows for differing opinions about its origins. Saguy and Riley (2005) argue there is a contemporary obesity debate with four primary groups at the forefront of the obesity epidemic controversy: anti-obesity researchers, anti-obesity activists, fat acceptance researchers, and fat acceptance activists (p.870). These groups engage in framing contests over the nature and consequences of excess body weight. The authors define members of the fat acceptance groups to embrace a body diversity frame, presenting “fatness” as a natural and largely inevitable form of

diversity, members of the anti-obesity camp frame higher weights as risky behavior akin to smoking, implying that body weight is under personal control and that people have a moral and medical responsibility to manage their weight. Both groups sometimes frame obesity as an illness, which limits blame by suggesting that weight is biologically or genetically determined but simultaneously stigmatizes fat bodies as diseased. While the anti-obesity camp frames obesity as an epidemic to increase public attention, fat acceptance activists argue that concern over obesity increases public attention, fat acceptance activists argue that concern over obesity is distracting attention from a myriad of more important health issues for Americans struggling with weight issues.

The strategies the groups use to establish their own credibility and discredit their opponents using public awareness campaigns and activism can influence not only public opinion but public policy. Despite a 2001 Surgeon General's report having declared that overweight and obesity have reached nationwide epidemic proportions" (U.S. Department of Health and Human Services, 2010) and the World Health Organization (WHO) called obesity "a global epidemic" (World Health Organization, 2011), fat activists have called for less public awareness and intervention regarding obesity. Fat activism, which has reclaimed the word fat, much like civil rights movement re-appropriated the word black and the gay movement reclaimed queer, has not rallied behind calls to stamp out the obesity epidemic, of which fat activists are arguably the greatest victims (Saguy & Riley, 2005). The fat acceptance movement has countered such claims by saying that a person can be healthy at any size and that claims about obesity being a health risk are simply overstated.

Saguy & Riley (2005) suggest that debates over the nature of obesity largely rely on moral assumptions about fat individuals and their behaviors. The social sciences have a long standing interest in the connection between medicine and morality. Conrad & Schneider (1992) believe in the “medicalization of obesity” arguing that compared to treating the behavior as sinful or criminal, “medicalizing” behavior fundamentally “diminishes or removes blame from the individual for deviant actions” (p. 871). In contrast, Zola (1972) argued that the language of medicine merely extends moral judgment of responsibility, blame and morality on the obese person.

However, obesity is being addressed by state governments across the United States by taking steps in a variety of ways with their citizens to create options. For example, the state of New York started an initiative called Creating Healthy Places to Live, Work, and Play to promote healthy lifestyles and prevent obesity and type 2 diabetes. This initiative works to improve the health and physical activity status for New York communities by:

- Increasing the availability and accessibility of places to be physically active.
- Creating and maintaining community landscapes conducive to physical activity, such as playgrounds and walking trails.
- Increasing the availability and accessibility of fresh fruits and vegetables.
- Increasing the healthful quality of foods offered for sale at local restaurants and corner stores (New York Department of Health (2011, NP).

In addition to communities, the initiative is working with employers to improve the health of their workers by adding wellness programs and making the work place healthier. For example:

- Workers can buy healthy food at or near work
- Workers can be physically active at or near work
- Through an employer health plan, workers can see doctors and get programs or services that prevent obesity and type 2 diabetes
- Female workers with babies can breastfeed or pump milk while at work (New York Department of Health (2011, NP).

Socio-Economic status – Challenges for Lower Income Minnesotans

In the United States, a person's socio-economic status (SES) consists not only of individual but household and neighborhood considerations as well as social class, race and ethnicity, gender education level, income and access to resources (Bisgaier & Rhodes, 2011). Several studies, using different methodology, show the important role of economic factors in food selection support the fact that lower SES is associated with food constraints, compromising the ability to have adequate nutrition (Kennedy, et al, 2007; Beydoun, et al, 2008; www.who.int, 2011; Darmon, et al, 2002).

Food Deserts

Knuth (2010) discovered that Minnesota has areas where there is a lack of available food sources that he identifies as a "food desert" which is an area or neighborhood in which healthy food sources are not easily accessible. Even if someone wants to buy and eat fresh fruits and vegetables, they are not easily found in the community. Knuth (2010) estimated that in 2006, food deserts covered about "one-half of Minneapolis and nearly one-third of St. Paul". These numbers show a potential for the Minneapolis and St. Paul suburbs to have 20 times the number of grocery stores per capita compared to the urban city neighborhoods. The distance to travel to get food is difficult for the one in five Minnesota households without adequate transportation and 8.9% of households nationally that do not have a vehicle (The United States Census Bureau, 2011).

Thomas's (2010) research is consistent with the research done by Knuth (2010) on food deserts identified that the physical lack of healthy food is exacerbated in many cases by low levels of "financial access to healthy food", "poor education about nutrition", and a "lack of viable transportation options". Adults and families living in "food deserts" may

face a problem that goes far beyond the scarcity of fresh fruits and vegetables in the local grocery store. In recent years, fast food restaurants and other types of food items that generally are high in calories and low in nutritional value have become increasingly inexpensive and easy to access (Knuth, 2010). Beydoun, et al (2008) identify that the cost of fruits and vegetables has gone up over time, while fast food and soda has become cheaper. In some Minnesota communities, there are fast food restaurants on many blocks offering a much lower per-calorie cost for unhealthy foods. With the struggling economy and unemployment rate around 5.9% in Minnesota it is not surprising people are not seeking out organic fruits and vegetables (DePass, 2011).

Figure 1: Graphic showing the change in food prices

Recent changes in the structure of food retailing have led to the development of large supercenters in suburban areas of the United States. Thomas (2010) found no apparent difference between food secure and insecure households in distance on the decision to shop at various retailers. However, there were differences in the distance between households and retailers. Food insecure households tended to be located slightly farther from large food retailers and slightly closer to convenience stores therefore, food insecure households reported traveling slightly farther to a primary food retailer (Thomas, 2010).

Current State Wide Efforts to Promote Healthier Diets

Simply Good Eating – University of Minnesota Extension Program

The Simply Good Eating program philosophy is children who eat breakfast are better learners, adults who eat well are more productive employees and with good nutrition, seniors stay in their homes longer and have lower medical bills (The University

of Minnesota Extension, 2011). Funded by SNAP, Simply Good Eating offers classes in a various community settings, including food shelves, WIC (Women, infants and Children) clinics, senior citizen centers, day-care centers, homeless and battered women shelters, migrant centers, summer camps, low-income housing buildings, grocery stores and in participant homes. The program provides six hours of education with learners developing behavioral changes in food safety, meal planning, food preparation, grocery shopping, food budgeting, and proper nutrition (The University of Minnesota Extension, 2011).

Simply Good Eating works with people with limited resources who often run short of food at the end of the month with the program teaching practical tools to participants how to make better choices at the grocery store and how to use of the food they bring home. The program has innovative curriculum that is customized to the needs of diverse populations and available in several languages to make learning more accessible (The University of Minnesota Extension, 2011). Simply Good Eating also offers “Cooking Matters for Adults”. These classes are offered in English and Spanish and teach low-income adults how to prepare and shop for healthy meals on a limited budget. More than 70 percent of Eating Right participants said they eat more fruits, vegetables and whole grains after the course than before (The University of Minnesota Extension, 2011).

SAMHSA (Substance Abuse and Mental Health Services Administration) Wellness Efforts

SAMHSA’s website reports that people with “mental and substance use disorders die decades earlier than the general population, mostly due to preventable medical conditions such as diabetes or cardiovascular, respiratory, or infectious diseases (including HIV)” (Substance Abuse and Mental Health Services Administration , 2010). The Federal

Government/SAMHSA has spearheaded the 10 x 10 Wellness Campaign to “promote wellness for people with mental illnesses by taking action to prevent and reduce early mortality by 10 years over the next 10 years” (Substance Abuse and Mental Health Services Administration , 2010) using tools like Swarbrick’s Eight Dimensions of Wellness as paraphrased below:

- Emotional—Coping effectively with life and creating satisfying relationships
- Environmental—Good health by occupying pleasant, stimulating environments that support well-being
- Financial—Satisfaction with current and future financial situations
- Intellectual —Recognizing creative abilities and finding ways to expand knowledge and skills
- Occupational—Personal satisfaction and enrichment from one’s work
- Physical—Recognizing the need for physical activity, healthy foods and sleep
- Social—Developing a sense of connection, belonging, and a well-developed support system
- Spiritual—Expanding our sense of purpose and meaning in life (Swarbrick, 2006, pp. 311-314).

The focus on wellness will offer people living with mental illness the opportunity to strive for recovery using the tools through effective services, supports and resources.

American Diabetes Association

Multiple efforts are underway to improve nutrition in Minnesota from private businesses providing a fee-for-service educational experience like “Live Better Nutrition Consulting” to state efforts based on the United States Department of Agriculture (USDA) programs like the “Smart Choices” program initiatives in Minnesota schools and the “Eat Smart Live Strong” programs designed to work with adults ages 60-74 (American Diabetes Association, 2011). The ADA (American Diabetes Association) in St. Paul, Minnesota organizes efforts throughout the year to educate state residents on ways to fight obesity related issues as well as raise money for diabetes research. The ADA brings awareness to

diabetes during the month of November with their “Raise your hand to Diabetes” campaign as well as having programs specific to the African, Latino and Native American populations and a program to fight diabetes in the workplace (American Diabetes Association, 2011).

Affordable Care Act

A collaborative report done by a team from Blue Cross Blue Shield of Minnesota and the Minnesota Department of Health in 2008 estimate that healthcare costs related to obesity will top 3 billion in Minnesota (Blue Cross Blue Shield of Minnesota, 2011). The Obama Administration identified the need for healthcare reform to include key elements to address the need for quality healthcare for all, no matter one’s socio-economic status, when developing the Affordable Care Act (Kahng, 2010). The Affordable Care Act includes free screening for diabetes for all Americans covered under the plan along with other preventative healthcare measures. Although programs and services are available for low income adults to become educated on healthy nutrition options, further exploration is needed into how SES affects food choices.

YMCA – Diabetes Prevention Program

The Twin Cities Young Men’s Christian Association (YMCA) mission and focus is to be a “cause-driven organization” that is for youth development, healthy living and social responsibility (Young Men’s Christian Association Twin Cities, 2011). The YMCA offers the Healthy Family Home™ program, a community partnership funded by Eli Lilly and Company. This program was developed to help families across America to change their home behaviors and environments to help support improvements in health and well-being with the goal to change behaviors of children to become healthier adults (Young Men’s

Christian Association Twin Cities, 2011). The YMCA offers scholarship opportunities for low income individuals and families to gain access to their programs and services based on their income, making it potentially more accessible to low income adults.

The YMCA has partnered with the UnitedHealth Group and medical insurance providers to offer a Diabetes Prevention Program (Young Men's Christian Association Twin Cities, 2011). It is an evidence-based program that uses a "group lifestyle intervention" designed to reduce the risk of diabetes in individuals with pre-diabetes or at high risk for developing type 2 diabetes. This program has been proven to cut people's chances of developing the disease by more than half and is open to people who are YMCA members and non-members and if they are not covered by insurance the program is still available (Young Men's Christian Association Twin Cities, 2011). The YMCA is currently focusing on reaching the homeless population and working with a local shelter in Minneapolis to provide health and nutrition education to the employees to assist in educating those that use the services (D. Roseborough personal communication, November 3rd, 2011).

Open Arms – Healthy Locally-Grown Meals for People Living with Illnesses

Open Arms started in 1986 in Minneapolis when founder, Bill Rowe, cooked a healthy meal in his apartment and delivered it to a friend living with HIV/AIDS (Open Arms of Minnesota, 2011). Today, Open Arms cooks and delivers meals to more than 700 people with the help of 1,400 volunteers each week to people living with HIV/AIDS, Multiple Sclerosis, Lou Gehrig's Disease (ALS), cancer and more than 42 other diseases, as well as their caregivers and dependents (Open Arms of Minnesota, ND). Open Arms

staff understands that proper nutrition is important for everyone, whatever the medical diagnosis, and especially for those living with a serious illness. Good nutrition helps boost the immune system to fight off illness and encourages the ability to maintain a healthy weight. Open Arms realized how difficult it can be to live with a serious illness and make good nutrition a priority so the culinary team and dietitian work to create tasty meals with fresh, organic ingredients that contain the nutrients needed at no cost to the recipients.

Blue Cross Blue Shield of Minnesota – “Do Campaign”

Blue Cross Blue Shield of Minnesota created the “do Campaign”, encouraging Minnesotans to “groove your body every day” to prevent a host of health problems (Blue Cross Blue Shield, 2012). The program encourages workplaces and community groups to promote wellness using a “to do list” that list ideas on how to move more and eat better. These materials are great for use in worksites or facilities to help remind employees and patrons to make the active choice for better health. Blue Cross Blue Shield of Minnesota has worked on television commercials and community programs about the importance of physical activity and healthy eating since 2004. Other programs and services Blue Cross offers to help achieve and maintain a healthy weight include: sponsoring the” public bicycle-sharing program Nice Ride Minnesota”; funding community projects to improve access to healthy foods in schools and underserved communities; supporting new laws like “Complete Streets” to make communities more walk-able and bike friendly (Moua, 2010).

Complete Streets

On May 15th, 2010 Minnesota Governor Tim Pawlenty signed the Complete Streets legislation into law described below from the Complete Streets website:

“Complete Streets is planning, scoping, design, implementation, operation, and maintenance of roads in order to reasonably address the safety and accessibility needs of users of all ages and abilities. Complete streets considers the needs of motorists, pedestrians, transit users and vehicles, bicyclists, and commercial and emergency vehicles moving along and across roads, intersections, and crossings in a manner that is sensitive to the local context and recognizes that the needs vary in urban, suburban, and rural settings. Complete streets provide opportunities for increased physical activity by incorporating features that promote regular walking, cycling and transit use into just about every street. (National Complete Streets Coalition, 2011, NP)

The implementation of Complete Streets across Minnesota will allow for people to move more freely in hopes that people will move more often. This will allow for better opportunities for exercise and less utilization on modes of transportation that do not expel energy such as cars or trucks.

Farmer’s Markets – Market Bucks

A collaborative effort by several Minnesota community organizations, rural and urban farmers markets and Blue Cross and Blue Shield of Minnesota, seeks to make affordable, healthy food even easier to buy for more Minnesotans who receive food support as part of the Supplemental Nutrition Assistance Program (SNAP) (Blue Cross Blue Shield of Minnesota, 2011). In 2011, 24 farmer’s market locations around Minnesota will accept Electronic Benefit Transfer (EBT) cards to purchase healthier foods at these markets, an increase of six locations from last year. Also returning are "Market Bucks" which are coupons that match the first \$5 in EBT card purchases with an additional \$5 in Market Bucks each market day (Blue Cross Blue Shield of Minnesota, 2011). Blue Cross worked closely with local governments such as the City of Minneapolis and Saint Paul - Ramsey County, and with the Minnesota Farmers' Market Association (MFMA) to expand the capacity of markets to accept EBT (Blue Cross Blue Shield of Minnesota, 2011).

These community organizations, with additional funding from the Blue Cross, Communities Putting Prevention to Work (CPPW) and Statewide Health Improvement Program (SHIP) increased the number of markets accepting EBT from only one in 2006 to 24 this year (Blue Cross Blue Shield of Minnesota, 2011). This collaborative group also launched Market Bucks in 2010 to increase the number of customers using their EBT cards to buy fruits, vegetables and other healthy food at participating farmers markets. In addition to expanding customers' purchasing power and increasing healthy eating, the program benefits local farmers and the local economy (Blue Cross Blue Shield of Minnesota, 2011).

Minnesota Statewide Health Improvement Program (SHIP)

In 2008, bipartisan legislation was passed to address rising healthcare costs called the Statewide Health Improvement Program (SHIP) that is described as an “investment in primary prevention activities designed to improve community health through reducing the risk factors most contributing to chronic disease and thereby reduce health care costs” (The Minnesota Department of Health, 2012). Currently, the SHIP grants are in the second year of implantation across Minnesota.

Statewide SHIP grants were awarded to 53 community health boards and 11 tribal governments in 2009 (The Minnesota Department of Health, 2012). These grants allow Minnesotans to enjoy greater access to fruits and vegetables and more opportunities for physical activity. Children in schools across Minnesota now get better food and more physical activity. More health care providers are getting the tools they need to refer their patients to appropriate resources to address obesity and tobacco use, and more Minnesota

employers are reducing health care costs and increasing productivity through workplace wellness programs (The Minnesota Department of Health, 2012).

With SHIP dollars, Faribault, Martin, and Watonwan counties in Minnesota have seen success in the schools serving these counties are now offering healthier options and increased physical activity to their children and greater access to fresh to fruits and vegetables for those living in food deserts (The Minnesota Department of Health, 2012). The SHIP program has allowed the communities to look at food systems on a local level to help local farmers and businesses to improve the economy in the area helping the communities on different levels.

Conceptual Framework

Theoretical Framework

What if everyone lived into their nineties or even one hundred years old and had access to a healthy diet of fresh fruits and vegetables, daily exercise, safe streets and parks to move freely, lived with little daily stress, and had an abundance of social interactions and opportunities in their lives? It is possible and there are places in the world where this already exists and it is attainable for everyone. The following excerpt is the story of a researcher that set out to find the places where people live the longest and found common traits that can be translated into everyday life no matter where you live or income you have available. Here is the story of *The Blue Zones*.

Dan Buettner was born in St. Paul, Minnesota in 1960. He is the founder and Chief Executive Officer of *Blue Zones* and the New York Times best-selling author of “*The Blue Zones: Lessons for Living Longer from the People Who’ve Lived the Longest.*” In 2004, Buettner teamed up with National Geographic and hired longevity researchers to identify places around the world where people lived measurably better and longer. In these *Blue Zones*: Okinawa, Japan; Sardinia, Italy; Loma Linda, California; Nicoya, Costa Rica, and Ikaria, Greece it was found that people reach age 100 at rates 10 times greater than in the United States. After identifying the world’s *Blue Zones*, Buettner and National Geographic researchers took teams of scientists to each location to identify lifestyle characteristics and diet that might explain longevity. Buettner (2008) and the researchers found that the lifestyles of all *Blue Zones* residents shared nine specific characteristics that they call the characteristics the Power 9.

Buettner and his team of researchers found that the longest lived people “*move naturally*” in their environments without thinking about it. Their environments consist of places they can walk to easily like to the grocery store, place of worship or a friend’s home. More and more research states that stress may cause people to gain weight and inflammation that may cause disease. Buettner’s team identified that a routine in daily living to “*shed stress*” is essential to living a healthier life and having a healthier weight. In all of the *Blue Zone* areas Buettner and his team discovered that “*eating wisely*” and using the 80% rule to stop eating when a person is 80% full was essential in people having healthier diets and weights. In addition to stopping before one is full is eating a plant focused diet high in beans, soy and lentils, only eating meat twice a week.

In 2009, Albert Lea, Minnesota, completed the pilot *Blue Zones* community health experiment transformation program with noticeable results for their residents:

- Life expectancy increased an average of 2.9 years
- Participants lost an average of 2 lbs. each
- An average of 21% drop in absenteeism by key employers
- City employees showed a 49% decrease in health care costs as reported by city officials
- A community-wide effort that actively engaged 68% of the city's local restaurants, 51% of its largest employers, 100% of its schools and 27% of its citizens (The Blue Zones, 2011, NP)

Albert Lea is one pilot program of many that are developing across the country.

Incorporating the simply principles is a promising formula for people to enhance and extend their lives.

How does this apply to adults who are low income being able to live longer by having healthier diets, therefore, healthier weights? Buettner (2008) and his team traveled across the world in search of places where people live the longest and studied their

lifestyles looking for answers. This researcher was interested in talking to professionals who work with adults who have low income who do not live in one of the Blue Zones and explore what community-based programs are successful and what challenges they face in providing services that focus on the concepts most relevant to encouraging healthy diet and weight. This study interviewed professionals working directly with programs that affect low income adults in order to explore in what ways the community based programs are working and what additional services may be needed moving forward and how they might fit and not fit with Buettner's findings described above.

Professional Lenses

This researcher has six years of experience working with people with disabilities providing representative payee services and independent living skills training for adults, many of them living at or below poverty levels. Assisting in managing finances and county benefits has allowed this researcher to witness the daily struggle for many of those living at or below the poverty level to manage basic needs such as housing, medical care, utility costs and having enough money to eat each month. This researcher develops meal plans, budgets for monthly food costs and travels to local food shelves with consumers assisting in obtaining available resources to be able to have enough food available.

Along with access and affordability of food, this researcher accompanies consumers to medical and mental health physician appointments where side effects of medications that cause weight gain are discussed. Many times the medications are for treatment of mental illness that may assist with symptoms that are unmanageable but cause the person to gain significant weight in a short amount of time causing other medical problems including diabetes and high blood pressure.

Personal Lenses

This researcher is an adult who has never lived below the U.S. poverty levels, therefore, has never gone hungry or not had access to affordable food options and has always had access to transportation. A personal identity factor that this researcher has is a BMI considered to be in the obese category for the past six years. This may influence the approach to the research project with the researcher having the perspective coming from understanding what it is like to be an overweight adult in Minnesota but not an adult of recommended weight. It was important for this researcher to be aware of this potential bias when conducting the research and analysis.

Methodology

Introduction

This study used a qualitative exploratory design to sample community-based organizations defined as non-profits and for-profit businesses' and organizations operating within local communities. These included community-service and action agencies targeting health, education, personal growth and improvement, social welfare and self-help for the disadvantaged. The study looked at the root causes and barriers to obtaining and maintaining healthy diets for adult Minnesotans. Finally, this study looked at what this all might begin to suggest about how to effectively promote low income adults in Minnesota having access to healthier foods, healthy diets and healthy weights, with particular attention to the role of supporting healthy weight. This researcher used the definition of a healthy diet from the Centers for Disease Control (CDC) for the purpose of this study as an emphasis on fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products. The healthy diet also includes lean meats, poultry, fish, beans, eggs and nut and is low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugars and stays within daily calorie needs (The Centers of Disease Control and Prevention, 2011A).

Research Design

The purpose of this study explored the effectiveness of community, systemic or policy based interventions and programs designed to work with low income adults to have healthier diets and healthier weights and thus the effectiveness of these programs in recruiting and serving Minnesota adults with successful outcomes. This researcher defines low income as an individual whose family's taxable income for the preceding year did not exceed 150 percent of the poverty level amount (The Minnesota Legislative Reference

Library, 2010). The percent of Minnesotans in poverty decreased from 10.2 percent in 1990 to 7.9 percent in 2000. Since then, poverty rates have shown an upward trend. In 2008 the rate was 9.6 percent (The Minnesota Legislative Reference Library, 2010).

This study used open-ended qualitative questions designed to gain a beginning understanding of professionals' views of the design and effectiveness of their community based programs and efforts in this area. This study gathered professional opinions as to what they believe will be effective in future programs that work with people with low income to have better access to healthier food and have healthier diets and thus ultimately healthier weights. In this spirit, this researcher asked not only about programmatic strategies they use, but what information they base this on and what sources of information they are using to inform their efforts.

Population and Sample

The first contacts in this snowball sample were referred by committee members and involved this researcher making calls to businesses and companies, utilizing referrals from other professionals, and sending emails explaining the focus and nature of this study, and asking for participation. The sample was chosen with the goal to find out more about the successes and challenges of current and proposed programs when working with low income people to have healthier diets to determine the possible trends of where programs are moving to in the future based on what is working. The data was gathered upon the approval of the University of Saint Thomas Institutional Review Board (IRB) obtained in January 2012.

The sample consisted of twelve professionals (n=12) working in this area at the community level from both urban and rural cities in Minnesota. The sample in this study

consisted of four professionals working at a community or mezzo level in Minnesota defined as statewide policy level professionals. Seven professionals work at the individual one-on-one micro level with programs that directly affect people with low income both in their communities and in their homes. One professional researches healthy lifestyles of people across the world as well as is an accomplished author working primarily on micro, mezzo and macro levels.

Protection of Human Participants

To minimize risk toward and to protect the participants, a proposal was submitted to the University of St. Thomas' Institutional Review Board (IRB) and approved prior to conducting this study. Informed consent forms were reviewed in person or over the phone with each interviewee and signed by all willing participants prior to the interview. Each paper copy of each consent form is stored in a locked filing cabinet at this researcher's home. To maintain confidentiality, the identities of the participant are not given in the final research paper. Each participant is identified generally as "participant". The transcriptionists hired to transcribe the interviews signed a confidentiality consent form for each transcript. The data were then de-identified by this researcher using numbers for each participant's name. Digital copies of each interview were kept in the researcher's possession during interviews in a locked filing cabinet at this researcher's home. Electronic copies were stored on a password protected computer that is only known by the researcher. The paper copies of the qualitative data will be stored indefinitely in the possession of the researcher. The electronic copies of the qualitative data will be deleted June 15th, 2012.

Data Collection

The participants were asked to read and sign a consent form prior to the interview starting. This researcher answered any questions the participants had regarding the process and gave them the option to stop the interview at any time if they do not want to continue, or skip particular questions. The participants were allowed to contact the researcher up to one week after the interview and request for their interview not to be used in the study. No participants did contact this researcher. (see Appendix 1 - this was stated explicitly in the consent form, itself). Data were collected through seven audio-taped in-person interviews and two phone interviews, using semi-structured, open ended questions, allowing each interviewee to share information about the program they work with, their effectiveness and challenges they face. They were asked the following questions: 1. Tell me about your organization/employer and your role in it. 2. How did the organization come to be concerned about weight and/or diet for your clients? 3. How does your organization intervene or try to help in this area? 4. What successes and/or challenges have you had in this area? 5. What are future directions you're considering? 6. What challenges do you think Minnesota adults, in general, face in relation to healthy diets and healthy weights? 7. What challenges do you think are potentially unique to lower income adult Minnesotans? 8. What do you see as organizational or societal "next steps" in helping in this area? 9. Any policy steps that you think would be particularly effective or ineffective?

This researcher conducted a total of nine interviews. This researcher interviewed three professionals during one interview and two professionals during another interview with the other seven interviews with only one professional interviewed, with a total of 12 participants. The seven in-person interviews were audio-taped with the participant's

permission, and all of the interviews were conducted at a location and time that was convenient to the interviewee. The two phone interviews were audio taped with the permission of the participant while the phone was on speakerphone in a private area at the researcher's office where the interview was not overheard by others to protect the confidentiality of the participants.

Strengths and Limitations

A central strength of this study is that little research has been done in the area of challenges and successes of current community-based programs focusing on low income people in support of them having healthy diets, therefore, this research holds the potential to be a valuable source of information in determining best practices for future programs. A limitation of this study is that it is a relatively small sample and exploratory so it can't be generalized over the entire population or outside Minnesota, therefore, this research looked for emerging themes to be further explored in future research. Another limitation of this study would be not interviewing low income Minnesotans directly about their experiences, needs and suggestions limiting the scope of the research to professionals but may be a prerequisite to opening up the opportunity for future research to be done by other researchers to explore a more first-hand and larger perspective on this topic.

Results

This section discusses the results of the interviews conducted for this study on community based efforts that promote healthy diets for low income Minnesota adults. Semi – structured interviews were conducted with twelve professionals (n=12) with experience researching or working with programs that promote or address healthy diets for low income Minnesotans. This study was conducted in the Minneapolis/St. Paul and St. Cloud areas of Minnesota. Sampling included snowball sampling with suggested contacts from committee members and known contacts to this researcher. A total of nine interviews were conducted with twelve total participants. There were nine interviews with one participant interviewed and two interviews that included multiple participants being interviewed at the same time.

Findings

The interviewees were asked the question “How did the organization come to be concerned about weight and/or diet for your clients?” While most of the professionals interviewed reported that their organizations had always focused on diet and healthy lifestyles for their clients, five mentioned that a trend in the numbers related to people living with obesity was identified between two and six years ago.

I think it's always been that way. I mean, the program has always been about getting people to eat healthier food. Even when I went to school in the 70s, it was calories in and calories out, and you read the dietary guidelines and it's calories in and calories out. That has not changed.

I think it was five or six years ago that people started to see the trend. That the numbers were just really rising with obesity, and at that time, we started to pay attention to it.

.....as a diabetes program we've been concerned about that for some time, but in, I think in 2005.

The interview results developed into six essential and recurring themes of barriers low-income clients face in relation to having healthy diets that professionals face working with individuals to have healthy diets will be addressed below

- Generational Lack of Knowledge of How to Cook
- Competing Demands
- Sedentary/Convenience Lifestyles
- Lack of Available and Safe Streets and Neighborhoods to Move Freely
- Successes
- Challenges

Finally, valuable suggestions for future changes or additions to programs and services working with low income people on healthy diets will be outlined in the following paragraphs.

Generational Lack of Knowledge of How to Cook

The participants were asked two questions about what they saw as challenges that Minnesotan Adults have in relation to healthy diet and healthy weight. One of the major themes that developed was mentioned by half of the participants is the generational lack of knowledge their clients had in knowing how to cook a meal and how this can play a role in healthy choices for individuals and their families. Participants commented on how grocery stores were designed to persuade customers to buy certain foods that are convenient and generally not healthy or nutritious to a generalized lack of knowledge of how to put a basic meal together outside of adding water to a boxed meal. An overall theme of how

generationally people have not passed down the knowledge of how to cook to their children therefore more and more generations do not learn the basic skills of how to cook for themselves.

Table 1 – Lack of Knowledge of How to Cook

We give the cookbooks out to the families so they can take them home because we are finding the lost art of cooking a meal. That is one of the challenges is there are people who do not know how to cook. They just did not learn that at home and they do not know where to start even if they wanted to. To put pasta, meat and something together like hamburger helper type meal together but homemade is possible. That is why people buy a box because they don't always know and just add water.

People don't know how to cook anymore. You look at the grocery store shelves; it is full of very convenient food that's high in calories, high in fat, and high in salt, so it's really difficult for people to change their mindset as they're going through the grocery store.

It is very generational, my Mom never cooked, I never cooked, my grandmother never cooked. Sometimes you can go back three or four generations and they never cooked. You hear about generational poverty that this is the way they have grown up and in their culture it's frowned upon to change.

Anything they can put on a tray and put in the oven when people don't know how to cook, so I think that it has to shift where everybody is making changes. You can't just have one part of the population shifting with everybody else not doing it too.

The other challenge is I think there has been a gap between the generation that knew how to cook and the current generation. I think there are so many poor people who don't know how to use a stove or don't have pots or pans and a big part of eating well is preparing your own foods. Most foods that we get when we go out to a restaurant are high in salt and high in calories. So, yeah. And if you are ripping up cellophane off of your dinner it is probably not very healthy.

Competing Demands in Life

A major theme developed throughout the participant interviews identifying competing demands in the lives of people with low income. Various examples were discussed including access to transportation to attend nutrition or educational classes or to get to a grocery store to buy fresh fruits and vegetables. Participants mentioned the barrier

of lack of childcare resources leaving parents to bring children on the bus to get groceries or difficulties in childcare coverage during working hours as a daily struggle for some families living with limited funds.

The barrier of English as a second language, literacy issues and differences in culture traditions was discussed in relation to designing programs or providing culturally sensitive and inclusive materials and resources. One participant stated that her collaborative group within her organization was meeting and problem solving how to reach a certain part of the population that is difficult to reach and in many ways does not want to be reached, referring to families and individuals in rural or urban settings that are not reaching out for support even if they are eligible for services. Three of the participants identified marginalized or inadequate housing as a barrier identifying that when it is not clear if they will have a roof over their heads from one day to the next having healthy fruits and vegetables is not on their minds.

Table2 - Competing Demands

Transportation	<i>I think that transportation is a really big one. I think that that's kind of underestimated and how many people don't have cars, or don't have reliable cars.</i>
Transportation & Childcare	<i>You know we talk about social media and internet and not everyone has access to that, transportation issues, childcare issues, financial issues there is just a lot that we don't know how to overcome those obstacles.</i>
Transportation	<i>Location, which would be transportation. It's too cold, It's too humid, some climate issues but people may use it as an excuse and then it drives the cost of our fresh produce up so it becomes less affordable to those who lack access in the first place.</i>
Transportation	<i>I think there aren't many people that really could live without cars here.</i>

**Transportation,
Marginalized
Living
Conditions, and
Language
Barriers**

Well, we have had several forums and meetings and coalitions over the last four years, and what we're discovering is that we cannot talk about consumption until we talk about access. So, if you want people to eat healthier foods, we can't jump into this is what you have to eat. We have to make sure that access, that it's available for them. So, that's by far number 1. It's the lack of access amplified, and it's amplified because of either transportation or marginalized living conditions or languages. It's still access, but it's made worse for these lower income audiences.

Transportation

If they're taking the bus, can you imagine going to the grocery store and carrying home how many bags of groceries?

**Language
Barriers**

I think probably the most that we have had with the barriers or the frustrations comes with the languaging. We're talking about PSC [Policy, Systems, and Environmental Change], we're looking at population, and we work with the local public health that basically actually does the on-the-ground work. They're our arms and legs out there, and they will go into a school setting, and they're using public health ease, and it does not translate, and that's been a barrier. So, we have to kind of model to our local public health educators what it is that they should be saying out there, so that was a little bit of a, in a couple places, a bump in the road.

**Literacy,
Cultural
Community
Participation,
Basic Needs not
being Met,
Transportation,
Childcare**

We are in conversation with the people in the Somali and Hmong communities as to what might make it easiest or best for their communities to participate, if there are any particular challenges, then to work with them on that. Well, we know that people who are having trouble paying the rent and buying food are probably focused on that and going to a class to think about counting fat grams just might not make it that day. So they may have childcare issues, transportation issues just to get to a program, and they may have even a literacy issue, whether English is not their primary language or they even are not really going to be literate in any language because they come from oral traditions.

**Childcare
Needs and
Prevalence of
Crisis Prone
Lives**

People go to the grocery store with their kids, and they're screaming, and they want this, that, or the other thing, and I would not want to be in some of the shoes that the clients that we serve are in, and I will be honest, with a lot of the clients, they have so many other crises in their lives that food is one of the last things they think about, and food is one of the last

things that they put their money into, because you can go to the food shelf and get food.

Competing Demands

The concern about people's time is questionable. I think with the low-income population they do have many other competing demands.

Sedentary and Convenient Lifestyle

This research identified overwhelming responses from participants around access to cheap fast food or processed foods high in fat and calories. Participants identified the prevalence of fast food restaurants “on every corner” in urban areas as well as popping up in rural small towns as a new trend. One participant noted how fast food restaurants are teaming up with grocery stores and convenience stores in the same building so you can shop for your gas or groceries and walk over to the McDonald's and get lunch before you go home.

Half the participants noted how the American society has changed with conveniences designed to have a sedentary lifestyles allowing for less energy to be expended. Examples identified by participants in research answers were remote controls for turning the T.V. channel, automatic garage door openers, drive thru restaurants, and sedentary style jobs sitting all day at a desk and couple that with easy access to unhealthy foods and the results can be a society of overweight people. Three participants discussed how American lifestyles are full of things to get done causing people to feel they have exercised but in fact they were just “busy” not getting their heart rate up like in actual exercise but feel exhausted at the end of the day.

Table 3: Sedentary and Convenient Lifestyle

<p>Access to Cheap Foods</p>	<p><i>Cheap packaged foods are what's most accessible to poor people, not beef. Unhealthy calories are the cheapest calories so that's the big problem.</i></p>
<p>Access to Cheap Fast Foods</p>	<p><i>Well, you've got McDonalds on every corner. You know, McDonalds is everywhere, it's not even McDonalds, it's Burger King or Hardees, and they are in every tiny little town. And they're attached to grocery stores now. People's lives are so busy, and that food is cheap, so you can take your family though the drive thru, especially if you eat off the value menu, you can get a lot of food for not a lot of money, and when you're in a hurry, I can see where it becomes more appealing.</i></p>
<p>Access to Processed Foods</p>	<p><i>I think it's a lot of the challenges everyone, everywhere faces, just it's hard, our whole structure is built to be sitting down and be eating processed, not good for you food, and I think that's especially true for people with disabilities, because they can't move around often. But I think that it's just you can't walk anywhere and it's easier to buy bad food than good food.</i></p>
<p>Access to Cheap Fast Foods</p>	<p><i>The media, you have the availability of fast foods, you have the cold weather or another reason not to get any exercise. Easier to drive places than to walk or take public transportation because there is no sidewalks anywhere and it is just easier to be sedentary and eat crap. The other thing is it is cheaper to eat crap. You can get a loaf of plain old white bread for a \$1.59 but if you want a loaf of healthy bread you are going to pay upwards of \$3.00 to \$4.00 to \$5.00. It is the same as the fresh produce compared to canned produce. You can buy a can of Food Club of green beans way cheaper than what you can buy fresh ones.</i></p>
<p>Sedentary Job and Busy Lifestyles</p>	<p><i>The time thing - everyone's busy and if you have a sedentary job and you go home and you're busy with three kids. People say they are really busy I get a lot of exercise but the truth is you really don't, you're just busy and wiped at the end of the day but you didn't do anything you were just busy.</i></p>
<p>Access to Fast Foods & Conditioned to want High Calories and</p>	<p><i>We live in an environment of abundance and ease and within a mile radius of the average Minnesotan's home there are seven junk food purveyors and we are hard wired to want calories and sweet things and fatty things and discipline can only go so far. But when you are in every turn, every day, every time you go to open your car or get cough medicine or rent a DVD you are</i></p>

Sweet Things	<i>driving [by a lot] of junk food. It is impossible to beat it. 67% of Minnesotans are overweight or obese. And that's not because we lack willpower or it is not because we are somehow lesser people than our great-grandparents were who were not obese. It is just the environment has changed for the worse.</i>
Conveniences	<i>You cannot walk anymore, so we've created a society where you really don't have to spend any energy. You don't even get up and turn the channel on your TVs any more. You know, or open your garage doors, I mean there's a gazillion examples of how, not that I want to believe me, you know I like those conveniences, but I mean, there certainly is, just our whole society has changed.</i>
Sedentary & Convenient Lifestyles	<i>We are a society of convenience so I am not going to go an extra mile to get something healthy.</i>

Lack of Available and Safe Streets and Neighborhoods to Move Freely

Participants identified not only how cities and streets are designed but where schools are built and how unsafe neighborhoods are barriers for individuals and families to move freely to exercise and get from one point to the next. One participant stated that many low income people work 2nd or 3rd shift work not allowing for parents to go to the park with their children depending on the time of day and the safety of their neighborhoods. These barriers are addressed later as a solution to allowing for better ways for people to move through city planning.

Table 4: Lack of Available and Safe Streets and Neighborhoods to Move Freely

City Planning	<i>Towns are looking at the design. Cul-de-sacs are great; however, you know kids can't ride their bikes down streets or on the bike paths, the walk paths; a lot of housing developments have no sidewalks. Schools are built out in Timbuktu, and so now kids can't ride their bikes or walk, they have to be bused. So, the way we've designed our cities and towns has really had a huge impact on our obesity as well. It used to be, I remember growing up, there were all these little grocery stores in your</i>
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neighborhood, so when you needed one small little thing you could run to the grocery store.

**Access to Safe Parks,
Expensive Gas**

For someone it's where they live, you know, so they don't let their kids out to play because there may not even be a park close or if there is, can you go over there? A lot of low-income people work the most bizarre hours, so even if they wanted to take their kids to the park, they may not be able to because their work hours. Just transportation as well. A lot of them ride the bus, or if they do have a vehicle, gas is expensive. So, you're not just going to hop in your car to drive some place, so things are maybe not in their walking distance that they can even take their kids.

Unsafe Neighborhoods

Um, they also live in neighborhoods where it is not safe to move naturally, it is not safe to walk places so that is yet another challenge to getting enough exercise, um, physical activity we need every day.

Successes

The participants were asked about successes they have experienced in their programs, services, or professional experiences with low income individuals and families. One participant discussed working with clients one-on-one doing experiential learning such as cooking with them in their homes where the entire family benefited from the experience brought positive results. Similarly, another participant discussed experiential learning working with clients in meal planning and grocery shopping and teaching how stores set up their stores to encourage people to buy unhealthy products was shown to be helpful with long-term changes in behavior. Another participant discussed the use of the “patient centered approach” where they work with clients and determine what they want to work on versus the staff coming in with a set determined curriculum brought better results. Once the topics were identified through the patient centered approach the need for repetition of the messages of healthy eating and healthy lifestyles was found to be

beneficial showing long-term success. Another participant reported that the U.S. government has been starting up programs for example “I Can Prevent Diabetes” and seeing positive results with changing attitudes of the public taking steps to be healthier.

Three participants discussed how Complete Streets legislation and the focus on promoting better ways for communities to move people more freely was a positive step toward assisting people in having more options for exercise. There was a collaborative effort in the St. Cloud area to pass the Complete Streets legislation and that was also true among many of the programs and services of the professionals interviewed. The participants identified the need to collaborate with other groups or organizations or communities to combine their resources to work toward a common goal. Participants discussed the need to “think outside the box” when brainstorming ideas of how to approach the topic of healthy diets for low income adults. One participant stated that the general public is vocal about healthy diets for kids and that is a start in marketing programs and services toward children yet the struggle not to lose sight of the adult population in the process.

Table 5 – Successes

Collaboration	<i>We might not think about working with the “green group” who is really interested about clean air but if we say “you are concerned about reducing emissions” and we are concerned about getting kids active but we both want the same things how can we pool our resources and be successful. So we are trying to think outside the box.</i>
Complete Streets	<i>I would say complete streets would be a prime example of something that is effective. In getting people more mobile and less reliant on vehicles. Complete streets looks at all modes of transportation, automobiles and taking into consideration people in wheelchairs with special needs, walking, biking, public transportation, busing and so forth. And looking at anytime a street is made or refurbished that you keep the complete streets</i>

	<i>model in mind so we make sure we have adequate lights adequate cross walks, adequate lines and shoulders and so forth so when you are looking at the master plan to say OK it is not just about moving vehicles it is about moving people.</i>
I Can Prevent Diabetes Program	<i>I mean government is starting to get it a little bit so they are starting up programs, like the “I Can Prevent Diabetes” programs and providing funding for things like that. Wellness is starting to catch on a little bit. People are trying to be, they want to be healthy.</i>
One-on-One Counseling Style	<i>Try to do in that one on one we try to use visuals, we try to change our counseling styles to really try to get at where people are trying to do and interested in and I have other things here that will get to more details.</i>
Menu Planning and Smart Shopping	<i>The educators will tell me they’ve seen people in the grocery store, because we spend a lot of time talking to people about, menu planning how to shop at a grocery store, and how they arrange their store you know obviously to trick consumers to purchase certain foods and whatever, and we want people to learn how to create a menu and go to the store and buy those particular items or to use their coupons or whatever strategies they have. And many of my educators will run across people years later, and they’ll say, I still today use the tricks that I learned with you, so people are using what we teach them.</i>
Collaboration and Consolidation of Work	<i>In 2009 we did a collaboration plan. Because we figured why are we doing all these individual plans, and we’re not talking together, and people weren’t reading it, so let’s do this collaboration plan together. So we worked very closely with the state and with metro, local, and public health and as part of that process, you have to identify priority areas, and we identified SHIPS, which is tobacco and obesity. So those were two of our key priority areas. And then we meet quarterly with the metro, local, and public health directors and so we always talk about our priority areas.</i>
Repetition of Message	<i>I think we see people making small changes and certainly the list of challenges is longer than that list of successes but we do not always see everything either. And sometimes we see people when they come back and say somewhere I heard this and I know they heard it here because we talk about it every single time. So even though they may not remember where they heard it they are making small changes and they hear a lot of the same things form</i>

the nurses and from us. I think sometimes when you hear something three or four times at the clinic, people do make changes. It does not always mean that the weight changes but some of the habits are changing.

**Patient
Centered
Approach**

We are looking at the patient centered approach. They are calling it patient centered services.

Collaboration

Where we have the most successes are where we have collective impact, where it's more than one person involved, and they all want to come together to make the strategy work, and that's where we're seeing the biggest successes. So, whether it is in the healthcare setting, in the community setting, in the school setting, where we see a leadership team that's broad based, we're seeing the biggest successes. So we've got the school nurse, the community, the student, where they're all working together. We call them champions. We have to find the champions in every area.

**Experiential
Learning**

I think like I said when the nurses actually cook a meal with the client and the client likes it and they report back the next time that their kids enjoyed it and they ate it and they can't believe they ate it because they only eat macaroni and cheese from a box. I think those are some of the things we have seen and then they start then to make a few more homemade meals as opposed to opening a box because that is what a lot of them do.

**Awareness of
Pre-Diabetes
& Celebrity
and Media
Attention
Brought to
the Subject**

Well, one of the things that is really helping is that this time is there is increased awareness about pre-diabetes and it can be something that can be prevented, so I think that is actually helping as there is just more and more awareness, not only of health concerns and issues. I think as we do that and then have awareness that people who lose weight could be helping to prevent that diagnosis of diabetes that could help. Someone just sent me an e-mail today, and it was an article that Alec Baldwin wrote, as an actor that has lost 30 pounds, and he was motivated by his diagnosis of pre-diabetes. That kind of publicity in people being open about their successes and how it's important and those types of things sometimes catch on. There are quite a few pieces like that going on.

Challenges

The participants were asked about challenges they have experienced in their programs, services, or professional experiences with low income individuals and families. One participant stated that the system set up for physicians to report obesity statistics is not consistent among all clinics and hospitals so adequate and accurate information is not available and regular follow up visits are not always scheduled for consistent treatment of those with diabetes. Another participant discussed how certain programs designed for low income clients charge the participants for attending and this can be a barrier if the client has other basic needs not addressed the programming will not be a priority. The presence of scholarships for programs helps some clients afford programming yet the programs are at times 16 weeks long and many clients do not follow through with the entire length of the program and get the full benefit.

Three participants mentioned the perception people have that it is expensive to eat healthy so they do not believe they are able to eat healthy if they have limited resources. Participants discussed a variety of ways to approach attaining healthy foods through couponing, having a garden in the summer months, shopping sales among the grocery stores in their community yet these ideas produced barriers for some people that may not have access to adequate transportation or the presence of competing life issues. The challenge of identifying and working with the stigma that goes along with being obese in American society was mentioned by one participant and how this is a challenge with both young children, teens and adults.

Table 6 – Challenges

<p>Perception that Healthy is Too Expensive</p>	<p><i>People claim, they think it is so hard to have access to healthier food in colder environments. They think it more expensive to eat fresh fruits and vegetables or it is more of a perception problem. There are tricks to getting around healthy eating. Healthy food is not as expensive as people think it is. You just have to do it right, buy things that are on sale, good frozen things. Yes, you can definitely spend a lot of money if you shop incorrectly on fruits and vegetables. But you can spend a few bucks a meal. It is nothing crazy. You go to Subway and spend more than that. I think it is a challenge Minnesotans have.</i></p>
<p>Cost and Length of Programming</p>	<p><i>Well in many areas, in particularly the low income, it seems to be recruiting people into the program has been a challenge. Part of that has been because some of the programs need to cover their costs; therefore, a six-month program might cost a couple hundred dollars, a year program might be \$340 like the YMCA charges, so cost has been an issue, but programs like Simply Good Eating program can offer it at no cost, or we have even tried \$15 on the theory that sometimes if you pay something for it, it's more meaningful and you stick it out. So, we try minimal costs, but they have had a very difficult time in the Metro area recruiting people into the program.</i></p>
<p>Inconsistent Measurements of BMI</p>	<p><i>So one of the things that's badly needed is the BMI and the medical charts and it's not being done consistently, so then you don't have any data to know how you're progressing, and so we've actually formed the Minnesota Community Measurement. What we want to do is work with them to make sure that everybody would be on the same page about the specs and that we could get that to be one of their priority areas. They have a lot of measurements that they work on. They're not reporting it consistently. I think the specs are pretty clear. People know how to do it, but I know that there are some technical difficulties with the EMR, the Electronic Medical Record, so that's another...All of this really ugly detailed work that takes a long time, but once it's done it makes a huge difference. To help providers know, who are very busy people treating patients, to help them know that if you do these ten things every time you see a patient who has diabetes, you're more likely to improve their overall health. And by helping them to change their practices a little bit, and it's not only the provider, sometimes it's the person at the front desk who makes sure that patient does make that follow-up appointment.</i></p>
<p>Stigma of</p>	<p><i>Some of the challenges, anytime you are trying to create a</i></p>

Obesity

behavioral change you know that's very difficult. And you're definitely dealing with different players and you're dealing with several different agendas. Um you know, in terms of what you want the outcome to be and how do we get there. Um, there's also a stigma around obesity that it's difficult to address, it's difficult to talk about and our physicians will say that.

Media influences & Quick fixes

The challenge I run into with trying to get people healthy is that people is they want to be healthy, they want to lose weight so they are coming to us but they are not really ready to make the real change. They expect it to be quick. The media is a unfortunately a huge player into that, they think they can come to my program, see me one hour a week and they assume that is enough. You got to get real here. If you think that is going to be it. You are away from me 6 days and 23 hours of the time. It is challenging to see people fail. I don't like to see people fail. Are all people that do they get it and are they ready to change.

Suggestions for Future Programs or Policy Changes

Finally, this study looked at what this all might begin to suggest about how to effectively promote low income adults in Minnesota to have access to healthier foods, healthy diets and healthy weights, with particular attention to the role of supporting healthy weight. Many of the participants discussed various ways certain current efforts are not working to combat obesity and related issues with low income people. Participants stated that telling people what to do doesn't work, not addressing cultural and literacy issues alienates clients, and at times teaching strictly about diet and nutrition and not looking at the larger systems that affect their clients is not always effective. Participants noted various programs that are showing promise in being effective. One participant discussed working on policy initiatives focusing on making the healthier food choices the most affordable and the easier choice for their clients to make.

Policy, Systems, and Environmental Change; so, instead of contacting the person directly and trying to do that knowledge base, and therefore that they know better, they'll do better, and they don't; We are going to affect everything that's around them, so it's the policies, their environment, and any systems changes that are

needed so that wherever they go, the healthy choice is the easiest choice, it's the most affordable choice, and it's nothing that they can even, we're not dealing with them directly, we're dealing with a population base, so that's our strategy for right now.

Five participants discussed how working one-on-one with clients was beneficial to meal plan, cook meals, and grocery shop as tools in changing behaviors. One participant stated that due to statistics showing that one-on-one education and training does not work, the funders do not want to fund this type of training moving forward. The participant stated in general the importance of still having one-on-one training with the low income population and the struggle of communicating this need with funders.

And possibly, because the lower income audiences also have a lower educational attainment, it might be knowledge too. So where a lot of our funders don't want to fund education one-on-one anymore, because they said, "Well, it didn't work." In this audience, we still need it. With our target audience we still need the education piece to go along with the policy, systems, and environmental change piece.

Seven of the participants discussed the need to address the basic needs of their clients or bringing healthy options to their clients living environments was being administered in various ways and was showing promise when eliminating the barrier of transportation. One participant was looking at having on-site programming at public housing sites in order to increase access, developing community gardens at public housing sites and teaching gardening skills as well as increased access to local farmers markets.

We're looking at the public housing and what we can do there in terms of increasing access. It could be community gardens; it could be farmers markets to increase the fruit and vegetable access; it could be making sure that they have a room or a unit where people can come and get resources about health or maybe sit down and have a lesson, bringing in extension to come in and do it. So, we're looking at public housing now, and they seem to also be very interested in the health and nutrition in public housing, the ones that tend to gobble up the healthcare costs because of their desperate situation.

All participants in this study discussed in one way or another how city planning and urban development plays a role in access for citizens to get from one point to another as well as offering safe avenues to move freely. Different participants are currently working at the policy level lobbying for change with local city councils for Complete Street laws in their communities to organizations working with city planners to rethink how neighborhoods are designed to optimize the ability for residents to have safe neighborhoods to state and local agencies working with schools to have healthier food options for kids. Eight participants suggested changes not only in public health policies, urban planning, agricultural, and manufacturing policies noting that it changes are needed on many levels and it will take the entire society to make large scale changes to affect obesity rates.

You know like school meals are changing, cities are taking a look at how they're designing. I think manufacturers are getting a lot of pressure and so they're making some changes. I think that people are becoming more aware of it, and there are steps that have been taken. Again, I just think everybody has to step up to the plate and not just one element because it's going to take all of it. I read somewhere, I can't remember, but all the different pieces that would help turn the tide, it is just huge. You can't put it all on one person's back. It's got to be everybody's, and so that's what I mean it's the whole society.

Three participants suggested supporting laws and policies that make high sugar and high fat foods more expensive in order to change behaviors similar to the fight against tobacco. Similarly, these same participants suggested restricting the SNAP program (food support program) recipient's ability to only buy healthy food options with that benefit and nothing that lacks nutritional value. Three participants noted the concept of "nudging" or steering consumers to make better choices not only in the grocery stores but in convenience stores or at a work meeting.

Well, we should take the same approach with sugar as we did with tobacco. They are not good for society and a combination of public information, behavioral economics and restrictive policies or de-normalizing policies works.

There were conflicting statistics discussed by participants with one participant stating the obesity rates were leveling off with others stating statistics were continuing to rise.

Discussion

The current research explored community based programs that promote healthy diets for low income Minnesota adults. There exists a significant amount of research in relation to obesity topics with specific research focused on low income adults (Kahng, 2010; Kennedy, et al, 2007; Knuth, 2010; Thomas, 2010). In other research there were findings in relation to the reasons why people are overweight (Bellisari, 2007; Beydoun et al., 2008; Conrad & Schneider, 1992; Darmon et al., 2002; Grant & Boersma, 2005; Keigher & Lowery, 1998; Lambert, 2011; Moore, 2011). This discussion includes sections to highlight this study's findings, implications for social worker practice, strengths and limitations of this study, and implications for future study.

Implications for Social Work Practice

Programs and services that work with low income adults to have healthier diets play an important role in identifying individuals in need of services and for designing services appropriate for specific populations for them to be effective. Social Workers success is important for the future of the United States healthcare system and the costs associated with the care of individuals with chronic diseases such as diabetes when related to obesity. The participants' responses point to many implications for social work practice. In particular, implications include the need for one-on-one experiential training and services for low income individuals, the need to address competing demands such as transportation, marginalized housing, literacy, and childcare as well as the need to address how city planning develops streets and cities for people to be able to move freely and have safe neighborhoods and streets.

First and foremost, the experiences shared by participants highlight the fact that addressing healthy diets with low income adults is multi-faceted and requires policy and system changes as well as better services to address basic needs so the focus can be placed more on healthy diets. With this knowledge social workers will not only need to address the basic needs of individuals but also be advocates for change on city councils for safer and better streets and neighborhoods and with city, state, and federal governments to address policy changes for additional transportation, subsidized housing, and childcare resources. More social workers must become champions for low income people by acquiring additional education and take positions as decision makers at the policy level work to address these issues with a social work lens. Social workers must work in media in ways that address the stigma and awareness of the need for education about healthy diets and weights.

Secondly, participants made it clear that collaboration was needed among programs, between physicians and reporting agencies, between non-profits and for profit organizations and any other entity working with low income individuals. The need for transparent communication about what is working and what is not working and addressing these issues in a timely manner was noted as an important tool in working effectively and efficiently.

Thirdly, there are implications that suggest the need for environmental or policy changes making healthier options more available and affordable were prominent in participant responses. Low income individuals generally utilize more health care dollars treating chronic conditions including diabetes and associated issues. There is a need for social workers to develop healthy social and volunteer opportunities for low income

individuals as it has been shown that people that volunteer their time have lower BMI's (Buettner, 2007).

Strengths and Limitations of this Study

There are several strengths to this study. First, the information gathered is a great summary to what is known about what is available about programs and services for low income individuals and this study is specific to Minnesotan adults. Research done for this study found a plethora of research on obesity and low income individuals but nothing specific to Minnesotan adults looking at federal, state and local policies and non-profit responses to current and future programs and services. In addition, an additional strength to this study was the open ended questions that allowed for information to be discovered through the interview process. The semi-structured nature of the interviews were such that the participant was free to elaborate and expand from the scheduled open ended questions, allowing for more information to be discovered.

Although the study interviewed 12 professionals from a variety of backgrounds and viewpoints working with low income individuals this could be seen as a strength or a limitation. The study looked at a variety of viewpoints which brought a rich texture to the responses yet allowed for so much information it could be confusing and cumbersome to analyze and fully grasp.

Although each and every participant offered valuable information a limitation would be that low income adults were not represented to discuss their experiences and suggestions for changes that may be effective. The study focused on professionals working in the Minneapolis/St. Paul and St. Cloud communities representing both rural

and urban populations. The information accumulated should not be used as a generalization to the greater United States low income population and not taken universally. The experiences of low income people and professionals outside Minnesota may have very different experiences.

Suggestions for Future Study

This study did provide valuable information to enhance the research already available on this topic yet there are suggestions for future study in this area. This was a small study with only professionals interviewed and would benefit from expansion gathering the point of view of low income adults. Narrowing the focus of future studies to focus on people living with serious and persistent mental illness (SPMI) and how community-based programs address healthy diets for this population would be beneficial to social work as this was not specifically mentioned by the participants in this study.

Conclusion

In conclusion, the topic of healthy diet when faced with external barriers like limited income presents challenges to professionals and organizations charged with a solution. This study findings suggest that one-on-one education and training with people with limited income is still needed even though current research shows it does not work. Other suggestions that came from this study include “nudging” people by changing their environment by offering better food choices alongside not so healthy options and making changes in the workplace to encourage movement and exercise may be helpful in changing behavior. Research participants discussed the need for organizations to collaborate and combine resources to work together toward the common goal of a healthier community.

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Appendix A
GRSW Research Proposal
Consent Form
University of St. Thomas

**Community based efforts that promote healthier diets for
low-income Minnesotans**

I am conducting a study about I invite you to participate in this research. You were selected as a possible participant because of your knowledge and experience in community based programs working with low income Minnesotans. Please read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Stephanie K. Larson, a graduate student at the School of Social Work, Saint Catherine University/University of Saint Thomas and supervised by Dr. David Roseborough, PhD.

Background Information:

The purpose of this study is to gather professional opinions on the most effective community-based programs for low income Minnesotans.

Procedures:

If you agree to be in this study, I will ask you to do the following things: Meet me at an agreed upon location for a 45 to 60 minute interview. The interview will be tape recorded and transcribed either by me or a paid transcriber. I will present the final paper on presentation day on May 14th, 2012.

Risks and Benefits of Being in the Study:

The study has no known or expected risks. For instance, if the participant discusses a particular client in the interview, the details in the final report would be omitted. The study has no direct benefits.

Confidentiality:

The records of this study will be kept confidential for this study. Research records will be kept in a locked file at my home in Sartell. I will omit any particularly identifying information from the transcript. Findings from 15 minutes of the transcript will be presented to my research class. The audiotape and transcript will be destroyed by June 1st, 2013.

Voluntary Nature of the Study:

Your participation in this study is entirely voluntary. You may skip any questions you do not wish to answer and may stop the interview at any time. Your decision whether or not to participate will not affect your current or future relations with the Saint Catherine University, the University of Saint Thomas, or the School of Social Work. If you decide to participate, you are free to withdraw at any time without penalty. Should you decide to withdraw, you may do so up to one week after the interview concludes and data collected about you will not be used and will be destroyed.

Contacts and Questions

My name is Stephanie K. Larson and you may ask any questions you have now. If you have questions later, you may contact me at 999-999-9999 or my professor Dr. David Roseborough, PhD. at 651.735.1408. You may also contact the University of St. Thomas Institutional Review Board at 651-962-5341 with any questions or concerns.

You will be given a copy of this form to keep for your records.

Statement of Consent:

I have read the above information. My questions have been answered to my satisfaction. I consent to participate in the study and to be audio-taped.

Signature of Study Participant

Date

Print Name of Study Participant

Signature of Researcher

Date

APPENDIX B
UNIVERSITY OF ST. THOMAS
GRSW682 RESEARCH PROJECT

**Community based efforts that promote healthier diets for
low-income Minnesotans**

Interview Questions

1. Tell me about your organization/employer and your role in it.
2. How did the organization come to be concerned about weight and/or diet for your clients?
3. How does your organization intervene or try to help in this area?
4. What successes and/or challenges have you had in this area?
5. What are future directions you're considering?
6. What challenges do you think Minnesota adults, in general, face in relation to healthy diets and healthy weights?
7. What challenges do you think are potentially unique to lower income adult Minnesotans?
8. What do you see as organizational or societal "next steps" in helping in this area?
9. Any policy steps that you think would be particularly effective or ineffective?

