

# Urban First Nations, Inuit, and Métis Diabetes Prevention Project: Fresh Food Market Evaluation

**Brittany Kachur** 



### Community-University Institute for Social Research

### Building healthy, sustainable communities

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- 2. Social Economy
- 3. Rural-Urban Community Links
- 4. Building Alliances for Indigenous Women's Community Development
- 5. Analysis of community-university partnerships

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Portal bringing university and community together to address social issues: CUISR facilitates partnerships with community agencies.

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*Student training*: CUISR provides training and guidance to undergraduate and graduate students and encourages community agencies to provide community orientation in order to promote positive experiences with evaluators and researchers.

# URBAN FIRST NATIONS, INUIT, AND MÉTIS DIABETES PREVENTION PROJECT: FRESH FOOD MARKET EVALUATION

BRITTANY KACHUR







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# DEFINITION OF TERMS

**Aboriginal Diabetes Initiative (ADI)** – a Health Canada initiative that promotes culturally tailored approaches to diabetes prevention, health promotion, and best management practices in communities across the country (Health Canada, 2012).

**Urban First Nations, Inuit, Métis Diabetes Prevention project (UFNIMDP)** – a division of Health Canada's ADI that provides funding for community-based diabetes prevention and health promotion activities specifically for urban Aboriginals (Health Canada, 2012).

**Household Food Insecurity (HFI)** – "The limited or uncertain availability of nutritionally adequate and safe foods or the limited or uncertain ability to acquire acceptable foods in socially acceptable ways" (Anderson, 1990, p. 1560).

**Food Desert** – "This term refers to geographic areas, or neighbourhoods, where affordable and nutritious foods are unavailable, requiring residents to travel outside of their neighbourhood to access nutritious foods" (Cummins & Macintyre, 2002).

**Fresh Food Market** - a small community-based market that provides fresh fruits and vegetables at wholesale prices in an effort to improve access to healthy food while reducing the negative effects of living in a food desert (City of Vancouver, 2013).

**Type 2 Diabetes** – a prevalent chronic disease affecting the metabolic system characterized by high blood glucose levels and serious systemic complications (Saskatoon Health Region [SHR], 2011).

# Abstract

Improving access to healthy, affordable produce in Saskatoon's core neighbourhoods is one of the primary objectives of the Urban First Nations, Inuit, and Métis Diabetes Prevention (UFNIMDP) project (Armstrong-Monahan, 2013). Fresh Food Markets were initially established as a service of the CHEP Good Food Inc. in several locations and since then, the UFNIMDP project has been instrumental in supporting the expansion of the markets (Armstrong-Monahan, 2013).

This report offers a formal evaluation of the Fresh Food Markets based on a survey distributed to market customers. The survey sought to understand the impact market services were having on household food insecurity (HFI). Noteworthy results show a reduction in the use of community food programs and an increase in fruit and vegetable intake by regular market attendees. From the analysis of the survey data and a comprehensive review of current literature, a series of recommendations are made. These include modifications to expand the service and better meet the needs of the neighbourhoods it serves. Additional recommendations look at innovative programming and food strategies from other urban centres across North America.

Continuing to build upon Saskatoon's already exemplary services could have a greater impact on HFI, therefore creating a more equitable and sustainable food system.

### INTRODUCTION

The prevalence of type 2 diabetes in Saskatoon's Aboriginal population points to a substantial health disparity (SHR, 2011). Health disparities refer to the inequalities that exist in health, healthcare quality, and access (Lemstra & Neudorf, 2008). They reflect the determining factors of health such as income level, education level, and cultural background (Lemstra & Neudorf, 2008). Disproportionate rates of morbidity and mortality can be precipitated by many factors, most notably socioeconomic status – an individual's social and economic state (Sisson, 2002). Paralleling the high rate of type 2 diabetes in Saskatoon are high levels of food insecurity within Saskatoon's core neighbourhoods (SHR, 2011). Household Food Insecurity (HFI) signifies the inability of an individual or family to meet their nutritional needs due to a variety of barriers (Anderson, 1990). A study conducted by Saskatchewan Food Banks found that 63% of food bank patrons self-identify as First Nations (Food Banks Canada, 2011). Diabetes is a debilitating and costly chronic disease that disproportionately affects Aboriginal people, with incidence and prevalence rates of 1.6 and 2.6 times higher respectively than the non-First Nations population (SHR, 2011). The critical links between environment, socioeconomic status, food security, and health must not be overlooked. As such, improving food security has emerged as a priority in diabetes prevention in Saskatoon's Aboriginal population (Armstrong-Monahan, 2013).

Funding from the Urban First Nations Inuit Métis Diabetes Prevention (UFNIMDP) program supports a variety of strategies and activities that are aimed at addressing food insecurity within the core neighbourhoods of Saskatoon. The UFNIMDP involves five partner organizations including:

- Saskatoon Community Clinic (SCC) A primary health care cooperative that supports health promoting activities and services that address the socioeconomic issues facing Saskatoon communities (SCC, 2013).
- 2. Saskatoon Health Region (SHR) The organization responsible for the planning, organization, delivery and evaluation of healthcare in Saskatoon and the surrounding area. The SHR's Aim 4 Health program is a diabetes education and management program that targets Aboriginal community members diagnosed with or at risk of developing type 2 diabetes (SHR, 2013).
- 3. CHEP Good Food Inc. (CHEP) CHEP is a community organization that works to improve food access and reduce HFI in Saskatoon. Their programming is comprehensive and their delivery approach encourages community development and capacity building (CHEP, 2013).
- 4. Central Urban Métis Federation Inc. (CUMFI) A community based Métis organization that works to address Aboriginal issues in Saskatoon (CUMFI, 2012).
- Saskatoon Indian and Métis Friendship Centre (SIMFC) A not-for-profit organization that works in Saskatoon communities to improve the lives of urban Aboriginal people (SIMFC, 2013).

Other organizations or programs, including the Collective Kitchen Partnership Program, Community Peer Leader Program, University of Saskatchewan Aboriginal Student Centre, and the SHR's Mental Health and Addiction Services Oasis Program, are linked to the UFNIMDP through various project activities.

The project Advisory Committee includes a representative from each partner organization and meets on a quarterly basis to review the project's progress and plan for additional project activities that are reflective of UFNIM-DP objectives. Progress is measured based on meeting the following four project objectives (as defined in the original UFNIMDP funding proposal):

- 1. To create supportive environments and increase practices of healthy behaviours through improved access to healthy food.
- 2. To increase knowledge and skills of healthy food preparation as a means to increase the practice of healthy eating behaviours.
- 3. To increase knowledge of healthy food choices as a means to diabetes prevention through integrating diabetes awareness into project activities.
- 4. To increase community ownership and capacity to design and deliver culturally appropriate health promotion and diabetes education activities.

As the objectives suggest, project activities are varied. These activities have been evaluated on an on-going basis using a standardized monitoring tool and are summarized in the following chart (see Appendix A). This report is focused on examining the outcomes of project activities developed or supported to address food insecurity in the Saskatoon urban Aboriginal community.

# LITERATURE REVIEW

The following literature review is central to the evaluation of the Fresh Food Market program and examines several key issues surrounding food security and its impact on health.

### Household Food Insecurity

Household Food Insecurity (HFI) is a complex issue with far-reaching implications experienced locally as well as on an international scale (Health Canada, 2012b). It is strongly associated with socioeconomic status and its negative effects are compounded by the lack of accessibility to healthy food choices (Health Canada, 2012b). Additionally, HFI and inadequate nutrition have been shown to contribute to several debilitating chronic diseases (Dibsdall Lambert, Bobbin & Frewer, 2002). Low income individuals are more likely to suffer poor nutrition and as such, experience disproportionate rates of type 2 diabetes, heart disease and cancer (Dibsdall et al., 2012). Improving physical access to and the affordability of healthy foods, particularly fruits and vegetables, is necessary but not without its challenges. This is a multi-faceted issue and "the problem of accessibility of wholesome foods is also directly linked to the competing accessibility of energy-dense, nutrient-poor products" (Dibsdall et al., 2012, p. 166). If access and affordability are appropriately addressed, lack of motivation to eat healthy foods can then become the central focus of programming and research (Dibsdall et al., 2012). Identifying the factors that interfere with motivation, and ultimately exacerbate HFI, is an area requiring further research (Dibsdall et al., 2012).

HFI has become a priority in program planning and the development of policy regarding food systems (Health Canada, 2012b). A continued awareness of the barriers, whether socioeconomic or physical, experienced by the nutritionally vulnerable is important (City of Vancouver, 2013). The issue of food access "may be the most complex for the simple reason that it is rooted in notions of justice and equity related to the basic human need to nourish ourselves" (City of Vancouver, 2013, p. 93). Therefore, integrated strategies to reduce HFI must not only address food access but also broader environmental and political factors (City of Vancouver, 2013). In the city of Saskatoon, many organizations are coordinating their efforts to reduce HFI and improve food access in their communities (Saskatoon Food, 2013). Garnering governmental and public support may help in reducing disparity, making Saskatoon's food system more equitable and just (Saskatoon Food, 2013).

#### **Food Deserts**

The term *food desert* refers to an area of an urban centre with poor access to healthy, reasonably priced food (Cummins & Macintyre, 2002). The definition of food desert varies and can include both areas lacking access to any food sources and areas with convenience stores and fast food restaurants but no grocery stores (Walker, Keane, & Burke, 2010). These neighbourhoods often experience disproportionate rates of poverty and illness (SCC, 2008). Historically, as cities grow and affluent residents move into suburbs, retailers follow, leaving inner-city, lower-income residents with limited food access (Walker et al., 2010). This perturbing trend can be addressed by prudent urban planning and neighbourhood-specific social interventions (SCC, 2008).

Several research studies recognize food deserts as negatively impacting the health of a community (Walker et al., 2010). The retail food environment of a neighbourhood shapes the choices individuals make (Walker et al., 2010). Studies have also examined the relationship between the retail food environment of a community and the intake of fruits and vegetables (Zenk, Schulz, Kannan, Lachance, Mentz, & Ridella, 2009). Results often vary according to location, proving that identifying such relationships is complex and challenging (Zenk et al., 2009). The relationship may also be affected by an individual's race and ethnicity and there may be generational differences as well (Zenk et al., 2009). Overall, the presence of a full-service grocery store positively influences the fruit and vegetable consumption of urban community members, while easily accessible fast food restaurants and convenience stores encourage diets high in energy-dense foods (Walker et al., 2010; Zenk et al., 2009).

The role food plays in the health of individuals and communities is well-established (SCC, 2008). In Saskatoon, several core neighbourhoods have been recognized as food deserts (Kershaw, Creighton, & Markham, 2010) (see Appendix B). The neighbourhoods identified as food deserts with the poorest food access include: Holiday Park, King George, most of Riversdale, areas of Caswell Hill, Pleasant Hill, Westmount, and Mount Royal (Kershaw et al., 2010). These low-income neighbourhoods had the most food imbalance in Saskatoon, meaning residents live much closer to fast food restaurants than to supermarkets (Kershaw et al., 2010). Reducing HFI in these communities was identified by the Saskatoon Community Clinic as a priority during Poverty Awareness Week in 2008 (SCC, 2008). Supporting projects that improve access to supermarkets and offer good, healthy produce at affordable prices remain the focus of their interventions (SCC, 2008).

#### **Type 2 Diabetes**

*Diabetes mellitus* is a disease of the endocrine system that produces hyperglycemia or high blood glucose levels due to a systemic insulin deficiency (SHR, 2011). Type 1 diabetes refers to an autoimmune disorder that results in inadequate insulin production and accounts for 10% of people with diabetes (SHR, 2011). Type 2 diabetes is much more common and is characterized by insulin resistance (SHR, 2011). While the onset is typically later in life, there has been an increase in the number of children and adolescents diagnosed with type 2 diabetes (SHR, 2011). This is particularly true for the Aboriginal population, where, as previously mentioned, the incidence and prevalence rates of diabetes are 1.6 and 2.6 times higher respectively than the average incidence and prevalence rates in the Saskatoon Health Region (SHR, 2011). Nearly half of the Aboriginal population in Saskatoon over the age of sixty has been diagnosed with type 2 diabetes (SHR, 2011). Not only are more Aboriginal people experiencing diabetes than the rest of the population, they also face an earlier onset of the disease that is often more severe and has higher rates of complications (SHR, 2011). The mortality rate of an Aboriginal individual with diabetes is four times higher than someone in the non-Aboriginal population (SHR, 2011).

The long term implications of type 2 diabetes can be severe, particularly when hyperglycemia is not managed effectively (SHR, 2011). Chronic hyperglycemia compromises the vasculature and can result in cardiovascular diseases such as heart disease and stroke, kidney disease, hypertension, limb amputations and vision loss (SHR, 2011). These risks can be mitigated by managing type 2 diabetes through healthy lifestyle choices (SHR, 2011). A healthy diet, maintenance of a healthy weight, exercise and prudent control of blood glucose levels can prevent diabetes, its complications and even death (SHR, 2011).

The Saskatoon Health Region's report on diabetes identifies several priority areas and recommendations. These include the prevention of diabetes through health promoting activities and partnerships, screening high risk populations and implementing early interventions, and preventing complications through chronic disease self-management and evidence-based education and practices (SHR, 2011). The UFNIMDP works to fund activities that prevent or delay diabetes and its subsequent complications in the high-risk urban Aboriginal population (Health Canada, 2012a). These activities are centered on reducing household food insecurity within the core neighbour-4 hoods in Saskatoon and providing opportunities for individuals to make healthier dietary choices (Health Canada, 2012b; SHR, 2011).

#### **Community Markets**

In Saskatoon, community markets are called Fresh Food Markets, a CHEP Good Food Inc. initiative. These markets were created to improve neighbourhood access to fresh produce (C. Armstrong-Monahan, personal communication, June 6, 2013). Fruits and vegetables are sold at reduced prices at nine different locations, including elementary schools, high schools and community churches. The UFNIMDP has supported CHEP to fund five of these markets. Fresh Food Markets have been well received and attended in communities with limited access to fruits and vegetables (C. Armstrong-Monahan, personal communication, June 6, 2013).

Food culture and environment play a central role in communities and are "an effective vehicle to connect people to one another" (Toronto Public Health [TPH], 2010, p.1). Such connections can help build capacity and encourage positive community action (TPH, 2010). Subsequently, issues related to HFI may be improved by community-based, health-promoting approaches (TPH, 2010). Community food markets have emerged in many North American cities and are viewed as essential in improving food access and reducing HFI (FoodShare Toronto, n.d.). In Toronto, community food markets are a vibrant, well-used service within neighbourhoods and 79% of customers return to purchase produce on a weekly basis. According to Toronto FoodShare, the majority of participants (53%) are eating more fresh fruits and vegetables since the establishment of the Toronto Good Food Markets (FoodShare Toronto, n.d.). These markets have grown beyond the sale of groceries and have begun incorporating additional socially beneficial programming, such as children's activities, baking groups and harvest celebrations.

Vancouver has also seen the establishment of several community markets in recent years and their current civic Food Strategy identifies markets as a priority intervention (City of Vancouver, 2013). These markets are reflective of the Food Strategy objectives as they improve access to healthy foods, support community involvement and development, and encourage equality (City of Vancouver, 2013). Community markets in the city of Saskatoon parallel the market services being provided in other Canadian communities.

### METHODOLOGY

The purpose of this report is to evaluate the Fresh Food Market project activity and its impact on the community. The anticipated outcome identified in the UFNIMDP project map states "Aboriginal people using the Market 2 to 3 times a month will both be less reliant on community food programs and will consume more fruits and vegetables" (Armstrong-Monahan, 2013, p. 2) (see Appendix C). Evaluation questions and outcome indicators were created that support developmental evaluation and feedback and assist with identifying key areas requiring growth.

#### **Evaluation Questions**

- Do participants feel project activities such as the Fresh Food Markets and Coupons help them feel more food secure?
- Do they use community food programs less often?
- Do the Markets relieve any of the stress of grocery shopping?
- Do they eat more fruits and vegetables?

#### **Outcome Indicators**

- 20% of Aboriginal people accessing Markets will state their food lasts longer
- 20% will state they and/or their family eats more fruit and vegetables

#### **Research Methods**

Survey respondents were adults over the age of 18 who were attending the Fresh Food Market with the intent of buying groceries. Surveys were distributed at the St. Thomas Wesley Church Fresh Food Market on three consecutive Wednesdays – June 19th, 26th and July 3rd, 2013. This particular market was chosen as on-going monitoring has shown it is the largest, most frequented market. Additionally, it met the target population of the UF-NIMDP project as approximately 90% of the consumers are Aboriginal (C. Armstrong-Monahan, personal communication, June 6, 2013). Approval for the study was obtained from the University of Saskatchewan Research Ethics Board on June 13th, 2013.

#### Design

A brief script was prepared to respectfully invite community members to participate and inform them of the intent of the research project. A consent form highlighted the purpose and anonymity of the survey, the contact information of the researchers and the project's ethics approval. Participants were informed of their right to pass over any questions they did not want to answer. This consent form required verbal consent from each individual (see Appendix H).

Efforts were made to ensure the survey used plain language and would be accessible to all community members. Primarily, the respondents completed the survey independently though some required assistance despite the efforts to use plain language (see Appendix I). A total of 52 (n=52) surveys were completed. If it was a respondent's first time at the market or they attended infrequently, they were only eligible to complete the first two questions. If they shopped regularly at any of the markets they were asked to complete a total of twelve questions. Questions examined different aspects of market use in relation to food insecurity. Upon survey completion, participants were given two Market Coupons, a value of \$10.00, for their contribution to the project. These coupons could be used for future purchases at any of the markets or the Good Food Junction grocery store.

# **RESULTS & INTERPRETATION**

The Fresh Food Market survey questions were intended for regular market customers who attended markets more than once per month. Additional themes emerged from the responses to open-ended narrative questions as well as from the analysis of qualitative data.

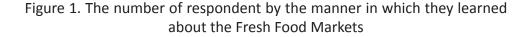
#### **Data Analysis**

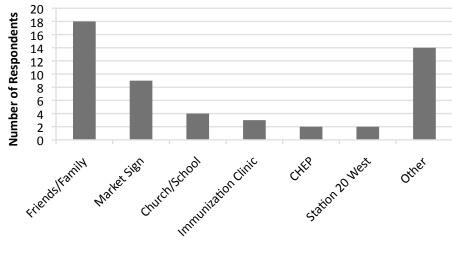
The results of the surveys were compiled by the researcher and summarized. Graphs were created using Excel to provide a visual representation of significant survey results.

#### Results

A total of 52 surveys (n = 52) were completed at the Fresh Food Market at St. Thomas Wesley Church. Of those respondents, 83% (n = 43) had previously attended the market and 17% (n = 9) were first time market goers. The community market coordinator stated that most attendants of the market are community members and/or families attending the immunization clinic held at the church (F. Burgess, personal communication, June 19, 2013). As mentioned previously, it has been estimated that approximately 90% of those shopping at the market are Aboriginal (C. Armstrong-Monahan, personal communication, June 6, 2013).

All patrons surveyed were asked about how they first heard about the Fresh Food Market at St. Thomas Wesley. Figure 1 represents the various responses. The category 'Other' included a variety of sources such as a parent aid and a diabetes counsellor who promotes the Fresh Food Markets. This figure indicates the positive influence of word of mouth advertising as the majority of respondents heard of the markets through friends and family.





Where Respondents First Heard of Market

The nine respondents attending for the first time were asked for their initial impressions of the quality and prices of the fresh produce. The responses were all positive; community members said prices were reasonable and the fruits and vegetables looked appetizing.

The third question of the survey was directed to respondents who were frequent users of the Fresh Food Market. This question related to HFI and examined the ways in which the markets have benefited individuals and families. Results show that 38% of people go to the grocery store less often and 19% claimed their groceries last longer at home since regularly attending the market. Of those surveyed, 35% spend less money on getting groceries because they do not need a car or taxi service and 42% are able to walk to a market location. Importantly, 54% of people stated that they and their families eat more fruits and vegetables since they have started shopping at the markets (see Figure 2).

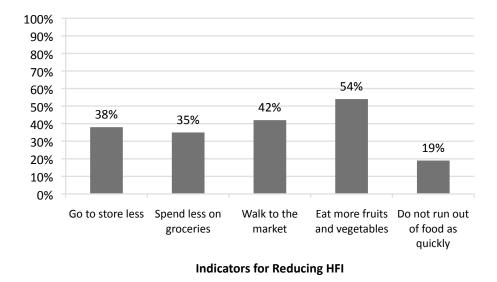
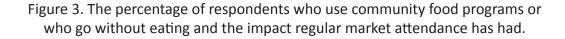
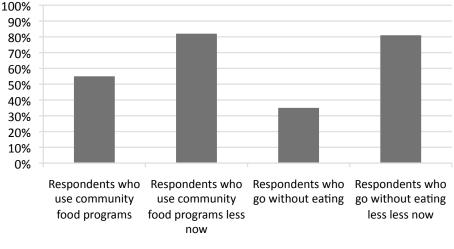


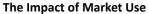
Figure 2. The percentage of respondents who identified how the markets had benefitted themselves and their families.

Additional survey questions inquired about the use of market coupons, which are distributed at various activities of the UFNIMDP program. Sixty-three percent of survey participants stated that they have used the coupons and the majority of them spend more than the value of the coupon. Market customers typically purchase five to ten items (60%, n=24) and the majority of people (90%, n=35) buy both fruits and vegetables, rather than solely fruit. Finally, respondents were asked if they eat fewer fruits and vegetables than they think they should because they do not have enough money and 53% (n=21) of respondents said yes.

Figure 3 represents the impact that regular market attendance (two to three times a month) has had on different aspects of community members' lives. Consumers were asked if they use any community food programs such as the Saskatoon Food Bank or the Friendship Inn. Fifty-five percent of people (n=22) responded yes to this question and were directed to answer a follow-up question that asked if they use these services less frequently because of the Fresh Food Markets. Of those who did attend community food programs, 82% (n=18) stated they use them less often because of the markets. Secondly, when asked if people in their household ever skip meals because they do not have enough money to purchase food, 35% (n=14) of people responded yes. When asked if this happens less since attending the Fresh Food Markets, 81% (n=13) of people answered yes.







The final survey questions were open-ended and inquired about what respondents like about the markets and what they would choose to improve. Figure four represents what survey respondents like about the market services. The 'Other' category includes responses such as the friendly and welcoming service, the coupons, and the enjoyment from visiting with friends and community members. These answers will be further highlighted as the report identifies significant themes that emerged from the market survey results.

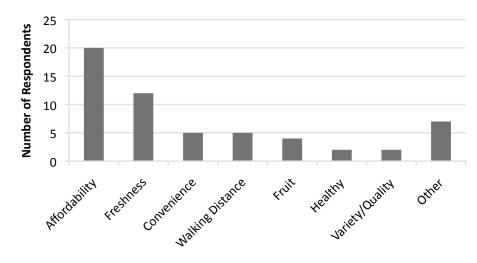


Figure 4. The number of respondents who identified what they liked most about the Fresh Food Markets

What Respondents Like About the Market

## DISCUSSION

#### Theme 1: Affordability

When survey participants were asked what they liked most about the Fresh Food Market, the overwhelming response was the affordability of the produce. With a wide variety of fruits and vegetables at wholesale costs, customers are able to buy items that they typically would not purchase. This is consistent with the finding reported above that community members are eating more fruits and vegetables and are less reliant on other retail food establishments. The reasonable pricing is meeting individual needs by improving accessibility; some customers come to buy enough for a snack at work while others come to purchase their produce for the week. The purpose of community markets is to reach vulnerable populations and reduce the barriers associated with HFI, specifically affordability (City of Vancouver, 2013). The UFNIMDP has supported CHEP in increasing the scope of the Fresh Food Market program and as a result communities may have improved equity in access to fresh produce.

#### Theme 2: Convenience (Improved accessibility to fresh produce)

The locations of the nine Fresh Food Markets in Saskatoon seem to be improving the physical accessibility of fresh produce in otherwise underserved communities. Survey respondents consistently pointed to convenience as one of their preferred aspects of the markets. Many customers live within walking distance to the market and appreciate being able to access fresh fruits and vegetables with relative ease. The convenience of shopping at an accessible community market encourages customers to attend with regularity and may ultimately reduce HFI over the long-term (City of Vancouver, 2013).

#### **Theme 3: Community Engagement**

Regular customers expressed appreciation for the people who are the driving force of the Fresh Food Market program. They also enjoy the social interaction and sense of community they experience when they come to do their grocery shopping. Improving access to fresh, affordable food is not solely about improving physical health as food also plays an integral role in "building strong and diverse communities" (TPH, 2010, p. 1). The St. Thomas Wesley church location was described as friendly and welcoming; a strength that appears to encourage customers to continue to access the service.

#### Theme 4: Market Expansion

When asked what could be improved about the Fresh Food Markets, a common response from survey respondents was to increase and expand the service. This included not only increasing the variety of produce available but also increasing the hours and locations of markets. All of the Fresh Food Markets are open during weekdays, which can be an issue for those who work weekday jobs. Participants also named specific foods they wished the market would offer and some mentioned that there is often a shortage of the more popular items like bananas and oranges.

#### Theme 5: Decreased reliance on community food programs

Survey results show that individuals who routinely purchase groceries at the Fresh Food Markets report reduced reliance on community food programs such as the Saskatoon Food Bank and Friendship Inn. This important finding is one of the desired outcomes identified in the UFNIMDP project map (see Appendix C). The short-term implications may be an improved quality of life for community members and the ability of CHEP to point to the positive outcomes of this program. As well, the potential for long-term benefits, including reducing community food insecurity and chronic disease rates, is significant if the program continues in this direction.

#### Theme 6: Increased consumption of fruits and vegetables

Survey results, as seen in Figure 2, show a marked increase in individual consumption of fruits and vegetables. Many survey participants spoke positively of the wide variety of fruits and vegetables available at the market. Some people even stated that the Fresh Food Market produce tastes better than what they get at the grocery store. The data collected alongside these affirming comments indicates that a second anticipated outcome of the UFNIMDP project has been realized; that 20% of people accessing the markets will state they and/or their family eats more fruit and vegetables. Increasing the amount of fruits and vegetables in the diet can reduce the risk of developing and help manage the symptoms of several chronic diseases (Dibsdall et al., 2002).

#### Limitations

Several limitations have been assessed in relation to the market research project; the first being the open-ended nature of many of the survey questions. In an attempt to reduce this problem, the survey was thought-fully designed to include a mix of questions. Also, the Fresh Food Market survey was completed at only one of the nine market locations in Saskatoon. St. Thomas Wesley was chosen because it is the largest market and it reaches the UFNIMDP project's target population as an estimated 90% of patrons are Aboriginal. While surveying at several locations amongst differing demographics may have produced different results, the researchers purposefully chose this market due to the UFNIMDP project's objectives.

An unanticipated issue that arose each week at the market resulted from the market coupons being given out as appreciation for respondents' contribution to the study. Word of mouth travelled quickly throughout the community and several individuals came into the market wondering where and how they could get free coupons. Efforts were made by the researcher and community market coordinator to ensure that individuals were not taking unfair advantage of the situation or duplicating responses by taking the survey twice. Additionally, there were some partici-12 pants for whom English was a second language or reading and/or writing were a challenge. This may have impacted the results of the survey though due care was taken to ensure questions were written in plain language. As well, the researcher encouraged participants to ask for assistance if required.

#### Recommendations

#### Market Expansion

One of the recurring comments from survey participants was to expand the Fresh Food Market service. Several new locations have been added in the past year, increasing access to healthy, fresh produce (Armstrong-Monahan, 2013). Community members have also suggested an increase in the frequency that the St. Thomas Wesley location runs. If the market was opened two or three times a week rather than just once, people would have improved access to the largest of the Fresh Food Markets. There are individuals attending the market over their lunch break because they are working during the weekdays. They suggested adding a weekend market for those with full-time jobs. The data that has been collected is indicative of positive community gains and expanding on this service could reduce household food insecurity in these neighbourhoods (TPH, 2010).

#### **Mobile Food Markets**

Various urban centres have begun utilizing mobile fresh produce markets as an integral part of their food strategies. Food trucks have become pervasive in urban landscapes and those involved in food security initiatives are using the momentum of this movement (City of Vancouver, 2013; FoodShare Toronto, n.d.). In the past several months, the City of Saskatoon has begun permitting food truck operators to open for business. Best practices in other Canadian communities include the use of mobile community markets (City of Vancouver, 2013). In particular, the South Vancouver Neighbourhood Food Network Mobile Pocket Market uses a van to deliver fresh produce to communities in need (City of Vancouver, 2013). They operate in areas where there are seniors' complexes and affordable housing sites to improve access for those with limited mobility (City of Vancouver, 2013). The Mobile Good Food Market in Toronto selects underserved neighbourhoods through analysis and consultation and has been providing this service since 2012 (FoodShare Toronto, n.d.). Peaches and Greens food truck in Detroit provides easily accessible produce as well as education on healthy food choices (Barclay, 2012). A similar project may work particularly well in Saskatoon's warmer seasons. During summer months, the mobile food market could be stationed at community parks and swimming pools where families gather to give them the opportunity to purchase healthy snacks and vegetables and fruit to take home.

#### Modifying the Market Coupon Program

The UFNIMDP program uses market coupons as an incentive for Aboriginal community members to utilize the Fresh Food Market services. The coupons are distributed at a variety of project activities with the goal of supporting Aboriginal community members to purchase more fruits and vegetables. This coupon initiative has been used in several North American communities to motivate individuals to purchase healthy foods (City of Vancouver, 2013; TPH 2010). However, several community members at St. Thomas Wesley expressed concern over the use of market coupons. Their experience has been that the market coupons, while beneficial to some, are being sold by individuals on the street. This may be an unavoidable symptom of the larger, more pressing issues in the community.

An alternative coupon program that exists in BC is the Pocket Market Coupon Program. In this particular neighbourhood, low-income market customers purchase pre-paid coupons on a monthly basis (Cedar Cottage Food Network [CCFN], 2010). The revenue from the coupon sales are used to purchase produce in bulk which is then sold to the participants with coupons at significantly lower prices (CCFN, 2010). This program provides incentive to purchase lower priced, fresh produce while ensuring that participants take ownership of the coupon program (CCFN, 2010). Another excellent example of a coupon incentive program comes from Detroit, Michigan. The Double Up Food Bucks Program provides fresh food market customers with cards or tokens for as much as they want to spend on groceries that particular day (Fair Food Network, 2012). When they use this service, their purchases are matched dollar for dollar up to a \$20.00 maximum (Fair Food Network, 2012). If they choose to spend \$5.00 from their prepaid card or in tokens, they would receive \$10.00 worth of fruits and vegetables (Fair Food Network, 2012). This program engages community members while encouraging them to shop for locally grown produce (Fair Food Network, 2012).

#### Utilizing Technology

The Fresh Food Markets may benefit from using technology to advertise programming and educate community members. There is limited information online regarding the Fresh Food Market program. While the program is a CHEP Good Food Inc. initiative, this may be an area where the UFNIMDP program could make an impact. The majority of survey respondents initially heard of the market from friends and the sign that sits in front of St. Thomas Wesley Church on Wednesdays. Other forms of advertising, particularly online, may help with increasing the number of customers attending the markets. Between local schools, community organizations, libraries and the widespread use of smartphones, many community members are likely to have access to online information. Advertising through an organization's website, Facebook pages and Twitter accounts may inform younger generations of food security initiatives in their communities.

#### **Connecting Other Programming with Fresh Food Markets**

A wide variety of exemplary community food initiatives exist in Saskatoon. The Fresh Food Markets may provide a more comprehensive service if they chose to connect with these other programs. The mobile food market in Detroit provides fresh produce along with recipes and nutrition education while advocating for food equity within the city (Barclay, 2012). The St. Thomas Wesley market uses colourful notes with topical food facts placed amongst their produce. It may be worthwhile to expand on this supplemental information without overwhelming participants. An option would be to provide a weekly recipe that uses market produce to customers as they check out. However, the reality for some individuals who attend the markets is that they may not have the cooking skills or equipment to use a recipe. Advertising at the markets for the Collective Kitchen Partnership Program or Grub N' Gab, a cooking class combined with a health related education session, would promote reciprocity and collaboration. These links could create new opportunities for individual growth while strengthening community action.

#### **Reaching Out to an Underserved Population**

Several of the survey participants at the St. Thomas Wesley market were shopping for both themselves and a friend or family member with limited mobility. A suggestion made to improve the markets was to create a service that would link routine customers with vehicles to people in the community who are unable to attend and shop for themselves. This service would build individual capacity by encouraging community members to support one another and, in turn, promote unity in Saskatoon neighbourhoods.

#### Develop a Food Strategy for Saskatoon

Several organizations in Saskatoon are working towards the development and implementation of a Food Strategy for the city that expands on the already existing Food Charter (Saskatoon Food, 2013). The Saskatoon Food Charter was adopted in principle in 2002 and is reflective of Canada's Action Plan for Food Security (Saskatoon Food Coalition [SFC], 2002). The charter covers several elements, including justice, health, food production, culture and globalization, which affect food security in our community (SFC, 2002). The goal of the Saskatoon Regional Food Assessment and Action Plan (SRFAAP) is to build upon the Food Charter and expand on economical, environmentally-friendly food security initiatives (Saskatoon Food, 2013). Engaged partners include a range of organizations such as CHEP Good Food Inc., Saskatoon Food Coalition, Saskatoon Health Region and the Saskatchewan Ministry of Agriculture (Saskatoon Food, 2013). The Saskatoon Community Clinic would be an ideal member of this partnership as the goals of the SRFAAP align closely with the goals of the SCC to reduce HFI (SCC, 2008; Saskatoon Food, 2013).

The City of Vancouver has just recently released its Food Strategy which aims to strengthen action towards the "development of a just and sustainable food system" (City of Vancouver, 2013, p. 1). The Food Strategy provides an inclusive framework that addresses many regional issues while acknowledging the impact of HFI on a global-scale (City of Vancouver, 2013). The strategy speaks to the importance of astute urban planning and equitable policy development in reducing HFI (City of Vancouver, 2013). The Vancouver Food Strategy stems from their Food Charter (2007) and became necessary as awareness of the critical role food plays in an urban landscape grew (City of Vancouver, 2013). In 2010, the city of Toronto adopted a Food Strategy that also incorporates short and long-term goals and actions to reduce HFI and improve the quality of life in Toronto communities (TPH, 2010). The Toronto Food Strategy focuses on the connections within urban food systems and seeks to overcome challenges by capitalizing on the city's numerous strengths (TPH, 2010).

A Food Strategy in Saskatoon would involve inter-organizational collaboration working on comprehensive strategies to reduce HFI (Saskatoon Food, 2013). Such collective action creates a driving force that can more effectively address political, environmental, and social barriers (TPH, 2010). Developing a food strategy in Saskatoon would be "not only a response to vulnerabilities and challenges, but equally in response to the recognition of what food brings to the city" (City of Vancouver, 2013, p 3). The SRFAAP promotes the involvement of key stakeholders at every level, including community organizations, political figures and engaged community representation (Saskatoon Food, 2013). Specific initiatives would continue to address the spectrum of issues regarding HFI and operate within multiple levels of the food system, including grocery stores, farmer's markets, schools, local farms, and restaurants (Saskatoon Food, 2013). Ideally the Food Strategy, when ratified through public and governmental support, would offer stability and sustainability to community food initiatives (Saskatoon Food, 2013).

#### Locally Sourced Produce

Sourcing fruits and vegetables from local farmers and producers is an approach identified by both the Vancouver and Toronto Food Strategy reports (City of Vancouver, 2013; TPH, 2010). Supporting local farms creates a symbiotic relationship that benefits organizations, the local economy and the environment (City of Vancouver, 2013). CHEP Good Food Inc. makes considerable efforts to obtain locally-grown produce when it's available (C. Armstrong, personal communication, July 25, 2013). Prioritizing this practice may help in improving the affordability of produce and further reducing the environmental impact of the Fresh Food Markets (City of Vancouver, 2013).

#### **Food Prescriptions**

An interesting variation of market coupons has just recently been introduced in New York City hospitals. Physicians have begun writing prescriptions for fruits and vegetables for low-income and at-risk patients (Tolan & McShane, 2013). When discharged from the hospital, these patients are able to exchange the prescription for a predetermined amount of fresh produce from any of the city's farmers markets (Tolan & McShane, 2013). Though this is a trial project and only in its early stages, it presents a unique way to reach vulnerable populations (Tolan & McShane, 2013). The UFNIMDP is already partnered with the SHR and provides a market coupon program, often distributing coupons at community clinics (C. Armstrong, personal communication, July 25, 2013). Expanding 16 the coupon program into the three city hospitals and presenting it as a physician prescription may be an engaging approach. It would also be a good reminder to health care practitioners, who too often focus on downstream approaches, to think upstream and recognize HFI as a root cause of illness (Tolan & McShane, 2013).

# CONCLUSION

The UFNIMDP project was successful in expanding the Fresh Food Market services; as previously mentioned, the number of operational markets increased from five to nine (Armstrong-Monahan, 2013). The Fresh Food Market Survey results were reflective of the positive impact the markets are having on local communities. Most notably, community members report a reduction in their use of community food programs such as the Saskatoon Food Bank and an increase in their intake of fruits and vegetables. These survey results are a snapshot of the wide range of community organizations gaining momentum in their efforts to reduce HFI in Saskatoon (Saskatoon Food, 2013). Creating a comprehensive and cohesive Food Strategy, which capitalizes on collaborative action, would provide a framework for expanding on the already exemplary programming (City of Vancouver, 2013; Saskatoon Food, 2013). Making strides in an encouraging direction can strengthen public support and bolster community engagement, furthering improving the impact of community food initiatives (City of Vancouver, 2013; Saskatoon Food, 2013; TPH, 2010).

### References

Anderson, S.A. (1990). Core indicators of nutritional state for difficult-to-sample populations. *The Journal of Nutrition*, 120, 1557S-1660S.

Armstrong-Monahan, C. (2013). UFNIMDP project map.

- Barclay, E. (2012) Cheaper fruits and vegetables alone can't save food deserts. NPR: the salt. Retrieved from http://www.npr.org/blogs/thesalt/2012/11/15/165204681/cheaper-fruit-and-vegetablesalone-cant-save-food-deserts.
- Cedar Cottage Food Network. (2010). TLCC pocket market coupon program. Retrieved from http:// tlccfoodsecurity.blogspot.ca/2010/08/well-after-6-month-hiatus-tlcc-is-back.html

Central Urban Métis Federation Incorporated. (2012). Retrieved from http://www.cumfi.org/

CHEP Good Food Inc. (2013). CHEP's mission. Retrieved from http://www.chep.org/mission

- City of Vancouver. (2013). What feeds us: Vancouver food strategy. Retrieved from http://vancouver.ca/files/cov/vancouver-food-strategy-final.PDF.
- Cummins S, & Macintyre S. (2002). A systematic study of an urban foodscape: the price and availability of food in greater Glasgow. *Urban Studies, 39, 2115-2130.*
- Dibsdall, L.A., Lambert, N., Bobbin, R.F., & Frewer, L.J. (2002). Low-income consumers' attitudes and behaviors towards access, availability and motivation to eat fruits and vegetables. *Public Health Nutrition. 6, 159-168.*
- Fair Food Network. (2012). Double-up food bucks. Retrieved from http://www.doubleupfoodbucks.org/how-itworks
- Food Banks Canada. (2011). Hunger counts. Retrieved from http://www.foodbankscanada.ca/getmedia/ dc2aa860-4c33-4929-ac36-fb5d40f0b7e7/HungerCount-2011.pdf.aspx
- Food Share. (n.d.). Good Food Markets. Retrieved from http://www.foodshare.net/good-food-markets
- Health Canada. (2012a). Diabetes. *First Nations and Inuit Health*. Retrieved from http://www.hc-sc.gc.ca/fniah-spnia/diseases-maladies/diabete/index-eng.php

- Health Canada. (2012b). Household food insecurity in Canada: An overview. Retrieved from http://www.hc-sc. gc.ca/fn-an/surveill/nutrition/commun/insecurit/index-eng.php.
- Kershaw T., Creighton T., Markham T., Marko J. (2010). Food access in Saskatoon. Saskatoon: Saskatoon Health Region. Retrieved from http://www.saskatoonhealthregion.ca/your\_health/documents/PHO/ CommunityFoodAcce ssReportOct2010.pdf.
- Lemstra, M. & Neudorf, C. (2008). Health disparity in Saskatoon: analysis to intervention. *Saskatoon Health Region.* Retrieved from http://www.saskatoonhealthregion.ca/your\_health/documents/PHO/ HealthDisparityRept-complete.pdf
- National Institute of Allergy and Infectious Disease. (2013). Minority healthy: what are health disparities? Retrieved from http://www.niaid.nih.gov/topics/minorityhealth/pages/disparities.aspx
- Saskatoon Community Clinic. (2013). Mission and values. Retrieved from http://www. saskatooncommunityclinic.ca/mission\_and\_values.htm.
- Saskatoon Community Clinic. (2008). Food deserts in Saskatoon. Information Bulletin for Poverty Awareness Week. Retrieved from http://www.saskatooncommunityclinic.ca/pdf/CC%20Food%20desert%20 sheet%20Oct%2014.pdf.
- Saskatoon Food. (2013). Goals of the Saskatoon regional food assessment and action plan. Retrieved from http://www.saskatoonfood.ca/
- Saskatoon Food Coalition. (2002). Saskatoon food charter. Retrieved from http://saskatoonfoodcoalition.ca/ page/saskatoons-food-charter
- Saskatoon Health Region. (2013). LiveWell diabetes program: aim 4 health. Retrieved from http://www.saskatoonhealthregion.ca/your\_health/ps\_cdm\_diabetes\_aim\_4\_health.htm.
- Saskatoon Health Region. (2011). Diabetes in Saskatoon Health Region: A report of the medical health officer. Retrieved from http://www.saskatoonhealthregion.ca/your\_health/documents/PHO/SHR\_Diabetes\_ Report\_August2011.pdf.

Saskatoon Indian and Métis Friendship Centre. (2013). About us. Retrieved from http://www.simfc.ca Sisson, A. (2002). Fruit and vegetable consumption by low-income Americans. *Nutrition Noteworthy, 5, 1-5.* 

- Tolan, C. & McShane, L. (2013). Prescription for fruits, vegetables city's next remedy in battle against obesity. *New York Daily News*. Retrieved from http://www.nydailynews.com/life-style/health/doctorsprescribe-fruits-vegetables-fight-obesity-article-1.1407115.
- Toronto Public Health. (2010). Cultivating food connections: Toward a healthy and sustainable food system for Toronto. Retrieved from http://wx.toronto.ca/inter/health/food.nsf/Resources/340ACEEDBF1B2D60852 57738000B22F2/\$file/Cultivating%20Food%20Connections%20report.pdf.
- Walker, R.E., Keane, C.R., & Burke J.G. (2010). Disparities and access to health food in the United States: A review of food deserts literature. *Health & Place, 16, 876-884.*
- Zenk, S.N., Schulz, A.J., Kannan, S., Lachance, L,L., Mentz, G., & Ridella, W. (2009). Neighborhood retail food environmental and fruit and vegetable intake in a multiethnic urban population. *Am J Health Promot*, 23(4), 255-264.

## APPENDIX A: UFNIMDP Project Activities

Objective 1: To create supportive environments and increase practices of healthy behaviors through improved access to healthy food.

### Fresh Food Markets

Created to improve neighbourhood access to healthy fruits and vegetables at an affordable cost. The UFNIMDP project together with CHEP has been able to initiate an additional 5 markets, making the total number of markets 9. Depending on the location, 40-90% of participants meet the project's target population.

### Market Coupon Distribution

These are used to improve access at the Fresh Food Markets for food insecure individuals from the Aboriginal community. Since the project began handing out coupons, approximately 51% (499 of 984 coupons handed out) of those distributed have been used at the markets. (target was 35%).

### **Healthy Snacks**

Cases of fruit have been provided to partner organizations for a healthy snack option in their waiting rooms. The project aimed to increase the number of organizations receiving the health snacks by two and provide snacks at three special events. Both goals were met and exceeded. An example would be the Aim 4 Health and Saskatoon Community Clinic Fitness Food Fun diabetes education and exercise program. Snacks were provided to this program on a weekly basis.

### Subsidized Good Food Boxes

The Good Food Box is a community based food program that provides community members with a variety of fresh produce at affordable prices. Good Food Box Coordinators within inner city neighbourhoods were provided with additional boxes to give to Aboriginal residents at subsidized rates. UFNIMDP Market Coupons were also distributed and used to subsidize the cost of the boxes. Results indicated that 90% of the funds allotted to this activity went towards subsidizing food boxes. However, the market coupons were not used by community members to purchase good food boxes.

Objective 2: To increase knowledge and skills of healthy food preparation as a means to increase the practice of healthy eating behaviors.

### **Cooking Sessions**

The UFNIMDP funded nine different cooking sessions including the Oasis Cooking Sessions, Food Experience with Aim 4 Health, Infinity House Cooking Sessions and the Aboriginal Student Centre Cooking Sessions. These drop-in gatherings offered hands-on experience preparing a variety of meals. At the same time, nutrition-related discussions provide participants with practical knowledge on topics such as food safety, healthy food choices and diabetes prevention. It was estimated that 90% of participants met the project's target population. Kids/Teen Kitchens.

### Kids/Teen Kitchens

Kids/Teen Kitchens were developed as a five week cooking and nutrition class The UFNIMDP supported Kids Kitchens where the participants were at least 50% Aboriginal and encouraged incorporation of diabetes prevention education. Data collected shows that only three of the Kids Kitchens met the project's target population requirements.

# Collective Kitchen Partnership Program

The Collective Kitchen program allows participants to pool resources and prepare food in bulk for their families. The UFNIMDP funded Grub n' Gab, evening community education sessions for Collective Kitchen participants that included education on modifying recipes to reduce sugar, fat and sodium as well as increase fibre and other nutrients. In addition, the UFNIMDP funded a three day Collective Kitchen Leadership Training, as well as a number of drop-in Collective Kitchens with the Saskatoon Tribal Council.

Objective 3: To increase knowledge of healthy food choices as a means to diabetes prevention through integrating diabetes awareness into project activities.

# Snack Pack Attacks

Developed by the project's dietitian, Snack Pack Attacks targeted pre-kindergarten students at three community schools. Children and their parents received education about healthy snacking through games and activities and took home a "snack pack" with \$10 of fruits and vegetables.

# Integration of information on diabetes and nutrition awareness into project activities.

Through a variety of activities, the project sought to increase diabetes awareness and prevention. The project aimed to integrate this information into 75% of activities. New resources were developed and implemented on five different occasions. Specific activities included adapting a Diabetes Bingo from the Canadian Diabetes Association. It was used on two occasions. Also, displays and presentations were held at varying health fairs.

Objective 4: To increase community ownership and capacity to design and deliver culturally appropriate health promotion and diabetes education activities.

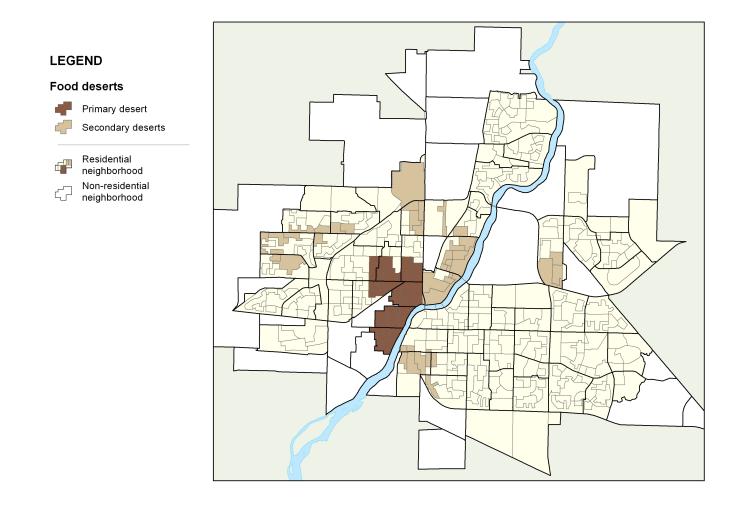
# Engage and support Elders as program spokespeople

To meet this objective project staff invited members of the Kokums or Grandmothers' group (Saskatoon Community Clinic) to participate in sharing about project activities such as the Sacred Circle Resource. This resource includes a booklet and video and Kokums were asked to share it with family and friends. The engagement of Elders as educators aims to assist in sharing information about diabetes prevention.

# "Shared Vision Gathering"

This gathering was for the staff of partner and other community organizations providing services and programs for Aboriginal community members. Attendance exceeded expectations with 39 participants. The day provided an opportunity for increasing diabetes knowledge and awareness and also allowed for networking between several key community organizations. Another goal was to introduce the staff of these organizations to the diabetes programs and resources available in the community – programs such as Aim 4 Health (Fitness Food Fun).

# APPENDIX B: Food Deserts in Saskatoon



**Source**: Kershaw, T., Creighton T., Markham T., Marko J. (2010). Food access in Saskatoon. Saskatoon: Saskatoon Health Region.

Developed between November 2012 - March 2013

| ,   | I   | nealthy behaviours through   |
|---|---|--|
| improved access to healthy food<br>Project Activities Relating to<br>Objective 1  | Anticipated Outputs (direct products of related activities)   | <i>Evaluation Questions Relating to the</i><br><i>Objective and Activities</i>   |
| Increase the number of Fresh<br>Food Markets offered in core<br>neighourhood locations with the<br>potential for a high Aboriginal<br>audience. | The goal is to offer one more whole-<br>sale Market location in 2012-13<br>in addition to 5 currently offered.<br>CHEP and partner community<br>organizations offered 3 Market loca-<br>tions prior to December 1, 2011.<br>With UFNIMDP support, CHEP<br>was able to develop 2 new Market<br>locations in 2011-12. | <b>Process evaluation</b> : Are the Neighbourhood Markets offered as planned?<br>Are the old and new Markets offered at locations with a high potential to attract Aboriginal people?  |
| Market Coupons are used as<br>incentives for food insecure<br>Aboriginal community members<br>to access Fresh Food Markets.                     | More Aboriginal community mem-<br>bers purchase fresh fruits and veg-<br>etable because of Markets.   | Quantitative: Because Market<br>Coupons are provided as incentives<br>to access food security programs, is<br>there an increase in the number of<br>Aboriginal community members us-<br>ing the Markets?   |
| Market coupons are distributed by<br>the staff of partner organizations<br>and in programs linked with the<br>UFNIMDP project.                  |   | <b>Qualitative</b> : Do Market Coordinators and Volunteers observe an increase in Aboriginal community members using the markets?  |
| Use of Fresh Food Markets +<br>Coupons increase healthy food<br>choices and helps to address food<br>security.                                  | Aboriginal people using the Markets<br>2 to 3 times a month will both be<br>less reliant on community food pro-<br>grams and will consume more fruits<br>and vegetables.  | Qualitative:<br>Do participants feel project activities<br>such as the Fresh Food Markets and<br>Coupons help them to be more food<br>secure?<br>Do they use community food pro-<br>grams less often? Do the Markets<br>relieve any of the stress of grocery |

| improved access to healthy food  |  |   |  |
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| Project Activities Relating to<br>Objective 1  | Anticipated Outputs (direct products of related activities)  | Evaluation Questions Relating to the<br>Objective and Activities  |  |
| Subsidized Good Food Boxes:<br>Good Food Box Coordinators<br>living in inner city areas will<br>receive additional boxes to provide<br>Aboriginal community members.<br>As well, Market Coupons will be<br>used to purchase good food boxes;<br>individuals receiving coupons were<br>informed of this option.<br>The Good Food Box is an<br>alternative, community based food<br>distribution system that provides<br>a variety of quality fresh fruits and<br>vegetables at affordable prices.   | Good Food Box site coordinators<br>will provide subsidized good food<br>boxes.<br>UFNIMDP Market Coupons will<br>be used toward the purchase of good<br>food boxes.  | Quantitative:<br>The majority of money allocated by<br>the project to subsidize Good Food<br>Boxes will be used for this purpose.<br>(Good Food Box coordinators are<br>not asked to keep records of the<br>subsidization of boxes.)<br>Because of the incentives (Market<br>Coupons) to use the Good Food<br>Box food security program, is more<br>of the target population using this<br>program? |  |
| Healthy snacks (case of fruit)<br>provided each week to partner<br>organizations for clients in their<br>waiting areas or at special events.<br>Acronyms used:<br>CUMFI – Central Urban Métis<br>Federation Inc.<br>SCC – Saskatoon Community Clinic<br>WSCC – Westside Community Clinic<br>SWITCH – Students Wellness Initiative<br>Toward Community Health – a student<br>run health clinic offered at the WSCC<br>ASC – Aboriginal Student Centre<br>FFF - Fitness Food Fun is offered by the<br>staff of Aim 4 Health and SCC three<br>times a week at two different exercise<br>facilities in the inner city.<br>LNNS – Late Night Study Sessions at<br>the ASC.<br>LWCC – Live Well with Chronic<br>Conditions | More project partners provide<br>healthy snacks at their facilities.<br>Prior to the UFNIMDP project<br>coming on stream, CHEP provided<br>one project partner organization<br>(CUMFI) with fruit each week to<br>provide as snacks for clients in their<br>waiting areas. | Process Evaluation:<br>Are healthy snacks provided at other<br>partner or community locations?  |  |

Objective 1: To create supportive environments and increase practice of healthy behaviours through improved access to healthy feed

| improved access to healthy food   |   |  |
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| Project Activities Relating to<br>Objective 1   | Indicators  | <i>Evaluation Tools (How will evaluation data be gathered?)</i>  |
| Increase the number of Fresh<br>Food Markets offered in core<br>neighourhood locations with the<br>potential for a high Aboriginal<br>audience. | <ol> <li>Five Neighbourhood Markets are<br/>retained in 2012-13.</li> <li>One Fresh Food Market location<br/>is added in 2012-13.</li> </ol>  | Administrative records of project activities.  |
|   | 3. Four (4) Fresh Food Markets<br>are located in schools in which the<br>school enrolment is at least 35%<br>Aboriginal students/families. Or, at<br>community locations in which the<br>nearest school communities are at<br>least 35% Aboriginal. | Enrollment numbers of Aboriginal<br>students at schools in which Markets<br>are offered or the schools are close<br>to community facilities in which<br>Markets are located. |
| Market Coupons are used as<br>incentives for food insecure<br>Aboriginal community members<br>to access Fresh Food Markets.                     | <ol> <li>35% of coupons used at Markets<br/>are UFNIMDP project coupons.</li> <li>Market Volunteers observe an<br/>increase in Aboriginal community<br/>members accessing Markets.</li> </ol>   | UFNIMDP project Market Cou-<br>pons are identified with a code<br>printed on the coupon as well most<br>are marked with ADI and the source<br>of the Coupon.                 |
| Market coupons are distributed by<br>the staff of partner organizations<br>and in programs linked with the<br>UFNIMDP project.                  |   | Observation of the Market Volun-<br>teers.   |
| Use of Fresh Food Markets +<br>Coupons increase healthy food<br>choices and helps to address food<br>security.                                  | <ol> <li>20% of Aboriginal people accessing Markets will state their food lasts longer.</li> <li>20% will state they and/or their family eats more fruit and vegetables.</li> </ol>   | Survey at Fresh Food Markets<br>Survey questions will be developed.  |

| improved access to healthy food  | *  |  |
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| Project Activities Relating to<br>Objective 1  | Indicators   | <i>Evaluation Tools (How will evaluation data be gathered?)</i>  |
| Subsidized Good Food Boxes:<br>Good Food Box Coordinators<br>living in inner city areas will<br>receive additional boxes to provide<br>Aboriginal community members.<br>As well, Market Coupons will be<br>used to purchase good food boxes;<br>individuals receiving coupons were<br>informed of this option.<br>The Good Food Box is an<br>alternative, community based food<br>distribution system that provides<br>a variety of quality fresh fruits and<br>vegetables at affordable prices.   | <ol> <li>85% of the \$3750 designated to<br/>subsidize good food boxes will be<br/>spent for this purpose.</li> <li>10% of good food boxes are<br/>purchased with UFNIMDP project<br/>Market Coupons.</li> </ol>   | The Good Food Box Program keeps<br>monthly records of the number of<br>Coupons used to purchase boxes.                             |
| Healthy snacks (case of fruit)<br>provided each week to partner<br>organizations for clients in their<br>waiting areas or at special events.<br>Acronyms used:<br>CUMFI – Central Urban Métis<br>Federation Inc.<br>SCC – Saskatoon Community Clinic<br>WSCC – Westside Community Clinic<br>SWITCH – Students Wellness Initiative<br>Toward Community Health – a student<br>run health clinic offered at the WSCC<br>ASC – Aboriginal Student Centre<br>FFF - Fitness Food Fun is offered by the<br>staff of Aim 4 Health and SCC three<br>times a week at two different exercise<br>facilities in the inner city.<br>LNNS – Late Night Study Sessions at<br>the ASC.<br>LWCC – Live Well with Chronic<br>Conditions | <ol> <li>The number of community organizations receiving healthy snacks increases by two; that is three agencies will regularly receive healthy snacks for their waiting areas.</li> <li>Healthy snacks will be provided at three special events.</li> </ol> | Records kept by the individual at<br>CHEP responsible for bulk buying<br>purchases.<br>Project activity administrative<br>records. |

## Objective 1: To create supportive environments and increase practice of healthy behaviours through

| improved access to healthy food   |  |   |
|---|--|---|
| Project Activities Relating to<br>Objective 1   | Sources of Data (From whom will the information be gathered?)  | Outputs/Outcomes for Selected<br>Indicators   |
| Increase the number of Fresh<br>Food Markets offered in core<br>neighourhood locations with the<br>potential for a high Aboriginal<br>audience.   | Project Manager/Evaluator records.<br>CHEP records – CHEP (Child<br>Health and Education Program)<br>work with both the Saskatoon<br>Public School and Greater Saskatoon<br>Catholic School divisions. Through<br>these connections CHEP has access<br>to school enrollment numbers.   | <ol> <li>Five (5) Fresh Food Markets were<br/>retained.</li> <li>Three (3) more Markets came on<br/>stream. Aboriginal Student Centre<br/>(ASC) at the University of Saskatch-<br/>ewan, St Maria Goretti and ED<br/>Feehan schools.</li> <li>Five Market locations are located<br/>in communities in which there is<br/>a high Aboriginal population: St<br/>Mary's, Pleasant Hill elementary<br/>schools and Mount Royal High<br/>School have enrollments of 40 % or<br/>higher Aboriginal students. There is<br/>the very popular Market offered at<br/>the ASC at the University of Sas-<br/>katchewan. As well, the coordinator<br/>and volunteers at St Thomas Wesley<br/>Church estimate 90% of those ac-<br/>cessing their Market are Aboriginal<br/>community members. The output<br/>in this project activity exceeded<br/>expectations.</li> </ol> |
| Market Coupons are used as<br>incentives for food insecure<br>Aboriginal community members<br>to access Fresh Food Markets.<br>Market coupons are distributed by<br>the staff of partner organizations<br>and in programs linked with the<br>UFNIMDP project. | The CHEP Accountant identifies<br>and records all coupons used at Mar-<br>kets. UFNIMDP funded Market<br>Coupons are identified separately.<br>Survey of Market coordinators and<br>volunteers attending a Breakfast<br>Gathering on March 7, 2013.<br><b>Note</b> : Attendance at the Breakfast<br>Gathering was poor; those in at-<br>tendance were primarily the coor-<br>dinators and volunteers of the new<br>Markets. Volunteers representing St<br>Thomas Wesley Church estimated<br>that 90% of individuals accessing<br>their Market site are Aboriginal. | The project did not start distributing<br>Market Coupons until July, 2012.<br>During the 9 month period, July 1,<br>2012 to March 31, 2013 – very close<br>to a thousand UFNIMDP coupons<br>(984) were given out; 499 or 51%<br>were used at Markets.<br>It was anticipated that the use of<br>UFNIMDP coupons would also be<br>an indication of an increase in the<br>number of Aboriginal people ac-<br>cessing the Markets. This was false<br>thinking as there was no information<br>prior to the start of the project on<br>the number of Aboriginal commu-<br>nity members using the Markets.   |

| improved access to healthy food  |  |  |
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| Project Activities Relating to<br>Objective 1  | Sources of Data (From whom will the information be gathered?)  | Outputs/Outcomes for Selected<br>Indicators  |
| Use of Fresh Food Markets +<br>Coupons increase healthy food<br>choices and helps to address food<br>security.   | Aboriginal community members<br>accessing the Fresh Food Markets at<br>St Thomas Wesley United Church<br>between June 15 and July 15, 2013.<br>Survey of students at the Aborigi-<br>nal Student Centre (ASC), end of<br>March 2013.   | <b>Note</b> : Measuring the value of the<br>Fresh Food Markets is a component<br>of a Summer Practicum for a Mas-<br>ter's of Public Health Student. The<br>results of the survey will be reviewed<br>and published by CUISR (Com-<br>munity University Institute of Social<br>Research) Survey results will be<br>available by July 30, 2013.   |
| Subsidized Good Food Boxes:<br>Good Food Box Coordinators<br>living in inner city areas will<br>receive additional boxes to provide<br>Aboriginal community members.<br>As well, Market Coupons will be<br>used to purchase good food boxes;<br>individuals receiving coupons were<br>informed of this option.<br>The Good Food Box is an<br>alternative, community based food<br>distribution system that provides<br>a variety of quality fresh fruits and<br>vegetables at affordable prices. | The Coordinator of the Good Food<br>Box will track the number of UF-<br>NIMDP funded Coupons used in<br>the purchase of boxes from the Good<br>Food Box Program.<br>Good Food Box Program records are<br>published in CHEP's yearly Out-<br>come Report.<br>Project Evaluator documentation. | <ol> <li>\$3400 (90%) of the money al-<br/>located for this activity was spent on<br/>subsidizing good food boxes. This is<br/>equivalent to the cost of 200 regular<br/>food boxes or 285 small. The regular<br/>box (\$17) contains approx. 8 dif-<br/>ferent kinds of veggies, 3 different<br/>kinds of fruit, and 1 grain or legume.<br/>Small boxes (\$12) contain approx. 6<br/>different kinds of veggies, 2 different<br/>kinds of fruit, and 1 grain.</li> <li>Contrary to expectations indi-<br/>viduals receiving the ADI Fresh<br/>Food Market Coupons did not use<br/>the Coupons to purchase good food<br/>boxes. However, a few coupons have<br/>been used to purchase fruits, veg-<br/>etables, milk and eggs at the Good<br/>Food Junction grocery store in Sta-<br/>tion 20 West.</li> </ol> |

| improved access to healthy food  |   |  |
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| Project Activities Relating to<br>Objective 1  | <i>Sources of Data (From whom will the information be gathered?)</i>  | Outputs/Outcomes for Selected<br>Indicators  |
| Healthy snacks (case of fruit)<br>provided each week to partner<br>organizations for clients in their<br>waiting areas or at special events.<br>Acronyms used:<br>CUMFI – Central Urban Métis<br>Federation Inc.<br>SCC – Saskatoon Community Clinic | Project Manager + CHEP Good<br>Food Inc. documentation.<br>Documentation by the Saskatoon<br>Health Region (SHR) LiveWell Dia-<br>betes: Aim 4 Health Program | 1. More sites or programs (4) were<br>provided healthy snacks than<br>anticipated; snacks; CUMFI and<br>WSCC received a case of fruit each<br>week; half of the fruit delivered to<br>WSCC is shared with the Wednes-<br>day evening SWITCH Clinic. The<br>project provided \$30 to \$50 a week<br>to FFF for the provision of snacks.   |
| WSCC – Westside Community Clinic<br>SWITCH – Students Wellness Initiative<br>Toward Community Health – a student<br>run health clinic offered at the WSCC<br>ASC – Aboriginal Student Centre   | The UFNIMDP Project Monitoring<br>Tool is completed for many of these<br>activities such as Live Well with<br>Chronic Conditions Sessions.                    | 2. <b>Special Events</b> - UFNIMDP provided funds to the ASC to provide a healthy snack for the LNSS offered 10 days around final exam time in December 2012.  |
| FFF - Fitness Food Fun is offered by the<br>staff of Aim 4 Health and SCC three<br>times a week at two different exercise<br>facilities in the inner city.   |   | Healthy Snacks were provided at<br>the 6 session LWCC Program at the<br>Saskatoon Food Bank – January 29<br>to March 11.   |
| LNNS – Late Night Study Sessions at<br>the ASC.<br>LWCC – Live Well with Chronic<br>Conditions   |   | The project provided fresh produce<br>for: Xmas Meals at 4 CUMFI sup-<br>ported housing units; Elders' tent<br>at Batoche Days, July 20 to 22,<br>2012. This event is organized by the<br>Saskatoon Indian Métis Friendship.<br>Healthy snack choices were also pro-<br>vides at: World Food Day (October<br>13, 2012), Positive Women Expos-<br>ing Injustice (December 3, 2012)<br>and the 2013 Nutrition Month ac-<br>tivities at Saskatoon Tribal Council. |

### APPENDIX D: Project Map - Objective 2 - Increase Knowledge and Skills of Healthy Food Preparation

| Objective 2: To increase knowledge and skills of healthy food preparation as a means to increase the practice   |  |   |
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| of healthy eating behaviours.   |  |   |
| <i>Project Activities Relating to</i><br><i>Objective 2</i>   | Anticipated Outcomes   | Evaluation questions related to objective and activities  |
| <b>Kids/Teen Kitchens</b> – the<br>UFNIMDP project supports Kids<br>Kitchens in which 50% of the<br>participants are Aboriginal. CHEP<br>Good Food Inc usually offers 15<br>– 5 week session of Kids or Teen<br>Kitchens during the school year – | Six (6) of the 5 week sessions of<br>Kids/Teen Kitchens will be offered<br>at inner city schools or community<br>locations in which at least 50% of<br>those participating are Aboriginal. | Process Evaluation: Are the an-<br>ticipated number of Kids Kitchens,<br>meeting this criterion, offered in<br>2012-13?<br>Qualitative: |
| September to end of June.   | Information about diabetes will be added to the Kids Kitchen curricu-  | Do participants indicate they have gained new knowledge and skills?   |
|   | lum.   | Do they indicate they learned some-<br>thing about diabetes?  |
| Cooking Sessions (focus on skill<br>development and healthy food<br>choices)  | The same number of Cooking Ses-<br>sions will be offered in 2012-13 as<br>were offered in the previous project<br>funding year; three were funded by                                       | <b>Process Evaluation</b> : Are Cooking Sessions offered as planned?  |
|   | UFNIMDP in 2011-12.  | <b>Qualitative:</b><br>Because of the information provided<br>at the Cooking Sessions do partici-                                       |
|   | The Cooking Sessions will improve pants a  | pants report improved food choices<br>and eating behaviours?  |
|   | Community Peer Leaders (commu-<br>nity role models) will support Cook-<br>ing Sessions.  | <b>Output:</b><br>Do peer leaders provide support at<br>the Cooking Sessions?   |
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| of healthy eating behaviours.  |  |  |
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| Project Activities Relating to<br>Objective 2  | Indicators   | <i>Evaluation Tools (How will evaluation data be gathered?)</i>  |
| <b>Kids/Teen Kitchens</b> – the<br>UFNIMDP project supports Kids<br>Kitchens in which 50% of the<br>participants are Aboriginal. CHEP<br>Good Food Inc usually offers 15<br>– 5 week session of Kids or Teen<br>Kitchens during the school year –<br>September to end of June. | <ol> <li>Six - 5 week sessions will be<br/>offered at locations meeting the Ab-<br/>original participant criterion.</li> <li>50% of Kids Kitchen participants<br/>will say they prepared a healthy dish<br/>or meal and/or learned new cooking<br/>skills.</li> </ol>  | UFNIMDP Monitoring Tool com-<br>pleted by Kitchen Facilitators.<br>Kids Kitchen Passport – completed<br>by participants ask questions on new<br>learning. (Journal recording)  |
| Cooking Sessions (focus on skill<br>development and healthy food<br>choices)   | <ol> <li>Three multi sessions Cooking Programs will be funded in 2012-13.</li> <li>40% of those participating in programs in which an evaluation is given pre and post attendance will say they have made at least one change conducive to the prevention of diabetes: eat breakfast, eat 3 meals a day, and reduce intake of pop and sugary drinks, increase time, distance and/or frequency of walking or other exercise.</li> <li>Peer leaders will provide support at the Cooking Sessions 80% of the time.</li> </ol> | Monitoring Tool: Activity Tracking<br>Log<br>Evaluation at the first and last ses-<br>sions of Cooking Programs when<br>attendance at programs is with a<br>defined group and not drop-in.<br>E.g. Oasis cooking session is drop<br>in.<br>Community Peer Leader Program<br>coordinator records. |

Objective 2: To increase knowledge and skills of healthy food preparation as a means to increase the practice of healthy eating behaviours.

| of healthy eating behaviours.  |  | -  |
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| Project Activities Relating to<br>Objective 2  | Sources of Data (From whom will the information be gathered?)  | Outputs/Outcomes for Selected<br>Indicators  |
| <b>Kids/Teen Kitchens</b> – the<br>UFNIMDP project supports Kids<br>Kitchens in which 50% of the<br>participants are Aboriginal. CHEP<br>Good Food Inc usually offers 15<br>– 5 week session of Kids or Teen<br>Kitchens during the school year –<br>September to end of June. | CHEP Nutritionist will gather<br>completed Monitoring Tools from<br>Kitchen Facilitators.<br>Project manager's documentation.  | <ol> <li>Fewer Kids Kitchen (KK) than<br/>anticipated met the criteria of<br/>involving at least 50% Aboriginal<br/>students. The UFNIMDP project<br/>supported 3 Kids Kitchens pro-<br/>grams; two of the 5 session programs<br/>were funded in the fall months of<br/>2012, one at White Buffalo Youth<br/>Lodge (WBYL), the other at St<br/>Maria Goretti School. The third KK<br/>receiving project support was held<br/>at WBYL between January and mid<br/>February, 2013.</li> <li>Kids Kitchen Passports were not<br/>completed at the sessions held at<br/>WBYL because they were drop in<br/>programs. The author was unable to<br/>obtain the passports completed at<br/>the St Maria Goretti Kitchens.</li> </ol>      |
| Cooking Sessions (focus on skill<br>development and healthy food<br>choices)   | Cooking Session facilitators will<br>complete Project Monitoring Tool<br>Pre and post activity evaluation tool.<br>Project Manager and Coordinator of<br>the Community Peer Leader Pro-<br>gram documentation. | 1. In contrast to expectations, support for Cooking Sessions was in<br>high demand; nine different Cook-<br>ing Programs of varying lengths (2<br>to 9 individual sessions) received<br>financial assistance; as well, all but<br>3 of the programs received support<br>from project staff. Cooking Ses-<br>sions were offered at a variety of<br>community locations: Oasis and<br>the Community Peer Leaders used<br>the kitchen facilities of the Westside<br>Community Clinic; The Aboriginal<br>Student Centre group met at the<br>kitchen facilities of the University<br>of Saskatchewan Student Health<br>Centre; a couple of "trial" sessions<br>were offered at the Saskatoon Tribal<br>Council at their Urban location; |

Objective 2: To increase knowledge and skills of healthy food preparation as a means to increase the practice of healthy eating behaviours.

| <i>Project Activities Relating to</i><br><i>Objective 2</i>                  | Sources of Data (From whom will the information be gathered?) | Outputs/Outcomes for Selected<br>Indicators  |
|--|---|--|
| Cooking Sessions (focus on skill<br>development and healthy food<br>choices) |   | <ul> <li>Aim 4 Health staff offered 8 Food<br/>Experience programs at the Sas-<br/>katoon Food Bank; other Cook-<br/>ing Sessions ran out of Station 20<br/>and Infinity House. It is difficult<br/>to determine the total number of<br/>discrete individuals, although a close<br/>estimate is 140. The difficulty in<br/>providing an exact number is that<br/>two of the Cooking Programs, Oasis<br/>and the Aboriginal Student Centre<br/>(ASC), are drop-in events; prior reg-<br/>istration is not required. However,<br/>both programs had high average at-<br/>tendance, 15participants/session and<br/>11/session at the ASC.</li> <li>2. Unfortunately, there is no pre<br/>and post cooking session evaluations<br/>on which to determine if the project<br/>met indicator 2 in this section.</li> <li>3. Members of the Community Peer<br/>Leader Program provided support<br/>for 3 of the Cooking Sessions. When<br/>scheduled to assist with Cooking<br/>Sessions, peer leaders attended 100%<br/>of the time.</li> </ul> |

# Objective 2: To increase knowledge and skills of healthy food preparation as a means to increase the practice of healthy eating behaviours.

### APPENDIX E: Project Map - Objective 3 - Integrate Diabetes Awareness into Project Activities

| Objective 3: To increase knowledge of healthy food choices as a means to diabetes prevention through   |   |  |
|--|---|--|
| integrating diabetes awareness into project activities.  |   |  |
| <i>Project Activities Relating to</i><br><i>Objective 3</i>  | Anticipated Outcomes  | <i>Evaluation questions related to objective and activities</i>  |
| Integrate information on healthy<br>food choices (and active living)<br>as a means to diabetes prevention<br>into project activities: that is,<br>Cooking Sessions, Kids Kitchens,<br>Fresh Food Markets, health fairs<br>etc. | Diabetes awareness activities will be<br>developed or acquired and used in<br>project activities. | <ul> <li>Process Evaluation: Are the diabetes prevention and awareness activities and information (tools and resources) developed/ acquired and used?</li> <li>Output: Number of resources developed or acquired.</li> <li>Quantitative: Number of times these tools and resources are used in the project activities?</li> <li>Qualitative: Is there an increase in knowledge and/or change in behaviour as a result of participating in some of the project activities?</li> </ul> |

| <i>Project Activities Relating to</i><br><i>Objective 3</i>  | Indicators   | <i>Evaluation Tools (How will evaluation data be gathered?)</i>   |
|--|--|---|
| Integrate information on healthy<br>food choices (and active living)<br>as a means to diabetes prevention<br>into project activities: that is,<br>Cooking Sessions, Kids Kitchens,<br>Fresh Food Markets, health fairs<br>etc. | 1. Diabetes awareness information<br>and/or activities will be incorporated<br>into 75% of project activities: (Note:<br>This does not mean at each session<br>of these programs there will be dia-<br>betes education.)   | Hard copies of tools and resources.<br>Monitoring Tool: Activity Tracking<br>Log. The Monitoring Tool asks staff<br>or facilitators to document the tools<br>and resources used in each activity.   |
|  | <ul> <li>2. 4 new resources or activities will be developed/acquired and incorporated into project activities and events.</li> <li>3. New resources will be used on 5 different occasions.</li> <li>Cooking Sessions: <ul> <li>20% of participants will state they have learned to cook 2 to 3 new diabetes friendly meals. They will state they have made the meals or plan to make meals at home.</li> </ul> </li> </ul> | Project Evaluator will develop<br>knowledge and/or behaviour change<br>evaluation tools for UFNIMDP<br>sponsored events and activities, if<br>one does not exist.<br>Interviews, focus groups, evaluation<br>forms, and anecdotal recording of<br>comments may also be used as evalu-<br>ation tools. |

Objective 3: To increase knowledge of healthy food choices as a means to diabetes prevention through integrating diabetes awareness into project activities.

| integrating diabetes awareness into  | î - ´   | Outpute/Outparence for Salartad  |
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| Project Activities Relating to<br>Objective 3  | Sources of Data (From whom will the information be gathered?)   | Outputs/Outcomes for Selected<br>Indicators  |
| Integrate information on healthy<br>food choices (and active living)<br>as a means to diabetes prevention<br>into project activities: that is,<br>Cooking Sessions, Kids Kitchens,<br>Fresh Food Markets, health fairs<br>etc. | Project Manager, CHEP Good Food<br>Inc. Nutritionist and Community<br>Development staff person documen-<br>tation.<br>Cooking Session facilitators.<br>Partner organization staff in atten-<br>dance at events and activities and the<br>Project Evaluator. | <ol> <li>Our project is about good food.<br/>The promotion of healthy food<br/>choices is implicit in project activi-<br/>ties through the examples of healthy<br/>snacks and meals served at activities<br/>and the project's focus on promot-<br/>ing Fresh Food Markets. The project<br/>supported 23 different activities,<br/>of that number; diabetes awareness<br/>information was incorporated into<br/>17 or 74% of project activities. This<br/>is almost exactly the percentage<br/>considered to successfully meet the<br/>first indicator of project success in<br/>this area.</li> <li>4. No specific information was col-<br/>lected that could determine if the<br/>project had met this indicator.</li> </ol> |

Objective 3: To increase knowledge of healthy food choices as a means to diabetes prevention through integrating diabetes awareness into project activities

## APPENDIX F: Project Map - Objective 4 - Increase Community Ownership and Capacity

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| health promotion and diabetes prevention activities. |  |  |

| Project Activities Relating to<br>Objective 4   | Anticipated Outcomes   | <i>Evaluation questions related to objective and activities</i>  |
|---|--|--|
| Engage and support Aboriginal<br>Seniors as project spokespeople<br>and "educators" on the prevention<br>of type 2 diabetes.<br>Project staff will invite members<br>of the Kokums or Grandmothers'<br>group supported by the Saskatoon<br>Community Clinic to a gathering<br>(lunch meal and presentation).<br>The intent of the gathering is to<br>introduce the members of the group<br>to the Sacred Circle resource and in<br>turn ask them to "share" with others<br>the information in this resource on<br>the prevention of type 2 diabetes.<br>Participants will also be introduced<br>to the Fresh Food Markets.<br>Elder with the Westside<br>Community Clinic actively<br>participates in a project activity<br>one afternoon a week. | There will be a good turnout of<br>Kokums for this event scheduled for<br>February 20, 2013.<br>Using the Sacred Circle booklet and<br>video, members of the Grandmoth-<br>er's Group will inform other family<br>members and friends on the preven-<br>tion of Type 2 Diabetes. They will<br>learn about the prevention of type 2<br>diabetes.<br>As well, they will tell others about<br>the Fresh Food Markets. | Is this a topic of interest for the<br>Grandmother's Group?<br>Do the group members share the in-<br>formation in the Sacred Circle with<br>others (grandchildren, other relatives<br>and friends)?<br>Do the group members gain infor-<br>mation about diabetes prevention<br>from the Sacred Circle Resource?<br>Do the group members tell others<br>about the Fresh Fruit Market? |

| health promotion and diabetes prevention activities.  |   |   |  |
|---|---|---|--|
| Project Activities Relating to .<br>Objective 4   | Anticipated Outcomes  | Evaluation questions related to objective and activities  |  |
| <ul> <li>March 20, 2013 a gathering for the staff of community agencies or organizations providing programs and services to urban living Aboriginal community members. The intent of this event is to increase knowledge on the prevention of type 2 diabetes and to increase awareness of diabetes resources in the community; in this way, increasing the capacity of community organizations.</li> <li>This activity will work toward re-engaging and developing new partnerships with community groups and organizations to focus on collaborative action to deliver diabetes prevention activities.</li> </ul> | A guest list will be developed of<br>organizations providing programs<br>and services for inner city Aboriginal<br>community members.<br>A needs assessment tool will be<br>developed to assess the level of<br>awareness potential participants<br>have on type 2 diabetes and diabe-<br>tes programming resources in the<br>community. The Gathering agenda/<br>content will be developed based on<br>the results of the needs assessment.<br>As well, this tool will be adapted to<br>assess the outcome of the learning<br>event.<br>After the event, participants will say<br>they have more knowledge on the<br>risk factors, prevention strategies and<br>complications of type 2 diabetes.<br>As well, they will indicate they have<br>more information on community<br>diabetes education and support pro-<br>grams + diabetes resources.<br>Attendance will be considered very<br>good if there are 25 to 30 partici-<br>pants. | Process Evaluation: Did the organization of the event go as planned? I.e. guest list created, pre event learning needs assessment and post event evaluation to determine if learning needs were met. Quantitative: How many organizations are reached with the invitation to this event? Is this a topic of interest for the organizations and their staff? Qualitative: Do participants indicate they have more knowledge on type 2 diabetes; its risk factors and complications, because of participating in this event? Do participants indicate they are more aware of diabetes programs and resources available in our community? Are the participants of the Learning Event satisfied with the information and resources they received? |  |

Objective 4. To increase community ownership and capacity to design and deliver culturally appropriate health promotion and diabetes prevention activities.

Objective 4. To increase community ownership and capacity to design and deliver culturally appropriate health promotion and diabetes prevention activities.

| health promotion and diabetes prevention activities.  |  |  |  |
|---|--|--|--|
| Project Activities Relating to<br>Objective 4   | Indicators   | Evaluation Tools (How will evaluation data be gathered?)   |  |
| <b>Engage and support Aboriginal</b><br><b>Seniors as project spokespeople</b><br><b>and "educators" on the prevention</b><br><b>of type 2 diabetes.</b><br>Project staff will invite members   | <ol> <li>1. 15 + group members attend this<br/>event</li> <li>2. 50% of the Kokums/Elders will<br/>share the Sacred Circle Resource</li> </ol>   | Monitoring Tool: Activity Tracking<br>Log.<br>Follow-up phone calls and/or discus-<br>sion with group members at their |  |
| of the Kokums or Grandmothers'<br>group supported by the Saskatoon<br>Community Clinic to a gathering<br>(lunch meal and presentation).<br>The intent of the gathering is to<br>introduce the members of the group<br>to the Sacred Circle resource and in<br>turn ask them to "share" with others<br>the information in this resource on<br>the prevention of type 2 diabetes.<br>Participants will also be introduced<br>to the Fresh Food Markets. | <ul> <li>with at least one other individual. As well, 50% will tell one other individual about the Fresh Food Markets.</li> <li>3. 50% of the grandmothers participating in the gathering and engaged as "educators" will identify at least two things they learned on the prevention of type 2 diabetes from their participation in this project activity.</li> </ul> | regular monthly group meeting.   |  |
| Elder with the Westside<br>Community Clinic actively<br>participates in a project activity<br>one afternoon a week.   |  |  |  |

| health promotion and diabetes prevention activities.  |   |  |  |
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| Project Activities Relating to<br>Objective 4   | Indicators  | <i>Evaluation Tools (How will evaluation data be gathered?)</i>  |  |
| Shared Vision: Diabetes Gathering<br>– March 20, 2013 a gathering for<br>the staff of community agencies or<br>organizations providing programs<br>and services to urban living<br>Aboriginal community members.<br>The intent of this event is to increase<br>knowledge on the prevention of type<br>2 diabetes and to increase awareness<br>of diabetes resources in the<br>community; in this way, increasing<br>the capacity of community<br>organizations. | <ol> <li>50% of the community organizations receiving the event invitation will send staff.</li> <li>10 different community organizations will send staff to this event.</li> <li>30 staff members of community organizations offering programs and services to Aboriginal people in our community will attend this one day event.</li> </ol> | A needs assessment tool will be developed to assess the perceived learning needs of potential participants prior to the event.<br>The needs assessment tool will be modified and after the gathering to determine if participants feel that the information received increased their knowledge of type 2 diabetes and increased their awareness of diabetes education and support programs in the community. |  |
| This activity will work toward<br>re-engaging and developing new<br>partnerships with community<br>groups and organizations to focus<br>on collaborative action to deliver<br>diabetes prevention activities.   | <ul> <li>4. 50% of those responding to the evaluation of the Gathering will strongly agree they have more knowledge on a variety of aspects of diabetes.</li> <li>5. 50% of participants will strongly agree they have more information on community diabetes education and support programs.</li> </ul>                                      |  |  |

Objective 4. To increase community ownership and capacity to design and deliver culturally appropriate health promotion and diabetes prevention activities

| health promotion and diabetes prevention activities.  |   |   |  |
|---|---|---|--|
| Project Activities Relating to<br>Objective 4   | Sources of Data (From whom will the information be gathered?)   | Output/Outcome for Selected<br>Indicators   |  |
| Engage and support Aboriginal<br>Seniors as project spokespeople<br>and "educators" on the prevention<br>of type 2 diabetes.<br>Project staff will invite members<br>of the Kokums or Grandmothers'<br>group supported by the Saskatoon<br>Community Clinic to a gathering<br>(lunch meal and presentation).<br>The intent of the gathering is to<br>introduce the members of the group<br>to the Sacred Circle resource and in<br>turn ask them to "share" with others<br>the information in this resource on<br>the prevention of type 2 diabetes.<br>Participants will also be introduced<br>to the Fresh Food Markets.<br>Elder with the Westside<br>Community Clinic actively<br>participates in a project activity<br>one afternoon a week. | Project manager's documentation of<br>attendance.<br>Project Evaluator will contact group<br>members either by phone or will<br>attend a group meeting to acquire<br>information to answer evaluation<br>questions. | <ol> <li>20 individuals attended this event.<br/>Six (6) community peer leaders provided support for the event. Three project staff and one of the Diabetes Outreach Workers from Aim 4<br/>Health provided short presentations.</li> <li>2 + 3. To date there is not enough information to determine if indicators 2 and 3 have been met. Nine (9) participants were contacted by the author either in person or by phone 2 months after the Elder Gathering. The lapse of two months was too long for some of the women; they couldn't remember the Sacred Circle booklet. There were, however, some interesting comments.</li> <li>Project staff plans to follow-up with the Kokum's group in the fall so a more complete evaluation will be provided in the 2013 project end write-up.</li> </ol> |  |

Objective 4. To increase community ownership and capacity to design and deliver culturally appropriate health promotion and diabetes prevention activities

| health promotion and diabetes prevention activities.  |   |  |  |
|---|---|--|--|
| Project Activities Relating to<br>Objective 4   | Sources of Data (From whom will the information be gathered?)   | Output/Outcome for Selected<br>Indicators  |  |
| <ul> <li>Shared Vision: Diabetes Gathering – March 20, 2013 a gathering for the staff of community agencies or organizations providing programs and services to urban living Aboriginal community members. The intent of this event is to increase knowledge on the prevention of type 2 diabetes and to increase awareness of diabetes resources in the community; in this way, increasing the capacity of community organizations.</li> <li>This activity will work toward re-engaging and developing new partnerships with community groups and organizations to focus on collaborative action to deliver diabetes prevention activities.</li> </ul> | Project manager and staff's documentation of event.<br>Gathering registration list.<br>Documentation kept by the Aim 4<br>Health program. | The outputs and outcomes of<br>the Shared Vision Gathering are<br>found on pages. This is the activ-<br>ity for which our project retained<br>the \$3,000 initially designated for<br>travel expenses. There is much to<br>say about the organization and<br>output/outcome of this event. |  |

Objective 4. To increase community ownership and capacity to design and deliver culturally appropriate health promotion and diabetes prevention activities.

### APPENDIX G: Project Map - Objective 5 - Increase the Potential for Project Success

| Project Activities Relating to<br>Objective 5   | Anticipated Outcomes  | <i>Evaluation questions related to objective and activities</i>  |
|---|---|--|
| Saskatoon Community Clinic<br>Accounting Department will<br>oversee project finances; generate<br>quarterly budget reports,<br>bookkeeping, audit services and<br>consult with project manager. | Project administrative resources<br>developed and as planned. | Process Evaluation:<br>To what extent is the project imple-<br>mentation consistent with the proj-<br>ect design and timelines identified?<br>Are project activities implemented as<br>described in the project work plan? |
| Advisory Committee is formed<br>and meets quarterly, as well they<br>will be engaged in establishing a<br>project framework or map, risk<br>assessment and evaluation plan.                     |   | <b>Outputs:</b><br>Administrative tools: project frame-<br>work, reporting templates, project<br>evaluation map and risk assessment.   |
| An Elder will join the Advisory<br>Committee.   |   |  |

| Objective 5. To increase the potential for project success.   |   |   |
|---|---|---|
| Project Activities Relating to<br>Objective 5   | Indicators  | <i>Evaluation Tools (How will evaluation data be gathered?)</i> |
| Saskatoon Community Clinic<br>Accounting Department will<br>oversee project finances; generate<br>quarterly budget reports,<br>bookkeeping, audit services and<br>consult with project manager. | <ol> <li>Mid-year and final financial reports completed on sent in on time.</li> <li>Advisory Committee meets as planned, every three to four months.</li> </ol>                | Project Manager/Evaluator docu-<br>mentation.                   |
| Advisory Committee is formed<br>and meets quarterly, as well they<br>will be engaged in establishing a<br>project framework or map, risk<br>assessment and evaluation plan.                     | <ul><li>3. Administrative tools and resources are in place.</li><li>4. Elder from one of the Aboriginal partner organizations participates on the Advisory Committee.</li></ul> |   |
| An Elder will join the Advisory<br>Committee.   |   |   |
|   |   |   |

| Objective 5. To increase the potential for project success.   |  |   |  |
|---|--|---|--|
| Project Activities Relating to<br>Objective 5   | Sources of Data (From whom will the information be gathered?)                          | Output/Outcome for Selected<br>Indicators   |  |
| Saskatoon Community Clinic<br>Accounting Department will<br>oversee project finances; generate<br>quarterly budget reports,<br>bookkeeping, audit services and<br>consult with project manager. | Saskatoon Community Clinic Ac-<br>counting Department<br>Project Manager documentation | 1. The <b>midyear financial statement</b><br>was completed and sent by Novem-<br>ber 30, 2012, as negotiated with<br>UFNIMDP. Final statement was<br>completed by April 30, 2013 and<br>accompanies this evaluation.  |  |
| Advisory Committee is formed<br>and meets quarterly, as well they<br>will be engaged in establishing a<br>project framework or map, risk<br>assessment and evaluation plan.                     |  | 2. Advisory Committee met 5<br>times in 2012-13, April 3, June 14<br>and September 13, 2012 and Janu-<br>ary 23 and March 25, 2013.   |  |
| An Elder will join the Advisory<br>Committee.   |  | 3. Administrative Tools developed:<br>Activity Tracking Log, Reporting<br>Templates for the Advisory Commit-<br>tee and project staff, Project Evalu-<br>ation Map. <i>Note</i> : The only admin-<br>istrative tool not developed was the<br>Risk Assessment – see note 2 on the<br>following page. |  |
|   |  | <b>4. Elder on Advisory Committee</b><br>– please see note 3 on the following page.   |  |

Note 1: One of the most valuable resources the project acquired was the Sacred Circle: Type 2 Diabetes Prevention for Aboriginal Children booklet and video produced by the Alberta Native Friendship Centres Association. Our project then developed a sacred food "bundle"; the colours of the traditional foods included in the bundles represented the four colours of the Medicine Wheel. The project staff and 5 community peer leaders assembled 100 bundles. The bundles and Sacred Circle booklet were provided on three special occasions: Shared Vision; Diabetes Gathering on March 20, 2013; Kokums Gathering, February 20, 2013 and on the occasion of the women of Infinity House graduating from their Cooking Program. Diabetes Conversation Map: Educational Tool developed with the sponsorship of Lily Diabetes was used on three occasions; at two of Oasis' Cooking Sessions and at the Shared Vision Gathering. The Aboriginal Diabetes Bingo developed by the Canadian Diabetes Association (CDA) was also used on two occasions; other CDA resources, particularly those developed for Aboriginal peoples, were distributed at project activities. A local but previously developed resource on recipe adaptation to reduce sugar, sodium and fat was used at several project sponsored activities. The project's Dietitian developed a hand out on easy fruit and vegetable dips to use at Snack Pack Attacks when parents and children participated in the Attack. Another resource the project developed was a card game that helped people assess their risk of developing diabetes. This card game was a particular good activity at health fairs. Two more resources were adapted for the Shared Vision gathering: Health Passport and Grocery Store Scavenger Hunt.

The project staff with assistance from the Aim 4 Health Program developed a project display board. This resource has been used at presentations, gatherings and health fairs.

**Note 2**: The challenge in developing the Risk Assessment tool was partially because there is a dearth of information on risk assessment for community based chronic disease prevention projects. However, after a year and a half of managing the project the author has a better idea of the risks associated with a project of this nature; developing a Risk Assessment may be doable.

**Note 3**: The project partners did not succeed in having an Elder join the Advisory Committee. It was not that this objective slid off the side of the project manager's desk. It was a regular Advisory Committee topic;

APPENDIX H: Fresh Food Market Survey Consent Form



### Title: Urban First Nations Inuit Métis Diabetes Prevention Evaluation Project – FRESH FOOD MARKETS

This survey is designed to help us understand if the Fresh Food Markets are helping people make healthy food choices. This information will help to identify areas for improvement regarding this topic, and will also help in future program planning. **Participation in this survey is voluntary, and you can decide not to participate at any time, or choose not to answer any questions you don't feel comfortable with. Survey responses will remain anonymous.** Since the survey is anonymous, once it is submitted it cannot be removed.

By completing and submitting this questionnaire, **your free and informed consent is implied** and indicates that you understand the above conditions of participation in this study.

Completion of the survey should take 5-10 minutes.

If you have any questions you can contact Brittany Kachur – 306-270-0896, <u>bak342@mail.usask.ca</u> or Principal Investigator Dr. Rachel Engler-Stringer – 306-966-7839, <u>rachel.engler-stringer@usask.ca</u>.

This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office <u>ethics.office@usask.ca</u> (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

The following questions are about the Fresh Food Markets.

### APPENDIX I: Fresh Food Market Survey

### FRESH FOOD MARKET SURVEY

Hi, my name is Brittany, I am a public health student working with the Saskatoon Community Clinic. I am doing a short survey with people who use the Fresh Food Markets. I am wondering if you would be able to answer a few questions about your experience at the Market. The markets started out as a trial, so we would like to get an idea of how people shopping at the Markets feel about them. We want to see if people benefit from having healthy food more easily available to them in their community. We would like to offer market coupons for your help with this important project.

1. Is this your first time at the Fresh Food Market?

o No

o Yes

A. If no, how many times a month do you usually buy food at the Market?

- o Less than once a month
- o Once a month
- o Two to three times a month
- o Every week

B. If yes, what did you think of quality and price of the fresh produce or fruits and vegetables?

2. How did you hear about the markets? \_\_\_\_\_

3. Because you come to the Fresh Food Markets one or more times a month would you say the Fresh Food Market helps you in any of the following ways:

- o Go to the grocery store less often?
- o Spend less money on getting groceries because you don't need to use a car or hire a taxi?
- o Because you can walk to the Fresh Food Market?
- o You and those you live with eat more fruits and vegetables?
- o You don't run out of food as quickly?
- 4. Do you use other community food programs, such as the Saskatoon Food Bank or Friendship Inn?

o Yes o No

If yes, do you use them less often because of the Fresh Food Market?

o Yes o No

5. Four organizations or programs provide Fresh Food Market coupons for community members to use at the Fresh Food Markets. Have you used the market coupons?

o Yes

If yes, did you purchase more than the value of the coupon?

o No

o Yes o No

6. How much food do you usually buy at the Fresh Food Market?

o Less than five items

o Five to ten items

o More than ten items

7. Do you or other people in your household ever skip meals because you do not have enough money to buy food?

o Yes o No

If yes, does this happen less often since coming to the Fresh Food Markets?

o Yes o No

8. Do you eat less fruits and vegetables than you think you should because you do not have enough money?

o Yes o No

9. Some people just buy fruit at the Markets, others buy both fruit and vegetables. Do you usually buy vegetables when you come to the Market:

o Yes

If yes, what is your favorite recipe or recipes you make with the market food?

o No

10. How many people live in your household?

11. What do you like about the Fresh Food Market?

12. What would you recommend to improve the Fresh Food Market?

### LIST OF PUBLICATIONS

#### Community-University Institute for Social Research

- Allan, Nancy, & Michael Gertler. (2006). *Remaking the Links: Fair Trade for Local and Global Community Development.* Saskatoon: Community-University Institute for Social Research.
- Amankwah, Dinah. (2003). *Integrative Wraparound (IWRAP) Process Training*. Saskatoon: Community-University Institute for Social Research.
- Avis, Kyla, & Angela Bowen. (2004). *Postpartum Depression Support Program Evaluation*. Saskatoon: Community-University Institute for Social Research.
- Banks, Christopher. (2003). *The Cost of Homophobia: Literature Review on the Human Impact of Homophobia On Canada*. Saskatoon: Community-University Institute for Social Research.
- Banks, Christopher. (2004). *The Co\$t of Homophobia: Literature Review on the Economic Impact of Homophobia On Canada*. Saskatoon: Community-University Institute for Social Research.



Basualdo, Maria, & Kangayi, Chipo. (2010). *Cypress Hills Abilities Centres, Inc: Exploring Alternatives. A Research Report.* Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.

- Berntson, Ron. (2003). *Peer Victimization Experiences in High School*. Saskatoon: Community-University Institute for Social Research.
- Bidonde, Julia. (2006). *Experiencing the Saskatoon YWCA Crisis Shelter: Residents' Views*. Saskatoon: Community-University Institute for Social Research. Please contact Clara Bayliss at the YWCA at 244-7034, ext. 121 or at <u>info@ywcasaskatoon.com</u> for copies of this report.

#### Lenking Learning Learning

Bidonde, Julia, & Catherine Leviten-Reid. (2011). "A Place to Learn, Work, and Heal": An Evaluation of Crocus Co-operative. Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.

#### Lanking Learning Learning

Bidonde, Julia, Mark Brown, Catherine Leviten-Reid, & Erin Nicolas. (2012). *Health in the Communities of Duck Lake and Beardy's and Okemasis First Nation: An Exploratory Study.* Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.

- Bowditch, Joanne. (2003). *Inventory of Hunger Programs in Saskatoon*. Saskatoon: Community-University Institute for Social Research.
- Bowen, Angela. (2004). Healthy Mother Healthy Baby: Program Logic Model and Evaluability Assessment. Saskatoon: Community-University Institute for Social Research.



Brown, K., I. Findlay, & R. Dobrohoczki (2011). *Community Resilience, Adaptation, and Innovation: The Case of the Social Economy in LaRonge.* Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.

- Brownlee, Marilyn, & N. Chopin. (2009) *Evaluation Report: Snapshot of Collaborative Processes. Saskatoon:* Saskatoon Regional Intersectoral Committee and Community-University Institute for Social Research. Saskatoon: Community-University Institute for Social Research.
- Chopin, N., S. Hogg, S. McHenry, J. Popham, M. Stoops, S. Takahashi, & I.M. Findlay. (2012). Fetal Alcohol Spectrum Disorder Awareness and prevention Strategies: Learning from the Reported Alcohol Knowledge and Behaviours of College-Age Youth — A Research Report. Saskatoon: Community-University Institute for Social Research.
- Chopin, Nichola, Bill Holden, Nazeem Muhajarine, & James Popham. (2010). *Ten Years of Quality oif Life in Saskatoon: Summary of Research 2010 Iteration.* Saskatoon: Community-University Institute for Social Research.

Lucking Learning Levensing

Chopin, N., & I. Findlay. (2010). *Exploring Key Informants' Experiences with Self-Directed Funding: A Research Report.* Saskatoon: Community-University Institute for Social Research

- Chopin, N., & S. Wormith. (2008) Count of Saskatoon Homeless Population: Research Findings. Saskatoon: Community-University Institute for Social Research
- CUISR. (2001). *Proceedings of the Prairie Urban Congress 2001*. With support from Canada Mortgage and Housing Corporation, City of Saskatoon, GE Capital Mortgage & Insurance Canada, Government of CANADA, Saskatchewan Housing Corporation, and Western Economic Diversification Canada. Saskatoon: Community-University Institute for Social Research.
- CUISR. (2002). Partnerships for a Healthy Sustainable Community: CUISR—Present and Future. Saskatoon: Community-University Institute for Social Research.
- CUISR. (2003). "We Did It Together": Low-Income Mothers Working Towards a Healthier Community. Saskatoon: Community-University Institute for Social Research.
- CUISR. (2004). *Building Community Together: CUISR—Present and Future*. Saskatoon: Community-University Institute for Social Research.
- CUISR. (2004). CUISR at the Crossroads: Strategic Planning Session, June 23, 2004. Saskatoon: Community-University Institute for Social Research.
- CUISR. (2010). Saskatoon HIFIS Report on Homelessness. Saskatoon: Community-University Institute for Social Research.

Daniel, Ben. (2006). *Evaluation of the YWCA Emergency Crisis Shelter: Staff and Stakeholder Perspectives.* Saskatoon: Community-University Institute for Social Research. Please contact Clara Bayliss at the YWCA at 244-7034, ext. 121 or at info@ywcasaskatoon.com for copies of this report.

#### Linking Learning Learning

Diamantopoulos, Mitch, & Isobel M. Findlay. (2007). *Growing Pains: Social Enterprise in Saskatoon's Core Neighbourhoods.* Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research



Dozar, Marsha, Don Gallant, Judy Hannah, Emily Hurd, Jason Newberry, Ken Pike, & Brian Salisbury. (2012). *Individualized Funding: A Framework for Effective Implementation*. Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.

- Drechsler. Coralee. (2003). Influencing Poverty Reduction Policy Through Research Evidence: Immigrant Women's Experience in Saskatoon. Saskatoon: Community-University Institute for Social Research.
- Dressler, Mary Pat (2004). *Aboriginal Women Share Their Stories in an Outreach Diabetes Education Program*. Saskatoon: Community-University Institute for Social Research.
- Dunning, Heather. (2004). A Mixed Method Approach to Quality of Life in Saskatoon. Saskatoon: Community-University Institute for Social Research.
- Dyck, Carmen. (2004). "Off Welfare...Now What?": A Literature Review on the Impact of Provincial Welfare to Work Training Programs in Saskatchewan. Saskatoon: Community-University Institute for Social Research.
- Dyck, Carmen G. (2005). "Off Welfare ... Now What?": Phase II, Part 2: Analysis. Saskatoon: Community-University Institute for Social Research.



Elliott, Patricia W. (2011). *Participatory Action Research: Challenges, Complications, and Opportunities*. Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.

- Engler-Stringer, Rachel. (2006). *Collective Kitchens in Three Canadian Cities: Impacts on the Lives of Participants.* Saskatoon: Community-University Institute for Social Research.
- Engler-Stringer, R., & J. Harder. (2011). *Toward Implementation of the Saskatoon Food Charter: A Report.* Saskatoon: Community-University Institute for Social Research
- Evitts, Trina, Nazeem Muhajarine, & Debbie Pushor. (2005). *Full-Time Kindergarten in Battlefords School Division* #118 Community Schools. Saskatoon: Community-University Institute for Social Research.
- Fernandes, Neville. (2003). Saskatchewan's Regional Economic Development Authorities: A Background Document. Saskatoon: Community-University Institute for Social Research.
- Fillingham, Jennifer. (2006). SEN-CUISR- Environmental Charitable Organization Feasibility Study, Phase Two. Saskatoon: Community-University Institute for Social Research.



Findlay, Isobel M. & Anar Damji. (2013). *Self-Directed Funding: An Evaluation of Self-Managed Contracts in Saskatchewan.* Saskatoon: Community-University Institute for Social Research and Centre for the Study of Co-operatives.

#### Laiking Teaming Levenbang

Findlay, Isobel M., Julia Bidonde, Maria Basualdo, & Alyssa McMurtry. (2009). *South Bay Park Rangers Employment Project for Persons Living with a Disability: A Case Study in Individual Empowerment and Community Interdependence.* Saskatoon: Community-University Institute for Social Research and Centre for the Study of Co-operatives.

#### Harking Tearning Levensing

Findlay, Isobel M., James Popham, Patrick Ince, & Sarah Takahashi. (2013). *Through the Eyes of Women: What a Co-operative Can Mean in Supporting Women during Confinement and Integration.* Saskatoon: Community-University Institute for Social Research and Centre for the Study of Co-operatives.

- Gauley, Marg. (2006). *Evaluation of Respectful Conflict Resolution and Peer Mediation Program.* Saskatoon: Community-University Institute for Social Research.
- Gold, Jenny. (2004). *Profile of an Inter-Sectoral Issue: Children Not In School*. Saskatoon: Community-University Institute for Social Research.
- Grosso, Paula. (2003). Uprooting Poverty and Planting Seeds for Social Change: The Roots of Poverty Project. Saskatoon: Community-University Institute for Social Research.
- Grosso, Paula, & Jodi Crewe. (2004). *Project Greenhorn: Community Gardening*. Saskatoon: Community-University Institute for Social Research.
- Harlingten, Leora. (2004). Saskatoon Charging and Disposition Patterns Under Section 213 of the Criminal Code of Canada. Saskatoon: Community-University Institute for Social Research.



Heit, Jason. (2012). *Mapping Social Capital in a Network of Community development Organizations: The South West Centre for Entrepreneurial Development Organizational Network*. Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.

Henry, Carol J., Carol Vandale, Susan Whiting, Flo Woods, Shawna Berenbaum, & Adrian Blunt. (2006). Breakfast/ Snack Programs in Saskatchewan Elementary Schools: Evaluating Benefits, Barriers, and Essential Skills. Saskatoon: Community-University Institute for Social Research.

Hurd, Emily. (2012). *Community Conversations about the Good Food Junction Co-operative*. Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.

Jackson, Maureen. (2004). *Closer to Home: Child and Family Poverty in Saskatoon*. Saskatoon: Community-University Institute for Social Research.

Laiking Jeaning Leventary

- Janzen, Bonnie. (2003). An Evaluation Of The Federation of Canadian Municipalities Quality of Life Reporting System. Saskatoon: Community-University Institute for Social Research.
- Jonker, Peter, Colleen Whitedeer, & Diane McDonald. (2005). Building Capacity of Fond du Lac Entrepreneurs to Establish and Operate Local Tourism Business: Assessment and Proposed Training. Saskatoon: Community-University Institute for Social Research.
- Kelsey, Melissa V. (2004). *Determining Saskatoon's Value Profile*. Saskatoon: Community-University Institute for Social Research.
- Klymyshyn, Sherry, & Lee Everts. (2007). *Evaluation of Saskatoon Community Clinic Group Program for "At Risk" Elderly.* Saskatoon: Community-University Institute for Social Research.
- Kynoch, Bev. (2003). The Brightwater Environmental and Science Project: Respecting Traditional Ecological Knowledge– The Soul of a Tribal People. Saskatoon: Community-University Institute for Social Research.
- Li, Song. (2004). *Direct Care Personnel Recruitment, Retention and Orientation*. Saskatoon: Community-University Institute for Social Research.
- Lisoway, Amanda. (2004). 211 Saskatchewan Situational Analysis. Saskatoon: Community-University Institute for Social Research.

#### Lanking Learning Learning

Lynch, Karen, & Isobel M. Findlay. (2007). *A New Vision for Saskatchewan: Changing Lives and Systems through Individualized Funding for People with Intellectual Disabilities – A Research Report.* Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.

#### Linking Teaching

Lynch, Karen, Cara Spence, & Isobel M. Findlay. (2007). *Urban Aboriginal Strategy Funding Database: A Research Report.* Saskatoon: Centre for the Study of Co-operatives and Community-University Institute for Social Research.

- MacDermott, Wendy. (2003). Child Poverty in Canada, Saskatchewan, and Saskatoon: A Literature Review and the Voices of the People. Saskatoon: Community-University Institute for Social Research.
- MacDermott, Wendy. (2004). *Youth . . . on the brink of success. Youth Addictions Project.* Saskatoon: Crime Prevention—Community Mobilization and Community-University Institute for Social Research..
- MacDermott, Wendy. (2004). Common Functional Assessment and Disability-Related Agencies and Departments in Saskatoon. Saskatoon: Community-University Institute for Social Research.
- MacDermott, Wendy. (2004). Evaluation of the Activities of the Working Group to Stop the Sexual Exploitation of Children. Saskatoon: Community-University Institute for Social Research.
- McRae, Stacy, & Keith Walker. (2007). An Evaluation of Family to Family Ties: A Review of Family Mentorship in Action. Saskatoon: Community-University Institute for Social Research.

- Moneo, Cameron, Maria Basualdo, Isobel M. Findlay, & Wendy MacDermott. (2008). *Broadway Theatre Membership Assessment. A Research Report.* Saskatoon: Community-University Institute for Social Research.
- Muhajarine, Nazeem, Stacey McHenry, Jethro Cheng, James Popham, and Fleur MacQueen-Smith. (2013). *Phase One Evaluation: Improving Outcomes for Children with FASD in Foster Care: Final Report.* Saskatoon: Community-University Institute for Social Research and Saskatchewan Population Health and Evaluation Research Unit..
- Muhajarine, Nazeem, Maureen Horn, Jody Glacken, Trina Evitts, Debbie Pushor, and Brian Keegan. (2007). *Full Time Kindergarten in Saskatchewan, Part One: An Evaluation Framework for Saskatchewan Full-Time Kindergarten Programs.* Saskatoon: Community-University Institute for Social Research.
- Muhajarine, Nazeem, Trina Evitts, Maureen Horn, Jody Glacken, and Debbie Pushor. (2007). *Full-Time Kindergarten in Saskatchewan, Part Two: An Evaluation of Full-Time Kindergarten Programs in Three School Divisions.* Saskatoon: Community-University Institute for Social Research.
- Ofosuhene, Maxwell. (2003). Saskatchewan River Basin-Wide Survey of Residents' Attitudes Towards Water Resources and the Environment. Saskatoon: Community-University Institute for Social Research.
- Olfert, Sandi. (2003). *Quality of Life Leisure Indicators*. Saskatoon: Community-University Institute for Social Research.

#### Lanking Learning Learning

Pattison, D. and I. Findlay. (2010). *Self-Determination in Action: The Entrepreneurship of the Northern Saskatchewan Trapper's Association Co-operative*. Saskatoon: Community-University Institute for Social Research and Centre for the Study of Co-operatives.

- Prokop, Shelley Thomas. (2009). Program Evaluation of the Saskatoon Community Clinic: Strengthening the Circle Program. Saskatoon: Community-University Institute for Social Research.
- Propp, A.J. (Jim). (2005). Preschool: As Essential As Food. An Effectiveness Review of the Saskatoon Preschool Foundation Tuition Subsidy Program. Saskatoon: Community-University Institute for Social Research.
- Quinlan, Elizabeth, Ally Clarke, and Natasha Miller. (2013). *Coordinating and Enhancing Care and Advocacy for Sexual Assault Survivors: New Collaborations and New Approaches.* Saskatoon: Community-University Institute for Social Research.
- Radloff, Karla. (2006). Community Resilience, Community Economic Development, and Saskatchewan Economic Developers. Saskatoon: Community-University Institute for Social Research.
- Reed, Maureen. (2003). *Situating Indicators of Social Well-Being in Rural Saskatchewan Communities*. Saskatoon: Community-University Institute for Social Research.
- Roberts, Claire. (2006). *Refugee Women and Their Postpartum Experiences*. Saskatoon: Community-University Institute for Social Research.

- Ruby, Tabassum. (2004). *Immigrant Muslim Women and the* Hijab: *Sites of Struggle in Crafting and Negotiating Identities in Canada*. Saskatoon: Community-University Institute for Social Research.
- Sanderson, K. (2005). *Partnering to Build Capacity and Connections in the Community*. Saskatoon: Community-University Institute for Social Research.
- Sanderson, Kim, Michael Gertler, Diane Martz, & Ramesh Mahabir. (2005). *Farmers' Markets in North America: A Literature Review*. Saskatoon: Community-University Institute for Social Research.
- Schmidt, Heather, Cynthia Chataway, Patrick Derocher, Jeff McCallum, & Yolanda McCallum. (2006). Understanding the Strengths of the Indigenous Communities: Flying Dust First Nation Focus Group Report. Saskatoon: Community-University Institute for Social Research.
- Seguin, Maureen. (2006). Alberta Mentoring Partnerships: Overview and Recommendations to Saskatoon Mentoring Agencies. Saskatoon: Community-University Institute for Social Research.
- Sinclair, Raven, & Sherri Pooyak (2007). *Aboriginal Mentoring in Saskatoon: A cultural perspective*. Saskatoon: Indigenous Peoples' Health Research Centre in collaboration with Big Brothers Big Sisters of Saskatoon and the Community-University Institute for Social Research.
- Soles, Kama. (2003). Affordable, Accessible Housing Needs Assessment at the North Saskatchewan Independent Living Centre. Saskatoon: Community-University Institute for Social Research.



Spence, Cara, & Isobel M. Findlay. (2007). *Evaluation of Saskatoon Urban Aboriginal Strategy: A Research Report.* Saskatoon: Community-University Institute for Social Research.

- Stadnyk, Nadia, Nazeem Muhajarine, & Tammy J. Butler. (2005). *The Impact of KidsFirst Saskatoon Home Visiting Program in Families' Lives*. Saskatoon: Community-University Institute for Social Research.
- Sun, Yinshe. (2005). *Development of Neighbourhood Quality of Life Indicators*. Saskatoon: Community-University Institute for Social Research.
- Tannis, Derek. (2005). *Mentoring in Saskatoon: Toward a Meaningful Partnership.* Saskatoon: Community-University Institute for Social Research.
- Tupone, Juliano. (2003). *The Core Neighbourhood Youth Co-op: A Review and Long-Term Strategy*. Saskatoon: Community-University Institute for Social Research.
- Victor, Janice. (2011). *Report to the Saskatoon Regional Intersectoral Committee: The Middle Ring Evaluation*. Saskatoon: Community-University Institute for Social Research.
- Waikar, Rahul, Suresh Kalagnanam, & Isobel M. Findlay. (2013). *Financial Proxies for Social Return on Investment Analyses in Saskatchewan: A Research Report.* Saskatoon: Community-University Institute for Social Research.

- Williams, Alison with Sylvia Abonyi, Heather Dunning, Tracey Carr, Bill holden, Ron Labonte, Nazeem Muhajarine,
   & Jim Randall. (2001). Achieving a Healthy, Sustainable Community: Quality of Life in Saskatoon, Saskatchewan. Research Summary. Saskatoon: Community-University Institute for Social Research.
- Wohlgemuth, Nicole R. (2004). School Fees in Saskatoon. Saskatoon: Community-University Institute for Social Research.
- Woods, Florence. (2003). *Access to Food in Saskatoon's Core Neighborhood*. Saskatoon: Community-University Institute for Social Research.
- Wright, Judith and Nazeem Muhajarine. (2003). *Respiratory Illness in Saskatoon Infants: The Impact of Housing and Neighbourhood Characteristics*. Saskatoon: Community-University Institute for Social Research.



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