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Healthy Lifestyles for Newcomers in Manitoba

Needs Assessment for Healthy Living

A report for Healthy Living Manitoba and the Public Health Agency of Canada describing the health status of newcomers to Manitoba, the barriers they face in maintaining adequate physical activity and nutrition, and best practices of addressing these barriers.

Rudy Ambtman, Ph.D. and Ray Ali, M.A.
NEEDS Inc.
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Rudy Ambtman, Ph.D.
Ray Ali, MA

EXECUTIVE SUMMARY

Introduction:

This study is divided into four sections, beginning with a literature review followed by sections describing barriers, best practices, and ending with a series of recommendations.

The literature review sets the foundation of the study by providing evidence that newcomers, typically immigrants, come to Canada healthier than the average Canadian. However, the literature reports that this advantage is quickly lost over a period of time. This phenomenon appears to hold true for the children of newcomers also.

Section 2 highlights the barriers that impede healthy choices for newcomers in respect to nutrition and physical activity. Our informants describe barriers which are consistent with those reported in numerous studies. These barriers include those that are related to socio-economic variables, safety, housing, language, transportation, time restraints, cost of foods, poor diet, lack of knowledge, attitudes, cost of programs, lack of child care, gender bias, school policies, and weather. Section 3 describes existing programs available and identifies best practices provincially and other jurisdictions. The study ends with a series of recommendations for consideration.

Methodology:

This study includes reviews of the academic literature, but much of the data comes from interviews conducted during a four month period. The over 100 informants were selected from organizations directly providing services to newcomers, governments, and from a wide range of cultural groups. Interviews were conducted in Winnipeg, Brandon, and Altona. Emphasis is placed on understanding the Manitoba scene. When possible, findings are supplemented by national and international sources.

Objectives:

This comprehensive needs assessment study is designed to understand ways to enhance nutrition and physical needs of newcomers in Manitoba and is guided by the following questions:

- What specific information is required to assist the planning of healthy life strategies of newcomers?
- What are the barriers to physical activity and healthy nutrition choices?
- Are the barriers similar/dissimilar to other sectors of the population?
- What are the best practices that employ culturally sensitive approaches to reach inactive population
- Should there be different approaches for different cultural groups?
- How should the government work with various cultural communities and other stakeholders?

Findings:

Based on the interviews the following critical themes emerged.

- Improving one's nutritional and physical health will continue to be of secondary concern for newcomers until improvements in the areas of poverty, housing, employment, and education are made. Many of the issues faced by newcomers are similar to those most vulnerable in our society. In addition, newcomers are faced with the challenges of adapting to a new lifestyle and they are subjected to racism and discrimination.
- There is general consensus that good programs currently exist for newcomers but that expansions of these programs are required. In addition, there is a need for strategic implementation of new programs and approaches. What is clear is that new programs have to be sustainable, accountable, community based, and housed in existing organizations.
- There needs to be more emphasis placed on "real" partnerships with all the key stakeholders. Further endeavours must include dialogues with the appropriate cultural groups impacted by a program.
- All programs must adhere to an empowerment and community capacity building approach and, where appropriate, develop a training or volunteer component to the program.
- Newcomers should be provided more intensive information and program opportunities in the very early stages of settlement. This could be partially accomplished in the orientation phase as well as by the development of a stronger health and wellness component in EAL classes.
- There is a need to target specific cultural groups in the early stages of settlement and perhaps the need to develop exclusive programs for them. More inclusive programming can be provided for newcomers once they are established in the community.
- There needs to be greater emphasis on establishing girl/women centered programs.

Recommendations:

The following are our recommendations:

Recommendation 1:

Newcomer mothers need to be a high priority group for existing programs that promote breastfeeding.

Recommendations for Federal and Provincial Governments**Recommendation 2**

Establish an advisory committee representing the interest of government departments, the health sector, non profit agencies, ethnic organizations, and the school system.

Recommendation 3:

That funding be made available to allow newcomer serving organizations to provide adequate staff training in the areas of nutrition and physical activity.

Recommendation 4:

That any promotional campaign aimed at the population at large has a specific component aimed at newcomers and ethnic groups and that such a campaign uses culturally/ethnically diversified images and has components in all newcomer languages.

Recommendation 5:

That programs be developed, using existing organizations, to promote the concepts of healthy eating and physical activity that are specific and relevant to newcomer groups.

Recommendation 6:

That any programs offered to newcomer groups be developed with, rather than solely for them.

Recommendation 7:

That a consensus be developed to routinely direct Newcomers to ACCESS Centres where possible and expand the range and ability for the centres to deal with the nutritional and physical activity needs of newcomer groups.

Recommendation 8:

That information be made available to (potential) newcomers in their countries of origin detailing the realities of life in Canada, including the health risks of the *healthy immigrant effect* and the healthy living choices recommended in Canada.

Recommendation 9:

That government make up-front commitments to continue sustainable funding to those programs that demonstrate effectiveness in reaching their goals.

Recommendation 10:

That culture/language specific healthy living programs be funded for the first year of (re)settlement.

Recommendation 11:

That any additional programming be delivered by existing organizations, especially by those that have good track records.

Recommendation 12:

That government seriously review their immigration and settlement practices to assure that newcomers find adequate employment and housing upon arrival.

Recommendation 13:

That adequate funding be provided to rural communities to deliver a full range of settlement services

Recommendation 14:

That the equity of program availability between the inner city and the suburbs of Winnipeg be reviewed.

Recommendation 15:

That the *Canada-Manitoba Sport Development Partnership* or similar initiative continues to be supported.

Recommendation 16:

That a curriculum be established for use by EAL classes and organizations serving newcomers that addresses the nutritional and physical activity needs of adult newcomers.

Recommendations for Social Service Organizations and Religious Institutions

Recommendation 17:

That organizations in their program development and delivery must demonstrate collaboration with newcomer communities and use the principles of strengthening community capacity.

Recommendation 18:

That organizations serving newcomers actively promote healthy living

Recommendation 19:

That organizations that provide nutrition and physical activity programs for parents provide either concurrent/joint programs for their children or child care.

Recommendation 20:

That organizations providing services to newcomers consider a differential programming approach to recent versus longer term newcomers.

Recommendation 21:

That more programs and natural opportunities for play be developed for pre-school children and their newcomer parents.

Recommendation 22:

That cooking classes for newcomers be developed in or near housing complexes that are dedicated to them, or in areas where there are high concentration of newcomers.

Recommendation 23

That organizations providing healthy living information and programs to newcomers reach out to natural entry points of their target audience.

Recommendation 24:

That food banks consider food bank outlets specifically aimed at newcomers.

Recommendation 25:

That organizations serving newcomers in Winnipeg network to develop a city wide listing containing the names and locations of major food stores, food banks, ethnic specialty food stores, and physical activity organizations and sites.

Recommendation 26:

That organizations serving newcomers network to develop a circuit of informal soccer games.

Recommendation 27:

That organizations serving newcomers develop physical activity programs for women and girls of those newcomer groups that do not participate in co-ed and/or public activity programs.

Recommendation 28:

That places of worship promote activity based programs, create and sponsor sporting clubs, and create activity days throughout the year

Recommendations for Newcomer Groups

Recommendation 29:

That cultural groups work in concert with “mainstream” service organizations.

Recommendation 30:

That ethno-cultural groups promote physical activity programs for their members, such as walking tours and winter activities, and sponsor sporting events, such as informal soccer games, especially for young adults.

Recommendation 31:

That ethno-cultural organizations encourage greater involvement of girls and women in physical activities by having community leaders endorse female specific programs or by advocating with mainstream organizations to discuss ways to include female participation.

Recommendation 32:

That ethno-cultural organizations create Newcomers’ Clubs.

Recommendation 33:

That ethno-cultural groups sponsor summer healthy lifestyle camps for young men and women between the ages of 16 to 24.

Recommendations for Businesses

Recommendations 34a to g:

That businesses:

- a) Establish nutritional meal plans in their cafeterias
- b) Introduce more ethnically diversified foods in their cafeterias
- c) Develop on site exercise rooms
- d) Encourage and sponsor “in house” sports (e.g., soccer) teams
- e) Encourage employees and their families to participate in community based physical activity programs and create a subsidy program for those that cannot afford such programs
- f) Create wellness programs for employees
- g) Encourage employees to walk or bike to and from work.

Recommendation 35:

That businesses continue to and/or increase their charitable spending on healthy living programs for newcomers.

Recommendation 36:

That grocery stores that cater to newcomers work with newcomer organizations to provide the most nutritious food options and –where appropriate information on content.

Recommendations for Neighbourhoods and Municipal Governments

Recommendation 37:

That municipal governments increase safety and the perception of safety, particularly in areas with gang activity.

Recommendation 38:

Establish community gardens as well as create more community kitchens.

Recommendation 39:

That community centres undertake a vigorous review of their role in providing programs to newcomers and establish partnerships with newcomer groups.

Recommendation 40:

That the City of Winnipeg continues funding the Sport Programs in Inner city Neighbourhoods (SPIN) and increase its scope and reach.

Recommendations for Schools and EAL Programs

Recommendation 41:

That school divisions revise their policies with regards to after- hours' use of gymnasiums by the community in order to fully accommodate newcomer groups.

Recommendation 42:

That schools strengthen and expand courses that have a strong nutrition and cooking component, encourage newcomer students particularly to participate in these classes, and within that group promote male participation.

Recommendation 43:

That schools encourage students to bring ethnically diverse foods for lunch and ensure that there are provisions to allow foods to be heated.

Recommendation 44:

That EAL programs make a concerted effort to promote healthy living.

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INTRODUCTION

Currently Manitoba admits approximately 10,000 newcomers from other countries per year. In 2007 (as in the previous two years) the top three source countries were, in order of importance: Philippines, Germany, and India (Manitoba Labour and Immigration, 2008). These three communities made up more than half of all newcomers that year. The stated goal of the Manitoba Government is to double the total newcomers over the next ten years.

The vast majority (70.2% in 2007) of the newcomers to Manitoba are in the provincial nominee program. Refugees made up about 11% of newcomers that year, with family members around 12%.

The present study found its origins in the rather disconcerting phenomenon of the *healthy immigrant* (see below). This often duplicated observation is that newcomers, particularly immigrants and –to a lesser extent refugees- come to Canada in relative good health. After a number of years, they revert to the shape of the average Canadian. In other words, the physical condition of many newcomers deteriorates. In addition, there is evidence that the children of newcomers are subject to the same type of physical health stresses as their parents (Martinez, 2007). Newcomer health is a family affair.

From a population health perspective, the healthy immigrant phenomenon is a natural target, as it makes sense on many levels to prevent the health of any identifiable group from deteriorating. Not only that, but newcomers will be an increasingly significant influence on the health system in the coming years.

Against this background, the *Newcomers Employment & Education Development Services Inc.* (NEEDS) submitted a proposal to both *Health Canada* and *Healthy Living Manitoba* to do a needs assessment addressing the following questions:

- What specific information is required to assist in the planning of healthy life strategies of newcomers?
- What are the barriers that promote physical inactivity and unhealthy nutritional choices?
- Are the above barriers similar/dissimilar to other sectors in the general population?
- What are the best practices that employ culturally sensitive approaches to reach specific inactive populations?
- Should there be different approaches for different cultural groups?
- How should governments work with the various cultural communities and other stakeholders to develop and implement policies to support fully a comprehensive integrated and sustainable strategy?

The authors were recruited in November 2008 to conduct the assessment. They produced the report in early April 2009.

This needs assessment is limited to physical activity and nutrition as the two main points of focus. A number of other contributing factors -such as mental health, safety practices, and environmental variables- that contribute to wellness and health was largely excluded to keep the study within its parameters. Nevertheless, wherever possible, we took a holistic approach in our understanding of the data.

Methodology

The study included a literature review, individual interviews with key informants, and a number of focus groups. The literature review consisted of several searches of the professional literature using a number of search engines (PubMed, SPORTDiscus, and PsycINFO). These data bases were searched using key words in various combinations such as *immigrant(s)*, *newcomer(s)*, *refugee(s)*, *nutrition*, *physical activity*, *wellness*, and *health (status)*. While we found hundreds of articles on the subject, we mostly concentrated on Canadian studies. Foreign publications are cited if no domestic information was available, or if the study made key points that seemed relevant to the Canadian situation.

The second source for the literature review was the World Wide Web using the Google search engine. This review, using similar search terms as for the professional search, focussed largely on existing programs and best practices. Again, our focus was Canada, although we also reviewed other jurisdictions, such as Australia, the United States of America, and countries in Europe. We limited our search to English and, to a lesser extent, French language sites (using such key words as *santé*, *nutrition*, *activité*, and *immigration*).

We interviewed 103 individuals (sometimes as families). These informants were selected because a) they represented all the main organizations that work with newcomers, b) represented organizations that could play a (greater) role in meeting the needs of newcomers, c) were recommended to us as being particularly knowledgeable or key in the area, or d) were representative of selected newcomer communities. Generally, interviews were conducted by the two researchers together. Some individuals were interviewed by one of the researchers.

All the interviews took place in Winnipeg, Brandon, and Altona. The latter two communities were selected because they have significant newcomer communities and infrastructures, and their situation is different from that of Winnipeg.

We used a standard interview schedule (see Appendix B) as a general guideline. However, most of our interviews were fairly free flowing, following the train of thought of the interviewee rather than the confines of the outline. All questions, unless not appropriate for a particular informant, were addressed in all interviews. Some interviewees were asked additional questions, based on their particular area of expertise or situation.

We conducted ten focus groups, one with individual newcomer adults, four with staff from a single organization, one with professionals from several organizations, two with children/youth, and two with newcomer families. The same interview schedule as for the individual interviews was used. A separate schedule for children/youth was developed (see Appendix C).

All informants were advised that they would not be quoted by name in the report, and were asked for permission to list their name and affiliation in the appendix. A few declined this and are listed as 'anonymous.' Children are all listed by first name only. Parents of children were either present (in the family interviews) or had given written permission for their children to take part in the research. Five informants were paid a small stipend, after an agency representative who arranged the interviews suggested this. All others gave us of their time for no remuneration.

The group and individual interview notes were transcribed and analysed.

SCANNING THE ENVIRONMENT

What Does the Literature Tell Us and Does That Match Our Own Findings?

The general population

There is irrefutable evidence that physical activity and good nutrition improve health (Carron et al., 2003; Coalition for Active Living, 2005, Winnipeg/Manitoba Research Committee, 2007). Evidence also suggests that maintaining physical activity not only reduces the cost of health care, it also reduces the cost of social service. As one study (Canadian Parks/Recreation Association, Undated.) concludes,

Physical activity and recreation have been shown to facilitate the development of children and youth, and to play a significant role in influencing behavioural patterns and in preventing or reducing risk.

Unfortunately, there is equally clear evidence that indicates that a significant percentage of the population does not participate in the minimally accepted standards of physical activity (Carron et al., 2003). The consequence is a

population that has seen a marked increase in obesity, diabetes, high blood pressure, and high cholesterol. Flynn et al. (2006) describe the situation for children:

Childhood obesity is a global epidemic and rising trends in overweight and obesity are apparent in both developed and developing countries. Available estimates for the period between the 1980s and 1990s show the prevalence of overweight and obesity in children increased by a magnitude of two to five times in developed countries (e.g. from 11% to over 30% in boys in Canada), and up to almost four times in developing countries (e.g. from 4% to 14% in Brazil).

Typical findings suggest that approximately 30% of our population is physically inactive and 40-50% of the population does not participate in enough physical activities (Carron et al., 2003). In a relatively recent, but undated report (in motion Research Committee, circa 2005) it was found that 67.9% of adults in Winnipeg reported they met the 1998 Physical Activity Guide (PAG) of Health Canada minimum guidelines. However, only 36.4% of children in Manitoba met the minimum PAG guidelines.

The Community Health Survey 2007, asked Canadians throughout the country to provide information about their food and nutrient intake during a specified 24 hour time span (Canwest News Service, 2007). This was the first national dietary survey since 1970 and the results should be a concern to all Canadians. Essentially the results indicated that Canadians are ignoring the Canada Food Guide and simply eating towards potential health problems. Of those surveyed 25% reported eating at a fast food outlet within the 24 hour period. The highest percentage recorded were men 19-30 years of age of whom 39% indicated that they ate at a fast food outlet. Not surprisingly, the consumption of vegetables, fruits, and dairy products was lower than the recommended amounts suggested. At the same time people are getting more than the recommended share of calories from fat. Furthermore the survey found that 25% of all individuals exceeded the recommended fat content intake resulting in overweight or obesity.

According to the 2007 Canadian Community Health Survey (Statistics Canada, 2008), 4 million people aged 18 or older, 16% of the total, reported data on weight and height that put them in the obese category. Another 8 million, or 32%, were overweight.

What we know about newcomer health

All studies we found concluded that newcomers to Canada are healthier than the general population upon arrival (the *healthy immigrant effect* or *epidemiologic paradox*). Virtually all then describe the phenomenon that this health status tends to regress to the Canadian average the longer immigrants spend in Canada. For

example, several *Statistics Canada* reports (Ali et al, 2004; Chen et al., 1996) conclude (quoted from the former):

“Compared to the Canadian-born, immigrants are generally in as good or better health, have similar or better health behaviours... These indications appear to be strongest among recent and non-European immigrants.”

These authors noted though that important distinctions exist among immigrant subgroups.

Most other studies note more explicitly that even though many come to Canada relatively healthy, this status deteriorates proportional to their length of tenure in the country (Martinez, 2007). As this author notes: “The peril of immigration now includes a decline in health. The longer immigrant children remain in this country, the poorer their health.”

Gee et al. (2004) also conclude:

Recent studies have established that a healthy immigrant effect operates in Canada - immigrants are generally healthier than Canadian-born persons - but that this effect tends to diminish over time, as the health of immigrants converges to the Canadian norm.

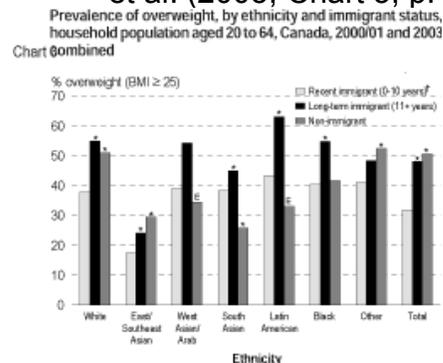
And Hyman (Hyman, 2004) concludes in an extensive review of the literature that:

Most literature suggests that Canadian immigrants, particularly recent arrivals, enjoy health advantages over long-term immigrants and the Canadian-born population in terms of overall health status.

A recent Canadian Heart and Stroke Foundation study (Lear, 2008) found: “The health of immigrants coming to Canada from China, South Asia, or Europe worsens with each decade they stay in the country.” This can even be quantified: after controlling for a host of variables, such as age and ethnicity, Lear et al.

(2009) found a 2% increase in the thickening of arteries for every ten years of living in Canada.

Figure 1. Reproduced from Tremblay et al. (2005, Chart 3, p. 29).



Tremblay et al., (2005), in a striking graph (see Figure 1) show how, for virtually every ethnic group in Canada, both recent newcomers (0-10 years) and Canadian born members of the ethnic group are less likely to be overweight than long term immigrants.

The above cited study by Gee, et al. (2004) examined how age at immigration affects the health of mid- to

later-life immigrants, compared to Canadian-born persons, using data from the 2000-2001 Canadian Community Health Survey. They found that the healthy immigrant effect applies to later mid-life immigrants; that is, new immigrants-those who immigrated less than 10 years ago-aged 45 to 64 have better health than their longer-term counterparts -those who immigrated 10 or more years ago-whose health status is similar to that of Canadian-born persons.

There is mounting evidence that one of the most vulnerable groups with low physical participation rates are newcomer communities (e.g., Evenson, et al. 2004, McDonald, 2006, Taylor et al., 2008). Most studies investigating this population group indicate that participation in physical activities is at a much lower rate than the general population. These results are consistent in all age groups and genders. A recent study released by Statistic Canada (2007) states:
Immigrants, regardless of how long they have been in Canada were less likely to be at least moderately active in their leisure time than were Canadians overall.

Another study reports that new immigrants have an alarming 50% higher rate of physical inactivity (Basrur, 2003). A recent study in London, Ontario among newly arrived Columbian newcomers found that 73% reported that they were less active than before coming to Canada (Ng et al., 2007).

There are, as can be expected, differences between groups and even within groups. While we did not really find significant accross-the-board differences between the sexes in the literature, differences between other groups appear to exist. For example, Tremblay et al. (2006) concluded the following based on data from the Canadian Community Health Survey:

The prevalence of recent immigrants (< or = 10 yrs) being physically active by ethnicity was: White (21%), Other (19%), Black (19%), Latin American (17%), West Asian/Arab (16%), East/Southeast Asian (14%), South Asian (11%). Recent immigrant Black men and White women had the highest prevalence of being physically active (M = 27%, F = 18%) while South Asian men had the lowest prevalence (M = 14%, F = 9%).

These authors also found time-since-arrival to be positively associated with physical activity, suggesting that new immigrants tend to be less active than all immigrants combined:

There is a gradient in the prevalence of being physically active with recent immigrants (16%) < immigrants (20%) < non-immigrants (24%).

We found that this is generally echoed by our informants, most of whom stated that newcomers seem to be less active upon arrival. Our informants did indicate that they felt that women and girls tended to be less active than men and boys, although this seemed to vary between communities as well.

When one looks at nutritional habits, newcomers do not fare any better. Redstone Akresh, in summarizing one of her studies on newcomer food consumption is quoted as saying: “*Coming to the land of milk and honey can be hazardous to new immigrants’ diet and health*” (Lynn, 2006).

We found that a change in eating patterns upon arrival is not a straightforward process. As Satia-Abouta et al. (2002) state:

The process by which immigrants adopt the dietary practices of the host country--called "dietary acculturation"--is multidimensional, dynamic, and complex; in addition, it varies considerably, depending on a variety of personal, cultural, and environmental attributes.

Many of our informants, particularly the newcomers themselves, told us that they often prefer their traditional foods. They indicated that when they could find and afford them they would tend to use them. In the *Barrier* section we discuss this phenomenon in some more detail. Our interpretation is that there is a certain comfort in eating foods from the ‘old country.’ Children indicated that they liked eating traditional foods, but not for lunch in school (see also below). For this meal they appear entirely westernised. It should be noted that traditional foods are not necessarily healthy in the Canadian context, as they are frequently high in carbohydrates and fat. The difference is that the activity level in the country of origin used to be higher, compensating for the greater calorie intake. Traditional meals also were much higher in fruits, nuts, and vegetables. Most of our informants suggested that, even if newcomers maintained their traditional diets, they would add western components, such as fast foods, snacks, and carbonated sugar-rich beverages. These western/traditional hybrids thus become overly calorie rich, relative to the reduced activity level of the newcomers.

This is by no means an exclusive Canadian problem. For example, Satia-Abouta et al. (2002) concluded:

Immigration to the United States is usually accompanied by environmental and lifestyle changes that can markedly increase chronic disease risk. In particular, adoption of US dietary patterns that tend to be high in fat and low in fruits and vegetables is of concern.

Kruseman et al. (2005) found in a sample of African refugees in Geneva, Switzerland that after migration, main dietary changes were a decrease in different fruits and vegetables consumed weekly from 10 to 2 and 17 to 10 respectively. The number of respondents drinking sweetened beverages more than three times a week increased six fold. These findings are echoed by many of our interviewees. The decrease in fruits and vegetables and the marked increase in pop consumption appear common among newcomers to Manitoba as well.

We did not ask specifically about breast feeding practices (because very few children come to Canada as infants) and were unable to find statistical information on prevalence for newcomer groups in Manitoba. Moreover, none of our interviewees mentioned this as a variable for newcomer families. However, there is ample evidence that breast feeding in newcomer mothers is positively associated with improved health outcomes for their babies (Neault et al., 2007; Brotanek et al., 2008). Particularly since many newcomer families face food insecurity, breastfeeding would be an important enabling factor for infant health in Manitoba.

Recommendation 1:

Newcomer mothers need to be a high priority group for existing programs that promote breastfeeding.

Of course, not all reports are as bleak. Varghese and Moore (2002) studied 132 newcomers from India in Newfoundland. They concluded that the majority reported they were very or somewhat likely to engage in healthy lifestyle practices, although "consumption of grains, vegetables, and fruits was not in accordance with Canada's Food Guide to Healthy Eating."

Our informants noted a significant degree of food insecurity in the newcomer populations they serve. Reliance on food banks was frequently cited as considerable in various communities, especially for those who did not have jobs upon arrival in Canada. Among refugees, food bank use seemed almost guaranteed. The implication of food bank use is that consumers have little or no control over the quality of food they get. Generally there is a high availability of carbohydrates and canned foods, and a low availability of fresh fruits and vegetables. This makes eating according to Canada's Food Guide practically impossible. Or, as one interviewee noted: "You eat first, you eat properly later."

Overall, the vast majority of our informants viewed food insecurity, the dietary acculturation to Western style eating, and the reduction after arrival of consumption of healthy foods as major concerns for newcomers in Manitoba.

Conclusion

In our view, there is little doubt that newcomers to Canada are at considerable long term health risk. This is in part due to lower rates of physical activity, both relative to that what they had in their country of origin, and relative to the general population of Manitoba. In part, the increased health risk is also due to the development of poor nutrition habits, which are in many studies and by many of our informants described as dietary acculturation to a Western diet. For those newcomers who are poor, the quality of accessible foods is a compounding factor.

These patterns seem to establish themselves almost immediately upon arrival, but the effects do not become visible until after a number of years past arrival. Good health seems inversely related with time-in-Canada.

Of special concern are children and youth. If the general population is an indication of things to come, newcomer youth face a double disadvantage: the activity levels and healthy nutrition prospects for their Canadian born cohorts are not promising and newcomer youth are, by virtue of their status, at greater risk of poor nutrition and poor physical activity habits.

WHAT ARE THE BARRIERS TO PHYSICAL ACTIVITY AND GOOD NUTRITION FOR NEWCOMERS?

Barriers are typically defined as real or perceived hindrances or impediments that prevent a given behaviour (Cragg & Cameron, 2006). Life barriers shape our attitudes and behaviours and in many cases deny us the opportunities to obtain a lifestyle that we desire but cannot obtain. For some newcomers, economic status prevents them from doing certain activities while for others the unfamiliarity of this culture constitutes a barrier.

Good programming is predicated on our understanding of the barriers that limit those we want to serve. We could, for example, have good intentions of establishing a recreational facility in a particular neighbourhood that would service the area residents. However, if we did not attend to safety issues, made the programs culturally sensitive or appropriate, did not consult community leaders, provided for transportation, made programs accessible, or made provisions for child care, this program would not attract newcomers, especially newcomer women. The reason is simple: The organizers did not understand the barriers that prevent newcomers from attending such a facility. The Pan Canadian Physical Activity Strategy highlights the importance of understanding barriers when it made elimination of barriers one of its five basic principles in improving physical activity opportunities in Canada. "Barriers to physical activity will be removed from the physical and social environments in which Canadians live, learn, commute and play" (Coalition for Active Living, 2004).

Our interviewees provided us a comprehensive list of barriers that impact newcomers in respect to healthy nutritional choices and participating in physical activities. In respect to nutrition, the major themes were socioeconomic /life stress issues, knowledge, busy and difficult life style, difficulties adapting to new cultural norms, lack of nearby supermarkets, cost of food (particularly nutritious food products), language, weather, transportation and easy availability of convenient/fast food. This list is similar to those reported in the literature. (Basrur, 2003; Kassim and Rothman, 2004; Kiezebrink, 2008).

Barriers cited restricting physical activities include life stress, cost of programs, lack of facilities, lack of culturally appropriate places and programs, lack of motivation/sedentary lifestyle, safety, transportation, gender bias, weather, and lack of child care. Once again, these barriers closely parallel the literature. (in Motion, circa 2005; University of Waterloo, 2008; Guerin et al., 2003). Smith (2004) aptly describes the relationship between nutrition and poverty as a function of scarcity:

... it is about not enough money, not enough decent food in neighbourhood stores, not enough knowledge about what constitutes a healthy meal or the time to fix it.

What was perhaps surprising was not what was said but what was not said by our interviewees. The literature describes discrimination and racism as a major barrier (Basrur, 2003; University of Waterloo, 2008; Lawton and Hallowel, 2006). Yet this issue only peripherally surfaced once. There are a number of possible explanations for this. First, our interviewees might have been cautious or were simply uncomfortable sharing this insight with the researchers. Second, the interviewers did not bring up the issue or invite any discussion around racism in Canada. Third, if there is discrimination it may be subtle enough that it can easily be overlooked, especially by people who are not undergoing it. Nevertheless, we believe that it may be an important variable to consider.

The following barriers were those most often expressed by our interviewees. Some of the barriers apply to both nutrition and physical activities while others are specific to one or the other. There is considerable overlap and interaction between the barriers we describe. This makes for a complicated picture. We do believe that we found most of the major barriers. We suggest that anyone working with newcomer groups would be well served by starting with an understanding of the obstacles faced by newcomers in Manitoba.

Socio-economic status/Life stressors

Our qualitative study clearly suggests that the challenges and difficulties facing newcomers often parallel those of the general population struggling with poverty. Kassim and Rothman (2004) indicated in their study that new immigrants were more likely to live in neighbourhoods with high rates of poverty and that the income gap between visible and non-visible minorities was widening. Income security, employment, education, and family stability are the most pressing issues facing newcomers. (Koc and Welsh, 2002; Lindsay et al., 2009). In addition, newcomers are also confronted with other issues like racism, language, illiteracy, post traumatic stress disorders and other mental health issues, and lack of governmental and social service programs. One could argue that this is an issue of poverty as well as inadequate economic safety nets. The deterioration of these safety nets places those that are most vulnerable, like newcomers, at greater risk. Until these concerns are addressed, the issues of

nutrition and physical activity will remain in the background. Many newcomers are simply preoccupied with issues of “survival” and even though they may appreciate the importance of a healthy and balanced life style, nutrition and becoming physically active are not of immediate concerns. As one adult stated “feeding my children and getting a job are more important than nutrition and physical fitness. I know they are important but they are not my priority.”

Below we discuss a number of barriers in detail, noting that many of them come down to the social determinants of health, such as poverty. However, most of these barriers have aspects that are unique to newcomers.

Mental Health Concerns

Beyond the everyday stresses that are part of the typical newcomer experience, there are a number of mental health problems that may exist prior to arrival or develop in newcomers after settlement. A number of references were made to (particularly men) developing depressions in response to being unable to find jobs or losing their status. The symptoms are often excessive inactivity or lethargy and excessive eating, leading to weight gain.

Refugees may arrive with post traumatic stress disorders that could also influence their nutrition and physical activity behaviours.

Stress can bring on diabetes in those in pre-diabetic states.

Safety

Safety and the perception of a lack of safety are major deterrents in participating in evening programs, especially for those living in the downtown areas. Parents and social services personnel all indicated that parents do not allow their children, especially their daughters to attend after-school functions because of the gang activities and high crime rates. Those living in housing complexes in the suburbs also expressed these sentiments.

Safety for newcomers is not an issue of physically protecting oneself and family, but also of being vigilant against racial and discriminatory verbal abuse and practice (Guerin et al., 2003). Sadly, it appears that many newcomers learn very quickly that the safest place is inside their own apartments and that is where they stay.

In a major study conducted in England, connecting neighbourhood safety and physical activity, the authors drew the following conclusion: “Residing in a neighbourhood that is perceived to be unsafe at night is a barrier to regular physical activity among individuals, especially women living in urban low-income housing. Feeling unsafe may also diminish confidence in the ability to be more physically active” (Bennett et al., 2007).

Housing

In the initial phase of settlement many of the newcomers typically live in apartment complexes in the downtown area. Because of their large family size, many live in cramped quarters until they find larger premises in subsidized housing units in the inner city area or suburbs. Inadequate housing could spur feelings of hopelessness and inadequacy. A study on Canadian youth at risk noted that children living in public housing and children living in neighbourhoods restricted by a lack of resources did not participate in physical activities as much as other children (Lindsay et al., 2009). Another study indicated that this trend was even magnified with newcomer children (Lifestyle Information Network, 2008). Lindsay et al. (2009) also indicated that inadequate housing was a strong indicator of poor health and lower level of physical activity than the general public.

Many of our respondents indicated that they were frustrated because their children could not play in their apartments as the result of cramped quarters or rules. They noted the fact that there were no park areas close by for their children to play. Many of these units are located in areas of high crime making it impossible to go outside, especially in the evening. Green space is limited or unavailable and the only recreational outlet is watching television or playing video games (if they can afford the latter). We noted that most of the housing units do not have open areas or play areas. Thus, many children are confined to playing inside their apartments.

Transportation

Owning a car is a luxury that most newcomers cannot afford. Given that Manitoba's cities and towns are car dependent, given our climate, and given our less than stellar public transportation systems, one can readily see how transportation can be a major barrier for newcomers. Shopping, particularly shopping in large quantities can be extremely challenging if not impossible. Those living in the Winnipeg inner city are often limited to shopping at stores that are in close vicinity to their homes. This may force newcomers to buy food at premium prices. Major grocery outlets are often located in areas difficult to access by public transportation. We were told on more than one occasion that the public transit system is difficult to understand and that newcomers, especially in the beginning, worry that they may get lost when using it. The consequence is that newcomers have to rely on those with cars or make buying a car a priority on their limited budget.

This is by no means an exclusive Winnipeg problem. In Brandon, for example, most newcomers work at the packing plant. Most don't own vehicles. Most live on the outskirts of town. Most shop on Saturday. On Sunday, the only day that could realistically be used for family outings and physical activity, there is no public

transport. Consequently, many newcomers are confined to the areas around their homes where there are no or few facilities. Newcomers in smaller communities often have to travel to major centres for shopping, EAL classes, and places of worship.

Transportation is a major barrier that prevents parents from registering their children in organized sports. They simply cannot transport their children to practices or games that are scheduled throughout the city. The result is that children are often denied the opportunity to participate in sporting activities (Canadian Fitness and Lifestyle Research Institute, 2004).

Language

Not being able to communicate in one of Canada's official languages is an often cited barrier. The lack of adequate English or French skills hampers newcomers doing the most basic tasks like shopping or inquiring about food items at a grocery store. Many stated that they do not have the language skills to register their children in activities because they cannot complete the registration forms. Doherty and Taylor (2007) noted in their study that newcomer youth do not participate in sports because of their language limitations and fear of being ridiculed by their peers.

We were also told that it is not uncommon for newcomers, especially refugees and family class immigrants, to have interrupted schooling in their country of origin. The resulting functional illiteracy in the first and subsequent languages makes it more difficult to become literate in English or French.

In communities outside Winnipeg, newcomers often have to travel elsewhere for EAL classes that are not available in their own town. This adds to their lack of time and stress.

A number of informants also mentioned the availability of foreign language publications and information. While there is a lot of information on nutrition and physical activity opportunities available in the official languages, most of these are not translated into newcomers' own languages. In other words, it is not until newcomers become literate in English or French that they benefit from this information. For example, Canada's Food Guide is available in ten additional languages. While this sounds impressive, newcomers to Manitoba speak considerably more languages. Two of the top eight (Amharic and German) and most of the other languages do not have translations. We found no readily available audio/video resources in newcomer languages addressing healthy living.

Many mainstream, not-for-profit organizations mentioned the lack and cost of professional interpreters for various language communities. This makes it more difficult to deliver services to specific newcomer groups. It appears that

interpreters who assist, for example, in dietary counseling need to also have certain counseling skills, as they need not only translate, but also work with the client to obtain sufficient rapport to get a 'buy-in' for changes in diet.

Cost of Foods, Budget Priorities and Problems, Lack of Grocery Stores, and Availability of Foods

Cost of food was a repeated theme by many informants. The irony is that even though we are fortunate to live in a country with bountiful foods, many of our informants indicated that they ate better in their country of origin than presently. They attribute this to the high cost of food like fresh vegetables and fruits. What they now buy are cheap foods that have less nutritional value.

Inner city communities are serviced by many smaller grocers that can neither supply the variety of foods that newcomers require nor compete in price with national food chains. The only choice many have is to go to the closest store or wait until someone drives them to a larger chain store. We were also informed that even though many newcomers understand that local convenience stores are more expensive, they are the only places where one can buy on credit.

Another challenge that was expressed was the inability to get customary ingredients for meals. When this happens, the tendency is simply to buy foods of convenience (Lawton and Hallowel, 2006; Koe and Welsh, 2002). Ethnic food stores are available but often the cost of food (e.g., halal) products prevents some from patronizing them on an ongoing basis. The consequence is that the cost of food for a family is greatly increased. This issue is a particularly difficult for newcomers outside Winnipeg. With the exception of Brandon, which has now two stores catering to various newcomer groups, most newcomers have to travel to Winnipeg to access specialty stores.

The overall picture is a somewhat more nuanced. Not all newcomers are poor and many can afford healthy foods. Some nutritionists also advised us that it is possible to buy healthy foods on a limited budget, but this takes skill; something many newcomers have not yet developed.

Setting money aside for food is for a number of newcomers with better-than-minimum incomes not necessarily a priority. We heard many stories of newcomers choosing to spend more money on housing (to get away from unsafe neighbourhoods), transportation (buying a car for necessary travel), family abroad (many newcomers send money 'back home'), or even tobacco. This leaves less in the food budget.

We also learned that some newcomers arrive in debt (e.g., Government sponsored refugees who owe the Government the cost of their passage) or

quickly get into debt upon arrival. A lot of money, including that for food, goes into servicing the debt. This also leaves no funds for leisure activities.

A not uncommon complaint was the taste of –especially- fruits. Many newcomers are not motivated to spend a lot of money on fruits they think taste inferior to those in the country of origin, especially because these foods were so much cheaper. Poor choices that are not necessarily less expensive also occur (see below).

That acculturation is also a two-way street became apparent when we interviewed an organization that dispenses vitamins to pregnant women. Some of their Muslim clients, when they discovered that the tablets may have contained a beef-based gelatine, stopped taking the pills. This prompted the organization to research the ingredients of the vitamins to assure compliance with dietary (halal) customs.

Poor Diet and Easy Access to Fast Foods

We noted that a number of newcomers make poor diet choices, even if there are alternatives. Often this results from a continuation of traditional diet practices. Many foods are high on carbohydrates, have a high calorie count, and contain high levels of oils. Of course, such a diet would not have been a problem in the high activity environment from which some newcomers came.

A number of newcomers tend to eat more processed or take-out foods and a limited amount of vegetables and fruits (Koe and Welsh, 2002). There is also a paradoxical belief amongst some of these newcomers that nutritious foods are too expensive and too difficult to prepare. Single males appear to be the greatest risk group in this category.

Another consideration is that many newcomers' apartments are too small to store bulk food so there is a tendency to buy ready-made foods on a regular basis. It is easier to resort to comfort foods or fast foods like pizza if for no other reason than that it is popular with the children.

Lack of Time

Newcomers live a difficult and hectic lifestyle requiring them to juggle many obligations at the same time. Going to English classes, applying for work, working (often two jobs at minimum wage), looking after their children and perhaps extended family members can be daunting, especially on a restricted income. There often is little time to prepare appropriate meals or to find time for leisure activities.

Adults tend to skip physical activities. Children have little choice to adopt this behaviour and a disproportionate amount of time is taken up in television watching (Active Healthy Kids Canada Research, 2008; Lindsay et al., 2009).

Lack of Knowledge and Lack of Information

Many newcomers do not have the knowledge base to make informed choices regarding healthy foods. This does not imply that they are not good cooks, as they often are. The issue is not cooking, but the ability to cook with the ingredients available. Language barriers prevent them from reading food labels. Understanding how to compare prices, not knowing food names, and not having an understanding of the relationship between nutrition and health are factors that create poor choices.

Some newcomers come to Manitoba not having the skills to operate basic kitchen appliances that most Canadians take for granted. Many informants told us that better educated newcomers have a greater appreciation of healthy living. Less educated newcomers appear to be in a higher risk category for poor lifestyle choices, regardless of income.

Some practices may be safety issues. One anecdote we were told is of a family that cooked with a cleaning product because it smelled like, and had the consistency of a cooking oil the family used in the country of origin. The lack of understanding of the need for proper food storage was also mentioned.

A number of informants told us that they felt the settlement orientation newcomers receive in Manitoba focuses only on the mechanics of food acquisition and preparation, not on healthy food consumption. Even though there are attempts to provide resources to newcomers, the consensus is that more information during the early stages of orientation is desperately needed. In this way, newcomers can have the confidence to navigate around a grocery store as well as to be comfortable around a kitchen in a manner that is conducive to healthy living.

This seems a critical issue, as it takes a while for newcomers to become 'food acculturated.' We heard a number of anecdotes demonstrating the disconnect between cultures. For example, one mother brought tuna sandwiches to a potluck dinner at her child's school. She apparently felt that she needed to bring 'Canadian' food as her traditional cooking would not be appreciated. Other mothers indicated that it would have been very helpful if they had known what to pack for their child's school lunches before they discovered that their children were discarding their more traditional fare (Welcome Place, for example, provides these tools for refugee parents). Others indicated that they had no idea that some foods are extremely high in calories or fat. Particularly foods in Manitoba that resemble foods in the country or origin, but that have much higher energy values, are described as traps.

A number of newcomers, particularly refugees, obtain significant amounts of food from food banks. However, many receive food stuffs with which they are completely unfamiliar. They are uncertain regarding the preparation and have no idea about the nutritional or energy content.

One of our informants spoke of what she labeled *the innocence of newcomers*. That is, the belief that everything Western, including food, is superior. This led to the newcomers replacing their traditional, healthier foods for fast food. Some, particularly children and youth, view fast foods as 'exotic,' particularly pizza. Once unavailable or cost prohibitive in their country of origin, it is now relatively accessible.

We found that the awareness among newcomers of what is available in terms of physical activity is minimal. Those who receive an orientation through one agency may find out about –for example- the free programs at the YM/YWCA, while other newcomers served in another stream were not aware. In general, there appears to be no standardized form of settlement orientation and many newcomers do not even receive the basic information upon arrival.

This lack of information is also a concern for newcomer-serving groups in communities outside Winnipeg. Our informants indicated that there is no 'play book' for what to do with newcomers or how to do it. They make it up as they went along, learning by trial and error.

Some newcomers indicated that they would like to have played soccer upon arrival in Manitoba, but that they had no idea how to find likeminded people so that they could organize informal games.

Attitudes and Beliefs

Many newcomers do not seem to make the connection between nutrition and health. They also do not seem to make the connection between physical activity and health. We were told on many occasions that food is a concern but nutrition is not. Similarly, all parents wanted to see their children healthy but many did not see the connection between their nutrition, physical activity, and health.

In some level, for many physical activity is a foreign concept. The illustration often given is that in their country of origin walking was a necessity and through walking they stayed in shape. Doing an activity for the sake of being active is not in their consciousness. Physical activity is not a deliberate act as it has become in Western culture.

For some, bringing an attitude that they do not have to change becomes a barrier that prevents them from investigating alternatives. One informant told us that in her cultural group, men are highly interested in soccer, but refuse to pay for the

privilege of playing. They are apparently quite adamant that one should not have to pay money for something that was free in the 'old country.'

In some communities there is a bias against sports, especially for girls (see below). We also found a few allusions to the *fat=successful* concept. That is, in a small number of cultures there is the rather ingrained belief that overweight is a sign of wealth and health. Fitness and staying trim may therefore not be a priority.

While not strictly an attitudinal variable, parents are often pressured by their children to buy 'Canadian' food. While there is evidence that children can have a positive influence on parents' food choices, the reverse is also true.

We also found that newcomers often socialize in environments that are not conducive to healthy living. Visiting with friends in coffee shops, for example, may lead to a high calorie intake. Many newcomers socialize in churches and ethnic associations. These events are often characterized by massive amounts of (traditional) foods, but not by much physical activity.

Gender bias

There is evidence that young boys and girls participate in physical activity programs but there is a noticeable drop in girl's registration by age twelve. Programs still tend to be boy/men centred, involving competitive sports. There are few girls-only programs. A number of informants made a clear statement that girls do not attend programs because these are not geared towards them. The consequence is that they do not participate.

This lack of, or inappropriateness of programming for girls is aggravated by the traditional values of a number of communities that will not let girls participate in co-ed activities. Adult women are said to face similar difficulties when trying to arrange women-only physical activity programs in sport facilities.

Cooking in many cultures is the prerogative of women. We found that single men from these cultural backgrounds will often not cook for themselves. Instead they rely on fast foods as staples of their diets. We were also told that at times women feel pressured to continue to cook in traditional ways for their families, even if those menus are not suitable for their new situation.

Several informants advised us that it is not uncommon for adolescent daughters in families where both parents work, to do all the grocery shopping and meal preparation.

Lack of Facilities and Appropriate Programs

We were informed that there are few available activity programs accessible to newcomers and those that are available are difficult to get to because of transportation or safety issues. There appears to be a number of programs available to children but these programs decline rapidly for adolescents. For the 18 to 24 year old groups there is no programming at all.

In City of Winnipeg, the situation is even more acute as gym spaces located in schools are often unavailable. Many informants told us that throughout the city, school gymnasiums were not available, were expensive, or could only be used for limited activities. Many complained about arbitrary rules by school divisions, and decisions regarding availability coming down to the school principal or –in one case- the custodian. For example, the Winnipeg School Division has a rule that older adolescents cannot play indoor soccer in its gyms. River East Transcona will only rent out junior high school gyms at certain times, but not senior high school gymnasiums. If school facilities are rented out, they are often expensive (e.g., \$4,500 for 15 days on weekends). Our interviewees generally could not understand the reasons for this, with the exception that there is an appreciation that some of the costs had to be recovered for custodian presence in the building.

Our informants were also less than complimentary about the community centres in Winnipeg. A number felt that these do not cater to newcomer groups at all. One went so far to suggest that there exists a definite bias among some centres against certain racial minorities. While we were unable to confirm this, we did conclude that for many community centres, newcomers are not particularly relevant. These feelings seem to be mutual with many newcomer groups. This seems to lead to a vicious cycle of newcomers not asking for programs or taking part in a community centre's organization, and community centres essentially ignoring this important segment of the population. It should be noted that there are some promising exceptions.

Even when programs are available, the concern is that they are not culturally sensitive or appropriate for certain groups. This is especially true for Muslim women and girls. As Guerin et al. (2003) noted that the issue is not that Islam is a barrier to women engaging in physical activity; the issue is that a lack of culturally appropriate facilities and opportunities are the barriers.

Children who come to Manitoba cannot be enrolled in school until they have relatively stable housing. These children, while living in transitional housing, may attend other programs, but there is no guarantee that they will get adequate physical activities. While this may seem a minor concern, starting the first couple of weeks in a new country with a sedentary lifestyle is not a good beginning.

Parents and service personnel also stated that it was very difficult to register their children to a community club program or a city sponsored program because of language difficulties, the inability to understand the registration forms, and the unwillingness of the program personnel to help them with the process. This is no longer much of a problem in Brandon, as the Westman Immigrant Services organizes a one-day central registration for all children's programs in the city.

A number of NGOs shared with us the frustration of not being able to obtain sustained funding for programs addressing healthy living in newcomers. We noticed that there are few programs addressing nutrition or physical activity that are geared to newcomers' needs. By their own admission, most existing programs could do a better job. There is a particular dearth of programs addressing both nutrition and physical activity concurrently (let alone taking a holistic approach to healthy living).

Child Care/Babysitting Difficulties

The relationship between accessing child care and participating in activities outside the home for newcomers is well documented in Guerin et al. (2003). Similarly, the Canadian Fitness and Lifestyle Institute (Canadian Fitness and Lifestyle Research Institute, 1996) indicated that child care was a factor that prevented people from attending physical activity programs. Newcomer parents - especially mothers- indicated that the only way that they can participate in a program is if they get a babysitter, there is child care available, or the program is of a family nature. If child care is not available, women will not attend the program, regardless how valuable that program might be for them or their family. This is true for cooking based programs, EAL programs, or activity based programs.

School Lunch Policies

We have been told that schools have policies severely restricting the use of microwave ovens. This makes it very difficult for children to bring certain traditional meals. They learn that it is logistically difficult to warm up their foods. This, coupled with peer pressure and issues of shame and embarrassment makes them conform to bringing sandwiches or not bringing anything for lunch. Children learn very quickly that in school the standards are sandwiches, hot dogs, hamburgers, and pizzas. Parents' perception is that schools do not encourage children to bring "ethnic foods" for lunch. They are often confused by school policies around foods (e.g., not being allowed to bring peanut butter).

Weather (Winter)

Winnipeg's winters can be extremely difficult even to the hardest citizen. For newcomers from warm climates, experiencing the cold for the first time can be enormously challenging, forcing people to stay indoors for extended periods. Simply put, newcomers do not fare well during the winter and it is going to take many winters for them to be acclimatized (if at all). Interestingly enough, we were informed that many newcomers believe that the cold is unhealthy, giving them another reason to stay indoors. Most are not aware of winter sports and are not interested in participating in winter outdoor activities. One can easily visualize the difficulties associated with shopping for groceries in the winter months, particularly when one does not have access to a car. Staying indoors, perhaps eating more convenience foods and without much physical activities then becomes the norm.

The cost of living in winter is generally higher than in other seasons due to increases in heating, transportation, clothing, and food expenditures. This places a strain on food and physical activity budgets. Smith (2004) describes this phenomenon as "heat or eat."

Conclusion

Newcomers may face many barriers to healthy living. Some are a function of their own attitudes, beliefs, and customs. Other barriers are environmental. Yet others are lack of adequate settlement (or even pre-settlement) information and preparation. It is particularly in the latter area that changes can be made to improve the health of newcomers to Manitoba.

WHAT ARE BEST PRACTICE SOLUTIONS IN MANITOBA, CANADA, AND BEYOND?

While the professional literature offers some studies of good programs that would be possible models for Manitoba, most of the really interesting approaches to newcomer physical activity and nutrition are found on the World Wide Web. The advantage of the former is that they usually describe rigorously evaluated programs, while that may not be the case for the latter. We offer a mixture of both sources with the caution that program descriptions outside the peer reviewed realm are more subject to professional judgement.

It should be noted that many ethno-cultural organizations have activity or nutrition programs. Some have traditional dance programs or sports clubs. For example, the Filipino community has a 500 member basketball organization. We have not included these in this section. It is also noteworthy that beyond the best practices listed in the Manitoba section, we found virtually no other programs that target newcomers in the areas of physical activity and nutrition.

We have divided our best practices search into existing programs in Manitoba and outside the Province.

Manitoba

The programs described in this section were explained to us by our informants. Whenever possible, we asked for written program descriptions and program evaluation reports. Few of the latter exist, either because the programs are too new or because no attempts were made to evaluate them.

Not all excellent programs are necessarily included in this section. We were selective in describing only those programs where there was a high degree of newcomer participation and that specifically addressed either nutrition, physical activity, or both.

Nutrition Based Programs

Balcony Gardens/ Garden Plot Programs

Balcony and garden programs have been proven popular in a number of communities. They provide newcomers with all the tools to grow their own vegetables, including some traditional varieties. IRCOM in Winnipeg and Westman Immigrant Services in Brandon are two examples of organizations that have experimented with these types of programs and have yielded positive results.

Benefits:

- Inexpensive and can be operated by volunteers
- Family and community based
- Has the potential of reducing food costs
- Heightens awareness of the value of fresh produce and the importance of good nutrition
- Strengthen community and neighbourhood pride
- Has a physical activity component

Welcome Place Life Skills Training Program

A program developed by Welcome Place in Winnipeg matches Life Skills Trainers with newcomer families. It is based on the principle that newcomers require practical assistance in the community. A life skills trainer (who speaks the language of the newcomer) is assigned to a family on their arrival to Winnipeg and works with the family until the family can function independently in the community. This is a broad based program that helps newcomers adjust to their new surroundings and realities. A nutritional component containing information on food preparation and practical cooking experience is a core learning goal.

Some topics that are discussed include food substitution, shopping, food preparation, food recognition and identification, reading labels, making lunches and reading recipes. A lunch kit for children is provided to parents. In our view, the program is not as strong in teaching healthy nutrition and physical activity.

Benefits:

- Trainers speak the same language as newcomers.
- Based on modelling as well as hands on learning.
- Based on giving practical advice and guidance at the appropriate time require.
- Based on the abilities of the family and is not restricted by time constraints.
- Food component is well developed and monitored. It also has an evaluative component.

Healthy Mom and Me

This is a program for pregnant mothers at nine sites throughout Winnipeg. A number of these sites attract mostly refugees and immigrants. The program targets pregnant women and operates essentially as a drop-in centre. The programs provide nutritional information to mothers and an opportunity for mothers to meet and share their experiences. Nutritional supplements are available at no cost to the participants. Sessions are facilitated by qualified community workers and nutritionists.

Benefits:

- Supportive group. A place for moms to connect with members of their own cultural community as well as moms from other cultures.
- Program is developed by nutritionist and facilitated by professional community workers
- Program is culturally sensitive
- Program is located in various sites throughout Winnipeg.

Mary Jane Cooking Classes

Mary Jane Coking School in Winnipeg is a non profit organization that provides cooking classes to a wide range of groups, including ethnically diverse groups. Recently the school has been involved in partnerships with a number of cultural groups to deliver cooking programs. A strong component of their programs is the incorporation of nutritional information. They also emphasize that cooking nutritiously does not have to be expensive or time consuming. What is required is knowledge and practice. The program is developed and facilitated by trained nutritionists.

Benefits:

- Neutral place that is safe and comfortable for participants
- Warm and inviting premises; It is located in a home
- Has sufficient work space and appliances
- Programs offered are culturally sensitive

- Works with targeted cultural groups as well as offers inclusive programs
- Developed by a nutritionist
- A specialized non profit agency

International Centre/NEEDS Skill Building Programs

The International Centre in Winnipeg operates a six-week cooking program for adult newcomers that appears to be fairly typical of similar programs. Unique is its after school program for children between the ages of 9 to 13. It should be noted that NEEDS Centres operates a very similar program and philosophy and both programs will be amalgamated and eventually housed at the NEEDS Centre facility. Currently these programs operate every evening and incorporate nutritional programs such as cooking with physical activities, homework, and various arts and craft initiatives. The programs especially targets newcomer children of both sexes.

Benefits:

- Targets newcomer children of both sexes and all ages
- Offers a mix of activities and blends cooking and physical activities
- Is offered every day during after school hours
- Operated and well supervised by knowledgeable and culturally diversified staff
- Supported by the parents of the children who participate
- Located in the inner city

Physical Activity Programs

YMCA-YWCA

The YMCA-YWCA in Winnipeg provides newcomers and their families with a free six month membership to four of their facilities including Downtown, St. James, East Kildonon, and South Winnipeg. When the trial period expires the individuals can apply for a general membership and be eligible for any available subsidies. This program targets families and has programming opportunities for members of all ages. There is a children's component, a women' program, and a sports program for adolescents and young adults. This program is well advertised and many newcomers are aware of it from their initial orientation.

Benefits:

- Attractive to adolescents and young adults who otherwise may involve themselves in gang activities
- The "Y" is universally known and well respected
- The "Y" offers basketball and soccer which are extremely popular for young adult newcomers
- The Y" also offers an EAL programs so moms can participate in this program while there children participate in supervised play activities

The Brandon YM/YWCA has a similar two-week free program. The Rady Jewish Community Centre in Winnipeg offers a free membership to newcomers.

Global Welcome Centre

Provides support and funding for cultural groups wishing to develop activity based programs for their members. It builds on community capacity by forging partnerships between cultural groups and mainstream community organizations or schools. The Global Welcome Centre works in partnership with Winnipeg *in Motion* and is funded by Manitoba Labour and Immigration.

Benefits:

- Targets specific cultural groups
- Requires partnerships with existing agencies/organizations and cultural groups
- Provides opportunities for cultural groups to develop and implement programs needed in their community.
- Develops community capacity building through volunteerism and skill building

International Centre After School Program

The International Centre operates an after school program for newcomer children between the ages of 9-13 and living in the Inner City of Winnipeg. This program operates Tuesday to Saturday from 5 to 7pm. Physical activity programming is an important aspect of this program and involves such activities as soccer, volleyball, basketball and badminton. The Centre accesses a local school's gymnasium. This program will be relocated to NEEDS Inc.

Benefits:

- Targets critical age group
- Parents trust the organization

Sports in Inner city Neighbourhoods (S.P.I.N.)

S.P.I.N. is a City of Winnipeg funded recreational program that is offered to inner city children during the summer months. Even though it is not specific to newcomer children, many of the participants are from this demographic group. It is an inclusive, culturally appropriate program that targets children under 13 years of age. It is also important to note that the content of the program is designed for both boys and girls. The programs are recreation based with an emphasis placed on developing physical competencies as well as a nutrition component. The program has as a core belief, a desire to build capacity in the community by encouraging community adults to participate as supervisors, coaches, and mentors.

Benefits:

- Based on building community capacity
- Requires the involvement of community members and support by community groups

- Well structured programs that are age and gender appropriate
- Emphasis is placed on having fun while playing sports, in addition to building skills
- Integrates physical activities with good nutrition

Boys and Girls Clubs of Winnipeg

Boys and Girls clubs are well established and well respected for their commitment to the children they serve and the communities in which they operate. All their clubs are open to all children but four of their clubs service a large number of newcomers. These are Ryerson, Victor Mager, Sister McNamara, and Dalhousie. They provide physical activities in a structured and unstructured format that are instrumental in keeping children away from gang involvement. Sports are an important component of their programs because it is through sports that children develop leadership and social skills. All their clubs provide a meal program with a food preparation component for those attending. They operate every evening and are well connected to the school system and social services organizations that are situated in the community.

Benefits:

- The Boys and Girls clubs are well established and well respected by the community in which they operate
- Programs are well designed and supervised and have an outstanding track record of success
- Programs operate in schools and have the use of the school gymnasium
- Children feel safe and are brought back home if their parents are unable to pick them up

Spence Street Neighbourhood Program (Magnus Elias Recreation Centre)

Spence Neighbourhood Project operates this drop-in centre for children and youth. The children's program (ages 6-12) is from 3:30pm to 5:30pm, while the youth program is from 6:30pm to 9:30pm. The youth program is open to teens up to 18 years of age, but most of the youths who regularly use the program are between the ages of 13 to 15. Even though there are unstructured play times, much of the activities are planned and supervised. All teams are coached by a volunteer. Most of the physical activities involve basketball and soccer. Currently 10 teams play in a league. This program is open to all neighbourhood youths, but attracts a large number of newcomers.

Benefits:

- Transportation is provided to and from games
- Integrates children and youth
- Targets critical age groups

Outside Manitoba

There are numerous programs and other initiatives around the world that deal with nutrition and physical activity for newcomers. Below are some we believe are feasible for Manitoba and appear to be cost effective.

Nutrition Based Programs

North Hamilton Community Health Centre (2001) offers a community garden program and a children's gardening club. While open to all residents of the catchment area, the neighbourhood has a large proportion of newcomers. The gardening programs use organic gardening. Of note is that it is a health clinic that operates the gardening programs.

Toronto Public Health developed the Toronto Peer Nutrition Program (City of Toronto, 2009). The program is offered to parents of young children from ethnically diverse communities in Toronto. Using trained peers, it works in partnership with community agencies, providing programs, nutrition workshops, and educational materials in various languages. Objective is to improve nutritional status of children between the ages of six months to six years.

Access Alliance was established in 1989 in Toronto, Ontario, with four ethno-cultural communities coming together to create the Centre in response to their identification of significant barriers to services for immigrants and refugees (Access Alliance Multicultural Health and Community Services, 2009).

A multi disciplinary team offers a wide range of health services to newcomers in a culturally sensitive and language accessible manner. Registered dieticians provide individual and group education on various health topics such as diabetes, healthy weights, heart health, osteoporosis, food intolerances and allergies, digestive problems, pregnancy, breast feeding and child nutrition. Programs for newcomer groups include training of volunteer peer leaders to provide culturally appropriate cooking programs in their communities. Every 2 – 3 years they train a multilingual group of newcomer women and place them in partner agencies located in under-serviced areas across Toronto.

The **Community Kitchen Program of Calgary** (2009) operates 35 community kitchens where they teach adults and children (including many newcomers) to cook nutritious meals on minimal budgets. They also provide fresh vegetables and fruit at cost to low income families.

Physical Activity Programs

The variety of physical activity programs far outnumbers the nutrition programming available. There is a large range of programs that aim to get people to move more in every day mode (e.g., walking), in more formal ways (e.g., exercise classes), or in competitive and non-competitive sports. Below we offer a number of examples of approaches and resources to programming for newcomers.

The North Hamilton Community Health Centre (North Hamilton Community Health Centre, 2001) offers a walking program (as well as the community garden programs mentioned above).

At a much larger scale, an empirical study by Jennum et al. (2006) worked with an entire neighbourhood in Norway that had an ethnically diverse population, including a large number of newcomers. Almost half of the community of about 6700 initially participated in the project. The interventions consisted of such things as marking walking trails, delivering brochures, and providing counselling to get the participants to become more active.

A study at a community centre in San Francisco, CA, found that the physical fitness of a group of older Chinese adults improved significantly with Tai-Chi class (Taylor-Piliae et al., 2006). The 60-minute classes took place three times per week, over 12 weeks.

An excellent publication by the (Australian) Centre for Multicultural Youth Issues (Centre for Multicultural Youth Issues, 2005) provides a number of examples of sports organizations having programs to include more newcomer youths. They observed that, unless associations made concerted efforts, newcomer youths were not likely to participate in organized sports, other than through their schools.

Key in all these examples is the involvement of community leaders and participants in the decision making processes for establishing the programs.

RECOMMENDATIONS

There is ample and irrefutable evidence from a variety of national and international sources that concluded that the health status of newcomers deteriorates the longer they stay in Canada. Many face overwhelming difficulties adjusting to a new life style in their adopted country. They are stressed to quickly learn a new language, find appropriate housing, find employment, or attend school and care for their family, just to name a few tasks. It is little wonder that, given these priorities, making healthy choices regarding nutrition or physical activity is not a major concern. Newcomers eat more and less healthy, and participate in physical activities less. It is this combination that is resulting in

increased weight, high blood pressure, diabetes, and a variety of other health related ailments.

This is not just an issue for newcomers but a serious health problem impacting all segment of society in Canada. Unfortunately issues that are associated with the general public often have a greater impact on those groups that are most vulnerable in society, such as newcomers. This issue takes on greater importance when we put in context that by 2017, the Canadian population will be made up by 20% visible minorities (Lindsay et al., 2009; McCarville and Mackay, 2007).

Health issues resulting from poor diet and high sedentary rates in placing an enormous cost to our health care system as well as a high emotional and physical cost to individuals and their families. Fortunately it is an issue that can be ameliorated with the committed efforts of all members of society.

The following are recommendations specific to newcomers in respect to healthy choices. It will take leadership from all levels of government, require consultation and cooperation and the forging of partnerships from all stakeholders. Most importantly and most challengingly, it will require creative thinking and alternative program development.

We have divided our recommendations into groupings of sectors to which they are directed. Recommendation 1 was made above.

Recommendations for Federal and Provincial Governments

There are a number of directly government funded organizations such as Sports Manitoba, Manitoba/Winnipeg *in motion*, Sports Program in Inner City Neighbourhoods (S.P.I.N.) and a wide range of social service organizations such as the YM/YMCA, Boys and Girls Clubs, N.E.E.D.S. Centre, and Welcome Place, that have established nutritional/physical activity based programs and should be applauded for their efforts. However, these programs tend to operate independently from each other creating potential overlap. Moreover, many of these programs either a) do not specifically target newcomers, or b) lack the necessary knowledge to operate both good nutrition and physical activity programs for newcomers. They also do not communicate effectively with each other on best practices, or even what the other is doing in this area.

We believe that there should be more coordinated efforts with all the key stakeholders and urge them to work more cooperatively.

Recommendation 2

Establish an advisory committee representing the interest of government departments, the health sector, non profit agencies, ethno-cultural organizations, and the school system.

The mandate of such a group would be as follows:

- Share current local knowledge of existing programs and monitor their effectiveness.
- Learn best practices and share information on newcomer health.
- Develop a strategic plan that addresses barriers and solutions to improving the overall wellness of newcomers particularly as it pertains to nutrition and physical activity.

The notion of bringing together government departments that have physical activity and healthy living mandates with community groups was strongly recommended in a report titled *The Working Together Initiative: The Contribution of Sport and Physical Activity to Multiple Policy Objectives* (Sport Matters, 2008). Additionally, in a report by Tuft University the researchers note that engaging local governments, schools, community based organizations and families showed that a community approach to healthy lifestyle is effective (Tufts University, 2009). On a national level this is also consistent with the Pan Canadian Physical Activity Strategy. Its third principle states ‘All government levels will work with the voluntary sector to develop and implement policies and legislation to fully support a comprehensive integrated and sustained strategy’. (Coalition for Active Living, 2004).

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Following from this networking needs to follow staff training so that the participating organizations will be better equipped to provide nutrition and physical activity supports to newcomers. This training also needs to include cultural competence training to allow organizations to become culturally safe places.

Recommendation 3:

That funding be made available to allow newcomer serving organizations to provide adequate staff training in the areas of nutrition and physical activity.

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Poor eating habits coupled with physical inactivity are placing a tremendous economic strain in our health system. This is an issue clearly affecting every sector of our population and therefore must not be seen as an issue impacting

solely newcomers. Government has taken a role in developing preventative programs to improve the general health of its citizens. While recommending that these efforts continue and increase goes beyond the scope of this study, we strongly support any efforts aimed at the general population. However, we heard -time and again- from our informants that they believed current large scale campaigns neither reach newcomer populations, nor are appropriate or relevant to them. Many expressed scepticism about the wisdom of spending large amounts of funds on advertising initiatives, if the campaign is not supported by accessible programs.

Therefore, when any promotional campaigns aimed at the general population take place, we make the following recommendation:

Recommendation 4:

That any promotional campaign aimed at the population at large has a specific component aimed at newcomers and ethnic groups and that such a campaign uses culturally/ethnically diversified images and has components in all newcomer languages.

For example, the Canada Food Guide is available in only a few languages. While there is some cultural diversity in food examples, many more languages need to be used and each ethnic group needs food examples that are relevant to their specific reality. Brochures promoting physical activity need photographs of all racial groups and manner of dress. It is not until newcomers recognize themselves in pictures of outlandish activities (such as skating, or tobogganing) that they begin to consider these as options.

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Because so many newcomer groups do not connect either nutrition or physical activity to health, we need to have public education campaigns that connect these concepts. Winnipeg *in motion* campaign regarding increasing physical activity is a good example (albeit that it currently does not work with any newcomer groups, nor does it focus on nutrition).

Recommendation 5:

That programs be developed, using existing organizations, to promote the concepts of healthy eating and physical activity that are specific and relevant to newcomer groups.

Templates for such programs need to be developed, but should be delivered by, or in close conjunction with, newcomer organizations. The funding mechanism currently piloted by a partnership of Winnipeg *in motion* and the University of Winnipeg at the Global welcome centre is a good example of the mechanism for funding after the templates are created.

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For programs to be successful it must that have a “buy in” with cultural groups and not just the organization that services the cultural groups. In a report titled *Call to Action: Living in Toronto* the researchers pointed out that supporting and building on the leadership of Toronto ethno-cultural diverse communities is a fundamental element of reducing barriers and their associated health inequalities (Basrur, 2003). Moreover, since most newcomer groups are at different stages of understanding and practicing healthy living, one-size-fits-all approaches won't work. In addition, there are significant differences within many newcomer communities. Treating one ethnic group as an undifferentiated entity would lead to significant problems for anyone trying to provide programs. Therefore, a community development approach, empowering each group to start taking (more) responsibility for their own health is, in our view, the only workable approach.

Recommendation 6:

That any programs offered to newcomer groups be developed with, rather than solely for them.

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While strictly outside the scope of this study, use of medical facilities was often mentioned by our informants. Newcomers tend to either not access the medical system until they have advanced health concerns, or they use physicians or emergency departments of hospitals. At the same time, we have been impressed by the scope of services, such as dietary counselling, of ACCESS centres in the Province. Most Newcomers have many issues confronting them including health concerns that they require a “team approach” similar to that being offered in those Centres.

Recommendation 7:

That a consensus be developed to routinely direct Newcomers to ACCESS Centres where possible and expand the range and ability for the centres to deal with the nutritional and physical activity needs of newcomer groups.

However, to ensure that health care is available to all, it is imperative that the hours of operations are expanded to accommodate those who are working shift hours. This would also require adequate staffing in the form of interpreters, community development workers, and nutritional professionals.

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Since there appears to be a lack of preparation for newcomers prior to coming to Canada, we need to develop pre-settlement programs in countries of origin.

Many come with high and often unrealistic expectations and then become disappointed and discouraged shortly after arrival. This point was highlighted in a survey of 30 immigrants from Edmonton, Toronto and Vancouver. One of the recommendations was “Make information on the country and the culture available for potential newcomers to read and think over prior to Canada” (Stewart and Neufeld, 2007).

Recommendation 8:

That information be made available to (potential) newcomers in their countries of origin detailing the realities of life in Canada, including the health risks of the *healthy immigrant effect* and the healthy living choices recommended in Canada.

Upon arrival, this preparation would lead naturally to better information at settlement programs (see below).

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We were told repeatedly about funding woes with various levels of government. This ranged from having programs approved only at the end of the physical year (with the requirement to spend the money that year) to short term funding (with no continued commitment). We therefore suggest:

Recommendation 9:

That governments make up-front commitments to continue sustainable funding to those programs that demonstrate effectiveness in reaching their goals.

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Many of our informants were concerned about integration of newcomers into mainstream society. Some appear to base service and programming decisions – in part- on this ideology. While this may be a long term goal, we would like to caution putting integration before healthy living. Instead we suggest a more pragmatic approach.

Since it appears that poor nutritional and physical activities develop almost immediately upon arrival in Canada, but language skills do not develop as quickly, it is important to have programs in the language of the newcomer. Moreover, recent newcomers (i.e., those in Canada less than one year) may be more comfortable and apt to participate in programs with those that share the same language and culture. From this position we believe that culture and language specific programs may be more constructive, particularly in the early stages of settlement. Inclusive programs can be made available to those newcomers living in Winnipeg for more than a year. The rationale is that after

one year, many newcomers have the basic language skills to communicate and share many issues that cross cultural barriers.

Recommendation 10:

That culture/language specific healthy living programs be funded for the first year of (re)settlement.

This does not preclude other -integrated- programs from addressing healthy living. For example, some physical activity programs may be excellent vehicles for integration and schools and EAL programs have a major role to play in this area (see below).

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It was clear from those we interviewed that we need to work with existing programs, strengthen and expand those that are working, and phasing out those that are not effective. It was also clear that we do not need a new agency to deliver services.

Recommendation 11:

That any additional programming be delivered by existing organizations, especially by those that have good track records.

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Since it appears that newcomers who are better educated, are economically self-reliant, have steady employment, live in appropriate housing, have an awareness of what to expect prior to coming to Manitoba, have an awareness of the importance of a healthy and balanced lifestyle and have access to prompt medical care have the capabilities of making healthier life choices.

Poor nutrition and poor life choices will continue to be an issue until we address the issues of poverty, poor housing, unemployment, and lack of education. Too many newcomers to Canada face major obstacles, lack of work, underemployment, etc. While this is far beyond the scope of this study, but is a major determining factor of good health, we would like to echo the many voices who have called for :

Recommendation 12:

That governments seriously review their immigration and settlement practices to assure that newcomers find adequate employment and housing upon arrival.

At a minimum, a screening mechanism that would identify newcomers who are most at risk should be developed and newcomers should be provided with the

necessary resources to help them adjust more effectively in their respective communities.

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We noticed that smaller rural communities have much greater difficulty providing adequate settlement services to newcomers than Winnipeg and, to a lesser extent, Brandon. This is in part due to the lack of infrastructure such as interpreters and training, and the economy of scale in delivering services to very small numbers of newcomers from a particular culture or language group. Physical activity and nutrition are pre-empted as issues by much more pressing matters in those communities.

Recommendation 13:

That adequate funding be provided to rural communities to deliver a full range of settlement services

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Ironically, we noted a parallel concern in Winnipeg in that there are a number of programs in the inner city areas but very few programs available or accessible for newcomers living in suburban neighbourhoods. Yet, the tendency for newcomers who initially settle in the inner city is to move to the suburbs as soon as they can.

Recommendation 14:

That the equity of program availability between the inner city and the suburbs of Winnipeg be reviewed.

This could be done by the various departments that fund programs for newcomers or the network suggested in Recommendation 2.

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The *Canada-Manitoba Sport Development Partnership's* goal is to increase the level and range of participation of children from the ages of 6-18 among Manitoba's aboriginal and new immigrant populations. These two target groups are at greatest risk of developing chronic lifestyle problems.

Recommendation 15:

That the *Canada-Manitoba Sport Development Partnership* or similar initiative continue to be supported.

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There is a lack of a comprehensive curriculum of health education focused on immigration. Such a program would make the connection between nutrition and good health and the importance of physical activity. It would need to also include cooking classes, physical activity classes as well as helping new immigrants navigate our health system.

Recommendation 16:

That a curriculum be established for use by EAL classes and organizations serving newcomers that addresses the nutritional and physical activity needs of adult newcomers.

Recommendations for Social Service Organizations and Religious Institutions

It is our opinion that organizations that provide services to newcomers must develop active and participatory partnership with ethno-cultural groups. An example of such a relationship is the *Multicultural Health and Community Services Access Alliance* in Toronto (Access Alliance, 2009). This program works collaboratively with community and cultural group partners to develop comprehensive programming for newcomers. They have a strong nutrition program, including workshops, counselling, a cooking program, peer programs, and training of volunteers. They also developed a cooking curriculum called *Bok Choy, Black Beans and Bananas: A Newcomers Guide to Healthy Eating*.

Recommendation 17:

That organizations in their program development and delivery must demonstrate collaboration with newcomer communities and use the principles of strengthening community capacity.

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Recommendation 18:

That organizations serving newcomers actively promote healthy living.

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Child care was often mentioned as a major barrier, particularly to physical activity programs.

Recommendation 19:

That organizations that provide nutrition and physical activity programs for parents provide either concurrent/joint programs for their children or child care.

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As we indicated in the recommendations to governments section above, there needs to be a differential response to recent newcomers and those who are in Canada for over a year. “New” immigrants require specialized programs that are culturally specific, while more settled immigrants would benefit with more inclusive programming.

Recommendation 20:

That organizations providing services to newcomers consider a differential programming approach to recent versus longer term newcomers.

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Children, especially those of preschool age, need opportunities for play particularly those living in apartment blocks. An example is an American national program called *Hip Hop to Health Jr.* This is a curriculum designed for minority pre-school children who are overweight or at risk of being overweight. This program combines healthy habits and intensive physical exercise. Progress reports are sent to parents on a weekly basis. The program also offers an aerobic class for parents two times a week (Fitzgibbon and Schiffer, 2007).

Recommendation 21:

That more programs and natural opportunities for play be developed for pre-school children and their newcomer parents.

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Since it is difficult for newcomers to travel to cooking classes even if they are interested, there appears to be a need for cooking classes near where newcomers live.

Recommendation 22:

That cooking classes for newcomers be developed in or near housing complexes that are dedicated to them, or in areas where there are high concentration of newcomers.

These classes can serve the dual function of healthy nutrition and collective food purchases. Since many newcomers are already good cooks, these classes could take more of a ‘sharing of skills in the Canadian context’ approach.

There are some at-risk groups, such as African single men who heavily rely on fast food for their meals. Getting them to a ‘guys-only’ cooking class may be a challenge, but definitely worth the effort.

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‘Natural entry points’ are the places where newcomers gather, such as religious institutions, housing units and or cultural organizations. Newcomers congregate in places where they feel welcomed, supported and where they can interact with others in a safe environment. These then become the logical places to provide information about healthy living and places to obtain support from the community leaders. It is the community leaders who will have to play an instrumental role in changing people’s attitudes and behaviours regarding healthy living.

Recommendation 23:

That organizations providing healthy living information and programs to newcomers reach out to natural entry points of their target audience.

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Anecdotal evidence suggest that newcomers in Winnipeg access food banks more frequently now than before. We also heard that newcomers often do not understand how to use or cook the food they are given and that they may not consume foods that are completely unknown to them. If this is in fact the current reality:

Recommendation 24:

That food banks consider food bank outlets specifically aimed at newcomers.

These outlets should provide nutritional and cooking information; if necessary in the language of the consumer.

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A number of organizations provide newcomers with an extensive list of grocery stores in their areas. In fact, we observed a variety of lists put together by various individuals and organizations that were sometimes duplicating each other. Most of these lists are for the inner city of Winnipeg. We did not see similar

lists for physical activity locations. Given the number of newcomers that live in neighbourhoods other than the inner city areas, to avoid duplication, and to provide newcomers with lists of local (free or low cost) physical activity options:

Recommendation 25:

That organizations serving newcomers in Winnipeg network to develop a city wide listing containing the names and locations of major food stores, food banks, ethnic specialty food stores, and physical activity organizations and sites.

Such a booklet could be linked to government and non-profit organization websites and should be updated regularly. We suggest that it would be a worthwhile investment of a grant to translate such a booklet into various languages and include health information and information on how to access the health system (see Recommendation 7).

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Soccer is huge with most current newcomer groups, especially those from the South- and Central Americas, Africa, and Europe. Many of our newcomer informants told us that they used to play formal or informal soccer themselves. They also indicated that in Canada they had difficulties finding a team or even an informal 'pick-up' group.

Recommendation 26:

That organizations serving newcomers network to develop a circuit of informal soccer games.

This somewhat 'out of the box' recommendation stems from the fact that –in our opinion- many newcomers would welcome the opportunity to play pick-up soccer if they knew where to go and felt welcomed. It would be an opportunity for – especially men- to shine at something in an environment that is often perceived as devaluing them. It would also be an opportunity for integration and to meet new people.

We suggest that this should not become a 'league' with teams and referees, and especially not with admission fees. Rather, all organizations would need to do is to arrange space (lawns in various parks) and post the schedules in various languages in all participating organizations. We recommend times for women, men, and a couple of children/youth age groups. There appear to be ample volunteers to bring this to fruition. In the winter informal indoor soccer opportunities or basketball could replace summer games.

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Women and girls of a number of newcomer groups are particularly at risk of physical inactivity. This is partly a function of cultural beliefs and partly of the lack of suitable facilities and programs.

Recommendation 27:

That organizations serving newcomers develop physical activity programs for women and girls of those newcomer groups that do not participate in co-ed and/or public activity programs.

We have seen examples of swimming programs for Muslim women, but the range of options are currently not wide.

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Religious institutions play a pivotal part in the lives of many newcomers and thus can play a part in bring about changes in attitudes and behaviours by promoting healthy life choices.

Recommendation 28:

That places of worship promote activity based programs, create and sponsor sporting clubs, and create activity days throughout the year.

For example, a program called Body and Soul (Body and Soul, 2009) was developed for African Americans and their religious organizations. This program encourages church members to eat a healthy diet rich in vegetables, fruit and dairy products. This program provides peer counselling, pastoral care, and a supportive church environment. Moreover, this program appears to be replicable in all places of worship.

Recommendations for Newcomer Groups

Many of the recommendations for organizations serving newcomers (above) also apply to ethno-cultural groups, especially if they are providing services to newcomers. However, we made several recommendations that are specific to organizations and groups that are newcomer based.

Recommendation 29:

That ethno-cultural groups work in concert with “mainstream” service organizations.

As indicated above, the model of the Global Welcome Centre for funding of programs that bring together cultural and mainstream organizations to deliver programming, appears to be a good approach.

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Cultural groups are an excellent beginning point to share with their members information on nutrition and the importance of physical activities.

Recommendation 30:

That ethno-cultural groups promote physical activity programs for their members, such as walking tours and winter activities, and sponsor sporting events, such as informal soccer games, especially for young adults.

Recommendation 31:

That ethno-cultural organizations encourage greater involvement of girls and women in physical activities by having community leaders endorse female specific programs, or by advocating with mainstream organizations to discuss ways to include female participation.

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Newcomers often do not participate out of isolation.

Recommendation 32:

That cultural organizations create Newcomers' Clubs.

These are clubs that invite newcomers to join as a way to reduce social isolation, practice their English skills, share concerns and become involved in the community. One such program is the Newcomers Clubs Canada, that has many chapters across Canada, but not in Manitoba (National Newcomer Council of Canada, 2009).

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Recommendation 33:

That cultural groups sponsor summer healthy lifestyle camps for young men and women between the ages of 16 to 24.

Cultural groups in partnerships with other community organizations can be instrumental in the development and promotion of nutritional and physical activity programs for this population.

Recommendations for Businesses

There are a number of businesses in Manitoba, like Maple Leaf in Brandon that recruit and employ significant numbers of foreign workers. Newcomers come on temporary employment visas but many settle in the communities that employ them. Many of the businesses have done a good job in assisting these workers in adjusting to work and community living. However we believe that businesses can play a greater role in helping newcomers make healthier life choices. In the long run it makes good business sense, by increasing productivity and thus reducing sick time.

Recommendations 34a to g:

That businesses:

- a. Establish nutritional meal plans in their cafeterias**
- b. Introduce more ethnically diversified foods in their cafeterias**
- c. Develop on site exercise rooms**
- d. Encourage and sponsor “in house” sports (e.g., soccer) teams**
- e. Encourage employees and their families to participate in community based physical activity programs and create a subsidy program for those that cannot afford such programs**
- f. Create wellness programs for employees**
- g. Encourage employees to walk or bike to and from work.**

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Businesses have always been generous in supporting elite athletes and some have sponsored more grassroots programs. For example, the Ford dealerships of Winnipeg have partnered with the General Council of Winnipeg Community Centres to provide funding for children who are unable to afford registration to community club programs. In Richmond, B.C., Greenshield teamed up with Richmond Food Bank and provided funding for a nutrition demonstration project.

Recommendation 35:

That businesses continue to and/or increase their charitable spending on healthy living programs for newcomers.

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Grocery stores catering to newcomers have a major role in providing for the nutritional needs of newcomers. As corporate citizens they are responsible for the nutrition and quality of the food they sell.

Recommendation 36:

That grocery stores that cater to newcomers work with newcomer organizations to provide the most nutritious food options and – where appropriate information on content.

Recommendations for Neighbourhoods and Municipal Governments

Safety is seen as a major barrier for participating in outdoor physical activities. Parents are afraid of walking the streets or allowing their children to play outdoors. It also appears that residents need to perceive that their neighbourhood is safe before attending any programs in their neighbourhood especially in the evening hours.

Recommendation 37:

That municipal governments increase safety and the perception of safety, particularly in areas with gang activity.

While this is easier said than done, municipal governments could do more to help people reclaim our streets, for example, by vigorously stimulating programs like Neighbourhood Watch. This should be done with significant participation of newcomer groups. Isolation can be reduced by creating ways for neighbours to meet by creating neighbourhood or housing tenant associations.

Municipal governments can strengthen our communities through community policing, better lighting, more bicycle paths, recreational and designated green spaces, and promoting neighbourhood block parties in all four seasons.

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Recommendation 38:

Establish community gardens as well as creating more community kitchens.

While this is often left to not-for-profit organizations, we believe municipalities should play a leadership role and develop partnerships with NGOs and newcomer groups. These are practical and inexpensive projects that have the potential for newcomers of reducing social isolation, providing opportunities to practice English skills, reducing food costs, increasing physical activities, and connecting to nature. Garden and community kitchen programs sponsored by the Calgary Horticultural Society (Calgary Health Region, 2009) and the North

Hamilton Community Health Centre are good models to replicate. (North Hamilton Community Health Clinic, 2009).

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Recommendation 39:

That community centres undertake a vigorous review of their role in providing programs to newcomers and establish partnerships with newcomer groups.

Community centres must be more sensitive to the needs of newcomers and must increase their efforts in attracting and welcoming this population group into their programs and facilities. These ought to be places that are culturally safe. Community centres are well-positioned to play a prominent role in providing physical activity opportunities to newcomer children and youth.

In Winnipeg, as a starting point, community centres, through the leadership of the General Council of Winnipeg Community Centres need to undertake a study to understand the barriers that newcomers face in attending their programs. The next step is to address these barriers. Additionally, community centres must begin to consult with cultural groups directly and create better linkages between themselves and the cultural groups.

Community centres should actively promote and publicise subsidies or waive registration fees for those that cannot afford their programs. Municipalities have a role in providing funding for this, possibly in partnership with businesses.

We were told on a number of occasions that community centres can be very intimidating to first time users. We suggest that community centres offer “open houses” for newcomers in order that they meet those involved as well as to explore the facilities. It also might create greater dialogue with both groups that could create new and interesting program initiatives, or ways to deliver existing programs in more culturally sensitive ways. We also recommend that special provisions be made available to help newcomers complete registration forms. Finally, community clubs must find ways to remove transportation barriers that often restricts newcomer parents from registering their children into these programs.

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Recommendation 40:

That the City of Winnipeg continue funding the Sport Programs in Inner city Neighbourhoods (SPIN) and increase its scope and reach.

Indeed, we believe this program should be available through the year (as opposed the summer months) and should be available throughout the city (as opposed to the inner city neighbourhoods).

Recommendations for Schools and EAL Programs

As there is a clear connection between good nutrition and physical education on the one hand, and academic achievement on the other, schools are major stakeholders and must do their part in improving the health of newcomer children and youth. Moreover, schools are the trustees of, in many cases, the only public recreation facilities in neighbourhoods.

Recommendation 41 :

That school divisions revise their policies with regards to after-hours' use of gymnasiums by the community in order to fully accommodate newcomer groups.

Recommendation 42:

That schools strengthen and expand courses that have a strong nutrition and cooking component, encourage newcomer students particularly to participate in these classes, and within that group promote male participation.

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We heard from a number of sources concerns around school lunch programs.

Recommendation 43:

That schools encourage students to bring ethnically diverse foods for lunch and ensure that there are provisions to allow foods to be heated.

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EAL programs for adults are ideal locations to promote healthy living. While the curriculum is aimed at attaining the Canadian Language Benchmarks, in our view there is room to discuss healthy nutrition. We also see no reason why there could not be brief breaks for physical activities, like there are now in some schools around the country.

Recommendation 44:

That EAL programs make a concerted effort to promote healthy living.

Often, EAL classes are taken soon after arrival and thus newcomers could obtain relevant information in these areas. EAL classes emphasizing the relationship between nutrition and health and the relationship between being physically active and health would be beneficial. Many newcomers do not come to this country with this mindset. Having the language of healthy living would go a long way in increasing awareness. There is a good example that occurred elsewhere: York University (Kinesiology department) developed an EAL curriculum on physical activity for Chinese immigrants that can be replicated for other cultural groups (Taylor et al., 2008).

Suggestions for Further Program Development

In the course of our research we found many promising ideas and received excellent suggestions from our informants. The following are a collection of these findings.

Suggestions to Enhance Nutritional Programs

1. Invest in more nutritional professionals to work with newcomers. Ontario Public Health Association developed a community assistant program that hired individuals from various cultural communities to work within their own community. The program premise states:
Only a peer from the same culture, speaking the same language, would know what the food customs were, and how to present new information and experiences in a way that earned the trust of the participants (Ontario Public Health Association, 2009)
2. Create cooking classes and locate them in public housing units.
3. It was noted that adolescent boys, especially those from African countries do not have the basic skills to make good nutritional choices. They see cooking as “women’s work” and strongly hold onto this point of view. We need to make every effort to help them change this point of view and more importantly help them develop the skill to be self sufficient in the area of cooking. We suggest that cultural groups develop and offer cooking classes specially targeted to adolescent boys.
4. Nutritional programs should encourage the participation of all members of the family.
5. All programs should be free of charge and include child care provision.
6. A number of individuals and organizations endorsed the idea of developing a cooking program and offered the following insights and guidelines for such a course:

- Needs to be developed by a qualified nutritionist/dietician and must be Manitoba specific.
- For newcomers living in Manitoba less than one year.
- Program must be a certified program and to teach the course the instructor must be certified. This would provide standardization throughout the province.
- Newcomers should be encouraged to instruct the course.
- Program should be taught in various languages.
- Course must be “user friendly”, culturally appropriate, and specifically targeted to newcomers.
- Course must have a practical “hands-on” component.
- Should be accessible to all members of the family.
- Course should contain the following topics:
 - *Thorough discussion of the Canada Food Guide
 - *Establish a clear connection between food and health
 - *Food identification
 - *Food substitution
 - *Reading food labels
 - *Price comparison
 - *Measurement skills
 - *Recipes and following recipe instructions
 - *Grocery shopping
 - *Maintaining traditional cooking skills and integrating new cooking skills.

Suggestions to Enhance Physical Activity Programs

1. We need to develop activity programs that teach competencies and skill development within a recreational focus framework rather than developing competitive programs.
2. We need to develop and implement girl/women based programs (Guerin et al., 2003). For women, especially that of Islamic faith, exercising in a women’s only facility that is also culturally sensitive is crucial. As one study stated it is “not just for themselves but also for the integrity of their whole community” (Lawton et al., 2006). For many girls, hip-hop dance programs are probably more popular than sports based ones. For many

- women natural activities, like walking, may be the only feasible option and should be encouraged.
3. We need to train and develop coaches and mentors from all cultural groups. To build community capacity we need to develop a stronger volunteer base.
 4. Need to encourage business to sponsor recreational activity/learn to play programs.
 5. Physical activity programs must contain the following elements:
 - Be inviting
 - Be age appropriate
 - Programs that are offered must be diverse
 - Programs must be recreation based, not competitive based
 - Programs must be skilled based
 - Programs must be well supervised
 - Programs must involve parents in some capacity
 - Programs must be community based
 - Programs, if required, must have appropriate translators.
 - Physical activity must be redefined to include the concept of motion. House chores, child care, grocery shopping etc. is part of physical activity (*in motion* Research Committee, circa 2005).
 6. Activity programs must be located in a safe environment free from discriminatory and racial harassments. These programs must be ethno-specific, culturally relevant, and those that are sponsoring/facilitating the program must understand the many challenges and difficulties newcomers face. When possible, programs should be delivered by someone of the same culture (Smith, 2009; Coalition for Active Living, 2004).
 7. Encourage newcomers to involve themselves in winter activities and develop simple programs to teach newcomers how to enjoy themselves in winter.
 8. Organizations such as the YM/YWCA must work hard to find ways to encourage young adults between 18-24 to be more physically active and to do so at an affordable price. There is a general consensus that physical activity and recreation are valuable tools in preventing youth problems. Newcomer youth face enormous struggles and are vulnerable to gang and other criminal influences (Canadian Parks/Recreation Association, Undated.)

Suggestions for Future Projects and Funding

These are our suggestions for future projects and funding. We realize fully well that there are various restraints and criteria, especially from government

departments. However, the criteria below are, in our opinion, minimum requirements for successful implementation of a strategy to improve the healthy living practices of newcomers.

- Projects should be funded for a minimum of two years, with the expectation that they become permanent if and when successful. Short term projects do not have a lasting impact in the community.
- Projects must have the support of the cultural group(s) impacted by the project.
- Project must involve joint partnerships with community based organizations.
- Project must promote the principle of building community capacity.
- Project must be culturally sensitive and promote skill building amongst the participants
- Project should combine elements of nutrition and physical activities.
- Project must be supervised or facilitated by individuals knowledgeable in nutrition and physical activity concepts.
- Priority should be given to projects targeting girls/women.
- Projects should have a clear evaluative component and be replicable.
- Where applicable, projects should address barriers affecting participation such as child care, transportation, safety, language, and participant cost.

Conclusions

The process by which newcomers adopt the dietary practices of the host country -*dietary acculturation*- is multidimensional, dynamic, and complex; in addition, it varies considerably, depending on a variety of personal, cultural, and environmental attributes. Therefore, to intervene successfully on the negative aspects of dietary acculturation, it is important to understand the process and identify factors that predispose and enable it to occur (Satia-Abouta et al., 2002). The same goes for physical activity: It is complex and needs to be understood before interventions can be made.

Ultimately, it is the responsibility of each individual to make healthy choices regarding food and physical activity. All of us, including newcomers, have a responsibility to seek out accurate information to help us in our decision making. In doing so, we should expect the availability of accurate information and supportive programs from the appropriate resources. For newcomers facing numerous barriers, this support network is even more critical.

Governments, government funded entities, not-for-profit organizations, religious institutions, schools, and newcomer organizations all have a role to play in improving the healthy living of newcomers. We express the hope that this study encourages these disparate groups to work together towards this goal.

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APPENDIX A: LIST OF INFORMANTS

Please note: Children are listed by first name only. Informants were given the option of not being listed or listed in a manner with which they felt comfortable (they are noted as *anonymous*, *adult*, or *family*). A number of members of various ethnic communities, particularly, chose this option. Some asked to be listed by first or nickname only. No academic titles are provided. Only positions titles are listed if they were provided to us (some informants chose to only give their organization). We chose not to list specific ethnic community membership for those listed by name, so as not to suggest that the informant spoke for that community. Several of the interviewees represented more than one organization and/or community. Unless specified, the informant was working for an organization or living in a community in Winnipeg.

Fuad Abdulahi, Life Skills Counsellor, Manitoba Interfaith Immigration Council Inc., Welcome Place

Abdullahi, Community member, Winnipeg

Abeba Abebe, Cultural Facilitator, Brandon Regional Health Authority

Kaitlin Adlam, BSW Student, Multicultural Family Centre

Congolese Adult, Community Member, Winnipeg

Karin Adult One, Community Member, Winnipeg

Somali Adult One, Community member, Winnipeg

Karin Adult Two, Community member, Winnipeg

Somali Adult Two, Community member, Winnipeg

Muna Ahmed, Outreach Worker, Healthy Start for Mom & Me

Jodi Alderson, Youth Program Coordinator, NEEDS Centre for War Affected Families

Yasmin Ali, Executive Director, Canadian Muslim Women's Institute

Semir Ali, Community member, Winnipeg

Marlene Amell, Executive Director, General Council Winnipeg Community Centres

Robyn Andrews, Employment Program Coordinator, NEEDS Centre for War Affected Families

Anonymous, Community member, Winnipeg

Anonymous, Community member, Winnipeg

Nemeth Banas, Researcher, Qualtrica Associates

Marlene Beaudet, General Manager, YMCA-YWCA

Ruth Bergman, Volunteer, SEEDS Church, Altona

Deanna Betteridge, *in motion* Coordinator, *Population and Public Health*, Winnipeg Regional Health Authority

Esther Blum, Researcher, Qualtrica Associates

Leanne Boyd, Director Policy Development, Healthy Child Manitoba

Lynn Campbell, Program Development Coordinator, Manitoba Labour and Immigration

Sandra Carbello, Settlement Facilitator, Western Immigrant Services

Jorge Cardenas, IT-Network Administrator, NEEDS Centre for War Affected Families

Christian Chavez, Cultural Facilitator, Brandon Regional Health Authority

Wendy Church, Program & Policy Consultant, Healthy Child Manitoba

Debra Clark, Community Initiative Director, YMCA-YWCA

Terry Cormier, Recreation Technician/Community Centre Liaison, Community Services Department/ City of Winnipeg

Judy Cormier, A/Assistant Director, Children's Services, Saskatchewan Ministry of Education

Noelle De Pape, Executive Director, Immigrant and Refugee Community Organization of Manitoba

Shannon Dennehy, Program/Policy Consultant, Healthy Child Manitoba

Jaymi Derrett, Physical Activity Consultant, Manitoba Culture, Heritage, Tourism and Sport

Andre Doumbe, President, Afro-Caribbean Association of Manitoba Inc.

Darlene Dyck, Pastor, SEEDS Church, Altona

Mary Jane Eason, Community Nutritionist, Mary Jane Cooking School

Arlene Elliot, Program Coordinator, Strengthening Families, Mount Carmel Clinic

Ken Faulder, Aboriginal Sports Liaison, Sports Manitoba

Steven Feldgaier, Director, Triple P - Positive Parenting Program, Healthy Child Manitoba

Laureen Fulham, Healthy Child Manitoba

Halimo, Community member, Winnipeg

Tara Hawking-Kreller, Community Dietician, Healthy Start for Mom & Me

Kristine Hayward, *in motion* Coordinator, Population and Public Health, Winnipeg Regional Health Authority

Ifrah, Community member, Winnipeg

Ahlam Jasim, Volunteer Member, Canadian Muslim Women's Institute

Rene Juarez, Coach and Director, Chile Community Centre

Kelly Kaleta, Diabetes Educator, Brandon Regional Health Authority

Vaska Karamanova, Neighbourhood Immigrant Settlement Worker, Seven Oaks Area

Michelle Kilborn, Program Manager, K-12 Wellness, Curriculum Branch, Alberta Education

Grace Kisoso, Coordinator, Global Welcome Centre, Faculty of Education, University of Winnipeg

Sandy Kostyniuk, Program Consultant, Manitoba and Saskatchewan Region, Public Health Agency of Canada

Rick Lambert, Community Sports Director, Sports Manitoba

Tim MacKay, Principal and EAL Coordinator, Louis Riel School Division

Jamil Mahmood, Coordinator, Spence Street Neighbourhood Program

Kathy Mallett, , Healthy Child Manitoba

Flor Marcelino, Member of the Legislative Assembly for Wellington

Sheila McBeath, Volunteer Coordinator/Administrative Officer, NEEDS Centre for War Affected Families

Bernadette T. McCann, Neighbourhood Immigrant Settlement worker, Pembina Trails School Division

Tina Moody, Healthy Child Manitoba

Muna, Community member, Winnipeg

Wababili Musanza, Community member, Winnipeg

Naima, Community member, Winnipeg

Naimo, Community member, Winnipeg

Marceline Ndayumvire, Manager, Life Skills Programs, Welcome Place, Manitoba interfaith Immigration Council Inc.

Mallory Neuman, Manager, Healthy Child Manitoba

David Northcott, Executive Director, Winnipeg Harvest

Cheryl Oliveira, Community Dietician, Healthy Start for Mom & Me

Deborah Olukoju, Lead Pastor, Immanuel Fellowship Family One, Community members, Altona

Family Two, Community members, Altona

Audrey O'Reilly, Public Health Nursing Consultant, Health Promotion Unit, Population Health Branch, Saskatchewan Ministry of Health

T. Michael A. Owen, Executive Director, Boys & Girls Clubs of Winnipeg

Paul Paquin, Conseiller pédagogique / Curriculum Consultant, Manitoba Education, Citizenship and Youth

Siil Park, Youth Program Coordinator, International Centre

Florence Quan, Community Ministries/Family Foundation Coordinator, Multicultural Family Centre

Lisa Ramsay, Coordinator, Elspeth Reid Family Resource Centre

Colleen Rand, Chronic Disease Specialist, Winnipeg Regional Health Authority

Hope Roberts, Settlement Program Director, Western Immigrant Services

Heather Robertson, Crime Prevention Program Coordinator, NEEDS Centre for War Affected Families

Marion Ross, Provincial Coordinator for Families First, Healthy Child Manitoba

Camilla Salad, Volunteer Member, Canadian Muslim Women's Institute

Jan Sanderson, Chief Executive Officer, Healthy Child Manitoba

Vera Schroeder, Community Programming Coordinator-Settlement, River East Transcona School Division

Shedrek, Community member,

Isle Slotin, EAL Consultant, Winnipeg School Division

Jan Smith, Director, Adult Continuing Education, River East Transcona School Division

Sheelagh Smith, Community Dietician, WRHA Health Action Centre

Michelle Strain, LEEP Supervisor, Multicultural Family Centre

Peng Sun, Cultural Facilitator, Brandon Regional Health Authority

Dalia Szpiro, Community Immigration Officer, Jewish Federation of Winnipeg

Taher, Community member,

Sharon Taylor, Executive Director, Wolseley Family Place

Maria Isabel Toro-Vidal, Intro Program Coordinator, NEEDS Centre for War Affected Families

Tom Urquhart, Volunteer, NEEDS Centre for War Affected Families

Carlos Vialard, Manager, Settlement Services, Welcome Place, Manitoba
Interfaith Immigration Council Inc.
Margaret von Lau, Executive Director, NEEDS Centre for War Affected Families
Sophia Vong, President, Winnipeg Chinese Women's Association
Habtamu Wedajo, Community Resource Coordinator, Immigrant and Refugee
Community Organization of Manitoba
Glen Williams, Manager, Victor Mager Club, Boys & Girls Clubs of Winnipeg
Marie Wotton, Supervisor of Family & Community Development, Child and
Family Services of Western Manitoba
Arian Yaftali, Member, Afghan Canadian Women's Organization
Elham Yousif, Interpreter, NEEDS Centre for War Affected Families

APPENDIX B: INTERVIEW SCHEDULE - ADULTS

The following schedule was used for most organizational representatives. The questions were adapted for newcomer community members, depending on their situation and command of English.

- 1) Premise (Explain purpose of study).
- 2) Describe the work your organization does with newcomers, particularly anything in the nutrition or physical activity area.
- 3) Do you see a wellness/health trend in newcomers after arrival?
- 4) Do you see differences between newcomer groups re: 3.
- 5) Are you aware of any newcomer communities who are aware of the health trends of new arrivals? Do you know of any communities that do anything about this?
- 6) What do you see as the barriers to maintaining good health (both nutrition and physical activity)? Are there different barriers for different communities?
- 7) Are you aware of any best practices, successful programs?
- 8) Do you have any (particularly unpublished) studies or reports that you can share with us?
- 9) What would communities need in order to tackle their health issues?
- 10) What do you see the capacity of the communities to tackle the issues themselves (differences between communities)?
- 11) Could you take me through what you would see as the steps organizations (like WRHA) that are concerned with this issue should take with a relatively new newcomer group, in order for them to maintain good physical health?
- 12) Are any existing programs useful to newcomer groups (e.g., *In Motion*)?
- 13) If the Government had an awareness campaign, should there be a component specifically targeted to newcomer groups?
- 14) What do you think Government policy should be to assist communities? Which level of government?
- 15) Any other helpful suggestions?

APPENDIX C: INTERVIEW SCHEDULE – CHILDREN AND YOUTH

1. Where are you from?
2. How long have you lived in Winnipeg?
3. Do you remember the kinds of food you ate when you lived in _____? (ask them to name the foods)?
4. What kinds of foods do you eat now?
5. What are your favourite foods?
6. What do you eat mostly at home?
7. What do you eat for lunch?
8. Do you like playing sports?
9. What physical activities do you like to play?
 10. Do you belong to a sport's team/community club/school team?
 11. What stops you from playing (prompt: weather, transportation etc)?
 12. Do you think you eat better now than before you came to Winnipeg?
13. Do you think that you were more active now than before you came to Winnipeg?
14. What foods do you miss eating?
15. When someone says "Canadian foods" what foods do you think of?
16. When someone says "Canadian sports" what sports do you think of?
17. Do you like Canadian foods?
18. Do you like Canadian sports?