

**Traditional Food Knowledge:  
Renewing Culture and Restoring Health**

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Author's declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

## Abstract

Traditional food knowledge (TFK) refers to a cultural tradition of sharing food, recipes and cooking skills and techniques and passing down that collective wisdom through generations. The value of this knowledge is hidden in a global food system offering an abundance of commercial convenience foods. This study defines TFK and explores its value to assert space for its recovery and renewal. Using Trevor Hancock's research on healthy communities and models, such as the Mandala of Health (1985), traditional food knowledge will be analyzed for its potential to contribute to individual and community ecosystem health.

The role of traditional food knowledge is examined with respect to promoting biocultural diversity and improving the capacity for food production among citizens. Food diversity is an important component of human nutrition and can be an indicator for a bioculturally diverse region. Studies on biocultural diversity recognize the close connection between cultural and biological diversity. Only recently have the losses in cultural heritage, such as traditional food knowledge garnered academic and policy attention. Traditional food knowledge can be one means of asserting cultural identity and can be a way to connect people to the natural world. Transmitting this knowledge is one important means of fostering sustainable livelihoods, ecosystem health and enhanced individual and community capacity.

Traditional food knowledge can provide an individual with the capacity to prepare meals that are nutritious, safe and culturally relevant. This skill can support adaptation to altered food environments, such as is the case for immigrants and indigenous populations. The food system itself has rapidly changed with global industrialization, urbanization and cultural homogenization; and traditional food knowledge is no exception. The distinct expressions of taste and place are facing a continuity gap when traditional food knowledge is not passed forward, but rather sidelined as an abstract, historical concept.

This study takes a qualitative case study approach exploring the concept of traditional food knowledge. The existing literature is compared to the lived experience of immigrants and their families in the Canadian suburban context, specifically in Mississauga, Ontario. This study explores the relevance and value of traditional food knowledge to Indonesian-Chinese New Canadians, their families and the wider community.

Despite the colossal challenges posed by a global food industry, there are personal and community benefits to gaining or relearning traditional food knowledge. The community capacity increases with a greater number of skilled practitioners and educated consumers. Informal sharing of the cultural life skills engages people from various walks of life as they learn about, and from, each other. Governance that enables and sustains this type of community exchange will require changes to ensure equitable support for the opportunity for such informal learning and capacity building to occur among all citizens.

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## **Dedication**

To elders and teachers in school and in life.

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## 1.0 Introduction

### *Cooking away*

*There is a point where you leave home and; consequently, home cooked food. My mother and my grandmother both came to Canada well-equipped with knowledge gained from helping my great-grandmother, a street vendor, who sold food in the small village of Temagung, Indonesia. My father may not have such an extensive history of cooking, but he improvises from cookbooks and television shows. Recently he has discovered Indonesian web sites that offer cooking tips. Unlike my elders, without some hands-on training and guidance, I would not feel confident trying any Chinese or Indonesian dishes that I was served growing up.*

*This lack of confidence in cooking these dishes has not had any impact on my future prospects of material security. I feel that I can contribute to society as a literate and highly educated citizen. As a first generation Canadian, I impress elder relatives when I can understand a couple of Indonesian words. It does not seem to matter if I do not dedicate myself to learning about Indonesia or my Chinese heritage. It does not seem to matter that I cannot pronounce or remember the names of many of my elder relatives who attend family reunions. I recognize their faces and we eat together. I really enjoy seeing everyone despite the language barriers.*

*What I realized is that as the faces started to disappear at these family gatherings, it is harder to find out how everyone is related. Likewise, the dishes brought to these gatherings are less and less Indonesian-Chinese in flavour and appear to be more like reproductions of grocery store magazine covers. The few dishes brought such as lumpur or kue lapis get snapped up and pocketed quickly before they are all gone. There are dishes whose names I don't know how to spell and there are those that I can only recognize if they were there in front of me. My cousins and I still sit at the "kids' table" even though there is now another kids' table with younger people than us. We admire our plates of food and giddily remember how much we love and miss such home cooking. We think the food will always be there for us. We think it will always be around. And maybe it will be, if we recognize how much it matters to us.*

## 1.1 Purpose

The purpose of the study is to explore the transmission of healthy and sustainable food traditions as a means of nurturing healthy communities. Food traditions derive from knowledge that has been tested over time. Canada has a history of an evolving food culture since its first inhabitants and this history is growing more complex with the influence of a changing demographic and the global industrial food system. This study focuses on what traditional food

knowledge means for the health of a growing and diverse suburban population in Canada. The study explores the value of this knowledge as a component of a community's capacity to foster a healthy community. Traditional food knowledge can provide opportunities to broaden the discourse on food security and sustainable agriculture to include a wider understanding of the contributors to community and environmental health. Through this greater understanding, practical recommendations are developed to meet healthy community goals.

## ***1.2 Problem Statement***

What is traditional food knowledge?

To whom is it important and why?

To whom is it not important and why?

If it is important, or if there are important elements, how is it shared?

What are the opportunities and challenges in promoting it?

## ***1.3 Rationale***

As traditional ecological knowledge and traditional food systems are being acknowledged as valuable in protecting the integrity of natural resources (Kuhnlein and Receveur 1996; Berkes 1999; Maffi 2001); these concepts are reviewed to understand how specific traditional knowledge related to food provisioning is a key piece in building understanding and appreciation of a biocultural landscape.

This thesis highlights traditional food knowledge (TFK) as an age-old concept, but also it is a new academic concept worthy of research. TFK is a product of generations of people, usually women, learning from each other and their environment about how to feed themselves. This knowledge has been passed from generation to generation, empowering each one to be as

self-sufficient as possible with regard to food in their environment. This cycle of cultural learning, self-sufficiency and environmental sustainability is showing signs of breaking in a globalized system of food commodities. The United Nations Educational, Scientific and Cultural Organisation has created an internationally-ratified Convention for the Safeguarding of Intangible Cultural Practices as a means of documenting the “function and values of cultural expressions and practices...” (UNESCO 2007) The economist G. Becker (1965) advocates for a similar accounting to understand how food culture in a household affects the actual convenience of food:

...What households can produce, then, is affected not simply by monetary resources, and time availability of household members, but by the quality of their input, itself a product of the investment made by individuals, and by society at large, in training and providing experience of the necessary skills and knowledge. (as cited in Gofton 1995, p.169)

The training itself will vary according to the underlying values and ideologies in the household and the overall food culture as well as the quality and quantity of time available in a household. (Gofton 1995, p.169)

The concept of traditional food knowledge integrates a number of academic disciplines such as social, cultural, and nutritional anthropology; human ecology, agriculture, population health, family studies, community development, and education, among others. By taking such a broad view, traditional food knowledge can be viewed from various angles to understand the many implications for the ecosystem health of a community. Blending these perspectives will also provide opportunities to find new approaches to appreciating and passing on traditional food knowledge for the sake of health promotion and community development in specific geographic areas. This thesis explores traditional food knowledge as inclusive of knowledge of aboriginal peoples as well as migrant populations.

The research has relevance to a variety of people, on many levels. Individual citizens and families who are interested in studying their own cultural ancestry will be interested in ways of sustaining some of the diverse food traditions in their everyday lives. Community groups, involved in food security, social justice and environmental issues will find this research as a pertinent point of consideration for their activities. Public health and social services administrators, policymakers as well as food producers and retailers may find this study useful to understand the population health and lifestyle implications in the diverse and shifting suburban Canada demographic environment.

#### ***1.4 Boundaries, proposed site and justification***

The focus of the study is situated at the intersection of environmental and social elements of a healthy community. While there are many facets of a healthy community and the requisite local and sustainable food security systems, this study examines the role of traditional food knowledge for the improved capacity of citizens, cultural continuity and support for biodiversity.

The definition of traditional food knowledge is inclusive of newcomer immigrant populations, representing a growing number of the Canadian population. The case study is embedded in the Canadian context of economic and population growth around urban areas, specifically the burgeoning suburban regions. The proposed site is a growing suburb in the Greater Toronto Area, Mississauga. Mississauga is representative of the development-focused city planning in Southern Ontario and it also has a growing and multicultural population, in which 47% are immigrants.(Mahoney 2006) Between 2001 and 2006, Mississauga showed a 9.1% growth in population compared to 0.9% growth in Toronto. (Statistics Canada 2007)

The participants in my case study are Indonesian-Chinese first-generation Canadians in Mississauga and surrounding area. They were selected as the author could easily recruit and access linguistic and cultural translation to understand and relate to participants as a second-generation Canadian of the same ethnic and cultural background. The first-generation Canadian participants immigrated from an urban environment in Indonesia and none expressed an agricultural heritage. Therefore, it is beyond the scope of the study to thoroughly analyze the issues around declining rural areas, though this is a part of the context of traditional food knowledge as a study.

### ***1.5 Conceptual Framework***

It may not seem like Canadians are suffering from poor individual and community health, considering the abundance of food choices on grocery store shelves. However, while ‘developed’ countries, such as Canada, have access to quantities of food; there are problems of obesity, low intake of fruits and vegetables and diet-related chronic disease. (Lang and Heasman 2004), (Desjardins and McCrae 2005). On a wider scale than individual health, there is evidence that our global industrialized food system is unsustainable for community health and the ecosystems on which it depends. While quantity of food has increased due to increased productivity using industrial methods, the quality of the food and the value of the local food production has declined. (Petrini 2005/2007) (Heasman and Lang 2006)The food system is being critiqued for its narrow focus on economic progress at the cost of social, cultural and ecological foundations. (Petrini 2005/2007, p.19) Irreversible changes to the ecosystem and biodiversity are attributed to the massive conversion of land to agricultural use, among other factors. (Millennium Ecosystem Assessment 2005)

These costs are only now becoming apparent and publicized in such reports as the Millennium Ecosystem Assessment (2005):

The changes that have been made to ecosystems have contributed to substantial net gains in human well-being and economic development, but these gains have been achieved at growing costs in the form of the degradation of many ecosystem services, increased risks of nonlinear changes, and the exacerbation of poverty for some groups of people. These problems, unless addressed, will substantially diminish the benefits that future generations obtain from ecosystems. (Millennium Ecosystem Assessment 2005)

The existing food system paradigm is described by Heasman and Lang as “productionist” for its focus on quantity, while new paradigms struggle to replace it. The productionist paradigm does not leave room in its economic measurements to include the value of social, cultural and ecological services. (Heasman and Lang 2006) Traditional food knowledge would flourish more readily in an ecological-focussed food system where social and biocultural aspects would be reintegrated. Lang and Heasman describe the need to integrate public and environmental health: “Because human and environmental health are so inextricably connected, solutions for the future of food supply have to address environmental quality and human health goals simultaneously.” (Lang and Heasman 2004) This study explores the particular social, cultural and ecological significance of traditional food knowledge for community health.

An ecosystem health perspective is broad enough to include the complex interactions of health. Trevor Hancock’s model of a healthy community illustrates many of the broad interactions. Hancock states that a healthy community is more than the sum of the health of individuals in a population; it includes the equitable access to health determinants and the functionality of the community as a whole. (Hancock, Labonte et al. 1999) A healthy community is not a static product, rather it is a dynamic approach where relationships and collaboration result in processes that are oriented towards citizen empowerment, community capacity-building, increased equity, environmental integrity, among many population health



goals. (Duhl and Hancock 1997) The healthy communities approach is characterized by processes that:

- address multiple determinants of health – social, environmental, economic, physical, psychological, spiritual, and cultural;
- build community capacity to create a healthy community;
- identify important building blocks for creating a healthy community, such as community involvement, inter-sectoral partnerships, political commitment and healthy public policy. (British Columbia Healthy Communities 2006)

Figure 1 below illustrates a simplified version of Hancock’s broad vision of health as a “mandala of public health.” (Hancock and Perkins 1985)

### Vision: Ecological perspective of human health

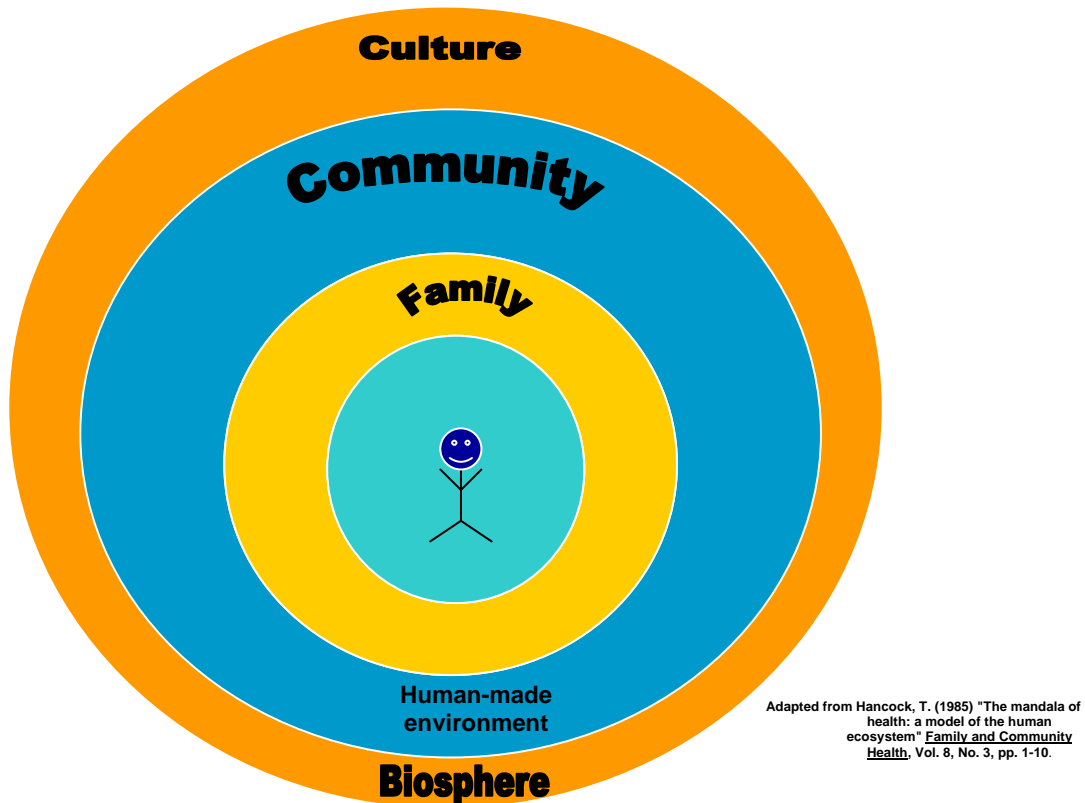
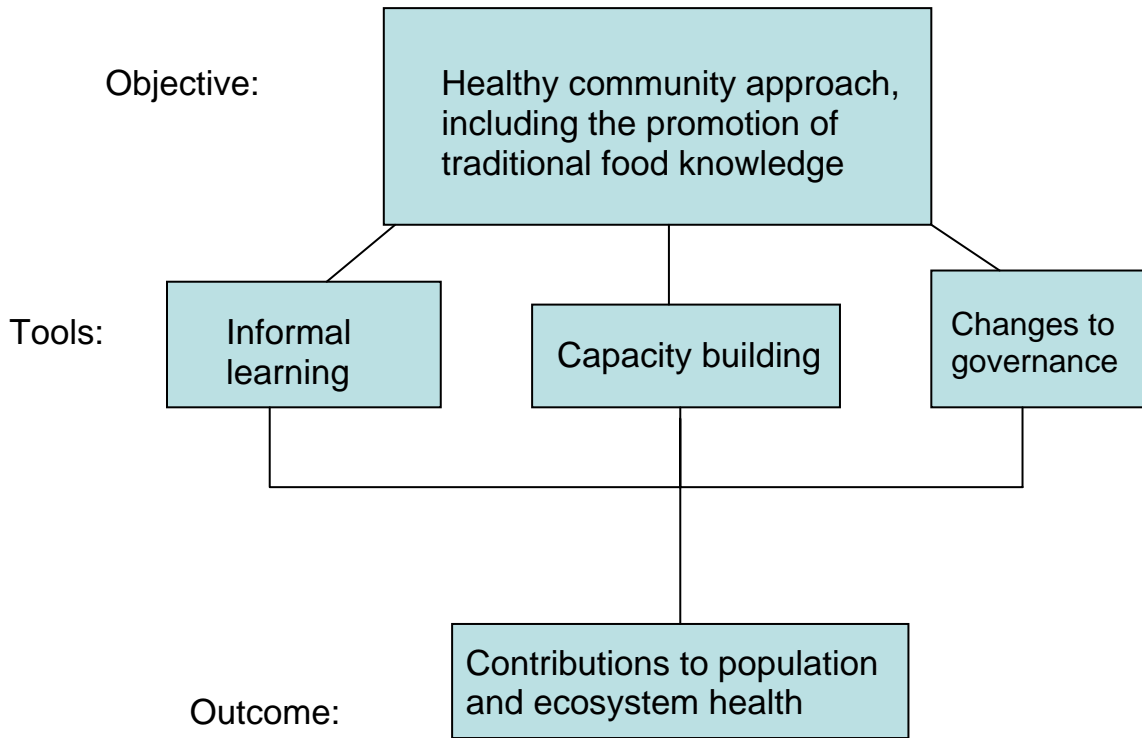


Figure 1: Ecological perspective of human health (Hancock, 1985)

Hancock's "mandala of public health" model defines individuals as nested within the biophysical and social environment (Hancock, 1985). It encompasses the reality of the social and the biological aspects of our world and points broadly to various scales where interaction between these two areas can take place. The human-made environment lies in the same sphere as the community, highlighting the link between the social community and the local environment. At the largest scale of the mandala, the biosphere and culture co-exist illustrating the interplay between the planet and human civilization. The biosphere is described as "the ultimate determinant of our health" and its limits and integrity to be respected for our own health's sake (Hancock, 2000). Cultural norms are described by Hancock as a key determinant of how we approach health (for example, using the productionist paradigm as opposed to ecosystem health approach). There are interactions between these levels; and, the model illustrates how the positive interaction of many different elements is required for health (Hancock, 1985).

Hancock's framework is useful as a starting point for delineating the determinants of health that relate to traditional food knowledge. Education and governance are important to include as drivers of the progression towards health. (Hancock, Labonte et al. 1999) For this research, these drivers are recognized as "informal learning", "capacity building" and "changes to governance". The drivers and the determinants of health support the development of criteria to inform the role of traditional food knowledge in health promotion. The determinants and drivers act as indicator categories to develop questions for the primary data collection.

The research framework is combined with the ecological vision of health to analyze traditional food knowledge on various levels from the individual within a family, to the community, municipality and wider food system.



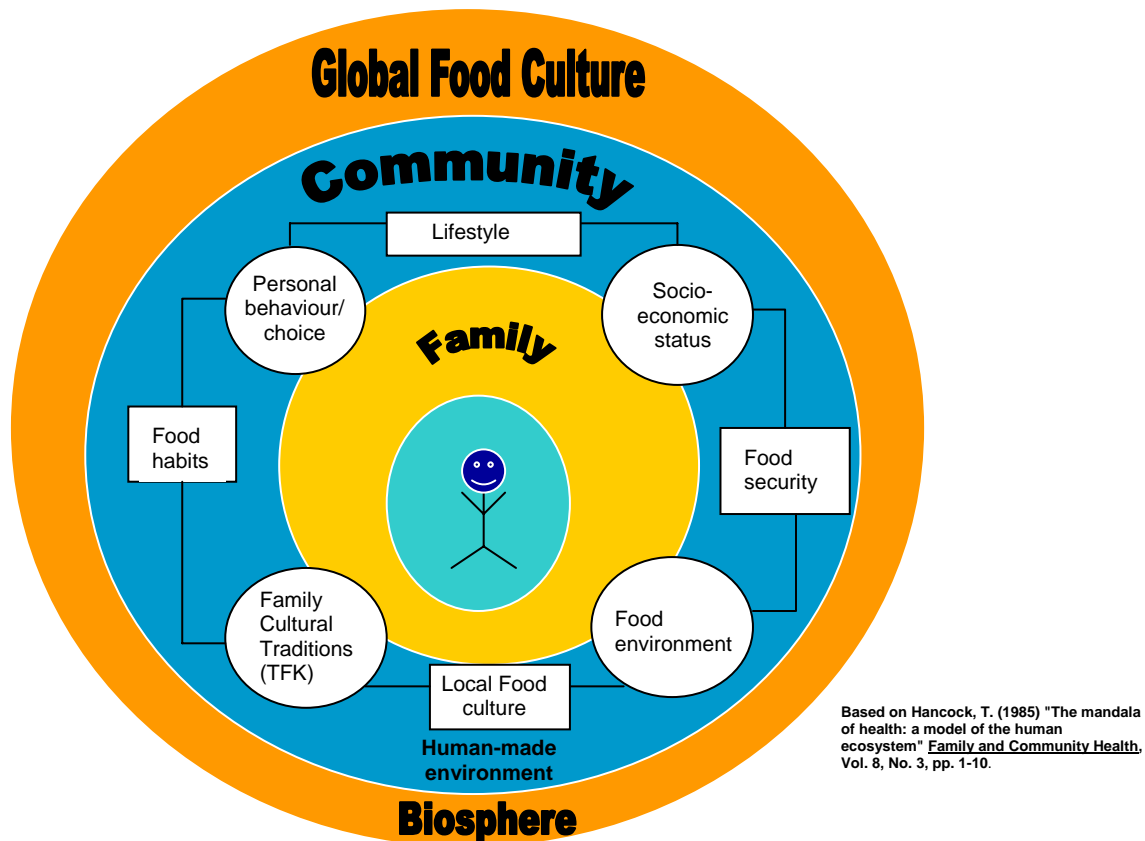
**Figure 2: Research framework**

The literature provides the theoretical foundation for the case study and supports the definition of the concept of traditional food knowledge. The definition of traditional food knowledge is important in a general sense to delineate an essential phenomenon we are examining, but also to learn how it to continue its transmission among diverse populations such as Canadian suburbs. The criteria of healthy communities which include traditional food knowledge are important in helping communities recognize the social and ecological value of food and its associated wisdom passed on from generation to generation. By understanding the characteristics that define traditional food knowledge, criteria has been formulated to test its presence and to evaluate the opportunities and barriers to ensure its transmission.

Criteria of a healthy community that respects traditional food knowledge would include:

Healthy, participatory, local food culture	Informal learning of healthy food habits and traditions	Community food security	Community capacity for healthy lifestyles
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These criteria were identified by analyzing the factors that can lead to variations in healthy food provisioning and cultural learning based on the literature review and the discussions and interviews with various actors in Mississauga, Ontario. The criteria were selected as broad categories that could encompass household variation in food provisioning and which connected to healthy community outcomes. Hancock has a similar model that relates to health care. (Hancock 1985) These criteria represent elements for TFK transmission which ensure for cultural continuity, ecological sustainability and improved capacity of citizens through equitable and sustainable means. Figure 3 illustrates how these criteria fit in with the ecological vision of a healthy community.



**Figure 3: Traditional food knowledge and human-ecosystem health**

The first criterion is “healthy, participatory local food culture” which refers to the food cultures that can be found in households. When family cultures are aggregated in a locale, a local food culture emerges. Health and participation is emphasized to ensure that a food culture is one in which citizens are empowered to express their own cultural backgrounds rather than passively consuming cheap, unhealthy, mass-produced food.

The second criterion is “informal learning of healthy food habits and traditions” which emphasizes that the food knowledge can be learned in a number of different settings. Some young people may learn at home, others from community members. Citizens of any age may

learn about other traditions and food habits in venues where they can exchange knowledge such as within a community garden or kitchen.

The third criterion is “community food security” which focuses on the accessibility to culturally appropriate, safe and nutritious food. Apart from the quantity of food, it includes characteristics such as social equity, ecological sustainability and cultural relevance.

Community Food Security is a strategy for ensuring secure access to adequate amounts of safe, nutritious, culturally appropriate food for everyone, produced in an environmentally sustainable way, and provided in a manner that promotes human dignity. (Desjardins, Roberts et al. 2002)

A precursor to community food security is food sovereignty, a concept that relates to the right of people to determine what food is consumed and how it is produced. (Via Campesina 2003, Menezes 2001)

The fourth criterion is “community capacity for healthy lifestyles” which encompasses the other aspects of health, such as physical activity and social activities for community cohesion. There is always personal choice involved in the level of participation in these activities, but they should not be precluded as a result of socio-economic status. Consideration for healthy lifestyles may take the form of healthy urban design characterized by such qualities as walkability and access to social community spaces, (e.g. community gardens and neighbourhood markets).

These criteria for healthy communities that seek to foster traditional food knowledge are positioned at the community level, and yet are each associated with smaller scale factors (at the individual and family/household levels) as well as larger scale factors (global food culture and the biosphere). The case study in Mississauga, Ontario and the literature review will illustrate how traditional food knowledge relates to these factors.

## **1.6 Research Methodology**

The research goal is to foster a fuller understanding of the role food traditions play in the development of healthy communities and to uncover further lines of inquiry and action. This study uses an exploratory single case study approach to the concept of traditional food knowledge through qualitative analysis. (Robson 2002, p.90) Case study methodology will support inquiry into “a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.” (Yin 2003, p.13) This is relevant to traditional food knowledge which may be in decline due to a context that does not support or value its practice and transmission.

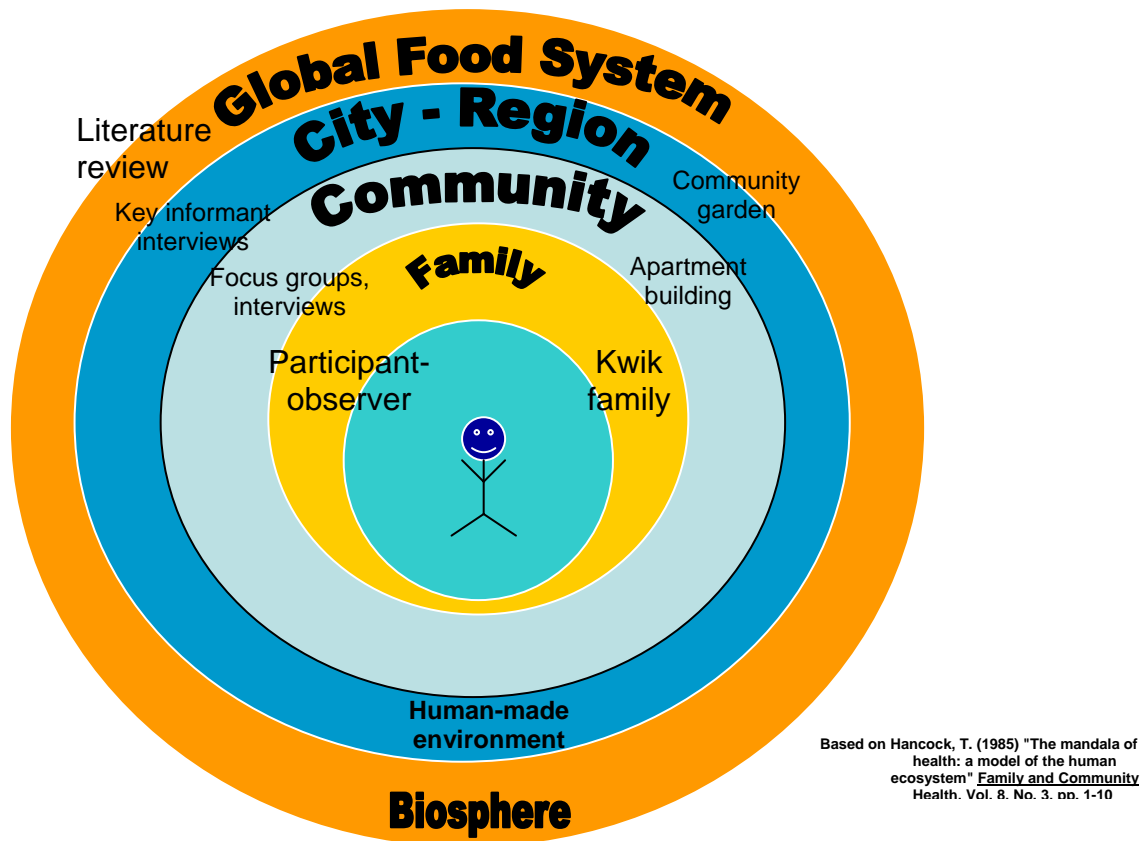
As described by Hancock’s “Mandala of Health”, ecosystem health requires a look at the complexity of interactions among variables to reach community health goals. (Hancock, 1985). A case study can cope with this complexity through multiple sources of evidence and a basis of theoretical propositions. (Yin 2003, p.13-14) The case study, as a methodology, supports the exploration of the notion of traditional food knowledge in a suburban context, specifically, Mississauga, Ontario.

Ethnography is the qualitative approach used to understand traditional food knowledge and its transmission as a cultural phenomenon. James P. Spradley (1979) describes culture as “acquired knowledge that people use to interpret experience and generate social behaviour” (p. 5) He also describes culture as a system of meaningful symbols. The meaning can often be hidden largely within insider tacit knowledge which cannot be talked about or expressed in direct ways. The ethnographer can discern inferences through observation of behaviour, ethnographic interviews with insiders, and by studying related artifacts. (Spradley 1979) As a subdiscipline of descriptive anthropology, ethnography is appropriate for exploring TFK as it

“refers to a description of a people and the cultural basis of their peoplehood.” (Vidich and Lyman 1994)

The strength of the research is in the use of various techniques to support a systematic exploration of the concept in theory through the literature and in practice through the case study. The research questions are explored at various levels. First the individual is analyzed as a unit embedded in a family/household. Personal narrative is an outcome of data collected by the author as a participant-observer in informal family cooking lessons. The personal narrative is used to position the author within the research and to provide the author’s perspective and reflection on food culture within the family with which she has an “ancestry of experience”. (Berkes, 1999) Second, the community is analyzed at the level of a neighbourhood apartment building. Focus groups and semi-structured interviews with Indonesian-Chinese Canadians offer perspectives from two different generational standpoints. Third, the municipal level support for TFK through governance institutions is analysed. Key informant interviews are conducted with individuals involved in municipal government, non-governmental organizations, and a food business to understand their role and influence on the barriers and opportunities for promoting traditional food knowledge. The largest scale, the global food system, is analyzed through a literature review. This literature review provides the necessary background context for the case study with regards to the history of food tradition transmission and the essential elements to ensure TFK transmission continues. The study methodology and research sites are summarized in Figure 4.





**Figure 4: Research methodology using ecological perspective of human health (Hancock, 1985)**

New Canadian elders of Indonesian-Chinese origin were recruited at a selected low-income apartment building in Mississauga, Ontario as bazaars and potlucks attended by the author’s grandmother demonstrated some evidence of traditional food practices and a gathering point for people of Indonesian-Chinese origin. Elders and younger generations were recruited: unsuccessfully through a poster announcement, however, the snowball method through my grandmother proved much more successful. Eight elders gathered for a focus group in the fall of 2008 to discuss the importance of traditional food knowledge and its transmission. Linguistic and cultural translation was provided by Julie Kwik. Through my family

connections, I was also able to recruit four participants of younger generations (mostly middle-aged, 35-64 years) for interviews.

The focus group and interview methods were advantageous to draw out thoughts and opinions that could not be found in simple observation or even participation in events. The recruitment proved successful, however, the participation is biased towards those connected through friendships and relationships to my relatives. Nevertheless, the perspectives revealed diversity among the origins of these Indonesian-Chinese first-generation Canadians based on socioeconomic class and regions in Indonesia.

At the municipal level, five interviews were conducted with governance actors from various sectors to learn about the food initiatives in Mississauga, as well as the opportunities and challenges for TFK promotion. The interviews were conducted with the following individuals:

- Anonymous, South Asian resident of Peel
- Community Garden Coordinator, EcoSource Mississauga & Multicultural Inter-Agency Group of Peel
- Newcomer Farmstart-up Coordinator, Farmstart
- Anonymous, Low-income apartment building manager
- Mid-sized South Asian Food Entrepreneur located in Halton (near Peel)

These interviews revealed the gaps and the opportunities in Mississauga, Ontario to develop an enabling environment for traditional food knowledge. The interview data in this area is weakened by the lack of participants from the social services side. Many specific information gaps were filled by speaking with additional experts from Waterloo Region who

could speak to nutrition and community governance issues that related to TFK transmission and social equity specifically.

The following table provides the details of the participants in the focus group and interviews and the experts consulted.

**Table 1: Methods and Participants**

Methods	Participant Name	Origin/ Organization
Focus group	E.M.	Indonesian-Chinese, 1st generation Canadian
	I.B.	Indonesian-Chinese, 1st generation Canadian
	J.P.	Indonesian-Chinese, 1st generation Canadian
	P.W.	Indonesian-Chinese, 1st generation Canadian
	N.T.	Indonesian-Chinese, 1st generation Canadian
	R.R.	Indonesian-Chinese, 1st generation Canadian
	C.Y.	Indonesian-Chinese, 1st generation Canadian
	Triasih Elmadya	Indonesian-Chinese, 1st generation Canadian
Interviews: semi-structured	R.K.	Indonesian-Chinese, 1st generation Canadian
	Marisca Lewis	Indonesian-Chinese, 1st generation Canadian
	Meliana Wibowo	Indonesian, 1st generation Canadian
	N.W.	Indonesian-Chinese, 1st generation Canadian
	Anonymous	South Asian resident of Peel
	Carolyn Bailey	EcoSource Mississauga & Multicultural Inter-Agency Group of Peel - Community Garden Coordinator
	Newcomer Farmstart-up Coordinator	FarmStart
	Manager	Low-income apartment building in Mississauga
	Preena Chauhan	Mid-sized South Asian Food Entrepreneur
Expert consultation	Ellen Desjardins	Nutritionist in Waterloo Region
	Dr. Neil Arya	Adjunct professor in Environment and Resource Studies
	Dr. Greg Michalenko	Specialist in sustainability and wild regional foods
	Julie and Ferry Kwik	Cultural translation support

## **1.7 Organization of the thesis**

The thesis is organized into six chapters. Each chapter begins with a personal narrative to present the author’s personal perspective as she learned about food and family culture; these examples from personal experiences offer anecdotal stories that help to illustrate some of the

broader themes of the thesis. The first chapter begins with the purpose, problem statement, formal rationale and methodology to provide the necessary background to the study. The second chapter is the critical theoretical piece and defines traditional food knowledge (TFK) and highlights its significance for healthy communities. The ways by which TFK is transmitted through cultural teaching and learning is described in order to understand the process and the enabling factors. A variety of influences on TFK transmission from the global food system to societal changes are outlined, followed by specific considerations for immigrant populations. This provides the theoretical basis for the following chapters. Chapters 3 and 4 ground the theory. Chapter 3 provides the results from focus groups and interviews with Indonesian-Chinese participants in Peel region in order to describe the significance of traditional food at home and among friends. Chapter 4 explores the environment for food provisioning in Mississauga, Ontario within the Region of Peel with consideration of the opportunities for the practice and transmission of traditional food knowledge brought by immigrants. This analysis is supported by key informant interviews that were drawn from a variety of sectors in Mississauga and the Region of Peel. Chapter 5 provides practical tools for change to improve TFK recognition and transmission in Peel region through capacity building, informal learning and changes to governance. Finally, the thesis concludes with responses to the original problem questions, highlights the contributions of this thesis to the literature, and provides recommendations for further research.

## **2.0 Literature Review: Defining Traditional Food Knowledge and its significance**

*I have started to make appointments with my grandmother to learn some of her secret family recipes. I have to book early to avoid disappointment as her social calendar fills up a week ahead. I choose a couple of recipes to learn and others are recommended as we meet every few months: black soup, lumpur, lodeh, djentik manis...*

*The first step is a trip to the Chinese food store to find the ingredients. Many of the items I do not recognize or would have known existed, like kluwak nuts which come in a can or galangal leaves. Some ingredients are found in my mom's fridge or nestled in the spice cupboard.*

*When we set up in the kitchen, my grandmother does not refer to any written recipes. She simply begins to assemble things without a second thought: boiling water, chopping things and adding them to the pot. I try to catch up with my pen and paper, peppering her with questions: "What is that? How much did you add? How much is that – a tablespoon? Mom, how do you spell that? How long do you boil it for?"*

*The process can require some tactile skills such as folding Indonesian cake pieces into banana leaves to make a symmetrical triangle. I won't be able to write this down. My grandmother and mother coach me, sometimes re-doing my work. They both also know how things should taste in the middle and most importantly at the end of the process. Their presence assures me that the result will be edible and I will not have to devote more than a day to it from selection of ingredients to consumption. Without these two women to guide me, I doubt I would have attempted this myself. I will need to practice to keep this knowledge alive in my memory bank.*

### **2.1 Background discussion**

Traditional food knowledge (TFK) is a concept that has been coined here to acknowledge the importance of the relationship between traditional culture and healthy communities.

Without TFK, the ability for individuals, families and communities to provide quality, healthy food for themselves is seriously undermined. TFK transmission is a socialization opportunity that can empower individuals and allow cultural communities to sustain themselves.

In this way, TFK is an important component of healthy communities. Healthy communities require an expanded view of health beyond the individual to encompass the

complex interaction of various determinants of health, including social, ecological and economic determinants. (Hancock 1985) TFK has been overlooked, but plays an important role in improving food security, enhancing individual and community capacity and promoting biocultural diversity.

Despite the benefits, as with many traditional cultural practices, TFK is being undermined by forces that prevent its transmission to younger generations. A continuity gap is growing as the process of de-skilling in a modern commoditized food system and societal fragmentation facilitates convenient consumption over meaningful localized production and provisioning. (Jaffe and Gertler, 2006) To immigrant cultures, such as examined in this study, the maintenance of TFK is even more important because it provides a self-identifiable cultural bridge between the geography of their past and their present.

## ***2.2 Defining Traditional Food Knowledge***

### **2.2.1 The necessity of food knowledge**

Nutrition is our primary biological process for survival, and yet, our appetite for food is not satiated by mere caloric intake. In social anthropology, functionalists and structuralists have studied how food manifests both culture and communication in our social groups. (Goody 1982) Beyond these social groups, food also connects us to the history of global trade and commerce and to the local places where each edible ingredient grows. Food represents such a busy intersection of time, people, and places since the process of food provisioning has become quite intricate. One way of making sense of this complex topic is to consider food in terms of phases of production and consumption. As Goody suggests : “the study of the process of providing and transforming food covers four main areas, that of growing, allocating, cooking

and eating, which represent the phases of production, distribution [and storing], preparation and consumption...to which can be added a fifth phase, often forgotten, disposal.” (Goody 1982, p.37) Goode (1989) is more specific about the factors influencing food choice expanding the phases to “six steps in the food-flow process: production, access, acquisition, preparation, presentation, and ingestion. Each of these is affected differently by structural, situational, and cultural variables.” Each of these phases requires specific skills and knowledge to be successful in terms of the provision of basic foods. Another phase could be made explicit – the social transmission of these skills. This cultural education phase may not be immediately critical to providing food. Over time, however, it is critical for cultural survival and capacity building to see these skills and knowledge transmitted to new generations of food providers. Goode (1989) and Farb (1980, p.190) imply that there is a pattern of food events and eating behaviour to each culture’s cuisine; but they stop short of addressing it as a necessary phase. Perhaps it is only necessary if the goal is to continue these particular food provisioning patterns for generations. Freedman underlines the importance of this cultural bridging:

Human culture, the focus of anthropological study, may be defined compositely as the sum total of a group’s learned, shared behavior. This phenomenon of consistent transmittal, the sharing of experience through time, is apparently unique to our species and is also a basic type of positively reinforcing social behavior. From it arose the possibility for individuals and cultures to adapt to the natural environment and to begin the process of change and development some scholars have termed cultural evolution.” (Freedman 1977)

Food provisioning systems have evolved. And although food knowledge within the food provisioning spectrum may have narrowed to the preparation and consumption phase in most of North America and the urbanized world, traditional food knowledge in each phase is still worthy of recognition and definition. Traditional food knowledge represents this collective wisdom around food provisioning that is widely dispersed among the diverse cultures that have fed generations of people.

### **2.2.2 Traditional food knowledge: choice words**

Knowledge that has been honed by generations of people surviving in particular environments may be recognized intuitively as something of value. It is only very recently, however, that the academic community has recognized it as knowledge worthy of study. The terms, traditional ecological knowledge and indigenous knowledge, were first used in widespread Western communication in the late 1970s and early 1980s (Berkes 1999, p.4) (Warren 2001, p.446). Indigenous knowledge is defined as “the knowledge generated by communities and ethnic groups that usually pass the knowledge from one generation to the next through oral transmission; it is focused on the microenvironment in which it is generated.” (Warren 2001) Traditional ecological knowledge (TEK) is a branch of indigenous knowledge and likewise traditional food knowledge (TFK) can be viewed as an extension of TEK.

Traditional ecological knowledge and indigenous knowledge offer a window into the challenges of choosing appropriate words to define traditional food knowledge. Berkes (1999, p.5) notes the difficulty in using the term ‘traditional’ as this can seem contradictory to change, despite the fact that there are dynamic aspects in traditions; a problem that can be avoided by using ‘indigenous’. However, the problem with using ‘indigenous’ with reference to food knowledge is that food knowledge is not necessarily native to a landscape or bioregion, and can be transplanted to a specific place: an example being immigrants who bring their food traditions to Canada. Friedmann points out that a biocultural diaspora has existed for centuries: transplanted tomatoes from the Aztecs to Italy are no less deserving of cultural recognition in Italy than in the Americas. (Friedmann 2005) Traditional ecological knowledge is built from societies with “historical continuity in resource use on a particular land.” (Berkes, 1999, p. 8) Berkes describes how these can be broadly seen in indigenous societies, but not exclusively as



shown by inshore cod fishers of Newfoundland, for example. (Neis, 1992 cited by Berkes, 1999 p. 8) 'Traditional' still holds as a relevant word as Emery, 1997, (cited in Berkes 1999, p.5) found that Inuit (Eskimos) agreed that 'traditional knowledge' related to such meanings as:

practical common sense; teachings and experience passed through generations; knowing the country; being rooted in spiritual health; a way of life; an authority system of rules for resource use; respect; obligation to share; wisdom in using knowledge; using heart and head together.

Furthermore, "traditional" is used by Kuhnlein to define indigenous food systems: "Traditional food systems of indigenous peoples can be defined to items that are from the local, natural environment that are culturally acceptable. It also includes the sociocultural meanings, acquisition/processing techniques, use, composition, and nutritional consequences for the people using the food." (Kuhnlein and Receveur 1996, p.417) The word "traditional" communicates the passage of knowledge through generations without limiting the population in question to be indigenous to the geographic area.

M.K. Watson suggests that Kuhnlein's 'traditional food systems' are better conceptualized as foodways to recognize that food traditions are able to thrive beyond a specific locale. Anchoring food traditions to specific places ignores the adaptability of traditions in other places, such as urban areas. Massey's theories enable identities and place to stretch beyond localized boundaries, as they incorporate social relations and connections to a range of different places. (Massey 1994; Massey 2004) Foodways, as defined by Counihan, are "behaviors and beliefs surrounding the production, distribution and consumption of food." (Counihan, Carole M. 1999, p. 6). This definition encompasses the ability for food and people to migrate and still 'fortify identity construction'. (Watson 2007, p.133)

The term “intangible cultural heritage” may be an example of widening this definition without limiting it to an indigenous culture or ethnic group.

Intangible Cultural Heritage, as defined by the UNESCO Convention, consists of non-physical characteristics, practices, representations, expressions as well as knowledge and skills that identify and define a group or civilization.(UNESCO 2005)

Intangible cultural heritage is very closely related to indigenous knowledge as both involve generational transmission of knowledge and both are responsive to changes in the environment. (Warren 2001) (Berkes 1999; UNESCO 2005) Both intangible cultural heritage and indigenous knowledge can provide a sense of identity and cultural continuity as they contribute to cultural diversity. Foodways and related social practices are cultural manifestations of intangible cultural heritage. (UNESCO 2005) These umbrella terms provide a broad backdrop for why traditional food knowledge is important. The first essential step in recognizing and discussing traditional food knowledge is to name the phenomenon and define its boundaries:

**For the purpose of this study, traditional food knowledge will be defined as cumulative teachings and experience gained from the process of sharing foodways from generation to generation.**

### ***2.3 Traditional Food Knowledge and Healthy Communities***

The role of traditional food knowledge in healthy communities is hidden away from economic measurement as it is often not a part of the formal economy. Nonetheless, TFK contributes to and connects food elements of the ecological and social spheres of a community. Identifying this role is important to ensure TFK can continue before being marginalized and lost.

As described in Chapter 1, Hancock introduced healthy communities as a way to show the complex interactions of determinants of health to contribute to a healthy context in which individuals can develop. The benefits that can be connected to traditional food knowledge

include: 1. improved food security, 2. individual and community capacity building and 3. the promotion of biocultural diversity. More specifically, with respect to this particular study, TFK can be particularly important in Canada's multicultural society, conferring benefits to immigrant populations, who rely quite heavily on their traditional foods to maintain cultural and physical health.

Despite the importance of food traditions to healthy communities, food security interventions have focused on ensuring sufficient quantity, rather than quality. (Lang, 2004, p.28-33; Heasman and Lang, 2006) However, in North America, the quality of food is increasingly becoming a concern as many North Americans are suffering from food-related disease. Many chronic diseases relate to overconsumption of foods with low nutrient value. (Lang and Heasman 2004) More and more commercial foods are accessible compared to fresh ingredients. (Patel 2007, p.244) Many aboriginal and immigrants, in particular, may find the transition to commercial, processed foods an unhealthy turn away from healthy traditions of fresh, homemade meals. (Agriculture and Agri-Food Canada 1998; Dyck and Dossa 2007; Liou and Bauer 2007; CBC Newsworld 2008) Traditional foods are usually based on dietary diversity for optimal nutrition which in turn translates to biodiversity. (Wahlqvist and Specht 1998; Johns and Sthapit 2004)

Even when traditional food does not provide optimal health conditions, understanding traditional foodways from various cultures can help nutritionists' advice gain acceptance (Pan, Dixon et al. 1999; Hyman, Guruge et al. 2002) Structuralist Mary Douglas (1984) emphasizes that if we do not understand the social meaning of food for individuals, then we cannot expect to change their behavior. (cited in Locher, Yoels et al, 2005, p. 292) Nutritionists, themselves, have begun to learn the important connections that can be made to biodiversity and ecosystem

health. (Wahlqvist and Specht 1998; Wahlqvist 2004) Johns and Sthapit note how biodiversity can be harnessed in developing countries with implications for developed ones: “Although extensive diversity may not be necessary for humans to satisfy basic nutritional needs, within a sociocultural context traditional biodiversity use is a potentially powerful vehicle for maintaining and enhancing health-positive behaviours.” (Johns and Sthapit 2004, p.144)

Food security plays a role in contributing to social determinants of health such as social inclusion, something that can be particularly important to people undergoing periods of transition, displacement and isolation. Koc and Welsh (2002) assert that “Food security is a part of ‘feeling at home’” (p. 47). Sharing food preparation tasks and meals can be an opportunity to provide emotional support and comfort. (Van Esterik 1999) Winson describes the inclusive nature of sharing food: “The rituals of food preparation and communal food consumption have played a central, integrative role in human society. They have formed an essential means of bringing people together – of establishing human existence as a social existence.” (Winson, 1992, p. 2) Examples of this reunion of people are at meals marking special occasions, food processing and harvest, and intergenerational sharing of recipes and culinary skills. Comfort foods provide associations to these times when people were cared for or moments of bonding while preparing food. (Locher, Yoels et al. 2005) Since comfort foods can alter moods in such a powerful way, there are arguments for including comfort foods for hospital patients, and new immigrants. (Tanabe 2006; Lessa and Rocha 2007) Indeed, consuming particular foods can provide an individual with “control over the body, the mind and therefore over identity. . . . it is the first and probably the main means of intervening in the body, the favored instrument of control over the self.” (Fischler 1988, p.280) This sense of

control or comfort derives from a sense of the familiar and the memory of times associated with a sense of belonging.

Food is also important for its symbolic and cultural significance. Particular foods can be seen as an artifact of one's cultural identity and thus provide a strong marker of one's connection to a cultural group. Mary Douglas, describes how cultural beliefs manifest in ordinary meals: “. . . The meaning of a meal is found in a system of repeated analogies. Each meal carries something of the meaning of the other meals; each meal is a structured social event, which structures others in its own image.” (Douglas 1999, p.240) As an example of this, Searles studies the symbolic power of the Inuit system of classification of food in empowerment and fortifying their ethnic identity. (Searles 2002) These identities are not impermeable and Gabaccia describes the “multi-ethnic” identity of Americans as they whet their curiosity for “foreign” culinary adventure amid fast food options. (Gabaccia 1998) Furthermore, Ferrero acknowledges that the appetite for food outside of our usual cultural communities can build cross-cultural solidarity in an increasingly multicultural and transnational world,: “[ethnic food]...must be seen also as a device to establish close ties within a community: ties that blur ethnic and social boundaries and conceptions of space.” (Ferrero 2002, p.215) Koc and Welsh go further and speak of how diverse cuisines can expand ethnocentrism. (Koc and Welsh 2002) Traditional food provides a concrete expression of personal identity as well as a sense of belonging to a larger community.

Related to social determinants of health is the concept of enhancing one's capacity to contribute skills to the community and community recognition of these assets. Developing personal skills is one of the five actions for health promotion outlined by the World Health Organization (World Health Organization 1986). Indeed these skills are critical to feeling a

sense of self-efficacy, something that is critical in times of household food shortage. Patricia Rojas, who depends at times on the food bank in Toronto, has learned cooking skills from her mother. "Some of the people at the bank, when they get the lentils, don't know what to do with them,' she says. She points to an onion. 'I'll use that for the spaghetti sauce. If you cook, you're okay.'" (No author given, Toronto Star, 2007) Personal skills can be gained by learning even simple traditional foods and the basic kitchen and crop growing skills.

Women's accomplishments, in general, have not been well-documented or acknowledged historically, and as such, the societal importance of food traditions have not received due attention. This is an important oversight because there are considerable individual assets in the community that are associated with traditional food knowledge. Appropriate recognition of the value of TFK could play a role community building by connecting the capacities of individuals. As Kretzmann and McKnight observe, "...the most powerful communities are those that can identify the gifts of those people at the margins and pull them into community life." (Kretzmann and McKnight 1993, p.28) Conversely Shiva and Dankelman describe what can happen if the acknowledgment of women's role in agroecology in the Global South is left unacknowledged:

The deskilling and de-intellectualizing of women, through the ignorance of their contribution to management, knowledge and experience of the agro-ecosystem, results in a loss of women's knowledge and intellectual integrity with regard to forestry, agriculture, plant genetic resources and animal husbandry. Women also lose their status and decision-making power in the social system, breaking down their sense of dignity, self-respect and self-determination. (Shiva and Dankelman 1992)

Recognition of the value of women's contribution may be a critical step in preserving these traditions within communities.

In the Global North, women are also assumed to have the nurturing role of food provisioning. (Van Esterik 1999) However, the role is not valued in a formal economy and has

been source of gender inequity with regards to household tasks. This inequity is sometimes characterized as subordination in a male-dominated society. (DeVault 1991, p.232-233) The response to empowering women, however, can be more nuanced than a total disassociation from culinary knowledge and skills. Voski Avakian discusses the value of looking at the connection between women and food with fresh eyes: “Because cooking has been conceptualized as part of our oppression, ‘liberation’ has often meant freedom from being connected to food...”(Voksi Avakian 2005, p.5) Voski Avakian argues that this would further conceal the domestic efforts and creativity of women that has been a part of the invisible and invaluable labour of women. Indeed, various narratives reveal ways in which “women have forged spaces within that oppression. Cooking becomes a vehicle for artistic expression, a source of sensual pleasure, an opportunity for resistance and even power.” (2005, p. 6) Preserving traditional food knowledge may be a way to share tasks and to reverse the dismissal of household and nurturing work. (Van Esterik 1999, p.160)

The preservation of traditional food knowledge is not only important for human empowerment and nutrition, but also has implications for broad human ecological concerns such as biodiversity. In the past decade, there has been much interest in increasing biocultural diversity, “the total variety exhibited by the world’s natural and cultural systems.” (Maffi 2001) Biodiversity is the cradle of raw materials for food and the “key to ecological integrity”. (Nazarea 1998, p.2-3) Folke et al. (1996) explain that economic and human activity depend on biodiversity as insurance for ecosystems to function with resilience to changes. Protecting biodiversity as a basis for resilience protects human welfare. Biodiversity conservation should extend beyond protected parks to policies and reforms that defend sustainable human activity. For example, food production that works in tandem with ecological processes supports future

activity. Large-scale monoculture agriculture is cited as simplified ecosystems with low biodiversity and low resilience. (Folke, Hollings et al. 1996; United Nations Environment Program 2007) As traditional diets depend on dietary diversity, (Johns and Sthapit 2004, p.145) they may play a role in protecting biodiversity. (Wahlqvist and Specht 1998; United Nations Environment Program 2007) This connection between cultural and biological diversity is illustrated by Victor Toledo description about his native Mexico:

...in a country that is characterized by cultural diversity of its rural inhabitants, it is difficult to design a conservation policy without taking into account the cultural dimensions; the profound relationship that has existed since time immemorial between nature and culture...Each species of plant, groups of animals, type of soil and landscape nearly always has a corresponding linguistic expression, a category of knowledge, a practical use, a religious meaning, a role in individual and collective vitality. To safeguard the natural heritage of the country without safeguarding the cultures that have given it feeling is to reduce nature to something beyond recognition; static, distant, nearly dead (Nabhan, House et al. 1991, p. 127)

Traditional food knowledge benefits emerge at all levels of healthy communities. It is a cultural expression that can manifest itself on every scale: from eating to the production of traditional agricultural systems. In between these two levels are activities at the household and community-level which is where TFK transmission to younger generations occurs.

## ***2.4 How do we learn traditional food knowledge?***

There is scant literature on cultural food transmission in North America. The literature alludes to cultural transmission, but few studies have actually researched the process. The research challenges are significant for traditional food knowledge as it is tacit knowledge that is an inextricable part of daily activities. (Livingstone 2006: 217) With these qualities, measurement, observation and understanding require long-term and involved research. Nevertheless, the literature consistently demonstrates the conclusion that food knowledge is learned through cultural education. Haviland (1974) outlines three categories for the process of cultural



transmission, or enculturation: cultural cues or nonverbal behavior, informal education, and formal education. (cited in Bass, 1979, p.6)

Cultural cues on a broad scale are derived from a dynamic cultural system composed of the family, educational system, philosophical system, technological system, economic system, mass media and political system (Bass 1979, p.8) Bass describes how these subsystems can influence each other and the total cultural system; their influence on an individual can vary according to one's life stage. Children may have gained cultural cues from family members, but as time passes cultural cues emerge from other sources: media, advertising, sponsorship, formal education, internet, peer groups, and formal education. (Lang and Heasman 2004, p. 197) Life changes, such as migration, can also demonstrate the influence of cultural cues: a study of migrant women creating healthy spaces in the home revealed that, in addition to the knowledge brought from countries of origin, women learned from doctors, children's schools, television and print media. (Dyck and Dossa 2007, p.696) Variation is not limited to a life stage or situation, but also the specific social unit under study (such as a nation, cultural or religious community, or household). Even within a social unit, many factors give rise to variation. (Goode 1989)

Informal education contains considerable variation since it is a self-directed initiative which allows it to emerge incidentally or in a planned manner in any number of settings. (Livingstone 2006) Much of our early food knowledge develops from home cultures and informal settings. Informal education of traditional food knowledge requires cultural teaching and learning as described by Maynard and Greenfield (2006). Cultural teaching transmits traditional food knowledge through experiential learning in social settings, in contrast to the individualistic bias that assumes learning occurs by an individual in isolation (Livingstone

2006, p. 216; Maynard 2006) The individual in isolation is an insufficient unit of study also because the focus is on collective knowledge. (Hager and Halliday 2006, p.143)

Traditional food knowledge requires tactile learning that goes beyond passive reading of written recipes. Through informal learning, each person uses multi-sensory experiences to develop a personal understanding of tastes and textures. Jaffe and Gertler describe this process:

Food production has traditionally been learned through apprenticeship, with children learning first-hand while their mothers cook. These skills are sentient, practical, and in some senses non-discursive forms of consciousness, with the learner acquiring a knack, or a feel, that comes with the continual engagement with the physical and sensual qualities of food...Cooking involves body knowledge, such as the movement required to whip an egg, knead biscuit dough, or skillfully cut a chicken. Putting together a meal involves juggling several tasks at once.” (2006, p. 147)

Yet not everyone gains the necessary skills to replicate flavours through food preparation, though some parents may attempt to influence children’s tastes by cooking with them. Casey and Rozin (1989) have found that parents’ most popular means of influencing their child’s food preferences include engaging them in food preparation and being positive role models in food choices. (Casey 1989) Parents, particularly mothers, play a primary role even as children reach adolescent ages. In researching the predictors of healthy dietary practices among adolescents, Backman et al. (2002) has shown an invaluable role for mothers in the promotion of healthy diets as “the mother was the most influential individual regarding healthful dietary behavior in adolescents.” Mothers are role models who themselves can be influenced by changes in societal priorities, (Dyck and Dossa 2007) one of which is formal education.

Formal education may be given a highest priority for children by their parents, but it is overshadowing the lessons of informal learning. In their study of traditional weaving transmission in Mexico, Maynard and Greenfield found that the level of the mother’s schooling dictated the level of weaving skill acquired by the child, even more than the level of schooling achieved by her child. It was, thus, less a function of time devoted to weaving; rather, it was

more a function of maternal schooling moving “socialization priorities away from indigenous informal weaving education”. (Maynard, p. 150) This corroborates Zent’s research that demonstrated the correlation between variables that represent acculturation such as bilingual ability in Spanish and degree of formal education with a decline in ethnobotanical knowledge variation among the Piaroa of Venezuela. (Zent 2001) In a similar vein, Lang describes a rapid cultural shift in the United Kingdom to a culture of non-cooking:

Food processors are delighted to see a growth in the number of homes in which people have never really cooked, with the result that children’s role models don’t teach their children how to cook. If you think of the evolution of cooking skills over the last 10,000 years, an immense cultural shift is taking place in decades. Schools and the state are colluding in this process, teaching computer skills, but not life skills...We no longer teach cooking skills to our children. They are taught a theoretical exercise of designing a snack bar, with the emphasis on packaging; thus a practical issue becomes a matter of theoretical culture. (Lang 1999)

This problem is being addressed in British schools, where the government announced the introduction of compulsory cooking classes for students aged 11 to 14 starting in September 2008. (Pignal 2008) Ontario, Canada is also considering bringing back applied programs for senior elementary students; these programs were cut in the 1990s. (The Record 2007) While these life skills are important to teach, schools may not have the resources (or the awareness) to teach the diversity of meals that are traditionally eaten by students. (Kuhnlein and Receveur 1996, p.422) In researching for a recent anthology of traditional American recipes of endangered foods, Nabhan noted the distinctive quality of food knowledge: "The daunting thing is that so much about American traditional foods comes out of people's heads and isn't in any book..." (Severson 2008) A synergy among food culture, informal and formal education may be necessary to pass on traditional food knowledge to younger generations.

## **2.5 The continuity gap in knowledge transmission**

The food provisioning phases described by Goody (1982) neglected to include the long-term essential step of cultural transmission. As described earlier it is an intangible cultural heritage which is not necessarily written down; but, built into the bones of everyday experience and in the mind of a group's collective memory. As this traditional food knowledge falls off, there is a continuity gap in cultural transmission.

Worldwide, there is a growing awareness that intangible cultural heritage is fragile and difficult to recreate when experienced practitioners are not able to pass on their skills and knowledge. UNESCO has a number of conventions to stem the current loss of this cultural heritage. (UNESCO 2007) Jaffe and Gertler assert a gap in knowledge that they refer to as consumer de-skilling:

There is a growing gap between what consumers may know and the information that is possessed and processed by the leading actors in the food chain. This translates to a growing gap in power and a growing capacity on the part of manufacturers and retailers to manipulate tastes and behaviours. (Jaffe and Gertler 2006, p. 145)

Jaffe and Gertler point to the de-skilling as consumers head into the grocery store and are unable neither to select for quality, nor to ensure nutrition. The de-skilling also occurs at the level of preparation skills which impedes the ability to eat foods that may be less processed and more affordable. (2007, p.155) It is important to acknowledge the growing gap in the areas of production and distribution – phases that dictate the local food environment. In each of these phases, the continuity gap is subject to structural factors linked with the global food system marketplace and societal shifts in the last century.

### **2.5.1 Provisioning from a global food system**

The global food system currently uses a productionist paradigm (Lang and Heasman 2004) which is designed for profit rather than food security and human development. Political-economic critiques demonstrate that each phase of the food provisioning process has been transformed by global food industry in the last century:

- production: decline of rural life and marginalization of small-scale farmers and processors;
- distribution access for consumer acquisition: consolidation and rise of food industry monopolies; food and marketing manipulation;
- preparation and consumption: de-skilling and alienation of people from the natural tastes, origins and pathway of their food.

(Winson 1992; Power 1999; Lang and Heasman 2004; Petrini 2005/2007)

Despite the presence of some alternative markets, global production and distribution controlled by a few actors commands the world's food system. (Lang and Heasman 2004) These large-scale operations are affecting the food environment and altering the traditional food stocks around the world. (United Nations Environment Program 2007)

### **2.5.1.1 Production and distribution in the global food system**

If we consider a food environment as the array of foods available and accessible in a particular neighbourhood, then we will realize that our food environments are human constructs. For most of the urbanized population, one's food environment has less to do with seasons and bioregion, than it does with distribution and retail decisions by an elite few. The reasons that control has been surrendered to this small group can be explained by the 'bottleneck' in the distribution chain. Companies that have the capital and financial resources to meet economies

of scale in the buying, shipping, processing and retailing of food are large. The power and size of these corporations are evident in their revenue streams: in any of the sales from retail, seed, food processing or agrochemicals, revenue outstrips the total GDP of Canada. (Patel 2007, p.12) Canadian government farm subsidies are biased toward large-scale industrial farms: The largest 30% (farms with over \$100,000 in sales) account for 87% of production and receive 75% of program payments. (Heasman and Lang 2006)

For the sake of profit and export, food production has become a complicated business. Where seeds could be reused and animal manure recycled into fertilizer, there are now specialized seed and agrochemicals. These new technologies can be socially and ecologically disruptive to agricultural traditions. (Shiva and Dankelman 1992) Monoculture and corporate seed control are examples of ways in which tight managerial control in the food system can dampen ecological diversity. (Anderson 2005, p.91) The UN Food and Agriculture Organization estimates that crop genetic resources are disappearing at the rate of 1-2% per year; and about 75% of the diversity of agricultural crops is estimated to have been lost since the beginning of the last century (UN FAO, 1993). This loss of biodiversity translates into a loss of dietary diversity that many traditional diets depend upon. (Johns and Sthapit, 2004, p. 145)

Consolidation in the retail sector has debilitating effects on the built environment and access to healthy food. Independent grocery establishments in the food retail subsector are disappearing as large retail/wholesale corporations are taking a larger market share. (Agriculture and Agri-Food Canada, 1999) As the neighbourhood sources are pushed out, access to food is rendered difficult to those not located near these retail supermarkets. The inequity is further underlined as those that live in low-income neighbourhoods tend to be

charged more and have foods that are predominately processed and fat saturated. (Patel, 2007, p. 244)

The variety of food products belies the actual limitations in choice. Every year the American food industry introduces 15,000 to 20,000 new products to store shelves.(Omahen 2003) Concurrently in developing countries, Johns and Sthapit (2004) assert that although there may be a variety of brands and formulation of processed foods available in modern marketplaces, the actual biological diversity may be limited as imports replace local foods (p.146). Nonetheless, there are cracks in which small and medium entrepreneurs can squeeze through: in the greater Toronto area, these smaller enterprises were the fastest growing in the food industry, since the mid-1990s, catering to consumer demand for local, fresh, ethnic, and fusion cuisine. Donald and Blay-Palmer argue that this creative food economy “offers an opportunity for a more socially inclusive and sustainable urban development model.” (2006, p. 1901) A food environment dictates the choice of available “raw” ingredients at a consumer’s disposal. However, retail choices become edicts for pre-processed consumption when the food system provides a saturation of only specific tools and information to cook and follow.

### **2.5.1.2 Preparation and consumption in the global food system**

While the majority of the world’s population is becoming urbanized, most will not have the opportunity to engage directly in the latter phases of production and distribution. Historically, women’s domestic work in food would have been considered production; however Jaffe and Gertler argue that this role has been usurped: “What housewives/homemakers/consumers did in shops, restaurants, and homes became defined as consumption, not production.” (p.149) The role of food provider was handed over to external producers and manufacturers; and, food knowledge and experience were also being undermined. The authority of women in meal

preparation was increasingly displaced by experts in home economics, nutrition and other food professionals. (Jaffe and Gertler, p. 149; Vileisis 2008, p.133, 137) Further, advertising filled the void of experiential knowledge and allowed manufactured food to finally break through the suspicion of most homemakers. (Vileisis 2008)

#### **2.5.1.2.1 The new food production experts**

Prior to the mid-nineteenth century, women were the family's source of production ranging from food to clothing. As industrialization began to take on the domestic roles, everyday tasks of housekeeping were less tangible and were certainly outside the formal economy of the industrial system. (Shapiro 1986, p.12-13) To establish domestic work as a relevant pursuit in this industrial world, women (who would be the harbingers of home economics classes) ushered in scientific knowledge as a more legitimate, progressive source of knowledge than traditional wisdom. (Vileisis, 2008, p. 137-138) This would be the germination of 'domestic science' where moral decay from poor housekeeping could be efficiently countered by household machines and manufactured prepared foods – over which traditional knowledge had little relevance or authority. (Shapiro, 1986, p. 4, 39-40; Vileisis, 2008 p. 137-141)

#### **2.5.1.2.2 A convenient and fast food environment for consumers**

It took some convincing for women to trust pre-made, manufactured food in the early 20<sup>th</sup> century. (Vileisis 2008) After WWII, however, manufactured food products boomed and new suburban lifestyles with women in paid labour outside the home provided the right mix of factors needed to gain the acceptance of 'convenience' foods. (Vileisis 2008, p.186)

Convenience food prepared by large-scale manufacturers may seem to fit the needs of busy consumers, but it may well be that convenience and fast food fits even better with the goals of



those who benefit from industrial manufacturers. Preserving food for long-distance transport and indeterminate shelf time requires the technology and types of food that could literally feed an army. Military missions have tested and brought home such culinary wonders as tinned meat (Thompson, Cowan et al. 1995, p.44) (Patel, 2007, p. 258), dehydrated mash potatoes and technologies related to supplying and heating food, such as meals in airtight containers. (Poindexter 1944, p. 17)(Patel, 2007, p. 263) The convenience of the supermarket belies other intentions. As food prices climbed with the entry into WWI, supermarkets cut overhead costs and customer-assisting staff (store clerks) with a self-service layout. Patel describes the patented design of Clarence Saunders who opened the transformative King Piggly Wiggly in 1916 as the “first consumption factory.” (2007, p. 220) The layout, much like a warehouse, allowed stock to shift easily while communicating only through its architecture and food labels. (Patel, p. 220-222) Labels could communicate much more than nutrition but could provide a sense of novelty and an infusion of any number of sentimental ideals. (Vileisis 2008, p.163)

Beyond supermarkets and labels, information and even needs were manufactured. Advertising could fill the void of traditional experiential knowledge by inculcating consumers through women’s magazines, television and advertisements geared toward children, including in schools. (Patel 2007; Vileisis 2008, p. 264-5) Prepared foods such as TV dinners are an example of manufactured needs: marketing took advantage of the advent of television where “the necessity of convenience [to meet prime time TV schedules] was created and sated...” (Patel, 2007, p. 264-5) TV dinners in the 1950s forecast a new way of eating. In 1999, six out of ten U.S. households watched TV while eating. (Roberts, Foehr et al. 1999) TV dinners are an example of “commodity fetishism” which Jaffe and Gertler define as “substituting

consumption for the satisfaction to be gained through creative production and social relations, and deflecting onto consumption powerful emotions and desires.” (2006, p. 154)

The most obvious success of advertising interference with traditional food knowledge is seen in the rates of breastfeeding. Jaffe and Gertler describe the rise of infant formula: “From the 1930s, the coincidence of scientific discourse with the rising corporate hegemony in food production advanced the view that industrial, scientifically prepared infant formula was ‘best for baby,’ and besides, more convenient and modest. (2006, p.150) The result has been a decline in breastfeeding rates; the lowest Canadian rate can be seen in Newfoundland, particularly in remote outport communities. A 1995 study in Newfoundland cited women’s reasons being inconvenience and embarrassment. (Matthews, Webber et al. 1995) This decline across North America is only starting to reverse with considerable educational, political and scientific effort. Jaffe and Gertler assert, “The loss of breastfeeding knowledge and skills, then, is the most fundamental aspect of consumer deskilling.” (2006, p.151) Kuhnlein and Receveur cite a similar phenomenon of infant formula replacement among aboriginals. (Kuhnlein and Receveur 1996, p.422) The industrial food system has created consumer instincts for food based on efficiency, instant gratification and uniform standards and these instincts inform our cravings and tastes.

#### **2.5.1.2.3 Homogenizing tastes in the global food system**

The industrial molding of taste can clearly start as early as the first baby bottle and continue into adulthood. The dominance of Western industrial flavour spills across national and cultural borders. The homogenizing effect of the globalization of Western culture is evident as a Western food system and diet is largely promoted. (Cannon, 2002 as cited in Johns & Sthapit,

2004, p. 145) Food aid to the Global South post-WWII was predominantly wheat which introduced a most expensive grain to countries that were previously self-sufficient. (Friedmann 1994, p. 259) Industrial manufactured food represents a streamlining of tastes where the diversity of food is “serialized” (Baudrillard 1996 [1968]) The homogenizing effect of culture has elicited governance responses such as the UNESCO Universal declaration on cultural diversity and the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage. (UNESCO 2005) Civil society responses are evident with the Slow Food movement which acts to preserve food traditions through “taste education” and the promotion of traditional regional foods. (Petrini 2005/2007) These responses begin to push back against a history of assimilation in North America to dominant culture.

Historically, culinary cultural assimilation may have been as overt as the 1884 Federal Anti-Potlatch Law for aboriginals or written more subtly to broad audiences of various ethnic traditions. North American home economists of the late nineteenth century sought to civilize palates by writing cookbooks that intended to impart healthy menus based on science and industrial principles, a revision of “old-fashioned” traditional foods. (Jaffe and Gertler, p. 149) Using the example of the “The Settlement Cookbook” by Mrs. Simon Kander, Jaffe and Gertler note its goal for assimilation of diverse tastes: “One of its primary targets was immigrant women, who needed instruction on the arts of the American kitchen. In addition to its many recipes for “American cuisine,” it offered standardized renditions of some of the most popular foods of the ethnic groups who would be using the cookbook. (Jaffe and Gertler, 2006, p. 159)

It may be argued that today more people have a broad acquaintance with a variety of foods, such as those from ethnic traditions; however, the interpretation of these cuisines may

be diluted to reach the greatest number of people. (Jaffe and Gertler, p. 154-5, Ferrero, 2002, p. 202) Jaffe and Gertler extend this to other areas of processed food:

Industry offers – and many people now choose – foods dominated by undistinguishable tastes of salt or sugar. The object is to develop and sell foods with no objectionable tastes, rather than to produce foods characterized by strong flavors that may only appeal to a limited segment of the market. The result is the widespread consumption of bland-tasting fast foods, which people buy because they are safe, predictable, and convenient... (2006 p. 154-155)

A final example of the sea change in taste preference is evident in the emotionally-embued, and very personally defined, comfort foods. Locher et al. (2005) cite a rise in comfort food consumption and a disparity in what is now considered comfort foods: the undergraduates that they investigated revealed that they would reach for commercial convenience foods while a generation or more ago, those foods would be homemade. (p. 287) The researchers relate the widespread need for comfort foods as a potential indicator of the difficulty that many feel in fortifying an identity in communities where individuals feel socially disconnected. (p. 274) The industrial channels of food provisioning have disconnected us from the social connections which are so essential in times of change.

## **2.5.2. Societal changes contributing to the continuity gap**

### **2.5.2.1. Societal changes in the household: women, work and the family**

Continuity of TFK requires time to get together to prepare a meal. In modern life this might not be deemed “productive” time. Rare is the time when family members are together; and meals eaten together are relegated to symbolic special occasions. (DeVault 1991) The cultural ideal of a meal is in conflict with the actual social organization of time and space. The troubling aspect is that this disconnection is experienced in our bodies.

Kristensen’s Danish study of eating patterns reveals that even in environments of food abundance, bodies may experience periods of food insecurity when trying to juggle different

time schedules and appetites, in situations of ongoing time pressures. (2006) The time crunch is felt most by women who are loaded with the normalized notion that everyday care work of feeding the family is the subordinate task of wives and mothers. (DeVault 1991, p.236) The awareness of the amount and value of work to reproduce the ritual of the family meal rose with women's increasing participation in work outside the home since WWII. (Vileisis, p. 187) This trend continues: time use data from 2005 reveal that Canadian women have among the highest employment rates in the world (81%). Women are also feeling more time-stressed than men, although both women and men are spending increasing amounts of time in paid/unpaid work in a day. (Statistics Canada 2006) Kristensen's study "suggests that problems coordinating different bodily rhythms and social schemes may provide a further reason why women feel more stressed and rushed, even though in strictly quantitative terms they may not have less time of their own." (Kirstensen and Holme 2006, p.168-9) While Canadian men are slowly taking up more unpaid work (Statistics Canada 2006), there may still be more support necessary to slow the growing continuity gap. DeVault highlights this need to place equity on the public agenda in recognition of women's care tasks: "Those who produce familiar comforts might then be understood not as magically unselfish, but as people themselves, worthy of consideration, who should not be expected to produce sociability almost single-handedly with so little social support." (DeVault 1991, p. 237) Beyond cultural reproduction, there are concerns for the quality of the diets of children and adolescents which are associated strongly with the frequency of family meals. (Gillman, Rifas-Shiman et al. 2000; Neumark-Sztainer 2003)

In addition to the quantity of work impinging on the social life of families and households, work structure and expectations are also taking their toll. In European history,

countries like France fought for meal times in a struggle between unions and employers. Ultimately, the meal times provided a social protection for the regularity and stability of eating rhythms. Unfortunately, current workplace eating habits may be irregular due to individuals accommodating and prioritizing work demands. (Grignon 1996; Kirstensen and Holme 2006) Jaffe and Gertler describe how employees are “flexible consumers” in a capitalist labour market. “The profitable employment of wage labor is based, in part, on the ability to turn workers, and their families and neighbors, into new kinds of consumers – those who invest a minimum of time and effort in their food. This leaves more time for wage work, but also more time for other (more profitable) kinds of consumption...Eating is done at odd hours, on the run, and often alone.” (2006, p. 145-6) Vending machines are installed in anticipation of irregular work hours. (Segrave 2002, p. 271) All this fosters dependence on eating fast food away from home.

### **2.5.2.2. Societal changes in the economy: a growing middle class**

Even if time were available, traditions cannot be learned if they are not practiced in the home. Dual income families can afford to outsource food preparation. Historically this would take place through the use of domestic servants since cooking was stigmatized as an unsavoury task: “With the rise of urban affluence through the nineteenth century, it would become surprisingly common, even in middle-class households, for domestic servants rather than housewives to do the cooking – a trend that would profoundly influence women’s attitudes toward knowing and working with foods.” (Vileisis 2008, p.32) Today food preparation is outsourced by means of prepared foods and restaurant dining: “Every day one-quarter of the adult population eats food from a fast food restaurant. Every month about 90% of American

children under the age of 10 eat at McDonald's; the average American eats three hamburgers and four orders of french fries every week." (Schlosser 2001)

### **2.5.2.3 Societal changes in the community: Urbanization**

Migration within, and between, countries is occurring largely from rural to urban areas. A World Health Organization report points to increasing urbanization as a reason for an increased distance between consumers and primary food production. This distance has a negative impact on the availability of fresh produce as well as a disparity in access to these foods by the urban poor. (World Health Organization 2003, p.23) Not only does this increase the distance from consumers to food producers, it depopulates rural areas through a drain of social services from education. According to Toronto food policy analyst, Wayne Roberts, traditional farming cultures in Ontario may be at risk from these social factors as well as the financial squeeze. (Button 2006) Changes in land use will lead to a decline in wild components that can be an essential part of traditional foods. (Hladik, Hladik et al. 1993 as cited in Johns and Sthapit, 2004, p. 145; Anderson 2005) Further, urbanization is taking over land that is also needed to increase staple food supplies, such as rice in Asian countries, where manual labour is also being replaced by urban jobs. (Waldie 2008) Urban and suburban areas exist where food security is poor due to a lack of accessible food purveyors. (Button 2006; Patel 2007)

### **2.5.2.4. Societal changes beyond borders: Migration**

Continuity is challenged when people migrate away from their traditional cultures. Acculturation occurs. (Bass 1979, p.14, 16) Although diet is the last vestige of cultural change among immigrants, a new environment will usually change at least some aspects of food habits. (Bass 1979; Kuhnlein and Receveur 1996; Shatenstein and Ghadirian 1998) Hyman

describes how although many immigrants arrive healthier than the native born population, known as the “healthy immigrant effect” this health advantage quickly disintegrates with changes in the determinants of health in the new environment, including diet. (Hyman, Guruge et al. 2002, p.126) The food environment is filled with convenience foods where time, social and economic pressures elicit their consumption on a regular basis. (Pan, Dixon et al. 1999; Liou and Bauer 2007) This is having a detrimental effect on many immigrant diets such as Asians and South Asians who make up a significant and growing segment of the immigrant population in Canada. (Statistics Canada 2007) Popkin and Udry report that second and third generation Asian Americans are more than twice as likely to be obese than first generation Asian residents. (Popkin and Udry 1998) Another study cited that fast food restaurants are a symbol of home when abroad for Asian Americans. (Liou and Bauer 2007, p.136)

The healthy immigrant effect may likely change as Western diets diffuse worldwide. “For example in Southeast Asian countries, educated and affluent segments of society already eat an amalgamation of Asian and selected Western food items.” (Hyman, et al., 2002, p. 129; (Story and LJ 1989; Yu 1991) In the meantime traditional food can help the transition of migrants to new places as the sensory experience can be a way of carrying and asserting a piece of identity and connecting with the past. (Ferrero 2002; Koc and Welsh 2002; Searles 2002; Lessa and Rocha 2007) Traditional diets in the sociocultural and nutritional sense seem to provide a more healthful alternative to fast food convenience foods. (Anderson 2005)

## ***2.6 Trade-offs and responses for immigrants to North America***

When migrants bring TFK to a new environment, there may be drawbacks that will lead to trade-offs and opportunities that can cultivate diversity. The diversity of cuisine is a part of the biocultural diaspora which began with the first immigrants to the continent. (Friedmann 2005)



Immigrants to Canada, a growing proportion of the Canadian population, face challenges regarding culture and acculturation, access to information and linguistic skills, food availability and poverty. (Choudry, Jandu et al. 2002) Hyman lists these challenges as determinants of healthy eating for new immigrant women. (Hyman, Guruge et al. 2002) TFK praxis offers challenges and opportunities for Canadians. This section focuses on the dual nature of immigrant TFK praxis through the lens of relevant healthy community indicators: nutrition, ecological sustainability, social equity and economic viability.

### **2.6.1 Trade-offs for TFK and nutrition**

As traditional food knowledge evolves over many generations, it is worth considering for the goal of optimizing health and nutrition. Traditional diets around the world have become an amalgam of Western and other foods (Agriculture and Agri-Food Canada 1998; CBC Newsworld 2008); how far back in history would allow the separation of traditional diets from “external” influence? One criterion would be to use pre-industrial frameworks to remove as much industrial manufactured ingredients as possible.

This criterion is likely used by Anderson when describing traditional diets and health. Anderson notes that most diets from traditional and poor parts of the world are healthy, but makes exception with the Central Asian steppe nomads and other pastoralists who formerly lived largely on milk and meat.

Overall, traditional societies tend to maximize across nutritional needs. They pick the crop mix that provides the best diet for the least input. They have a high-yield starch staple, a plant protein source, and – almost always – an animal protein source as well. Usually there is a special oil source. They always have high-yield, vitamin-rich fruits and vegetables that serve as "protective foods," supplying necessary micronutrients and often protective chemicals. (Anderson, 2005, p. 82-83)

While these principles may be common in traditional diets, it is important to also understand the context in which traditional diets emerged. The nomads and pastoralists’ diet of milk and

meat may be healthy considering all the physical activity involved in their lifestyle. Popular food writer Pollan writes, “In borrowing from other food cultures, look at how they eat as well as what they eat.” (Pollan 2007) Research suggests that dietary diversity that is promoted through many traditional diets is beneficial for nutrition. (Wahlqvist and Specht 1998; Johns and Sthapit 2004) This diversity depends on biodiversity and ecological integrity (Wahlqvist and Specht 1998), and thus should be another consideration not only for the sake of nutrition, but ecosystem health as well.

### **2.6.2 Trade-offs for TFK and ecological sustainability**

Traditional food depends on ecological integrity. Genetic diversity of plants allow resilience in the face of environmental changes. Using the example of the Irish potato famine, Salazar writes: “...dependence on only one staple food can be highly dangerous, especially when its genetic base is narrow.” (Salazar 1992) While many foods can be grown in different environments, it is important to consider the possible ecological interference that could result from the introduction of different crops. For example, invasive plants and contaminated seeds may interfere with the local environment. Seeds need to be screened. (Michalenko 2008)

Food consumption can create markets for endangered foods, but there are examples where consumption would be best curtailed for ecological sustainability. For example, shark fin is used as a prestigious ingredient to make soup in Asian countries. Considering the rapid decline of shark species from the demand for fins, (WildAid no date given) a substitute for the tasteless protein and an international moratorium would be the greater priority to ensure the species long-term survival. Where it does not make ecological sense to continue with a particular food production, substitutions may be an alternative approach.

### **2.6.3 Trade-offs for TFK and social equity**

TFK, in the sense of preparation, may be based on the tradition of having women preparing the food. Immigrants may see a change in this role as men will need to take up cooking responsibilities in North America. (Pan, Dixon et al. 1999) It may be important then to share household tasks and TFK with non-traditional domestic cooks in the household.

Economic equity outside of the household is critical as it enables nutrition. Research is demonstrating what is happening with immigrants and other citizens who have such limited choices due to financial or accessibility constraints. They are eating fast foods that are accessible and relatively affordable. (Popkin and Udry 1998; Pan, Dixon et al. 1999; Hyman, Guruge et al. 2002) In cases where time and financial pressures limit new Canadians from eating healthy traditional food, the trade-off may be a decline in health status as we are seeing in subsequent generations. (Popkin and Udry 1998; Liou and Bauer 2007) New Canadians may also bring rich agricultural knowledge which could be useful in a time when the farming sector is in need of skilled workers. (Habamenshi 2007) Financing and land access are prohibitive barriers for new Canadian farmers though. (Farmstart coordinator June 2008)

### **2.6.4 TFK and economic viability/accessibility**

The rise of the “creative food economy” of entrepreneurs selling ethnic and other niche cuisines clearly indicates an opportunity for the diversity of ‘minority’ cultures to be included in the formal economy of urban centres such as the Greater Toronto Area. (Donald and Blay-Palmer 2006) Gabaccia notes that “...migrations also produced new ‘communities of consumption,’ which generated small businesses to serve their taste for distinctive foods.” (Gabaccia 1998, p.8) Outside of these urban centres and ethnic enclaves, ethnic food may not be as readily available to new Canadians.

New Canadians may be in the minority based on their ethnicity or cultural background, but their cuisine may offer them a cachet afforded by their knowledge of what constitutes their culinary heritage. (Ferrero 2002) Where the industrial global food market may standardize, dilute or even misrepresent culinary traditions, Ferrero argues that this cultural knowledge can empower food entrepreneurs that cater to their minority culture as opposed to the taste of the masses. (Ferrero 2002)

Other food vendors form branches of the informal economy. This provides a low-income way of sharing and earning some low-overhead income. That said, this practice may be deemed illegal where food safety codes dictate capital resources such as licensed kitchens. (Katz 2006, p.148-150) Conversely, less formal ways of selling diverse foods are under consideration in the City of Toronto where a pilot for street vendors (previously limited to Western fast food such as hot dogs) will begin in the late Spring 2009. (Roberts 2008)

Despite any potential trade-offs, Johns and Sthapit argue that integrating and elevating elements of food culture such as nutrition and biodiversity can help ensure that “healthful foods form part of a socially, ecologically, and economically sustainable [food] system.” (Johns and Sthapit 2004, p. 150-151)

## **2.7 Conclusion**

TFK is worthy of recognition within the context of concepts such as traditional ecological knowledge and intangible cultural heritage as a form of traditional collective wisdom specifically focused on food provisioning. The value of TFK can be concretely understood by framing it as a window into the complex dynamic of determinants that are required for healthy communities. TFK contributes a set of social and ecological benefits to the health of communities and individuals, such as improved food security, enhanced capacity and greater

biocultural diversity. The continuity of TFK transmission is threatened not only by its diverse nature among cultural communities; but also because of the societal and food system changes that focus more on commodity consumption than on healthy food production and social and cultural reproduction. TFK fills many of these gaps in the food system and addresses some of the particular needs of immigrants who can find aspects of identity of past and present affirmed through the familiarity and dynamism of traditional foods.

### 3.0 The significance of traditional food at home and among friends

#### *Learning from my elders*

*In his book on traditional ecological knowledge, Berkes (1999) outlines the importance of an ancestry of experience to have an insider perspective on a culture and its traditional knowledge. However, it is often the case that individuals are a product of an ancestry from diverse cultures, as migration throughout history has woven people from different places, ethnicities and nationalities. As a child of Indonesian-Chinese parents who have raised their family in Mississauga, Ontario, it made sense to harness the ancestry of experience of those from whom I have absorbed a minimal amount of traditional food knowledge. I have yet to learn many types of comfort foods from the Indonesian and Chinese cultures such as bacang and lumpur – both rice packages wrapped around meat and held together in a banana or other leaf. These foods are worth more to me than other foods. They have an added value of being a very personal expression of family culture that I grew up in and the memories might also be wrapped in with the flavour. These foods nourish and satiate on more than the physical level.*

*My motivation for understanding the process of traditional food knowledge transmission in Mississauga's Indonesian-Chinese community is partly selfish. Those familiar flavours will disappear with those who know how to prepare them. In my case, my grandmother is the source of a wealth of knowledge. I would like to understand why I have not learned from her and if this is the case for others in our cultural group. What are the structural factors and history behind acquiring this knowledge? Who has it and how can it be shared? There is a lot of sharing within my grandmother's low-income apartment building. I have observed recipes being checked over phone calls and a variety of ethnic dishes shared at potlucks. Through all this activity are young people learning from elders? Or is the learning limited to those within the apartment building? I began to gather some answers through a focus group with the Indonesian-Chinese elders who are residents or are connected to the apartment building.*

*My research recruitment for the focus group was limited to a small poster that was posted by the apartment manager high above the mail boxes (definitely difficult to read for the elderly, a primary target group), so I relied on my grandmother to round up some of her friends in the building and surrounding area. While I decided to host it at my grandmother's apartment to keep things familiar and comfortable rather than the community hall downstairs, I saw an older woman trying to read the poster high above her. I asked her if she was interested in attending. She quickly refused, indicating her appointment to meet a friend at the designated time. When my cultural translator (my mother) and I arrived at my grandmother's apartment, at the start time the same woman walked through the door to meet her friend, my grandmother, and through this friendship I had another participant in the focus group. Although my poster had pictures of traditional food offered in recognition of participation, it was the relationships and trust that were the gatekeepers. The limitation of this snowball approach is the selection bias based on my grandmother. This bias is countered by*

*semi-structured interviews conducted with a younger generation of family and friends of Indonesian-Chinese origin who reside in the Peel region area, some of whom are not connected or related to my grandmother.*

*The focus group revealed my own biased thinking that all grandmothers could cook the traditional food of their childhood. This stereotype hides the complex and unique stories behind each individual. Although they may share the same general ethnic and cultural background, they may have differences influenced by socioeconomic, education, family cultural backgrounds and personal interests and tastes. An example of this is evident as I watch the differences in the way my mother and my grandmother approach cooking and sewing. Both are very confident in their techniques, but they can sometimes scoff at each other's methods. My mother is meticulous about using the right tool for the right job, while my grandmother will improvise with whatever is on hand. They do share common knowledge which is evident as I prepare a recipe with my grandmother. My grandmother breaks off a leaf of a houseplant and puts it in a soup. I asked my mother later about it. The houseplant is in fact a kafir lime leaf plant which is common in Indonesian stews. What a strange discovery to learn that what once seemed an ornamental potted plant in the living room is actually a source of stewing leaves.*

Informal learning can be a powerful form of education as described by Livingstone (2006), Greenfield and Maynard (2006) and Hager and Halliday (2006). The focus group of eight first generation Canadian elders and interviews with four first generation Canadian parents provide a set of perspectives on the meaning and significance of traditional food for themselves and for their children/grandchildren. To understand how TFK stands out in a food environment that is flush with convenience and processed foods, the focus groups and interviews focused on the context of people's lives growing up compared to presently in Canada and the meaning of traditional food and transmission. The chapter will first focus on how much TFK these new Canadians brought and the variation relating to socioeconomic status, cultural traditions, food culture in the household, food environment and personal choices in order to understand the baseline knowledge that participants bring based on their personal background. The next section will look at the significance of the foods and how these new Canadians were able to translate the amount of knowledge they had to a new environment to see how knowledge may have had to adapt to new circumstances. The third section will highlight the importance of

transmission to the study participants in order to understand the value placed on the continuity of this knowledge. The final section will introduce the broad community tools that can promote TFK and its transmission.

### ***3.1 How much knowledge do immigrants bring?***

Immigrants are not a homogeneous group, although they are sometimes portrayed and investigated as such. (Hyman et al., 2002) Focusing on a group of Indonesian-Chinese New Canadians in Mississauga and its environs, however, allowed me to control for some variations due to culture and ethnicity. The first data gathering strategy of a focus group of elder grandmothers demonstrated that generalizing even within this group would be neglecting critical differences that explain variations in food habits and family cultural practices. Major sources of differences (illustrated in Figure 3 in Chapter 1) include: socioeconomic status, food culture in the household, food environment and personal behaviour/choices.

#### **3.1.1 Socioeconomic status as a determinant of food knowledge**

Pollan writes that eating should be based on traditions, such as the foods our grandmothers would have eaten growing up. (Pollan, 2007) This general rule makes sense superficially, until it is recognized that the traditions vary from household to household based on a variety of factors such as those mentioned. The focus group of elders, in particular, illustrated an important difference based on socioeconomic status.

The elders in the focus group are living independently and still cook for themselves. Surprisingly, most of the elders did not learn or prepare traditional food since they had a paid domestic kitchen helper as they grew up in Indonesia. These helpers prepared the food “from scratch” (i.e. without using store-bought instant spice packages). Having a hired kitchen helper



reflects differences in socioeconomic status from those who can not afford this luxury. Only my grandmother, Triasih Elmadya, did not have a domestic helper and was the sole focus group participant who learned cooking from another family member when growing up. Focus group participants pointed to her as very knowledgeable and skilled in TFK. These participants gained skills that were largely self-taught through informal learning from a variety of sources, such as instructions on instant spice packages. This echoes the experience of the first generation parents which will be discussed in the next section. It is interesting to note that the English language skills were more advanced by the other elders compared to my grandmother, perhaps indicative of the greater emphasis on formal academic schooling rather than on kitchen skills. This formal education emphasis growing up was given as reasoning by one younger participant for not learning TFK skills.

### **3.1.2 Other factors determining variation**

With respect to other factors that determine variations in food habits, the participants shared considerable common ground in terms of cultural traditions, the food environment itself and personal preferences.

#### **3.1.2.1. Cultural tradition**

Food culture was similar among the elders and first generation parents. Generally, they grew up eating rice staples with Indonesian and/or Chinese dishes. Many of the dishes are stewed for a long time which brings a rich flavour to dishes. Street vendors were a common source of prepared foods outside of the home. Hot spicy dishes were often missed among the participants. There was some variation as dishes reflected different regions of the country.

### **3.1.2.2. Food environment**

Most participants shared similar urban food environments in Indonesia. One participant came from a coastal area so she was used to eating fresh fish as opposed to the preserved fish dishes of other areas in Indonesia. The food environment in Canada has changed for these new Canadians. Since their arrival (5-20 or more years ago), more and more ethnic ingredients are available in Canada, which reflects a growing creative food economy, including ethnic food services. (Donald and Blay-Palmer, 2006)

### **3.1.2.3. Personal choice/taste**

In preparing food, personal choices are made regarding which dishes to recreate and what ingredients to use and acceptable substitutes. For example, some choose to cook with “instant” spice packages, while others prefer cooking with fresh ingredients, if available. Each participant described different dishes that they missed, reflecting personal taste. One woman’s anecdote is an example of the expression of how personal taste can trump traditions and household food culture: In Indonesia, her mother ran a home production of tofu, but as the daughter she was infamous in the community for her utter distaste for tofu despite her mother’s occupation.

## ***3.2 The significance of the traditional foods and recreating them***

The amount of knowledge that immigrants bring to the traditional food table is not immediately evident even to themselves as they learned to recreate personally meaningful dishes in an adopted country. TFK was not represented much in the food production area, as none of the elders or the first generation parents grew their own food, except for the odd spice plant. The data for this section is mainly drawn from interviews with the first-generation

parents since the interview method allowed for greater probing and there was a significantly reduced language barrier.

Traditional foods are important to first-generation parents because they offer a flavourful and important link to their previous home country. (Ferrero 2002; Koc and Welsh 2002; Lessa and Rocha 2007) Similarly, participants in this study described craving favourite foods from childhood that were not readily available in restaurants in Canada or even as prepared foods in a store. One participant described a link that food has to special times of the year for Chinese cultural celebrations.

Since many traditional foods are not available in Canada as a prepared food, participants and elders find themselves forced to recreate meals not from skills they learned, but from the memory of eating it or witnessing the dish being prepared in the past. To this end, memory and creativity combine with ingredients on hand in Canada. It is a process that is described by elders and parents alike:

Marisca says, “I think about a dish and then I try to recreate it.” She also describes the development of a kinesthetic knowledge: “If I don’t know what I’m going to make, I start with garlic, then I let my hands lead me.” (Lewis 2008)

Another participant describes the process: “I use my imagination. I try to recall what would be the ingredients to make [from the foods of my childhood]. Or I ask people – my sister back home or here, or co-workers.” (Anonymous 2008)

Some have gleaned basic traditional cooking skills from cookbooks and other sources:

“Now you can google it. But then you have to read the different recipes and try to make sense to determine how you want to do it.” From the cookbooks, he “guesses” about how to do it and the result is (laughing) “unique and one of a kind.” (Anonymous 2008)

Since these skills are not learned from transmission, the improvisation and experimentation can be surprising when it achieves the desired results:

A parent of two, Marisca whipped together a quick meal with fried egg, vegetable and a tomato ketchup, onion sauce. She was surprised that this was actually a dish she had eaten in childhood called, *Telur Fujung Hai*. “Without knowing I created a dish from childhood. No one taught me that. It’s in my head. I remember the taste and how it looked.” (Lewis 2008) Another dish she successfully recreated is *Kolak Pisang*– it is now her signature dish that she brings to work. Despite the success, she is nonetheless wary of grandmother’s critique – illustrating some evolution of food knowledge.

Another participant was able to recall witnessing the street vendors in Indonesia putting the finishing, but critical touch on a dish:

I use the instant bumbu [spices], but then I add kafir lime leaf and cucumber ends and then I add lemon juice. You know the cucumber ends has some sort of chemical reaction. I found out by observing the street vendors in Indonesia. (Anonymous 2008)

For people who did not have to prepare food for themselves in their previous home countries, these skills develop because the situation of immigration or leaving home required it from them. Cooking represents a widespread form of informal learning in household work, particularly for some immigrant women of higher social class. (Liu 2007) Marisca describes this situation,

“I learned because my lifestyle [in Canada] required me to do that. My sister [who has domestic kitchen help in Indonesia] wouldn’t know what to do. Her lifestyle doesn’t require her to know.”(Lewis 2008)

Another research participant describes a different reason, “there are no Indonesian restaurants, so I must make it myself.” Recreating dishes from the past can exact the right mix of ingredients, memory and resourceful innovation.

TFK may be rooted in experiences in childhood which can be a barrier for those trying to remember the distant past. One participant doesn’t remember the exact meanings or history

of certain celebratory foods because the Chinese cultural festivities were banned by the government. Her memory is from her childhood when “these celebrations (like Chinese New Year) were suppressed by the Indonesian government more than 30 years ago. It has only been in the last 7-8 years that you can celebrate Chinese New Year again.” (Seneviratne 2007)

Another participant explained that ingredients are sometimes difficult to identify, perhaps because they did not learn the names as children, let alone the translation:

Sometimes I'll see something [ingredient], but I don't know the name, but I recognize it, yes. I recognize it because I've seen what I've eaten...(Anonymous 2008)

There are also barriers related to ingredients and responsibilities to care for others:

I would love to cook dishes at home, but I can't find the ingredients. I have restrictions in that my daughter complains that it's smelly and I can't make the dishes in small quantities. (Anonymous 2008)

This last quotation illustrates the social weight of food preparation. Traditional food preparation or perhaps food preparation in general, is done with more consideration for the collective household than just the individual who prepares food. If food is not served because it may not be enjoyed by other family members, then it may never be made or transmitted in the home, which corroborates with (Moisio, Arnould et al. 2004). The taste preferences and value judgments of other family members can affect the food culture in the home.

Traditional food is valued even if the requisite skills are not available to recreate the dishes. The value is held to such a degree that immigrants are willing to take the time and effort to experiment, and in some cases, bringing unexpected or new results. The spotty memory of food experiences is illustrated in the hit-and-miss nature of food experimentation. Another barrier to recreating food in a new environment can be found in the home where the

taste preferences of other family members may prevent exposure to foods that are not often welcome. Transmission, in these cases, will likely be limited.

### **3.3. Transmission of TFK: the practice and the perceived value**

The literature review outlined the value of TFK from a “healthy communities” perspective, but it is critical to understand the practical implications and the motivations for TFK transmission to support its continuity. The elders and parents were asked whether or not children/grandchildren were learning to cook traditional food and whether this transmission was important. They all agree that traditions are fading away and expressed regret over the lack of options to change what seems inevitable. The elders responded that exposure to traditional food was low for such reasons as:

- i. Indonesian restaurants are expensive and not as common as in places like Holland, a Western country that was a colonizer to Indonesia,
- ii. Preparation time for Indonesian food is long; parents don't have the time to expose their kids. Indonesian food takes time to stew and is better over time.
- iii. Cross-cultural marriage in Canada naturally change the household food culture

It is interesting to note that although most elders did not have the traditional food preparation skills prior to their arrival in Canada, one elder had been able to pass on her own self-taught recipe to her daughter-in-law. This recipe of *rumpaya*, a fried cracker, now provides some income to her daughter-in-law who sells her home cooking. While most parents do not anticipate economic returns, there is acknowledgement of the importance of TFK transmission for reasons of gustatory and cultural education. TFK provides a link to the cultural past of a family. Traditional foods add to the variety of foods and are therefore broaden one's gustatory palate. And TFK is an opportunity to transmit culture to future generations for continuity.

### **3.3.1. Traditional food links to past: ancestry, identity, roots**

Teaching second-generation Canadians about their immigrant roots is important to first-generation parents. Marisca will teach children for its place in heritage education:

It's a part of tradition, their roots. That's why I gave them an Indonesian name and teach them the language and I will also teach them about the food. I want them to know where the family is from. Not forget their roots. Not forget where their mother is from. And they have Indonesian blood, whether they like it or not. (Lewis 2008)

Traditional foods are a manifestation of a cultural identity, echoing the literature of Ferrero (2002), Searles (2002), and others. Another mother has children who generally like "Canadian" foods, an example of which she gave is french fries. Her 25 year old daughter who is now expressing interest in learning about Asian food "since we are not white"; she is also interested to increase the variety of her diet. This contrasts with when the children were younger and they would not eat traditional food, asking "What is it?" This last question motivates parents to expose their children to traditional food so that they are more open-minded to other tastes. This next quote illustrates traditional food as portal to the past as well as a way to overcome ethnocentrism (Koc and Welsh, 2002):

Yes! It's one way to preserve culture. It's also a way to introduce the next generation who don't know much about their ancestors. It teaches them to be open-minded; not necessarily of Indonesian food, but any food. At least you should take the chance to taste it, try it, eat it. (Anonymous 2008)

### **3.3.2. Traditional foods as a tool for teaching openness to other tastes**

Children's acceptance of home-cooked traditional food can be challenging in the face of so much well-advertised fast food, as illustrated by the study on comfort food by Locher et al. (2005) TFK is used by those interviewed as a way to diversify young palates.

A mother explains the challenges of exposing a child to traditional food:

She's getting better. When we were in Indonesia when she was young she ate only rice. We even went to a McDonald's and she said "the meat doesn't taste the same." It was very hard.

The exposure her mom and aunt gave this child ultimately paid off as she now likes a variety of Indonesian dishes. Interestingly on the flip side, this mother explained the difficulty she had with her sister who preferred only her own traditional home cooked meals:

Her sister lives in Mississauga and is not as open-minded. "I told her, 'it's difficult to invite you. If it's a different shape or different colour you don't want to eat it.'...It's the advantage of being open-minded. Here in Toronto, there's lots of choice. Back then [in Indonesia, during her childhood], it was always strictly traditional Indonesian."

A grandfather explains how although he cooks Indonesian food once a week, he doesn't enforce an imposed diet of traditional food. He insists that he would like his family to at least try the food he craves eating to broaden their gustatory horizons:

I don't think it's important for them to eat Indonesian food. It's up to them. I'm not going to impose it on them...I think it is important that they [children/grandchildren] taste the food so that they know what is available. Indonesian food is spicy, but [my grandson] tries some things...

He turned the question to me and asked if I like Indonesian food. While I stated that I preferred the Chinese aspect of our food tradition, he replied, "It's because you don't know what it [Indonesian food] is like". While comfort foods of younger generations are shown to more likely be prepared "fast" foods with relatively simple flavours (Locher, Yoels et al. 2005), parents are exposing children to the variety of traditional foods to help them acquire more complex tastes.



### 3.3.3. TFK and social bonding

It is perhaps this openness that is required for cultural continuity. Children must enjoy the food to be motivated to keep the traditions going. One mother is happy to cook for her university-bound daughter for as long as possible. Her daughter is not interested in cooking:

At 16, cooking is not her passion. I do it for her, so that she can focus on her school works and other commitments. She appreciates very much healthy food which she said the best is at home, and it is inexpensive too (compared to ready-to-eat she buys occasionally). However, she knows that when she will move out, for example, to university, she will have to look after herself. The same thing as her mother did! I find this situation as a "take and give" for both of us. (Anonymous 2008)

This mother sees cooking as support for her daughter before she transitions to independent living.

The social bonding was evident just by observing the participants in the study. During the focus group and interviews, food was exchanged between people. Sharing food or the informal economy of food provides an opportunity for people to interact. One mother with children who are becoming curious of Indonesian food are attending the community bazaars to gain exposure to this food since it is not made at home. Elders share dishes they specialize in making at potlucks. (Anonymous 2008)

In summary, traditional food knowledge transmission can involve something as simple as exposing children to the tastes of traditional foods. The benefits can be seen in the transmission of cultural continuity and a sense of personal history, the development of an openness to a diversity of tastes and the opportunity for social bonding. The motivation for elders and parents is not healthy communities writ large; it is rather personal to their role in expanding the culinary experience for their children and grandchildren.

### **3.4. Tools to encourage TFK and its transmission**

To encourage TFK and its transmission, individuals will find the locus of empowerment at the household and community level. However there are important governance issues to recognize which will be discussed in the next chapter. Tools to close the continuity gap in transmission may range from documentation and archiving of knowledge to communications technology, such as books, media and internet to formal education. But the following tools have multiple social benefits for a healthy community:

a. Informal/lifelong learning: the cultural transmission of traditional food knowledge is easily categorized as informal learning as it is self-directed and the education occurs outside of formal institutions. (Livingstone 2006) Allowing room for this type of learning, by recognizing its value and providing the means and circumstance for people to engage in it will allow the full benefits of traditional foods to be shared in ways that are most meaningful and adaptive to each learner's circumstance and life stage. (Hager and Halliday 2006)

b. Individual and Community Capacity building: Capacity building would allow some room for informal learning to take place. Capacity building is about empowering individuals and communities to adapt to their environment, an important feature for immigrants who adapt to a new country. (Kretzmann and McKnight 1993)

c. Changes in governance:

Removing detrimental policies that prevent culture from flourishing such as the Indonesian ban on Chinese cultural celebrations (1967 – 2001) or the Canadian anti-potlatch law is a first step. (Seneviratne 2007) There are also a number of structural changes required to ensure social equity for food-insecure households and paradigm shifts prioritizing ecosystem health that are needed to allow social practices around traditional foods to be actively promoted.

In summary, grounding theory in the lived experience of immigrants revealed the difficulty in generalizing their experience and their influences growing up. Learning TFK, such as that which is involved in food preparation, is not emphasized in households that can afford hired kitchen helpers. However there were many similarities in the food culture, environment and personal choices among the study participants. The significance of traditional food dishes echoes the literature in that it provides new Canadians with a link to their past identity before immigration. Interestingly, the immigrants with limited acquired TFK from their family life growing up were still able to recreate dishes using memory, creativity and improvisation. The experience of preparing food is a social one and so individuals may be restricted from preparing food that will not be appreciated by other family members. Nonetheless, these new Canadians see transmission of TFK as important, even in as simple a manifestation as having children taste it. Transmission is important for linking to the past, for developing an openness to other tastes and for social bonding. Transmission does not occur without some effort as we have seen among the participants who did not have the opportunity to learn as they grew up. Broad tools to encourage transmission of TFK include informal learning, capacity-building and changes in governance. The next chapter will discuss the local geography of the case study in Mississauga, Ontario, Canada and Chapter 5 will describe how these tools can be put to use in that context.

## 4.0 Searching for a TFK-supportive environment in suburbia: Mississauga, Ontario

*My parents continue to reside in Mississauga, Ontario after 27 years, and they have witnessed the city grow by leaps and bounds. When my paternal grandparents were alive we used to eat Chinese food at a restaurant almost every Saturday with relatives. We used to have to travel to Toronto for such fare and then as Chinese restaurants sprang up in Mississauga, we would only have to go to Toronto for trips to the Asian grocery stores on Spadina Avenue. These days, my parents can drive to the large Asian grocer, TNT, near the centre of Mississauga or buy takeout Chinese at the end of their subdivision. There is evidence of the “creative food economy” described by Donald and Blay-Palmer (2006) blossoming here.*

*Despite the growing diversity of some retail grocers, I do not really miss living in Mississauga because I feel quite restricted by having to travel everywhere by car. Most retailers are located in a mall of some form surrounded by expanses of asphalt parking lot. There are creative adaptations to the uses of space in these malls – my mom has joined a Chinese exercise group that practices a form of tai chi dance early on weekdays before the shops open in the Erin Mills Town Centre shopping plaza. One of the two farmer’s markets in Mississauga is located in the Square One shopping plaza parking lot.*

*There have been these improvements and probably many more than these since I have last lived there, but as I leaped over snow banks in front of bus shelters to get to interviews by public transit, I can see there is still room for improvement.*

A supportive and enabling environment for traditional food knowledge is important to promote cultural transmission. Newcomers to Canada bring their food cultures with them as food is one of the last vestiges of cultural practice that continue unabated in one’s adopted country. (Bass 1979; Kuhnlein and Receveur 1996; Shatenstein and Ghadirian 1998)

Immigrants to Canada must go through a process of settling that can vary in nature depending on one’s background. Comfort foods and food security are important to bridge the cultural acclimatization that must occur. (Koc and Welsh 2001; Koc and Welsh 2002) This chapter will describe the food environment of Mississauga and the concrete opportunities to build support for traditional food knowledge capacity. The analysis is first conducted using four major phases of food provisioning: production, distribution, preparation and consumption. Secondly,

opportunities will be discussed around the issues of food security, cultural continuity and healthy lifestyles and habits.

The majority of immigrants are choosing to settle in suburban areas such as Mississauga, located in the Greater Toronto Area of Ontario. It is a growing city in the Region of Peel expanding to accommodate a rapidly growing population . Immigrants make up about half of Peel Region's population of 1,159,400. (Agrawal, Qadeer et al. 2007; Social Planning Council of Peel 2008) The Region of Peel attracts 24,000 new immigrants per year; many are drawn to family and friends who live there. Immigrants are also drawn to job prospects; however they face barriers such as foreign credential recognition. (Jamal 2006) Despite these issues of settlement, it could be argued that immigrants' needs for social services do not differ from those of non-immigrants. (Agrawal, Qadeer et al. 2007) However, while a basic assumption in health programmes may be the same level of personal empowerment in health, societal structure and personal context may mean very different levels of control and power for immigrant women, for example. (Choudry, Jandu et al. 2002) In such context dependent scenarios, the environment must enable people to access health promotion in ways that are relevant to their values and lives.

This chapter analyzes the infrastructure of Mississauga, Ontario within the Region of Peel as the context of food provisioning. The opportunities for the practice and transmission of traditional food knowledge brought by immigrants will also be considered. This analysis is supported by key informant interviews that were drawn from a variety of sectors in Mississauga.

The following individuals were interviewed:

- Anonymous, South Asian resident of Peel
- Community Garden Coordinator, EcoSource Mississauga & Multicultural Inter-Agency Group of Peel,
- Newcomer Farmstart-up Coordinator, Farmstart
- Anonymous, Low-income apartment building manager
- Mid-sized South Asian Food Entrepreneur located in Halton (near Peel)

The key informants contribute to the analysis because they have had first-hand practical experience in Mississauga in the area traditional food knowledge sharing and transmission opportunities.

#### ***4.1 Production of food in Mississauga***

The Mississauga landscape is mainly a built environment. Agriculture now plays a minor role in the economic and social fabric of the city. Mississauga farms represent 4% of the 483 farms in Peel Region on 4% of 95,000 acres of land, according to the 2006 Census of Agriculture. The number of farms in Peel Region has declined by 7% since 2001. (Peel Region Planning Policy and Research Division 2008) The built environment is characteristic of urban sprawl where infrastructure for private car ownership and low density housing dominate the visible landscape. (Region of Peel Planning Department 2005). This situation raises health and environmental concerns. Peel Region is among the municipalities with the least number of commuters who travel using active and sustainable means, such as cycling or walking. In fact, the number of active transportation trips decline between 1996 and 2001 in Peel Region. The median commuting distance for a Peel resident in 2001 was 10.6 kilometres. (Region of Peel Planning Department 2005) This type of sprawl has health impacts as concerns arise with

respect to increasingly physically inactive and car dependent residents of these suburban communities. (Abelsohn, Bray et al. 2005) In 2003, an estimated 45% or 372,000 of Peel Region residents were overweight or obese. (Region of Peel Public Health 2005) These conditions can predispose individuals to chronic disease. Indeed, in 2003, approximately 36,900 were diagnosed with diabetes, 32,000 with heart disease, and 44,100 with osteoarthritis. (Region of Peel Public Health 2005) The lack of food production opportunities reflects a low amount of physical activity opportunities in Mississauga which can lead to sedentary lifestyles.

#### ***4.2 Distribution of food in Mississauga***

The distribution of food outlets such as grocery stores, ethnic food stores, farm markets and community gardens is indicative of the degree of citizens' accessibility to food. The design and planning in Peel Region demonstrates a disconnection between residential neighbourhoods and fresh food supplies such as local food production and farm market distribution. The 2007 "Grown in Peel" map produced by the Region of Peel illustrates that local farm market or farm gate purchases would necessitate a longer commute for some residents to the only two farm markets. (Region of Peel Public Health 2007) Moreover, there are no local farmgate sales in Mississauga. Carolyn Bailey of EcoSource Mississauga indicates that the community garden she is coordinating is the first one growing on municipal land. (Bailey February 2008) This contrasts with other municipalities which have been promoting such gardens for many years. For example, the City of Kitchener provides start-up grants for new community gardens. (City of Kitchener 2008) Montreal began its extensive programme in the 1970s and now boasts 97 community gardens equivalent to 8195 allotments serving 10,000 people. (Pfeiff 2001; Reid and Pedneault 2006) The growth of the urban agriculture in Montreal began with immigrants undertaking 'guerrilla' gardening. (Cosgrove 1994, 2001) Mississauga's food accessibility in

comparison is very limited despite the significant population of immigrants who are often accustomed to locally available farm food in their countries of origin. Nevertheless, there is evidence of a creative food economy whereby small and medium-sized vendors are establishing stores in Peel Region. Many of the participants in this research of Indonesian-Chinese origin, noted the recent increase in availability of ethnic food ingredients in the area over the past 20 years. The availability of ethnic food ingredients is a welcome arrival for those craving and sharing food dishes that they prepare and personalize for consumption.

### ***4.3 Food Preparation Skills in Mississauga***

The next phase in food provisioning is the preparation of food dishes, which requires not only the ingredients, but knowledge about how to select, combine and serve them into a dish that often represents aspects of one's culture. The manager of a low-income housing complex geared toward senior citizens, facilitates the convivial exchange of prepared dishes from South Asia through potluck gatherings during holidays in their community room. The manager observes that there is more than food that is shared: "They can exchange the taste of their food and congregate with each other. And share their experiences." (Apartment Manager March 2008) She also notes that potlucks offset the responsibility of one person cooking for everybody and it may also be more economical to bring a prepared dish to share than to have each person pay for a plate of food. It is interesting to observe that knowledge about food preparation is shared informally, with some last-minute phone calls to knowledgeable residents who know specific recipes. When asked though, the manager did not perceive that there was any communication about the food. "About food, we don't talk. Unless it's nice, then we'll ask what is in it." (Apartment Manager March 2008) The sharing of food knowledge is an informal



activity and there are ample opportunities to encourage greater exchange by combining it with other activities such as formal education and community programming.

Community programming and formal education possibilities are not fully realized. As mentioned previously, since the 1990s, Ontario grade school children are no longer trained in basic cooking skills as they once were. Community kitchens are another venue in which food preparation skills can be shared. Community kitchens are regarded as social, educational spaces to empower people with food preparation and storage skills (Engler-Stringer 2005); however implementation of community kitchens may face barriers in Peel Region such as difficulties in commuting and the time it would take people of low income in getting to the location. The City of Mississauga promotes the use of skill-sharing in community kitchens through formal fee-based courses as opposed to informal sharing. (City of Mississauga 2008)

Peer-led food preparation workshops serve as another means of sharing nutritional information. The Region of Peel has implemented a provincial Community Food Advisor programme in which community peers are trained to facilitate workshops on healthy eating for community groups. Peers from a cultural group can share nutritional information that may be integrated into the specific cultural dishes. Advice is also provided regarding fruit and vegetable selection and preparation using recipes. One resident acknowledges the value of these peers for their cultural knowledge: “Food is such a personal thing...so specific to cultures...As much as you read in books, you cannot know or have the expertise of the culture of food [of a group]. A dietician will not be as well received if they are not from the cultural group.” (Anonymous March 2008) This view is corroborated by the research of Hyman et al. (2002). Expanding such programmes to be as geographically accessible as possible to community members may help fill gaps that are leading to food consumption trends in the area.

#### ***4.4 Food Consumption Trends in Mississauga***

New immigrants often miss having ready access to fresh fruit and vegetables of their country of origin. (Koc and Welsh 2001) Eating habits of Peel residents, examined in municipal reports, reveal that their diets also lack fruits and vegetables. Four out of ten Peel residents eat adequate amounts of fruits and vegetables – a rate consistent with the provincial average, according to the Canadian Community Health Survey. (Statistics Canada 2003) Youth rates are even poorer with very low consumption of fresh foods: In a 2004 municipal survey of 7,000 students from grade 7 to 12, only 6% of young students in Peel reported eating raw or cooked vegetables three or more times a day; 10% of students reported eating fruit as frequently. One in every two (49%) students did not eat raw or cooked vegetables every day and more than one in three (39%) did not eat canned or fresh fruit every day. Conversely, less-nutritious convenience foods and drinks such as cookies and soft drinks were often consumed on a daily basis. More than one-half (52%) of students reported drinking sugar-sweetened beverages at least once a day. Less than half of the students had breakfast on a daily basis. (Region of Peel Public Health 2005) The eating habits of adults and youth reflect the common trend of eating less nutritious foods that reflect the food environment where fresh fruits and vegetables are less accessible.

#### ***4.5 Evaluation of TFK support in Mississauga and Peel Region***

Healthy food provisioning in Mississauga and Peel Region, then has considerable room for improvement. Citizens are constrained in their ability to acquire fresh, local and seasonal fruits and vegetables which are culturally appropriate. The suburban design of sprawling residential areas does not enable citizens to use active transportation to acquire local food or social

settings for sharing food knowledge, such as farm markets, community gardens and kitchens. The lack of control and empowerment are relevant to issues of food security, healthy lifestyles and habits and cultural continuity. The consumption pattern of fruits and vegetables by residents may be an indication of such problems. One purpose of the case study was to test out the hypothesis that promoting traditional food knowledge will support changes towards healthy communities through the empowerment of skills and cultural transmission that lead to healthy lifestyles and habits. This was done by speaking with key informants in governance regarding food education and provisioning initiatives. The evidence is not conclusive; however it does answer the questions relating to the opportunities and challenges to promoting TFK and its transmission. How such wider promotion could take place in Mississauga and Peel Region is analyzed through the criteria of food security, healthy lifestyles and habits and cultural continuity.

#### **4.5.1 Food security considerations**

Food security is a fundamental requirement for healthy communities and should be regarded through a lens of sustainability to ensure such security for future generations. (McAllister Kattides and Bastos Lima 2008) Social and ecological sustainability include systems that support livelihood sufficiency and opportunity while protecting the integrity of the environment. (Gibson 2005) Social sustainability may be compromised in Peel because of its sprawling urban design that creates transportation challenges for some individuals with respect to access to food and related community activities. Affordable housing is also a significant barrier; according to the Ontario Non-Profit Housing Association report in 2006, residents in Peel have a ten-year wait for affordable units, which is among the longest waits in the

province. Given this situation, income spent on housing can impede on basic acquisition of necessities such as food. (Evans 2007)

However, there are projects that are attempting to address this issue of social sustainability in food security. Farmstart, a nonprofit initiative which aims to support new farmers including immigrants, has an incubator farm in Brampton, Ontario. This farm currently supports a newcomer from Zimbabwe to test crops from the South alongside more established farmers. This is a unique programme and acts as one of the only spaces for newcomers to gain mentorship with established farmers. The Farmstart-up coordinator with this organization can relate to the benefits of the programme: “My work with Farmstart provides the opportunity to work with many people from around the world in growing the kinds of food we enjoyed before we all came here... You keep some of what you know -- your home.” (Farmstart coordinator June 2008) According to Farmstart, some of the biggest challenges for new farmers is financing and access to land.

#### **4.5.2 Cultural continuity considerations**

Cultural continuity around food requires some conscious efforts to empower those with the skills through relevant avenues and accessible venues. One avenue for sharing knowledge is the provincial Community Food Advisor programme. Ellen Desjardins, a nutritionist in Waterloo Region, worked on a more community-based version of the provincial Community Food Advisor programme, sponsored by the Region of Waterloo Public Health. The Community Nutrition Worker (CNW) programme in Waterloo Region has been running since 1985, and empowers the traditional knowledge of community members from various cultural groups to teach from their cultural expertise as well as Western nutritional knowledge. These Waterloo Region CNWs are trained to lead hands-on cooking lessons with people in their own

communities in community centres and are further empowered through payment for their work. Desjardins trained CNWs for six years with a distinctive approach:

My approach was to treat the CNW trainee as an expert... to help her see that she had valuable skills as a cook that she could pass on to others here. That was a new idea for most immigrant women. It was also useful for them to pass on details about their culture and religion (especially, food restrictions, fasting, special occasions) and to teach people about their traditional use of spices, vegetables and grains. (Desjardins June 2008)

This type of community food advisor programme reflects the effectiveness of partnering with groups to which health promotion programmes wish to target. The use of community-based, participatory approach proved effective in a study with South Asian women in Peel Region. (Choudry, Jandu et al. 2002)

Community gardens are an example of a key venue for supporting biocultural diversity in the region. Community garden coordinator in Mississauga, Carolyn Bailey, is seeing demand outstrip the space allotted for community gardens. Bailey observes: “Food preference is one of the first things people think about with the gardens; [since] comfort food ingredients are often imported and expensive.” (Bailey February 2008) Sociologist Friedmann points out that gardens are also venues for preserving biocultural diversity, of such produce as tomatoes, “Saving heritage tomatoes from industrial displacement is as important in regions where it has adapted through transplantation as in its centre of domestication.” (Friedmann 2005) The City of Mississauga is only beginning to actively support community gardens with the first allotment on municipal land, despite high demand for plots by residents. (Bailey February 2008)

These initiatives are sprouting from non-governmental organizations with limited resources; municipalities are appearing slow to support and apply these successes in other areas and neighbourhoods. Food issues of equity, access and prioritization of cultural

continuity may be easier for municipal government to engage in if an overarching food strategy or food charter were developed in consultation with non-governmental organizations and citizens. Cultural continuity is a priority for newcomers such as women of South Asian descent, an ethnic group that makes up the largest segment of new immigrants to Mississauga and Peel Region. (Choudry, Jandu et al. 2002; Social Planning Council of Peel 2008) A municipal food charter that identified social issues, such as cultural continuity, as a priority would enable municipal employees to more actively engage on issues of social sustainability.

#### **4.5.3 Considerations for healthy lifestyles and habits**

Healthy lifestyles and habits may seem difficult to achieve in an environment which is supportive of sedentary, isolated habits such as car dependency. The Region of Peel Student Health Survey (2005) revealed that close to half of 7,000 grade 7 to 12 students spend six hours per week in front of the television and the same amount spend the same amount of time in front of the computer. Food production is highlighted as one way that citizens of all ages could become more active. Bailey, community gardens coordinator in Mississauga, explains “growing one’s own food does take time, but this can be a time with therapeutic benefits from the physical activity, being outdoors and relaxing.” (Bailey, February 2008) During the interview process for this thesis, many key informants spoke about how food production and preparation can be healthful activities because citizens are empowered to “take control” of what goes into their food; and these are activities that can bring together people of various ages and backgrounds. (Bailey February 2008; Farmstart coordinator June 2008; Chauhan March 2008)

Traditional food knowledge transmission can encompass these social activities and benefits from community gardens to cooking and eating communally. There are clear

opportunities where programmes such as the Community Food Advisor programme and Farmstart's incubator farms provide a first step for the Region of Peel to recognize and support the traditional food knowledge that people bring. Other programmes also deserve attention and expansion such as community gardens which may be of interest to the area's growing aging population and new immigrants. (Jaros 2006) Beyond these programmes, consideration needs to be given to the question of why Region of Peel residents are not demonstrating healthy eating habits and why increasing numbers of them are overweight and obese.

#### **4.6 Summary**

The findings from this chapter reveal that, for many newcomers to Canada, the suburban destination– Peel region and specifically, Mississauga, Ontario – does not wholly support or enable the food knowledge newcomers bring. The literature and the key informants from community governance organizations reveal that a food environment that enables TFK transmission for a growing immigrant population will demand more than linguistic translation, but a systemic regard for the diverse needs of new immigrants and ways to empower them in their process of settlement and adoption of healthy lifestyles in a new environment. The next chapter will turn to three TFK-relevant tools of empowerment that can seize opportunities for change, these include: informal learning, capacity building and changes to governance.

## 5.0. Tools to build a home for TFK

*My grandmother and I can sustain a conversation on the phone for about five minutes, which is fairly good considering the language barrier. When we're cooking together we can spend hours in each others' company. Our conversation may be focused on the ingredients, but they are also a jumping-off point to learn about other things: what substitutions have been used, where ingredients come from, what they look like as a plant. More personal stories may arise that are a real treasure. The dish we happen to be preparing is my maternal great grandmother's "old-fashioned" recipe, "Lodeh". It is a coconut milk soup which features jack fruit and green beans.*

*"What was her name again?"*

*"Yanni Liem"*

*My mom can talk about where recipes have come from during her life's journey – the potato salad from the Gulbas who had taken her in like a daughter after leaving her Indonesian home to catch up and marry my dad who was studying in Germany.*

*I am taking the time to do this and learn from my family although sometimes other priorities demand my attention. I am trying to bond in earnest and expand my knowledge of myself beyond credentials and material things. These relationships also define me and connect me to my personal history – the stories, places and things that have come before and are a part of me.*

Mississauga is a concrete example of a city that is growing with the influx of immigrants. Traditional food knowledge plays a role in helping immigrants settle and to support cultural diversity. Despite these benefits, limited support is offered by municipal governing bodies in Peel Region and Mississauga. This chapter discusses ways to generate recognition to traditional food knowledge by supporting its practice and transmission. Three tools are necessary: informal learning, capacity-building, and changes in governance. Informal learning and capacity building are the means by which one learns and shares the capacities of traditional food knowledge. Capacity-building underlines the need to recognize the individuals with the skills and to support them in sharing those skills at home and in the community. Beyond education and enhancing capacity, a basic requirement involves changing governance to focus on basic needs such as food security. Governance is also needed to reorient the food system towards one that values the 'external' benefits of a food system such as ecological and cultural



integrity. Informal learning, capacity-building and changes in governance are essential tools to ensure the benefits of traditional food knowledge do not fade with passing generations.

### ***5.1 Informal learning: supporting the process of sharing TFK***

For TFK transmission, informal learning occurs at the family and community level.

Chapter Two provided examples of how the cultural transmission of food knowledge can help assert cultural identity. Two main examples include the challenges to the traditional cultures such as the Inuit (Searles, 2002) and immigrants, such as the Mexican Americans (Ferrero, 2002). Informal learning refers to how we socialize the new generations and is the path by which culture is cultivated in each household.

Beyond the informal learning that can happen in homes, relationships can be built beyond bloodlines through shared activities such as food preparation in collective kitchens. Cross-cultural knowledge is shared in the Region of Waterloo Community Nutrition Worker programme as community peers learn about nutrition, ethnic food store locations and share ways of adapting traditional recipes with available ingredients. (Desjardins, June 2008) Such activities require support and infrastructure to ensure that they continue in a milieu where such food learning occasions are limited by competing priorities of work, school and other activities.

The informal learning of TFK could be promoted by allowing some space and social recognition to the process of TFK transmission. Provincial educational systems could promote TFK learning by recognizing the time students take to learn in the home or in the community as equivalent to the community service hours or worth some amount of credit. This may be a way of decentralizing the basic cooking skills taught in Ontario to grade 7 and 8 students before these life skills were removed from the curriculum in the 1990s. Municipal governments

could support venues for TFK learning such as collective kitchens, community gardens and land for new farmers for incubation and experimental plots. These types of venues facilitate the experiential learning that is essential for the continued transmission of food knowledge.

## ***5.2 Capacity-building: recognizing the skills of TFK***

TFK transmission requires more than just the necessary setting; it requires individuals endowed with the knowledge and capacity and willingness to share those skills in at least one area of the food provisioning process. The process of de-skilling in the modern food system removes the incentive to generate TFK. Capacity-building can reverse this process by demonstrating the value of TFK and the importance of passing on these capacities to others, particularly younger generations. Informal learning and capacity-building could happen without any conscious decisions to do so; however, it may take more awareness to counter food environments that emphasize de-skilling over capacity-building. This research serves to underline the value of TFK as an important capacity worthy of transmission for the health of communities.

The second step in building such capacity would be to recognize those people who have abilities in the area of TFK. Many people could be deemed capable of sharing TFK who would not normally be recognized as such. For example, senior citizens may have acquired this knowledge through life stages that required food provisioning skills as illustrated by the Indonesian-Chinese Canadians who had to gain cooking skills upon arriving in Canada. Providing recognition may require more than mere identification of individuals. Recognition of capacity may also mean understanding the ways in which individuals would like to share their knowledge. Respecting the value of these individuals' skills would also mean providing the means for them to share their knowledge. The Region of Waterloo Community Nutrition

Worker programme has aimed to do this by encouraging and paying workers to share their cultural expertise as well as messages about nutritional guidelines. (Desjardins June 2008)

There are limits as to how much capacity-building programmes are able deliver to the most vulnerable. Language may be a barrier for many new immigrants. Power observes that basic needs are required for participation. “Self-provisioning activities and alternative distribution programs often exclude the most vulnerable because basic levels of resources, which provide stability and an ability to imagine the future (that is, hope), are usually prerequisites for participation.” (Power 1999) Social justice is needed to tackle the larger structural problems that food solutions can not adequately address. Kuhnlein and Receveur (1996) relate this to indigenous peoples: “Central to many of the issues concerning retention of TFK and use of traditional food systems by indigenous peoples is the issue of politics. To practice and retain cultural knowledge and values, peace, stability, and prosperity are needed. Unfortunately, all too often it is the indigenous peoples within a nationality who are discriminated against, oppressed, marginalized, and colonized, which makes it difficult to retain their cultural practices.” (Kuhnlein and Receveur, 1996, p. 420) In Mississauga, Ontario, low income people may be marginalized by issues of geography and time, limiting their access to resources.

### ***5.3 Changes in governance for a food-secure future***

Consumption patterns in Peel Region reveal a problem with poor nutrition and obesity, most alarmingly among young students. (Region of Peel Public Health 2005) Governance at the level of municipal public health should be oriented to address the determinants that lead to healthier food consumption and lifestyles. As illustrated by the ecosystem health models, health status often depends on an interaction of many determinants. (Hancock, Labonte et al.

1999) Addressing the social and environmental determinants that relate to TFK such as diet, lifestyle (e.g. physical activity) and socialization would require an integrated, multi-sectoral and participatory approach. This approach is more complex, time-consuming, and difficult to evaluate.

The Region of Peel is missing out on a key role with regards to the promotion of traditional food knowledge. Currently, the regional municipality appears to limit its activities to providing generic nutritional knowledge as opposed to the possibilities of coordinating and inspiring knowledge sharing. For example, nutritional knowledge is handed out through the Peel Public Health web site which provides written information on generic healthy eating. The alternative is a phone number to receive nutritional advice. The City of Mississauga has kitchen facilities in community centres; however, the municipal recreation guides promote formal learning programmes rather than recognizing the existing knowledge in the community and coordinating a network of knowledge sharing. Nutritional knowledge is thus usually an expert driven, scientific evidence-based provision of knowledge handed down to those that request the information. An integrative approach to promote traditional food knowledge would require a holistic policy approach and the cooperation of many agencies and departments.

While dietary knowledge of ingredients can be key pieces of knowledge, the presumption appears to be that lack of knowledge about nutrients is the primary issue to address poor consumer choices. Similar nutrition programmes in international development policy are critiqued for targeting the people as the problem. Erica Wheeler (1986) argues that the ‘teach the mother, feed the child’ approach misses the target: Policy-makers assume “If women only knew what to do, they would be able to deploy existing resources (time, labour, fuel, water, cash and food) to feed their families better.” (as cited in Pottier 1999, p.26) This

approach hides the structural factors that may play the larger role in food security such as employment and wage rates, food prices, land tenure, market structures, cultural needs, etc. (Pottier 1999, p.26) These are not only factors that are more difficult to address through one governmental department, they are also much more difficult to evaluate in terms of effective change on nutritional status. Nevertheless, these may be the more pertinent factors to address to improve the health status of citizens and to promote healthy eating in particular.

The problems of unhealthy eating habits in Peel Region demonstrate symptoms of an unhealthy food culture. Injecting professional dietary advice into the populace may have isolated successes, but to re-orient the food culture of an entire region may require a shift in approach. One approach may be to foster informal learning and support decentralized programming. The provincial Community Food Advisor programme, and specifically the approach of the Region of Waterloo Community Nutrition Worker programme, demonstrates the type of approach that can support cultural practices, enhance community capacity, and address issues of de-skilling. (Desjardins June 2008) The Region of Peel Public Health department could add more emphasis to such programmes to broaden its reach. The Community Food Advisor programme could grow in scope to provide an avenue for intergenerational learning to occur. Elders in the community could teach youth in community kitchens in neighbourhood community centres. Formal education value could be placed on this learning through provincial education credit. Informal learning at home could be another avenue for education credit. Informal learning would allow the education and capacity building to happen in a decentralized way and could thus be encouraged to happen more often and spontaneously. The process could be evaluated in order to understand how such learning could

be supported further. This type of decentralized expansion of the Community Food Advisor programme would support diversity, recognize the capacity of individuals, and build life skills.

A key venue for learning, community gardens, is an example of the need for the Regional Municipality of Peel and the cities to take up a greater role in coordinating community collaboration with residents, external organizations and internal departments for the sake of capacity building, informal learning and cultural transmission. The opportunities to expose and engage citizens with agriculture within the suburban environment were extremely limited. The one community garden on municipal land in Mississauga and the single experimental plot for new immigrant farmers in Brampton illustrates the meager access to growing food, despite high demand for community garden space. Overall, agriculture as an activity is in decline as more and more land is taken away for other uses.

Another reason to include community gardens as a priority is to enable the social interaction and informal learning to enhance existing knowledge of food. The cultural group under study, as a sample of Mississauga residents, did not express any agricultural background. Most originated from urban cities before immigrating to the urban/suburban environment of the Greater Toronto Area. A few participants were involved in direct food production through a home garden. With regards to traditional crops, these were limited to houseplants, such as the kafir lime and a hot pepper plant. Nevertheless, these plants may be signs of interest if opportunities for growing on the land were provided. Sociologist Harriett Friedmann recognizes such an opportunity, "...urban neighbourhoods and community gardens are potential sites for mutual learning, as seeds are shared and agronomic knowledge exchanged among immigrant cultural communities." (Friedmann 2008, p.248) Friedmann notes that such exchange is a way to increase the biodiversity of plants, as biocultural diasporas have done in

the past. Conscious action towards biocultural diversity can be seen in the documentation and coordination of a project of urban Toronto's non governmental food organization, Foodshare. The project, "Seeds of Our City", involved such activities as gardeners' recording their actions and observations in a format accessible to share with other gardeners. (Friedmann 2008, p.248-9) Whether formal recording or informal conversations, urban agriculture is among the prime venues for cultural learning to take place and for biocultural diversity to expand.

The future for community gardens in Mississauga is looking brighter with signs that municipal support is growing and with the possibilities for innovative uses of urban development. A recent Mississauga Recreation and Parks guide touts the support the city has for community gardens (despite the current meager allocation of municipal land), indicating the will to expand in the future. (City of Mississauga 2008) Although only a small amount of land is devoted to agriculture, Mississauga's landscape of big box industrial retail and commercial buildings may well be designed to withstand urban garden rooftops. Roger Keil, director of the City Institute at York University, suggests, "Box stores and parking garages have flat roofs that can take the weight of all-season greenhouses." (Roberts 2008, p.262) And examples exist in downtown Chicago of urban gardens created on top of concrete in schoolyards and public parks. (Allen and Allen 2007) Other venues include neighbourhood markets such as those in Toronto and in Waterloo Region, Ontario. There are possibilities for an evolution of the use of space to create cultural food places.

Collaborative involvement by municipalities with external organizations would benefit such food venue creation. Farmstart and EcoSource Mississauga and Multicultural Inter-Agency Group of Peel have demonstrated innovation in their programming to support community gardens and citizen engagement with local food and TFK; and they could use more

than referral services to the public. Montreal's community garden programme's success emerged from interdepartmental cooperation and multisectoral collaboration and an ear to community desires. (Reid and Pedneault 2006, p.6) Collaboration and advocacy could support expansion of their programmes to benefit a greater portion of residents and to ensure not all the land in Peel region is built up to the detriment of local food security planning.

Collaboration with residents would also be a way for municipalities to respond to the particular needs of groups and neighbourhoods. For example, female South Asian residents of Peel region were empowered through a participatory action research study on health promotion. These women organized a workshop with some coordination support and were able to open up a free dialogue which built greater understanding between generations of families. One of the community concerns mentioned by these South Asian women was the maintenance of cultural practices which is viewed as a critical piece in bringing "a sense of self and a sense of continuity" (Choudry, Jandu et al. 2002, p. 78, 80) A future municipal consultative project or study could develop a food charter for Peel region as has been done in Toronto, Ontario to ensure broader aspects of food security, including cultural practices, are protected.

TFK implies a level of participation by all in the learning, teaching and development of a healthy food culture. To ensure inclusive participation, TFK needs to be acknowledged as a valued piece of education through informal learning. TFK is not knowledge that one is endowed with by nature, but is learned in social settings. Community capacity is enhanced by this knowledge. However, capacity building requires a governance structure that supports basic capacities for sustenance; such as housing. Governance to promote TFK health benefits could be improved with a paradigm which would allow the regional and local contributions by TFK practitioners to be counted. The participation of a diverse citizenry in the development of a



dynamic food culture would enhance the health and cultural wealth of communities around the world.

## 6.0 Conclusion

*There is a point, perhaps for everyone, where you come home again. You seek out the familiar flavours and cooking that represent that comfort of home. For some, this is the time when the food and the related knowledge is sought to share with new families and circles of friends. Food encourages exchange. In his book *Through the Children's Gate*, Gopnik writes,*

*Searching for an occult connection between cooking and writing, I had missed the most obvious one. They are both dependencies of conversation. What unites cooks and writers is that their work flows from the river of human talk around a table. People cook to bring something to the table; people write to keep something that was said there. I enjoy the company of cooks, I realized, because I love the occasions they create for conversation. (Gopnik 2006, p.178)*

*Where there is food, there are often people. Social gatherings, such as reunions and weddings or even the regular grocery shopping trip can be a real highlight for those who are socially isolated. During the research for this thesis, I had the opportunity to coordinate a fruit and vegetable market stand in Kitchener, Ontario. The market was located in a hospital parking lot and our most faithful customers were elderly women who could not easily get to the main market venues. I think they were grateful for a market that they could access independently by foot. People shared their knowledge and recipes for more obscure fruits and vegetables, like transparent apples and kohlrabi. They would be curious about new local produce that were virtually unheard of the Canadew melon and cheddar cauliflower. The colours and the beauty could lift dull spirits for those trundling over the hot pavement to our canopy. I recruited a friend with time and a violin to transform our patch of parking lot into a real place for people to meet, access food and chat.*

*I felt quite privileged to have the weekly duty, as a part of my role, to buy the market produce from a Mennonite-run produce auction in Elmira. The produce would be picked that morning or the night before with the early light glinting off crates of green lettuce leaves and snug tomatoes. At the height of the season, the outdoor wing of the auction would include a bandstand where retailers would perch next to the auctioneer. He would rhyme off bids while horse and buggy or tractors and trucks would pull in front, displaying their wares as if the curtains were drawn on the "Price is Right" displays. There was sincere pride embedded in the food. This pride in the food and where it came from rippled out to the neighbourhood market shoppers and right through to the men's shelter residents who would offer to help carry leftover produce to their storage space. My regular volunteers were really my gracious friends and it was a pleasure to work alongside them as we built up some muscle tone carrying boxes of produce. I could not have asked for a better exercise regime. We had our set-up and tear-down routine patted down to lean efficiency. Each part of the work was fully engaging, like a well-rehearsed play.*

*The market pilot project which began as a community collaborative of the Region of Waterloo Public Health department, Opportunities Waterloo Region, St. Mary's Hospital and Mill-Courtland Community Centre, among others, has expanded in 2008 to include*

*five market sites. Not unlike community gardens, providing decentralized access to fresh local produce can increase the exchange of conversation, food knowledge and a beautiful harvest.*

*On the new generation family front, the success in the community is dampened by the fact that my nephews and niece think the raw sweet peas are disgusting, but I was able to sneak some market spinach into a pasta dish my niece and I prepared together. My niece was thoroughly displeased by the feeling of wet spinach. Food in all its textures warrants the drama.*

This final chapter will review the problem questions of the thesis and respond to them based on the research findings. Recommendations will be summarized based on the discussion of challenges and opportunities in promoting traditional food knowledge. The last sections will consider the contributions of this thesis to the literature, future research possibilities and a final reflection.

## **6.1 Review of TFK and healthy communities**

The thesis began with a discussion of the importance of healthy communities which involve a complex set of determinants of health, not least of which are social, cultural and environmental factors. As traditional food knowledge touches on many of these, this thesis took a systems approach by looking at health from a population health perspective using Hancock's mandala of health model. The analysis through the literature review and the case study were guided by the mandala of health model to understand how traditional food knowledge influences and is influenced by factors at various levels, from the global to the local.

From the analysis, the problem questions were answered. The first question is

*What is traditional food knowledge?*

The literature review uncovered the root definitions of indigenous knowledge, traditional ecological knowledge (TEK) that can branch into more specific traditional knowledge, such as

traditional food knowledge. TFK has a similar definition to TEK with an emphasis on food traditions: TFK is defined as the cumulative teachings and experience gained from the sharing of food traditions from one generation to the next.

The second question relates to the rationale for the TFK definition by asking, *What is its value for healthy communities?*

The literature review in Chapter 2 described the value primarily at the community level. TFK can improve food security as it involves basic life skills in food provisioning and social elements such as inclusion and the maintenance of personal and cultural identities. Healthy communities seek to recognize the capacities of its members; TFK skills are an important skill to recognize in order to facilitate exchange and transmission among household and community members. On a broader scale, TFK in food production can contribute to preservation of cultural and natural heritage which are important for biocultural diversity.

The case study among Indonesian-Chinese Canadians in Mississauga demonstrated that there is significance attached to TFK in the home and among friends. Parents want to expose their children to the food that connects them to their ancestry and countries of origin, corroborating with the literature. Individuals also described the value in socializing younger generations to a greater diversity of tastes through TFK.

The next questions ask whether this value is equal to all people: *To whom is it important? To whom is it not important and why?*

It is clear that people who value the tastes of their childhood/ country of origin will want to transmit the knowledge. Positive associations are important because those who do not enjoy the food will not want it reproduced in the household. The skills may not be viewed as valuable to those who can afford to purchase the food from others or retailers; however, consumer de-

skilling proves that even consumers require a basic level of knowledge to effectively navigate the global industrial food system. Furthermore, the transmission of traditional food knowledge is necessary to ensure a variety of foods are grown and consumed to sustain biocultural diversity, an essential component of ecological integrity. Knowledge and best practices honed over generations on both the production and consumption sides that are passed on through cultural transmission are culturally relevant by definition, thus playing a significant role socially, if not also significant for personal nutrition and ecological diversity. Like many cultural practices, traditional food knowledge transmission can play a role in socialization of younger generations and in teaching basic life skills. For the sake of personal skill and sharing of domestic tasks, TFK transmission can be important to ensure a basic level of food training in society.

The next question focused on transmission:

*If it is important, or if there are important elements, how is it shared?*

The literature review demonstrated that TFK transmission is a form of cultural transmission. As such, it involves informal learning using experiential education to allow “learners” to gain the knowledge using many of their senses through practice as opposed to reading theory. Informal learning requires societal investment to provide adequate support and recognition. Otherwise, informal learning may be marginalized by formal learning and other competing priorities.

## **6.2 Challenges and Opportunities for TFK**

Once the concept, definition and significance of TFK were established, the prescriptive section of the thesis answered the last question:

*What are the challenges and opportunities in promoting TFK?*

The conceptual framework I began with related the Hancock's mandala of health to traditional food knowledge. Hancock's model outlined the nested and interconnected levels at which health is influenced. Using this as a guide, the challenges were analysed from a global to a local perspective.

The challenges for promoting TFK can be seen on various scales. At the global level, the modern food system is dominated by a "productionist" paradigm as discussed in the first chapter. The literature review in Chapter 2 outlined the major ways in which this paradigm hindered TFK transmission, such as de-skilling home production through manufactured commodities. Along with other societal changes such as dual-income families, growing middle class, urbanization and migration; TFK is facing a continuity gap in which traditional food knowledge is lost before transmission takes place.

Regional challenges emerge when one considers a food environment that can support diverse forms of TFK. This can be particularly relevant to the increasing number of immigrants flowing to suburbs where access to food and food-learning opportunities can be restricted by urban design that presumes private car ownership and lacks planning for local food production.

The challenges to promote TFK are multidimensional and thus require broad, adaptable, and participatory tools for change. A three-pronged tool made up of informal learning, capacity building and changes in governance may just seize the essential elements required to maintain and transmit TFK to younger generations. As the drivers of change for community health are education and policy (Hancock, Labonte et al. 1999); the opportunities are grouped as such.

### **6.2.1. Education**

The benefits of TFK cannot be harnessed if the continuity gap between the skilled and the unskilled continues to grow. As each individual requires a basic level of knowledge in food provisioning as personal life skills, it would make sense to re-introduce the basic cooking classes in the provincial curriculum in Ontario for young students in grade 7 and 8. Beyond these basic skills, TFK may exact cultural specific knowledge that is best learned informally in a variety of settings such as one's household or in community kitchens, etc. Recognition of such cultural education could be integrated with the formal education system through high school community service hours or some amount of credit. Such recognition would allow some room for informal learning to take priority among the demands of formal education. This recognition may be critical to encourage households to put some time aside for this practice and transmission. It was evident through the focus group and interviews with the first-generation Canadians that even several generations ago, formal education took precedent over learning basic cooking skills. Whatever the reason for this, one lesson is that every young adult should be provided the opportunity to learn such life skills as basic food preparation; and consideration should be given for opportunities to grow food as well. Such opportunities require more than time and initiative, other essential components are social spaces in which to share such knowledge and skills, such as collective kitchens and community gardens; and community development through peer-led programming, such as the Community Nutrition Worker programme in Waterloo Region. Such spaces and programmes need to be financially and physically accessible to ensure broad participation from neighbourhoods throughout a municipality. A variety of venues and avenues would allow new Canadians to introduce

younger generations to the diversity of foods in Canada, including the traditional foods and knowledge that immigrated with their families.

### **6.2.2. Policy**

Political will is often required to initiate and maintain such social spaces for cultural practices in a community. Governance often focuses more on scientific, quantifiable and physical factors that are more easily measured and evaluated than qualitative and socially significant factors, such as culturally acceptable foods. Evidence-based decision-making may overlook other determinants of health such as culture and links with the environment. While culture is noted as significant to consider for the acceptance of dietary advice, it is not a primary motivator in governance as it may be for citizens. (Choudry, Jandu et al. 2002; Anonymous March 2008)

The opportunities for maintenance of one's culture and fusion with others in the community, which could at once contribute to biodiversity and community health, demands collaboration which could be facilitated by municipalities.

There are a few ways in which municipalities, and municipal public health departments in particular, could re-orient their approach to recognize the existing knowledge and capacity in the community:

- Facilitate the development of a food charter which takes into account cultural values
- Ensure full participation possibilities by addressing socioeconomic issues such as food security and housing for the most vulnerable
- Evaluate and expand the avenues and venues for informal and accessible traditional food knowledge exchange, such as community gardens and the Community Food Advisor programme.



- Use a participatory approach to facilitate community collaboration with residents, community organizations and other municipal departments for greater outreach. Outcomes of such collaboration could include decentralized programming and participatory planning for sustainable food security and cultural transmission of TFK.

#### ***6.4 Contributions to the literature***

This thesis serves to recognize the value of a cultural phenomenon that can provide more than mere caloric value, but one that acknowledge the broader social and health benefits for individuals, families and communities with a personal sense of nourishment, comfort and a sense of ‘home’. Traditional food knowledge is a capacity which contributes to the variety of knowledge available to all people in adapting to changing environments and dynamic cultures and in building healthy communities. Traditional food knowledge encompasses the wisdom of generations of people, particularly women, who have developed traditional food systems which can evolve and are still important to people who are transplanted into new environments.

The research study documented variations within a cultural ethnic group and explored the multidimensional and mulitscalar benefits of TFK. These were illustrated in a model adapting Hancock’s mandala of health (see Figure 3). This model included how TFK fits into key influences on families and communities, such as family cultural traditions, food environments, personal choices and socioeconomic status. Criteria of traditional food knowledge were associated with these factors, such as local food culture, community food security, healthy lifestyles and informal sharing of food habits. This model is grounded in the literature and a case study of Indonesian-Chinese first-generation Canadians in Mississauga,

Ontario. Mississauga, Ontario is a multicultural suburb of the Greater Toronto Area, characterized by urban sprawl and very low agricultural activity, provided an important example of an area of high growth from immigration of people and their traditional food knowledge from all corners of the world.

Lastly, the thesis offered practical recommendations to support TFK transmission. As culture is a critical piece of identity for immigrants, TFK transmission can be a concrete, yet subtle way of sharing culture with younger generations. Informal learning, capacity building and changes to governance will help actively preserve cultural traditions that contribute to community health for a greater number of people.

## **6.5 Future research**

Further research on TFK could be drawn from quantitative and qualitative approaches; the latter would particularly benefit from a participatory action methodology. Quantitative research could be in the form of full cost accounting of the health impacts of not investing in informal and formal food education. It would be useful to know how many people are not learning food knowledge neither at home, nor at school. Without a social setting, it seems that “kitchen literacy” (Vileisis 2008) would not be strong. The link between TFK and biocultural diversity is worthy of investigation: a decline in the number of people skilled in TFK may be indicative of a decline in the diversity of biocultural knowledge. Qualitative research may be the best way to capture the significance of TFK to other cultural communities and to understand how it can be best transmitted.

Participatory action research may be an effective means for further research on the topic of TFK and healthy communities. As there is a great variation of traditions among immigrants in cities such as Mississauga, citizen participation would help ensure the research

is culturally relevant and practical for community development. This has proven effective in research in Peel region with regards to health behaviours among South Asian women, whose ethnicity represents the largest group of newcomers to the region. (Choudry, Jandu et al. 2002) Research with established farming cultures in suburban areas would provide insight into how the societal and food system changes are affecting their TFK. The research would support planning for sustainable food security with sociocultural considerations.

Smaller scale research projects could evaluate existing programmes that facilitate skill sharing, such as the community food advisor programme. The potential for expansion can be evaluated, for example, in broadening the scope to include intergenerational learning and integration with formal education. Such participatory research involves citizens as researchers and engages them as participants rather than clients in building healthy communities.

## ***6.6 Final reflection***

This thesis has helped me open a dialogue with my family and community about the value of traditional food knowledge. This knowledge can be very personal as it can reflect the various relationships and cultures. Each of us can think of where our food knowledge came from and who imparted that wisdom by exposing us to different tastes. We can each consider the people who helped develop our personal preferences and habits, how these habits can be made healthy through nutrition and sustainability considerations, and who we might want to share our knowledge with. There may still be opportunities to learn informally from those around us. Traditional food knowledge is but one example of the type of community capacity that can exist within a community. Cultural practices extend into other activities, such as dance and textile weaving, which express cultural and group identity. Recognizing these capacities, which may seem to have little material value in a world of global commodities, may actually be the

richness that can be found in any community. Within these cultural practices are the relationships that form parts of our community and personal identity. These are elements that remain invisible to most people and sometimes to ourselves—until we start to see how these practices reflect our lives and those who helped shape them.

## **Appendices**

### ***Appendix 1: Focus group questions for Indonesian-Chinese Canadians (aged 65+)***

#### **Personal**

Where did you grow up as a child?

What was your favourite food then? When would you eat it? Why did you like it? Who prepared it?

What other foods did you eat then?

What is your favourite food now? When do you eat it? Why do you like it? Who prepares it?

Where do you get your food? How often do you eat out?

Do you eat with other people?

What might explain the differences in food you had as a child and the food you have now?

What foods in childhood are you unable to make now? Why?

Who taught you to cook?

Who still cooks?

#### **For people who do cook:**

Do you enjoy it?

Do you cook differently from when you were younger?

#### **Regarding children**

What kinds of food do your children like?

Do your children eat the same food as you do?

Are your children interested in learning how to make food?

Who taught your children to cook?

Are your children learning about traditional foods?

Do you think this is important? Why?

#### **Regarding grandchildren**

Do your grandchildren eat the same food as you do?

Are your grandchildren interested in learning how to make food?

Who is teaching your grandchildren to cook?

Are your grandchildren learning about traditional foods?

Do you think this is important? Why?

#### **Practice of Traditional food**

Where do you buy your ingredients?

Besides the grocery store, are there other places you must go to find ingredients?

Do you grow any of your food? Did you used to grow food?

Are there any ingredients that are difficult to acquire?

## ***Appendix 2: Interview questions for younger generation of Indonesian-Chinese Canadians (adults aged 18-64 )***

### **Personal**

Where did you grow up as a child?

What was your favourite food then? When would you eat it? Why did you like it? Who prepared it?

What other foods did you eat then?

What is your favourite food now? When do you eat it? Why do you like it? Who prepares it?

What other foods do you eat now? Where do you get your food? How often do you eat out?

Do you eat with other people?

What might explain the differences in food you had as a child and the food you have now?

What foods in childhood are you unable to make now? Why?

Who taught you to cook?

Who still cooks?

### **For people who do cook:**

Do you enjoy it?

Do you cook differently from when you were younger?

### **For those to who care for children**

What kinds of food do your children like?

Do your children eat the same food as you do?

Are your children interested in learning how to make food?

Who taught your children to cook?

Are your children learning about traditional foods?

Do you think this is important? Why?

### **Practice of Traditional food**

Where do you buy your ingredients?

Besides the grocery store, are there other places you must go to find ingredients?

Do you grow any of your food? Did you used to grow food?

Are there any ingredients that are difficult to acquire?

### ***Appendix 3: Interview questions for municipal governance actors***

#### **Organizational efforts**

What is your organization working on in terms of food issues?

How is this contributing to healthy communities?

What areas in food, do you hope to branch into?

Why are food issues important to the community? And/or What drew your organization to food issues?

#### **Food knowledge**

What kind of food knowledge is important for people to have?

Are these all equally important to pass on?

Do you think there is a decline in food knowledge? What kind?

How would you define traditional food knowledge in the context of Mississauga?

What role does it have for the community and for ecosystem health?

#### **Knowledge transmission**

What are important elements required to pass on food knowledge?

Who are the knowledge bearers?

Who should be active transmitters?

What challenges exist to transmission?

What supports do you think are necessary for knowledge transmission?

What policy supports might be useful?

What opportunities do you foresee for transmission to grow or continue?

#### **Personal knowledge [for contextual purposes]**

Who has taught you how to prepare food? Or where have you received your food knowledge?

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