

Impacts of Place and Social Spaces on Traditional Food Systems in Southwestern Ontario

Abstract

Processes of environmental dispossession have had dramatic consequences for dietary quality, cultural identity, and the integrity of traditional food systems (TFS) in many Indigenous populations. These transitions have not been documented among First Nation people in southwestern Ontario, and virtually no studies have investigated TFS in southern or urban regions of Canada. Nested within a larger community-centred project designed to better understand the social and spatial determinants of food choice and patterns of food security, the objective of this paper was to explore First Nation mothers' knowledge about access, availability, and practices relating to traditional foods in the city of London, Ontario, and nearby First Nation reserves. In 2010, twenty-five women participated in semi-structured interviews that were audio recorded, transcribed, and analyzed with input from community partners. Our results centre on the women's stories about access, preferences, knowledge, and sharing of traditional foods. Those living on a reserve relied more consistently on traditional foods, as proximity to land, family, and knowledge permitted improved access. Urban mothers faced transportation and economic barriers alongside knowledge loss related to the use and preparation of traditional foods. Overall our results demonstrate uneven geographic challenges for First Nation engagement in TFS, with urban mothers experiencing uniquely greater challenges than those residing on a reserve.

Keywords

Indigenous knowledge, traditional food systems, food sovereignty, environmental health, southwestern Ontario, geography

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Introduction

In the past few decades, research from various disciplines has described an interdependent relationship between Indigenous Peoples¹ and their local ecosystems (Adelson, 2000; Burgess, Johnston, Bowman, & Whitehead, 2005; Ermine, Nilson, Sauchyn, Sauve, & Smith, 2005; Richmond & Ross, 2009). The health of the land and the health of the community are thought to be synonymous; health is nurtured through relationships to the physical environment, which provides the basis for cultures, kinship systems, and traditional ways of living to thrive. This important relationship is sanctified by a deep spiritual relatedness between people and their local environments, that which has been sustained for generations through Indigenous knowledge (IK). Indigenous knowledge refers to the cultural traditions, values, and belief systems that have enabled many generations of First Nation people in Canada to practise nourishing, healthful relationships with their natural and social environments (Cajete, 2000). Traditional foods originate from the natural environment, either from farming or wild harvesting (Gagné et al., 2012; Kuhnlein, Erasmus, & Spigelski, 2009). Traditional foods are nutritious, local, and central to the physical health and well-being of Indigenous people. Their harvesting and consumption also hold important significance for the preservation of IK as they are housed within their own unique traditional food systems (TFS). A traditional food system refers to the sociocultural meanings, acquisition, processing techniques, use, composition, and nutritional consequences for the Indigenous Peoples using these foods (Kuhnlein & Receveur, 1996). The relationships that Indigenous Peoples have with their unique food systems and local ecosystems encourage practices, values, and traditions that perpetuate healthy Nations and territories.

Globally, TFS are being threatened by processes of environmental dispossession. These large-scale forces compromise Indigenous people's access to the land and resources of their traditional environments (Richmond & Ross, 2009), generally leading toward decline in procurement of traditional foods and in the social, cultural, and economic benefits they provide. Across the globe, various processes of environmental dispossession have had the effect of limiting or reducing access to traditional foods among Indigenous populations, leading to the

¹ This paper is about Indigenous Peoples. The term *Aboriginal* encompasses First Nations, Inuit, and Métis people as formally recognized under the Constitution Act of Canada, 1982. These terms are used in accordance with terminology authors use when referring directly to their studies.

gradual replacement of these foods with marketed or pre-manufactured products. This transition has had dramatic consequences for dietary quality and cultural identity, along with the health and maintenance of TFS (Cidro, Adekunle, Peters, & Martens, 2015; Egeland, Williamson-Bathory, Johnson-Down, & Sobol, 2011; Johnson-Down & Egeland, 2010). In Canada, only about a quarter of First Nation adults consume wild meat from their local environments and even fewer (18.6%) include wild plants and berries as part of their diets (FNIGC, 2012). The base of research investigating dietary practices among First Nation communities in Canada has historically tended to focus almost exclusively on intake, with considerably less attention given to understanding how knowledge, access to Indigenous knowledge, and knowledge loss about traditional food systems may impact local food security (Campbell, Diamant, Macpherson, & Halladay, 1997) or the food sovereignty of Nations. Food sovereignty expands the focus of food security from food cost, access, and availability toward understanding the ways in which power relations and inequality undermine production, distribution, and consumption patterns (Kuhnlein, Receveur, & Chan, 2001; Power, 2008).

Food System Environments

While a broad body of research details how processes of environmental dispossession are at the root of cultural change and environmental contamination among Inuit and other northern and circumpolar peoples (Kuhnlein et al., 2001; Organ, Castleden, Furgal, Sheldon, & Hart, 2014; Willows, 2005), there is a gap in published research exploring the mechanisms that link processes of environmental dispossession with TFS among populations in southern regions of Canada (Kirkpatrick & Tarasuk, 2008; Mundel & Chapman, 2010; Stroink & Nelson, 2009). Even though the origins of these concerns may reflect global food trends, such as the overall environmental health of TFS, the mechanisms or determinants by which access to traditional foods has been reduced are different. For example, the impacts of colonialism and forced assimilation associated with urbanization patterns have eroded the relationships that have existed between Indigenous Peoples and their local ecosystems. Not only have these influences reduced physical access to the foods available in the environment (Organ et al., 2014), but they have also stressed relationships necessary to maintain social structures that underpin the transmission of IK.

Processes of dietary change, access to traditional foods, and Indigenous knowledge among southern First Nation communities have received very little research attention. The small base of research with southern and urban First Nation people indicates real and important challenges related to the maintenance of traditional food systems (Gendron, Hancherow, & Norton, 2016; Richmond et al., 2017). As current demographic trends detail, southern First Nation populations are becoming not only more urban but also overrepresented by youth and children. There is a need to do food systems research that will lend itself to informing policies that can both respond to and address the health, social, and cultural needs of these diverse southern First Nation populations as these processes are representing new geographies. Few studies have investigated TFS in southern or urban regions. Most studies on traditional food

patterns have taken place in northern communities (Gaudin, Receveur, Walz, Girard, & Potvin, 2014; Lambden, Receveur, Marshall, & Kuhnlein, 2006; Receveur, Boulay, & Kuhnlein, 1997; Sheehy, Kolahdooz, Roache, & Sharma, 2015). Groups living in more populated regions of Canada have not been investigated as extensively, although low incomes, high unemployment, and loss of traditional food environments have been similarly found to contribute to food insecurity among southern groups (Neufeld, 2003; Sinclair, 1997; Willows, Veugelers, Raine, & Kuhle, 2011).

Population groups such as women, lone-parent families, and Indigenous people have previously been identified as being most likely to be food insecure in Canada (Willows, Veugelers, Raine, & Kuhle, 2009). In Ontario, 29% of First Nation households on reserves experience food insecurity (Chan et al., 2014). An examination of other influences on food choice is severely lacking from the literature. Factors that determine foods selected are complex and not guided exclusively by affordability or either individual or household characteristics. A range of unique influences such as education, politics, technology, cultural preferences, and individual biological need shape availability and ultimately food choice. In an Indigenous context many of these determinants relate to the social, cultural, historical, environmental, and economic marginalization of Nations and communities.

This paper explores the challenges, meanings, and desires of the modern traditional food system among First Nation women in southwestern Ontario, Canada. Theoretically framed by the concept of environmental dispossession, we qualitatively examined traditional food access, knowledge, sharing practices, and preferences among First Nation women in the city of London, Ontario, and at two nearby First Nation reserves.

Methods

Research Process

This research project resulted from a research partnership between the Southwest Ontario Aboriginal Health Access Centre (SOAHAC) and researchers from the Indigenous Health Lab at Western University. SOAHAC is one of 10 Aboriginal Health Access Centres in Ontario. It is funded by the Aboriginal Healing and Wellness Strategy to provide health care services to Aboriginal people in London and at its satellite office on the Chippewas of the Thames First Nation. SOAHAC provides holistic health services and promotes traditional and Western health practices to approximately 1,000 clients at its London office and another 1,000 clients at the Chippewa office (SOAHAC, 2016).

The SOAHAC Food Choice Study began in 2008 as a two-phase, community-based project collaboratively designed to examine the social and spatial processes underlying dietary practices, food security, and sources of food among urban and reserve-based First Nation households in southwestern Ontario. The study took a community-based approach that heavily involved SOAHAC staff and community members in its design, implementation, analysis, and dissemination of results. Dietitians and other health care providers had expressed their

frustrations with generic nutrition research and education approaches (e.g., 24-hour recall); they expressed a strong desire for research that would enable meaningful community input around the more systemic forces that underlie food choice, such as food insecurity. The objective of the Food Choice Study was to provide culturally and socially relevant data for their programming efforts. This approach was adopted to ensure that research with First Nation communities promotes capacity-building and knowledge formation that benefits all research partners involved (Castellano, 2004; CIHR, 2013) and was influenced by the principles of OCAP (ownership, control, access, possession).²

To initiate the research and gain community support for the project, two large community feasts were held in September 2008 at each of the selected SOAHAC locations. The first phase of the research was quantitative in nature and developed around the Food Choice Survey instrument. The survey was pre-tested and self-administered to 229 participants, including 99 on-reserve and 130 urban participants. Descriptive statistics were generated to establish dietary patterns, food sources, and levels of food security (results reported elsewhere: Richmond, Steckley, et al., 2017). These patterns were described according to income, age, gender, household type, and geographic location. Results indicated an overrepresentation of food insecurity among First Nation women with young children, which directed the development of the second qualitative phase in 2010 to examine in more detail determinants of food choice among mothers with young children.

Interview questions were therefore shaped by the results of the quantitative interviews, designed in collaboration with SOAHAC staff and piloted prior to use. Study objectives included (a) investigating current knowledge surrounding access, availability, and practices relating to traditional food among urban and on-reserve First Nation families, and (b) describing present-day urban and rural food environments in this region of southwestern Ontario. This paper focuses on the comparison of traditional food practices among First Nation families living in London, Ontario, with those of nearby reserve communities that access SOAHAC services.

Prior to data collection the study received ethical approval by SOAHAC's board of directors, as well as the university's Non-Medical Research Ethics Board. Women were fully informed of the study prior to giving consent, and their privacy was protected. Each of the mothers also received a \$50 food voucher for a local grocery store for their time.

Participant Description

A sample of 25 mothers was recruited, with 14 living in London at the time of their interview, and 11 from First Nation communities within 30 km of the urban centre. The city of London, Ontario, has a population of 492,200, of which approximately 6,000 self-identify as First Nation, Métis, or Inuit (Statistics Canada, 2013).

Demographic data for all participants appears in Table 1. Study participants living in London ranged in age from 24 to 55, with a median age of 34 years. Those living in reserve

² OCAP® is a registered trademark of the First Nations Information Governance Centre (FNIGC; www.fnigc.ca).

communities were from 23-58, with a mean of 36 years. More women in the city were single (10 versus 4 married). Only 5 living on a reserve were single, 4 married and 2 common-law. On average women in the city had 2.4 children; slightly less than 2.5 on the reserve. Pseudonyms have been used for the participants. Names beginning with “R” and “C” refer to mothers from reserve and city (urban) locations, respectively.

Table 1

Participant Description (N = 25; n = 14 Urban, n = 11 Reserve)

Pseudonym	Residence	Age	Marital status	No. children
Carla	London	27	Single	3
Carol	London	33	Single	1
Carrie	London	41	Single	2
Cathy	London	39	Single	3
Cecily	London	25	Single	2
Celine	London	39	Single	2
Chantal	London	26	Single	3
Charlene	London	36	Single	2
Cheryl	London	33	Married	1
Cindy	London	26	Married	4
Claire	London	55	Married	2
Collette	London	36	Single	4
Cora	London	24	Married	1
Corine	London	39	Single	4
Rachel	Reserve	30	Single	4
Rae	Reserve	58	Single	1 (grandson)
Raven	Reserve	35	Common-law	2
Rena	Reserve	31	Married	4
Rhonda	Reserve	23	Single	1
Rita	Reserve	40	Married	2
Roberta	Reserve	35	Single	4
Robin	Reserve	37	Married	2
Rose	Reserve	33	Married	2
Rowena	Reserve	46	Single	4
Ruth	Reserve	24	Common-law	2

Data Analysis

Interviews from the second phase of the Food Choice Study were tape recorded with each participant’s consent and transcribed verbatim. Organization and coding of the transcribed data were conducted using QSR International’s NVivo 9 computer software for the primary thematic

analysis of the interviews, focusing on common themes and patterns of food choice among young families. This initial analysis specifically examined food preferences as well as environmental factors influencing food choice, such as family type, place of residence, food access, and perceived barriers (results reported elsewhere: Richmond, Neufeld, et al., 2017). These results were subsequently discussed and refined into larger categories with SOAHAC staff prior to conducting final focus groups with the interviewees. Willing participants from the second phase of the study were invited back to the SOAHAC sites to participate in focus groups or sharing circles, where these initial results were presented and discussed to provide a means of member checking, ensuring that participants' experiences were being interpreted in a meaningful way.

Further analysis of these qualitative interviews began in 2014, with a focus on traditional food access, knowledge, and preferences among First Nation women and their families living on and off reserves. Themes and categories identified from the interviews were coded and analyzed using QSR International's NVivo 9 software. Analysis involved browsing, searching, coding, and categorizing the interview text using a constant comparative method of data analysis associated with grounded theory (Strauss & Corbin, 1998). The software was also used to search and further interpret the interview text through the creation of models and memos (Richards, 2005). Thematic analysis was also employed along with coding and matrix queries to assist in further identifying relationships between categories, as well as place of residence and other sociodemographic data (Bazeley, 2007). Initial results and themes were shared with SOAHAC staff, prior to the development of life history interviews that were conducted with female Elders representing the same communities in 2015 (Neufeld, Richmond, & Southwest Ontario Aboriginal Health Access Centre, 2017).

Results

Interviews with women living either on a reserve or in the city of London included specific questions related to their (a) use of, (b) access to, and (c) knowledge of traditional foods. Mothers were asked about personal meanings they associated with traditional foods, the frequency of family meals incorporating traditional foods, as well as specific challenges related to accessing traditional foods in urban and reserve settings. Participants from both groups spoke about access to and preferences, knowledge, health properties, and sharing of traditional foods. Access issues were the most common theme discussed by both groups of women. Each interviewee spoke about the ways they are challenged by reduced access to traditional foods. All but three women living on a reserve have regular access to traditional foods (e.g., deer meat, fish, corn soup, wild rice, berries), compared to only four of the 14 participants living in London who reported having inconsistent access to these foods. The range of women's narratives will be presented in the following sections, framed according to primary themes and location. Quotes have been edited slightly to improve readability.

Knowledge

Knowledge limitations around the preparation of traditional foods, and around hunting and harvesting practices, were frequently discussed by all participants. Although more women from the city talked about these challenges, both groups expressed their frustrations with the preparation of many traditional foods. Chantal explained:

It's harder, especially when on the reserve you're closer to family. And if someone was cooking or we're going to make stuff, we could do it together. But in the city, we're all scattered around and we don't get to see each other.

Homemade breads and soups were particularly challenging for mothers to prepare on their own. Those on a reserve described the traditional preparation of corn soup with hardwood ashes to be especially complex and time-consuming. Many, like Raven, relied on family members:

I make fry bread once in a while, but corn soup, I don't know how to make it so if we have it it's either pay for it or ... if my mom makes it she'll always make a lot so we'll get some that way.

Both groups of women recommended that it would be beneficial to offer cooking classes to learn traditional techniques or create a method of recipe sharing to make traditional food knowledge more accessible. Carla suggested:

Maybe there could be more classes on how to cook more traditional foods, or even just—like I don't have a recipe for anything traditional. My mom gave me recipes for soups and stews and things like that, but I wouldn't know how to cook corn soup. No one ever taught me that. So it's not in my mind how to cook it. And I don't think a lot of people know.

Several women from the urban group discussed their lack of general knowledge related to traditional foods and other cultural traditions around Indigenous foods. One participant, Carrie, was not familiar with the term *traditional foods* at the start of her interview until she was given examples of foods she recognized, such as fry bread and corn bread. Cindy and Collette had difficulty remembering the story of the Three Sisters (corns, beans, and squash) that were traditionally planted and cooked together in a soup with the same name. Cindy said,

I remember there was a story. I can't remember what it was. Like I was taught it—I went to a Native school. I can't remember what it was. There [were] three main foods and I can only remember corn. There was two other ones and I can't remember.

Three other urban participants talked about the challenges related to knowing where to find ingredients to prepare traditional foods such as corn soup. Charlene commented, “I don't really know where to get, like, the [white] corn and stuff and how to make it myself. I always rely on

other people that make it.” Cathy explained that having to find the ingredients is particularly difficult: “If you weren’t raised that way, then it’s a chore to find your way back to doing what should be done.” Carla said she would like “more knowledge so I can cook whatever I wanted to cook without having to look it up, or going around and asking everybody else how to do it.” Cindy made reference to similar barriers negatively impacting traditional knowledge transfer due to families becoming increasingly “urbanized,” along with “[not] knowing your Elders, because they’re the ones that pass down all this tradition.” Cindy was aware of the legacy of residential schools and their structural impacts on knowledge transfer from Elders to younger generations. She empathized with her sister and the challenges she faces, not having access to transportation to travel to her home community and speak with her Elders and learn how to prepare traditional foods. As she said, “My sister, she doesn’t even make bread.” Cindy made the connection that her sister

didn’t go to the same schools I did, because she didn’t grow up in my household. She’s about ten years older than me. I think my mom might have had more problems back then, than she did when I was growing up. So maybe that has something to do with it too.

A smaller number of women living on a reserve talked about the disappearance of traditional harvesting and hunting knowledge. Rita had a lot to say on the subject of hunting and the shifting of traditional roles related to food procurement:

We lost a lot of our hunters—a lot of our hunting ways. There’s very few that go hunting, like normal hunting. Like we have pheasant, we have wild turkeys around here, but you don’t hear of hardly anybody getting any of that stuff. When I was a kid, everybody ate everything.

She went on to suggest:

Probably if we had some kinda life skills that taught everybody how to hunt again that would help. I’ve gone hunting once when I was younger. We were hunting pheasants, but my husband, I don’t think, has ever hunt[ed] ... So I think if we had some kinda traditional teachings on what a hunter is. Something like that to help the people empower—get back to something like that again, definitely, because a lot of people don’t even know how to load a gun. Like, I don’t know how to load a gun. I’d like to hunt. Nobody has the skills like that anymore ... very few.

Sharing

Compared to those living on a reserve, substantially fewer urban-based participants talked about the concept of sharing traditional foods and knowledge within family and the wider community. However, both groups did refer to sharing practices within their immediate and extended families. They also talked about the importance of sharing resources, such as food,

within their communities. Nearly half of the urban interviewees provided examples of the ways they share traditional foods within their families. Cindy described a common practice she experienced every time she returned home to her community:

When we go to my grandma's house, she always gives us food. That's one thing that Native people do is they give food. It's like one of those things. I don't know if everybody else does that. I know my grandma and my mom always have something.

Carol shared her experience: "Last week, my mother had a party and she made corn soup. So we had corn soup and I brought some home. And we had a big thing of it and we had it for supper." She also talked about the importance of having a hunter in the family and how her son's father provides for them "because his dad is a fisherman and a hunter, he gets ducks and deer and stuff like that. We have pickerel because I don't have to pay for it. So I have a lot of fish in my fridge."

Comparatively, nearly three quarters of the on-reserve interviewees gave examples of the ways traditional foods, mainly wild meats, were shared within their families and communities. Several of the reserve-based respondents highlighted the ways in which the city can limit traditional contributions from extended family and others. Roberta empathized, "Every time I turn around and go to somebody's house they always got something going. If it ain't corn soup, they've got fried bread going or something. You wouldn't find it in London as you would down here." Rae, however, thought that circumstances had changed in her community from the time she was younger:

I remember my grandmother used to have these [working] bees and everybody come together and we'd have all these wild foods. They used to give away for pies for the people that have nothing. All the women would get together and cook up everything. But you never ever see that no more.

Rae was concerned that the value of sharing was not being practised in the same ways today as it had been in the past. She said:

Nowadays, people just go out there and take our venison, the deer—they just go out there and abuse it. Like they shoot it, they skin it; they take it and sell it instead of just taking what they need and giving it to the people. You never seen anybody no more helping other people.

She went on to suggest:

They should go back into that helping. Neighbours used to help neighbours and walk for miles, and give somebody that didn't have something, they'd give it to

them. And you don't, never see that no more—ever. They give you something, you have to buy it.

Mothers from both urban and reserve locations also talked about local limitations on the transference of traditional food teachings and sharing practices reflecting IK. These connections to traditional foods were discussed briefly by a handful of participants. Cecily referred to the transfer of energy she experiences with deer meat: “They’re strong and they exercise those animals. I think about that and if I’m eating that, that’s how I’m gonna be.” Rita also talked about the pride she felt in the teachings she had as a child to lead a sustainable lifestyle and expressed the desire to transfer or share that knowledge and “teach my kids to hunt, to garden, to live.”

Preferences

Most interviewees, from both urban and reserve settings, talked at length about specific traditional foods they and their families most enjoyed, in terms of taste perceptions, celebratory associations, and familiarity, as well as community or cultural ties that these foods fostered. While on-reserve women discussed these preferences more frequently during their interviews, both sets of women talked about the cooking techniques they used when preparing wild meat. Roberta complained, “I’ll cook everything else, but other than venison. I just can’t stand the smell!” Robin said, “If you can get that gamey taste out of there, I’ll eat it!” For those who grew up in the city or were bringing up their children in the city, there was a demonstrated lack of familiarity, for instance, with wild meats such as deer. Cathy explained, “There’s a lot of traditional Native foods that are made that just weren’t a part of my staple of food growing up, so it’s kind of not very tasty either.” Interestingly, quite a few of the respondents described cooking techniques they used to mask the taste of wild meat and present it to family members as store-bought beef, which seems to reflect a paradox to maintain these connections with wild foods even though the focus is on their preparation and not their consumption. Raven described her approach:

I think it depends on how you cook it because I know when I—at first I did not like it. And then I seen someone else the way they cooked it and I didn't even know that's what it was. So when I cook it I don't tell my kids until after they eat it and they don't know the difference from that or a roast because I'll cook it like if I have a roast—it just all depends on the way you cook it. I have it in water with salt and sit like that for a day. Then I put this marinating sauce on it. Then I throw it in a slow cooker like that. And they think it's a roast beef!

Personal motivations to prepare traditional foods like deer meat for their families in London frequently reflected children’s preferences. Over 70% were single parents living on fixed incomes in the city. They did not want to waste precious funds or time on food their children did not want to eat. Celine described the frequency of traditional foods she prepared at

home as “not something that happens all the time because my children won’t eat them.” She went on to say, “because it takes a lot of work to cook them and make them and everything like that. It’s something I always buy. I don’t make corn soup and I won’t make fry bread.” Participants in the city tended to associate traditional foods with celebratory occasions involving extended family, fostering a sense of belonging and cultural identity. When asked why it was important to have traditional foods at family gatherings, Celine responded,

Well, it’s a celebration. We all enjoy it, my extended family. So it’s like a delicacy. So I think it’s important. It’s part of who I am. I grew up eating corn soup and having it at my grandma’s and we always had fish [too]. And so it’s just part of who I am.

On-reserve participants talked about traditional foods in the context of special occasions and discussed the environmental and health benefits of consuming a variety of “foods that come out of the ground.” Preferences for certain traditional foods were not necessarily associated with special events and extended family for those in the city. Ruth talked about these foods as “things that aren’t processed, don’t have any added salt.” Making these foods regularly and having access to wild sources of meats and plants were not necessarily considered out of the ordinary. As Rena said, “We pretty much have it—it’s not something that’s a big, special traditional night thing. We can get venison meat if we ever needed it. We can get the fish if we ever need it.” Robin described all the wild meats that were available in her community and other types that she had previously prepared and preferred: “I’ve tried venison, goose, I think it was a moose. The wild turkeys that you see, I’ve tried that too.” Some of these less common wild meats available locally were often described, along with variations in the preparation of corn soup and homemade breads. *Gunjen*, or oven bread, for example, was a local favourite compared to more familiar forms of fry bread or bannock. Ruth talked about her husband and daughter loving it, but since she was raised in a more northern community, “if it came to bannock and gunjen, I would definitely take bannock!”

Access

Both on- and off-reserve interviewees reported their access to traditional foods to be determined by environmental safety concerns, seasonal availability, and the time and costs associated with procuring traditional foods. Mothers from urban and reserve locations were worried about the safety of consuming fish and other animals from the local environment, in particular the Thames River, which runs through the city of London and the two nearby First Nation communities. As Robin cautioned, “You don’t know what the animals are consuming. Same with the river, you don’t know what’s in that river anymore, so you’re almost scared to eat the fish.” As Cecily expressed: “There’s so much pollution in the water and on the earth and in the air. You gotta really think about it, is it really healthy for me to be eating so much of this natural source of food that our people used to live on?” Seasonal availability of certain items like berries and fish was discussed as a barrier that limited the variety of traditional foods available

during the winter months. Time constraints also were expressed by many women with regard to both the preparation efforts required for corn soup and corn bread, as well as the added time spent travelling to access certain ingredients. Even though she lived outside of the city, Ruth complained that “sometimes it is easier to go to the grocery store and get it when it’s already packed than going to find someone who has the [wild] meat I want.”

Transportation to and from their home communities was frequently mentioned by urban respondents as time consuming and costly, yet necessary to access wild meats, fish, and other ingredients used to prepare traditional foods. As many live at a distance from family, accessing traditional foods means increased transportation costs to obtain wild foods harvested on reserves, or to participate in extended family meals. Chantal complained that “it’s hard to have the money when you want to find the foods. Sometimes you hear about it in the city, you want to go but don’t have the money to do it.” Prepared soups, breads, and other items for some London residents may be available only during celebratory events such as powwows or sold commercially on reserves.

Several of the reserve-based women suggested that it can be expensive to purchase prepared foods such as corn bread, fish, and other wild meats if you don’t know a hunter or someone willing to share local wild foods. As a grandmother living on a limited income with her young grandson, Rae complained about the price of rabbit and fish available commercially. She said, “When you go to buy fish it’s very expensive. I’m very lucky. Sometimes my cousin from Kettle Point, she brings me fish and just gives it to me, but she’s like me. She can’t get around too well.” Due to environmental concerns, fish and other wild meats were also thought by many to be safer and cheaper, and therefore more accessible, in the near north, compared to southwestern Ontario. As Rita said, “The wild fish and game, it’s cheaper up there. Just that you gotta go up there and get it, or ship it down here.” The costs associated with travelling and purchasing equipment to access other desirable traditional foods such as wild rice and moose meat further north were viewed as significant barriers to access.

Discussion

This research sought to explore the impacts of place on traditional food systems in southwestern Ontario, using environmental dispossession as the theoretical framework from which to understand the linkages between TFS and IK in this context. Analysis of interviews with on-reserve and urban First Nation women reveals considerable spatial differences in access patterns and knowledge. Those living on a reserve relied more consistently on foods such as wild meats, fish, corn soup, wild rice, and berries compared to those in London. Many described daily as well as weekly preparation and consumption of these foods. Urban mothers faced transportation and economic barriers associated with accessing ingredients or participating in family events back in their home communities, while those on reserves talked about the benefits of living in a tight-knit community with family members and friends who hunted and fished on a regular basis. Women’s worries about environmental safety of wild foods prevented consistent

access among both urban and reserve-based women, as did the seasonal availability of items such as fresh berries or fish. These findings were consistent with the quantitative results of the Food Choice Study (Richmond, Steckley, et al., 2017). Both on-reserve and urban respondents reported consuming fewer traditional foods than they would like as a result of access barriers such as time and knowledge. Spatial differences in food sources were also noted, with urban families indicating greater limitations in accessing traditional foods than those living on a reserve.

Access to knowledge, land-based activities, contact with Elders, and cultural capacity around food is also integral to the health and maintenance of TFS (Richmond, Neufeld, et al., 2017). Traditional food systems are also highly influenced by resource availability and the physical environment (Kuhnlein et al., 2001; Waldram, 1985; Wein, Henderson Sabry, & Evers, 1991). Previous studies examining traditional food access and availability have often taken place in remote regions where environmental safety issues associated with traditional foods such as wild meats and fish have been viewed with concern, particularly in northern communities where contaminants have accumulated up the food chain in many species (Furgal & Seguin, 2006; Kuhnlein & Chan, 2000; Receveur et al., 1997; Tsuji et al., 2005; Waldram, 1985; Wein et al., 1991). Comparatively, in southern Canada, few studies have reported on environmentally contaminated locally harvested foods (Abonyi, 2001; Bruyere & Garro, 2000; Chan, Trifonopoulos, Ing, Receveur, & Johnson, 1999; Garro, 1994; Lang, 1989), or their decreased access due to environmental modification, such as urban development and the displacement of Indigenous species (Doolan, 1991; Hlimi, Skinner, Hanning, Martin, & Tsuji, 2012; O'Neil, Reading, & Leader, 1998; Turner & Turner, 2008; Wheatley & Paradis, 1997).

The concept of sharing food was significant among both urban and reserve-based respondents, but the practice seemed to be more highly valued in the urban centre where traditional foods are less prevalent. Sharing practices have been much more widely documented in the literature, even though only 27.9% of First Nation adults in Canada report sharing traditional foods on a yearly basis (FNIGC, 2012). The majority of these studies have found that community sharing occurs as an adaptation to food shortages (Chan et al., 2006; Ford, Berrang-Ford, & Paterson, 2011; Robidoux, Haman, & Sethna, 2009; Skinner, Hanning, Desjardins, & Tsuji, 2013). Other investigations in the north have listed the following barriers to community sharing: increasing hunting costs, no hunter in the household, and environmental change negatively impacting yields (Beaumier & Ford, 2010; Ford et al., 2011; Socha, Zahaf, Chambers, Abraham, & Fiddler, 2012). Only a handful of authors have written about the sharing of traditional foods in a southern or urban context. One study set in a First Nation high school described food sharing happening as a result of cultural programs held where these foods were regularly served (Kerpan, Humbert, & Henry, 2015). Out in the community, hunters living in and outside of the city also distributed wild meat to those families in need. According to the participants of the current study, these community-based food sharing networks appear to be disappearing as they are replaced with more Westernized forms of distribution with individualized economic benefits. A Vancouver-based study parallels some of the findings in our

study, particularly those related to the unique challenges in accessing traditional foods in an urban setting. The Vancouver participants stated that traditional foods are commonly shared through community networks, but due to distance and disconnection, these practices are limited when living in the city (Elliott, Jayatilaka, Brown, Varley, & Corbett, 2012).

The frequency of traditional food consumption is often linked with taste appreciation (Kuhnlein, 1992), and this was certainly the case in our study, where nearly all participants talked about the properties of traditional foods as well as their preferences. They shared cooking techniques used to mask the stronger flavour of wild meats, especially when serving them to their children. Women also associated other traditional foods such as fry bread and corn soup with family events and celebrations. Those living in London tended to prepare these items less often because their children would not eat them and the food would go to waste. Although preferences appear to be shifting away from traditional foods, fondness for traditional foods tends to be associated with increased age, exposure, and positive experiences (Bruner & Chad, 2013; Kerpan et al., 2015; Kuhnlein et al., 2009), which seemed meaningful for several women in this study who continued to prepare wild meat even though they did not like the flavour. Younger community members often report a preference for store-bought foods (Bruner & Chad, 2013), as was also mentioned by participants with young children in this study, along with women who did not have the same familial connections with these foods. Research in rural and urban Alberta is, however, demonstrating that family and school can positively influence traditional food experiences (Kerpan et al., 2015; Pigford, Willows, Holt, Newton, & Ball, 2012). Increased exposure to these foods through school programs, cultural activities, and family events has been shown to increase both the frequency of consumption and taste preferences among urban youth. On reserves, knowledge gained from Elders and family members most consistently informed children's food preferences and health beliefs (Pigford et al., 2012).

Loss of knowledge related to the decreased use of traditional foods was demonstrated most consistently in this study by mothers living in London. They were often challenged by the time and teaching necessary to prepare certain recipes like corn soup. In the city, for example, many of the participants indicated they did not have consistent access to Elders and extended family. Several expressed their desire for connection to both their culture and the past. It was also difficult to locate a consistent supply of locally sourced animals and fish when immediate family members no longer possessed the hunting skills or knowledge to prepare wild meats. Women living on reserves talked about the importance of sharing traditional foods and knowledge. A few were concerned that community-sharing practices were changing, with younger hunters selling wild meat instead of distributing it without cost as had been the practice in the past.

It is well known that harvesting and hunting practices were irreparably impacted by assimilative actions taken to sever communities from their traditional lands and knowledge systems (Degagné, 2007; Elias et al., 2012; Raschke & Cheema, 2008; Richmond & Ross, 2009). In our study context of southwestern Ontario, results demonstrate the dramatic impact processes of environmental dispossession have had on TFS and IK expression, especially for First Nation

women in London. Indigenous women's identities are continuing to evolve in new environments. However, urban locations have created significantly greater challenges to fully engage in TFS as a result of their physical and social distance from their communities. Their geography has presented a number of practical limitations to practising TFS in meaningful ways, but so too are they limited by their relative social and cultural exclusion from their home communities. At the root of many of these women's stories of urbanization lie uneasy truths about the politics of identity and Bill C-31, that clause in the Indian Act that has separated women from their communities and children from their families (Bourassa, McKay-McNabb, & Hampton, 2004; Richmond & Cook, 2016). Life history interviews with female Elders representing the same communities in southwestern Ontario further illustrate these intergenerational impacts that have disconnected First Nation women, in particular those living in urban centres, from the land (Neufeld et al., 2017). Shifting from subsistence farming on reserves to wage economy pursuits in the nearby United States, for example, divided extended families from each other and the land.

Conclusions

The SOAHAC Food Choice Study is one of the first in southwestern Ontario to qualitatively examine patterns of traditional food use among First Nation people living in reserve and urban settings. Interviews with First Nation women demonstrate considerable spatial differences in access patterns and knowledge. With approximately 60% of First Nation people now living off reserves in Canada (Statistics Canada, 2013), a more comprehensive understanding of the unique environments impacting traditional food systems in an urban context is essential. Continued community-engaged research aimed at increasing control over local food systems in these under-researched places and spaces is recommended. Future research on the sustainability of food environments and TFS needs, however, to shift from a focus on food security towards the concept of food sovereignty (Grey & Patel, 2015). In the Indigenous context, food sovereignty encompasses the ability to acquire foods in socially acceptable ways, such as through traditional practices (FAO, 1996; Schuster, Wein, Dickson, & Chan, 2011; Willows et al., 2009) that may encompass IK. An Indigenous food sovereignty framework explicitly connects the health properties of food with the health of the environment and identifies a history of social injustice as having radically reduced Indigenous food sovereignty in nations such as Canada (Morrison, 2011). It addresses aspirations for collective well-being, along with acknowledging land rights and cultural integrity. Indigenous food sovereignty also considers gender equity and adequate nutrition, and it addresses structural racism and a restructuring of sociopolitical processes (Cidro et al., 2015).

The emerging literature on the Indigenous food movement identifies community involvement, family-centred education about food, and a re-established relationship with the land as essential to the restoration of traditional food systems (Kuhnlein et al., 2009). Progress has been made in the resurrection of traditional food systems. In northern Minnesota the community of White Earth is focused on achieving the localized harvesting of traditional foods. Food-related projects such as gardening and maple sugaring also have an impact on the physical health and

cultural connectedness of community members (LaDuke, 2005). Another project in Saskatchewan highlights the importance of Elders and community members in exploring and revitalizing the use of Indigenous foods by passing on knowledge through workshops on the identification, harvesting, processing, and preparation of Indigenous foods and medicines (Gendron et al., 2016).

Community involvement and family-centred education about food as well as re-establishing a relationship with it and the land are necessary to overcome the present-day environments that continue to act as barriers towards a collective vision involving the sharing of resources, increased access, knowledge, and positive associations with traditional foods. The dimensions that constitute TFS can contribute toward the holistic health of individuals and communities (Kuhnlein et al., 2009). Traditional food systems are complex and holistic. These foods are valued from a physical health perspective, and the activities involved in their acquisition and distribution allow for the practice of cultural values, such as sharing and cooperation (Earle, 2011). There is urgency in promoting the sharing of practices and increasing knowledge capacity around traditional foods through increased social support within both families and the larger community of women living in urban environments. Elevating traditional foods and TFS as pathways towards self-determination also reinforces both dietary and biocultural diversity (Johns & Sthapit, 2004). Diversity in both forms thereby improves health and continues to build resilience.

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