Food Security in a Northern First Nations Community: An Exploratory Study on Food Availability and Accessibility

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ABSTRACT

Food security exists when people have consistent physical and economic access to sufficient, safe, and nutritious foods to meet their dietary needs and food preferences for an active and healthy life. Remote northern First Nations communities suffer disproportionate rates of food insecurity and confront many social problems that stem from colonization. Access to healthy, inexpensive, and culturally appropriate foods will not solve all of these problems; however, healthy food is necessary for wider social change and healthy living. Despite widespread knowledge of the food crisis in remote northern communities, little attention has been given to the suggestions of community members themselves for addressing these problems. Using a decolonizing, Talking Circle method, this study provides a voice for community members in a northern community in Ontario to share their experiences on healthy eating and food security. This paper rejects traditional academic writing and embraces Indigenous story-telling as a narrative framework. The outcome of the Talking Circles held with community members shows that there is a serious need for food security and food sovereignty (i.e., independence) in northern communities. Community members are ready and willing to think of solutions to the twin crises of food insecurity and ill health. The suggested solutions (a) require political sovereignty prior to sustainable social and economic development, and (b) emphasize the importance of traditional knowledge and values.

KEYWORDS

Food security, Aboriginal health, environmental change, social determinants of health, First Nations



INTRODUCTION

Pood security exists when people have physical and economic access to sufficient, safe, and nutritious foods to meet their dietary needs and food preferences for an active and healthy life (World Food Summit, 1996). Food security is a prerequisite to broader health (World Health Organization, 1986). Remote First Nations communities deal with many social problems, including food insecurity, which stem from colonization. Access to healthy, inexpensive, and culturally appropriate foods will not solve all of these problems; however, healthy food is a prerequisite for wider social change and improved health. In addition, food sovereignty—culturally appropriate, locally determined food systems and food distribution enhance community independence.

This study¹ focuses on knowledge in a northern community, and transforms community-based, anecdotal evidence into data that can be used to lobby governments for increased funding and new food programs and policies. Despite widespread knowledge of the food crisis in remote communities, little attention has been given to community members' suggestions for addressing these problems. This paper embraces Indigenous story-telling as a narrative framework. Stories and oral tradition provide ethical guidance: "the stories people tell have a way of taking care of them" (Lopez, 1990, p. 48). As an Elder put it, "you always start with a legend or tell a story. Then you combine with that story what's the purpose of what he's trying to say." An Elder in a northern First Nations community opened the Talking Circle by saying:

A long time ago when the Creator was building or making Mother Earth...he had a purpose to build, to do things regarding what he has to offer us...God or the Creator put everything what we can use as a Native people in here. He provided animals, all different kinds of animals for us to eat, the fish. Also the trees, different kinds of trees, and in every tree there is an herb where we can make our medicine.

After outlining the literature on food insecurity in the north, we describe our collaborative partnership and the ethics and method of our project. Our evidence illustrates that First Nations community members are ready to solve this problem.

LITERATURE REVIEW

Legal context

Personal security cannot be obtained without food security, and the *Charter* imposes upon Canadians an obligation to ensure freedom from want for all. This obligation is heightened in the context of a history of colonialism and the rights given to First Nations People under s.35 of the Charter (Macklem, 1997). Control over food, and denial of access both to traditional food (through seizure of Indigenous lands, residential schools, loss of traditional language and foodways) and of market foods (because of transport, price, and poverty), have been tools of colonialist control. As Damman, Eide, and Kuhnlein state, ill health "may reflect the failure of the state to respect and protect [I] ndigenous peoples' rights...territories and livelihoods" (2008, p. 150). The United Nations Declaration on the Rights of Indigenous Peoples includes the "right to the highest possible standard of physical and mental health" (United Nations, 2007, Article 24).

Food insecurity defined

Food insecurity occurs whenever "the availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain" (Andersen, 1990, p. 1576S). Remote northern communities are particularly vulnerable to food insecurity (Ledrou & Gervais, 2005). The risk of food insecurity among Aboriginal people is disproportionate; it is one and a half times greater than that of non-Aboriginal people (Che & Chen, 2001), and double that of non-Aboriginal people (Ledrou & Gervais, 2005).

Food insecurity is directly related to low income (Power, 2005). Recent studies in urban centres in Canada document this problem (Nova Scotia Nutrition Council, 2003). Despite this understanding, little has been done to regulate the cost of nutritious food in Canada. The problem of food insecurity is heightened in Aboriginal communities, partly because Aboriginal people are more likely to have low incomes. This is not a problem unique to Aboriginal populations in Canada. A large body of literature documents similar problems in other countries, particularly in remote Indigenous populations in northern Australia (Gracey, 2000; Jones & Smith, 2006; Lee, O'Dea, & Mathews, 1994; Ruben & Walker, 1995; Sullivan, Gracey, & Hevron, 1987).

Food insecurity contributes to malnutrition, poor learning outcomes, developmental delays, low birth weights,

6



depression, anxiety, and suicide, all of which are pressing problems in remote Aboriginal communities (Barton, Anderson, & Thommasen, 2005; Che & Chen, 2001; Knip & Akerblom, 2005; Moffatt, 1995; Newbold, 1998; Willows, 2005). Although these wider problems will not be solved immediately through improved diet, food security is necessary to improve the lives of Aboriginal Peoples.

Food availability and food accessibility

Lifestyle and poor choices have often been blamed for lack of good nutrition. Aboriginal communities, however, have had their "access to traditional environments reduced" (Richmond & Ross, 2009, p. 403). Access to traditional food is very limited and sometimes risky (Assembly of First Nations Environmental Stewardship Unit, 2007). In the absence of reliable and universal access to traditional foods and gardens, market foods become important in the food intake of Aboriginal people. Choice of market goods can be severely decreased by high food costs, poor availability of healthy food, low income, and/or high housing and heating costs. Limited evidence has been collected about food prices in the North. Researchers have recently argued that information on food pricing is essential to food security research and policy-making (Power, 2005). By establishing a Northern Food Price Survey program, the province of Manitoba has acknowledged the importance of food pricing in providing enough healthy food in the North (Northern Food Prices Project Steering Committee, 2003). The steering committee noted that there is "strong support from northern organizations and communities to use this much needed data base as a planning and decision-making tool" (p. 27). Our partnership with remote northern Aboriginal communities also illustrates this support. However, the only way to get a clear picture of the current food (in)security situation in northern communities is to get the information at its source: from community members and market food providers. A partnership based on mutual trust and respect has been established, as described in the next section.

METHODS: A COMPREHENSIVE DESIGN OF STORY-TELLING AND TALKING CIRCLE

Ethics and values: A self-determination approach

When designing this community project and partnership, we purposely rejected "destructive practices of colonial

research by fragmented social sciences" (Findlay, 2006, p. 47) and used a holistic and decolonizing approach that gave control over data and interactions to participants, and defined questions in terms of community needs (Smith, 1999; Weber-Pillwax, 2001). This approach reflects the fact, as one Elder put it, "in the community, we have lots of knowledge." We used a holistic approach to food, the environment and health expressed by community members, and defined partnership as working together in "kindness, caring, and understanding."

Colonialist-style researchers go into a community to extract information, abruptly leave, and are the only ones who benefit from the research. Instead of this approach, we established a decolonizing relationship with community members based on reciprocity. The National Aboriginal Health Organization (NAHO, 2004) refers to this as selfdetermination applied to research. This model is based in ownership, control, access, and possession (OCAP) of the generated information or data.

Partnership: The Miichim Reference Group

Over a period of 2 years, a partnership was developed with Nishnawbe Aski Nation (NAN), an Aboriginal political organization in Ontario representing 49 First Nations communities within James Bay Treaty 9 territory and the Ontario portions of Treaty 5 (http://www.nan.on.ca/), which resulted in the creation of the NAN/Matawa/Lakehead University Miichim² Reference Group, which guided the research design and ethics protocol. We obtained permission to enter a northern community from the community's chief and council and from NAN.

Comprehensive approach: Talking Circle and stories of healthy eating

We conducted a Talking Circle with members of a northern community in Ontario, to hear directly from local residents about the challenges around obtaining food, and to ask about solutions to food insecurity. A Talking Circle, unlike interviews or focus groups, allows participants to drive discussion and avoid research-determined questions. The Talking Circle was conducted in September of 2009 and included 18 community members. Participants were recruited by a community member and included two Elders and one child. Eleven (61 per cent) of the participants were women, which we considered important since obtaining and preparing food remain largely the responsibility of women. A weakness of this sample is that, while it included Elders



and women, the voice of youth was absent.

All participants in the Talking Circle were volunteers, understood the purpose of the project, and embraced the opportunity to speak about the challenges in obtaining healthy food in their community. As required by the Lakehead University's Research Ethics Board, participants signed consent forms. The final report was returned to the community for review and consent before the information was used publicly. The Talking Circle was used instead of Western-based research procedures that involve dominating the discussion by imposing rigid questions on participants

All participants introduced themselves and spoke in their own time. The store manager also participated, and a separate discussion was held with two community members who wished to participate but could not attend. An Elder opened the Talking Circle with a prayer, tobacco wrapped in cloth was presented to the Elder as an offering for sharing knowledge, and lunch was provided for participants. Participants consistently expressed concern that traditional foods are often inaccessible and that Western foods are both expensive and unhealthy.

RESULTS

Food and wellness

The widespread problem of food insecurity was clearly reflected in the comments of community members. Concerns were often expressed through stories, not directly as complaints. When opening the Talking Circle, one Elder stated that stories are too often lost:

All those animals they used that was given to us and that's what we forgot. We are learning too many so much of the European materials the white society thinks. And when they grow things down south they add different stuff, different chemicals and that's not the way the Creator did to us a long time ago...we have to continue to learn the proper things of what we have to eat from the land itself. An example is about the beaver... he has a lot of things to teach us about what he eats and the things that he eats and from the things that he eats we can understand what the herbs and the medicine, the traditional medicine what we can make. And also when you look at the beaver, he is an engineer. He can do lots of things. And I don't think he had lots of cavities when he's cutting down trees and all that. I just want to share some

of those stories as a Native here, what we lost through our tradition and cultural things. There's too many of us want to eat junk food and that's the reason why what we are today and having very poor health, physical health, cause of the things that we eat. And that's another reason why elders eat traditional food. They don't feel good when they don't eat moose meat or other things that they are used to eating.

This expressed a holistic approach to food and wellness. Food is described as a need that historically was met through connection to the land. The Aboriginals' ancestors thrived on traditional foods; loss of connection to and knowledge about the land, and reliance on the foods and medicines of white North American society now contribute to high rates of illness, particularly diabetes. This story reflects an understanding that ill health and food insecurity in Aboriginal communities are products of colonialism. The story also implies that control over food, denial of access to traditional food (through seizure of Aboriginal lands, residential schools, hunting and fishing regulations, and environmental degradation) and to market foods (because of transport, price and poverty) have been tools of colonialist control (Nyéléni, 2007).

The stories of the Elders and the participants in the Talking Circle provided evidence that many community members suffer from ill health and that it is believed to be connected to a decline in the quality of food. Another participant stated:

I'm a diabetic and have been for almost 10 years now. Since I became a diabetic I try to eat a lot of traditional food. I hardly eat any pan [fried] food. My mother still cooks for me. She usually cooks traditional food mostly soup and boiled fish. And before I was a diabetic I used to eat a lot of junk food, fried greasy food. And now I eat a lot of vegetables and a lot more traditional foods.

Academic observers have extensively documented the health problems in First Nations communities (Receveur, Boulay, & Kuhnlein, 1997) but there has been little discussion of addressing factors external to Aboriginal people themselves that contribute to ill health (Willows, 2005). Instead, the problem is often framed in government solutions as a matter of individual choice. Contrary to such colonialist assumptions, community participants in the Talking Circle stated that few food choices are available in remote Aboriginal communities. They also highlighted the challenges of teaching healthy living and eating to



community members removed from the land for more than a generation (and thus implicitly critiqued government policies—particularly land seizure and Residential Schools—which have undermined traditional relationships with the land).

Traditional foods: Food availability

One Elder, speaking through a translator, lamented the passing of traditional ways and traditional foods, and linked market foods to ill health in the community:

Those drinks that you have to open are really not healthy for you. Totally not good for you. There's so much sugar in the drinks that we are consuming all of the time—that's why people have heart attacks and strokes I guess because it slows down our blood circulation...The wild food like moose fat, beaver fat don't do damage to our bodies compared to other fats, other animals that are given injections to make them grow. That's the kind of fat that's not good for us. Bear grease is really good as a lotion for people who have arthritis to put on wherever they have arthritis. Bear is also really good to eat, tastes really good, especially if smoked first and boiled after...

Participants in the Talking Circle consistently said that "according to the Elders in our community, healthy foods are traditional foods. That's what they consider healthy foods." Traditional foods described included fish, bear, rabbit, moose, and berries. As one participant said:

Traditional foods would be like the moose meat, whether it's smoked or sometimes they call it noka'igan when they mash it up. They don't do that with the fish so much, but a lot of what the nasty habit is deep frying the fish. So then there's rabbit. That gets boiled into soup. Then there's the berries. We have a waabanoonan here. It's like a festival celebrating the berries. They try to have traditional foods but lately it's more of the processed stuff that we have here. What else, duck, goose. They don't eat bear and they don't have too much deer around here either.

Further, as one participant said, story-telling is also connected to traditional foods, and the link between food, language, and self-understanding is holistic:

I know they used to say that eat rabbit, you'll run like

a rabbit, as fast as a rabbit, but that's what they say to kids, but part of you still kind of believes in it. Eat moose meat and you'll be strong like a moose. I know it sounds silly, but part of you still kind of believes it. You are what you eat.

As another participant added that "traditional foods are healthier compared to the nontraditional. But traditional foods are harder to obtain than nontraditional foods because you can't just go to the store." "Wild food is good for you. I know that because it keeps my sugar down." Community members are correct in their claim that traditional foods are healthy. Their knowledge has been documented in Western nutritional assessments and "long evolved food systems of Indigenous peoples amount to a treasure of knowledge that is typically overlooked and undervalued" (Kuhnlein et al., 2006, p. 1013). Country or traditional foods are high in nutrients currently low in the diets of northern remote First Nations Peoples (Kuhnlein, Receveur, Soueida, & Egeland, 2004; Receveur, Boulay, & Kuhnlein, 1997; Receveur & Kuhnlein, 1998) but traditional food is not universally available (Lambden, Receveur, Marshall, & Kuhnlein, 2006) and intake of such food is in decline (Lawn & Harvey, 2004; Receveur, Boulay, & Kuhnlein, 1997). Traditional Aboriginal lands have been under assault by mining, forestry, and other resource-intensive uses that have created controversy in communities and disrupted access to historically important foods; in some places, traditional foods are contaminated by chemicals from industry and are unsafe for human consumption (Kuhlein & Chan, 2000; Kuhnlein, Chan, Receveur, & Egeland, 2002). Equipment, transportation, costs of obtaining traditional food, and absence of hunters and fishers in fragmented families-a legacy of Residential Schools-all create barriers to the consumption of traditional foods (Lawn & Harvey, 2004).

A participant maintained that traditional foods are important not only because the food itself is healthy but also because it is food that is associated with festivals and celebrations, which maintain connections with culture and tradition:

I think the community events like the feasts and that's where you will see a lot of the traditional foods come out...so when I think of the traditional foods, I think of all the community events because they usually have the waabanoonan.

However, access to traditional foods varies, and knowledge about how to prepare these foods is declining:



I can't really get that much access to traditional foods. Like my mother-in-law would invite us over sometimes but like where I really see a lot of it is in the communities, but there is also women whose husbands go out regularly and they get it regularly. But with us, it's once in awhile when we buy it or if someone gives it to us.

In addition, the traditional practice of food-sharing is disappearing with the traditional foods. Foods obtained in the traditional ways were always shared by the whole community but these values are being lost, and the usual practice of sharing wild food has turned into storing traditional food in freezers.

Another participant mentioned the cyclical nature of traditional food collection and consumption:

Well, the fall and spring is moose and the spring is duck too. And in the spring is the goose too. Spring is fish. I guess you can get it throughout the summer but we usually mainly have it in the spring...We're usually travelling. In the fall, moose, it's mainly moose in the fall...Once in a while, a beaver.

The cyclical nature of obtaining and eating food, the importance of feasts and family celebrations, and the holistic connection to the land were summed up as a sense of connection that could not be achieved through the purchase of food in a store:

Like when I go pick that mint, like I feel a connection with kind of how I was taught, you're not supposed to pick all of that in that area. I feel the connection with my grandmother because she's the one who showed me.

This connection, it was repeatedly stated, must be taught to the young people, who need to learn how to hunt, how to cook traditional foods, and how to treat the land, plants, and animals with reverence.

Change will be difficult despite a desire to increase traditional knowledge and eat more traditional food. As one participant explained it, time, money, and knowledge are all challenges:

Well, lack of knowledge I guess. Because I really don't have the knowledge myself and time I guess. Because I know it takes time to do all of those things and you just can't stop work to go and do the stuff you want to learn. And money to buy the equipment or to hire someone to build a teepee for you because I don't have the time for that either. So time, knowledge, and money.

Knowledge gaps exist because children and young people leave the community for education but also because

[t]here's some families that like even though they might stay here, they still don't have that traditional ways, don't carry on the traditional parts of it. Maybe it's because they don't have the means now. There is people that if they had the boat and motor and if they had the nets you know because all those cost a lot now and rather than getting those they have to buy what they have at the Northern.

Excessive pricing: Food accessibility

When access to traditional foods is limited, market foods become very important in the diet of community members. Most foods in the community are purchased from the Northern Store, which, except when winter roads are operational, has a monopoly. All the participants in the Talking Circle realized that foods are expensive in the Northern Store. "I'm interested in the study group because I'm concerned about the prices of food at the store." Despite this general belief that prices were very high, the individuals who worked at the local Northern Store were not blamed. While critique of the Western profit-based business was present in this discussion, it was acknowledged that regarding the Northern Store Manager:

We said don't blame everything on her because of what's inside the store...I think that's the reason why she's here today. She wants to work with us, she wants to better things for our own health. And our kids...the company is, like I said, is looking after its bottom line and unfortunately it's a corporation.

As another Elder stated, the community "knows that you have your own bosses and can't just lower the price." Although solutions were not discussed, a distinction was drawn between prices in the store and the positive community contribution of the store manager. This suggests that community members believe that solutions to the access and pricing problems in the community must be addressed through policies from government not through private businesses. Community participants' critique of prices in the Northern Store implicitly suggests that policy change is necessary. Stocking a remote store is expensive, a fact that is understood by community members. A private business



will not lose money and continue to serve the community. Solutions must be sought through government subsidies and increased assistance or perhaps through the development of cooperative, not-for-profit stores.

DISCUSSION: COMMUNITY SOLUTIONS

Solutions to food insecurity and ill health must be multifaceted, which the community participants in the Talking Circle made clear in their suggestions. Participants emphasized the importance of increased access to traditional foods and knowledge on the collection and preparation of such foods. Researchers are also beginning to understand that "traditional food is critical for providing many essential nutrients...[and] protection of traditional food environments is critical (Kuhnlein, Receveur, Soueida, & Egeland, 2004, p. 1452). The role of Elders in teaching young people was highlighted: "Share what life was like back then and share with the younger people and how to live a good life." Community members expressed recognition and regret that a full return to traditional foods and ways of living would not be possible but also said that a better balance must be found:

What made us go on an unhealthy path is completely dropping ours [traditional diet] and having to start with theirs [diet of white Westerners]. We didn't slowly pick up but went straight into it for something we weren't used to. Nowadays we're starting to develop more balance between the two [diets]. There were things in the bush that we weren't able to get so we had to find some common ground between the two and stick to it. That's all I have to say.

Community members also emphasized the need for education on the healthy preparation of market foods. Unlike teachings about traditional foods, this knowledge would not necessarily be transmitted by Elders. Instead, participants suggested that the store could play a role in education: "I think we should do taste tests." It was also suggested that healthy menus could be promoted in the store: "I want to talk more about healthy foods in the store. I would like to see more advertisement on what types of food that are healthy and how to actually cook it and what ingredients you can add to it."These suggestions echo the findings of other researchers who reported that "a variety of intervention programs to improve market food availability and choices, as well as acceptable preparation methods, are called for" (Kuhnlein, Receveur, Soueida, & Egeland, 2004, p. 1452).

One participant also suggested gardens as a potential partial solution to the problem of food insecurity:

Healthy foods in my family are we grow our own vegetables and we just got into in the last few years but we find it's better that way because we find there is no preservatives and all of that in there. And there's actually more pride knowing that we grew it ourselves in our reserve...Potatoes are flawless here. We grow onions and find that radishes grow really well; beets we growing; beans are amazing. Peas are ok but the birds seem to like the peas too.

Additionally, this participant linked gardening not only to healthy eating, activity, and well-being but also to connection to the land:

[M]y dad's diabetic. It's his way of working off his sugar. He's actually very healthy for being diabetic. He's healthier than me. He can outrun me. And I'm just learning off of him and also it's a bonding cause we go out there together.

This participant's family was the only family in the community to garden. Vandalism is a consistent problem and the garden has to be grown in the bush: "we grow it out in the bush because we find a lot of people are disrespectful and if we have it in the reserve, we find that it gets trampled on and destroyed." However, producing vegetables on site would reduce the cost of provisioning the community. Education in the school system about the value of gardens, and participation in gardening by children could overcome this problem of vandalism.

CONCLUSIONS

Food sovereignty will come from increased access to traditional foods and food systems. This requires political sovereignty and an emphasis on the transmission of traditional knowledge from Elders to younger community members. Since not all food will be provided through traditional means, potential solutions to the food insecurity crisis also include targeted subsidies, the development of northern community gardens, perhaps a community



cooperative and, most importantly, an increase in the social assistance supplement for those living in remote communities and requiring special diets (Bird, Wiles, Okalik, Kilabuk, & Egeland, 2008). As participants hinted, and other researchers have suggested, a return to traditional values and "formal food sharing initiatives may play a crucial role" in the reintroduction of traditional foods into the diet of community members (Robidoux, Haman, & Sethna, 2009, p. 27).³ The government appeared to finally recognize the extent of the crisis of food security and ill health in the North with the announcement by Northern and Indian and Northern Affairs of Nutrition North Canada, a food subsidy program that was intended to replace the unsuccessful Food Mail Program. Nutritious foods are to receive the highest rate of government subsidy and the list of eligible items has recently been expanded to include all non-food items that were available under the Food Mail program.⁴ Ironically, however, bottled water has been removed from the approved list,⁵ despite the fact that as of March 31, 2011, 107 remote northern Aboriginal communities were under boil-water advisories.⁶ Safe drinking water is essential for food security and safe food preparation. The government committed an extra 45 million dollars over 2 years to develop "culturally appropriate nutrition and health promotion initiatives."7 These terms have not been defined yet. The announcement instead highlights the need to consult community experts. The Talking Circle conducted in this project illustrates that community members are ready, willing, and able to provide direction to the government. As one community participant said, "it is up to us to work together for the community"; these community members must be able to have their ideas heard as the government reforms food policy in the North and the community strives to reassert traditional food sovereignty.

ACKNOWLEDGMENTS

We would like to thank the Chief for the invitation to his community in northern Ontario; community members for their welcome and support with the project; and members of the NAN/Matawa/Lakehead University Miichim Reference Group for their guidance in the development of this project. We would also like to acknowledge the Social Sciences and Humanities Research Council of Canada's Northern Research Development Program (File number: 851-2007-4) for funding this project.

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ENDNOTES

¹This work was funded by the Social Sciences and Humanities Research Council (SSHRC) Northern Research Development Grant. The researchers would like to acknowledge Roderick Fiddler and Judy Flett for help as research assistants, and for coordinating the research with the northern community.

² Miichim is the Anishininimowin or Oji-Cree (Severn dialect) word for food. Oji-Cree language consists of many different dialects.

³ These suggestions also echo the recommendations of the community that were used in the development interventions, which encouraged the promotion of traditional foods, family meals, promotion of healthy foods at point of purchase, and education through local media and in-store workshops (Sharma, Gittlesohn, Rosol, & Beck, 2010).

⁴The Food Mail program (see http://ainc-inac.gc.ca/ eng/1100100035755) provided nutritious, fresh food and other essential items at reduced postal rates to remote northern communities. The following website provides Nutrition North Canada's food eligibility list: http://www.nutritionnorthcanada.ca/index-eng.asp.

⁵ http://aptn.ca/pages/news/2011/04/12/federal-governmentcuts-water-out-of-food-program-for-northern-communities/

⁶ http://www.hc-sc.gc.ca/friah-spnia/promotion/publicpublique/water-eau-eng.php#how_many

⁷ http://www.marketwire.com/press-release/Government-Canada-Announces-Nutrition-North-Canada-Support-Healthy-Eating-North-1264589.htm



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