

UNDERSTANDING MĀORI FOOD SECURITY AND FOOD SOVEREIGNTY ISSUES IN WHAKATĀNE

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Abstract

This article presents on the findings of a pilot project on food security and food sovereignty with a small Māori group based in Whakatāne. The literature on food insecurity in New Zealand estimates that 10% of families/households experience low food security. Māori families are more likely to be affected than any other ethnic group. This research project set out to record and revive Māori food security strengths and concerns as well as to promote dialogue and knowledge about nutrition and health using photographs. Both an Indigenous research approach and photovoice methodology guided this project. We asked questions pertinent to food security and food sovereignty (traditional knowledge and tikanga) and invited participants to describe strategies relevant to healthy kai and wellbeing. While this was a small pilot project, the results show promise in understanding how food security and food sovereignty issues can be understood in the context of Māori health and wellbeing.

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Introduction

Reports on “food security” reflect a growing demand for locally grown, nutritious food as well as a heightened awareness of issues ranging from the dangers of pesticide use to community activism around food politics. In addition, there has been increased attention addressing food, health and wellbeing (Panelli & Tipa, 2008; Stevenson, 2013). If communities and families are to have good health and live healthy lifestyles, then at a very basic level people need access to “sufficient, safe, nutritious food to maintain a healthy and active life” (Stevenson, 2013, p. 4). Internationally, the World Health Organization describes food security as being built on three pillars:

- food availability, that is, sufficient quantities of food available on a consistent basis
- food access, that is, having sufficient resources to obtain appropriate foods for a nutritious diet
- food use, that is, appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation. (Stevenson, 2013, p. 4)

This definition has similar variations to those described by New Zealand authors although set within their respective contexts (McKerchar, Bowers, Heta, Signal, & Matoe, 2014; Panelli & Tipa, 2008; Stevenson, 2013; Te Hotu Manawa Māori, 2009). For example, Te Hotu Manawa Māori (2009), in their report *Food Security among Māori in Aotearoa*, state that food security “refers to the ability of individuals, households and communities to acquire appropriate and nutritious food on a regular and reliable basis” (p. 3). Further, they explain

that “various forms of legislation and pollution has resulted in many Māori losing the ability to grow and obtain food and generate an income” (p. 3). A scan of the literature on food insecurity in New Zealand found that Māori families/households experience low food security (Bowers et al., 2009; Carter, Lanumata, Kruse, & Gorton, 2010; McKerchar et al., 2014; Stevenson, 2013; Te Hotu Manawa Māori, 2009).

It is well documented that food insecurity amongst lower-income families is a significant contributor to poor health outcomes. Individuals in food-insecure households tend to have poorer physical and mental health as well as higher levels of stress than those who are food secure (Carter et al., 2010; Kuhle, Raine, Veugelers, & Willows, 2011). There is also a strong association between food insecurity and adverse mental health issues. Experiencing symptoms of depression and anxiety has been associated with a higher incidence of food insecurity across a range of populations (Anema et al., 2010; Carter et al., 2010; Strike, Rudzinski, Patterson, & Millson, 2012). Access to consistent economic resources and sufficient nutritious food is essential for achieving an active and healthy lifestyle (Socha, Zahaf, Chambers, Abraham, & Fiddler, 2012; Stevenson, 2013; Te Hotu Manawa Māori, 2009).

At the time of writing this article, New Zealand lacked a comprehensive national action plan to address unhealthy food environments (Swinburn, Dominick, & Vandevijvere, 2014), despite indications that food insecurity is worsening in some parts of the country. Literature relevant to improving Māori food security stresses the importance of a better cohesive national strategy (Bowers et al., 2009; Carter et al., 2010; Hutchings et al., 2012;

McKerchar et al., 2014; Stevenson, 2013; Te Hotu Manawa Māori, 2009). More Māori food security projects would assist in the development of a national Māori food security/food sovereignty coalition, as well as revive knowledge of the value of traditional Māori kai for enhancing wellbeing.

This article reports on a small pilot research project conducted in Whakatāne, a small town based in the Eastern Bay of Plenty on the North Island, that set out to record and revive Māori food security strengths and concerns as well as to promote dialogue and knowledge about nutrition and health using photographs. The aim of the project was to explore the intersections of food security and food sovereignty, and gain perspectives about what constituted healthy kai for Māori wellbeing. Our overall vision was to contribute toward a cohesive food security plan for descendants of Ngāti Awa, where our research took place, as well as to combine with other food security researchers and communities in formulating a national cohesive Māori food security strategy.

In the sections that follow, we provide an overview of the literature on food security and food sovereignty and its relevance to a Māori context. We then include the key findings gathered from our pilot project on participants' views about Māori food security and food sovereignty, and highlight potential strategies for addressing food security plans.

Māori food security

It is reported that 10% of New Zealand families live in food-insecure households (Carter et al., 2010; Stevenson, 2013). As compared to the wider New Zealand population, the prevalence of food insecurity is higher among Māori (Bowers, et al. 2009; Carter et al., 2010; McKerchar et al., 2014; Ministry of Health, 2012; Parnell, Reid, Wilson, McKenzie, & Russell, 2001; Stevenson, 2013; Te Hotu Manawa Māori, 2009). In fact, one in seven

Māori live in a household classified as having low food security (Stevenson, 2013). Furthermore, Māori are more likely to live in households classified as having low income (Carter et al., 2010; McKerchar et al., 2014). A 2008 report released by the Auckland Child Action Poverty Group (2008, p. 6) identified income as the single most modifiable determinant of health. Māori are disproportionately represented in the two lowest income quintiles (Carter et al., 2010; Stevenson, 2013). Increasing food costs have an adverse dietary and health outcome (Panelli & Tipa, 2008). McKerchar et al. (2014) highlight that access to affordable and nutritional food is a major issue facing Māori today.

Having a nutritious and well-balanced diet at all ages is a key component of a healthy lifestyle. A nutritious, well-balanced diet leads to healthy weight management, increased ability to undertake regular physical activity and a reduction in chronic conditions such as cardiovascular disease, diabetes and some cancers, particularly bowel cancer (Bay of Plenty District Health Board [BOPDHB], 2012). A recent report from the 2012/13 New Zealand Health Survey (Ministry of Health, 2013) found that Māori generally experience disadvantage across most indicators of health status and access to health services. Although Māori have the second highest obesity rate in New Zealand (44%) compared to Asians and Pākehā, this has been unchanged since 2006/07. The rate of diabetes for Māori (7%) is still higher than the national average of 5%. For Māori living in the Bay of Plenty, diabetes, oral health, vaccine-preventable diseases for Māori children, smoking rates, suicide rates, cancer death rates, obesity and the hospitalisation rate for injuries are higher than other areas and population groups in New Zealand (BOPDHB, 2012).

The burden of chronic disease on Māori is well documented (Ajwani, Blakely, Robson, Tobias, & Boone, 2003; Bloomfield & Logan, 2003; Ministry of Health, 1997, 2000, 2002a, 2002b). Improvements in Māori health status are critical given that Māori on average have

the poorest health status of any group in New Zealand (Ministry of Health, 2000, 2002c). Although there has been some improvement in the overall health of the nation, there still remains a continuing disparity in the burden of illness and death experienced by Māori (Ajwani et al., 2003).

Te Hotu Manawa Māori (2009) note that for Māori, food insecurity is a complex issue. Higher rates of food insecurity for Māori are a reflection of the unequal access to the positive determinants of health (McKerchar et al., 2014). There is also a historical link between poor Māori health and food insecurity that can be traced to early colonial policies and laws (Durie, 1998; Kawharu, 1989; Panelli & Tipa, 2008; Walker, 1990). Since the signing of the Treaty of Waitangi in 1840, evidence has shown that State-legislated policies have largely ignored and neglected the interest and wellbeing of Māori cultural values, customs and health (Boston, Martin, Pallot, & Walsh, 1996; Durie, 1998; Kawharu, 1989; Orange, 1987). Legislatively, the dispossession of Māori from their land and culture was further intensified through Acts such as the Native Schools Act 1858, the Suppression of Rebellion Act 1863, the Native Reserves Act 1864, the Māori Representation Act 1867, and the Tohunga Suppression Act 1907. New Zealand's current political health and social system derives from a history imposed upon by colonial principles of land segmentation, privatisation and individual and heritable titles (Consedine & Consedine, 2005; Walker, 1990).

Gathering specific details about food insecurity and food sovereignty and how it impacts Māori health warrants attention (Hutchings et al., 2012; Stevenson, 2013). Within the last few years, there have been a number of research projects dedicated to food security in New Zealand, and more recently focusing on "food security and Māori" (Carter et al., 2010; Hutchings et al., 2012; King, Maniapoto, Tamasese, Parsons, & Waldegrave, 2010; McKerchar et al., 2014; Stevenson, 2013; Te Hotu Manawa

Māori, 2009). Studies to better understand population variability and varying responses to specific nutrient, health and cultural interventions can only better the health problems facing Māori communities who live in food-insecure households.

Te Hotu Manawa Māori (2009) assert "as Māori we need to learn from the experience of others, and develop solutions that are based on a kaupapa Māori approach" (p. ii). We agree. Many of the solutions for Māori food security can be sourced from within our own communities and knowledge bases. In response to the aforementioned concerns, this research project sought to enhance perspectives that are inherent in food insecurity problems with Māori communities in the Whakatāne area.

Food security and food sovereignty

This section assists to better understand how food security is being addressed in the context of international and Indigenous food sovereignty perspectives. Understanding the broader issues of international food sovereignty provides a context for framing an analysis for Māori food sovereignty.

Food sovereignty movements emphasise that unlike food security, food sovereignty is about placing the control of food back into the local communities (US Food Sovereignty Alliance, n.d.). The concept of food sovereignty was first coined at the World Food Summit in 1996 by La Via Campesina, an international peasants' movement. This movement "is built on a strong sense of unity and solidarity between small and medium-scale agricultural producers from the North and South. The main goal of the movement is to realize food sovereignty and stop the destructive neoliberal process" (La Via Campesina, 2011, para. 5). Proponents of food sovereignty movements expressed that food security had become politically motivated in that governments were sanctioning multinational corporations to continue economic

dominance over farmers and communities (War on Want, 2013). Two examples mentioned in the War on Want report (2013) were that: a) multinational corporations supported by governments control seed and fertiliser patents (for example, “terminator seeds”, which cannot be used for replanting) and b) imposed farmer regulations and overinflated taxes are driving up the prices of lands and water taxes. Thus, multinational corporations and government policies have hijacked the food systems from small farmers, fisher people, pastoralists and Indigenous peoples (p. 3). In response, the First Global Forum on Food Sovereignty held in Mali in 2007 revised their definition of food sovereignty to ensure that food security and food sovereignty remains in the control of communities:

The right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations. (Nyéléni, 2007, para. 3)

Consequently, Indigenous communities, local farmers, small business cooperatives and those concerned with growing and sharing nutritious food are applying a food sovereignty lens to neutralise government-controlled food security activities (Cohen, Andrews, & Kantor, 2002; War on Want, 2013). Food sovereignty issues and Māori values are synonymous in that Māori too are emphasising their right to define food and agriculture systems through ecologically sound and sustainable methods (Bowers et al., 2009; Carter et al., 2010; Hutchings et al., 2012; McKerchar et al., 2014; Stevenson, 2013; Te Hotu Manawa Māori, 2009). Food security therefore has multifarious themes.

Indigenous peoples and food security

Like Māori, Indigenous peoples (we use the term Indigenous to mean those First Peoples who occupied their lands or territories prior to colonial contact) also struggle with food insecurity. Indigenous peoples have a unique position by virtue of their relationship with traditional lands, treaty rights, intergenerational customary practices and guardianship qualities (DeShutter, 2012). For many Indigenous peoples, food represents a respect for humanity and all living species, sustainable ecosystems, a respectfulness for the natural resources therein and importantly ensures a place for future generations (DeShutter, 2012; Hutchings et al., 2012; McKerchar et al., 2014; Nabigon, 2006; Panelli & Tipa, 2008). The concept of respectful Indigenous food relationships speaks to the sacredness of life and the healthy interactions between peoples, communities, species and spiritual entities (Hutchings et al., 2012; King et al., 2010; La Duke, 2005; Pimbert, 2006; McKerchar et al., 2014; Nabigon, 2006). Anishnaabe-Kwe activist, environmentalist, economist and author Winona La Duke (2005) nicely sums up the respectful and revered place of food: “The recovery of the people is tied to the recovery of food, since food itself is medicine: not only for the body, but for the soul, for the spiritual connection to history, ancestors, and the land” (p. 210).

Many Indigenous Nations feature high in the statistics for poor health and low incomes. Indigenous peoples are confronted by food shortage on three levels:

1. poverty and income marginalisation (colonially imposed over the generations) (DeSchutter, 2012; Stevenson, 2013);
2. obstructed (legally hindered or regulated) access to their traditional foods and territories (Baskin, Guarisco, Koleszar-Green, Melanson & Osawamick, 2009; Hutchings et al., 2012; Rudolph & McLachlan, 2013; Witana, 2012); and

3. deprivation of food development (colonial foods vs Indigenous food; colonial farming vs Indigenous farming, etc.) (Bateman, 1996).

All three points are critical to survival and wellbeing of a “people”. Simply put, healthy sustainable food is critical for Indigenous peoples.

The literature also reveals that many Indigenous peoples are responding to the food insecurity crisis by taking back the control of food strategies for their communities (Baskin et al., 2009; Bell-Sheetter, 2004; Elliott, Jayatilaka, Brown, Varley, & Corbett, 2012; Hutchings et al., 2012; King et al., 2010; McKerchar et al., 2014; Stevenson, 2013; Te Hotu Manawa Māori, 2009). There is a sense of urgency for Indigenous peoples to exercise their inherent rights and return to gathering, harvesting and preparing their traditional foods. Examples can be found in the increasing number of Indigenous-based research projects, knowledge-sharing circles, toolkits, traditional food gathering resource guides and healthy menus, to name a few (Cohen et al., 2002). In Canada, Bell-Sheetter (2004) developed a Native “food sovereignty assessment tool” (FSAT). The FSAT is a collaborative and participatory process that systematically examines a range of community food assets so as to inform change actions and to make the community food secure. The FSAT takes a solution-oriented approach that looks at assets and resources as well as problems. This type of tool gives their Native communities a greater role in deciding how their food is produced, distributed and celebrated.

Similarly, Te Hotu Manawa Māori (2009), a Māori health organisation, developed a food security toolkit on how to acquire affordable and nutritious food based on a kaupapa Māori approach. The key points raised in this toolkit are awareness about determinants of food security, Māori food security, access to food resources and capacity, and information on food sources. This toolkit emphasises the

inter-relationships between food, economics, culture and health. Another example is King et al.’s (2010) research on Māori food security. They found that the sharing of food is associated with meaning, being hospitable and caring for others, as well as with feelings of wellness and happiness. This particular research highlights the relationships between people, their environments and food.

The literature on food sovereignty informs our research with regard to understanding the wider social, historical, economic and cultural challenges associated with food insecurity and food sovereignty. As well, it provides an insight into the ways that Indigenous peoples are responding to the challenges associated with food insecurity as relevant to their communities and cultural contexts.

The next section describes our pilot project and presents the findings about Māori healthy kai, food security and food sovereignty strategies in the Whakatāne area.

The REKA Trust food security/food sovereignty pilot project

The aim of our pilot project was to record and revive food security strengths and concerns, promote nutrition and health, and to emphasise the importance of traditional knowledge and tikanga associated with health and wellbeing. The tribe where this research took place is Ngāti Awa. There are almost 20,000 registered descendants of Ngāti Awa and of those, 45% live mostly in the Whakatāne and Bay of Plenty region (Te Rūnanga O Ngāti Awa, 2010).

REKA Trust, formally established in 2012 with the aim to promote holistic wellness, māra kai and sustainable lifestyles in the Ngāti Awa/Whakatāne area, initiated this pilot research project to better understand the barriers and strengths for Māori to live healthy lifestyles. It was their hope that the findings would help them to develop resources, create articles, contribute to potential policies and

provide strategies for enhancing Māori health amongst their communities. REKA Trust gained endorsement from the Ngāti Awa Trust Board Chairperson and other community leaders to support their research ideas. Members of the REKA Trust also involved academic researchers to assist them. The research team grew to involve tribal elders; other Māori academics from Te Whare Wānanga o Awanuiarangi, the University of Waikato and Massey University; and an Indigenous researcher from Canada. The researchers received a start-up grant from the Ngā Kanohi Kitea Development Grant (New Zealand Health Research Council) to carry out the pilot project. Laurentian University (where the lead researcher is based) endorsed the research ethics. The two research leads for this project are both from Whakatāne—one is the Chairperson and Founder of REKA Trust and the other is an Associate Professor at Laurentian University, Canada.

The co-authors carried out the pilot research project with 10 Māori (7 male and 3 female, age range 20–72 years). Participants were recruited from the membership of the REKA Trust because this group was actively involved in growing māra kai and engaged in traditional kai gathering (hunting/fishing). We wanted to gain information from those who had knowledge of traditional kai because we felt that they had an expertise in the subject area with the notion that they would help us to establish an initial baseline for understanding food security and sovereignty. Invitations were sent to members of the Trust seeking potential participants; 10 responded.

We used both a Māori research and a photovoice methodology for this project. A Māori research methodology was the overarching kaupapa under which we endeavoured to maintain our tikanga and kawa. Linda Tuhiwai Smith (1999) advocates that a key process of kaupapa Māori research methodology is to demonstrate a reciprocal and respectful relationship between the researcher and the community it serves. She further stresses that the community must benefit

from the goals and outcomes of the study.

The photovoice methodological approach (a community-participatory action research strategy) is a process through which people can identify, represent and enhance their community through a photographic technique (Wang, 1999). Photovoice offers an alternative way for participants to tell their stories through the use of photographs. We found that there was a mutual connection between photovoice and Māori research methodologies in that both serve a similar purpose to exchange and integrate knowledge and action, and to encourage relevant social change strategies (Smith, 1999; Wang, 1999).

Interviews were carried out from September to December 2013. Questions were structured around participants' perceptions and experiences of:

- what a healthy lifestyle represents,
- perceived barriers to Māori health,
- perceived strengths of food security and food sovereignty on the health of Māori, and
- the importance of food security and how food sovereignty would be useful for REKA Trust and Māori communities.

All interviews (mostly up to 1 hour) were audio-taped and all the participants shared three photographs (that they took) about what healthy kai means for them. The key findings below are centred on the four main questions we posed.

Key findings

What a healthy lifestyle represents

Many of the participants showed us photographs of māra kai, seafood sources and fruit orchards to depict what a healthy lifestyle represents to them. Many of their stories were based on the inter-relationships that they had around

food with family members, grandparents, parents, children and mokopuna.

That's how my mother and father fed us, that is how they showed their love for us just through that garden. I remember sugar cane, sweet corn, peas, beans, cabbage, kūmara, rīwai, kamokamo and so many fruit trees and orchards. (Participant F5)

Many of them recalled happy memories of food gathering, preparing, planting and sharing of food. For many, these memories were inspiring, a source of pride and love. Many talked about the importance of sharing knowledge about healthy kai with the children. It was important for them to enjoy the kai they were eating as well as where to obtain it.

When the kids come home they always go straight to the strawberries in the garden themselves and pick what they want. And they have told me that our home strawberries [Figure 1] are better than the strawberries at Pak'nSave because they are sweeter and they taste better they reckon. (Participant F1)



FIGURE 1 Photograph of strawberries from garden provided by participant F1.

Most felt that they were lucky that the knowledge and information about Māori kai is not totally lost and that many whānau members

and kaumātua were still alive as they hold the memories of tradition and culture relevant to kai. Healthy kai and wellbeing, for this group, was sharing happy interactions with all generations of their whānau and extended whānau. A healthy holistic lifestyle that is closely intertwined with one's spirituality and culture and having a solid purpose in life is what represents wellbeing for these participants.

The holistic thing, the spiritual thing of growing kai, there are so many different ways of growing kai through the spiritual context of who we are. (Participant M9)

Drawing on La Duke's (2005) notion that a "recovery of the people is tied to the recovery of food" (p. 210), these findings show a similar meaning, in that healthy kai is in itself medicine, it is good for the spirit and the body, and is a vital connection to history, ancestors and the land.

Perceived barriers to Māori health

Many of the participants identified that fast foods, being overweight, being prescribed too many pills for diabetes, heart diseases and other illnesses, leading sedentary lifestyles and having low incomes compromised Māori health.

I can't believe the amount of pills my brothers and sisters take. You know some for low blood pressure. And I just think how did you get to this state? Everybody knows that if you eat healthy, because eating is only part of it, exercise is the other part of it, but if you have a balanced life, you won't have those pills, you won't catch those diseases. It is about keeping your immune system strong to fight all of those things. And the only way you can keep your immune system strong is to eat good food, healthy food. (Participant M6)

Examples of barriers to Māori health mentioned included poverty, colonisation impacts,

living in urban settings, dependency on supermarkets and lack of educational programmes about nutrition and health.

Another barrier is the way that prices are regulated. Food is regulated often in our country. You know for example, how fizzy drink is cheaper than water or milk. You can get a bottle of Coca-Cola for 99 cents but milk is four to five bucks. Even water is a couple of bucks for a 1-litre bottle of water. (Participant M2)

Another barrier to living a healthy lifestyle or accessing healthy kai that was mentioned was that the stock of fish and seafood is being depleted due to pollution in the waters. In addition, participants noted that food access was restricted due to quotas on kaimoana and as a result not many people are choosing to eat or harvest them anymore. The perceived major barriers are obstructed or hindered access to traditional kai and a high dependence on purchasing food that is cheaper but not necessarily healthier.

Processed food, that is a barrier for us too. It is affecting our health, it is affecting our ability to have confidence in us to take back our land and to take back the sovereignty and then we decide what we should do with our lands rather than give it to the Pākehā to grow maize on. (Participant F5)

Perceived strengths of food security and food sovereignty on the health of Māori

Many participants cited a number of strengths. These included having access to food gardens, fish and seafood, and food from the bush.

We are trying to steer our kids in the right direction, definitely free range chickens, free range poaka, by gosh we were self-sufficient then. I mean you talk about food security and

food sovereignty I think our parents and grandparents knew and lived that. (Participant F5)

Reviving the practice of growing, preparing and obtaining Māori kai was mentioned by all participants. Teaching the next generation about sustainability and respect for kai practices was also mentioned.

It is really just about the kids' day out and really educating kids about going to pick pipis, teaching them about sustainability not to take all of the pipis otherwise there might be no pipis left for other people. (Participant M2)

Using Māori health services was also mentioned as a strength.

Māori want to be dealt with by Māori, and I think that the emergence of the likes of Māori doctors and Māori nurses but also Hauora services, the development of those types of organisations and structures is certainly assisting in giving our people the knowledge around health and how to look after themselves. (Participant M9)

Another strength mentioned was the fond memories that participants had learning about how to grow and gather kai with their families and working together. These tasks are associated with caring for others and associated with pride and happiness.

I am going to choose this one [Figure 2] at Rangataua Marae because it actually brought the whole hapū together and it was a communal thing, we built this, we designed it all together, it was all designed as a whānau and what I thought about it is that it gives us whanaungatanga ... we ate together, we worked together. (Participant M6)

Food access, availability and use are the cornerstones of food security. Many participants highlighted that they were able to draw upon

intergenerational knowledge of traditional kai. They referenced meaning and a positive association with traditional kai. At the heart of these gatherings is the sharing and continuing of customary kai practices and guardianship qualities. Harvesting traditional kai also strengthens connections to the land.



FIGURE 2 Photograph of raised garden at Rangataua Marae provided by participant M6.

Importance of food security and food sovereignty that would be useful for REKA Trust and Māori communities

Food security and food sovereignty were perceived by participants as involving a number of factors such as control of land, land ownership/access, growing and distribution of food locally without genetic modification, local communities working together, and most importantly protecting knowledge for future generations. Many of the participants shared that it was important to continue to inspire whānau to grow their own kai at their homes, on their Māori land trusts, at their marae, and to grow kai for the mokopuna and kaumātua. Also mentioned was the importance of retaining traditional knowledge and practice of kai including tikanga and karakia. For some, sharing healthy kai strategies could prevent the further loss of traditional knowledge. One kaumātua said that healthy kai was akin to learning about “ngā taonga tuku iho”—treasures handed down to us from our ancestors. That knowledge about

healthy kai and having good relationships will keep our bodies fit and healthy longer.

Being more active at the tribal decision-making level and ensuring that the guardianship of traditional kai had a significant place in policies was also mentioned as a food security and food sovereignty strategy.

I think as far as food sovereignty is concerned we are already a step towards that. We have got our fisheries, we have control over our land and we say what we want to do with it Food sovereignty in the wider sense is that we need to start making decisions about what we are going to do about our fisheries, our whenua going forward. (Participant F5)

Taking back control over keeping and sharing seeds was also mentioned as a food security and sovereignty strategy. The sharing of seeds is a way to practise the tradition of seed saving. The tikanga and knowledge of collecting, sharing and replanting seeds represented a sense of manaakitanga with the land, with each other and for future generations. Many of the participants understood the importance of “sharing seeds” but noted that this practice has almost ceased. After doing their interviews, many of them came to realise how important it was to revive the sharing of seeds.

You know we talk about whakapapa on our own bodies We have to keep the whakapapa of our kai seeds going too.

So for food sovereignty making sure you grow pure seed or seeds that can regenerate itself is very important. (Participant F7)

Māori food sovereignty is re-centring “Māori healthy kai” as a vital part of the tikanga, culture and whenua. It encourages Māori communities to revive traditional kai access and use, become more knowledgeable about nutrition and health, and to revitalise well-being in ways that are happy, respectful and

soulful. Ultimately, Māori food sovereignty endorses the continuity of a positive, vibrant and healthy ecosystem for growers, gatherers and consumers.

Conclusion

Despite widespread knowledge about food insecurity in New Zealand, little attention has been given to the suggestions and solutions by Māori themselves. The findings in this pilot project suggest that community members are ready and willing to think of solutions and strategies for food security and health emphasising food sovereignty. This does not mean that food insecurity issues should be left for Māori to solve alone. As mentioned earlier, food insecurity is a complex issue, and needs to be understood in the broader economic, political, societal, historical and cultural contexts. For this reason, we believe that there is value in having both a comprehensive national plan and a Māori plan to address Māori food insecurity issues.

From this research we have learned that food security and food sovereignty will come from having increased access to traditional foods and food systems. Thus, a key recommendation that emerged was for more active engagement by individuals, whānau, marae and Māori land trusts to revitalise māra kai as a means of providing fresh and healthy kai. Activities associated with gardening, hunting and gathering are a medium for passing on traditional knowledge and practices as well as reviving active interactions with the land and food systems. Sharing knowledge and skills relevant to health and wellbeing that have been passed down over the generations is a preventative measure to enhance good health practices. The participants were cognisant that low income and fast lifestyles were barriers to health. Food purchasing and choices of healthy food can be influenced by providing nutrition programmes and cooking classes. Likewise, encouraging tribal and whānau based food cooperatives

can cultivate values of socio-economic interdependency and reciprocity. For some of the participants, environmental impacts, such as pollution, and imposed fish and shellfish quotas restricted access to traditional food from the rivers and sea. A potential solution is to encourage the development of a restorative framework about sustainable ecosystems for Ngāti Awa. Although the tenets of such a framework are not defined yet, it gives us a starting point. As researchers, we realise that there is still a lot more work to be done on Māori food insecurity in Whakatāne. Solutions to Māori food insecurity must be multifaceted. The findings from this pilot project have provided us with broad themes and ideas for planning a Ngāti Awa/Whakatāne based food security and food sovereignty toolkit. It certainly has inspired us to carry out more in-depth research, particularly taking into consideration age, exercise, income levels, rural and urban living, food consumption, and health and nutrition access.

The participants' narratives emphasised the importance of love, happiness and meaning that is associated with food, family and relationships. What we learned from them was that their dreams and aspirations were for their families to live a happy and long life. Their response to food insecurity was that we have the know-how, the means, the impetus, the history, the land and the resources to build healthy communities. We just have to do it!

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Informed consent was given by all participants in this research to use both the photographic and verbal materials produced through the researchers' interactions with them.

Glossary

hapū	a collection of whānau, normally united through a common ancestor	marae	carved meeting-house, dining-hall and cooking area, as well as the marae ātea or sacred space in front of the meeting-house
kai	food	mokopuna	grandchildren
kaimoana	seafood	ngā taonga tuku iho	treasures handed down of our heritage
kamokamo	squash	Ngāti Awa	a tribe based in the Whakatāne area
karakia	prayers, incantations	Pākehā	person of European descent
kaumātua	elder	pipi	small clams; a common edible bivalve
kaupapa	guidelines	poaka	pig
kaupapa Māori	Māori philosophies and principles	Rangataua	name of a marae in Poroporo
kawa	principles and ethics	rīwai	potatoes
kūmara	sweet potato	tikanga	principles and protocols
manaakitanga	hospitality, reciprocal sharing and caring	whakapapa	genealogy
māra kai	food gardens	whānau	means to give birth, is made up of usually three or four generations of extended family
		whanaungatanga	relationships
		whenua	land; afterbirth

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