Socio-cultural Factors Associated with Food Security and Physical Activity For Māori and Pacific People in Aotearoa New Zealand

A Report by

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Executive Summary

Introduction
The focus of this study has been to investigate the socio-cultural factors associated with food security and physical activity for Māori and Pacific people, and it has taken as a central thesis the view that at least some of the differences in the distribution of nutritional status among different populations within New Zealand have socio-cultural bases that are either independent of socioeconomic factors or that condition culturally specific responses to socioeconomic factors.

To support this study’s clear focus upon identifying and examining sociocultural factors for each target population, a practice theory based theoretical framework has been applied, using Bourdieu’s concept of habitus as a focus for the development of detailed research questions, qualitative research instruments and analytic strategies.

Fieldwork for each target population consisted of six focus groups and six in-depth interviews with key informants, making a total of twelve focus groups and twelve interviews. Māori researchers conducted fieldwork with Māori participants and Pacific researchers with Pacific participants. Focus group composition was arranged to ensure a cross-section of perspectives were represented for each of the two target populations.

Focus group discussions and interview proceedings were audio taped and transcribed. Text transcriptions were coded and analyzed thematically. The information obtained from the study participants underwent detailed qualitative analysis to identify:
1. the socio-cultural factors underlying the acquisition, preparation and consumption of food, and engaging in physical activity;
2. the factors that inhibit adequate food security and physical activity;
3. the factors that can enhance food security and physical activity;
4. the inter-relationships among these socio-cultural factors and their relative contributions to enhancing and inhibiting food security and physical activity; and
5. ways in which these socio-cultural factors could be modified to further enhance food security and physical activity for Māori and Pacific people.

This report is in four substantive sections: Introduction; Report of the Māori component of the research; Report of the Pacific component of the research, and a concluding Afterword. The Māori and Pacific reports each include their own, stand-alone, conclusions and recommendations to support the development of culturally appropriate interventions and strategies for improving nutrition and levels of physical activity for Māori and Pacific people, respectively.

The separate, stand-alone coverage of Māori and Pacific components of the research within one document reflects the manner in which the research has been conducted within a three tikanga framework by a three tikanga research team. In the concluding Afterword section, the findings and recommendations of the two culturally specific
components are discussed with reference to such aspects and considerations of the broader issue food security for Māori and Pacific people in New Zealand as policy; industry, the community; and the personal.

Findings from the Māori component of the research

Introduction

This report brings together the qualitative data from fieldwork carried out with Māori informants in three areas throughout Aotearoa New Zealand. The intention of this study is to understand the socio-cultural factors that enhance and contribute to food security and physical activity for Māori. This understanding is reached through a subjectivist analysis and interpretation of respondents’ depictions of their realities and perceptions of the world in which they live.

The Tapa Wha Model of Health was used to provide a structure to organise the recommendations and assist in the analysis of the research findings. The discussion that follows is organised under the following headings:

- Socio-cultural perceptions about food.
- Socio-cultural determinants of food security.
- Factors which influence food choice.
- Engagement in physical activity.

Perceptions of food

Māori share with many other indigenous cultures a view, that food not only determines physical health but also emotional, psychological and spiritual wellness. Not only is food strongly linked to overall health, it is regarded first and foremost as a necessity to support physical activity. Food also plays a major role in socio-cultural activities. It is often defined culturally, and any socio-cultural understanding of patterns of choosing, preparing, consuming, and acquiring, food would require an exploration of not only dietary culture but also socio-cultural perceptions about food. In the context of this study, the social and cultural meanings of food were difficult to distinguish because the cultural values, attitudes and beliefs associated with food are imbedded in social behaviour.

The meaning of food was found to be closely related to traditional practices and customs, and traditional values associated with the sacredness of the body. Physical and spiritual perspectives were both found to be significant in relation to cultural values, attitudes and beliefs and are still considered relevant today. While food is considered as a source of physical nourishment, it is also held to be an important source of medicine and spiritual nourishment.

People whose diets consisted of traditionally sourced food were not considered to be fat or obese, and all sources of traditional food were considered to be healthy. The social
meaning of food was found to be inextricably linked to cultural values, beliefs and practices. For example *Manaakitanga* is a key value associated with the social meaning of food. This includes being hospitable to visitors, and caring for people through sharing food. *Whanaungatanga* is an extension of *manaakitanga* and includes sharing food costs as well as activities or work associated with the preparation and cooking of food.

Food is associated with feelings of wellness and happiness. The way people feel can determine what they cook and how they prepare food. Social and cultural values, attitudes and beliefs are key factors that determine what people cook, how they cook and how they eat.

**Food security**

Respondents were asked to consider if they had access to a reliable and constant source of healthy and nutritious food. The immediate responses began with reference to the past and traditional sources of food or non-manufactured food products. This is because many of the respondents considered that healthy food sources originated from vegetables, fruit, and food that is hunted, collected or gathered. Older respondents had been raised at a time when gardens were a common feature in many homes and *marae* and when trips to collect *kaimoana* or *kai* from rivers, lakes and forest was a regular activity. These respondents talked about their views, attitudes, values, or experiences in relation to a period of time that was estimated to be between the years 1940 to 1975. Their responses emerged from past tense because for many of the respondents their natural perception is to reflect on the past in relation to the present or future. This concept can best be understood with reference to the saying: “*I nga raa o mua*” – which refers to “the days gone by” (the past) but is literally translated as “the days before us” as the word “*mua*” means in front of.

Until recently, traditional sources of food were available in adequate quantities to support and sustain healthy diets, and gardens were once a common feature in many people’s homes. The lack of availability of traditional foods in urban regions has had a major impact on some people’s diets. For example, the depletion of traditional sources of food such as *puha* and *kaimoana* has affected the ability of people to access a healthy traditional diet.

Maori have limited access to a variety of fruit and vegetables that are of good quality, while working parents are more inclined to select food that has already been cooked. This often includes unhealthy options such as fast-food. Additionally, labels on food are not always helpful in assisting people to select healthy choices.

If people practise concepts such as *manaakitanga* then there should not be issues in relation to accessing food in socially acceptable ways. Generally, people are concerned about where their food comes from, and expect it to meet culturally acceptable standards. There are concerns that the knowledge and skills required to select, prepare and cook food are in decline among contemporary Māori.

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1 Food.
Food choice

Although they are major contributors, not all aspects of culture or socially shared values determine what people eat. Other factors such as income, poverty, and changes in food production systems also contribute to choice. Any attempts to enhance a current food system are fraught with difficulties if we lack the understanding of how patterns of choosing, preparing and consuming food are internalised. It was considered that this information might be useful in terms of recommending factors that could enhance food security and also to illuminate any unforeseen consequences of systematic change in food behaviours or eating habits.

Some respondents were reluctant to change their current diets unless it was absolutely necessary. In other words, unless there was a serious threat to their health, they would probably not consider introducing healthier foods into their diets, changing the ways they prepared food or changing their eating habits. This was not because they did not want to improve their health but because of a lack of the support that they needed in order to change what they eat. Media and advertising were also identified as factors contributing to decisions about food choice. Education in schools and campaigns advocating healthy eating were considered to have the potential to positively influence food choice, if appropriately designed and presented.

Cooking and eating habits are closely related to cultural beliefs, attitudes and values, and while whanau have a major influence on how people are conditioned to eat, traditional values associated with eating behaviours have declined. Some parents/grandparents admitted over indulging their children/grandchildren with choices of food. The taste of food was identified as an important determinant of the food choices people make.

Engagement in physical activity

Clearly, support needs to be given to people who are already aware of the need to be more physically active, but who lack personal motivation or encouragement. Parents need to encourage children to be more active and to discourage sedentary behaviour. Whanau support is needed to encourage active behavior and more consideration needs to be given to supporting sole parent families to enable all their members to participate in physical activities.

With changes to the ways that foods are processed and distributed, access to traditional sources of physical activity have also declined. Given that one of the main sources identified was gathering, hunting or harvesting food, efforts to reintroduce this source might seem pointless now that food can now be delivered to the door. Hunting, gathering and collecting traditional sources of food, is rarely practised and often only for special gatherings. It has now become more of a recreational pastime rather than means of survival. The demise of traditional food gathering practices was considered to be one of the key contributing factors that have led to the loss of traditional skills, knowledge and values associated with food.
It is also no longer considered safe to participate in physical activities outside in some communities, and electronic games and the internet have had a major impact on young people’s participation in physical activity. Although *kapa haka* was identified as a key source of physical activity, more than half of the respondents did not actively participate in *kapa haka*. Sports activities were considered to be the main source of exercise. Sport was also identified as a key factor in the social lives of many people.

**Conclusions and recommendations**

**Suggestions for enhancing food security.**

**Re-establish or introduce gardening in homes and community gardens**

Re-establishing community gardens and gardening in homes was seen as one of the most practical suggestions to address issues of access to healthy food. This suggestion not only passes on the knowledge and skills of how to grow your own vegetables, it is also a cost-effective way of ensuring that whanau have access to a constant and reliable source of healthy food.

**Advise government or the Ministry of Health that financial support is needed for kaupapa Māori healthy eating programmes at schools**

There are already good healthy eating programs operating in schools. Reports from the respondents about how healthy eating messages are reaching home are a testimony to the success of these programs. However, many respondents believed that Māori are quite capable and willing to take responsibility for implementing their own programs in their own kura. These programs should be tailored to suit the environment in which the children live.

**Investigate reducing costs of healthy foods**

Recommend that researchers examine whether reducing the costs of healthy foods would make these foods more accessible for Māori and Pacific people.

**Improve access to traditional sources of food and regenerating depleted sources of food**

Improving access to traditional sources of food and regenerating depleted sources of food are already ideas that at least one coastal tribe have begun.

**Re-educate people about the socio-cultural values of food**

It is essential that Māori culture continues to evolve, but not at the expense of further compromise to its traditional values, beliefs and practices associated with food. It is vitally important for the survival and maintenance of Māori society and culture to evolve with these principles intact.
Change negative perceptions about healthy food
Ways must be found to improve people’s perception of healthy food and how it tastes, through positive measures such as promoting simple and affordable ways of cooking tasty food.

Improve knowledge of how to make healthy choices when selecting, preparing and cooking food
Improving knowledge of how to make healthy choices when selecting, preparing and cooking food is closely related to changing negative perceptions about healthy food. However, it extends to improving the nutritional information on food packages so that the information is understandable and meaningful.

Suggestions for enhancing physical activity
Role Models
Having positive role models was believed to be a key factor for enhancing engagement in physical activity. Respondents considered this to be particularly so for children and young people. Potential role models are not limited to professional sports people, but could include exponents of kapa haka, other leaders, family members, friends and peers.

Improve support for whanau to engage in physical activity and sports.
As a determinant of a healthy life, physical activity must be accessible to all people. The ability to share physical activity resources and costs was identified as one of the key factors that supported participation in sports or engagement in physical activity. Encouraging communities, groups or whanau to support active involvement in physical activity is a key enhancing factor. Community established sports facilities and physical activity programs can also significantly contribute to social cohesion.

Findings from the Pacific component of the research
Wellbeing and the well self
Wellbeing and the well self were both understood and discussed in relational terms that encompassed practices associated with the production, preparation, distribution and consumption of food, and the physical activity associated with those practices. Wellbeing and the well self were consequently derived from and defined in terms of relational arrangements in areas such as satisfactory family and wider community relationships, spirituality, access to food, exercise, income and shelter.

The disjuncture that is evident between socio-cultural factors and practices originating in Pacific nation village-based social and economic structures and the quite different social and economic structures that Pacific people find in New Zealand, lessen the effectiveness
of traditional restraints and restrictions on food consumption in the New Zealand context. To be effective, those restraints and restrictions must be modified and adapted to reflect New Zealand social and economic realities.

**Physical activity**

In Pacific nations’ village-based life, physical activity is an integral part of daily life; it is central to all subsistence economic activity and to social and cultural life through the medium of dance, for example. While physical activity was not directly associated with health in the minds of the focus group participants, it was associated indirectly through its fundamental contribution to the achievement of wellbeing and a well (or healthy) self.

Physical activity was primarily associated with the achievement of wealth and prosperity through the production and manufacture food and material goods. The physical demands of subsistence agriculture, fishing, and provision and maintenance of housing, for example, require varied types of physical activity, intellectual ability, knowledge and accumulated skills which involve the whole or entire body.

In the cash economy of New Zealand, food is purchased using money. In this new relationship between wealth and food, physical activity is directly linked to the generation of monetary wealth and no longer directly linked to the production of food. Even though the occupations of many Pacific people in New Zealand involve physical work, this is generally regulated and repetitive, and less balanced than that associated with subsistence food production.

When detached from economic life, balanced physical activity becomes an optional, recreational pursuit that is carried out through sport and exercise, but those carrying out physically demanding jobs are less likely to have the energy or inclination to engage also in vigorous, discretionary, physical exercise as well.

While recreational activities are not always looked on favourably in comparison with purposeful activities that are of collective benefit, it is nonetheless the case that in the recent years churches have become sites of physical activity programmes and healthy eating programmes for example Healthy Eating and Healthy Action programmes.

**Meanings of food: conceptions and values.**

In the Pacific nations, food production, preparation, distribution and consumption are carried out within the context of kin-based social and economic structures. In such contexts, people’s conceptions and values about food are closely linked to kin-based relationships, wider social relationships and notions of wellbeing. Food has significance beyond simply sustaining life because participation in its production, preparation, distribution and consumption provides meaning to life, also.

In contrast to their situations in their Pacific nations, Pacific people in New Zealand are, in a very real way, alienated from the direct means of producing their own food. While
their kin-based social structures remain, to varying degrees, intact, the economic structures that accompany them in their village-based lives no longer operate. In large households with multiple income earners working different shifts, household life can become fragmented, the patterns of village-based life are untenable, and practices such as shared family meals become irregular. The ready availability for purchase of foods that require little or no preparation removes another link in the connection between food and social structure.

**Food sources and types.**
In the Pacific nations, traditional locally produced or obtained foods include a wide variety of sea foods and land-based food crops. This food is fresh and unprocessed – apart from some types of food preservation such as drying and salting. The growing, gathering and catching of food involves most members of families and communities and people living in such circumstances are therefore exposed directly to the rhythms, cycles and seasons of food procurement, and in no sense alienated from the sources of their sustenance.

In New Zealand, while a greater variety of foods are available than in Pacific nations, their quality is also very variable. Economic and work pressures can lead people to purchase and consume foods of lower nutritional quality than would be available from indigenous sources. The distinction that is drawn between the foods of home, which are considered sources of physical, emotional and spiritual satisfaction and New Zealand derived foods, which are not so considered, reduces the potential for people to discriminate between New Zealand derived foods of comparatively high nutritional value and those with lower nutritional value, because both are of low emotional and spiritual value compared to the foods of home.

**Food preparation, distribution and apportionment**
The starting point for the preparation, distribution and apportionment of food in the Pacific nations is the value placed on abundance, which provides tangible evidence of wealth and prosperity, and elevated family status. Linked to the value placed on abundance is the practice of hospitality, which provides an avenue for the distribution and consumption of a form of wealth that is actually perishable and needs to be consumed, rather than stored and accumulated.

Distribution occurs at different levels, including the village and the household, and, in some cases the island. For example, fish catches in the village subsistence context are not necessarily the property of the fisher, but are distributed among agreed recipients. Rites of passage such as weddings and funerals require significant quantities of food to be provided by those (usually extended kin groupings) responsible for hosting them. At such relatively large-scale events, food is apportioned and served directly to those who are eating, a practice which places limits on the amounts consumed by individuals, in contrast with buffet style systems which place no restrictions on individual consumption and can facilitate, if not actually encourage, over consumption of food.
Within the household, the daily distribution and apportionment of food is likewise regulated to ensure that the different generations and status levels within the household are adequately and appropriately fed. Decision making about the preparation and serving of food was primarily the responsibility of mothers in some Pacific nations. The practice of feeding elders first and the importance of hospitality and feeding visitors also serve to reinforce the importance of food and dining within the wider social system.

The preparation of food in New Zealand is undertaken with different facilities from those in the Pacific nations. Decision making about the preparation and serving of food in New Zealand was less clear cut than in the Pacific nations and could extend to include all household members, including children. Food is more likely to be made available in a buffet format rather than be served in set portions and consequently, there is less regulation of quantity and content. At the same time, practices associated with abundance and hospitality, such as ensuring that guests are fed first, have been retained and the value placed on abundance continues in the New Zealand cash economy context.

**Etiquettes of consumption**

Etiquettes of consumption in the Pacific, at all levels, included prayers which served to reinforce the status of food as an element within an overall structure of sacred life sustaining, meaning giving relationships. In this context, food is a source of satisfaction; a total sense of physical, emotional and spiritual satisfaction – or *malie* which derives from the food being produced from land that people have a relationship with and produced by the people they have relationships with.

As in the homeland Pacific, meals in New Zealand are preceded by prayers. Meals that have been prepared in the home and eaten together at family meals are associated with the same or similar etiquettes to those associated with meals in the Pacific nations. However, a quite sharp distinction is found with takeaway meals, which are often taken home and eaten individually, or eaten in cars and other places outside the home. In contrast to indigenous foods, food sourced in New Zealand carried no sense of *malie* or significance beyond being a form of sustenance.

The timing of meals in New Zealand is influenced by the rhythms of employment and other engagements, rather than those directly associated with food production and preparation as is the case in homeland Pacific village based life. Portion servings have been replaced in New Zealand by buffet style self-serving, which makes the final stage of food distribution an individual rather than collective matter. However, the more systematised Pacific rituals are usually reverted to in New Zealand when entertaining visitors and at other collective gatherings such as weddings and funerals.

**Contemporary realities, opportunities and challenges**

The vulnerability of some Pacific people in New Zealand to food insecurity is increased by low socioeconomic position, low incomes and shortage of work, which can limit their
ability to buy better quality foods. Modest incomes coupled with traditional cultural obligations such as faalavelave compound the problem for some. On the other hand, not all food insecurity was the result of low incomes because the ability of some to buy already cooked food, and avoid the need to prepare it themselves, was another source of food insecurity when the food purchased was of lower nutritional value than food that they might prepare themselves for less cost.

Barriers to engaging in healthy levels of physical activity are various. The lack of necessity to be physically active in a vigorous way represents at the very least an absence of encouragement to be active. The prevalence of sedentary forms of entertainment and recreation, and labour saving technologies presents another set of barriers.

However, New Zealand does offer opportunities for Pacific people to achieve food security, and adequate levels of physical activity as well, through the availability of education, training, recreational facilities and better incomes. These make it possible for people to improve their employment prospects, choice and socioeconomic situations, and achieve food security through their ability to purchase good quality food, and be physically active through recreational activities.

**Drivers of change for enhancing food security and physical activity for Pacific people in New Zealand.**

The collective nature of Pacific cultures provides the best basis of strength for Pacific people in New Zealand to convert the challenges they face into successful responses to achieving healthy diets and lifestyles in New Zealand. The necessary networks and knowledge exist to be mobilised through collective activities and forms of control. At the same time, New Zealand has the infrastructure, expertise and facilities to support education in general and public health education in particular.

While the initiative to develop and shape such adaptations of their own cultures must lie with Pacific people, themselves, it is desirable that some ownership of the issue be taken by the members and representatives of the dominant Pakeha/Palagi culture(s) also. Increased mutual understanding between dominant and migrant cultures could contribute positively to Pacific cultural interventions towards physical activity and food security.

**Conclusions and recommendations**

The cultural disjuncture that has been identified underscores the position of Pacific people in New Zealand as transnational migrants in the sense that they maintain connections with their nations and cultures of origin, while simultaneously becoming connected with their destination country. Transnational migrants are people who find themselves in the position of functioning in dual cultural contexts: one to which they are entirely attuned and one to which they are not.

The cultural disjuncture or dislocation stems from the separation of indigenous Pacific socio-cultural factors and practices from the material bases upon which they originally
developed. While these material bases, or forms of capital do not exist in New Zealand for Pacific people, the symbolic significance of many non-material forms and types of capital that originate in the Pacific nations can be encouraged and used to provide a basis for culturally based initiatives to counter the cultural dislocation experienced by Pacific transnational migrants in New Zealand.

Examples of such non-material forms of capital, or social and cultural capital, are found in various Pacific based institutions in New Zealand and the people who lead and belong to them, an important example being the Pacific churches. These have become core institutions of inclusion for Pacific people in New Zealand, gathering places and sites of belonging. In recent years, the churches have become locations for Pacific community programmes on wellbeing, health and physical activity. Both fa’aafetui focus groups and individual interviews pointed to the churches as leaders of programmes and practices of Wellbeing, Healthy Eating and Physical activity.

New aiga-like formations for Pacific people in New Zealand are growing in churches, workplaces, and sports clubs, in flatting or living situations and sometimes within neighbourhoods. Pacific people take into these new aiga formations their understandings of their roles, responsibilities, rights and entitlements as well as their values and the ethics of aiga. These reciprocal roles include ensuring the physical and spiritual wellbeing of aiga which is inclusive of physical activity and food security, and as such these formations can be recruited to provide and support interventions and programmes to enhance wellbeing, food security and levels of physical activity for Pacific people in New Zealand.

Afterword

Introduction

The emphasis upon socio-cultural factors has focused on identifying the cultural foundations of behaviours and practices associated with physical activity and with food selection, preparation, consumption and preferences, for members of the Māori and Pacific populations of New Zealand. The public health purpose of such attention and effort is to identify and inform the development of interventions that will influence and encourage changes in behaviours and practices that will lead to better health outcomes for the members of those populations.

The reports of the Māori and Pacific components of this research have identified the cultural and material foundations of behaviour pertaining to their respective cultures and identified and discussed areas of intervention that would build on existing cultural strengths to foster an improvement in the levels of food security and physical activity for Māori and Pacific people in New Zealand. Each set of recommendations emphasises the importance of communal approaches to effecting behaviour change and that the basis of such communal approaches must be firmly grounded in existing cultural frameworks and build on existing strengths.
Interventions that are developed from this research must address at least four broad areas that are relevant to the issue of food security for Māori and Pacific people in New Zealand. The four areas are policy, the community, industry and commerce, and personal agency. These are discussed, in turn, next.

**Policy**
Interventions must focus on prevention and be affordable and cost effective. While affordability is always an important characteristic, that importance is heightened in the present environment of economic restraint.

Interventions that are based on broad platforms of support such as suggested here are well placed to ensure the maintenance of primary stakeholder control, be cost effective, and maintain a long term view to fostering and reconfiguring the indigenous cultural forms and practices that this research has identified to enhance their ability to support and reinforce behaviours and practices that will encourage healthy eating and physical activity in contemporary New Zealand.

**Community**
The community focused approach can facilitate significant breadth and depth of influence with ready access to other community based or located organisations and facilities such as schools, community centres, local government, local businesses and, of course, other churches and marae. Location within local communities can increase accessibility and accountability. Inter-community communication can foster a spirit of positive competition among those working within the field which has the potential to encourage innovation and maintain enthusiasm.

**Commerce and Industry**
Commerce and industry comprise a significant part of the wider environment and particularly so in the case of food, most of which is purchased from retail businesses. Māori and Pacific community led interventions to improve food security should engage with food related areas of commerce and industry with the aim of reinforcing community and consumer pressure to influence the types of foods that retailers sell and promote. Such engagement by local actors would be a valuable counterpart to centralised initiatives based on regulation and legislation, for example, and would be worthy of receiving material government support.

**Personal agency**
Behaviours and practices related to food security and physical activity are reflected in the actions that are carried out by individual people. But these are not carried out in isolation from either the actions of others or from identifiable cultural foundations. It is important, therefore, that any initiatives informed by this research incorporate a balanced approach to the linked issues of structure and agency.

The body of Practice theory that informs this research considers structure and agency to be linked in an interactive relationship in which 1) the actions that people undertake are understood to be influenced by their cultural background, and 2) the cultural background
is subject to being changed as a result of the actions that people undertake. The types of recommendations that have been made in the two components of the research report amount to the creative and conscious exercise of agency to modify aspects of cultural background that are based on indigenous material foundations that do not exist in New Zealand.

It is important to emphasise the mutuality of agency and structure in order to minimise the potential for the goal of changing behaviours and practices to be conceived simply as a publicity or education campaign that would focus only on the personal level of agency, without reference to the structural level of culture.
1. Introduction

This report presents findings from qualitative research carried out to investigate socio-cultural factors associated with food security and physical activity for Māori and Pacific people living in New Zealand. The research was funded by the New Zealand Ministry of Health and the Health Research Council of New Zealand under the Primary Prevention of Cancer and other Chronic Diseases Research Strategy. In the RFP for this research the Ministry of Health and the Health Research Council of New Zealand defined food security broadly to include issues of accessibility, quality, and cultural acceptability, in addition to availability and quantity (Ministry of Health and Health Research Council of New Zealand 2007). This is appropriate for a country like New Zealand that does not face the food shortages and uncertainty of supply that are the sources of food security concerns in some developing countries. Rather, New Zealand – in common with most other developed countries – faces food security issues in the face of an apparently plentiful supply of food. As with other social and economic attributes (such as income, health, education, and so on), nutritional status is characterized by uneven distribution within the wider society. The differential distribution of nutritional status is seen in variations in the food consumption patterns of different population groups, as revealed in the 1997 National Nutrition Survey (Russell, et al., 1999; Parnell, et al., 2005), the 2002 National Children’s Nutrition Survey (Parnell, et al., 2003), and associated variations in health outcome status, found by the New Zealand Health Survey (Ministry of Health, 2004 and 2008). The results of those surveys have shown, for example, that Māori and Pacific people constitute two major population groups within New Zealand that experience higher rates of morbidity and mortality for a range of diseases that are associated with diet, nutrition and physical activity.

While there is almost certainly a socioeconomic dimension to this situation – given the over-representation of Māori and Pacific people in the higher deciles of deprivation (Crampton, et al., 2004) and lower deciles of income (Statistics New Zealand, 2007), the anthropological and sociological literature on food and nutrition provides strong evidence for the social constructed-ness of food consumption, choice and use, and the social practices that are associated with food (Mennell, et al., 1992 and 1994; Lupton, 1996; Beardsworth, et al., 1996; Caplan, 1997; Hepworth, 1999; Pelto, 2000; Atkins, et al., 2001; Johnston, 2001; Mintz, et al., 2002; Perez-Escamilla, 2002; Tuttle, 2002; Robinson, 2003; Germov, et al., 2004; Mendez, 2006).

Accordingly, the focus of this research has been to investigate the socio-cultural factors associated with food security and physical activity for Māori and Pacific people, and takes as a central thesis the view that at least some of the differences in the distribution of nutritional status have socio-cultural bases that are either independent of socioeconomic factors or that condition culturally specific responses to socioeconomic factors. In other words, while it might be the case that food with comparatively low nutritional value might be comparatively cheap, and therefore comprise a larger proportion of the diets of poorer people, it might also be the case that many foods with lower nutritional value have attributes other than lower price that render them attractive to certain population groups.
Another possibility is that members of populations for which the kinds of foods commonly available in New Zealand foods are different from those that are common in their original cultural milieu might not discriminate between different types of the former as they might discriminate between different types of their indigenous foods.

In focusing upon socio-cultural factors in the context of research directly carried out with Māori and Pacific people, we were mindful of the need for the careful analysis of the research process and its associated power issues. These issues are subject to increasing scrutiny across the range of social research in New Zealand (Te Awe Kotuku, 1991, Teariki, et al., 1992, Tupuola, 1993, Tamasese, 1994, Durie, 1998, Tamasese, et al., 1997 and 2005, Smith, 1999). This scrutiny has identified the specific need for the development and use of culturally appropriate research methods for any research carried out with Māori and Pacific people and communities. The research method must give central place to the world views of the participants if it is to reflect authentically their concepts and their experiences. The critical concern is to provide a research process and context in which Māori and Pacific participants can express their own experiences, opinions and understandings using their own language, be it English, Māori or Pacific from their own ‘world views’. In response to these challenges, the methodology used in this research has included the focus group method. The focus group provides an effective venue for the collective discussion of key matters which is “particularly significant in light of Māori and Pacific practices of consensus formation and ideas of solidarity” (Goldsmith, 1993). The focus group method was applied to the Pacific research participants through the fa‘afaletui process developed at the Family Centre (Tamasese, et al., 1997 and 2005), and to Māori participants through Kaupapa Māori research processes. In addition to focus groups, individual in-depth interviews were conducted with key informants who were from the communities concerned and knowledgeable about cultural matters.

**Theoretical framework**

In formulating an appropriate theoretical framework for this study, a key criterion was that the framework be able to account for not only the particular socio-cultural factors that are associated with food consumption, choice and use, and physical activity, for each target population, but also the manner in which the values, ideas, concepts, practices and dispositions associated with each particular cultural framework are developed, maintained and reproduced. In common with other fields of anthropological and sociological research, a number of theoretical perspectives have been applied to the study of food and its social uses and meanings (Mennell, et al. 1994; Atkins, et al., 2001; Mintz, 2002; Mendez, 2006). These theoretical perspectives have covered the range of those applied to other substantive fields of anthropological and sociological research and embraced structuralism, developmentalism, functionalism (Mennell, et al. 1994; Atkins, et al., 2001) and practice theory through the work of Bourdieu (1984) (Mennell, et al. 1994; Lynch, et al., 1997, Atkins, et al., 2001; Robinson, 2003; Mendez, 2006).

Structuralism, associated most familiarly (including in relation to food) with the work of Levi-Strauss (1963), Douglas (1984) and Douglas and Nicod (1974) is based on the idea
that cultural meanings have their basis in the structural relations that underlie all social activities – including activities and practices associated with food. The structuralist approach, while bringing a valuable analytic focus to the behavioural regularities that are associated with structural relations, tends to mask the human agency that is involved. Functionalism, with its emphasis upon the roles of social activities in the maintenance of social structures shares, with structuralism, a tendency to mask human agency. While the structural bias is manageable in the context of a stable, slowly changing, social context, it represents a significant weakness in the context of rapidly changing eating habits which has, as Fischler (1980) argues, led to a ‘destructuration’ (quoted in Mennell, 1994). Developmentalism, on the other hand, specifically allows for the reality of changes in behaviour and cultural tastes occurring over time following previous developments (Mennell, 1994). However, the developmentalist approach to food is directed to a broader view of social and historical processes than was called for (or able to be incorporated) in this study.

Practice theory, on the other hand, has been developed specifically to bridge the divide between structure and agency (Sahlins, 1981, Ortner, 1984 and 2006) that has characterized much of the history of the social sciences. Bourdieu is a key exponent of practice theory and has developed the concepts of habitus, field and capital to describe and provide tools for the analysis of social reality. Significantly, for the purposes of this study, Bourdieu has applied this framework to the question of food consumption practices and the ways in which they differ across different sections or classes of French society (Bourdieu, 1984). His framework has also been applied to the sociological study of the body, which bears directly upon the socio-cultural dimensions of physical activity (for example, see Bourdieu, 1984, Bourdieu, et al., 1992, Charlesworth, 2000, Wainwright, et al., 2003, Turner, 1996), and his concept of habitus, discussed further below, deals explicitly with issues of embodiment in relation to social and cultural differentiation. While Bourdieu’s approach to social stratification and differentiation has emphasized class as an organizing concept, his general approach is inherently capable of working with other categories of social differentiation, such as ethnicity (Bentley, 1987; King, 1995, 1996, Turrell, 1998, and Johannessen, 2004), as this study has required.

In view of this study’s clear focus upon identifying and examining the particular socio-cultural factors that are associated with food consumption, choice and use, and physical activity, for each target population, and the manner in which the values, ideas, concepts, practices and dispositions associated with each particular cultural framework are developed, maintained and reproduced, a theoretical orientation that incorporates structure and agency seemed most appropriate and useful. Accordingly, a practice theory based framework was applied to this study using Bourdieu’s concept of habitus as a focus for the development of detailed research questions, qualitative research instruments and analytic strategies. Bourdieu’s associated concepts of social field and capital were also be brought to bear in the development of detailed research questions, qualitative research instruments and analytic strategies. The manner in which this was done will be outlined further, below, but it is useful now to briefly describe these concepts and the manner in which Bourdieu uses them.
The concept of habitus refers to the systems of dispositions that “dispose” people to act in particular ways and to respond in certain ways to particular events (see Bourdieu, 1977, and also Pickel, 2005). These dispositions are acquired by people during their socialization and the composition and structure of the habitus of a person brought up in one social context (for example, culturally Samoan) will differ from that of a person brought up in another social context (for example, culturally English). They differ due to differences in experiences, expectations, aspirations, dietary and dining practices, recreational activities, language use, education, health outcomes, and so on. The habitus of each of these (hypothetical) people reflects the wider structures of their particular context, or social field, and enables them to operate and act within that field without needing to give conscious thought to every action, because each knows what to do, how to behave, what is expected of them, which knife and fork to use first when dining, and so on. In these cases, habitus and field are congruent. When transposed into one another’s social fields, however, the congruence of habitus and field disappears, and the people find themselves on unfamiliar territory, to varying degrees, and cannot necessarily act effectively or appropriately by acting in accordance with their usual dispositions. It would be a very rare person who has not experienced such a situation. A habitus that is congruent with a particular social field is a component of a wider set of capitals that constitute membership of that field. Other components of a capital set might include attributes such as descent (in the case of iwi membership for Māori and land holding aiga or extended family membership Pacific people, for example), or particular education or training (in the case of an occupation-based field, such as the legal field, for example).

In the application of Bourdieu’s ideas to the sociological study of both food and the body, the concept of habitus is central for the purpose of analyzing differences in the practices, preferences and tastes that have been identified for the members of different social fields (usually through social surveys) (e.g., Bourdieu, 1984). In his book *Distinction*, for example, Bourdieu (1984) differentiates the cultural from the socioeconomic in his analysis of differences in food consumption patterns displayed by different occupational groups in France. This is illustrated in the case of foremen and clerical workers, where foremen earn higher incomes than clerical workers. Despite their higher income, foremen’s food tastes and consumption patterns show a preference for the cheaper foods consumed by poorer manual workers. By contrast, clerical workers, with their lower incomes, show a preference for foods that “differs radically from that of manual workers and is closer to that of teachers” (Bourdieu, 1984:177), whose incomes and social status are higher than those of clerical workers. In his analysis, Bourdieu focuses on the structures of dispositions that distinguish the habitus of foreman and manual worker and that of clerk and teacher, and highlights the importance of cultural background, values, norms and socialization over mere economic considerations. The following text from *Distinction* is very pertinent to the intent of this research:

The art of eating and drinking remains one of the few areas in which the working classes explicitly challenge the legitimate art of living. In the face of the new ethic of sobriety for the sake of slimness, which is most recognized at the highest levels of the social hierarchy, peasants and especially industrial workers maintain an ethic of convivial indulgence. A
bon vivant is not just someone who enjoys eating and drinking; he is someone capable of entering into the generous and familiar – that is, both simple and free – relationship that is encouraged and symbolized by eating and drinking together, in a conviviality which sweeps away restraints and reticence. (Bourdieu, 1984:179)

Research questions and methodology
A qualitative approach has been used for this study to allow the dispositions, values and norms to be identified through the thematic analysis of the words, statements and descriptions that were provided by Māori and Pacific participants in the process of responding to focus group and interview questions. Another key consideration influencing the choice of qualitative methods was the need to take seriously the issues of cultural perspectives, cultural etiquette and protocols as well as the issue of language, as was discussed earlier.

A disadvantage of focus groups – and qualitative interviews – is that they do not usually include sufficient numbers of participants to produce results that can be generalised through the application of statistical techniques in the way that the results from quantitative surveys can. However, in a study such as this, the ability to probe during interviews and discussions is a real advantage because it allows for the identification and exploration of issues and themes that might not have been known about during the design of question lines. A structured survey does not provide this flexibility.

The existence of data and results from three large-scale quantitative surveys of nutrition and health (Russell, et al., 1999; Parnell, et al., 2003 and 2005), and Ministry of Health, 2004 and 2008) means that this study did not need to obtain that information, but could, rather, build on the existing survey-based work and focus on identifying the socio-cultural underpinnings of the patterns of behaviour revealed by the surveys.

The specific research questions that were addressed in this qualitative study are as follows:

1. What are the socio-cultural factors that enhance:
   a) food security, and
   b) physical activity for Māori and Pacific people?

2. What are the inter-relationships among these socio-cultural factors and what are their relative contributions to:
   a) food security, and
   b) participation in physical activity in New Zealand?

3. In what ways could these socio-cultural factors be modified to further enhance:
   a) food security, and
   b) physical activity of Māori and Pacific people?
The research fieldwork started from the baseline of existing information about the food consumption, nutrition, diet, physical activity and health status, provided by the 1997 National Nutrition Survey (Russell, et al., 1999; Parnell, et al., 2005), the 2002 National Children’s Nutrition Survey (Parnell, et al., 2003), and the 2002/03 and 2006/07 New Zealand Health Surveys (Ministry of Health, 2004 and 2008). Summary information from these studies was presented to research participants in order to place this research in context and explain its purpose and importance. The development and implementation of the discussion and interview frameworks in the Māori and Pacific components of the fieldwork is detailed in the separate reports of Māori and Pacific fieldwork that are set out in the body of this report.

**Question line development**

The question lines that were developed focused on investigating the issues of food security and physical activity in the context of Māori and Pacific cultural concepts, and through the lens of the theoretical framework detailed earlier in this Introduction. The questions explored prior levels of physical activity in the indigenous subsistence based economies and explored current day realities in New Zealand and inhibitors of physical activity in New Zealand. Throughout the question lines attention was paid to identifying cultural and community strengths, such as those that would restore self, whanau, aiga and community controls over what is selected and ingested as well as levels of physical activity.

A baseline set of questions was developed and piloted at marae hui and Pacific community meetings during the initial contact phase. Building on this exercise, a set of key themes was identified that form the basis to develop a set of questions for the focus groups and interviews. The focus group questions were relatively unstructured, the aim being to obtain a coherent narrative of factors that influence food security and physical activity. All interview schedules used in this research were tested and piloted before being finalised and used with participants. Development of question lines for the focus groups and individual interviews was also informed by the theoretical framework detailed earlier in this Introduction.

**Fieldwork**

Fieldwork for each target population was to have consisted of six focus groups and six in-depth interviews with key informants, making a total of twelve focus groups and twelve interviews. This remained the case for the Pacific component of the research, while the Māori component included some additional interviews for reasons that are explained in the report of the Māori fieldwork. In some details, the implementation of the fieldwork differed for the Māori and Pacific components, and these are discussed under separate headings next, beginning with the Māori component. In accordance with the three tikanga structure of the Family Centre, the Māori component of the fieldwork and data analysis was carried out under the leadership of the Māori members of the research team, and all interviewing and focus group facilitation was carried out by Māori fieldworkers. Similarly, the Pacific component of the fieldwork and data analysis was carried out under
the leadership of the Pacific members of the research team, and all interviewing and focus group facilitation was carried out by Pacific fieldworkers. Focus group composition was arranged to ensure that a cross-section of perspectives, by age, gender and relationship status, were represented for each of the two target populations. Focus group discussions and interview proceedings were audio taped and transcribed. Text transcriptions were coded and analyzed thematically, as further discussed below. The study underwent ethical review and was approved by the Multi-region Ethics Committee at the New Zealand Ministry of Health.

As the fieldwork with each of the two target populations followed its own kaupapa\(^2\), their findings are presented in separate sections within this report, along with details of fieldwork and analysis methods.

**This report**

This report is in four substantive sections: Introduction; Report of the Māori component of the research; Report of the Pacific component of the research; and a concluding Afterword. The Māori and Pacific reports each include their own, stand-alone, conclusions and recommendations to support the development of culturally appropriate interventions and strategies for improving nutrition and levels of physical activity for Māori and Pacific people, respectively. In addition to the substantive sections, the report contains an Executive Summary, References section, and Appendices containing the Information sheet, Consent form, and Question lines.

The separate, stand-alone coverage of Māori and Pacific components of the research within one document reflects the manner in which the research has been conducted within a three tikanga framework by a three tikanga research team. Within the broad conceptual approach that was agreed by the team, and which has been described in this introduction, the Māori and Pacific research teams developed and applied their own distinct approaches to their components of the project. It is appropriate that their results and findings be allowed to stand alone because any recommendations arising from the research are culturally specific, by design, and it would be counterproductive to attempt to attempt to synthesise them at this stage. In the concluding Afterword, the findings and recommendations of the two culturally specific components are discussed with reference to four aspects and considerations of the broader issue food security for Māori and Pacific people in New Zealand. The four aspects discussed are policy, the community, commerce and industry, and personal agency.

\(^2\) Principles.
2. Report of the Māori Component of the Research

Mihimihi

Tēnā koutou ngā mana, ngā reo, ngā karangaranga maha o te rohe, o te motu. Ka tēnei te mihi atu ki a koutou. He mihi anō ki a tātōu mate kua wehe atu ki te pō, haere, haere, haere. Ka huri aku kamo ki ngā kaimahi o te Te Kaunihere Rangahau Haouora o Aotearoa (HRC) tēnā koutou. Anei a tātōu ripoata hei whakaarohia ma koutou, me āta panui, me āta whakaaro, hei whakakaha te hauora o ngā iwi Māori.

He mihi maioha tenei, ka oti te ripoata nei i te raa nehu o te rangatira a Ta Howard Morrison, no reira e tika ana ki te mihi, he tangata kaha a ia i tautoko o nga kaupapa hauora kia whakaora ai i a tātou te iwi Māori. Moe mai ra e te rangatira ki te taha o ngā tipuna oti atu.

We would like to thank all the participants who shared their stories, views, and opinions and willingly gave up their time to participate in this study. We thank the participants for trusting us with their personal experiences and knowledge. We hope your trust in us is rewarded in this report. We would especially like to thank our kaumatua and kuia who most humbly and graciously guided us through our journey to discover ways to improve the health and lives of Māori. Tēnā koutou katoa.

A special thanks also to the community researchers Mary Jane Waru and Ngaire Aben, this project would not have been possible without their strong support and assistance.
Introduction

This section reports the research on socio-cultural factors associated with food security and physical activity for Māori. Seven focus groups and eleven interviews were conducted to explore the socio-cultural factors which underlie the acquisition, preparation and consumption of food, engagement in physical activity and the factors that can inhibit and enhance food security and physical activity. A total of 54 people participated in the study.

This report is presented in three sections. The first section outlines the methodological approach and research design. It explains the research questions, the language and terminology, and the type of analysis that was used to interpret the information collected. This section includes details of the particular kaupapa Māori research processes of engaging Māori researchers, communities and respondents in the research and describes the research methods used to deploy the research. Section two reports the research findings. Section three draws together a conclusion of the research findings that includes recommendations and suggestions for further research and the possible implications of the research.

Section 1. Methodology

The aim of this research was to conduct a qualitative investigation of the socio-cultural factors that are associated with food security and physical activity for two target populations: Māori and Pacific people living in Aotearoa New Zealand. The research with Māori was informed by a kaupapa Māori framework, as discussed below. The Te Whare Tapa Wha model of health was used to structure the research themes and questions and to provide a framework within which to analyse the research findings. In order to identify the dispositions associated with the consumption, acquisition, preparation and use of food, and participation in physical activity, a qualitative approach was used. This approach allowed for factors to be identified through the thematic analysis of the words, nuances, statements and descriptions that were provided by Māori respondents in the process of responding to focus group and interview discussions topics and question. A key consideration influencing the choice of qualitative methods was the need to deal seriously with the issues of cultural perspectives, cultural etiquette and protocols as well as the issue of language.

Kaupapa Māori Research

The research team are mindful that traditional positivist approaches to research would not be appropriate for a study of socio-cultural factors, which in the context of this study means that research was carried out directly with Māori people about Māori people, their culture, their histories and their contemporary realities. A kaupapa Māori approach was adopted as it gave central place to Māori world views, beliefs and attitudes and allowed for the use of culturally appropriate research tools. Careful consideration was given to ensuring that any analysis and interpretation of the research findings did not lead to a

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3Kaupapa Māori refers to Māori frameworks which are based on Māori cultural values, beliefs and worldviews.
focus on deficit aspects of Māori culture or on the inability of Māori to deal with health problems.

Kaupapa Māori research is an approach which our Māori researchers take seriously and they are aware of how they must think through ethical, methodological and cultural issues. Māori were significant respondents and partners in the research, the researchers were Māori, and the research outcomes aimed to benefit Māori. The Family Centre’s three tikanga (three cultures) management structure ensures the centrality of cultural analysis and accountability in all its work. Kaupapa Māori research carried out with Māori, is conducted within its own cultural frameworks and incorporates its own concepts, knowledge, skills experience, attitudes, processes, practices, customs, languages, values, ethics, and beliefs. This structure supports the view that research involving Māori knowledge and people needs to be conducted in culturally appropriate ways that fit Māori cultural preferences, practices and aspirations. Research processes and procedures were also informed by the Health Research Council of New Zealand ‘Guidelines for Health Researchers on Health Research Involving Māori’, (Health Research Council of New Zealand,1998).

**Methodological Framework**

Food itself not only supports the physical activity, survival, nutrition and health of people but also holds spiritual and cultural values that are equally important to Māori. Accordingly, any perceptions of food, food security and physical activity held by Māori would include physical, spiritual and cultural dimensions. To enable these dimensions to be investigated, a methodological framework was developed to provide a structure to assist with the collection, analysis and interpretation of Māori beliefs, values, experiences, attitudes and practices. Mason Durie’s Te whare tapa wha model of health provided the dimensions of te taha tinana/wairua (physical and spiritual health); te taha whanau (family and social networks); te taha hinengaro (psychological perspectives, values, attitudes and beliefs). This framework symbolises a respect for the research respondents, their whanau and their worldviews. The framework facilitated an in-depth exploration of the perceptions about food itself, food security, factors which influence food choice, and engagement in physical activity, in a manner that considers and affirms the sacredness of Māori knowledge.

The methodological framework was developed in three phases beginning with four basic epistemological assumptions:

1) The generation or production of knowledge is embedded in local physical environments, social, cultural and political structures. In other words, knowledge is produced locally and is maintained within a cultural, social, political and physical context.

2) Knowledge is a collective resource.

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4 The Family Centre’s three tikanga structure gives Māori researchers oversight and control of work involving Māori, and Pacific Island researchers oversight and control of work involving Pacific people.
3) Knowledge is perceived as a living entity; that is, it is alive within culture and it is intergenerational.

4) Knowledge is produced, maintained and reproduced through an integrated system of human relationships with the natural physical environment (Maurial 1999).

A review of the existing literature and information about food consumption, nutrition, diet, physical activity and health status was conducted in the second phase of developing the framework. This review included the following studies: Enhancing food security and physical activity: the views of Māori, Pacific and low-income peoples (Lanumata, et al., 2008); Food Security among Māori in Aotearoa (Te Hotu Manawa Māori, 2007); Enhancing physical activity for Māori, Pacific, and low-income families/whanau (McKerchar, et al., 2008); Food Security Options Paper: A planning framework and menu of options for policy and practice interventions (New South Wales Centre for Public Health Nutrition, 2003), and Struggles, Strengths and Solutions: Exploring Food Security with Young Aboriginal Moms (Baskin, 2008).

The third phase of development involved a review of the key research questions:

4. What are the socio-cultural factors that enhance:
   a) Food security, and
   b) Physical activity for Māori?

5. What are the inter-relationships among these socio-cultural factors and what are their relative contributions to:
   a) Food security, and
   b) Participation in physical activity in New Zealand?

6. In what ways could these socio-cultural factors be modified to further enhance:
   a) Food security, and
   b) Physical activity of Māori?

The key research questions, information from the literature and the four basic epistemological assumptions informed the development of the following research themes:

**Theme 1: Understanding perceptions about food.**
- Perceptions of food.
- The social meaning of food.
- Cultural values, attitudes and beliefs associated with food.

**Theme 2: Socio-cultural determinants of Food Security.**
- Determinants of food security.
- Factors which influence food choice.

**Theme 3: Engagement in Physical Activity.**
- Socio-cultural factors which determine or influence participation in physical activity
Definition of food security

The following definition of food security as defined in the 1996 Rome Declaration on World Food Security was used by the Māori research team:

“Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet dietary needs and food preferences for an active and healthy life” (FAO, 1996).

For the purposes of this study, the above definition was extended to acknowledge that food must be “Accessible and adequate in nutritional quality, quantity, safety socially and cultural acceptability ways”. The determinants of food security were taken from the NSW Food Security Options Paper: A planning framework and menu for options for policy and practice interventions. The key determinants used in this study were:

1. Access to food:
   - The ability to access a healthy diet in terms of time and mobility
   - The ability to access to food in socially and culturally acceptable ways.
   - The ways that different foods are identified and promoted.
   - The knowledge and skills to make healthy choices when selecting food.

2. Food supply:
   - The quality and variety of food that is available today.
   - The location of food sources/outlets and the availability of foods within these locations.

Question line development

A baseline set of questions was developed from the research themes. The questions were open ended and designed to be used as prompts to obtain a coherent narrative, rather than specific answers, and to enable focus group respondents to articulate their understandings of food security, physical activity, health, and consumer environment issues described in the research themes outlined above. The research themes also informed the content of the in-depth interviews. That basis for discussions was also supplemented by a series of probes designed to extend the discussions and interviews into more detailed consideration and description of respondents’ dispositions towards food and physical activity, and the values, meanings, contexts and practices associated with those dispositions. The research themes were extended to include questions around access and supply of traditional food sources, and the nutritional quality of food. Also covered was the availability of non-traditional food which is culturally acceptable to the recipient and can be accessed in socially acceptable ways. Similarly, determinants of physical activity included access to traditional sources and forms of physical activity. The implementation of the discussion and interview frameworks in the Māori components of the fieldwork will be further discussed in the Fieldwork part of this section, below. The base questions and themes were incorporated into a question framework (See table 1 and Appendix 2.).
### Figure 1. Key research themes and questions.

<table>
<thead>
<tr>
<th>THEME 1: UNDERSTANDING PERCEPTIONS ABOUT FOOD</th>
<th>THEME 2. SOCIO-CULTURAL DETERMINANTS OF FOOD SECURITY and FACTORS WHICH INFLUENCE FOOD CHOICE</th>
<th>THEME 3: ENGAGING IN PHYSICAL ACTIVITY</th>
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<tr>
<td><strong>Te Taha Tinana</strong> Physical and Spiritual perceptions about food</td>
<td>Are you able to access food in socially acceptable ways? Share food costs, prepare meals with others in your social or family circles? Can you talk about how your social surroundings, whanau, friends, and community, influence your eating behaviours. Are you able to access food in culturally acceptable ways?</td>
<td>Do you consider that you have access to a reliable and constant source of healthy food? What are the factors that determine what you eat? (Besides when you’re hungry) Are you able to access food in socially acceptable ways? Share food costs, prepare meals with others in your social or family circles? Can you talk about how your social surroundings, whanau, friends, and community, influence your eating behaviours. Are you able to access food in culturally acceptable ways?</td>
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<tr>
<td><strong>Te Taha Whanau</strong> The social meaning of food.</td>
<td></td>
<td>In relation to the social meanings associated with physical activity, how do those factors impact on: - Where you are physically active? - When you are physically active? - Who you are physically active with? Can you talk about your beliefs, values and attitudes in relation to the social meanings associated with physical activity?</td>
</tr>
<tr>
<td><strong>Te Taha Hinengaro</strong> Psychological perspectives of food.</td>
<td></td>
<td>Do psychological factors determine how often you are physically active and what types of activities you do? What are your perceptions of physical activity and culture?</td>
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<th>THEME 4: FACTORS THAT CAN ENHANCE FOOD SECURITY AND PHYSICAL ACTIVITY</th>
<th>THEME 5: BARRIERS TO FOOD SECURITY AND PHYSICAL ACTIVITY</th>
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<td>What factors can enhance food security and physical activity?</td>
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Ensuring respectful engagement and consultation with Māori required that the researchers were familiar to and with their respective research communities, hapu, iwi and whanau. The three regions selected for study were Lower Hutt, New Plymouth and Hawkes Bay. The Māori researchers were each assigned one of these locations according to their personal connections to that location. That is, they had lived in one of the three research locations for a considerable time and had established connections in the Māori community, and/or they could whakapapa to that region. The processes of engagement involved initiating contact and meeting with key contacts to discuss the purpose of the research; recruiting research participants; consulting with kaumatua to seek advice on matters pertaining to the tikanga of their particular area; seeking advice and input about the research from stakeholders including health providers and iwi/hapu authorities; and sharing information about the research. It was left up to each researcher to determine who to engage and consult with in their assigned communities. In addition, an advisory group was established to ensure that tikanga Māori was adhered to throughout the research processes. In total, research relationships were established with one marae, one Māori hauora/health service provider, one kaumatua group, three community groups and several community members. Sufficient resources were allocated to allow for consultation hui/meetings and for the dissemination of the research findings.

Participant Recruitment

The prospective research participants were identified during the consultation hui with key contacts. A list of potential participants was established and they were invited to attend a research hui to discuss the project and organise a time and date to attend the focus group sessions. Participants were purposely selected to maximise the opportunity of discovering the broad range of experiences, views and korero. The sample was not restricted to any particular age group, gender, professional sector, iwi, hapu or whanau. The research locations were selected to capture any geographical differences in terms of access to food, and supply of food that may exist. Table 1. shows the composition of the sample according to geographic location, age range and gender. The relative contributions of older and younger participants are discussed at the end of this Introduction section.

<table>
<thead>
<tr>
<th>Location</th>
<th>No. of respondents</th>
<th>Age Range</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Hutt</td>
<td>17</td>
<td>16-68</td>
<td>11 (f) 7 (m)</td>
</tr>
<tr>
<td>Hastings</td>
<td>15</td>
<td>22-93</td>
<td>5 (f) 10 (m)</td>
</tr>
<tr>
<td>Napier</td>
<td>5</td>
<td>57-70</td>
<td>5 (m)</td>
</tr>
<tr>
<td>New Plymouth</td>
<td>17</td>
<td>30-70</td>
<td>12 (f) 5 (m)</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>16-93</td>
<td>28 (f) 26 (m)</td>
</tr>
</tbody>
</table>

5 hapu, iwi, whanau – generally refers to sub tribes, tribes and family.
6 Genealogical links.
7 Elders.
8 According to Māori protocol.
Data Analysis and Reporting

Oversight and conduct of the primary analysis and interpretation of data from Māori respondents was undertaken by the Māori researchers. Subsequent analysis, interpretation and integration were conducted by the full research team. The detailed cultural knowledge of the Māori researchers was a vital contributor to ensuring that the interpretation of research findings pertaining to Māori was congruent with their own cultural norms, values and dynamics rather than the norms, values and dynamics of the dominant (Pakeha) culture. A review of the research objectives was conducted before the data analysis process began. This process helped to organise the qualitative data and focus the analysis. The recorded interviews were transcribed by the research assistants and checked by the researchers. A basic analysis process followed which involved the following steps:

1. Listening to the audio recordings.
2. Transcribing the interview and focus group data.
3. Reading through all the data.
4. Organising comments into the pre-determined research themes.
5. Creating new categories for naturally occurring themes.
6. Labelling the categories or themes.
7. Identifying patterns, or associations and causal relationships in the themes.

Several techniques were used to ensure the validity of the findings and to clarify the reliability of the study, these included:

- Double checking data to see if it supported conclusions drawn.
- Peer examination – by one of the project leaders and an external auditor who was knowledgeable in qualitative research methods; and
- Clarification of research bias.

The researchers are aware that it is often difficult to distinguish between personal and professional perspectives. As the emphasis of this study was on Māori people and culture and the people conducting the research were Māori, they were inevitably inseparable from the research itself. The researchers made no attempt to deny or mask this reality.

Fieldwork

Focus groups and Narrative interviews

Data was collected through the use of focus groups and narrative interviews. The focus group discussions began with a half-hour power-point presentation which explained the kaupapa9 of food security and physical activity, the objectives and purpose of the research; the research process and the discussion topics. This information was also

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9 Topic.
presented in hard copy form for the respondents to take home. Time was set aside to discuss what would happen to the information shared during the focus group and interview discussions. This time allowed for any questioning about the research process and the research outcomes. The respondents were informed that the focus group discussions and interviews would be recorded with their permission. Before recording commenced, they were assured of confidentiality and told about their right to view their discussion and interview transcripts, and to withdraw from the project at any time. These rights were detailed on the consent form that the research respondents were asked to sign before taking part. The focus group and interview narratives were recorded on audio tape and summarised in note form. The notes allowed for descriptions of participant’s characteristics, enthusiasm, body language, and overall mood to be noted during the group discussions and interviews. These notes were also used to identify speakers or to recall comments that were unclear on the tape. Note expansion was performed soon after the focus group discussions and interviews; this involved the researchers listening to the audio tape to clarify certain issues and to confirm that all the main points had been included in the notes. The focus group and interview data was transcribed verbatim including quotations and punctuation of the participant’s responses. The transcripts were then checked for any errors and translated to English when Māori language had been spoken.

An advantage of conducting focus groups is that they allow for in-depth discussion and the exploration of issues and ideas. This led to the emergence of other relevant themes and factors related to food security and physical activity which the researchers had not considered during the design phase of the study. In total, seven focus groups were conducted, two groups in Wainuiomata (Lower Hutt), two groups in Hastings, one group in Napier and two groups in New Plymouth. At the completion of each focus group, potential respondents for the narrative interviews were identified.

The interviews were unstructured and conducted in a one on one environment at the participant’s residence. This method of inquiry was particularly useful as it allowed respondents to speak in their own language and to speak openly and freely about their experiences. This technique was also chosen because it fits more readily within a kaupapa Māori approach to research that aims to acknowledge the deep value that many Māori attach to their stories, concepts, values, beliefs, knowledge, etc. The key research themes and questions used in the focus group discussions also guided the narrative interviews. The interviewees were not asked new questions but rather were given an opportunity to extend any thoughts, views or korero which they did not share during the focus group discussions. It also allowed the researchers an opportunity to explore in more depth any topics or themes that had emerged from the focus group discussions. During interviewing, the researchers attempted to keep interactions with the respondents to a minimum so that they did not influence the participants’ words. However, the reality was that the interviews developed into conversations as the researchers and the respondents found themselves inseparable from both the kaupapa being discussed and the research itself. Although we only intended to interview 6 people (2 people from each area), 11 people volunteered to be interviewed. Not wanting to offend anyone’s offer to hear their korero we accepted all offers.
As the ultimate goal of the research has been to identify culturally based interventions for contemporary New Zealand, it was necessary to focus the questioning upon the socio-cultural bases of the practices concerned. Because these were often most clearly understood and articulated by older members of the Māori focus groups, their voices tend to be reflected more clearly in the reported findings as they relate to the origins of Māori tikanga and kaupapa and comparisons between past and present conditions and realities. However, the voices of all age groups were represented in the discussions relating to present day realities in the context of Māori tikanga and kaupapa.
Section 2. Research Findings

Reporting

The following section reports on the key research findings. It is based on the focus group and interview transcripts and reported in a way that corresponds to the key research themes. The research findings and discussions are organised under the following topics:

- Socio-cultural factors underlying the acquisition, preparation and consumption of food:
  - Perceptions about food;
  - Food security;
  - Food choice.
- Engagement in physical activity;
- Enhancing food security and physical activity for Māori;
- Barriers to food security and physical activity for Māori.

Socio-cultural factors underlying the acquisition, preparation and consumption of food and physical activity

Perceptions about food

Respondents were asked: “What does food mean to you”? The following responses reflected the general view of the meaning of food:

“I s’pose as far as food goes, food is a culture thing with Māori and it always has been”. “Food is our culture”. [Respondents: Taranaki Focus Group #1]

The first set of discussions to emerge about the meaning of food focussed on traditional practices and customs associated with food.

Customary beliefs, values and attitudes associated with food

The most common custom was acknowledging deities for their contributions of food for human consumption. Respondents described two ways that this custom is practised. The first is through karakia (giving thanks in prayer or traditional chant) and secondly through offerings of food, or the first item of food gathered, harvested or collected to nga atua o nga kai (the gods or deities who provide food). The following anecdotes express the general views of respondents and the importance and value they hold in these customs.

The custom is always the same. I remember my mother digging up the first potato, cutting the first cabbage, cutting the first tomato. Whatever the first vegetable she touched, the very first one was returned to the ground. Everything she took from the earth, the first one she returned to the ground. After a while it clicked that it is to show your gratification to Papatuanuku for giving us a kai. That was the same with fishing, the first one you catch you throw away, you throw it back. [Respondent: Taranaki Focus Group #2]
My mother always used to encourage us to leave a little on our plate and then when we clean up all the scrapings from the plate would be taken to one corner of the garden. This is what our mothers taught us, what our grandparents taught us. We have Christmas we take a plate up to the urupa [cemetery]. We were talking about Maru, now that’s one of the deities that came on our waka and each one of us were all saying how Maru was in our young days, “what did Maru mean to you”? Was to take kai, put it aside whether it be in the paddock, whether it be somewhere in the shed. If the cat ate it, ket te pai, [that’s okay] if the dog ate it, ket te pai but that was set aside for Maru. If we were to take it up to the urupa it was just left there.

[Respondent: Taranaki Focus Group #2]

Another important custom is acknowledging when ones body (physical) is in a state of sacredness. Blood is very tapu and during times of menstruation (mate) restrictions are placed upon women and they are not permitted to harvest, collect or gather food, as the following respondents explained.

Of course women of all people, my children, my daughters know the sacredness of that and I am happy, I’m glad about that. Sometimes I know they tell toot to me because when my girls have got their mate\textsuperscript{10}. I tell them come on lets go down and get kaimoana [seafood] and my girls go, “oh I got my mate Dad” and all the time they don’t want to go and I know. They tell me afterwards, “yeah Dad I just didn’t want to go.” Yeah well I knew it all the time. [Respondent: Taranaki Focus Group #2]

Preparation of food, going to the garden with your mate was never. Never ever would my mother ever consider going to the garden with her mate, picking the kai, never going to get puha [New Zealand sow thistle] or watercress while she had her mate. Y’know those are innate things that belong to us as Māori women and I think it kept our culture strong. Not only did it stop our women from going to harvest food at that time but it also gave them the opportunity I guess a rest from having to be the gatherer. Because I think that in former times they were the great gatherers of the time while the men were the hunters. I mean we were known for hunting and gathering. [Interviewee #1]

The topic of tapu and food extended to people’s views about the sacredness of their bodies in relation to the concept of tapu.

Mason Durie, one of his writings was about tapu and how its been ingrained to us that tapu has become more in the sacred y’know forbidden type thing but if you go back a lot of tapu, like that swamp was tapu not so much because there was a taniwha\textsuperscript{11} but you could drown you know you could get caught in

\textsuperscript{10} Menstrual cycle.

\textsuperscript{11} Taniwha refers to various mythical monsters.
the mud so it was made tapu not to go there and he was saying we should make marijuana tapu, we should make alcohol tapu, we should make McDonalds tapu because its not good for us. [Respondent: Lower Hutt Focus Group #2]

Well it’s the sacredness around your body you know ‘why would you put this into your body where it’s going to harm you in more ways than one’?

I’ve been into homes talking to the whanau and some child’s come along and put a hair brush on the table and there’s this huge uproar “don’t put the bloody hairbrush on there that’s tapu”, and then I’ve spoken to the parent and the children got drunk. Where did they get the alcohol? “Oh we brought it for them” [the parents]. But you know the hairbrush on the table and world war 3 was gonna break out and yet they openly provided alcohol for their young tamariki and there was just no concept of the damage that the alcohol was doing. [Respondent: Taranaki Focus Group #1]

In considering perceptions about food the researchers were reminded about the significance of the relationship between physical and spiritual perspectives. This view was reiterated in the statements of two kaumatua respondents.

The comparison between the two life’s; you’re looking at a physical life and the spiritual, the comparison and the parallel that comes with the spiritual life is stronger than the one you can see physically. [Respondent: Hawkes Bay Focus Group #1]

Without those connections of the wairua, the wairua doesn’t just mean who we are, what we are, it means our culture, it means believing in our whakapapa, that there is a tikanga, that we have a whakapapa to it all and nothing should be left unturned. [Respondent: Taranaki Focus Group #1]

Two key themes emerged in relation to discussions about physical and spiritual perceptions of food:

1) Food is rongoa (medicine); and
2) Food is spiritual nourishment.

**Food is rongoa (medicine)**

Many respondents believed that traditional food items held medicinal properties as the following respondent explained.

Our rongoa is our food and our food is our rongoa. Well that’s what my dad used to say. Your puha is your rongoa. Your watercress is your rongoa. Your kaimoana is your rongoa. When you feel like a big feed of salt you go to the moana. You go and get those things. Y’know you don’t have to wait until somebody brings you the salt. [Respondent: Taranaki Focus Group #1]
Food was also considered to have medicinal value when chewed before it was fed to babies and sick children. Although it was not clear whether the medicinal value came from the food itself or a combination of the food and saliva, many of the older female respondents recalled that this had been a regular practise.

*What I learnt from my parents and nannies is kei te hono haere koe i tou haa me tou mokopuna [you mix your saliva with the food and feed it to your grandchildren]. And I think all children who grew up like that sharing that chomp chomp and give it penu penu [mash it up] and give it you know it’s awesome. [Respondent: Lower Hutt Focus Group #1]*

**Food is spiritual nourishment**

Food was also described as an important source of spiritual nourishment. Respondents discussed the importance of acknowledging the spiritual properties of food as described by the following respondent.

*When I talk about the wairua thing ... y’know my gardens is not just about going to put food in the garden and eating it at the end of the day. It’s my connection with Papatuanuku, it’s my connection with Haumietiketike, it’s my connection with Rongo-ma-tane. Y’know, I don’t just go in there and think yahoo I’m in the garden. It’s not like that all these kaitiaki have provided for me, they’ve given me a whakapapa to all this kai. Y’know and then we go and get puha and watercress and I go Haumietiketike gees you’re pretty choice y’know. So you got to have the balance between Haumietiketike and Rongomatane. Then we go over to Tane. Y’know Tane, thank you for the birds and all those things that fly. Thank you for the bugs, y’know Tane Pupuke. [Interviewee #3]*

Another source of spiritual nourishment is matauranga Māori. One respondent spoke metaphorically about how he consumes the matauranga of his mountains, rivers, seas and forests.

*I get satisfaction from eating my mountain I eat my mountain day and night 24/7 I will not leave my mountain until I’m full I will not leave my river, my awa until I’m full, I will not leave my marae until my kete[is] full, and I will not leave until somebody has spoken even small about his kapata kai, about his way of doing eeling, his way of tahu miti. [Respondent: Hawkes Bay Focus Group #1]*

**The social meaning of food**

Two key themes dominated the discussions around the social meaning of food:

1. **Manaakitanga**: (Caring for people and sharing) and;
2. **Whanautanga/Whanaungatanga**: (Social interactions within family).

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13 **Papatuanuku, Haumietiketike, Rongomatane, Tane Pupuke** are names of different Māori gods associated with, respectively the earth, wild food, cultivated food, forests and birds.

14 **Māori epistemology.**
The respondents clearly alluded to the importance of caring for people, acting as a good host and sharing food. These factors were identified as values associated with the social meaning of food and key values necessary for group survival. The concept behind these values is known as manaakitanga or manaaki tangata which can be loosely translated to mean hospitality, to be a hospitable person, to care, to share, etc. The meaning of the concept manaakitanga derives from the notion that people are the most important thing in the world. It refers to the wellbeing of the collective group as opposed to striving for individual excellence and personal fulfilment. A proverb well known to Māori people depicts the origins of this concept, as one respondent stated.

*He aha te mea nui o te tenei ao, he tangata, he tangata, he tangata. What is the most important thing in the world? It is people, it is people, it is people.*

[Respondent: Taranaki Focus Group #1]

The main characteristic in the practice of manaakitanga is food, hosting with food, giving and sharing of food, and working collectively to prepare food for visitors are all examples of how one exercises manaakitanga. Many of the respondents believed that Māori are pre-disposed to manaakitanga through behaviours and practices associated with observing tikanga Māori. The following anecdotes elaborate on how the concept of manaakitanga is an integral part of Māori culture.

*Its called a cultural more, the Māori cultural more in terms of a perception or concept is manaakitanga ... ‘kātahi ko te mauri manaakitanga i te tuatahi ka rua ko te mauri manaaki whare, ka toru ko te mauri manaaki manuhiri i nga waa katoa’, [firstly are the principles of caring and sharing, secondly, you look after your home, thirdly you always look after your visitors]. The principle is a mix between tikanga and protocol. Our tikanga is our principle or the tika thing to do is feed the people that arrive at your house no matter who it is. That is what I was taught from my marae by my elders and that stands firm always. Because, Māori are social like people, it’s a natural being so that’s where it stems from.* [Respondent: Taranaki Focus Group #1]

*We as Māori socially we’re indebted to food, that’s the thing that attracts us. It’s part of tikanga, it’s part of our whakatau [greeting], it’s part of our pohiri [welcome]. It’s part of our noa [becoming free from a state of sacredness]. It’s the tikanga to be able to participate in activities within the group that you’ve visited. It’s our culture. We are remembered by our food, what we put on the table, you get taught from way, way back that you put the best on the table when the visitors come ... so you know we’ve grown with that concept.* [Respondent: Taranaki Focus Group #1]

*Every time I go to a place they’re “haere mai”, [come here] go around the back, cup of tea something’s on the boiler, fish head or something and they make a banquet for you. And if you’re hungry or starving they banquet because they honour manaakitanga.* [Respondent: Hawkes Bay Focus Group #1]
Whanaungatanga

The concept of manaakitanga is not limited to feeding your visitors but also refers to the practise of caring for family and sharing food amongst kin groups. It was also noted, that this practice does not necessarily involve the exchange of money. Working together in a communal way to feed people continues to be a major social activity. One respondent explained that this practice emphasises the importance of whanaungatanga or togetherness. The following respondents shared this view.

People working in the gardens everybody from the paa\textsuperscript{15} went down there and helped weed. If you did an acre weeding, that was your koha\textsuperscript{16}, your manaakitanga to the whanau or to the wider whanau at the paa. Whenever there was a do on at the marae they never brought in kai, the kai was supplied from around the different gardens, from around the different marae and they would bring it that was their koha, there was no money, no money touched the marae atea, the only thing that touched it was kai. They just turned and they never said “oh here’s my pig”, nah, they just dropped it and took off. You turned around and there was pigs, mutton, eels, crayfish and so our kaupapa here on this side of the world was about manaakitanga if we can’t communicate manaakitanga to our people they die. [Respondent: Hawkes Bay Focus Group #1]

I think that’s one of the beauties of our whole culture y’know that’s our tikanga, that sharing thing that was absolutely important. That was the survival of our people. Y’know and when you think about it how these hands over here have gone to the sea to collect that kai, they bought it to your house and you prepare it, the whanau come to share it. All these hands had manaaki the kai that’s going to go into your tinana, it surely must be good for you on a wairua level. [Respondent: Taranaki Focus Group #1]

Its like with the gardening like when the kuia and the koroua from Nuhaka were asked to talk about their childhood about 90% of them talked about going as families to that paddock and they’d have one plough and then all the parents would go with the kids and they would plough one paddock and then they go to the next one and they rotated. If they went out to get kaimoana they went together, it was the food that encouraged that togetherness, that activity, that manaakitanga, I’ll manaaki this family and their paddock and they’ll come and manaaki us to do that paddock and then when the kai is ready we share. [Respondent: Taranaki Focus Group #1]

I was brought up to cook, we have tangi [funerals], all of us kids can cook it’s just in us and I’m the same, for me it’s whangaungatanga, even at our house its full of kids and we’re feeding them all the time. On one side where

\textsuperscript{15} Some people often use the word marae and paa interchangeably, the marae proper is the area in front of the meeting house, whereas the paa is the entire complex including all buildings and surrounding land.

\textsuperscript{16} Contribution or gift.
its survival and the other side where it’s you’re just enjoying each other [the company]. [Interviewee #5]

Psychological perceptions of food

Many respondents associated food with feelings of happiness. They shared vivid memories of the different types of foods they had access to or the way food was prepared, from homemade preserves to meat products made at home.

She’d [Nan] take us home and roll out this big newspaper and she’d give a pin each and we’d sit, we loved them [bubu17]. With Nan was pickled paua, everything like that, corn and ate the tops off the kamo kamo [marrow], the flowers off, loved those, yea beautiful, yea. [Interviewee #5]

I tell you what Mum used to get, she used to go with these farmers to get the guts of the pigs, intestines, clean them out and bring them home and make black pudding out of the blood. She used to make her own, oh it was beautiful because she had her own stuffing, onions and thyme and put it in the pudding, put them back in the bag. Then she would bring these entire intestines home all clean. Ooh we used to love those put them in the oven and they were like crackly when they were cooked. Oh they were beautiful. That was one of our great meals. [Interviewee #6]

The sentiments expressed in the above discussion were also expressed by respondents when they discussed the term soul food. They talked about the different traditional foods that conjured thoughts and emotions similar to those associated with soul food, as the following respondent described.

Tahu miti is a delicacy of our old people and you know even though they got no teeth you wanna watch them their lips are drooling and they will not stop talking about tahu miti even though they got no teeth their mind and their spirit is back to that origin. [Respondent: Hawkes Bay Focus Group #1]

Exercising manaakitanga through feeding people also made people feel happy. As one respondent simply said: “Food makes me happy”. Respondents talked about being known in their whanau for feeding people, or for what they cooked, or the way they prepared a dish. The following expressions of how food made people feel good mentally, emotionally and spiritually was shared by many respondents.

For me Māori social cultural is whakaaro [how I think] because kai is something that I’m good at so its what I present and give to my whanau y’know so anyone who comes to my home knows that they’re going to get a good feed, and that’s my social acceptance, they know that if they go to aunty’s house or sister’s house they’re gonna get a really good kai and it’s wonderful food and I get all those wonderful accolades, and it boosts my ego, and then anything to do with whanau connection or whanau get

17 Bubu are a type of shellfish, found on and around the rocks.
together its always you know aunty will do the menu ... and that comes from whangaungatanga, that’s my cultural entrapment. [Respondent: Lower Hutt Focus Group #2]

That's pretty much the same with me, too, the whanau know I cook the mean as\textsuperscript{18} feeds so its accepted that the whole family come round the weekend and I cook the mean feed and they go away happy. [Respondent: Lower Hutt Focus Group #2]

For me food is happiness. If you’re fed well you’re happy y’know. I’m around food all the time. I’ve always been around food whether it be preparing or getting but y’know the kids aye? When they see me they know that they are going to get a kai. So that thing I said, food is happiness is when they see me they know they going to get [kai]. [Respondent: Taranaki Focus Group #2]

You know kai is really important as it is utilised as one of those things that brings people together but it also judges the character of the person who’s cooking it. And y’know its like when you cook puha if you’re in a kawa [sour] mood your puha comes out kawa. Y’know I think that’s why our kai is generally quite rich because we use what we can. [Respondent: Lower Hutt Focus Group #1]

**Food Security**

**Access to traditional sources of food**

Respondents were asked to consider if they had access to a reliable and constant source of healthy and nutritious food. Although this question was asked with reference to access to food in the present tense, the discussions that followed reflected views about access to food in the past.

Fresh produce and fruit were available in sufficient and reliable supply because it was grown at home or in marae gardens. Fruit was available seasonally and made into jams and other preserves. Meat was killed fresh, dressed at home or at the marae and meat products such as sausages and black pudding were common. Although access to food from the sea and waterways was physically restricted in some regions due to un-cleared bush and lack of road access, quantities of shellfish and other seafood were more abundant than they are today. The most easily accessible healthy source of food was, by far, garden produce and fruit. Almost all the respondents either grew vegetables themselves or they knew someone who did grow vegetables.

Well we were bought up to really honour, honour kai, really, honour the moana where we got our food from, the whenua and we never lost sight of having the right food to go in our kai. [Respondent: Lower Hutt Focus Group #1]

\textsuperscript{18} “Mean as”: a New Zealand colloquial expression meaning “very good” or “excellent”.
We had gardens for our family, gardens that sustained us for a year. [Respondent: Hawkes Bay Focus Group #2]

Dad always had a garden and we always had food in our garden, potatoes, the kumara, the corn all of those kinds of things, fruit trees, always had fruit trees, fresh fruit, peaches, plums all of those, apples so we were pretty lucky. [Interviewee #5]

We had a reasonably good sized community garden in the marae. There was always probably about 5 acres of corn there and potatoes. There was always kumara, always potatoes, always corn and cabbage. [Interviewee #1]

Moving from the rural regions to the big cities had a major impact on many people’s ability to access traditional sources of food.

The mutton birds y’know, our grandfather used to get tins sent up from the South island and that no longer occurs. However, that food would be considered very unhealthy to a lot of circles. We did so much activity, meaning that we had our own market garden, we had our own dairy farm so we were considered pretty rich in many respects because we had meat, we had the maara, nga hua maara [gardens]. We had y’know it was easy for us to survive. From the ages of 4 to about 15 we were going to the tide and kohikohinga mateitei [collect shellfish]. We would go with our kete19 and our kuia(s20). These are the things we were growing up with. So when we went to the big cities y’know those weren’t there and I still considered going to gather seafood whether it be pipi(s) [cockle] and y’know nga kai o reira [food from there]. It was very little but it still didn’t stop me from going there because being bought up that way... It was just the food that you were bought up with and we were so used to, different to what [we have in] the city aye? [Respondent: Taranaki Focus Group #2]

Probably now we don’t have access and we certainly don’t have the availability of food sources that we had [in] the past. [Respondent: Taranaki Focus Group #2]

But you know years ago our people were horticulture experts. They grew their own vegetables which was right up in Te Hapua21. One family had the orchard, one family had the vegetables, one whanau had the beef and that’s how we survived. They actually bought their kai together to feed everybody. [Respondent: Taranaki Focus Group #2]

No other item of food was mentioned more often during the focus group discussions or the individual interviews than puha (New Zealand sow thistle). Many respondents talked

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19 Flax basket.
20 Older, respected women.
21 A place in Northland, New Zealand.
about regular excursions to collect puha and watercress, as the following respondents explained.

_The whanau would come or we’d go get some with puha we’d always pick an abundance of puha to drop off to different people and stuff like that ... Y’know she [Nan] would always have an abundance of stuff. The neighbours, she’d give it to the neighbours even most of them around where they live were Māori anyway. It was a pretty good life... Because koko had a good job yeah we always had access to healthy food. Okay we had our boil ups²², Nan loved her boil ups, puha watercress, and we’d go help her pick that. She’d have us out on the side of the road go looking for puha and stuff like that._ [Interviewee #5]

Access to kaimoana or seafood was not limited to the coastal people. Most of the respondents alluded to trading food with whanau or it was brought from the coastal areas to the inland areas for important gatherings and it was gathered or collected on a regular basis.

_Y’know I hear the stories about how Waikanae used to come up with the mateitei and bring it up here for Parihaka... going to the tide, [we] went to the tide with my nan and koro, paua, kina all of that, bubu, on the mud flaps, yea they’d have us out on the mud flaps getting bubu... Whitebait season, always at nans. Y’know school holidays, we would spend the whole 2 weeks down there. We would go and get our own, go with her._ [Interviewee #3]

At the time when many Māori lived in rural districts access to meat was easier because many people lived or worked around farms. Fresh meat was often taken home and made into sausages or mince or taken to the marae for hui or tangihanga to feed people. Until recently in the city and semi-rural districts, meat was still being purchased directly from farmers. However, due to recent health regulations, access to fresh farm meat has been restricted. These regulations were not so much a concern but more of a nuisance for people who were accustomed to purchasing large quantities of beef, whole pigs, mutton and lamb fresh from the farm.

_I remember when we used to kill our own mutton, now it’s become a health issue we cannot go and kill it ourselves._ [Respondent: Taranaki Focus Group #2]

_A lot of these OSH²³ stuff has put a lot [regulations] on what we used to do. There were no freezers in those days and that’s how the meat was... So when you think about health and safety comparing it from today to then well the stomachs must have been pretty iron then._ [Respondent: Lower Hutt Focus Group #2]

²² A boil-up is a meal cooked (boiled) in one pot which consists of meat (brisket, pork bones, bacon bones) _puha_ and _dough boys_ (medium to large dumplings) or _motumotu_ (small dumplings).

²³ Occupational Safety and Health.
Although respondents acknowledged that the variety of kai they had access to was not as extensive as it is today, most respondents believed that they had (past tense) reliable access to healthy kai on a regular basis. In the context of these discussions “healthy kai” refers to either traditional kai or food that was harvested, gathered or collected.

_We weren’t that bad with kai, we were pretty good. It’s just that we had the same food all the time. There was a lot of kaimoana, and lot of meat and a lot of greens. It was just either cabbage or cabbage or cabbage and caulis. A lot of kumara ’cause Mum always had her vege garden. A lot puha and watercress because Mum went to look for it, and a lot of fish... So it was good food, no rubbish. We never had no biscuits, if we did it was crackers. Oh they were rock hard. Yeah cabin bread except it was harder. Then we had a factory a butter factory. But we did have nice kai. We always had a lot of mince and bully beef. I remember bully beef stew, carrots, kumara… So there was really no need for us to go hungry._ [Respondent: Taranaki Focus Group #2]

The older respondents also revealed that they had no memory of seeing – or at least it was uncommon to see – an obese or fat person when they were young. This was attributed to diets consisting of predominantly traditional foods and the physical activity required to find, prepare and cook traditional food.

_You know as a young boy I lived on a marae, I have no recollection of any fat people on our marae. Even our Kuia(s) my great great grandmother was skinny and she was still cooking and she was 115 when she died. I have no recollection of anybody fat on our marae._

_Yes, it was so important our kai, traditional kai. In the days we were young I don’t think I could ever think of anyone who was obese. I think we were so active._ [Respondents: Taranaki Focus Group #1]

**Access to healthy food today**

Respondents were asked to consider if they have access to a reliable and constant source of healthy food today, in terms of:

- The location of food sources/outlets and the availability of foods within these locations;
- The quality and variety of food that is available;
- The ability to access a healthy diet in terms of time and mobility; and
- The ways that different foods are identified and promoted.

Of concern to many respondents was the depletion of local sources of food from the sea and inland waterways. Their concerns were mainly in regard to traditional gathering areas that had been over fished or because the areas are now polluted.
Yeah kei reira kee nga tuna [the fish/eels were still there] when we were kids nearly every home used to have [them] you can see tuna over the back fence you know, today not many. [Respondent: Hawkes Bay Focus Group #1]

Even businesses were set up along the riverside where they could flush out their green or whatever and it was toxic and it killed a lot our food source in our rivers. A lot of it has been through the greed of tauiwi [foreigners] that really shaped our diet. We were healthy and we had good access to food at that time. But once those were cut off we were sort of strapped. We had to look for some new sources. [Respondent: Taranaki Focus Group #2]

Others were not happy about the thought of having to purchase kaimoana from the shop. Some would rather go without than pay for it, a principle shared by some of those who do not eat it anyway. It was explained that as a matter of principle respondents did not believe that they should have to pay for kaimoana, when they should just be able to go to the sea and get it.

Seafood; I will not buy kina, I don’t eat kina, just the thought of buying kina, y’know when you can go out here, depending where you are, for the mussel beds because here it’s really small so now I’ve started buying fish and buying mussels. I won’t buy paua, I don’t know if people sell it. [Respondent: Taranaki Focus Group #1]

Of concern to more than half of the respondents was the increasing unavailability of puha and watercress. Many areas where it had been sourced were now polluted. People believed the main causes of these sources being contaminated were farm effluent running into streams and weed spraying.

You can’t even find puha now, you can go walking for a long time and not find it like how it used to be … Like a lot of the creeks have been polluted... And if there is puha it’s been sprayed…Say no more and what puha you have got you don’t tell nobody that’s your secret otherwise … Watercress I don’t trust it anymore, unless you knew where you were going. Like I don’t know where to go anymore. So I ask because he’s got his own patch but doesn’t tell anyone so I go “can you get me some”? [Respondents: Lower Hutt Focus Group #2]

One respondent said he would travel for two hours to buy pork and bacon bones, watercress and puha. Those in the group discussions that did know where to get watercress and puha said that they were reluctant to give away their secret locations to just anyone, mainly because they were concerned that people took too much and did not leave enough behind for the plants to regenerate. Similar issues about the regeneration of seafood were also raised.

It’s like back home and the depletion of our kai moana and the easily accessible kai for our families and our nannies that go on the rocks and get a kai so we’ve had like hapu say there is rahui [ban] in certain spots where
our kai is so it can regenerate. And you have a division in the community – well who said you can put that rahui up? Even though it’s come from the marae, it’s not actually legal so we’re going to go get kai there anyway, y’know the concepts around the regeneration of the kai and [rahui] it’s not about someone trying to have ownership or stop access. [Respondent: Taranaki Focus Group #2]

The quality and variety of healthy food that is available.

Most respondents believed that unhealthy food was cheaper to buy than healthy food. Also, that more unhealthy food options were available in areas heavily populated by Māori than healthy options. It was also noted that certain unhealthy food items were too easily accessible. This was mostly due to the way foods are displayed in stores and their low cost, which was a huge attraction to those on a limited budget.

You go into the super market and 2 king-size of dairy milk chocolate you know 5 bucks, you don’t see pumpkin seeds and sesame seeds a kilo a dollar twenty or at a garage a pie and a coke two bucks, bread roll and water seven dollars eighty.

Just the other day on Queen street there’s an Indian takeaway coming up, and that was me, oh butter chicken, I won’t have to cook it now, ten dollars fifty yeah tea.

Here [in Lower Hutt], I notice the difference for us in the food, its like wow, its actually cheaper, for here is cheaper for us so we can afford to get more of the good food [good is not healthy] and it’s that butter chicken that killed me off, ‘cos I’ve never tasted it before. [Respondents: Lower Hutt Focus Group #2]

Respondents were not convinced that even if healthier options did become more available in areas highly populated by Māori, that people would select the healthier food or change their eating habits. When asked why they believed that, respondents said it was because “it is the way people are conditioned to eat”. Some respondents suggested that this is because some people do not think healthy food tastes good and that no matter what, some people just will not accept a change in their diet.

Working on the marae y’know always the boil up. It would have been about 10 years ago, it was 10 or 15 years ago when we were out there and they talked about healthy eating on the marae and trying to change other people’s attitudes towards y’know where we just had the water. Y’know it would be jugs of water, we wouldn’t have cordial where they always had cordial. Other options like cold meats and salad and mashed potatoes sort of thing y’know and some would accept and some wouldn’t so you still had to do the boil up. [Respondent: Taranaki Focus Group #1]

While some respondents believed that they had access to a variety of fruit and vegetables from the markets, there were debates about the freshness or quality of that produce.
Some respondents believed that the cheap cost of fresh produce at markets had been offset by the quality of the produce. Despite the availability of fruit and vegetables the amount of unhealthy varieties of food available still outweighed healthy options. Some respondents still preferred to grow their own vegetables, even if it was only a small garden, while others agreed that it was easier to buy vegetables at the shop because of the time and effort required to maintain a garden.

We go to the market instead of growing it ourselves, on a Sunday to buy it cos its cheap, all of the budget foods and all the markets are cheap you know they’re all like that. Seconds y’know, the bruised fruit and bruised veges, specked bananas all the cheap stuff.

Y’know the garden, my kids know how to grow a garden but do they grow a garden? It’s cheaper to go to Pak n Save, it’s cheaper to go to the shop, no energy required to do that compared to growing a garden. Y’know i’ve heard a lot people say, “Veggies are not that expensive so I’ll just buy it down there”.

Even though I buy veggies I still like to grow some, y’know, I’ve always liked doing a bit of a garden. It’s still alright to have them (vege shops) but I’ve always liked the gardens. It’s not like every day that I need to maintain it, just when I happen to walk past and I see weeds, pull it out while I am there. Yeah that’s why I think a lot of people think it’s just easier to buy down the shop. [Respondents: Taranaki Focus Group #2]

The ability to access a healthy diet in terms of time and mobility

The availability and convenience of fast-foods were identified as two of the key factors that influenced people’s diet in terms of time and mobility. Respondents said that because they worked fulltime they often found it difficult to find the time to plan healthy meals and it’s just convenient to stop at the supermarket on the way home from work to “grab” something quick for tea. Not having someone home to prepare meals was also a factor which influenced an over reliance on fast foods.

When it comes to shopping I notice I buy food that’s quick to cook up when I come home from work, and I got to find something I can cook straight away. I think a huge part of that, too, is the two parents working.

Back in our days it was one parent working. Both parents are working long day y’know, rushing around. [Respondents: Lower Hutt Focus Group #2]

I think the fast food has certainly changed our way of eating. It has bought us to a degree that fast food has come in where we don’t have much time [to prepare meals]. [Respondent: Taranaki Focus Group #2]
The ability to access a healthy diet in terms the ways that different foods are identified and promoted

Many respondents did not consider that they had access to a reliable and constant source of healthy food today, in terms of the way that food is identifiable and promoted.

They need to be more accurate on their scaling... It’s hidden... Some people can’t read. How much grams is this bla bla bla, breaking it down in simple form... Its that knowledge and when you’re dealing with labels the manufacturers come up with a brand number instead of having the name of the stuff which is usually in a language that I can barely understand; like there’s about 50 ways of putting salt on a label and now it comes down to numbering, so if you don’t know that 621 is MSG then you’re buying it. I remember at one stage I decided to get really into this and my shopping on average may take about an hour, but if I was to read every label I’ll be there for hours. [Respondents: Lower Hutt Focus Group #2]

Access to food in socially and culturally acceptable ways

It was considered that the ability to share food costs and prepare meals with others in socially acceptable ways was dependent on the social values people were raised with.

S’pose it depends on your upbringing ... we ran out of food and it got tight for [us] and the whanau pulled together and bring us food, and we’ll do the same too if our neighbours running out and our kids will do the same; it’s just how you bring your kids up and how you’re brought up. It’s just educating your kids. [Respondents: Lower Hutt Focus Group #2]

When we go diving we go to the neighbours drop them some off, our whanau, drop off to the kaumatua flats, that’s how we were brought up. [Respondent: Taranaki Focus Group #2]

That hasn’t changed. If you grow something, go to collect food, harvest food. They still bring me puha, kina, paua. I used to do that 20 years ago to all the elders that were on the pa, y’know cook their kai for them, take it to them, do the kanga wai and make sure that there was plenty of kanga wai for those who enjoyed kanga wai on the marae. [Respondent: Taranaki Focus Group #2]

Many respondents were concerned about where food was sourced from. For example, it was not considered culturally acceptable to pick puha near urupa or cemeteries. If kaimoana was offered to respondents they would question where it came from. They also considered that the size of shellfish was appropriate. Respondents believed that it was important to ensure the supply of food could be sustained for future generations.

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24 Housing for older Māori men and women.
Just last night got a phone call went round a mate’s place and he had crayfish and paua and I was on the way home from work and the first thing I say is “where did you get this from bro?” it just comes out you don’t even think of it.

I even ask people where they get their watercress from. Sometimes you know that there’s an urupa just a kilometre up the road and, oh, no thank you. [Respondents: Lower Hutt Focus Group #2]

The knowledge and skills to make healthy choices when selecting, preparing and cooking food

A lack of knowledge and skills in terms of being able to make healthy choices when selecting, preparing and cooking food was a major concern for parents amongst the respondents. These concerns were not limited to making healthy choices when selecting food from supermarkets or fruit and vegetable shops. As the following respondent explained, it is just as important to have the skills and knowledge when selecting food from traditional sources.

I think that’s a major concern, our young people don’t know anything about it. I’m grateful that my children know about it and because my mokopunas they are slowly learning about it now. I’m forever keep reminding them about it now. I mean my eldest moko is 16 and sometimes I have to scream at him to make sure he has heard me y’know. Then I always make my moko(s) come down to the moana with me and I tell them don’t forget to karakia or just talk to Tangaroa when you go down there and don’t forget to say thank you when you leave. I tell them every time but if you are going to go in and dive for the kaimoana and you are going to dive, I always do this. It doesn’t matter even if you are going for a swim you do it. It is just a sense of respect and through that respect to me; we were taught that they look after you while you are there. [Respondent: Taranaki Focus Group #2]

Food choice

Respondents were asked to discuss the factors which influence the habitual consumption of certain foods, and the development of eating behaviours, attitudes and habits.

Health problems

Health problems were identified as one of the key factors that determine what people eat. However, a change made to diets as a result of health problems was not a choice people had made voluntarily. In other words, if they had not become sick they would not have changed the way they ate.

Well my main factor about food is I love all food. But now that I’ve been unable to eat so much of this and that I sort of have to be educated again because of my intake of certain food and because of my sickness. When as I was growing up it didn’t affect me at that time; you know, it was there to be
got at and eaten and, you know, and we had so much of it and then because at that time it wasn’t ever told to us “don’t eat that don’t eat this” you know; and what we grew we ate it all straight out of the ground we just brushed the dirt off. And now I have to learn again and it’s bloody hard you know. Because you know about all these food out there and yet you can’t eat it as much as you can. [Respondent: Lower Hutt Focus Group #1]

I’ve been a diabetic for 18 years, type 2. Mine stemmed from my pregnancies. But I must say it was a whole lot of lifestyle change, the food I eat now for me is so different from the food I had when I was little. I grew up with raw food, boil up, food cooked on the ashes, I didn’t grow up with mashed potatoes and butter. [Respondent: Lower Hutt Focus Group #1]

My husband he dropped dead about 4-5 years ago and he was a health nut so that’s why I can relate to this, I was already on a healthy diet and it still knocked me out. To me I was over fit. And with that happening, my brain, like even when I’m cooking for the marae, for the whanau, I’m always aware of what I’m putting in, I won’t use real butter, I won’t use anything that’s real fattening ... before that well I’m a baker so I bake things, we ate everything fattening. [Respondent: Lower Hutt Focus Group #2]

Despite being aware of whanau members who had diabetes or heart disease, many respondents were adamant that as long as you balance your diet you can eat what you want. They stressed that the key factor is “balance”.

Yeah I got to have at least one hot meal a day. I used to have a real big breakfast and a real big tea but because I wasn’t doing anything I was getting a bit chubs, so I had to cut one of the hot meals out. I actually don’t change the way I’ve cooked by what’s been in the media. I don’t take the chicken skin off, that’s the best part. I think as long as you eat with the other stuff around it to even it all out and balance it all out I can’t see why you can’t eat anything you want. Y’know because I don’t exercise but I’m mindful now of when to eat, y’know when you go to places like this and they have that [cream cake]. I’m allowed to eat that. I don’t think, y’know I think that’s a waste of time to think before you eat unless you are on a real health kick, healthy eating is getting too expensive. I would buy salads every second or third day but because I like them [not] because it is healthy. I mean I don’t eat tomatoes but [daughter] does so I have to buy tomatoes for her. I don’t want to but I have to. [Interviewee #1]

Media influence/Television advertising

Many respondents discussed how food choice was influenced through the media by way of television advertising and the catchy tunes in adverts. Although no respondents admitted that they would go and buy a pizza when they heard the catchy tunes on television, they did mention that these messages may have some sort of subconscious influence on their choices of food.
They’ve done their research and they know how to market to you. Get something for free, everyone loves free things... Well even down to the tune that they use, they make sure it suits the children, they make sure it’s just long enough for you to have in your head like da-da-da-da-daaa. Like the McDonalds ad... Like the Pizza ad... It will stay in your head because it will have a catchy little tune that you have to remember. Like, you don’t have to but it’s subliminal... 0800 83 83 83. [Respondents: Taranaki Focus Group #1]

While on the subject of media and advertising, respondents talked about cooking programmes on television. Most of the respondents enjoyed the new shows on the cooking channel but they generally believed that they had little impact on their current diets or ways of cooking and eating.

Education about healthy eating

A number of respondents talked about how education through the schooling system had positively influenced decisions about what they cooked. Messages around the current campaigning in schools about healthy eating are being taken home either through children talking about healthy eating or through campaign sponsorship material such as drink bottles, fridge magnets, posters, etc that advocate healthy eating. Respondents also reflected on healthy eating activities that were part of their schooling experience, such as getting the free milk and apples at school and learning how to grow vegetables. However, some of the experiences with the school milk were not pleasant for a few respondents who said they disliked milk for a long time after having to drink it warm at school.

"I remember at primary school we used to have gardens and that was part of our education, was to plant this garden and weed it and get kai from it, we don’t have anything like that now. [Respondent: Lower Hutt Focus Group #1]"

"I s’pose I’m in that age group where the five food groups and the colours that should be represented in the meals was something that was being thrown through the education system. So I s’pose consciously that’s certainly a part that plays in when I’m preparing meals and knowing that the hungry tigers they’ll keep coming if they’re not sustained enough. [Respondent: Lower Hutt Focus Group #2]"

"My daughter, when they started getting those things coming home from school about healthy snacks and that and I was doing all her lunches like that but mine was totally different. But all of her meal was healthy. [Respondent: Lower Hutt Focus Group #1]"

Cooking practices

All the focus group respondents said they cooked more than they needed, even if they are only cooking for themselves. That is, they are manaaki tangata and it is in their cultural
psyche to cook more food than they require for themselves (or for their immediate whanau).

*We were talking in there how my nan who would cook for 5 of us or 4 of us and she would be cooking for 10 of us. Like she would always say to me you don’t know who’s gonna knock on the door at tea time and of course that’s something I took with me through the years. It’s taken me a long long long time to get out of that. My uncle, when he was alive he would come back from Australia and he would go, “god girl you are like your grandmother, you cook so much”. I used to say to him well she always said that someone might just knock on the door, whanau, friends or whatever might be travelling through and um you’ve got a kai for them on the table. So that was my value that I had that my nan had given to me. Nan always said if you haven’t got a cooked kai, even crackers and cheese, they were always fed when they come into the house, always. Crackers and pickles and cheese and biscuits that she’d make with a cup of tea or she would whip something up out of nothing to make sure the people were fed.* [Respondent: Hawkes Bay Focus Group #2]

Another factor related to cooking large amounts of food was feeling obliged to eat when someone had prepared or offered food. It was generally considered to be rude if one did not accept the offer of food or a cup of tea.

*We always been taught to cook more than we need. And you don’t want to be rude, once the food is on you must sit down and [eat]. He cooks for an army, so does Mum. And that’s why me and my sister when we cook we try not to cook for an army because you know he eats fast … You cook for extras that’s what it is. We would be eating leftovers 3 days later, that’s been us. My nana was like that too. That’s where I learnt to cook and even today I still cook for 10. That’s generational though, that’s generational stuff that goes through.* [Respondent: Lower Hutt Focus Group #1]

*You know it’s no problems to me I might have 4 or 5 pohiri(s\(^\text{25}\)) one after the other, we still eat you know we still eat. It’s quite interesting how we do that actually, the stomach can rest for half an hour and then we can go have another feed later but that’s where we are so conditioned.* [Respondent: Taranaki Focus Group #1]

Being culturally or socially conditioned to cook or prepare more food than is necessary does not account for all the reasons why people have developed habits of eating more food than they require. While the practise of manaaki tangata can partly explain why people have developed habits of cooking more than they need, this does not fully explain why they have developed habits of eating more than they need. One explanation can be attributed to another value that food should not be wasted. When respondents were asked why they eat more than they physically required the majority said: “Because it’s there”

\(^{25}\) Welcoming ceremony.
this also meant you can’t let it go to waste. However, not wasting food does not justify over indulging, as the following respondents explained.

*I think in former times food was used as sustenance and I think we exceed that now and we go beyond the sustenance and its almost like we have to, that’s kaihorō*. You know when you hear of kaihoro it’s because the kai might go away so you consume, consume greater amounts. There’s nothing wrong with that [eating leftovers] if we continue it but it’s to re-educate our people to give the healthy kai. [Respondent: Taranaki Focus Group #1]

*We all sat at the table together and all got the same amount of kai and that was it, that was your kai, eat it. You only had so much, you never had an overfill plate. Here’s an example, there’s 20 kids from my cousins’ houses, all of the kuia in the village know that we’re all at the auntie’s houses, so when they go home we’re not allowed a kai. We’re not allowed to eat on our kuia(s) table because she phoned and said “oh did you feed all those mokopuna at your house? And they say, ae, ae kua kai ana nga mahi. Well ka hoki nga tamariki ki o ratou ake whare, they’re allowed a little snack but they’re not allowed to eat full on so they don’t get a double up because there is a tikanga my kuia used to say which was: “kaua hoki mai hei kuri!” - don’t come back like a dog because you are doubling up on kai in other peoples houses that they have to feed the rest of the village with.* [Respondent: Taranaki Focus Group #1]

The following respondents believed that their whanau or those they lived with influenced how people are conditioned to eat. This was more about the influence of the behaviour of those who you live with or are close to you and was not necessarily dependant on cultural beliefs or practices.

*It is how you’re conditioned, because you know they say its not what you eat its how much you eat, and there are nations like the French and their food is just rich but they will only eat a certain amount, they’ve been conditioned only to have one piece of cake, y’know.* [Respondent: Lower Hutt Focus Group #2]

*It’s not only that it’s who you live with to, it’s their eating habits, you’re actually catering for them as well.* [Respondent: Lower Hutt Focus Group #2]

*It’s also your eating habits as well, some men eat quite fast as if their pork chops gonna suddenly come back to life and run off its plates. Only because when they were little they had to eat fast or else it will go. So that’s why Dad he cooks for an army when there’s only 5 of us.* [Respondent: Lower Hutt Focus Group #1]

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26 Gluttony.
With eating habits, what they eat, if mothers and fathers sit down and eat ... then the kids are going to eat ... and I refer to McDonalds, Kentucky Fried Chicken, fast food. Because the tamariki are guided by their parents once the rangatahi\(^{27}\) get to the age where they’re able to identify good food and bad food then they’ve had the disciplines to eat correctly and they’ll have a burger once a year or have a McDonalds once a year or Kentucky fried chicken once a year then that’s it; they’ll move back to the healthier type of foods that they’ve been brought up with. And if they retained or stay in that health and fitness world whether it’s a gym or whether its just getting out and walking or running the roads or its just getting a bike and riding around the roads. I think the home needs to have a far far higher responsibility for their rangatahi than they have, they’ve just let them down, parents have just let them down. [Respondent: Hawkes Bay Focus Group #2]

Spoilt for choice

The topic of how family, social and cultural values influence habitual eating and cooking habits led to a discussion about the greater degree of choice that exists for people now about what, when and how they eat compared to past years. Discussions began with how people remembered religiously sitting down with the whanau to eat a Sunday roast for dinner. If you missed the Sunday dinner or any meal in fact, that was it; you went without food. From the group discussions it became apparent that family values that regulated eating behaviours had diminished. Some older respondents believed that the behaviour of younger people today (including babies and children) would have been punishable when they were young. For example, one respondent talked about how children are allowed to roam freely around the house with food instead of eating at the table, and they eat what they want, whenever they want, instead of at breakfast, lunch or dinner time.

\[\text{The kids walk around eating the kai, dropping it everywhere and I get mad and say \textit{ata noho me kai} [you should sit down and eat] no they walk around and \textquote{oh she doesn’t like sitting down}, you know and oh next thing you find a bits of kai in the couch between the cushion and you know they don’t sit at the table and talk. [Respondent: Lower Hutt Focus Group #1]}\]

There was also a belief that part of the reason for the demise in traditional values and practices associated with eating is that people have spoilt their children because they do not want them to suffer or go without as they had when they were young. The general agreement was that compensating for what they missed out on when they were children compromised traditional values and practices associated with eating.

\[\text{I didn’t expect to have an option, if I knew I was gonna get a Sunday roast I was gonna be there, if I wasn’t then I starved. So we were the same with our kids, we used to have Sunday dinners but it got to a point where it was easier to get McDonalds and what-ever. But we got out of that practice of having}\]

\[^{27}\text{Youth.}\]
Sunday roast. We gave them the choice, and that’s what they went for so we broke that chain. If we wanted it back well it’s a bit late now but right through the early years we knew it was there and so it was a practice we carried on when we got married. But my whole philosophy changed, I came from a big family where there was 10 of us and you had to scrimp and save and if you were down the line you had to wear hand me downs all the way down. And so you know my philosophy when we got married was to have one child and give him everything he wanted. [Respondent: Hawkes Bay Focus Group #2]

That’s like my grand-daughter she’s got everything that she needs. At her age she’ll get everything. But by being good to our children by giving them the things we never had we spoil them, we ruin them and now we’ve got the problem that we’ve got. [Respondent: Hawkes Bay Focus Group #2]

Taste

Some respondents said that they cooked according to taste. This factor was also mentioned as one of the reasons why it was difficult to change dietary habits. That is, some people had become used to certain tastes. This discussion led to further discussions about why Māori and Pacific people eat high fat, high sugar products. Some respondents said that this was because they did not like the taste of green milk and other healthy products, but you mention mutton birds and their mouths start to water. As some of the respondents suggested, a big part of what we eat is how our taste buds have been conditioned.

I watch people’s [supermarket] trolleys and all Māori, PI28, its got all white bread in it tons of it and chocolate and potato chips and biscuits and blue milk and everything like that and then along come the pakeha and he’s got sunflower seeds and whole grain bread and he’s got lovely trim milk or soy milk, or rice milk and they got a bag of like 3 carrots whereas all the PI’s and Māori have got all this bad food.

I say taste you know I can have kai in the pantry, fridge, stove and I’ll say I feel like steak so its steak for tea and moumou29 the rest of the kai. It’s the taste.

To me personally I’ve never experienced hunger. I got no idea what hunger is, so food is solely taste; I live for taste when I eat.

It’s like eating food that you like [about taste]... And food has become a comforting thing ... in relationship to taste, not as far as hunger is concerned. [Respondents: Lower Hutt Focus Group #2]
I know um cooking fry bread I got to have dripping so the family know I’m doing fry bread they come. Y’know the taste is totally different and I say I drain it, y’know in a sieve or something so the fat doesn’t stick. I remember at the pa when we used to get blocks of dripping for all our fry bread but now they stick oil with it. I can taste the difference. Yeah it leaves the slimy taste. Hinu\textsuperscript{30}, I still fry in hinu, I still make gravies out of hinu, very few people do that or they get the packet and make it out the packet. It’s not the same roast juices. We very rarely have a roast because it’s so expensive. I’ll buy meat y’know but not a roast that’s just too expensive. [Respondent: Taranaki Focus Group #1]

The above statements reveal that what people cook is closely related to taste. Many respondents also said that what they cook is food that they learnt to cook at their marae, and this is generally referred to as marae style cooking. Something is made out of almost anything and everything. It was explained that if you can cook something with a limited amount of food and ingredients and it feeds the people and tastes nice then you understand what Māori culinary culture is. The emphasis is on the skills you use to create a wonderful pot of kai that can feed a lot of people out of a limited amount of food and ingredients.

Now Mum’s generation, Mum and all her sisters they’re awesome and really good at making a massive feed or massive kai from nothing and I think that’s a tool or a skill you tend to pick up from working on the marae. And when the chips are down and you don’t have enough kai you use what you have. And so I think, and it shows sometimes at a hakari\textsuperscript{31} as well. [Respondent: Lower Hutt Focus Group #1]

I still remember back in Ngaruawahia that we used to eat from, they set the table on the ground when they ran out of table in the kai house. They used to set the table on the ground and all us kids used to sit there and eat. So everything was mainly boil up in those days. It was a lot of boil up. [Respondent: Taranaki Focus Group #1]

**Engagement in Physical Activity**

**Health & Physical activity**

Two respondents said that their health determined their current levels of physical activity. These respondents, who were both over 55 years of age, also said that it was only as they had aged and their health had deteriorated that their levels of physical activity had diminished. This did not mean that they did not exercise as they were involved in regular activities such as gardening and aerobics classes for kaumatua. Other respondents believed that many people lacked knowledge about energy intake and energy

\textsuperscript{30} Cooking grease or fat.  
\textsuperscript{31} Feast.
expenditure. Many respondents agreed that people just feed their children without considering that what they eat needs to be balanced with how much physical activity or exercise they do.

Each age group has different knowledge about food, like my knowledge about energy in, energy out is really different to most people. Before I did this job I knew nothing about it. I just fed the kids because they needed feeding. I didn’t actually understand that what goes in and comes out has to equal up. [Respondent: Taranaki Focus Group #1]

Sometimes I think my kids, my moko(s) are small, they’re young they can burn all this off. That’s what I think, they can burn it all off and I can’t. You see I can give them all this kai because it’ll be alright for them, yeah well that’s me. [Respondent: Taranaki Focus Group #1]

I think a lot of it is the activities that you participate in has got a lot [to do] about food, about intake and your role of activities. [Respondent: Lower Hutt Focus Group #1]

Access to physical activities

Most older respondents agreed that when they were younger, gathering, hunting or harvesting food was their main source of access to physical activity. However, modern food manufacturing methods have made food more easily accessible so methods of gathering food no longer require high levels of physical activity. Respondents spoke about physical activities related to hunting, harvesting or gathering food.

Yeah, in the old days they were big boned people alright, but they weren’t fat like wobbly fat. They could work. That’s exactly how it was. The women were hard workers those days too. I still remember my mother doing all the work. She would get out in the gardens there; I’d sit beside her while she is working and copy her. Then she would still come home and still do the cooking, cook the kai up.

But we used to have to work to get our food, though. We don’t have to work physically. I mean physically all year long we worked to get, to store our food ready to eat. We don’t have to do that anymore. [Respondents: Taranaki Focus Group #1]

For many respondents, access to resources of physical activity did not mean that there had to be a sports facility, swimming pool or gym where they lived. Respondents commented that the absence of these types of facilities when they were younger did not deter them from creating their own resources or using what natural resources were available to engage in physical activity. The following view reflected the comments of many of the respondents.

You know we had one of those communities, that if there were a couple of cousins who were just hitting a hockey ball just out on the lawn, within 10
minutes you know there was 20 or 30 kids out playing hockey on their front lawn. But it was always like that, one start, or a couple started, whatever the activity was whether it was basket ball or if it was rugby and then we started playing golf, we had a golf course, Bridge Paa Golf Course it was, it’s now Hastings Golf Course and we used to go down and look for golf balls and then we used to go in the back paddock and there was probably only one who had a real golf club, the rest of us had pipes, lengths of pipes and we turn the head or the end of the pipe around to look like a golf club so we used to whack the ball around the paddock just with those. So we used to invent our own activities. Another activity was trying to chase the farmer’s cows and their sheep. [Respondent: Hawkes Bay Focus Group #2]

Older respondents also discussed how inactive young people are today in comparison to when they were younger. Electronic games such as play stations and home computers (specifically the Internet) were considered to be two factors that influenced sedentary behaviour amongst young people today. One respondent said:

_I remember a researcher I think through Youth Affairs [said] in Māori homes the highest electronic unit was play station in comparison to any other electronic thing in a house, the majority of Māori homes had play station or Sega or something like that, and that stood out huge, and now who needs to go around to your mates place when you can text them all night long and then you got the internet and bebo and all this._ [Respondent: Lower Hutt Focus Group #2]

Many respondents believed that electronic games and use of computers for entertainment at home had a negative influence on young people’s health because these recreations do not promote physical activity. They also acknowledged that as parents they were responsible for allowing their children to use electronic equipment without always promoting other activities that require higher levels of physical activity.

_And that’s what’s killing our kids, they sit around the computer … But we as adults have allowed them. Like they want a cell phone, who pays for the cell phone? They want internet, who pays for the internet?… Yep it’s our fault… Internet… Everything’s at your fingertips…Yeah that’s it, let your fingers do the walking._ [Respondents: Lower Hutt Focus Group #1]

**Cultural and Social determinants of physical activity**

Māori performing arts (kapa haka) was identified as the main physical activity related to culture. All of the respondents valued kapa haka as an integral part of Māori culture and as an important source of physical activity. However, only a few respondents were currently involved in a kapa haka group or regularly participated in activities such as the martial arts of mau taiaha and mau rakau.

_My physical activity is my warm ups for kapa haka. We do quite a full on warm up, intense physical and you can build a sweat from the little person to the biggest person not matter how old you are how young you are._
Everybody’s on the floor doing sprints in the wharekai it’s about making physical activities enjoyable to do. [Respondent: Lower Hutt Focus Group #1]

Our whanau are pretty active but if there’s no kapa then there’s nothing, my little one will go for a walk with her mates to the mall and that’s it, otherwise they [children] don’t have nothing. I don’t have sports kids just kapa kids. [Respondent: Taranaki Focus Group #2]

There was some discussion about how kapa haka and other culturally based physical activities are group activities. One respondent suggested that communities needed to be strengthened in order to rebuild and revive culturally based physical activities.

I think the other thing about physical activity is probably looking at the genetics of it all. I think that has an impact on where we were a very physical nation, so, y’know let’s look at the taiaha, the kapa, the haka, all of those things that occurred in the village. I think the whole thing with this is that we don’t have a community that we belong to and I think the impact of removing people from the communities have destroyed a lot of what really was functional and good for us as a nation. [Respondent: Taranaki Focus Group #1]

Sports activities were considered to be the main form of exercise and a key factor in the social lives of many of the respondents. While not all the respondents lived in communities where involvement in sports was a common feature, others were highly active in sports events and activities.

The life we grew up in was pretty sports orientated and a lot of people weren’t that way inclined a lot of people just were quite happy to go along and be part of the hikoi” that we used to go away on. But for those of use who were athletes or warriors it was always competitive so we grew up with a real competitive team of both tane and wahine. So the girls were competitive in their sports and it was just in the blood even if we were out on the front lawn playing hockey then the girls were right amongst it, when we were playing rugby the girls were right amongst it, then when we were playing bulrush the girls were right amongst it. So you know they learnt as well as we did but that active lifestyle for us living out at the paa was part and parcel to our whole existence. [Respondent: Hawkes Bay Focus Group #2]

Some respondents agreed that there is not enough financial support by the government to encourage careers in professional sports.

Sports was part of your life and it’s good for everybody. Australians have a lot of things for kids over there aye you know the government, you get money and the coaches get paid everyday to go and practise and all my nieces and

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nephews play [sport]. The government gives resources for that, wonderful. Some parents are on to it if they want their children to go. [Respondent: Hawkes Bay Focus Group #2]

Factors which can enhance food security and physical activity

Respondents were asked to discuss their views, attitudes and beliefs in relation to factors which can enhance food security and physical activity. Respondents were also asked to consider factors which they believed would improve their ability to eat a healthy diet and to increase their levels of physical activity.

Enhancing factors: Food Security

Re-establish or introduce gardening in homes and community gardens

Re-establishing the practice of growing vegetables either at home or on marae land was considered to be a factor that could enhance food security for Māori.

Well what you do is go back to the basics. Gardens, if you grow spuds there kumara, pumpkin or whatever a lot of it will be pinched but the more that’s pinched you know that people will use them therefore it becomes a community thing but you need to go back to the basics its no use trying to fight what’s there now. Replant all the land into veges...what we got to try and do is get back to that. [Respondent: Lower Hutt Focus Group #1]

That’s like when every Marae used to have their own gardens ... so the basics of what we’re used to as Māori which is growing gardens normally, you know growing gardens like what I do out [at] the paa; got me a half acre section of gardens with organic foods, like all organic foods, ehh he maara kai ki taku organic foods he mea flash tena kupu. [Respondent: Taranaki Focus Group #1]

Lobby Government to reduce healthy food costs

Many respondents agreed that more lobbying to Government to provide financial support for healthy eating programs at schools and to reduce healthy food costs would enhance food security.

The only way I can see Māori getting a fair deal is if we lobby more like yourselves are doing now and showing the research to lobby those ministers and those respective ministries I s’pose as well as [political] parties. Like y’know taking food taxes off and things like that y’know because the average people out there can’t afford those food so they go and buy the cheaper stuff y’know budget brand or basics y’know things like that. On a mass scale the only way to deal with it is through government, if we’re to look for health y’know; but it’s getting to the point where we’ll just do it. My example is what Ngati Hine hauora have done on their own back, without the help of the
government, is they’ve instituted a breakfast club. When I went to the school we went to the breakfast club and all the kids pay 50 cents they had a choice of bacon and eggs, sausages, 5 different cereals, 5 different fruit that’s every morning, that’s every morning without fail. Well straight after they’ve done all that they do all their physical activity. Whatever they do in their classes they’re chilled, they’ve had healthy food, it’s not what I call unhealthy food, like basics with Diet [Coke] and stuff which makes a kid hyper y’know. [Interviewee #4]

Improve access to traditional sources of food and regenerating depleted sources of food

Many respondents believed that access to traditional food such as puha and kaimoana would contribute to at least some of the diet which they considered to be healthy. Some respondents also believed that the concept of rahui\footnote{A ban or restriction on the use of a resource to ensure its conservation or sustainability.} is not only important in terms of food security as it relates to the supply of food, but was also important in terms of the survival of culture and knowledge.

We are looking at how water is being extracted out of our rivers and how that’s affecting the flow of our rivers and the hapu that live on that river and their kai and their access to the different kai. This is going to have that long term benefit that could also be raising that social awareness in our people now about our issues such as food security. Y’know you lose that food source, you lose that tikanga, you lose that matauranga, you lose a part of your Waitaratanga\footnote{Expression of Māori culture reflecting local (Taranaki/Waitara) characteristics and conditions.}. [Respondent: Taranaki Focus Group #1]

Re-educate people about the socio-cultural values of food

A number of respondents agreed that it is essential that Māori maintain their knowledge, values, customs, beliefs and practices and evolve with those principles intact. This was seen as a matter of survival as the following participant suggested:

I really think our kids are not taught those things anymore so they wouldn’t really know the value of that korero behind it and where they can actually value the kai on those basis, so, you will have some that will eat and more than they should and you will have some that will just pick. Then go down the road and buy takeaway. So I think it is [that] our kids need re-educating in our tikanga. [Respondent: Taranaki Group #1]

Change negative perceptions about healthy food

Many respondents believed that people do not think healthy food tastes good. When questioned further about this, it was discovered that what they meant was that they are not accustomed to the taste of healthy foods. In this respect, including more healthy food items in one’s diet would be a key factor in enhancing access to food needed for a healthy diet. One respondent suggested to other respondents that once you get past the strange
taste, it’s not that bad. However, the body language of the other respondents clearly illustrated that they were not convinced of this.

> There’s this mindset that healthy food doesn’t taste good but it actually does you know when you, on the rare occasion when I’ve gone on a diet, once you get all that shit food out of your system, I tell you a carrot, there’s huge dimensions to the taste of a carrot and you can really taste your kai and everything and it’s good, but then you just slip away. [Respondent: Lower Hutt Focus Group #2]

**Improve knowledge of how to make healthy choices when selecting, preparing and cooking food**

The inability of people to make healthy choices, when selecting, preparing and cooking food because they lack the knowledge and skills was considered to be a key barrier to achieving food security. There was concern that many young people do not have the knowledge or skills needed to access healthy food.

> And that’s the korero around our kaupapa. Like we need to be as a parent I need to be showing my kids how to dig a garden. I remember my nanny and them they had a whole backyard being a garden there was no lawn, it was all garden and heaps of different kai. And everywhere you could grow kai it was growing. [Respondent: Taranaki Focus Group #2]

**Responsibility**

Many respondents believed that it was important for them and other parents to take responsibility for teaching their children how to make healthy choices.

> I think as adults and as parents we need to take responsibility of what comes into the house, specially like what comes into the pantry, I would be devastated if my girls got into drugs and alcohol, but I’m quite content to allow them to eat unhealthy kai, y’know its that huge wake up and also taking that responsibility on board. [Respondent: Lower Hutt Focus Group #2]

**Enhancing factors: Physical Activity**

**Role Models**

By far, having positive role models was believed to be one of the key factors that could enhance engagement in physical activity. Respondents considered this to be particularly so for children and young people. Role models did not have to necessarily be professional sports people but could include top kapa haka groups and leaders, family members, friends and peers.
I think a role model is good; you got to start somewhere and if it’s seen to be done I think and that goes through all aspects of life, if the kids have got education, if the kids see their parents aspiring to higher education, then that’s probably likely the kids will look beyond trying to scratch past the 5th form\textsuperscript{35}, and I see that in all aspects in life including being role models and partaking in physical activity of some kind.

Yeah you gotta have those role models, they’re the ones that push the kids along, and they need to get out there, doesn’t matter what sport it is, whether it be golf, there’s top players within our community get out and talk to the kids and talk about health ... we had Tana\textsuperscript{36} come around to our boy’s 10\textsuperscript{th} birthday and he just talked about the professionalism, what he eats, and we had everything you can eat except for salads, and he didn’t eat anything, he wanted carrots and salad and it kind of woke us up, we had all the take away you can name and there was not salad. And he just spoke directly to the young ones and he spoke real good and they kind of looked up, so we need those to change the kids, like we got to be role models ourselves, so yeah just having those sportsman out there talking to our kids. [Respondents: Lower Hutt Focus Group #2]

**Social Supports: The ability to share activities and costs.**

The ability to share physical activity resources and costs was identified as one of the key factors that supported participation in sports or engagement in physical activity. Respondents discussed how being involved in communities, groups or whanau that encourage and support active involvement in physical activity is a key enhancing factor. Some respondents talked about the sports facilities established by their communities and they attributed a lot of their physical activity to their role models and their involvement in social events within these communities.

You know when we were young, we all played sports. I can remember my uncle as we grew you got a hockey stick and it was like no body could touch that because at 5 o’clock in the morning he used to blow the whistle down the road and you knew down the marae you were gonna play. Then my mother, we had a tennis court, she was a gun tennis player so that’s how I learnt; you know, I used to sit on the side and when they have doubles and you get out there and learn how to play.

And then we used to play sports, and swim in the creek down there; well there was nothing really else to do. Then we got that chapel in 1960 there was nothing in town, no basket ball and then all our kids learnt how to play basket ball. And then we went to college and carried on and things like that. [Respondents: Hawkes Bay Focus Group #2]

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\textsuperscript{35} Year 11 at secondary school.

\textsuperscript{36} Former All Black, Tana Umanga.
**Government support**

Many respondents believed that more financial support from central government would encourage more Māori to participate in sports and physical activities.

> You know there was a time in institutions where they had to have a percentage of Māori become part of the consumer. We don’t do that enough with our tamariki. We could be using the sports clubs so you know if you function with twenty percent of your sports group, athletics group with Māori we will give you xx amount of dollars because then it’ll afford those Māori tamariki going to the athletic club. [Interviewee #3]

Most respondents agreed that Māori have a natural physical talent to excel in sports. They also believed that there should be more sports or physical activity programs supported by the government. One respondent who runs a sports training program in prisons suggested that interventions could have a positive influence on young people if there was effective guidance.

> I worked in the youth units at Mangaroa prison, I run sports programs PT training programs in there and then into the drug and alcohol unit also. And when you talk to the kids/rangatahi in there you just gotta wonder why its taken them so long to get in there through the abuse they got from their parents, the abuse in all sort of fashions whether its beating, just ignoring and not teaching, and not taking their child’s future in their hands and given them that guidance and direction. I couldn’t help feel sorry for those kids in there. And yet they’re so talented in their athletic abilities you know. When these boys participated in the program that I facilitated out there you could just see the talent the skills that they all possessed and it’s frustrating. It’s frustrating I’m looking at these kids running around on that quadroon I could easily picture them running around in the same circles as a professional league player. And I just look at these kids and think geez they got so much talent, if only someone had channelled them, led them, guided them down a different pathway. [Interviewee #7]

**Factors which can prevent or inhibit food security and physical activity.**

**Socio-cultural barriers to food needed for a healthy life**

The respondents were not asked to identify specific factors that prevent or inhibit food security and physical activity. However, the following responses indicate the respondents’ concerns with regard to factors which prevent them from accessing a healthy diet and participating in physical activity required for a healthy life.
A lack of access to traditional sources of food/The depletion of traditional sources of food

Respondents were concerned about the depletion of and the lack of access to traditional sources of food. Many respondents believed that a lack of traditional food starved the body of not only physical nourishment but also spiritual and cultural nourishment. Therefore, if traditional foods are needed for a physically, spiritually and culturally healthy life then a lack of access to them would be considered a barrier to food security.

_A lot of this illness is the goodness being taken out of the ground. So like before we had gardens in our backyard we used to go in the creek and get the puha, we used to live off the land, where now it’s depleted._ [Respondent: Lower Hutt Focus Group #1]

_One thing we see is the commercialism within our country and that has taken our traditional foods away from our table, like tuna. When they put out the no quota for the tuna but it was being sold overseas well they emptied out our streams and our rivers. They did a good job in doing that... Y’know and kaare e roa, ka nagaro, ka ngaro tonu atu [it wasn’t long and it was all gone]. So this is why I think our diet are changing from the traditional because of the dollar being put on our food source; making the economics so difficult for us to compete with. Times have changed; the economics have gone against us. The fact that the dollars have now been tagged on our traditional foods. Now we could eat in those days mutton birds, y’know those were fat, they were juicy but we never ever got fat because we were so active and that activity has been taken away._ [Respondent: Taranaki Focus Group #2]

A saturation of unhealthy food outlets in areas heavily populated by Māori

Most of the participants agreed that there are too many outlets for unhealthy food in areas which are heavily populated by Māori. The availability of unhealthy options in relation to healthy options was considered to be a factor which influenced the choices of healthy food people had. One group pointed out that 5 out of 10 shops in the block where they lived were fast food shops. This perception was also illustrated in differences noted between different areas of Auckland:

_We’ve just spent the last 10 days in Auckland and we stayed in South Auckland and there was a liquor store everywhere and there was fast food places all over the place and then we were in CBD and we wanted to buy KFC chicken and in Auckland CBD there was not one KFC outlet and I said to my mate “head south, we need to go back out to South Auckland where all KFC outlets are” and we were right, there was not one KFC outlet [in CBD] and Auckland CBD is huge, I’m not just talking Queen St. And that also comes down to the clientele because the majority of people in Auckland CBD are all business people and that’s high class money you could buy a hoody in South Auckland for 20 bucks or in the CBD for a hundred and eighty dollars. But people who buy the 180 dollar hoody don’t eat KFC, they have that mindset. And it stood out like a sore thumb._ [Respondent: Lower Hutt Focus Group #2]
The unavailability of healthy food at affordable cost

Except for one person who was on a special diet, the cost of food itself was not mentioned as the most important factor which prevented people from accessing food needed for a healthy life. However, respondents were concerned that unhealthy food is cheaper to buy than healthier food.

You go into the supermarket and 2 king-size of dairy milk chocolate you know 5 bucks, you don’t see pumpkin seeds and sesame seeds a kilo a dollar twenty or at a garage a pie and a coke two bucks, bread roll and water seven dollars eighty.

Well you travel up and down the country and at a garage a pie and a coke two bucks, bread roll and water seven dollars eighty.

I went on Sure Slim and I been on it now for awhile, for the 5 weeks I was on it and all the weight I lost it cost me heaps it cost me heaps to feed me and then get them theirs ‘cos my kids were like “oh I don’t wanna eat that” or I’d start cooking it and they’d want it so I had to buy double, so certain things I cook they wanted to eat and in the end to eat healthy was costing me heaps. [Respondents: Lower Hutt Focus Group #2]

A lack of time to shop, prepare and cook healthy meals

The availability and convenience of fast-foods were identified as two of the key factors that influenced people’s diet in terms of time and mobility. Respondents said that because they worked fulltime they often found it difficult to find the time to plan healthy meals and it’s just convenient to stop at the supermarket on the way home from work to “grab” something quick for tea. Not having someone home to prepare meals was also a factor which influenced an over reliance on fast foods.

When asked if it was easier just to prepare something the night before, or have a meal ready to cook quickly, the general response was that it was too stressful to think about doing that, or that it was too much work. By the time people returned home from work they were often too tired to think about that; life had become so stressful.

Lifestyle stress ... my answer to it is fast food aye, y’know like when I grew up takeaways were sort of like a real treat and it wasn’t for a financial thing, but there was someone, it was my nanny, she would prepare like three households tea, but not having that now, takeaways, fast food is a huge thing and it just relieves that stress ’cos everyone’s fed its over and done with and lets deal with the rest of the shit that’s coming through the door. [Respondent: Lower Hutt Focus Group #2]

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A lack of knowledge and understanding about cultural and social values associated with food

There were some concerns expressed by respondents that people’s attitudes to concepts such as manaakitanga and tikanga have changed. The general view was that people have become complacent and that this attitude compromises genuine manaakitanga and tikanga. As Māori culture has evolved, people no longer understand, or they dismiss as irrelevant in today’s society, the traditional values, beliefs and practices associated with food.

“Our people have got to be taught back manaakitanga because I think some of them have lost the plot because their old people have gone. Now we gotta teach the young ones what a simple thing like manaakitanga can do no matter how old or how young you are - manaakitanga”. [Respondents: Hawkes Bay Focus Group #1]

One respondent also believed that many people do not consider the spiritual purpose of food. That is to whakanoa, (spiritually cleanse), she explains that if people were more aware of this value then they would understand that they do not need to over eat.

If we knew what noa was about then we wouldn’t over indulge. All noa was to do was to cleanse the tinana for that moment so that you could function within the organisation or where you were at that particular time. [Respondents: Taranaki Focus Group #1]

A lack of knowledge and skills to make healthy choices when selecting food.

The lack of knowledge and motivation that young people have in terms of gathering, collecting or hunting for food was considered a key factor in terms of their ability to make healthy choices when selecting food. As far as many respondents were concerned, many young people do not have the knowledge or skills needed to access healthy food that can be locally sourced. They also believed that the convenience and ease of buying fast food was a factor that influenced a lack of enthusiasm or interest in learning these skills, as the following respondents explained.

This is the place for the puha from Hicks Bay right through to Wairarapa. Beautiful puha and yet our kids don’t know how to cook it. So how do you get the puha across to our kids toroi puha, if you toroi man they’ll love it just like asparagus they’ll eat it like that, but we gotta bring that back. [Respondents: Hawkes Bay Focus Group #1]

I think some of these kids nga mea rangatahi kei te mangere tonu te haere [are too lazy to go], its easier for them to go to the lake [now] because kore kee te teiteitanga o nga tussock [because the tussock is no longer there] we had to find our way through to get to the water’s edge mai te moana [from the sea], then catch our tuna [fish or eel] and then come back out again, but

37 A food delicacy of mussel and puha.
today oh its all farm land now they can just go out and wai ... kei te waahi ra, [that place over there] you can just get over the rail line and haere te ramarama, haere te mo nga tuna, but mangere hoki nga tamariki o te kainga [and go get the fish/eels with a torch, but the kids at home are lazy] gee we’re always telling them at home “go out and get some kai there’s a lot of kai out there”... Oh they want to come into town and buy Kentucky Fry. [Respondents: Hawkes Bay Focus Group #1]

A lack of knowledge and skills to prepare and cook healthy food

Comments were made about young people (teenagers and young adults) not knowing how to cook even a basic meal. The respondents believed that this is one of the factors that promotes and encourages young people to eat fast food.

I think the reason why younger people opt for takeaways is cos it’s [a] quicker and easier option. At the end of the day it’s more expensive but I think it comes down to their ability of not knowing how to cook decent kai. Unless you worked on a marae or your family has always had home cooked meals, unless you have had that kind of upbringing, like I know how to cook a decent kai but my nieces and nephews may not you know or down the road [they] might not know how to boil eggs you know I think it comes down to the ability of not knowing how to cook. [Respondent: Lower Hutt Focus Group #1]

Barriers to participation in Physical Activity

Bullying

Two factors that were identified as barriers to participation in physical activity were psychological in nature. Many respondents believed that some children and young people do not participate in sports, kapa haka or other physical activities because of negative perceptions they have about their weight or because they are a bit bigger than other children they get bullied.

There was another area becoming quite prevalent in schools and that’s the bullying of fat kids in the schools. Just yesterday I was told that this kid wouldn’t go and change into his swimwear because he was teased about being fat. So, he wanted to wear his big t-shirt over his togs.

Even in kapa haka a lot of children, our Māori kids that are overweight tend not to go into kapa haka because they have to wear rapaki, because they have to expose their bodies. I know of many children that have opted not to choose that because of that. [Respondents: Taranaki Focus Group #1]

Lack of motivation and encouragement

Another psychological barrier is a lack of motivation. During discussions a point was raised that Māori are accustomed to group activities which is why some respondents
believed that they lacked enough motivation to participate in physical activity on their own. As the following respondent stated, he needed encouragement by others to motivate his involvement in physical activity.

*I understand this health and safety issue with food security now and it is important. The other thing is with our people, especially me. Now I call myself a little bit [more] lazy than I used to be when it comes to physical fitness. I’d love to do the exercise but I need the incentive, I need the encouragement to go. Oh alright I got a membership thing to the gym but I’ve only used it twice. You need someone to go with but I wish there was somebody out there that would just go, “hey get your arse up here.” Not just to me but to others as well, I’m sure there are others like me who get a bit mangere*38. [Interviewee #1]

Another barrier to participation in physical activity was not being around people who will encourage participation in exercise or physical activity.

*I know how important it is to lose that weight, I already know but I’m just really lazy. Y’know I can get up and go and do some work here and there but I need more than that. The work I’m actually doing like cleaning up my son’s house or doing a bit of work or going somewhere else to do a bit of work isn’t the exercise I need to bring my weight down. I need to get my heart rate up. I stopped working 2 years ago. If I was still working I’d just go and do my job then come back but it isn’t the job that would help lose the weight. Like when my mokos come here they say, “come on koro let’s go for a walk.” Alright. [Interviewee #1]*

**Issues of personal safety**

A lack of personal safety was considered by respondents to be a key barrier to participation in physical activity. Many respondents talked about how the safety issue was not as prevalent in the past and the issue appears to have arisen in recent years. Many of the parents in the group discussions would not allow their children or teenagers to walk at night because they did not believe it was safe to do so in the communities they lived in.

*When we were little we you use to go and play, the back door was always open... I think it’s about your community too. Y’know you speak to the Council that you feel unsafe and what can they do to protect the people in the community... But it’s not safe enough for our kids to walk here. [Respondents: Hawkes Bay Focus Group #2]*

**Lack of parental/whanau guidance and leadership**

Respondents believed that the motivation to participate in sports, exercise or physical activity has to begin with guidance, leadership and support at home. If parents are

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38 Lazy.
physically active then this is a factor that respondents believed will motivate other household members to be physically active or involved in sports, kapa haka, etc.

*It depends on the parent’s, y’know, how they are. If they’re people that have the “c’mon right we’re going” [attitude]. You’ve got to have that attitude.* [Respondent: Hawkes Bay Focus Group #2]

*It’s like the physical side of things when in a lot of families. You sit down after a big kai you would sit down as a whanau, have a waiata session or doing something else before you do the dishes, but now it’s changed. Do the dishes first before you do anything else, y’know, but those sort of things you don’t see that at all as part of the exercise.* [Respondent: Taranaki Focus Group #1]

A lack of guidance, leadership or support from family was considered to be a key barrier to participation in physical activity

*If we can’t teach our own children to enjoy physical activities when they go off to school well at home they’re going to be sluggish and watch TV. I didn’t expect that when my kids went to school that the teachers were going to encourage them to get involved in sporting activities for fitness. I expected them to participate in team or in sports that they wanted to be involved in.*

*It’s got to come from the parents; for me, the whole thing is about that guidance and it is difficult for single parents to be able to do that and I don’t know the answer to that because I’ve never been in that position but for those who are in the position, who have a happy mother/father/tamariki, all I can say to the parents is just to love your children, guide them because before they get to school they need that belief that their parents do care for them, that their parents do worry about their future and you can only do that or show that by example.* [Respondents: Hawkes Bay Focus Group #2]
**Summary of key research findings**

**Socio-cultural factors underlying the acquisition, preparation and consumption of food**

**Perceptions of food**
- The meaning of food is closely related to traditional practices and customs and traditional values associated with the sacredness of the body.
- Physical and spiritual perspectives are significant in relation to cultural values, attitudes and beliefs and are still considered relevant today.
- Food is not only considered as a source of physical nourishment but also an important source of medicine and spiritual nourishment.
- People whose diets consisted of traditionally sourced food were not considered to be fat or obese.
- All sources of traditional food were considered to be healthy.
- The social meaning of food is inextricably linked to cultural values, beliefs and practices.
- Manaakitanga is a key value associated with the social meaning of food. This includes being hospitable to visitors, and caring for people through sharing food.
- Whanaungatanga is an extension of manaakitanga and includes sharing food costs, activities or work associated with the preparation and cooking of food.
- Food is associated with feelings of wellness and happiness. The way people feel can determine what they cook and how they prepare food.
- Social and cultural values, attitudes and beliefs are key factors that determine what people cook, how they cook and how they eat.

**Food security**
- Until recently, traditional sources of food were available in adequate quantities to support and sustain healthy diets.
- Food gardens were once a common feature in many people’s homes.
- The lack of availability of traditional foods in urban regions has had a major impact on some people’s diets.
- The depletion of traditional sources of food such as puha and kaimoana has affected the ability of people to access a healthy diet.
- Māori have limited access to a variety of fruit and vegetables that are of good quality.
- Working parents are more inclined to select food that has already been cooked. This often includes unhealthy options such as fast-food.
• Labels on food are not always helpful in assisting people to select healthy choices.
• If people practise concepts such as manaakitanga then there should not be issues in relation to accessing food in socially acceptable ways.
• Generally, people are concerned about where food comes from. That is, it must meet culturally acceptable standards.
• There are concerns that many younger people do not have the knowledge or skills to select, prepare or food.

**Food choice**
• Health problems are key determinants of food choice.
• Media and advertising were identified as factors which contribute to decisions about food choice.
• Education in schools and campaigns advocating healthy eating can have a positive affect on food choice.
• Cooking and eating habits are closely related to cultural beliefs, attitudes and values.
• Whanau have a major influence on how people are conditioned to eat.
• There has been demise in traditional values associated with eating behaviours. Some parents/grandparents admitted over indulging their children/grandchildren with choices of food.
• The taste of food determines what food choices people make.

**Engagement in physical activity**
• The state of people’s health limits their current levels of physical activity but does not mean that they do not exercise.
• A key traditional source of physical activity was considered to be hunting, gathering, harvesting or collecting food. With modern day food production methods, accessing food no longer requires high levels of physical activity.
• It is no longer considered safe to participate in physical activities outside in some communities.
• Electronic games and the internet have had a major impact on younger people’s participation in physical activity.
• Although kapa haka was identified as a key source of physical activity, more than half of the respondents did not actively participate in kapa haka.
Sports activities were considered to be the main source of exercise. Sports were also identified as a key factor in the social lives of many people.

Enhancing food security and physical activity for Māori

Factors that could enhance food security for Māori include:

- Re-establishing or introducing gardening in homes and community gardens.
- Improving access to traditional sources of food.
- Regenerating depleted sources of traditional food.
- Educating people about the socio-cultural values of food.
- Changing negative perceptions about healthy food.
- Improving knowledge of how to make healthy choices when selecting, preparing and cooking food.

Factors that could enhance physical activity for Māori include:

- Having positive role models.
- Providing social supports so that people are able to share physical activity resources and costs.
- Provision of financial support from central and local government and other sources to provide pathways for younger people to take up professional careers in sports.

Barriers to food security and physical activity for Māori

Factors that prevent or inhibit food security for Māori include:

- Lack of access to traditional sources of food.
- Depletion of traditional sources of food.
- Saturation of unhealthy food outlets in areas highly populated by Māori.
- Unavailability of healthy food at affordable cost.
- Lack of time to shop, prepare and cook healthy meals.
- Lack of knowledge and understanding about cultural and social values associated with food.
- Lack of knowledge and skills to make healthy choices when selecting food.
- Lack of knowledge and skills to prepare and cook healthy food.
Factors that prevent participation in physical activity include:

- Bullying
- Lack of motivation and encouragement.
- Personal safety.
- Lack of parental/whanau guidance and leadership.
Section 3. Discussion and conclusions

Introduction

This report brings together the qualitative data from fieldwork carried out with Māori informants in three areas throughout Aotearoa New Zealand. The aim of this section is to synthesise the information gathered to present the narrative views of Māori in relation to food security and physical activity. Although the specific research questions do not focus on barriers to food security and physical activity, undoubtedly factors which could prevent or inhibit food security and/or physical activity were identified. As previously mentioned, the analysis and interpretation of the research findings do not focus on deficit aspects of Māori culture or on the inability of Māori to deal with health problems. The intention of this study is to understand the socio-cultural factors that enhance and contribute to food security and physical activity for Māori. This understanding is reached through a subjectivist analysis and interpretation of respondents’ depictions of their realities and perceptions of the world in which they live.

The Tapa Wha Model of Health was used to provide a structure to organise the recommendations and assist in the analysis of the research findings. The discussion that follows is organised under the following headings:

- Socio-cultural perceptions about food.
- Socio-cultural determinants of food security.
- Factors which influence food choice.
- Engagement in physical activity.

Socio-cultural perceptions about food

Māori share a common view with many other indigenous cultures, that food not only determines physical health but also emotional, psychological and spiritual wellness. Not only is food strongly linked to overall health, it is regarded first and foremost as a necessity to support physical activity. Food also plays a major role in socio-cultural activities. It is often defined culturally and any socio-cultural understanding of patterns of choosing, preparing, consuming, and acquiring food would require an exploration of not only dietary culture but also socio-cultural perceptions about food. In the context of this study, the social and cultural meanings of food were difficult to distinguish because the cultural values, attitudes and beliefs associated with food are embedded in social behaviour. In other words, social behaviours and practices associated with food are regulated by tikanga Māori. For example, in the context of this study the concept of manaakitanga describes the social meaning of food while the practice of manaakitanga is referred to as tikanga.

During the first focus group hui, information was presented to respondents which introduced the concept of food security and the term socio-cultural. Despite the researchers’ attempts to explain these notions the interpretation of their meanings were
clearly inhibiting the groups’ ability to fully engage in discussions. It was decided that it would be more appropriate to begin discussions by asking people - What does food mean to you? The idea that food is closely linked to social and cultural behaviour then became more apparent. Since the perception was that food is inextricably linked to Māori culture, it followed that the discussions on this topic focussed on traditional practices or customs associated with food.

Customary practices associated with food vary between different iwi, hapu and whanau. It was widely acknowledged that these practices are still considered vitally important to Māori culture in general. Most respondents were absolutely certain about their beliefs and values and they considered them to be just as relevant in modern society. However, customary practices were mainly restricted to traditional food that was cultivated, harvested or gathered. It was also a common view that while the beliefs in customary practices associated with food have not changed the number of people who actually practise these customs has diminished. This factor was attributed to a lack of knowledge, understanding and appreciation of traditional customary beliefs, values and practices related to food.

While there are different interpretations or explanations of the term tapu, it was generally accepted that the custom of observing tapu in relation to food cultivation, preparation, or harvesting is very important to Māori. There was some discussion on the different views or interpretations of tapu. For example, the respondents talked about how certain areas such as, rivers, lakes, mountains etc., were known to be waahi tapu (sacred places). They understood that this clearly meant that access to these places was restricted because there might be dangers there, of a physical or spiritual nature. It was generally agreed that most people were aware of what tapu implied and that the message was usually clear - don’t go there because it maybe harmful to you. This being the case, discussions occurred with regard to why people acknowledge some things to be tapu while they, at the same time, consciously put things into their bodies that they know could be harmful. As far as some respondents were concerned, if people believed in the sacredness of their bodies in the same manner that they believed in the institution of tapu then they maybe more considerate and careful about what they ate. In sum, there appeared to be a contradiction in terms of some people’s beliefs or understanding of tapu and what they actually practised. It is clear that the application of tapu in relation to food and the body does not support or advocate the consumption of harmful substances, which includes unhealthy food.

As previously mentioned, any perceptions of food, food security and physical activity for Māori would be one which included physical, spiritual and cultural dimensions. This view supports the notion that the Māori worldview consists of a two-world system where the material (physical) proceeds from the spiritual. People have a relationship with natural and spiritual worlds and all things are bound together in a spiritual oneness (Marsden 2003). The researchers were reminded about the significance of this view in the statements of two kaumatua respondents.

It is not unusual for many indigenous cultures to treat physical illnesses with medicines produced from organically grown or naturally sourced food. Although there are some
medicines which require specialised knowledge in order to use them to treat illness. There was a general view that certain foods that were traditionally accessed and eaten by Māori held medicinal value and if these food items are part of a staple diet they will aid in keeping people physically healthy and fit. Respondents made it clear that food was strongly linked to traditional views and practices of health. Furthermore, despite modern health procedures, traditional healing practices which include the use of rongoa Māori were still highly valued. It goes without saying that, if food security is a determinant of overall health then people must have access to reliable sources of traditional foods.

Although food provides the physical energy and nourishment the body needs by providing the necessary proteins, carbohydrates, fats, vitamins and minerals, there was also general agreement that a lack of spiritual nourishment in food could be detrimental to one’s spiritual wellness. It was considered that if one’s spiritual needs are not balanced with their physical needs then this could be a factor that contributed negatively to one’s overall health and wellbeing. During these discussions there was no attempt to scientifically justify any causal relationship between these two factors. It was simply explained that, from a traditional perspective, food was considered to be a source of both physical and spiritual nourishment. In a contemporary context, fast foods, such as McDonalds, KFC (Kentucky Fried Chicken), and processed or manufactured foods are not considered to contain the elements that provide spiritual nourishment. Hence much more of the food that is largely consumed today does not provide a balance of physical and spiritual nourishment. The idea that there are spiritual elements in food is not a view unique to Māori people. In a similar study that explored issues of food security amongst indigenous Canadians, respondents talked about how food is always connected to spiritual ceremonies and that Aboriginal peoples do not function at their best when they are not eating certain traditional foods (Baskin 2008).

The practise of manaakitanga is an important social and cultural feature in the lives of many Māori. It is also more than just hospitality, it is the philosophy of sharing and caring for other people. Manaakitanga is significant to all social gatherings; it applies when you host guests at your marae, in your home or any other social gathering event you are hosting. Respondents considered the practise of fostering and nurturing relationships with extended family through activities such as sharing food or helping to gather, harvest or prepare food, to be an important social activity. According to Mead (2003), the concepts of manaakitanga and whanaungatanga are highly valued principles which are governed by expected standards of behaviour. When exercised in the correct manner, which is according to tikanga, then the act of manaakitanga does not support behaviours such as habitual over eating. As the respondents clearly stated, there is no cultural justification for eating excessively. Therefore, it is a misconception that unhealthy eating habits have developed in response to practising principles of manaakitanga. However, when manaakitanga is practised haphazardly and people do not take care and pride in what they serve then this not only compromises cultural values and beliefs but also jeopardises people’s health. In this respect, the majority of respondents agreed that there was no need to compromise cultural values and beliefs if people were vigilant and careful about portion sizes and offered healthy options to their manuhiri (guests). This makes sense when one considers that the principles of manaakitanga
advocate notions of caring for others. One would not be exercising this principle in the correct manner if they are not concerned about the health of others.

Exercising manaakitanga through feeding whanau also makes people feel happy. One respondent simply said that: “Food makes me happy”. This view should not be considered in the same way that sufferers of eating disorders may associate temporary happiness with food followed by feelings of guilt or shame. It should be considered, rather, in the sense that joy is brought about through making others feel good, feel full, and feel well. Respondents talked about being known in their whanau for feeding people, or for what they cooked or the way they prepared a dish. They said it made them feel good that people enjoyed their cooking and they also believe that this practice has an important social role as it draws whanau together to eat and socialise.

Many respondents commented that eating takeaway food was in earlier times a once a weekly or fortnightly treat, whereas these days takeaway food could be consumed on any day of the week and at any time i.e., “twenty four seven”. For some respondents, takeaway fast food had become a mechanism of stress relief. That is, it has become so stressful for some people to think about what, when and how to cook that it was just easier to get takeaway food. As one respondent said, “once that is out of the way you can deal with all the other S%##% that comes through the door. Another respondent, who was a mother, also mentioned that some children had become very addicted to the toys and other treats that were given with fast food parcels. She said that sometimes she sees mothers so stressed out that they just buy their children the food so they can get the toys to shut them up, then they can carry on with the shopping. People who are already psychologically and emotionally stressed are not accessing a healthy diet and a lack of nutritious and healthy food can make people feel irritable, lethargic, unhappy and hungry.

On the other hand, different foods that we eat can impart bliss, satisfaction and harmony, although these foods may not necessarily be considered “healthy”. While there was no known phrase or word in Māori similar to soul food, the reference “food fit for the gods”, is a common saying and is probably a close equivalent to the meaning “soul food”. Respondents mentioned certain foods that would qualify as being “food fit for the gods”. This could be kaimoana, kanga wai (fermented corn), puha toroi, titi (mutton birds), etc. These types of food elevate feelings of wellness that are partly physical due to taste but also spiritual due to their origin and the way in which the food is prepared and served. In contrast, a big Mac burger for example would not qualify as “food fit for the gods” as it is considered to be common food which does not contain any spiritual essence. Such being the case the quality of the food that we eat and the spirit in which we prepare and serve the food is vital to create sound physical, mental and spiritual well-being.

In sum, cooking for others and what people eat can have a positive psychological affect on them. However, if they are already stressed, having access to healthy food is the least of their concerns.
Socio-cultural determinants of food security

Respondents were asked to consider if they had access to a reliable and constant source of healthy and nutritious food. The immediate responses began with reference to the past and traditional sources of food or non-manufactured food products. This is because many of the respondents considered that healthy food sources originated from vegetables, fruit, and food that is hunted, collected or gathered. Many of the respondents were raised at a time when gardens were a common feature in many homes and marae, and when trips to collect kaimoana or kai from rivers, lakes and forests was a regular activity. These respondents talked about their views, attitudes, values, or experiences in relation to a period of time that was estimated to be between the years 1940 to 1975. Their responses emerged from past tense because for many of the respondents their natural perception is to reflect on the past in relation to the present or future. This concept can best be understood with reference to the saying: “I nga raa o m ua” – which refers to “the days gone by” (the past) but is literally translated as “the days before us” as the word “mua” means in front of.

According to many of those respondents who were older than 40, access to reliable and constant sources of healthy and nutritious food in former times was not considered an issue. When those respondents were younger they had lived rurally or in semi-rural districts where fresh produce and fruit were still in ample supply. Gardens were a common feature in most homes which provided a sufficient and reliable source of vegetables. Most of the respondents had knowledge of how to grow vegetables and maintain a garden. Meat was supplied by whanau members who worked on farms, or from the local farmer. Little mention was made of people having to access food in socially or culturally unacceptable ways. However, respondents were aware of people who picked fruit from trees that were situated on other people’s properties. This was not considered a major crime and appeared to be common practice. It does not appear that the fruit was taken because of a lack of access to or availability of food, but rather because it was ripe. Another respondent knew of people who would rustle cattle or sheep when times were difficult, to feed their whanau. The respondent explained that the rustler would leave the carcass of the animal hanging on the fence so the farmer would know that one of his stock had been killed. Apparently the farmer could claim insurance for the stolen stock and so as long as you didn’t get caught there was some tolerance of this practice. Respondents raised two points in relation to this comment; 1) there were times when food was scarce and 2) a whanau(’s) ability to cope during these times was dependent on whether or not they were supported by extended whanau members, their ability to access natural resources and their hunter/gatherer skills. Overall, most older respondents believed that in former times, they had adequate and reliable access to food that they considered to be healthy.

During the mid 1960’s many of the respondent’s whanau had migrated from their rural or tribal districts to the larger cities such as Auckland and Wellington. This migration marked the beginning of major changes in people’s diets. This change was mostly attributed to the availability of new varieties of food and the scarcity of or lack of access to traditional sources of food. Most of these respondents, who had been raised on or near their marae, or in other Māori communities, recalled having never seen any people during
their childhood or young adult life who were obese or fat. Many respondents believed that diseases such as diabetes came about because of changes in their levels of activity and the introduction of food into their diets that their bodies had not acquired the ability to cope with. In addition, they also believed that a lack of access to an adequate supply of culturally/traditionally acceptable food had also contributed to the current obesity epidemic. The increased levels of fat and sugar in people’s diets and the decreased levels of physical activity could partly explain why respondents believed this.

Compared to former times, most respondents did not believe that they had access to a reliable and constant source of healthy food today. The depletion of traditional food sources was a major concern for most of the respondents.

Puha (New Zealand sow thistle) which is an edible plant that grew wildly in many places around New Zealand is considered to be one of the most suitable ingredients in a boil up. Furthermore, obtaining the plant was also a regular source of physical activity. During the focus group discussions, respondents raised great concern about the lack of access to this plant and other edible plants. The Lower Hutt focus groups were most concerned about this. According to the New Zealand Plant Conversation Network, the availability of puha is declining over most of the North Island but nowhere more so than along the south Wellington coast. It was very common to see puha in this region up until the 1980’s but it has almost disappeared from many of its former habitats. Respondents were also concerned about the depletion of other foods sourced from rivers such as eels and seafood. A major cause for the depletion of traditional foods was attributed to over fishing. Respondents shared their views about how some whanau will return to their traditional fishing places to collect kaimoana. While there were no concerns about this, there was a general opinion that even some whanau over-fish and take it for granted that the resource will be there forever. Also, some of them forget that they have other responsibilities to maintain which earn them the privilege to collect food from traditional gathering areas. Although this was not raised as a major concern it did highlight the respondents’ awareness that whanau need to exercise vigilance around the concepts of food regeneration.

It was generally agreed that although there is an abundance of food available today, not all people can access a variety of healthy food. Most people generally understood what healthy food meant in contemporary terms. However, despite the availability of fresh fruit and vegetable markets there was debate about the availability of quality produce at affordable prices. Many respondents were confused over the labelling on many healthy products, which are available in most supermarket stores. One group discussed the tick label on foods which they believed to be healthy food endorsed by the heart foundation. Some respondents believed that some companies put a tick on their products that resembles the heart foundation tick. This has caused some suspicion and confusion over which products are healthy. It appeared that some people did not know how to read the nutritional value labels on food. This was surprising given the amount of information that is available. There could be some validity in what the following respondents said, “You will be in the supermarket all night trying to read the labels”, (and people do not have time to do this) and “some people just don’t know how to read”. Many respondents also believed that some people (particularly younger people) do not have a basic
understanding of what products other than fruit and vegetables are healthy. The basic perception was that if it tastes “yuk” then it must be healthy. Serious consideration needs to be given as to how to change people’s perception that good food tastes bad.

The ability for some people to access a healthy diet because of time pressures has already been discussed to in relation to stressful lifestyles. Many respondents mentioned that they consumed unhealthy foods or fast foods particularly at times when they did not have time to cook or when they were feeling stressed. Their busy lives were attributed to working full-time and the stress was associated with the added pressures of having to do household work, such as preparing meals and cooking and taking children to sports etc. Not having someone at home to cook and take care of the whanau was seen as a major disadvantage. For those people who worked, not only did they not have the time to cook or prepare healthy food but people on low incomes also had the added factor of having to balance the budget.

The fast food industry is out there everywhere and this has made it more convenient to choose unhealthy food options when you don’t have the time to cook. It is also considered cheaper than buying all the healthy ingredients needed for a home cooked meal. Organising healthy meals for the week was not considered as important as budgeting for food. But budgeting is not the same as planning healthy meals. Often people would have to compromise healthy food for cheaper unhealthier options. This attitude is exacerbated by the fact that there are more fast food outlets with cheaper options than affordable healthy food outlets.

Many of the respondents believed that if people are raised understanding and practising the principles of manaakitanga, then access to food in socially and culturally acceptable ways should not be an issue. As previously described, cultural values such as manaakitanga are manifested in attitudes and beliefs about caring for people, which includes sharing food. Pierre Bourdieu defined this concept as cultural capital. He says that:

“Cultural capital is the inherited and acquired properties of one’s self. Inherited not in a genetic sense, but more in the sense of time, cultural, and traditions bestowed elements of the embodied state to another usually by the family through socialisation. It is not transmittable instantaneously like a gift. It is strongly linked to one’s habitus – a person’s character and way of thinking” (Bourdieu, 1981).

Bourdieu developed this concept in contrast to the notion of economic capital. The respondents explained that the way they were brought up was to share kai and to be mindful of whanau who needed kai. This may extend to sharing not only food but food costs with whanau. According to Bourdieu’s concept, these people have accumulated cultural capital, which enables them to access food in socially and culturally acceptable ways. It follows, then, that those who do not possess cultural capital or those who are not socialised accordingly will lack the same ability to share food, food costs, and prepare meals with others in their familial and social circles.
Factors which influence food choice

Although they are major contributors, not all aspects of culture or socially shared values determine what people eat. Other factors such as income, poverty, and changes in food production systems also contribute to choice. Any attempts to enhance a current food system are fraught with difficulties if we do not understand how patterns of choosing, preparing and consuming food are internalised. It was considered that this information might be useful in terms of recommending factors that can enhance food security and also to illuminate any unforeseen consequences of systematic change in food behaviours or eating habits.

Some respondents were reluctant to change their current diets unless it was absolutely necessary. In other words, unless there was a serious threat to their health, they would probably not consider introducing healthier foods into their diets, changing the ways they prepared food or changing their eating habits. This was not because they did not want to improve their health but because of a lack of the support that they needed in order to change what they eat. One respondent suggested that it is difficult changing your diet to healthy food when everyone else in the house is eating KFC. At least three kaumātua respondents admitted that by the time they realised that they had to alter their patterns of choosing, preparing and consuming food, they were suffering from advanced stages of chronic disease. Most respondents were aware of the relationship between diet and good health and they agreed that more needed to be done to improve diets to prevent the onset of chronic disease. But as one respondent said; “that’s easier said than done”. This comment raises issues about how to support whanau who need to introduce healthier foods into their diets and how to transfer knowledge of nutritional requirements for health to people who lack an optimal diet.

Many respondents strongly believed that television advertising had a major impact on consumer behaviour but they were less sure about the extent to which advertising messages influenced their own food choice. Conspiracy theories about how the multinational food industry had “secretly” developed subliminal messages into their advertisements were suggested. Despite the fact that no one provided any evidence of this, a valid point was raised and it was agreed that more research was needed to verify the impact media and television has on consumer behaviour with regard to food choice.

A more positive outlook in relation to media is the new series of cooking programmes now being televised. Although these programmes were considered very entertaining, most people believed that it was either beyond their own ability to cook like the chefs on television or they did not believe that they had access to the food or ingredients used by the chefs on the programmes. Despite the suspicion about the use of the media to subconsciously influence consumer behaviour, it was acknowledged that the same media was also used to transfer positive messages such as the knowledge required to inform better choices when selecting food. A number of respondents had commented about the healthy eating campaigning that they had mostly seen on television and through different promotional materials being distributed in their children’s schools.

The topic of how family, social and cultural values influence habitual eating and cooking habits led to a discussion about the greater choice of what, when and how they eat that
exists now compared to in the past. This view stimulated discussions amongst some respondents that began with the issue of having access to too much food. Although it was explained that food security meant that people have access to healthy and nutritious food, many respondents considered that food security was only an issue when there is not enough food at all. As one respondent said: “it’s not like we are in Africa”. What they meant by this was that in comparison to countries where people are dying of starvation, they believed that we have (in New Zealand) an abundant food supply. In view of this, the issue of whether or not people have access to that food seemed irrelevant. The point in question is how the issue of food security can be taken seriously when this definition of food bears little or no reference to how they define or prioritise issues related to food. However, if the issue is obesity then people can directly connect that term with over eating or unhealthy eating behaviours. Health is an issue people can directly relate to whereas the term food security is ambiguous, with various meanings.

**Engagement in Physical Activity**

Clearly, support needs to be given to people who are already aware of the need to be more physically active, but who lack personal motivation or encouragement. Parents need to encourage children to be more active and discourage sedentary behaviour. Whanau need support to discourage this behaviour and more consideration needs to be given to support sole parent families so that all their members have the opportunity to participate in physical activities.

With changes to the ways that foods are processed and distributed, access to traditional sources of physical activity have also changed. Given that one of the main sources identified was gathering, hunting or harvesting food, efforts to reintroduce this source might seem useless when food can now be delivered to your door. Hunting, gathering and collecting traditional sources of food, is rarely practised and often only for special gatherings. It has now become more of a recreational pastime rather than means of survival. The demise of traditional food gathering practices was considered to be one of the key contributing factors leading to the loss of traditional skills, knowledge and values associated with food.

For some people, hunting and gathering activities were replaced with other sources of physical activity such as sports and different forms of exercise. However, the nature of these activities is recreational so people will usually only participate if they have a keen interest and passion in sports activities, or if sports and exercise have evolved as part of the culture within the whanau or community in which people are socialised. Many respondents agreed that if whanau do not actively advocate that participation in sports, exercise and physical activities is a good thing then having access to resources of physical activity is not going to motivate them to use those resources on a regular basis.

It was noted that some people do not understand the basic principles of how much energy (food) the body requires in order to produce enough energy for the body to function. Many respondents agreed that people eat without considering that what their bodies do not require will be stored as fat. Improving people’s knowledge about balancing food intake with levels of physical activity may enhance participation in physical activity.
However, having knowledge does not necessarily change people’s behaviour. Other factors which influence sedentary behaviour need to be taken into consideration.

A key factor that was considered to influence sedentary behaviour is the use of electronic games and home computers for recreational purposes. One respondent insisted that, if Mum or Dad are sitting on the internet “surfing the web” or playing Texas holdem online their children will mirror this behaviour. It was noted that this is not the sort of behaviour that encourages inactive young people to participate in physical activity at home. In sum, it was clearly acknowledged that parents are aware of the issues related to sedentary behaviour and that more responsibility needed to be taken with regard to the use of electronic equipment, television and other recreational tools that do not promote physical activity.

Māori performing arts (kapa haka) was identified as the main physical activity related to culture. Increasingly, more people are becoming involved with kapa haka. The researcher’s son has an interest and fascination with haka. For a school project he watched archival footage of men performing haka, then footage from the 1970’s through to 1990’s, and then recent footage of the Matatini Māori performing arts competition held recently. He concluded that, in former times the men looked “hard”. This meant that they had defined muscular bodies and they seemed to takahi their waewae (stamp their feed) twice as fast as they do today. From the 1970’s through to the 1990’s, he noticed that a lot of men had wobbly stomachs and the pace of their haka seemed a lot slower. And today the men look “buff” (buff means hard, muscles are defined, no wobbly fat). This was an interesting observation made by a young Māori male. Although it could be argued that this is an idealistic view, nevertheless it is a positive view. Most of the respondents agreed that younger people could benefit from good role models to inspire and encourage their involvement and participation in physical activity. If the revival of culturally based physical activities can provide the positive role models that will enhance young people’s participation in physical activity, then more needs to be done to strengthen and support these activities.
Conclusions and recommendations

Suggestions for enhancing food security.

Re-establish or introduce gardening in homes and community gardens

Re-establishing community gardens and gardening in homes was seen as one of the most practical suggestions to address issues of access to healthy food. One of the focus group respondents invited the researchers to his home to view the garden he had made in his back yard. The respondent was a pensioner who lived in a Housing New Zealand home which was on a one and quarter acre section. The respondent was part of the Maara kai project which has being operating in the Hawkes Bay for at least 3 years. A horticulturalist showed the respondent how to sow and maintain the garden. The respondent now teaches his mokopuna how to look after the garden thereby imparting knowledge about how to grow food while at the same time teaching the next generation the value of food. When the vegetables are ready they are distributed to whanau and community. This suggestion not only passes on the knowledge and skills of how to grow your own vegetables it is also a cost effective way of ensuring that whanau have access to a constant and reliable source of healthy food.

Advise government or the Ministry of Health that financial support is needed for kaupapa Māori healthy eating programmes at schools

There are already good healthy eating programs operating in schools. Reports from the respondents about how healthy eating messages are reaching home are a testimony to the potential of these programs. However, many respondents believed that Māori are quite capable and willing to take responsibility for implementing their own programs in their own kura or other schools that their children attend. These programs should be tailored to suit the environment in which the children live. One respondent gave an example of a program implemented and financed by a Northland tribal authority (Ngati Hine). The program is called The Breakfast Club, the Tribal Authority subsidise food for the program and the kura and whanau organise the breakfast meals which consist of cereals, fruit and hot food. The Breakfast Club is part of a wider hauora program which advocates and teaches children healthy eating habits. After their morning kai, the children are expected to horoi (wash up) which includes brushing their teeth. Not only do these programs ensure that children who lack access to healthy food receive a healthy meal at kura, they also support a health education. Of course many Māori children do not attend kura and go to mainstream schools and programmes developed within kura would not be entirely transferable to mainstream schools. Nonetheless, kura based programmes can be sources of ideas and inspiration for the development of appropriate programmes for mainstream schools.

Investigate reducing costs of healthy foods

Recommend that researchers examine whether reducing the costs of healthy foods would make these foods more accessible for Māori and Pacific people. It was suggested that those who have a Community Services card could utilise this in the same way that the
Gold Card program for Superannuitants worked. The practicalities of implementing such an effort would require a significant amount of Government input. However, the long term benefits of improving the participants’ health and consequent savings in the cost of treating chronic diseases might outweigh the costs of implementing the effort.

**Improve access to traditional sources of food and regenerating depleted sources of food**

Improving access to traditional sources of food and regenerating depleted sources of food are already ideas that at least one coastal tribe have begun. Many respondents believed that access to traditional foods particularly where sources have been depleted would rapidly improve not only their diets but their overall health. If traditional foods were reintroduced into staple diets it would greatly enhance a physically, spiritually and culturally healthy life.

**Re-educate people about the socio-cultural values of food**

It is essential that Māori culture continues to evolve, but not at the expense of further compromise to its traditional values, beliefs and practices associated with food. It is vitally important for the survival and maintenance of Māori society and culture to evolve with these principles intact. It is clear that many of today’s generation lack knowledge about not only the nutritional value in food but also the spiritual and cultural value in food. Nutritional health programs must take into serious consideration holistic views of health which will cater for the physical, spiritual, psychological and cultural needs of Māori. Whanau need encouragement and support to revive the knowledge and traditions of their tipuna for their future generation. This maybe a difficult task for many whanau whose links with their histories, traditions, culture and whakapapa have been weakened or even severed. Nevertheless, ways must be found to re-educate the present generation so that they do not inherit the chronic diseases which are brought about through unhealthy diets and lack of exercise and physical activity.

**Change negative perceptions about healthy food**

Ways must be found to change the way people perceive the taste of healthy food. Promoting simple and affordable ways of cooking tasty food was one suggestion. Of all the cooking programs showing on television it was no surprise that many respondents said that the Jamie Oliver show was the most well known and favourite. Perhaps because he cooks healthy food in ways that people can relate to. One respondent said: “oh he just throws it all together and makes it look so nice”. This is true, his cooking methods and techniques do not put people off because it’s not so different to how they cook in their own kitchens. Fancy cooking shows are entertaining but not practical. Ways need to be found to improve the image and the taste of healthy food without reducing the nutritional quality.

**Improve knowledge of how to make healthy choices when selecting, preparing and cooking food**

Improving knowledge of how to make healthy choices when selecting, preparing and cooking food is closely related to changing negative perceptions about healthy food.
However, it extends to improving the nutritional information on food packages so that the information is understandable and meaningful. Introducing free community cooking classes and programs offered would improve people’s knowledge. Particularly if the program begins with selecting the food, then preparing and cooking it. The inability of people to make healthy choices, when selecting, preparing and cooking food because they lack the knowledge and skills is a significant barrier to achieving food security. Improving knowledge and skills will not only enhance food security but also improve people’s health.

Suggestions for enhancing physical activity

Role Models
By far, having positive role models was believed to be one of the key factors that could enhance engagement in physical activity. Respondents considered this to be particularly so for children and young people. Role models are not only professional sports people but include exponents of kapa haka groups and leaders, family members, friends and peers.

Improve support for whanau to engage in physical activity and sports.
If physical activity is considered to be a determinant of a healthy life then it must be accessible to all people. The ability to share physical activity resources and costs was identified as one of the key factors that supported participation in sports or engagement in physical activity. Encouraging communities, groups or whanau to support active involvement in physical activity is a key enhancing factor. Community established sports facilities and physical activity programs can significantly contribute to social cohesion. This was identified as a key factor which could promote participation in physical activity, sports and exercise. The most physically active respondents were those who were raised in communities where participating in sports was considered the “norm” and where there were facilities and resources to engage in physical activity. Not only was engagement in sports seen as important to the social cohesion of the community it was also an accepted part of its culture. A common barrier to participation in sports activities is the associated costs. More financial support is needed to remove these barriers and allow whanau to fully engage in physical activities. This financial support could, potentially, be provided from a number of sources, including central and local government, commercial sources and philanthropic sources.
Maara Kai (Research participant and mokopuna catching butterflies)
3. Report of the Pacific component of the research

Acknowledgements

We acknowledge with gratitude the Pacific communities for their generous contributions of knowledge and support to this research. We especially thank our Pacific Advisory Reference Group, the members of the fa’afaletui focus groups, and those we interviewed individually. We thank the participants for trusting their personal experiences and knowledge to us, and hope their trust is rewarded in this report. Without their enthusiastic participation this research would not have been possible.
**Introduction**

This section reports the research on socio-cultural factors associated with food security and physical activity for Pacific people in New Zealand. Focus groups and individual interviews were conducted to explore the socio-cultural factors which underlie the acquisition, preparation and consumption of food, engagement in physical activity and the factors that can inhibit and enhance food security and physical activity. As indicated in the introduction to this report, food security has been defined broadly to include issues of accessibility, quality, and cultural acceptability, in addition to the availability and quantity of food necessary to support an active and healthy lifestyle.

The information for this study of socio-cultural factors underlying food security and physical activity for Pacific people in New Zealand was obtained from six focus group discussions and six individual interviews carried out with New Zealand resident Pacific people from the Cook Islands, Niue, Samoa, Tokelau, Tonga, Fiji, Kiribati and Tuvalu. The focus group discussions and the individual interviews were guided by question lines that were designed to obtain information about participants’ understandings of the bases of wellbeing and health, knowledge of food sources and related practices in New Zealand and in their Pacific nations, knowledge about physical activity in New Zealand and in their Pacific nations, and views about ways of improving the nutritional status and physical activity levels of Pacific peoples in New Zealand.

While the ultimate goal of the research has been to identify culturally based interventions for contemporary New Zealand, it is argued that these must, in the end, be based on the cultural frameworks, norms and values that pertain to Pacific peoples. Consequently, the focus of the questioning was always upon the socio-cultural bases of the practices concerned. The Pacific nations based cultural frameworks remain as the ideal standards for many Pacific migrants – even though these may often not be fully realized in contemporary New Zealand because the necessary elements of material culture are absent, including the patterns and amounts of physical activity associated with food production, preparation and distribution in a village context. These absences can result in a state of cultural disjuncture, dislocation or discontinuity for the Pacific people concerned when they are in New Zealand.

The background to this cultural disjuncture or dislocation lies in the contexts of the Pacific nations’ historical relationship with New Zealand, the context of the migration of Pacific Peoples from the Pacific, and the context of their lives in New Zealand. Out of these three levels of context this research identifies areas of culturally based interventions, institutions, knowledge and practices that have the potential to contribute to restoring Pacific Peoples’ wellbeing, food security and levels of physical activity.

These three contexts are now outlined to provide a background to the discussion of the fieldwork results.
Pacific nations’ historical relationship with New Zealand and the context of migration from the Pacific nations to New Zealand.

The relationship between successive New Zealand Governments and the Pacific nations, which covers much of the twentieth century and extends well back into the nineteenth century, has been described in terms of a ‘Polynesian empire’ (Krishnan, 1994). Since the late 1840’s, successive governments had entertained expansionist dreams with respect to the Pacific (Macdonald, 1982). New Zealand’s formal acquisition of its Polynesian empire began in 1901 when New Zealand assumed responsibility for the Cook Islands and Niue, followed by Tokelau in 1925. Western Samoa became a mandated territory under New Zealand administration in 1921, following the seizure of the islands from Germany in the early stages of World War One (Krishnan, 1994). The mandate over Western Samoa was gained during the term of Massey as Prime Minister of New Zealand. Massey’s support for obtaining the mandate has been linked to his primary aim of participating in the control of Nauruan phosphate which was so important for New Zealand’s pastoral economy (Macdonald, 1982).

New Zealand as a signatory to the United Nations Charter on Mandated Territories became subject to the obligations of that Charter, which confer on the signatory countries, in this case New Zealand,

“as a sacred trust the obligation to promote to the utmost… the well-being of the inhabitants of these territories, and, to this end… ensure with due respect for the cultures of the people concerned, their political, economic, social and educational advancement, their just treatment and their protection from abuses.”  

The fiduciary obligation of the New Zealand Government, as clearly spelt out in this Charter, includes the development and progress of the people politically, economically, socially and in health and education. This obligation is fulfilled through its legislative and governance responsibilities to which the Health Research Council of New Zealand and the Ministry of Health contribute.

The inhabitants of these mandated territories, in this case Pacific people, became New Zealand citizens during the period of the mandates when the New Zealand geographic and territorial boundaries extended, in legal terms, to include countries that were mandated. In its administering of its Pacific mandates, New Zealand was also intent on its own development and as such directly recruited people from the mandated territories and other parts of the Pacific to settle in New Zealand cities and towns such as Auckland, Wellington, Christchurch, Dunedin and Tokoroa, thus encouraging their urbanisation. Consequently, the “New Zealand citizens” who had been living in the Mandated Territories in the Pacific became “New Zealand citizens” living in New Zealand. (Tamasese, et al., 2000)

Demand for labour to fill workforce shortages in the New Zealand manufacturing sector during the 1970’s lead to the South Pacific Work Schemes which targeted migrant workers from Fiji, Tonga, Tuvalu, Kiribati and Samoa. A special scheme was implemented for Tonga in 1975, for Samoa and Fiji in 1976 and for the people of Tuvalu and Kiribati by the end of the 1970’s. Pacific people were actively recruited by the manufacturing, meat agriculture and forestry industries, and were encouraged to migrate to New Zealand for this purpose. Consequently, the mass migration and settlement of Pacific people in New Zealand in the 1960’s and 1970’s was not accidental. It was a labour migration planned by the New Zealand government to meet acute labour demands. Although some Pacific people have entered other sectors of the economy, the majority of Pacific people have remained in the manufacturing and service sectors.

As well as responding to employment and other economic opportunities, Pacific people have responded to the additional motivations of gaining access to New Zealand educational institutions. More recently, population and climate change pressures in their homelands have become significant motivational factors as well.

The New Zealand economic crises of the 1980's seriously undermined the economic and social well-being of Pacific people in New Zealand. Now Pacific people are again impacted upon disproportionately by the global recession of 2008/9 due to their concentration in the manufacturing and service industries, the industries most affected by the economic crises. This impact is accompanied by a decline in living conditions for Pacific people in New Zealand which may well have a serious influence on Pacific physical and mental wellbeing and health outcomes.

The context of Pacific Peoples’ lives in New Zealand

Pacific people made up approximately 6.9% (265,974) of the resident New Zealand population in 2006, and the total Pacific population increased by 15% between 1996 and 2001, and a further 15% between 2001 and 2006 (Statistics New Zealand, 2006).

Of the Pacific population living in New Zealand 49% are Samoan, 22% are Cook Island, 19% Tongan, 8% Niuean, 4% Fijian, and 3% identifying as Tokelaunian. Between 1991 and 2006 the resident Pacific population grew by 59%.(Statistics New Zealand, 2006). The Pacific population in New Zealand tends to be young, with a median age of 21 years compared with a median age of 36 for the total New Zealand population, and is growing at a faster rate than the Māori and European populations. Between the 2001 and 2006 Census, for example, the Pacific population of New Zealand increased by 14.7% compared to an increase of 7.4% for Maori and a relative decline -9.1 for European (Ministry of Pacific Island Affairs, nd). The majority (88 percent) of Pacific people in New Zealand live in Auckland (Ministry of Health, nd).

In 2006, 60% of the Pacific population was New Zealand born. Those of Cook Island Maori descent were most likely to be New Zealand born, with 70% of the Cook Island Maori population resident in New Zealand being born here. Of other Pacific groups, 74% of the Niue population were born in New Zealand (compared to 66% in 1998), 66% of
Tokelauan population were born in New Zealand (60% in 1998); 60% of Samoans (stable), 53% of Tongan population was born in New Zealand (52% in 1998), and 44% of the Fijians resident in New Zealand were born here (a decrease from 47% in 1998).

Table 1. shows the considerable growth in the Pacific population of New Zealand between 1945 and 2006 and the similarly considerable projected increase from 2006 to 2051.

Table 1. Actual and projected Pacific populations 1945 to 2051

<table>
<thead>
<tr>
<th>Year</th>
<th>Pacific Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945</td>
<td>2,159</td>
</tr>
<tr>
<td>1956</td>
<td>8,103</td>
</tr>
<tr>
<td>1966</td>
<td>26,271</td>
</tr>
<tr>
<td>1976</td>
<td>65,694</td>
</tr>
<tr>
<td>1986</td>
<td>127,906</td>
</tr>
<tr>
<td>1996</td>
<td>202,236</td>
</tr>
<tr>
<td>2006</td>
<td>265,974</td>
</tr>
<tr>
<td>2011</td>
<td>300,000</td>
</tr>
<tr>
<td>2031</td>
<td>450,000</td>
</tr>
<tr>
<td>2051</td>
<td>599,000</td>
</tr>
</tbody>
</table>

Source: Based on Krishnan and (1994) and Cook (1999) but now including actual population figures for Pacific populations in 2006.

Employment, income and health status tend to be worse for Pacific people than for the general population. For example at the time of this research the current to June 2009 unemployment rate for Pacific people was 10.4% which was double the rate of unemployment average for all of New Zealand. By the March 2010 quarter the rate for Pacific people had increased to 13.3%. In 2006 the median annual income for all Pacific people aged 15 years and over was $20,500, compared to $24,400 for the general population. The median income for Pacific men was $24,500 compared to $17,400 for Pacific women. 32% of Pacific women received income support compared to 18% of Pacific men being in receipt of income support. As far as health status is concerned, and as indicated in the Introduction to this report, the New Zealand Health Survey (Ministry of Health, 2004 and 2008) has shown Pacific people (in common with Māori) experience higher rates of morbidity and mortality for a range of diseases that are associated with diet, nutrition and physical activity.

In 2006, 83% of Pacific Island census respondents reported having a religious affiliation. There have been some changes to the balance of denominations to which Pacific people claimed affiliation. In 1996 the largest group was the Presbyterian, Congregational and Reform Churches. This has now changed in 2006 to being the Catholic Church with the Presbyterian, Congregational and Reformed Churches now forming the second largest denominational group. The third largest denominational group is still the Methodist Church followed by the Latter Day Saints and other non-specified Christian churches.
This strong church affiliation and involvement represents one important site of intervention for the purpose of developing and implementing culturally congruent and useful initiatives and strategies aimed at facilitating improvement in the health status of Pacific people through their improved nutrition and levels of physical activity. This will be the focus of further discussion in the Conclusions and Recommendations section of this report of the Pacific component of the research.

In summary the context of the life lived and experienced by Pacific people in New Zealand is one that is very different from that which they lived and experienced in their Pacific nations. As indicated in the discussion of Pacific migration to New Zealand, Pacific people have moved here in response to a number of factors such as: demand for manufacturing and service sector workers; family reunification; education; and, more recently, demand for seasonal and agricultural industry workers. While a life in New Zealand has been an attractive economic and educational proposition for those intending to move here from their Pacific nations, their lives here, at least in the early years of their residence, have not, on the whole, been economically prosperous in relation to average New Zealand living standards.

As will be discussed in more detail throughout this report of the Pacific component of this research, the forms of cultural knowledge and practices, values and norms that Pacific Peoples have brought with them, and which continue to inform their lives and relationships, are separated from the material bases upon which they originally developed. These material bases, or forms of capital, included land and land use rights, ownership and control of the means of the subsistence production of abundant food and shelter, and other items of value such as fine mats, tapa cloth and canoes. But these specific material bases of cultural practices, values and norms are not normal parts of the New Zealand dominant culture, economy or context, and this is a central element contributing to the cultural dislocation that has been identified.

In the Pacific nations, material or economic capital in the form of lineage based rights to the use of certain Pacific homeland village lands is a virtual prerequisite to full entry into the social and economic field of the village, but does not, in itself, confer any economic advantage in New Zealand. On the other hand material or economic capital in the form of money or assets is, in principle, very transferable in either direction between the Pacific nations and New Zealand. However, as will be argued, the symbolic significance of many non-material forms and types of capital that originate in the Pacific nations can be encouraged and used to provide a basis for culturally based initiatives to counter the cultural dislocation experienced by Pacific migrants in New Zealand.

This report is presented in three sections. The first section outlines the methodological approach and research design. It includes details of the process of recruiting and engaging research participants, the Pacific fa 'afaletui research method used to elicit information in the focus groups and interviews, and the type of analysis that was used to interpret the information collected.
Section two reports the research findings. Section three draws together conclusions and recommendations of the research findings that include recommendations and suggestions for culturally based interventions to enhance the food security of Pacific people in New Zealand and their levels of physical activity. Section three will discuss the research findings with reference to the Bourdieu based theoretical framework that underlies the study and theoretical developments in the field of transnational migration.
Methodology

The aim of this research was to conduct a qualitative investigation of the socio-cultural factors that are associated with food security and physical activity for two target populations: Māori and Pacific people living in Aotearoa New Zealand. The research with Pacific people was informed by the fa’aafetui research methodology, as discussed below. A Pacific based relational understanding of wellbeing and the well self provided a framework for developing the focus group and interview questions, and for analysing the information they provided. In order to identify the dispositions associated with the consumption, acquisition, preparation and use of food, and participation in physical activity, a qualitative approach was used. This approach allowed for factors to be identified through the thematic analysis of the words, nuances, statements and descriptions that were provided by Pacific respondents in the process of responding to focus group and interview discussion topics and questions. A key consideration influencing the choice of qualitative methods was the need to deal seriously with the issues of cultural perspectives, cultural etiquette and protocols as well as the issue of language.

In recent years there has been an increasing recognition of the value of qualitative studies in health related research (Fossey, et al., 2002). This is particularly the case in contexts when it is important to address the meanings people from different cultures create to articulate their experience and understanding. Cultural meaning that differs from mainstream definitions often becomes marginalised in formal discourse and theory (Tamasese, et al., 1997). To avoid this marginalisation, the fa’aafetui methodology was developed for research with people from Samoa (Tamasese, et al., 1997 and 2005) and other Pacific cultures, and was applied in this research also.

The fa’aafetui methodology avoids the imposition of Western interpretation and meaning construction and enables authentic Pacific based approaches to research. From a Western perspective, postmodern critical theory offers a rationale for this approach to mainstream theorists and practitioners, because it identifies differing constructions of meaning and power differences between them (Lincoln, et al., 2000). Fa’aafetui is a Samoan concept that that refers to a process of weaving things together, and in the research context describes a method which facilitates the gathering and validation of important knowledge within a culture from people indigenous to the culture and with direct knowledge and experience of it.

The Pacific component of the research fieldwork was carried out in five stages:

2. Development of qualitative fa’aafetui focus group and interview question lines in consultation with the Advisory Reference Group.
3. Recruitment of fa’aafetui focus group and individual interview participants.
4. Conducting fa’aafetui focus groups and individual interviews.
5. Analysis of focus group and interview transcripts.
Pacific Advisory Reference Group
The Pacific Advisory Reference Group consisted of five members who combined knowledge of research with cultural knowledge and expertise. Together they constituted a *fa’a faletui* themselves, as they combined or “wove” their respective bodies of expertise together as they developed their advice and recommendations. The Advisory Reference Group reviewed the qualitative research instruments as they were developed and provided advice about the identification and recruitment of research locations and participants. Research processes and procedures were also informed by the Health Research Council of New Zealand ‘Guidelines on Pacific Health Research’.

Development of question lines
Question lines were developed to address the following overall research questions for this research:

1. What are the socio-cultural factors that enhance:
   a) food security, and
   b) physical activity for Pacific people?

2. What are the inter-relationships among these socio-cultural factors and what are their relative contributions to:
   a) food security, and
   b) participation in physical activity in New Zealand?

3. In what ways could these socio-cultural factors be modified to further enhance:
   a) food security, and
   b) physical activity of Pacific people?

The focus group and interview questions were initially developed by the research team and then shared with the *fa’a faletui* of the Pacific Advisory Reference Group. Once the questions were agreed the research team carried out two pilot interviews with a *fa’a faletui* Focus group and a Pacific individual. Once the pilot interviews were reviewed the exploratory questions were finalised and applied in the field work. The areas of questioning and discussion covered the following issues:

1. The socio-cultural factors underlying the acquisition, preparation and consumption of food, and engaging in physical activity;
2. The factors that inhibit adequate food security and physical activity;
3. The factors that can enhance food security and physical activity;
4. The inter-relationships among these socio-cultural factors and their relative contributions to enhancing and inhibiting food security and physical activity; and
5. Ways in which these socio-cultural factors could be modified to further enhance food security and physical activity for Pacific people.
The focus of the individual interviews was to explore in more detail and depth information about specific elements that had been covered within the focus group setting. Carrying out the individual interviews after the *fa’afaletui* focus groups also allowed the researchers to select additional issues for in-depth exploration.

**Recruitment**

The recruitment of participants was carried out to provide membership of six focus groups and six individual interviewees. Five of the focus groups were Pacific nation specific, and the sixth was pan Pacific. The first five focus groups covered the following Pacific nations: Tokelau, Niue, Cook Islands, Tonga and Samoa. The pan Pacific focus group was formed to cover and include members of newer Pacific populations in New Zealand such as people from Tuvalu, Kiribati, and Melanesian Fijians.

The five Pacific nation specific *fa’afaletui* focus groups were based on the highest Pacific Peoples populations with the longest presence in New Zealand. These are:

- Tokelauan: 6,822
- Niuean: 22,476
- Tongan: 50,478
- Cook Islands (Maori): 58,011
- Samoan: 131,103

The corresponding Fijian population in New Zealand was 9,864.40

The six interviews with individuals were conducted with people from the respective Pacific nations who had in depth knowledge or experience in the areas being covered by the research. Five of the individual interviews were similarly Pacific nation specific, being with respondents from Tokelau, Niue, Tonga, the Cook Islands, and Samoa. The sixth interview was the counterpart to the pan Pacific focus group and the interviewee was indigenous Fijian, representing the largest the populations included in the pan Pacific focus group.

Participants were recruited for the *fa’afaletui* focus groups through the Pacific community networks of the Pacific Section of the Family Centre, and with assistance of the *fa’afaletui* of the Pacific Advisory Reference Group for this study. The desired characteristics of the focus group participants were shared with each of the Pacific community network representatives who helped to recruit those in their specific community who had those desired characteristics.

The *fa’afaletui* focus group members were recruited with the aim of achieving a gender balance with equal numbers of women and men who had experience in the research areas. A gender balance was achieved within the *fa’afaletui* focus groups and among the individual interview informants. In each of the *fa’afaletui* focus groups recruitment also

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aimed for a balance of participants who were born in their Pacific nation and participants who were New Zealand born and/or Pacific born but who had been educated in New Zealand and lived here from a young age.

Individual key informants who were selected for interview were identified through community networks as people who were active in community affairs and events, having been organisers or leaders, and who had experience within their Pacific extended families and communities. Participants of the 6 individual interviews were equally balanced in terms of gender with 3 being women and 3 being male.

Six fa’afoalei focus groups were carried out with Pacific nation’s people, with one group for each of Tokelau, Niue, Cook Islands, Tonga and Samoa. While the research contract did not specify the inclusion of other island groups, the research team decided that it was important to include of the voices of the newer Pacific Peoples now resident in Aotearoa New Zealand, and achieved this by carrying out an additional fa’afoalei focus group that was ‘pan Pacific’. The pan Pacific fa’afoalei focus group included a representative cross section of Pacific Peoples, including Fijian participants. Fa’afoalei focus group sizes were between eight (8) participants in the smallest group and sixteen (16) participants in the largest group.

The fa’afoalei focus groups and the individual interviews were carried out in the following locations:

<table>
<thead>
<tr>
<th>Pacific nation</th>
<th>Fa’afaletui focus group Locations</th>
<th>Individual interview locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokelau</td>
<td>Lower Hutt</td>
<td>Wellington</td>
</tr>
<tr>
<td>Niue</td>
<td>Wellington</td>
<td>Auckland</td>
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<tr>
<td>Tonga</td>
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<td>Auckland</td>
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<tr>
<td>Cook Island</td>
<td>Porirua</td>
<td>Porirua</td>
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<tr>
<td>Fiji</td>
<td>Not applicable</td>
<td>Wellington</td>
</tr>
<tr>
<td>Samoa</td>
<td>Auckland</td>
<td>Wellington</td>
</tr>
<tr>
<td>Pan Pacific</td>
<td>Porirua</td>
<td>Not applicable</td>
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</tbody>
</table>

**Fieldwork**

Data was collected through the use of focus groups and narrative interviews. The focus group discussions began with a presentation which explained the reasons for the research and the health related issues around food security and physical activity. This was followed by an opportunity to discuss what would happen to the information shared during the focus group and interview discussions, and for respondents to ask questions about the research process and the research outcomes. The respondents were informed that the focus group discussions and interviews would be recorded with their permission. They were assured of confidentiality and told their rights to view their transcripts.
Once the research respondents were informed about the project they were asked to sign a consent form which also explained their rights to view their transcripts and withdraw from the project at any time. The focus group and interview recordings were transcribed verbatim including quotations and punctuation of the participant’s responses. The transcripts were then checked for any errors and translated to English when any Pacific language was used.

Data analysis and reporting
Audio recordings of the focus group discussions and interview proceedings were transcribed verbatim in the languages spoken during the fa’afoletui focus groups or individual interviews. The transcriptions from each of the fa’afoletui focus group and individual interviews were then coded and analyzed thematically. Care was taken to ensure that Pacific concepts which were best expressed in Pacific languages were clarified and included as appropriate in the theming and writing of the research findings. Theming of the transcripts was undertaken by the researchers who had conducted the focus groups and interviews, and who were familiar with the participants.

As a result of the processes of theming and analysis, the following broad framework was developed for reporting the results of the fieldwork.

- Physical activity
- Meanings of food: conceptions and values
- Food sources and types
- Food preparation, distribution and apportionment
- Etiquettes of consumption
- Opportunities in New Zealand
- Potential drivers of change for enhancing food security and physical activity for Pacific people in New Zealand
Pacific research findings

Introduction

The following analysis of the focus group and interview data obtained from Pacific people resident in New Zealand identifies and highlights the points of cultural disjuncture that concern particularly the views and practices of Pacific people in New Zealand in relation to food, diet, nutrition and physical activity. The discussion begins with research participants’ views about the bases of wellbeing and the well-self in Pacific cultures. The early discussion of wellbeing is important, firstly, because Pacific notions of wellbeing are wholistic and encompass all elements of Pacific traditional cultural, social and economic life, and, secondly, because the notion of ‘health’, which is so clearly central to the reason for undertaking this research in the first place, only made sense to the research participants as a component of the broader idea of wellbeing. Health, as a discrete concept, did not provide a productive avenue of discussion in the focus groups and interviews that were undertaken. As discussed later, health in and of itself was consistently seen as an element of wellbeing but not an outcome in itself.

The discussion then moves on to consider participants’ views on the following issues as they relate to their origins in their Pacific nations and their lives in contemporary New Zealand:

- Physical activity
- Meanings of food: conceptions and values
- Food sources and types
- Food preparation, distribution and apportionment
- Etiquettes of consumption
- Opportunities in New Zealand
- Potential drivers of change for enhancing food security and physical activity for Pacific people in New Zealand

While physical activity is discussed under a discrete heading, it is so entwined with the issue of food – its production and preparation in particular – that some discussion of physical activity occurs throughout. The discussion under each heading is presented first with reference to the situation the Pacific nations and then with reference to the situation in New Zealand to allow the cultural differences between the two locations to be identified and highlighted in relation to each factor.
Wellbeing and the well self.

A useful place to begin the discussion of socio-cultural factors in relation to food security and physical activity for Pacific people is with consideration of their understandings of the bases of wellbeing and the well self. The reason for this is that wellbeing and the well self were both understood and discussed in relational terms that encompassed practices associated with the production, preparation, distribution and consumption of food, and the physical activity associated with those practices. While the personal self was considered to combine individual and collective aspects, it was ultimately defined by the family and community relationships in which it was located. Wellbeing and the well self were consequently derived from and defined in terms of relational arrangements in areas such as satisfactory family and wider community relationships, spirituality, access to food, exercise, income and shelter. The essential bases of wellbeing were therefore directly related to particular social fields, the possession of the relevant forms and types of capital required for entry and existence within those fields, and habitus attuned to them.

In the focus groups and interviews, discussion of individual health, in isolation, proved not feasible because the idea only made sense to most participants as a component of relational wellbeing. An illustration of this was the response to the proposition that having good health would lead to a long life. The response was to the effect that the idea of having a long life, personally, made no sense in isolation; it only made sense in the context of being there, fit and well, for the main purpose of supporting and contributing to the collective wellbeing of the aiga.

In the Pacific nations, village based life is lived in close connection with the relational elements upon which wellbeing and wellness are based. In the Pacific nations context, the elements are integrated in ways that they are usually not in New Zealand. For example, in a Pacific nation indigenous village context, the means of food production are available to people by virtue of their kin relationships and genealogical links to the lands and waters associated with the village. Food preparation and consumption are likewise performed in the context of such kin relationships. Village based food production (and preparation) is labour intensive and in the combined production, preparation and consumption of food a balance is usually achieved between the input and output of energy.

The disjuncture that is evident between socio-cultural factors and practices originating in Pacific nation village-based social and economic structures, on the one hand, and the quite different social and economic structures that Pacific people find in New Zealand, on the other, lessen the effectiveness of traditional restraints and restrictions on food consumption in the New Zealand context, if those restraints and restrictions are not modified and adapted to reflect New Zealand social and economic realities. The limited transferability of Pacific homeland based types of material and economic capital that
contributes to this disjuncture means that associated social, cultural and symbolic types of capital must be adapted to the New Zealand context.

The Pacific relational conception of wellbeing that was revealed in the focus groups and interviews is closely related to corresponding relational conceptions of the self. Consequently, the discussion of wellbeing that will follow is preceded by a discussion of conceptions of the self as a relational entity. The discussion of the self will cover the following questions: the relational self; the self, language and concepts; roles, responsibilities and heritage; family structures and relational arrangements; the subsistence economy of abundance; relationships and contributions; and relational selves and their commitment to collective wellbeing.

The discussion of wellbeing itself then considers wellbeing in the following terms: wellbeing as experienced by the self through relationship and belonging; the spiritual nature of connections and wellbeing; wellbeing and material resources; the ability to provide for the needs of others and oneself; having a place in the community; and living safely.

**The relational self**

*Fa’a faletui* focus groups identified the self as being located in relationships, connections and inter-connections to *aiga, magafaaoa, kainga*, villages, *motu*, provinces and Pacific nations. The *fa’a faletui* focus groups found that these *aiga* or family structures were the base for organising and interrelating. The roles and responsibilities for care and support of their members throughout their lives and at their significant life events, such as birth, childhood, eldership and death, are defined in these family structures.

*Fa’a faletui* focus group participants pointed to the self as being identified by its genealogical connections, both biological and adoptive, and of both maternal and paternal lineages. These lineages connect the present generation to ancestors and invariably to the land and the waters from which they come. These genealogies also connect human beings to the spirit world of the ancestors and to the physical environment of their genealogy.

The self in relationship has certain elements: emotional, spiritual, physical and mental. All these elements are interrelated and cannot be separated. Together they constitute the whole self in relationship. Life is also said to exist in the emotional, spiritual, physical, and mental domains. Wellbeing or wellness of *aiga* members includes wellness at the emotional, spiritual, physical, and mental levels. The physical domain includes financial and material elements of the self.
The self, language and concepts

Each Pacific language has its own protocols of usage. The self that speaks respectfully and adheres to language protocols denotes being wholistically well-educated. Language carries the deepest messages about human being, cultures, relationships, God(s) and the environment.

Pacific languages are alike in their use of allusive, relational and metaphoric language that ‘invites’ rather than defines meanings. Allusive and metaphoric language of protocol and etiquette conveys thoughts and feelings in a way that safeguards relationships and enables communication to be expressed gently rather than being abrupt or direct.

In New Zealand, Pacific language use in relation to food and its production, distribution and consumption, has been observed to have changed from the use of formal language that speaks of food as special and sacred, to language that speaks about food as a mere fuel for the body. Similarly, Pacific and English languages in New Zealand now describe the body in only physical terms without reference to the spiritual aspects of the human body. The body and its physicality is increasingly being conceived of as belonging to the individual rather than the ancestors, the collective aiga or family or even to descendants. Therefore, the body’s wellness is becoming increasingly seen in more individualistic and/or secular terms. These developments increase the disjuncture between Pacific people’s concepts and values in relation to wellbeing, food security and physical activity.

Roles, responsibilities and heritage

The self in relationship to the ancestors, the land, the waters and the Atua (God(s)) is located in family structures which are in turn located in villages, motu (islands) and nations. These locations, with their relationships and family structures define roles, responsibilities, rights and entitlements which become one's heritage. It is in the fulfilment of one's heritage and responsibilities that one finds self-worth or self-respect. These roles and responsibilities are sometimes intergenerational and are fulfilled by present generations in order that the heritage is kept alive and present.

These responsibilities include the highly valued responsibility of serving or tautua. Service or tautua includes the production and distribution of food, wealth and prosperity to ones aiga, village and communities. This responsibility to serve has become a value. In some Pacific nations, everyone in the family, village, motu, provinces and national structure serves and is in turn served. The concept and enactment of service amongst all these roles presupposes interconnection and relationship, which give meaning and bind together aiga, magafaoa, kainga, groups, clans, family, village, motu, provinces and national structures. One of the core responsibilities is to create wealth and produce food for one’s aiga, kainga, magafaoa or families. These special or primary relationships include the relationships to the ancestors, to the land and waters, and to the Atua (God(s)).
The Pacific familial, social, political and economic structures are elaborate and therefore have etiquettes and protocols that guide speech, behaviour and ways of relating. They also guide how people assist each other and produce and distribute wealth. These protocols are not being passed on to the younger generation as much as they were previously.

**Family structures and relational arrangements.**

The selves connected in *aiga, magafaoa, kainga*, group, clan and families are situated in structures which are specific to each Pacific nation. These structures are connected or related through genealogy to other family structures, assigning roles, responsibilities and status as well as providing a frame for daily family rituals and ceremonies associated with significant life events. Pacific family structures give prominence to the place of ancestors, elders, leaders and, in some Pacific nations, sisters. These structures rely on the interconnection between each of the roles with its assigned set of responsibilities, setting out the relationships between each of the roles within the family with clear protocols or guidelines of etiquette at both the intra-familial and inter-familial levels.

**The subsistence economy of abundance, relationships and contributions**

Pacific based gender and other relational arrangements are premised in part on a subsistence economy of abundance in Pacific *motu* and nations. This subsistence economy of abundance is in itself premised on the spiritual relationships between the selves and the land and waters.

Definitions and representations of the Pacific subsistence economies as meagre and limited disregard the plentiful nature of the lands and waters on which our subsistence economies are based. The Pacific subsistence economy has been referred to as subsistence affluence. A *fa’afoletui* discussion pointed out that the abundance of the environment on which Pacific subsistence economies are founded provides a basis for particular gender arrangements and elaborate cultures of sharing and distribution.

This context of a subsistence economy which is abundant, available and accessible encompasses gender roles in which women and men participate in cultivation, fishing and the harvesting of produce. There are cultivations that are male specific, cultivations that are female specific and cultivations in which both participate. There are the kinds of fishing that only males do, kinds that females and young people carry out, and types that both genders can participate in together, while perhaps carrying out specific tasks. There is therefore a distinct gendering of production and distribution roles which flows into other social, political and familial gender arrangements.

The Pacific’s subsistence economy is characterised by cycles, such as, for example, agricultural and fishing cycles. There is the time when the mullet rises, and the time of
the rising of the ‘igaga’ (whitebait) and the time of the ‘uga’ (coconut crab) in Niue, the times of the ‘fuata’ (the season of the ulu, mago, vi (breadfruit, mango and apple fruit)), and the times of planting. There is the time when the use of areas of land or water is restricted in order for them to regenerate. It is at these times that the relationship between humans and the land and the waters, crops and fish is celebrated by rituals of welcome, distribution and use. As was identified in the fa’afalei discussions, the first produce of course went to leaders (including church leaders), elders, sisters or people who held significant status within families and communities.

The Pacific subsistence economy is premised on cycles of availability, on concepts of conservation and regeneration, and on the potential for abundance, with food, crops and materials for livelihood from both the land and the waters accessible and available. But abundance and availability are sometimes disrupted by natural disasters such as cyclones which can destroy some crops and may cause ‘oge’ (famine) or times when specific crops are in short supply. The occurrence of these events was known from past experience and they were in fact anticipated and planned for so that oge was able to be minimised.

Relational selves and their commitment to wellbeing

The selves that are located in relationships are committed to ensuring that those to whom they are related are well and are cared for in all the areas of life, that is, on the emotional, spiritual, physical, and mental levels. These selves, as has been pointed out earlier, are located in family structures which assign roles and responsibilities and ensure that there is a commitment to contribute towards each other along established pathways and practices that are clearly set out in cultural etiquettes and protocols. Contributions and responsibilities are determined by the location of each self within family structures, villages, and other collectivities.

Pacific conceptions of wellbeing

In a Pacific cultural context, wellbeing is one of the key objectives of the selves in relationship with their reciprocal and mutual arrangements. Wellbeing is closely associated with wholeness and generates social practices that support and assist the people, families, cultures, languages, nations, lands, and seas that the self is in relationship with. Consequently, wellbeing is a broad concept that encompasses a life that is lived well and relates well; a life that is lived with many blessings; a life that is lived in abundance and in harmony; and a life that is lived in health. Wellbeing is a wholistic concept that presupposes wellness in all the relationships in which the self is involved.
Wellbeing as experienced by the self

The self that relates to the land, waters, *Atua* and, through genealogy, to the ancestors experiences wellbeing when these relationships are in harmony or are in balance. Further, the self that relates to other selves in families, *motu*, villages, provinces, confederacies and nations finds wellbeing when these relationships and connections are in a state of harmony and health. The self does not experience wellbeing if any of those it is related to are not well or are not in a state of wellbeing. When all the elements of the self in relationship are in balance or in harmony, then wellbeing is experienced. The self in relationship finds wellness when all other selves to whom it is related are well or are being cared for. Wellbeing is experienced when one’s *aiga* or *aiga*-like formation is well and its members are supporting each other.

The spiritual nature of connections and wellbeing

The *va*, or the space that defines and relates Samoans to their ancestors, to the land, to the waters and to the *Atua*, is *tapu* or sacred. The concept of *Va Tapuia* (Tamasese, et al., 1997) and the Tongan concept *Veitapui* refer to the sacred space that establishes and defines the sacred relationship between people, the ancestors, the lands, the waters and their God(s) which is central to the self and its wellbeing. Wellbeing is a spiritual state.

Wellbeing is the fulfillment of roles, responsibilities and heritage

As has been mentioned earlier, the selves that relate in *aiga* or new *aiga* formations have assigned roles and responsibilities. The fulfilment of these roles and responsibilities is tied to entitlements and access. They include the provision of food, shelter and clothing, as well as spiritual and ceremonial supports, and their fulfilment brings a sense of self-worth and wellbeing.

Wellbeing and material resources

In New Zealand, wellbeing is also connected to having a good education that provides life skills and secures future employment. Education and qualifications bring honour and status to families and family members. Education and qualifications also secure higher levels of remuneration that give support to *aiga* and *aiga*-like formations.

In New Zealand, wellbeing is also closely connected to employment, whereas in Pacific nations, roles and responsibilities of *aiga* were able to be fulfilled with the produce from subsistence economies. The material supports and contributions from the land and the waters were abundant, available and accessible. People were able to provide for their families. In New Zealand, responsibility to care for and support *aiga* or new *aiga*-like formations is dependent on disposable incomes and employment. Material support for
aiga becomes a struggle when people earn low wages or are on income support or benefits. Responsibilities thus remain unfulfilled and wellbeing is not achieved.

Housing is not only a physical space that creates a sense of belonging; it is also a spiritual place where people gather and find ‘home’. It is a place where families and the selves that relate first learn the boundaries or the shape of the spaces that define relationship. It is also space for nurturance and learning. In the Pacific, one’s home or house is another core element of identity.

In New Zealand, appropriate, affordable and accessible housing is difficult to obtain. As a result, families are pressured into overcrowding, relationships can become strained and boundaries blurred. Pride in one’s home and shelter erodes over time and so wellbeing is not achieved.

Wellbeing is the ability to provide

The pride of providing for families and family members brings confidence in one’s ability and skills to provide, which is rooted in the subsistence economy of abundance, availability and accessibility. Heroic stories of provision are stories of highly developed skills in areas such as fishing and snaring birdlife. Pacific peoples are proud providers for their families, villages and communities.

In New Zealand, the provision of housing, education, food, clothing and ceremonial elements depends on disposable incomes and available employment. Pacific peoples are often employed in the sectors where remuneration levels are lower and the variety of employment is low. This has negative impacts on people’s pride in being providers; their ability to provide for their families is undermined and over time wellbeing can decline.

Wellbeing is having a safe place in the community

The self that relates finds wellness in collective groups and communities. It also finds wellness in being accepted and acknowledged, having a place, or in taking part and contributing to collectives or community. This is embedded in the notion of the self as it belongs to families, villages, provinces or confederacies, and in the New Zealand context, to new aiga-like formations such as Pacific Churches and communities.

Security is experienced when one is connected to and has a place in community. Further, one enjoys a sense of wellbeing when one has a place in the community, and contributes towards the community’s wellbeing. Selves in relationships find security when boundaries that define them and their relationships are kept, and daily living is experienced free from physical, emotional, psychological, spiritual and cultural violations. For Pacific people in New Zealand, the indigenous Pacific-based boundaries that define and relate are distorted daily by the influence of prevailing social norms that
are quite different from those in their Pacific nations. Safety may become marginalised and holistic security and the sense of wellbeing can be compromised.

Physical activity

The constituent elements of the whole self in relationship include the spiritual and the physical elements which are interrelated and cannot be separated or “addressed independently of each other when dealing with the whole person” (Tamasese, et al., 1997). For the purposes of addressing physical activity as one of the foci of this research we are addressing the physical element of the relational self. It is critical to remember that the essence of the Pacific relational self is the whole person, with both the physical and spiritual elements integrated.

Included within the spiritual element are the mental and intellectual (thought). As the spiritual and the physical sides are part of the whole self or the whole person, then when one element is not ‘well’ or is out of balance, the other elements are also impacted upon. For example, if the physical element is not well due to physical inactivity, this can also negatively affect the self spiritually, mentally and intellectually.

In the Pacific

In Pacific nations, village-based life, physical activity is an integral part of daily life. It is central to all subsistence economic activity and the production of food; buildings and cultural items such as woven mats and tapa cloth.

\[\text{Being physically active or to’aga means one’s family have access to appropriate and adequate food. O le aiga e tu ai le tuaniu. (Samoan fa’faletui)}\]

\[\text{There is respect for being physically active. This leads to wealth production and wealth redistribution. Physical activity that brings wealth and prosperity to one’s family is heralded. (Samoan and Tongan fa’faletui expressed this)}\]

Physical activity is central also to social and cultural life through the medium of dance, for example.

\[\text{Physical activity in leisure include dancing, weaving etc...all this helps to enable the body to develop muscles ... (Cook Islands fa’afaletui)}\]

As indicated in the earlier discussion of wellbeing, physical activity was not directly associated with health in the minds of the focus group participants, but was associated
indirectly through its fundamental contribution to the achievement of wellbeing and a well (or healthy) self.

*The older generations were physically active and generated family prosperity through their activities but they weren’t attentive to food contents like minerals or sugars.*
(Samoan fa’fale tu'i)

*Older generations were physically active and then had their smokes and whiskey.*
(Samoan fa’fale tu'i)

In this regard, physical activity was directly associated with the achievement of wealth and prosperity.

*Physical activity meant the development of material and spiritual prosperity*
(Cook Islands fa’a faletui)

The physical demands of subsistence agriculture, fishing, and provision and maintenance of housing, for example, require varied types of physical activity, intellectual ability, knowledge and accumulated skills, which involve the whole body. In this context, a healthy and strong body is a valuable resource and the more varied the demands a person’s body can meet, the greater is that person’s ability to create wealth for their kin group. As a Tokelauan participant recollected:

*I remember when I was a child, everybody..., even people to me who were quite old were very active ...they had white hair ...but they were very active, they were still climbing up the coconut tree, and sailing out the canoe. Compared to today, they were very healthy. So I think that my recollection of the days past is that people were very healthy, you can actually remember seeing people who are very fit and very strong.*

In Samoa, the relationship between physical activity and perceptions of the body are explained by a Samoan participant in the following terms:

*What they really mean [by ‘big’] is that the person is tino lelei – which is a good body. Which means the physique is strong – remember the living is all about active living. The physique is muscular, it is strong – women and men. The tino lelei means the physique has to be, the muscles have to be, pronounced. The bones need to be healthy and strong. So tino lelei has a very poor translation of ‘big’. which is the opposite of scrawny. Why we say scrawny is not the preferred body size is when you’re scrawny you can’t be physically active, doing your taro plantation – that’s where it comes from. For us, having a good physique is paramount.*

Physical activity was also expressed in indigenous sports like pigeon snaring or Tagati’a – Javelin throwing. It is said that one of the Samoan spirit warriors threw a javelin that
you can still see today streaking through the sky as a shooting star. Pacific peoples as navigators were also active in the construction and navigation of sailing craft of various sizes over both short and great distances.

Since the earliest times there has been a consciousness of the need for periods of rest to follow periods of intense activity in order to recuperate and regenerate. For many Pacific cultures specific times were set aside for rest from physical activity.

The physical body and its close integration with the spiritual and emotional dimensions meant that it was also possible to transcend the physical limitations through trance, chants, songs or oratory. These skills of trance, chant, song or oratory were called upon to help the self to go further or to go beyond, for example, the physical pain of tattooing or the long arduous ocean voyaging.

While the physical element was closely integrated to the spiritual or the emotional elements, boundaries do exist between these elements. Boundaries also exist between the two worlds – the spiritual worlds and the human or the material world. The balance between the spirit world and the human material world is very intricate. There are rules that guard this balance and these are passed down through generations within Pacific indigenous cultures.

In more recent times physical activity in the Pacific is expressed in current sports or recreational activities such as village cricket or the dominant sport of rugby at village, district, national or international levels.

*Young ones are now involved in sports and are keeping fit. They are also involved in professional sport therefore being fit and well have income impacts.*
(Samoan fa’afaletui)

Churches also organise and take part in sporting activities.

*The churches organise sporting and recreational activities. They are presently leading the Pacific community in healthy eating and healthy action campaigns.*
(Samoan individual interview)

Increasing urbanisation and growth of the cash economy in the Pacific are leading to contemporary changes in forms of physical activity and subsistence economic activities there.

**In New Zealand**

In the Pacific homeland subsistence economy, physical activity is the basis of material wealth and the production of food. In the cash economy of New Zealand, on the other
hand, food is purchased using money. In this new relationship between wealth and food, physical activity is directly linked to the generation of monetary wealth and no longer directly linked to the production of food.

Even though the occupations of many Pacific people in New Zealand involve physical work, in the manufacturing or service sectors for example, this is generally repetitive and less balanced than that associated with subsistence food production.

Older generation working two to three jobs remained physically active. However the body becomes weary and fatigued from having to work long hours...sometimes one works in multiple jobs with little time for rest.  
(Samoan fa’faletui)

In addition, there are many labour saving devices available for tasks that in the Pacific nations would be carried out by hand, or on foot.

Things are too easy now, it is no longer physically demanding ...technology saves time and energy but...  
(Cook Island fa’faletui)

When detached from economic life, physical activity becomes an optional, recreational pursuit that is carried out through sport and exercise. However, those carrying out physically demanding jobs are less likely to have the energy or inclination to engage also in vigorous, discretionary, physical exercise as well.

The transition to living in New Zealand can affect men and women differently, too, because while the home-based food preparation and distribution tasks performed mainly by women and girls in the Pacific nations still need to be performed in New Zealand, the food production and catching activities that are performed by men in the Pacific nations are no longer carried out in New Zealand. As a Cook Island participant put it:

There is nothing for boys, I think the boys were to go out and work more especially in the Cook Islands the boys job was either in the taro patch or to go out fishing to bring in the food or bring in the money... I think here, I think for the boys there is nothing left for them when we do cook island things

(Interviewer) How can we change that?

When we do Cook Island things, I think what they’re trying to do is to try and introduce the sports things to include the boys into island activities.

But recreational activities are not regarded as morally equivalent to wealth producing activities. A Tokelauan participant spoke about his own experience of this in Tokelau and its impact on his behaviour in New Zealand:
Nowadays, it’s an attitude in Tokelau, because I went through it, we were not allowed to, I mean we were not encouraged to be active in recreation. That was not allowed, was not encouraged. I remember having a hard time. You know as kids all you want to do is play, all you want to do is go to the middle of the village and play, but Mum always stop you from going, she would prefer you to either go and sleep for an hour or go and do some feau (jobs or errands). So I think that attitude has certainly affected me, because I have never sort of encouraged my children into recreational activity. It is something that I regret…. They play sports now but they should have really been involved [before], so I am encouraging them; it’s really good seeing them, your grandchildren. One in particular, he has two daughters, and the way he treats them they are like boys, but they are good, they are very active, yeah.

The same participant further described the moral or value-based tension between recreation and productive activity. This passage highlights the view, common to the interview and focus group participants, that health was associated with productive, economic, physical activity and not with non-productive, discretionary activity that is regarded as benefiting the individual rather than the collective:

*It’s not constructive, it’s not useful, I mean that's their attitude, not a lot of purpose in that, yes, whereas other activities are constructive, …recreation activities are for you own benefit, I suppose, and it doesn't benefit anybody else.*

No, I think a few people have taken to gardening, … occasionally I will have a garden, but mainly, because I don't have the time, even now I still don't have the time. But it is something that needs to be encouraged; it needs to be encouraged, because the economic benefits are part of the health benefits.

However, increased numbers of Pacific peoples (Both New Zealand and Pacific born) are being involved in sporting and recreational activities.

*We have exercise classes for the elderly where we walk, swim, garden and generally move around.*

(Niue fa’faletui)

The dominance of rugby, netball, softball, kirikiti (cricket), outdoor bowls and volleyball etc., engage Pacific Peoples across generations. Sporting tournaments are also organised to enhance cultural and group cohesion.

*Sharing and working as a community to take part together in our sports days… The sports tournaments really encourage our young ones to learn our language and our dance.*

(Tokelauan fa’faletui)
In the last three years churches have become sites of physical activity programmes and healthy eating programmes such as Healthy Eating and Healthy Action programmes, for example.
Meanings of food: conceptions and values.

In the Pacific

In the Pacific nations, food production, preparation, distribution and consumption are carried out within the context of kin-based social and economic structures. In such contexts, people’s conceptions and values about food are closely linked to kin-based relationships, wider social relationships and notions of wellbeing. Food has significance beyond simply sustaining life because participation in its production, preparation, distribution and consumption provides meaning to life, also.

Pacific perception of food is that it is not only physical nutrients but that food is also spiritual and emotional nutrients as well.
(Niue fa’faletui)

Food is appreciated for the satisfaction it gives to those who eat it and the value it adds to social and ceremonial occasions.

Social and ceremonial occasions are measured by the quality and quantity of food that is provided.
(Samoan fa’faletui)

Hospitality and Hosting is always associated with food…[W]e must ensure that the food we provide is lava ma totoe (abundant) and that we are providing the best that we have....[O]n visits food is offered as an expression of welcome and acceptance....[I]t is a symbol that I have given over all that I have and therefore this type of giving is beyond hospitality.
(Tokelauan individual interview)

Food, through its life-giving and meaning-giving qualities is a form of wealth that is created through the expenditure of physical labour. Hence the relationship between physical activity and food is very close and direct in the Pacific village context. This was reflected in the views of focus group members, who associated physical activity with wealth, rather than directly with health.

Production of food and household wealth becomes a preoccupation...
(Tokelauan individual interview)

In other words, health was a component of the broader concept of wellbeing, which was discussed in some detail earlier, and other important components of wellbeing include the important forms of material wealth that can only be produced through the application of physical work and labour (in conjunction with intellectual work and labour, also, it must be said). The forms of material wealth referred to include buildings, well developed gardens, fishing canoes, treasures such as fine mats and tapa cloth.
Daily life was active life of growing, fishing, building, weaving and the creation of household wealth...
(Tokelauan individual interview)

Material wealth is also manifested in the ability to support a large sized household, and enjoying close relations with food sources, such as those in the sea.

In New Zealand

In contrast to their situations in their Pacific nations, Pacific people in New Zealand are, in a very real way, alienated from the direct means of producing their own food. While their kin-based social structures remain, to varying degrees, intact, the economic structures that accompany them in their village-based lives no longer operate.

We purchase all our foods here and we do not know who plants them, who harvests and with what chemicals they have been treated...
(Cook Island fa’afaletui)

Our food which was grown and produced by ourselves or our relatives now are grown by strangers; the intimate connection of food production and our consumption is severed leaving us not malie (or physically, emotionally and spiritually satisfied). Food must be satisfying us: we are talking about physically, spiritually and food must hit the spot.
(Cook Island fa’afaletui)

In New Zealand, food is a commodity to be purchased with income obtained from economic activity that is not directly related to either the production of the purchased food or the still functioning kin-based social structures. In addition to this decoupling of economic and social structures, a different and greater range of types of food are available in New Zealand than in the Pacific nations.

Foods in New Zealand includes salads, cucumbers, coleslaw, lettuce and now its mesclun! Some families are now bringing pasta to church toanai (feasts)
(Samoan individual interview)

While many Pacific nation foods are available for purchase in New Zealand, they are more expensive than other alternatives and are more likely to be purchased for special occasions than everyday consumption. The decoupling of social and economic structures also removes the direct connection between food production and physical activity, and even though the occupations of many Pacific people in New Zealand involve physical work, in factories for example, this is generally repetitive and less balanced than that associated with subsistence food production.
Yea, it’s a major problem with our culture. Polynesian bodies are designed to do physical labour you know physical work and we don’t do that when we come to New Zealand
(Niuean individual interview)

In order to support themselves and their families with incomes from low paid, low skilled jobs, Pacific people often work very long hours in either single or multiple jobs, and lack time to spend on food and meal preparation. In large households with multiple income earners working different shifts, household life can become fragmented, the patterns of village-based life are untenable, and practices such as shared family meals become irregular. The availability for purchase of foods that require little or no preparation removes another link in the connection between food and social structure.

Especially now that it may have come from grandpa’s garden or may come from Nana who went half way around the island to pick up a sack of taro to bring back to the house. Things like that take into consideration, it’s that concept and they start to cook the food in a different way, as opposed to Mum going for a walk to Cannons Creek to buy a bag of taro. Where that probably would have no meaning to it whereas for us going half way around the island to get the best taro for you
(Cook Island individual interview)

Food sources and types.

In the Pacific

In the Pacific nations, traditional locally produced or obtained foods include a wide variety of sea foods, including seaweed, land-based protein such as pork, chicken and land crabs, and land-based food crops such as taro, kumara, banana, papaya, coconut, and other vegetables. This food is fresh and unprocessed – apart from some types of food preservation such as drying and salting.

“In my days, there were hardly any imported foods, I think rice was very rare in those days, but it was mainly just locally produced foods, fish, breadfruit, pulaka (swamp taro)...banana, ta’amu, coconut.”
(Tokelauan fa’afaletui)

The tasks involved in growing, gathering and catching food involve most members of families and communities in various ways. For example, deep sea fishing tends to be the preserve of men, while fishing on the reef flats and beach shallows is mostly carried out by women. Men, women and children take part in agricultural planting and harvesting, with the heavier work carried out by the men. People living in such circumstances are
therefore exposed directly to the rhythms, cycles and seasons of food procurement, and in no sense alienated from the sources of their sustenance. As a Tokelauan participant put it:

“I think traditionally, everyone's preoccupation in Tokelau is around about food, I mean that's the reality, (its production) either fishing, because there is no other activities, no form of employment, unless you’re a teacher, or doctor or nurse. You know people go to their plantations they grow stuff and they’re all about food provision, make sure there is enough food, fishing, and so food... still is, a very important part of the culture. A lot of time and effort is spent on preparing and planting, preparing to get food to make sure [of a steady supply] of food.”

In times of crisis, such as the weather and climate related natural disasters that periodically affect the Pacific nations, people have recourse to salted and sun-dried foods and buried root crops that are set aside for such situations.

In Tonga in a time of crisis we have preserved foods like foods dried in the sun or faala, or faka masima – salted foods. We go again to the sea and we bury our root crops to preserve them for longer times. (Tongan fa’a faletui)

“If there’s a hurricane, they have certain kinds of food that does survive buried under the earth, like cassava, if there’s any available on the mainland. Also faala, which is the mixing of flour and water into a dough with coconut, fish and greens to make it go further. Known as lovo.” (Fijian individual interview)

Sharing is an important part of the distribution of such foods at those times. In the contemporary Pacific, foreign food aid is another source of food in these cases, too.

Different stages of the life-course are also associated with particular types of food. For example, baby food is readily available from local sources such as various fruits and vegetables, taro and small sweet yams, and the soft flesh of young coconuts. For the elderly who are in need of soft foods, all available foods can be prepared in suitable forms, such as soups and stews. For pregnant women protein, carbohydrates, fruits and vegetables are readily available – as they are for the general population.

Our foods for babies was mashed and cooked pawpaw, taro, laupele (spinach), cooked bananas that are mashed and fish, the drinks for toddlers included lemon grass tea with a little bit of sugar. (Samoan fa’a faletui)
In New Zealand

While a greater variety of foods are available in New Zealand than in Pacific nations, their quality is also very variable. The pressures faced by large households with multiple income earners working different shifts and receiving low incomes can lead people to purchase and consume foods of lower nutritional quality than would be available from indigenous sources.

“Because of the family environment, [with] no one home doing the cooking during the day, [including] both parents, and the whole thing of not enough money to buy the right foods, [then] when we are talking about health, healthy living, it’s about the right foods which is the foods that costs a lot more to buy. Even at the markets all that kind of stuff is expensive now. The things that used to be cheap even lettuces, they’re about $4 each at the supermarket, so people tend to buy the cheap food, which is the carton of mutton or lamb flaps.”
(Samoan individual interview)

In New Zealand, Pacific people (in common with most of the population) purchase most of their food from shops, vegetable markets, supermarkets, and other outlets such as takeaway food establishments. Some food is grown and some fish caught, but on a very small scale compared to the Pacific nations village context.

The pressures associated with large households and multiple income earners working different shifts, that were noted earlier, encourage the purchase of prepared meals and other convenience foods of generally low nutritional value. As a Niuean participant put it:

*I think all the food that we have always had, its all been good food but I GUESS excessive, food with excessive fat we need to avoid or eat in moderation... see most of the big families that have mum and dad and grandad that came from the islands, they tend to prepare food like they prepare back at home, lots of coconut juice, lots of things that we normally wouldn’t eat if you knew what could happen if you ate too much of that food, but and you can’t tell them to change. It’s slowly phasing out because our young people go to work and I guess some of them are ... in jobs where they don’t have a lot of time to cook – which is everyone’s problem. So rather than cook and eat good food, they eat anything that’s fast. They tend to eat KFC you know McDonalds burgers, Chinese takeaways instead of just spending probably half the money they spend on those foods getting a decent meal from up the road; you know, some fresh vegetables and some meat and stir fry them with a bit of rice and that sort of food.*
(Niuean individual interview)

In times of crisis, Pacific households in New Zealand have recourse to food banks, stored preserved foods such as canned food, and, where possible, food from the sea. This is the
inverse of the situation in the Pacific nations, where foreign food aid (in a sense, the equivalent of the food bank in New Zealand) is the last resort.

In New Zealand different stages in the life-course are less clearly associated with particular foods than is the case in the Pacific nations, although food for babies and older people are generally soft types, whether purchased ready made in the case of tinned baby food or prepared from basic ingredients.

In New Zealand, though, we buy canned baby foods, use blue top milk and some mashed foods with rice or potato...
(Pan Pacific fa’afoaletui)

Foods for babies and older people tended to mirror those available and used in the Pacific nations, whereas the foods described for pregnant women in New Zealand included vegetables and fruits, although one group identified take-away foods such as KFC and McDonalds.

In the islands I remember when I was pregnant I craved mangoes but over here when someone is pregnant – ‘oh I am craving some KFC’ but I am wondering [because we have no KFC there] if they were in the islands would they still be craving KFC?
(Pan Pacific fa’afoaletui)

The distinction that is drawn between the foods of home, which are considered sources of physical, emotional and spiritual satisfaction (as discussed further later) and New Zealand derived foods, which are not so considered, reduces the potential for Pacific migrants to discriminate between New Zealand derived foods of comparatively high nutritional value and those with lower nutritional value, because both are of lower emotional and spiritual value than the foods of home.

In Samoa even though there’s heaps of extended family and there isn’t heaps of food you still manage to get by...and even though it isn’t much its still like soul food. And here there’s heaps of foods and we have money to buy whatever food but there’s still something missing. It not the same feeling...that satisfaction is not the same, you don’t feel it inside. All that food is here but its nothing compared to back home. ...
(Pan Pacific fa’afoaletui)
Food preparation, distribution and apportionment

In the Pacific

The starting point for the preparation, distribution and apportionment of food in the Pacific nations is the value placed on abundance, which provides tangible evidence of wealth and prosperity, and elevated family status.

We made fresh foods everyday. Every day we had fruits... there’s plenty out there
(Niue fa’a faletui)

In communal feasts we ensure that there are abundant quantities and that the food is of the best quality
(Tokelauan fa’a faletui)

Linked to the value placed on abundance is the practise of hospitality, which provides an avenue for the distribution and consumption of a form of wealth that is actually perishable and needs to be consumed, rather than stored and accumulated.

We give the best to our visitors to make them feel welcome and accepted
(Tokelauan individual interview)

Consequently, the preparation, distribution and consumption of food are subject to rules, procedures and etiquettes. Food preparation in the Pacific nations is largely by traditional means, including earth ovens, and using metal pots over open fires.

Distribution occurs at different levels, including the village and the household, and, in some cases the island. For example, fish catches in the village subsistence context are not necessarily the property of the fisher, but are distributed among agreed recipients. In many parts of the Polynesian Pacific, fish catches are distributed among the village households by being laid out in piles or bunches on the beach, with one bunch or pile for each recipient household. The practice in Tokelau was described as follows:

I think equity, its important, when food that is gathered from communal lands are distributed to all the different families. You might have heard the fatupaepae, that person the very important role of the women of the family that does that, so the food that's gathered is brought to the fatupaepae..., and her job is to make sure the food is redistributed to all the families. Food has been built into the culture like all Polynesians. Like someone visits you, you got to have something, and unlike here [in New Zealand when] you [are] offer[ed] some food, you can say no thank you, but over there [in Tokelau] it’s like bad manners if you refuse; so it’s built into the culture.... Food, it’s the kind of way to expressing many things, yes it does, it expresses the sense
of accepting the person and also this idea of, I'm going to give you everything. I... think it goes beyond... what we expect here as hospitality. (Tokelauan individual interview)

Rites of passage such as weddings and funerals require significant quantities of food to be provided by those (usually extended kin groupings) responsible for hosting them. The types and quantities of food to be contributed tend to be very clearly defined and known. This knowledge is an embodied knowledge that is an element of people’s habitus, acquired during the course of their upbringings and frequent exposure to these events and meeting their demands. The apportionment of food in the Cook Islands was described as follows:

... it’s decided by the chief cooks really, those that are in the kitchen, those that are cooking, they usually like, here in New Zealand its decided by them, also back home in the Cook Islands it’s decided by the women because the men do not play the role in the kitchen, like we do here in New Zealand.... once its bought into the kitchen [from the umu] it’s left there and then it’s for the women to decided how much of it goes out, who get the... thigh of the pork or the back leg of the pork and it’s usually decided by the women or the chief cooks those that are in the kitchen. (Cook Island individual interview)

At such relatively large-scale events, food is apportioned and served directly to those who are eating, a practice which serves to place limits on the amounts consumed by individuals. That contrasts with buffet style systems at some aiga or community events, held in New Zealand, which place few restrictions on individual consumption and can facilitate, if not actually encourage, over consumption of food. As noted by many fa’afaletui participants, in the daily, workaday village context, meals tend to be taken only twice a day, once in the morning after having done early morning work, and once at night as a household group.

Within the household, the daily distribution and apportionment of food is likewise regulated to ensure that the different generations and status levels within the household are adequately and appropriately fed. Decision making about the preparation and serving of food was primarily the responsibility of mothers in some Pacific nations. The practice of feeding elders first and the importance of hospitality and feeding visitors also serve to reinforce the importance of food and dining within the wider social system.

Yes we have special rules about certain foods, fish and other foods e.g. Turtles and how and who gets certain parts of turtle – or any at all; the same with tuna. The head of the turtle and the fish have to go first to Patele (the island priest) faamuamua Patele. (Tokelauan fa’afaletui)
Peoples of various status’ and roles have specific portions. We have a very formal system of apportionment.
(Samoan individual interview)

In New Zealand

The preparation of food in New Zealand was undertaken with different facilities from those generally available in the Pacific nations, such as electric and gas stoves and ovens and microwave ovens. As already noted several times, the pressures associated with large households and multiple income earners working different shifts encourage the purchase of prepared meals and other convenience foods of generally low nutritional value.

Decision making about the preparation and serving of food in New Zealand was less clear cut than in the Pacific nations and could extend to include all household members, including children. Food is more likely to be made available in a buffet format rather than be served in set portions and consequently, there is less regulation of quantity and content. At the same time, practices associated with abundance and hospitality, such as ensuring that guests are fed first, have been retained. For example, the value placed on subsistence based abundance continues in the New Zealand cash economy context, as a Tokelauan participant explained:

And this is why they turn to, and the other value is that you must never, you know if you feed your guests you have got to make sure that he or she has enough, don't just give a little bit, ... its got to be enough, and I think the mentality still sort of exists today [here in New Zealand]... It’s something that I have been trying to change, unsuccessfully – their attitude about food, the attitude about kind of hospitality. Even when I got married, ... I knew exactly what was going to happen, but I suggested to my family and to her family, that, you know, don't worry, that we are going to cater, we are going to go to a hotel and we are going to make sure that we get enough food. Oh boy! It ballooned, went down the hill. I was surprised, they were [so] very angry. I think this is because [of] how they feel, it’s because this is them, this is where they are coming and they have got to do it. And anyway, it ended up we wasted a lot of food, wasted a lot food.

When my daughter got married, I managed to sort of cut down, but we still ended up wasting a lot of food, and that's food that all the families would have contributed.... They haven't quite accepted the concept that we can actually cook the exact amount of food that would be enough for everybody; that hasn't [been] accepted... They would rather... have [more than] enough [than have] one person going away without having enough... That's not seen as a good thing, we lose face if that happens; yes, you lose face, you’re not doing your duty... not a good host... But they have always associated that with food; food is everything you know, when it comes to hosting visitors or
even important days, you know when you going to arrange something like that, then you have to go all the way and make sure that [there are] no half measures.

(Tokelauan individual interview)

Etiquettes of consumption

In the Pacific

Etiquettes of consumption, at all levels, included prayers which served to reinforce the status of food as an element within an overall structure of sacred life sustaining, meaning giving relationships. In this context, food is a source of satisfaction; a total sense of physical, emotional and spiritual satisfaction – or *malie*, that’s not only physical but is also spiritual and emotional. As a Samoan participant put it:

*So it’s malie. And you don’t get malie from McDonalds or butter chicken – you get a full stomach.*

The sense of *malie* derives from the food being produced from land that people have a relationship with and produced by the people they have relationships with. For example, for Niueans, the taro from Niue is considered to be especially sweet, the coconut crab, is sweet, and the other food that is produced from Niue is sweet. For them, there is a clear association with their land and the taste of that food and the process by which they got the food, and the sweetness (or tastiness) of the food.

Food was apportioned and received in recognition of this, and was to be eaten well and not to excess. There is a Samoan metaphor to the effect that:

*...even the fish that swims in the sea is already apportioned. You might swim in the sea, you fish, but we know which bits are going to who. Every bird that flies is already apportioned. It’s highly systematised.*

In New Zealand

As in the homeland Pacific nations, meals in New Zealand are preceded by prayers. Meals that have been prepared in the home and eaten together at family meals are associated with the same or similar etiquettes to those associated with meals in the Pacific nations. A quite sharp distinction is found with takeaway meals, however. These are often taken home and eaten individually without sharing, or eaten in cars and other places outside the home.
The Cook Island group made a sharp distinction between home cooked food and takeaway food, with the former providing “malie” or spiritual satisfaction, and the latter none at all. Niueans distinguished food that they received from Niue and food sourced in New Zealand. As discussed earlier, food from Niue was considered malie, whereas food sourced in New Zealand was a form of sustenance, but carried no significance for them beyond that because they were alienated from its source. They have no connection with those who produced it, the land from which it grew, or the people who carried out other processing and preparation.

The timing of meals in New Zealand is influenced by the rhythms of employment and other engagements, rather than those directly associated with food production and preparation as is the case in homeland Pacific village based life. Portion servings have been replaced in New Zealand by buffet style self-serving, which makes the final stage of food distribution an individual rather than collective matter. As in the Pacific, big meals are eaten at night, but this meal will have been preceded by at least one more meal than would have been the case in a Pacific homeland village. The more systematised Pacific rituals are usually reverted to in New Zealand when entertaining visitors and at other collective gatherings such as weddings and funerals.

In times of food shortage, pride can be a barrier to requesting help, in which case people tend to go without. On the other hand, people who are able to will often buy groceries for those they know to be going short.

**Contemporary realities, opportunities and challenges**

Some Pacific people’s vulnerability to food insecurity in New Zealand is increased by their low socioeconomic position, low incomes and shortage of work, which can limit their ability to buy better quality foods.

*In New Zealand we eat what is affordable and accessible. In our Pacific nation we ate fresh and organic foods. (Tokelauan fa’afaletui)*

Modest incomes coupled with traditional cultural obligations such as faalavelave compound the problem for some. On the other hand, not all food insecurity was the result of low incomes because the ability of some to buy already cooked food and avoid the need to prepare it themselves was another source of food insecurity when the food purchased was of lower nutritional value than food that they might prepare themselves.

Focus group participants considered that New Zealand offered opportunities for Pacific people to achieve food security, and adequate levels of physical activity as well. For example, they observed that there are more food choices here, and the availability of education, training and better incomes make it possible for people to improve their
employment prospects, choice and socioeconomic situations, and achieve food security through their ability to purchase good quality food.

*New Zealand provides us with choices of foods; increased incomes provide us with good quality food.*

(Cook Island fa’afaletui)

They can also choose to be more directly involved in producing and preparing their own food if they choose to. However, the greater emotional and spiritual significance attached to Pacific homeland foods than to those derived from New Zealand means that Pacific people are less disposed to distinguish between “good” and “bad” varieties of the latter, as noted earlier.

Barriers to engaging in healthy levels of physical activity are various. The lack of necessity to be physically active in a vigorous way represents at the very least an absence of encouragement to be active. The prevalence of sedentary forms of entertainment and recreation, such as television, along with labour saving technologies for recreational and non-recreational activities present another set of barriers.

*Television, and technology coupled with fatigue and over commitment and sometimes illness are sometimes barriers to physical activity*

(Cook Island fa’afaletui)

The effects of poor diet and lack of vigorous physical activity can then combine to pose further barriers to physical activity through outcomes such as obesity, diabetes, and other disabilities. The health protective potential of physical activity is recognised and focus group members considered that New Zealand offers opportunities for Pacific people to increase their levels of physical activity in recreational forms through such facilities as sports teams, gyms, and free open outdoor spaces. As this Tokelauan participant said:

*I think that most people think that only people with diabetes need to exercise, that's the problem. I think you really need to make people understand that you don't have to have diabetes, you don't have to have a medical conditions. *[T]he whole idea is to prevent getting it so get out and be active. Churches and communities are good venues; they usually have facilities to have these kinds of activities.*

(Tokelauan fa’afaletui)

**Drivers of change for enhancing food security and physical activity for Pacific people in New Zealand.**

The collective nature of Pacific cultures provides the best basis of strength for Pacific people in New Zealand to convert the challenges they face into successful responses to achieving healthy diets and lifestyles in New Zealand. The necessary networks and
knowledge exist and can potentially be mobilised through collective activities and forms of control drawing on culturally based collectives and institutions such as aiga, reunions, and church activities. At the same time, New Zealand has the infrastructure, expertise and facilities to support education in general and public health education in particular.

Group or collective activities, reunions, family events, church activities are all drivers for us to become physically active and be food secure...In New Zealand opportunities and resources like parks, gyms, and sports provide avenues to become physically active and strong.

(Cook Island fa’a fateui)

Some of the opportunities in NZ that would strengthen and increase our wellbeing and food security is through better public health education that recruits our individual, family and cultural strengths.

(Samoan fa’a fateui)

The cultural disjuncture associated with the migration experience means that it will be important for traditional forms of social and cultural capital to be mobilised in support of the challenge of developing and facilitating successful responses to achieving healthy diets and lifestyles.

It is possible to build collective forms of education and programmes for physical activity, wellness and food security...we can achieve these through communal dialogues and community gatherings for training and education

(Cook Island fa’a fateui)

However, if these forms of capital are to increase their effectiveness they will need to be shaped to respond to the realities of contemporary New Zealand based social and economic relationships.

There has been a noticeable change in Samoan feasting over the last 10 year period. These change have been gradual and there has been much more consciousness about eating well and eating salads and vegetables, even the way we cook is gradually changing for example we no longer use so much coconut cream. Desserts are becoming fruit salads or fruit. We are no longer drinking fizzy drinks and we have replaced these with water. There is a consciousness about the types of food and the exercises that are good for our hearts. The Heart Foundation run an exercise class in our church after which people have a healthy breakfast of fruit salad and cereals. Even at the main church functions we have cut down on foods like pisupo (corned beef) and abundant buffets. We now have dished out meals. In food ritual presentations we no longer use cartons of pisupo, we now use cartons of canned salmon. Even our church leaders are going through changes. They are much more engaged in exercises and physical activities. A lot of our people are involved with Pacific Health Services especially in the areas that
promote healthy eating and healthy action. These changes have come about through careful and far sighted leadership usually provided by women.
(Samoan individual interview)

Family based and individually based sources of strength begin with the ethic of family solidarity and collective wellbeing. This provides a source of motivation for maintaining personal health as a means of maintaining family wellbeing and ensuring the continuation of the past through the present into the future, and for individuals to live to see and enjoy their children’s and grandchildren’s lives. The collective of the family provides a potential support network available to facilitate family based decision making and activities aimed at improving nutrition, diet and levels of physical activity. Other collectives, such as the church, are likewise suitable avenues for initiating, supporting, and enabling healthy living. A Cook Island participant envisaged the Pacific cultural elements of social structures and knowledge being brought together to address contemporary issues in the following ways:

*I think it’s group together, grouping together works and also having key people to run these, like back in the cook islands we have key people [who] would run something; like a key leader would run the vaianatina [and] be the what we call the taua41 or the person who ... specialises in doing such things as the tivaevae, you would have a taua in fishing or a taua in lei making the leis or anything like that. That’s what we need here in New Zealand, a taua to lead these people. Say for instance if I was to run a diabetes focus group for the Cook Island people, I would be the taua knowing as much information as I do and I would be the mouthpiece for a lot of these people who don’t understand as well as I do and I would be able to feed it to them in the language that they can relate to, I think that ... what we probably need is more tauagas in these fields.*

While it goes without saying that the initiative to develop and shape such adaptations of their own cultures must lie with Pacific people themselves, it is desirable, also, that some ownership of the issue be taken by the members and representatives of the dominant Pakeha/Palagi culture(s) as well. Increased mutual understanding between dominant and migrant cultures could contribute positively to Pacific cultural interventions towards physical activity and food security. One example of an area of culture where mutual understanding could be particularly constructive is developing sensitivity to and insight into the impact of individualisation on wellbeing and health. Despite the sharp distinction between the European emphasis on individualism and the Pacific cultural emphasis on the collective, which represents a significant point of cultural difference, there is common ground between the two because both depend on collective arrangements for access to essential things, such as education, health care and other services. Consequently, adaptations that occur within the dominant culture to ease the adaptation of Pacific cultures are likely to be of benefit to the members of the dominant culture, also.

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41 Cf. Tohunga in New Zealand Māori – or expert practitioner in a particular field.
Conclusions and recommendations

The discussion of Pacific concepts of wellbeing, the well self, physical activity, and aspects of the production, preparation and distribution of food has identified and highlighted differences between indigenous practices, as they play out in subsistence-based social and economic life in the Pacific homelands, and in the lives of Pacific people living in New Zealand. The cultural disjuncture that has been identified in that discussion underscores the position of Pacific people in New Zealand as transnational migrants, and this provides a useful theoretical lens to support conclusions and recommendations for initiatives to facilitate improved nutrition and levels of physical activity for Pacific people in New Zealand.

The field of transnational migration research has developed in response to recognition that in most cases migration from one nation to another is not a process whereby the migrant exchanges one nation (the nation of origin) for another (the nation of destination). Rather, transnational migrants tend to maintain connections with their nations and cultures of origin, while simultaneously becoming connected with their destination country. The research field of transnational migration has therefore developed tools to enable investigation of the complexities of transnational migrants’ lives as they develop and maintain their connections to more than one society (Kelly and Lusis, 2006; Vertovec, 2004). Caglar (2001:607) describes the general perspective of the field as follows:

Current scholarship on transnationalism provides a new analytic optic which makes visible the increasing intensity and scope of circular flows of persons, goods, information and symbols triggered by international labour migration. It allows an analysis of how migrants construct and reconstitute their lives as simultaneously embedded in more than one society.

Within the field of transnational migration research, Bourdieu’s concept of habitus has been applied through the idea of the transnational habitus (Guarnizo, 1997; Kelly and Lusis, 2006; Levitt and Waters, 2002; Mountz and Wright, 1996; and Vertovec, 2004). Bourdieu’s concept of habitus and its application to this research is explained and discussed in the introduction to this report.

Transnational migrants are people who find themselves in the position of simultaneously (or sequentially) functioning in cultural contexts with which their habitus is completely congruent and cultural contexts with which their habitus is not completely (or at all) congruent. In the process of becoming acquainted with and established in their destination country, transnational migrants acquire a second, transnational, habitus that is comprised of dispositions that are attuned to the realities and conditions of their new country, but developed from and conditioned by the dispositions that comprise their first habitus. Guarnizo (1997: 311) proposes the following view of a transnational habitus as:
… a particular set of dualistic dispositions that inclines migrants to act and react to specific situations in a manner that can be, but is not always, calculated, and that is not simply a question of conscious acceptance of specific behavioural or sociocultural rules... The transnational habitus incorporates the social position of the migrant and the context in which transmigration occurs.

The cultural disjuncture or dislocation that has been identified in this research stems from the separation of indigenous Pacific socio-cultural factors and practices from the material bases upon which they originally developed. These material bases, or forms of capital, included land and land use rights, ownership and control of the means of the subsistence production of abundant food and shelter, and other items of value such as fine mats, tapa cloth and canoes. These specific material bases do not exist in New Zealand for Pacific people. However, the symbolic significance of many non-material forms and types of capital that originate in the Pacific nations can be encouraged and used to provide a basis for culturally based initiatives to counter the cultural dislocation experienced by Pacific transnational migrants in New Zealand. This was clearly indicated in the fa’afaletui focus groups and interviews when addressing the question of potential “Drivers of change in New Zealand”.

Examples of such non-material forms of capital, or social and cultural capital, are found in various Pacific based institutions in New Zealand and the people who lead and belong to them. Important examples of such institutions, which represent new sites of belonging for Pacific people in New Zealand, are the Pacific Churches in New Zealand, both mainstream or brought from Pacific nations. These have become core institutions of inclusion for Pacific people in New Zealand. They have become gathering places and/or sites of belonging.

The churches have built a strong basis for this over an extended period of time. During the early period of migration, churches and families were the two institutions that provided housing, employment networks, knowledge and skills for Pacific people settling into New Zealand. It was in the churches that Pacific people spoke in their own languages and found an expression of spirituality that was familiar.

At the same time it was the people themselves who created in the churches’ aiga-like formations that supported them, and in turn were supported by them. These practices and formations were the Pacific people’s ‘familiar’ in a new and different context. Pacific cultures and languages, for example, Aoga Amata (Samoan language Pre-schools) were initially founded within Pacific Church communities. It is in the churches’ roles as gatherers and comforters of Pacific peoples that they have come to be regarded as homes away from home and therefore another place of belonging for Pacific peoples.

In recent years, the churches have become locations for Pacific community programmes on wellbeing, health and physical activity. Both fa’afaletui focus groups and individual interviews pointed to the churches as leaders of programmes and practices of Wellbeing, Healthy Eating and Physical activity.
New *aiga*-like formations for Pacific peoples in New Zealand grew in churches, workplaces, and sports clubs, in flating or living situations and sometimes within neighbourhoods. Pacific people take into these new *aiga* formations their understandings of their roles, responsibilities, rights and entitlements as well as their values and the ethics of *aiga*. These reciprocal roles include ensuring the physical and spiritual wellbeing of *aiga* which is inclusive of physical activity and food security. As such, churches, *aiga* and new *aiga* formations are Pacific cultural institutions that can be recruited to provide and support interventions and programmes to enhance wellbeing, food security and levels of physical activity.

The churches are centres of both Pacific cultural activity and gatherings where food is served. They are also locations of collectives of Pacific people. These organisations already encourage cultural activities that involve forms of strenuous physical activity as in dance and sports. These could provide culturally acceptable avenues that encourage the development and maintenance of levels of physical wellbeing on a more systematic basis. To some extent this is already happening, as the research participants have indicated, but the seedling could develop into a much more blooming flower. Likewise, gatherings that involve food and celebration have begun to incorporate more healthy foods. These avenues could be more actively developed to encourage good practices in cooking methods, meal preparation and use of a greater variety of food types. The apportionment of food noted in this study indicates that there is a cultural basis on which to consider alternatives to buffet styles of food serving.

The churches also offer opportunity for discussion and education around the important relationships between physical activity, eating and health. As this research has shown, the motivation of people to change behaviours needs to be based much more on the relational nature of Pacific cultures rather than the more common appeal in New Zealand to individual body shape, health and longevity. Motivation in such cultures is more likely to be effective if it relates to the health and wellbeing of others in the extended family, such as grandchildren, rather an appeal to self interest and individual wellbeing.

The young and fast growing Pacific population of New Zealand will continue to experience and be affected by cultural dislocation unless Pacific cultural knowledge and practices, including those associated with food security and physical activity, are applied in new ways that reflect the material realities of life in New Zealand while at the same time retaining and building on indigenous Pacific cultural strengths.
4. Afterword

Introduction
The emphasis of this research upon socio-cultural factors associated with food security and physical activity has focused research attention and effort on identifying the cultural foundations of behaviours and practices associated with physical activity and with food selection, preparation, consumption and preferences, for members of the Māori and Pacific populations of New Zealand. In the context of public health, the purpose of such attention and effort must be to identify and inform the development of interventions that will influence and encourage changes in behaviours and practices that will lead to better health outcomes for the members of those populations.

The separate reports of the Māori and Pacific components of this research have each identified the cultural and material foundations of behaviour pertaining to their respective cultures and identified and discussed areas of intervention that would build on existing cultural strengths to foster an improvement in the levels of food security and physical activity for Māori and Pacific people in New Zealand. While the particular areas of intervention identified in each report differ in their details, there are commonalities. In essence, each set of recommendations emphasises the importance of communal approaches to effecting behaviour change. A further commonality is that the basis of such communal approaches must be firmly grounded in existing cultural frameworks and build on existing strengths. When the indigenous material foundations of cultural practices are absent, as in the case of Pacific people in New Zealand, or severely depleted, as is the case, to varying degrees, for Māori, there nonetheless remain symbolic forms that can be built upon and adapted to function upon a foundation of contemporary New Zealand economic and social frameworks.

Interventions that are developed from this research must address at least four broad areas that are relevant to the issue of food security for Māori and Pacific people in New Zealand. The four areas are policy, the community, industry and commerce, and personal agency. These are discussed, in turn, next.

Policy
This research was commissioned as part of a policy focus on cancer prevention, with particular reference to the combined contributions of inadequate levels of nutrition and physical activity to high rates of morbidity and mortality for a number of diseases, including cancer. Any interventions that are developed must be regarded as long term investments in the health of present and future generations of Māori and Pacific people. As these populations increase as a proportion of the general population, their health status will come, increasingly, to represent the health status of the country as a whole.

The emphasis of interventions must be on prevention and they must be affordable and cost effective. While affordability is always an important characteristic, that importance is heightened in the present environment of economic restraint. In this current environment it is important that interventions informed by this research be realistic in
terms of the balance of contributions and support that can be expected from government, central and local, and other sources such as community organisations, and from commerce and industry.

The recommendations in both components of the report allow considerable flexibility in determining the balance of contributions referred to above. For example, the Pacific report emphasised the current and potential role of Pacific Churches in sponsoring and facilitating the reconfiguring of indigenous Pacific cultural forms and structures to be sustainable in the context of New Zealand social and economic realities. Such a reconfiguration could only be successfully implemented under Pacific community leadership and initiative, so the central model would be a devolved model, rather than a centralised model of government control. At the same time, however, such an intervention would require support from the State. This support could be in various forms, including direct funding, and support in kind through the provision of facilities, training, and evaluation services, for example. The Pacific example just discussed could equally describe a potential Māori initiative, but one built on marae, iwi and runanga based organisations rather than churches.

Interventions that are based on broad platforms of support such as suggested here are well placed to ensure the maintenance of primary stakeholder control, be cost effective, and maintain a long term view. In the context of enhancing food security and physical activity, the focus of such devolved models would be upon fostering and reconfiguring the indigenous cultural forms and practices that this research has identified to enhance their ability to support and reinforce behaviours and practices that will encourage healthy eating and physical activity in contemporary New Zealand.

Community
The community focused approach that has been discussed already here, and in some detail in the two components of the report, has the potential to facilitate significant breadth and depth of influence. For example, initiatives based in Pacific churches and marae can have ready access to other community based or located organisations and facilities such as schools, community centres, local government, local businesses and, of course, other churches and marae. Being located within local communities has the potential to increase accessibility and accountability for and to local stakeholders. Inter-community communication can foster a spirit of positive competition among those working within the field which has the potential to encourage innovation and maintain enthusiasm.

Commerce and Industry
Commerce and industry comprise a significant part of the wider environment within which any initiative related to food security and physical activity will be implemented. This is particularly the case for food, because most of the food that is consumed is purchased in one form or another from retail businesses. Māori and Pacific community led interventions aimed at improving food security should engage with those areas of commerce and industry that are involved in the production, distribution and sale of food with the aim of reinforcing community and consumer pressure to influence the types of
foods that retailers sell and promote. Sustained engagement with the food industry has the potential to influence change in food content, such as has been achieved in the area of reduced levels of fat and salt in some cases, for example, or with food labeling. While such engagement by local actors in a devolved model might not be sufficient alone, it would be a valuable counterpart, source of support and source of encouragement to centralised initiatives based on regulation and legislation, for example, and would be worthy of receiving material government support.

**Personal agency**

This discussion began by noting the research focus on identifying the cultural foundations of behaviours and practices associated with physical activity and with food selection, preparation, consumption and preferences for members of the Māori and Pacific populations of New Zealand. Such behaviours and practices are, in the end, reflected in the actions that are carried out by individual people. But, as the preceding discussion has clearly demonstrated, these individual actions are not carried out in isolation from the actions of others, and they are not carried out in isolation from identifiable cultural foundations. It is important, therefore, that any initiatives informed by this research incorporate a balanced approach to the linked issues of structure and agency.

The concept of agency is reflected in the personal element of behaviours and practices associated with food security and physical activity; in the choices and decisions that people make about what they will eat and do. The concept of structure is reflected in the cultural foundations that have been spoken of. In terms of the body of Practice theory that informs this research, structure and agency are considered to be linked in an interactive relationship in which 1) the actions that people undertake are understood to be influenced by their cultural background, and 2) the cultural background is subject to being changed as a result of the actions that people undertake. The types of recommendations that have been made in the two components of the research report amount to the creative and conscious exercise of agency to modify aspects of cultural background that are based on indigenous material foundations that do not exist in New Zealand.

It is important to emphasise the mutuality of agency and structure in order to minimise the potential for the goal of changing behaviours and practices to be conceived simply as a publicity or education campaign that would focus only on the personal level of agency, without reference to the structural level of culture.
5. References


Ministry of Pacific Island Affairs (nd) www.mpia.govt.nz/information/understanding-about-pacific-peoples


Appendix 1. Information Sheets and Consent Forms

Information Sheet

You are invited to take part in research into:

Food security and physical activity for Māori and Pacific people

The Family Centre Social Policy Research Unit is carrying out a research study food security and physical activity for Māori and Pacific people.

In this research we will carry out separate focus groups with Māori and people from different Pacific groups. Altogether, 12 focus groups will be held, six with Māori and six with Pacific people. Each group will have about 10 people who will discuss a range of questions about what they eat, where they eat, what they like to eat, and the sorts of physical activities they take part in. In addition, individual interviews will be conducted with 12 key individuals – people who have a good knowledge and understanding of their communities and their practices with regard to food and physical activity.

This research is being funded by the Health Research Council of New Zealand and the Ministry of Health as part of a programme to improve food security and participation in physical activity in order to help reduce the rates of cancer and other chronic diseases in our communities.

We thank you for letting us tell you about this research and hope you will agree to take part in it by either participating in one of our focus groups, or being interviewed as a key individual.

The principal researcher in this project is Charles Waldegrave. He can be contacted at The Family Centre
PO Box 31 050
Lower Hutt
Phone 04 569 7112

This research has been approved by the Health and Disability Multi-region Ethics Committee. If you have any concerns about the study, you may contact the Multi-region Ethics Committee at Ministry of Health
10th floor, 180 Molesworth Street
PO Box 5013, Wellington

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Consent Form

Food security and physical activity for Māori and Pacific people

Consent Form for focus group and interview participants

I have read and I understand the information sheet relating to the above study. I have had the opportunity to discuss this study and I am satisfied with the answers I have been given.

I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time.

I understand that my participation in this study is confidential and that no material which could identify me will be used in any reports on this study.

I agree to have my focus group discussion/interview audio-taped.

I understand that I will receive a contribution equivalent to a value of $25 for taking part in this study, and that I will receive a copy of a final report of the study when it is completed.

I ____________________________________________ hereby consent to take part in this study.

Date __________________________

Signature _______________________

This research has been approved by the Health and Disability Multi-region Ethics Committee. If you have any concerns about the study, you may contact the Multi-region Ethics Committee at
Ministry of Health
10th floor, 180 Molesworth Street
PO Box 5013,
Wellington

The principal researcher in this project is Charles Waldegrave. He can be contacted at
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PO Box 31 050
Lower Hutt
Phone 04 569 7112
Appendix 2. Question-lines
## Māori question line guide

### THEME 1: UNDERSTANDING PERCEPTIONS ABOUT FOOD

<table>
<thead>
<tr>
<th>Te Taha Tinana</th>
<th>Te Taha Whanau</th>
<th>Te Taha Hinengaro</th>
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<tbody>
<tr>
<td>Physical and Spiritual perceptions about food</td>
<td>The social meaning of food.</td>
<td>Psychological perspectives of food.</td>
</tr>
</tbody>
</table>

Can you talk about your physical and spiritual perceptions about food?
Can you talk about your beliefs, values and attitudes in relation to the social meaning of food?
Can you talk about food in relation to what it means to you emotionally, psychologically or mentally?

### THEME 2. SOCIO-CULTURAL DETERMINANTS OF FOOD SECURITY and FACTORS WHICH INFLUENCE FOOD CHOICE

Do you consider that you have access to a reliable and constant source of healthy food?
What are the factors that determine what you eat? (Besides when you’re hungry)
Are you able to access food in socially acceptable ways? Share food costs, prepare meals with others in your social or family circles?
Can you talk about how your social surroundings, whanau, friends, and community, influence your eating behaviours.
Are you able to access food in culturally acceptable ways?
What are your cultural beliefs, values, and attitudes in relation to:
- How much food you consume?
- What you eat?
- How food is prepared and;
- How food is cooked?
Are you able to access food in culturally acceptable ways?

### THEME 3: ENGAGING IN PHYSICAL ACTIVITY

What are the factors that influence healthy physical activity choices?
Can you talk about how food production and lifestyle choices have impacted on you in terms of physical activity?
Are you able to access food in ways that would mean you would have to exert physical activity to do so?
Do you have access to knowledge and resources to physical activity and exercise that incorporate Māori cultural values?
In relation to the social meanings associated with physical activity, how do those factors impact on:
- Where you are physically active?
- When you are physically active?
- Who you are physically active with?
Can you talk about your beliefs, values and attitudes in relation to the social meanings associated with physical activity?
Do psychological factors determine how often you are physically active and what types of activities you do?
What are your perceptions of physical activity and culture?

### THEME 4: FACTORS THAT CAN ENHANCE FOOD SECURITY AND PHYSICAL ACTIVITY

What factors can enhance food security and physical activity?
What factors can enhance food security and physical activity?
What factors can enhance food security and physical activity?

### THEME 5: BARRIERS TO FOOD SECURITY AND PHYSICAL ACTIVITY.

What factors inhibit or prevent food security?
What factors inhibit or prevent food security?
What factors inhibit or prevent food security?
What factors inhibit or prevent or act as barriers to participating in physical activity or exercise?
What factors inhibit or prevent or act as barriers to participating in physical activity or exercise?
What factors inhibit or prevent or act as barriers to participating in physical activity or exercise?
Pacific question line

Pacific (Faafaletui) Food Security and Physical Activity
Focus Group Research Questions

Session 1

Self and Wellbeing Questions
- The well self questions
  - What is your understanding of the Samoan/Pacific Peoples self?
  - What is your understanding of the Samoan/Pacific Peoples well self?

- The wellbeing questions
  - What is your understanding of Samoan/Pacific Peoples conceptions and descriptions of well being?

Food Sources and Food Types
- What were the indigenous food sources and types that supported wellbeing and the well-self?
- When and where were they caught or gathered from?
- How were they caught and gathered?
- At times of crisis where were food sourced from?
- What were the kinds of foods and ways of serving these for the different life stages e.g. for babies, pregnant women, elderly or the sick?

Decision Making
- Who made decisions around what was to be prepared and served at meal times?

Food preparation
- What were the indigenous methods of food preparations?

Apportionment
- What were the indigenous approaches to food apportionment?

Etiquettes of Food Consumption
- What were the etiquettes of food consumption?
- What were the times of meals?

Food Rituals
- What were the indigenous food rituals and ceremonies of procurement, apportioning, preparation and consumption?
- At times of crisis and food shortage what were the rituals of sourcing food?

Cultural Values
- What are our indigenous values about food procurement, apportionment, preparation, provision, etiquettes and rituals?
Physical Activity
- What were the indigenous perceptions and practices regarding a physically active life?
- What was it in their way of life that kept people fit and healthy?

Session 2
Present Day Realities

Self and Wellbeing Questions

Food Sources and Food Types
- What are the food sources and types now?
- Where are they sourced from?
- How were they caught and/or gathered?
- At times of crisis or food shortage where are foods being procured from?
- What are the rituals of sourcing food now?
- What are the kinds of foods and ways of serving these for the different life stages e.g. for babies, pregnant women, elderly or the sick?

Decision Making
- Who makes decisions around what was to be prepared and served at meal times?

Food Preparation
- What are our present methods of food preparations? Why?

Apportionment
- What are our present approaches to food apportionment?

Etiquette of Food Consumption
- What are our present etiquettes of food consumption?
- What are the times of our meals?

Food Rituals
- What are our present food rituals and ceremonies of procurement, apportioning (allocation and distribution), preparation and consumption?
- At times of crisis and food shortage what are the rituals of sourcing food?

Cultural Values
- What are our present day values about food procurement, apportionment, preparation, provision, etiquettes and rituals?

Physical Activity
- What are the present day perceptions and practices regarding ‘physical activity’?
- Why do you think this is the case?
Session 3

**Additional Present Day Realities**
- Identify realities of life in New Zealand that contribute to Pacific Peoples being vulnerable to food insecurity for example socio-economic realities or cultural changes through living in New Zealand.
- Identify opportunities that New Zealand provides to Pacific People becoming food secure and achieving wellbeing.

**Physical Activity**
- What are the present day realities that inhibit Samoan/Pacific Peoples from being physically active, living a physically active life?
- Identify opportunities that New Zealand provides that support Samoan/Pacific Peoples living a physically active life or increasing our present physical activity?
- How could more physical activity be achieved in today’s climate?

Session 4

**Drivers**
- What are the strengths from our culture that would enable Samoan/Pacific Peoples to take more control of our wellbeing and become more food secure?
- What are the strengths and opportunities in New Zealand that would strengthen Samoan/Pacific People to increase our wellbeing and food security?
- What are our families and individual strengths that will help us to become food secure and achieve wellbeing?
- What are the reasons why we Samoans/Pacific People want to become food secure/achieve wellbeing and live longer?
- Identify what we as Samoan/Pacific Peoples, as families, as churches, communities and cultures can do to bring safety, wellbeing and enhanced food security and physical activity back into our everyday realities.
- Identify what we as Samoan/Pacific Peoples, as families, as churches, communities and cultures can do to prevent further food insecurity and its consequences from harming our collective wellbeing.

**Physical Activity drivers**
- Identify the impacts of life in New Zealand on our cultural concepts, values and practices in relation to living physically active lives.
- What terms, concepts, models best capture this for you as Samoan/ Pacific Peoples?