

ACCULTURATION WITHIN NEW ZEALAND PACIFIC COMMUNITIES; HOW DOES  
THIS INFLUENCE DIET AND HEALTH?

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### **Abstract**

The aim of this qualitative study was to examine eating related values, principles and practices of individuals of Pacific ethnicity who are living in New Zealand and how this influenced their diet and health. The study also explored themes of acculturation and the degree to which acculturation may influence diet and health. Thirty individuals who identified as Pacific participated in the study, which were audio taped, transcribed and subjected to thematic analysis. Four major themes were derived with three to five supporting sub-themes per theme. The themes identified were: Pacific cultural identity, Translation of Pacific culture into the New Zealand context, Challenges to health due to living in New Zealand and Solutions. These findings were discussed within the broader context of how acculturation, and the resulting practices and principles influence health and health outcomes.

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*Table 1. Outlines the four dominant themes and the underlying sub-themes.* #

*Dominant themes: Pacific cultural identity, Translation of Pacific culture into the New Zealand context, Challenges to health due to living in New Zealand and Solutions*

## **Chapter One**

### **Acculturation within New Zealand Pacific Communities; how does this influence diet and health?**

When it comes to the issues of healthy eating and food related disease it is necessary to consider both biological and social factors. Our bodies require certain foods and level of food intake in order to be healthy, function effectively in particular roles, and to meet our biological needs. Thus, to some extent biology dictates our food intake. However cultural norms, beliefs, and practices provide meaning and a context underpinning food intake, and therefore exert a significant influence on our food choices (“good” and “bad” foods), what constitutes a healthy person and healthy body size, and what is an acceptable level of activity and exercise. In other words, cultural factors influence our judgments concerning the values of specific foods and food related practices and also spell out what a healthy and viable lifestyle looks like.

#### *Biology and genetics in relation to food and health*

There have been many advances in the modern era which have enabled better research into the links between genetics and food related disease. In addition, molecular biological techniques have advanced within the last few decades, aiding in the study of ethnic or racial differences in health that are commonly assumed to have a genetic causation (Pearce et al, 2004). It is often assumed that diseases, such as diabetes, obesity or heart failure, are genetic because they run in families and differ between different ethnic groups. However, this relationship may also reflect a common lifestyle and environmental situation, rather than a genetic link. The common confusion between genotype and phenotype is potentially detrimental to the healthcare services and initiatives directed at minority groups. Genetic factors indeed do have a large influence on health, as reported by Pearce et al (2004), but they

are simply “just one piece of a much larger picture” (pg. 1071). People of all ethnicities are constantly interacting and developing with their environment over the course of a lifetime. Thus discussion surrounding genetic tendencies and their impact on diet is underpinned by assumptions about who is ‘normal’ and what is a ‘normal’ environment, which makes analysis of the relationship between diet, biology, and culture complex.

The lack of major genetic differences between ethnic groups, combined with significant variation in lifestyle observed between different ethnic groups, suggest that environmental factors are a more important influence on dietary practices than genetics (Pearce et al, 2004). For example, a New Zealand study conducted in 1994 (Marshall et al, as cited in Pearce et al, 2004) suggested that despite Maori people having the ADH2-2 gene variation which protects them from succumbing to alcoholism, a genetic variation that other groups do not have, Maori still have more prevalent alcohol abuse rates than other ethnic groups in New Zealand due to political, economic, social and cultural factors. In this example and others, an exaggerated focus on genetics may deflect attention and resources from more important, and controllable, influences on health; especially in relation to minority groups.

While genetics does not explain health predispositions to a great extent, the ways individuals interact with their environment does play a large role in determining people’s health. With regard to food, food choices made naturally by individuals in the absence of cultural or social pressures tend toward a healthy and balanced diet. Clara Davis, a paediatrician, conducted experiments throughout the 1920s and 1930s (as cited in Fischler, 1980) and found that children, when given the option of a selection of food or a ‘cafeteria diet’ (trays containing over twenty varieties of food), would over time choose a selection of food that enabled a balanced diet. Based on the results of this experiment, Fischler (1980) was able to argue that to some extent, food preferences at the biological and individual level



can be reliable and effective nutritional cues. Biological taste preferences help guide these cues. Cravings for different types of foods are often the result of dietary deficiencies in an individual, which results in the desire for foods that will provide the nutrients needed to bring an individual back to a healthy state. In this way biological needs drive much of our food choices and guide us towards relatively healthy food choice decisions.

Studies by Dr Weston Price, named the “Charles Darwin of Nutrition”, showed how people living in natural preindustrial settings tended to biologically choose healthy diets when possible. Price studied 14 different indigenous groups consuming their “original” diets. Populations he studied were selected on the basis of their reputation for possessing excellent physical and emotional health as well as a total dependence upon their original indigenous diet (Price, 1939). While foods consumed varied by group, he found all groups consumed roughly 65% animal foods and 35% plant based foods around the world (Price, 1939). Price also found that when an assortment of foods was available, indigenous groups would naturally eat a balanced diet. For example, Price found no groups that were 100% vegan (Price, 1939), since consuming animal products helps people greatly in obtaining healthy levels of protein, fat and vitamins (Fallon & Enig, 2000). Mintz found similar consistency in foods consumed around the world in preindustrial conditions, discovering that a diet centred around “‘core, fringe and legume (CLF)’ [foods]...form a basic pattern in all food consumption” (Mintz, 1992, as cited in Caplan, 1996, pg. 215). What is most important in the conclusions of these two scholars is that they found a great deal of consistency in the dietary preferences of people living in preindustrial conditions. This suggests that if people only have the choice of eating a limited set of naturally occurring foods they will tend to biologically consume healthy food, given natural tendencies to eat a balanced diet. This is true then even given the effect of cultural influences on the groups Price studied; while cultural values and practices in the groups studied surely guided food choice, diet and

lifestyle decisions, these cultural influences did not appear to contradict biological imperatives.

#### *Cultural and Social factors in influencing food choices*

While biological needs have dictated healthy food choice for much of human history, in modern times food preference has become more complicated and also more subject to cultural and social cues. Anthropologist, Sidney Mintz (1992, as cited in Caplan, 1996) has argued that historically human beings have eaten what is (approximately) good for them (nutritionally). However, since the nineteenth and twentieth centuries, particularly due to the introduction of increased fat and sugar into human diets, our natural relationship to food has changed, and with it our food habits have changed as a result (Mintz 1992, as cited in Caplan, 1996).

This is mainly because sugar and fat are highly palatable, and it has been shown that people will consume more than healthy amounts of what they find palatable, while by contrast will eat less than healthy amounts of what they find unpalatable (Mennell, 1991). This has resulted in people eating too much fat and sugar than is nutritionally needed, due to its higher palatability (Mintz, 1992, as cited Caplan, 1996). People now often consume foods that are palatable but nutritionally incomplete or unhealthy. When people have a greater variety of food they will also tend to consume more (Sorensen et al, 2003), which means that in the modern era with more food variety, people will tend to consume more foods than is healthy. Consumption of more foods and of more nutritionally incomplete foods have contributed to the increasing prevalence of food related diseases such as obesity and Type 2 diabetes at a global level.

Also, given greater food choice and availability in the modern era, people have been able to make food choices based more on personal, cultural and social preferences rather than just biological need. For example, veganism has developed in modern times as a dietary

philosophy that prioritizes animal rights over biological nutrition. Evidence indicates that animal products are naturally consumed by humans, and help with a range of human developmental needs, ranging from proper brain function to protection from disease (Fallon & Enig, 2000), therefore, avoiding consumption of all animal products is unnatural for humans. Yet, made possible by modern food technology, veganism has become a normal dietary choice state for millions of people around the world who choose a diet based first on moral reasons and only secondarily on biological need.

Similarly, obesity has become a problem of epidemic proportions in the modern era, whereas in preindustrial times it would have been rare given the less abundant and less processed food sources available. The World Health Organization (WHO) formally recognised obesity as a global epidemic in 1997. In 2008 the WHO stated that 1.5 billion adults were overweight, and that today, 2.8 million people are dying each year as a result of being obese. While this was once considered to be a problem for only high income countries, the rate of obesity is now worldwide, with sub-Saharan Africa as the only remaining region not affected (World Health Organization, 2013). Adults and children in lower-income groups and in racial minority groups, such as American Indians, Pacific Islanders, African Americans and Hispanics/Latinos carry substantially higher risk for obesity than comparative populations (Williams, Crockett, Harrison, & Thomas, 2012). This is often due to overconsumption of high fat and high sugar foods, which would not have been affordable and available in large quantities historically until the nineteenth and twentieth centuries.

Individual preference (for moral or taste reasons) is not the only non-biological determinant of food choice. Culture and society also shape the diets of individuals, as well as reinforcing and better defining cultural identity. In the modern era with more food choices and food abundance, there is greater possible range of cultural expression through groups' food choices. 'Fast Food Nation' and other recent media-related work suggest that a nation's

diet can be more revealing of its cultural character and practices than its literature or art (Kniazeva & Venkatesh, 2007). Food consumption in modern societies is attributed not just to biological need, but to the ‘complex interplay of cultural, economic, social, political and technological forces’ (Kniazeva & Venkatesh, 2007, pg. 420).

Food in a cultural context can even take on symbolic meaning. Current cultural research often describes food as both a metaphor and a commodity, fulfilling a symbolic purpose for a group of people as well as a practical one. Therefore a better appreciation of the role food symbolically plays in cultural identity is vital in understanding the way individuals relate to food consumption.

*Food as a symbol and an expression of cultural identity*

“The social group prescribes roles and their accompanying symbols [to food], and consumers adopt the roles and symbols suited to their identities” (Levy, 1981, 1999, as cited in Kniazeva & Venkatesh, 2007, pg. 421). The above is a quote by Levy, who theorized that people used and consumed food as a symbolic means of expressing their identities, both personal and cultural. For Levy, the ‘vocabulary’ of cooking and eating was the most important part of this symbolism (Kniazeva & Venkatesh, 2007). This idea has been more recently expressed by Williams, Crockett, Harrison and Thomas (2012) who propose that “food-ways are central to the re-telling of organizing myths and important historical events” (pg. 383) for a group of people, and suggest that eating traditional food connects people on a symbolic level, helping to maintain a group’s identity.

Some examples of the symbolic usage of food as expression of identity illustrate the point. Homemade foods represent ‘a symbolic bulwark against intrusion of the market into the domestic domain’ (Moisio et al, as cited in Kniazeva & Venkatesh, 2007, pg. 421). By contrast, manufactured foods are interpreted as symbols of progress, industrialization and modernization. Natural foods are thought to symbolize the return to nature, eating outside of

the home is considered to symbolize separation, and eating within the home conventional and family unity (Levy, 1981; Kemmer et al., 1998, as cited in Kniazeva & Venkatesh, 2007).

Food also has an important social function in interpersonal relations. Kniazeva and Venkatesh (2007) view food as a powerful tool for the establishment of interpersonal relationships, used to connect and disconnect people by creating or dispelling tensions. The power that food possesses for people is not anymore primarily in its potential to nourish, but in that it ‘possesses the ability to add significance to any human gathering’ (Kniazeva & Venkatesh, 2007, pg. 424).

As a result of 30 in-depth interviews (USA) of food consumption practices and discourses, Kniazeva and Venkatesh (2007) were able to gather an ethnographic account of the ‘multifaceted nature of food’. What is striking from the data collected is that social gatherings involving food enable an individual to consume high fat foods, without the attached guilt that s/he may otherwise feel. It appears that special occasions and good company allow an individual to break routine and indulge in otherwise forbidden foods (Kniazeva & Venkatesh, 2007). While this was studied only in the American context, it is possible that social gatherings in other settings could similarly contribute to a higher degree of overeating unhealthy foods.

For cultures that have histories characterized by oppression cultural food practices are particularly significant (Williams, Crockett, Harrison, & Thomas, 2012). For example, African American (Soul Food) cuisine symbolizes the struggle to survive during times of slavery and economic hardship, especially during periods of limited food options and availability. For oppressed ethnic minorities, ‘un-healthy’ eating habits may also serve to reinforce identity based motivations, whereby ethnic minorities come to view ‘healthy eating’ as a white middle class behaviour (the out group). Thus continuing to eat ‘un-healthy’ food

items reinforces in-group behaviours, and sense of (ethnic) identity (Oyserman et al, 2007, as cited in Williams, Crockett, Harrison, & Thomas, 2012).

*Pacific peoples' eating practices in a traditional setting*

For Pacific peoples living traditionally, food is also more than just something to be eaten - it is a "source of satisfaction; a total sense of physical, emotional and spiritual satisfaction-or *malie*" (King et al, 2012, pg. 131). The *malie* nature of food derives from it being produced by the people consuming it, in a communal setting, using natural resources that are highly valued and important to the people (King et al, 2012). As a result, food produced and consumed on the islands has tremendous importance on many levels, and is part of a holistic understanding of communal wellbeing, which encompasses not just health, but also relational harmony, economic prosperity, and stability of food supply (King et al, 2012).

A focus for Pacific people, traditionally on the importance of food in overall wellbeing, was likely due to the island environment. In an (traditional) island setting there were periodic food shortages resulting in weight loss and a feast or famine mentality (Fitzgerald, 1980). Periodic famines led over time to a focus on the symbolic importance of having abundant food supplies whenever possible, and providing this abundance freely to guests. Food abundance was a symbol of wealth, prosperity and status (King et al, 2012). Having an abundance of food was a form of wealth, whereas being large in body size indicated high social status because it implied someone was affluent enough to eat in abundance. Offering food was synonymous with welcoming and accepting someone, and accepting food offered was the way that guests formed positive relations with hosts. In total due to the emphasis on food and its symbolic nature as a sign of wealth, social acceptance and nourishment, Pacific people traditionally focused a great deal on providing and consuming an abundant amount of food at social occasions whenever possible (King, Tamasese, Parsons, & Waldegrave, 2012).

The primary expression of food abundance, and also the primary form of celebration in Pacific islands, was through large feasts, generally held to mark important occasions for high status individuals. Food provided at feasts was generous, but was also strictly apportioned according to the social status of the guest being served (King et al, 2012). The feasts therefore served to compensate for periodic food shortages, to connect island populations socially and reaffirm group identity, to reemphasize the social status and rank of each individual attending, and to foster greater communal and individual holistic well-being.

Individually and aesthetically, the concern over food availability and emphasis on the need for abundant food led to a corresponding emphasis on the value of large body size. This was particularly emphasized for high status women, or for women who aspired to appear high status, since a large body size was seen to symbolize higher rank in society and a higher degree of beauty: “The perfect women must be fat – that is the most imperative: her neck must be short... she must have no waist, and if nature has cursed her with that defect she must disguise it with draperies... her bust and hips and thighs must be colossal. The women who possess all these perfections will be esteemed chief like and elegant” (Schaff, 2005, p.g. 3).

In some Pacific island settings, the process of ensuring that women were of ample size was formalized into fattening practices. This was particularly formal for high-status women on Nauru. When a high-status woman experienced menses for the first time in Nauru, a three day feast was held, after which the woman would live in a specifically built hut for up to six months, with the sole purpose of fattening through feasting and relaxation. The purpose was so that the woman, in a context on the islands with limited food supplies, had enough fat on herself in order to successfully carry a child to full term (de Garine & Pollock, 1995). Without this extra fattening practice, many women would not have been able to conceive.

Large body size was not just considered helpful for health and status of women of childbearing age. For example for children as well, thinness was associated with unhealthiness. In general, Pacific people traditionally consider “one’s diet is a source of one’s strength and illness prevention” (Bruss et al, 2005, pg. 169) regardless of age or sex. An abundance of food and a large body size were not just status symbols, they helped a person to survive in a challenging environment with frequent food shortages.

*Food related disease in Pacific people in Western contexts*

In this context, one might expect a great deal of obesity and food related disease to develop due to an emphasis on providing and consuming large quantities of food whenever possible. Yet in traditional Pacific settings, this was not typically the case. Partly this was due to periodic famines, which reduced total caloric intake, and partly because food production and preparation traditionally in the islands was physically demanding, and the levels of energy expended were often balanced by the energy consumed. It was also due to the traditional Pacific diet tending to be “both low in fat and calories” (Curtis, 2003, pg. 40). While traditional Pacific island diets contained high fat foods such as coconut, there was also a great deal of fresh fruit, vegetables and seafood, which in total formed a balanced, healthy diet (King et al, 2012).

By contrast, in the present, day many Pacific people around the world have had food-related health problems develop when adjusting to new Western cultural and environmental settings. This has been observed in New Zealand (King et al, 2012), Hawaii (Davis, et al., 2004), Tonga, Nauru (Curtis, 2003), the Cook Islands (Fitzgerald, 1980), and Western and American Samoa (Davis, et al., 2004). This suggests that a great deal of the problem for Pacific people is to do with adjustment to a new industrial, modern setting, and the social and cultural difficulties related to this adjustment.



Much of the research into possible causes of food related-disease in Pacific populations has in the past focused on genetics. The presumption is that Pacific Islanders, living with periodic famines, may have developed “‘thrifty’ genes...causing rapid weight gain in times of plenty” as hypothesized by Neel (cited in Curtis, 2003, pg. 39); and that since Pacific Islanders traditionally highly valued large body size (Secretariat of the Pacific Community, 2002), this may have led through preferential selection over time to a population genetically predisposed to larger body sizes.

While these arguments are plausible, as discussed earlier social and cultural factors have been demonstrated to play a much greater role in determining health outcomes than genes alone (Pearce et al, 2004). For example, genetic arguments do not explain why Pacific people living in traditional settings tend to have better food-related illness rates than Pacific people living in Western settings (Davis, et al., 2004 and Curtis, 2003).

In terms of environment, differences between Pacific and Western settings make the likelihood of food-related disease higher for Pacific people in Western contexts. A traditional Pacific island diet was lower in fat and calories than a typical Western diet (Curtis, 2003) which Pacific people eat more of in Western contexts. In Western settings food is regularly available, and this can result in overeating for Pacific people used to feasting when food is available (Fitzgerald, 1980). While food production and preparation traditionally in the islands was physically demanding, in the Western setting less calories are expended at work on average (King et al, 2012). Also for Pacific people as well as other populations, greater access to more variety of food and to food with higher fat and higher sugar content in modern western societies has been shown to distort people’s biological ability to make nutritionally balanced food decisions and eat a balanced diet (Mennell, 1991; Caplan, 1996).

In addition, culture plays a role in food choice and consumption for Pacific people. Despite large differences between Western and traditional Pacific settings, Pacific people

continue to emphasize the importance of eating generous amounts of food in both settings when possible in order to be healthy. In the case of caregivers feeding children this is especially obvious. Pacific caregivers in all settings tend to try to feed children as much as possible, due to the belief that being thin is unhealthy (Bruss et al, 2005). In Western contexts however, with abundant high-calorie foods (high fat and sugar content), this emphasis on feeding children as much as possible can and often does lead to childhood obesity (Bruss et al, 2005).

Additionally, in Western settings Pacific people are largely disconnected from the production of their own food, and therefore also disconnected from the natural resources, communality and spirituality of food production. As a result, food can no longer contribute to holistic wellbeing as it can on the islands; food is for the most part without *malie*, and is eaten for biological need, and as a means of modified cultural expression, rather than holistic wellbeing (King et al, 2012). This can in turn lead to less-conscientious or healthy decisions regarding food and a resulting higher prevalence of food-related disease.

#### *Pacific people in New Zealand*

In New Zealand, 'Pacific' usually refers to people of Samoan, Tongan, Cook Islands, Fijian, Niue, Tokelauan, or Tuvaluan decent. The term 'Pacific' is also used to identify people of mixed racial ancestry, including multiple Pacific cultures and individuals with Pacific and non Pacific backgrounds (Medical Council of New Zealand, 2010). Pacific people make up approximately 7.4% of the New Zealand population (Statistics New Zealand, 2013). According to statistics New Zealand, the total number of the Pacific population rose by 15% between 1996 and 2001 and by an additional 15% between 2001 and 2006.

Pacific peoples began to migrate in larger numbers to New Zealand in the 1960s and 1970s, when labour shortages made it necessary for the New Zealand government to relax immigration rules (Ward & Liu 2013). Later in the 1970s, Pacific people were subject to

widespread discrimination because they were perceived as a threat to better-established ethnic groups (particularly New Zealand Europeans) in competition over scarce jobs. They were discursively labelled at this time as “overstayers” by many and experienced dawn raids which resulted in the deportation of many who had expired work permits (Medical Council of New Zealand, 2010). Negative stereotypes were also perpetuated about Pacific people beginning at this time as being criminal, lazy, unhealthy, and overly dependent on social services (Loto et al, 2006).

Increasing acceptance of multiculturalism in a population may act to reduce perceived intergroup threat (Ward & Masgoret, 2006); this appears to be occurring recently in New Zealand, as support for multiculturalism increases, and the perceived threat Pacific people pose to New Zealand society and New Zealand Europeans has diminished (Sibley & Ward, 2013). However negative stereotyping about Pacific people continues particularly in the media, likely due to the tendency for media to repeat and reinforce common social narratives as the dominant storytellers in society (Nairn et al, 2006).

Pacific people continue to occupy a marginalized position in New Zealand society. Residential segregation for the group in relation to New Zealand Europeans is highest of all non-European ethnic groups, when measured both in terms of integration by neighbourhood and in terms of degree of integration (Grbic, Ishizawa, & Crothers, 2010). Pacific people live predominantly in residentially segregated communities in New Zealand (Grbic, Ishizawa, & Crothers, 2010), with 71% of Pacific people in New Zealand living in three neighbourhoods near Auckland and another 13% living in neighbourhoods near Wellington (Pells, 2006). These residentially segregated communities are relatively deprived, as are Pacific people in general across a number of measures in New Zealand society (Borrows et al, 2011; Ajwani, Blakely, Robson, Tobias, & Bonne, 2003). Gaps in education, socioeconomic status, crime, and health (which will be discussed at length later) are also apparent between Pacific people

and societal averages (Ajwani, Blakely, Robson, Tobias, & Bonne, 2003). Studies have shown that employment discrimination against Pacific New Zealanders is prevalent, and may be due to perceptions of employability held by employment recruiters and employers. In one recent study, Pacific people were chosen last out of all immigrant groups for jobs in a test environment which controlled for all employment conditions aside from ethnicity. This was despite Pacific people being perceived as more culturally similar to New Zealanders than some of the other ethnic groups, such as Indian or Chinese, who were nevertheless preferred for employment (Coates & Carr, 2005). Even more dispiriting is the fact that Pacific communities continue to be under-employed in spite of recent improvements in their professional qualifications (Ongley & Blick, 2002, as cited in Coates and Carr 2005).

In the New Zealand context, increases in relative deprivation (Ajwani, Blakely, Robson, Tobias, & Bonne, 2003) and discrimination (Harris, et al, 2006) have been correlated with negative health outcomes (Eyles et al, 2010). Not surprisingly then, given the deprivation, discrimination and segregation of Pacific people in New Zealand, one of the most pressing social issues for Pacific people living in New Zealand is poor health outcomes, particularly in relation to food-related disease such as obesity and Type 2 diabetes (Eyles et al, 2010) (Children living in the most deprived areas are three times more likely to be obese than children living in the least deprived (Statistics New Zealand, 2013)). In New Zealand 27% of Pacific children are obese or overweight (with a Body Mass Index, or BMI, from 25 to over 30 (3.6 times more than non-Pacific)); 68% of Pacific adults are obese (62.4% Pacific males and 73.1% Pacific females); and 13% of Pacific people over the age of 15 had diabetes in 2013 (Statistics New Zealand, 2013). These are all much higher incidence rates than for New Zealand Europeans; for example 29.2% of New Zealand European adults are considered to be obese (Statistics New Zealand, 2013).

Much of these poor health outcomes are the result of adjustment to a Western environment and relative deprivation for Pacific populations. At present Pacific children watch more television on average than New Zealand European children, and are also more likely to be high consumers of commonly advertised snack and junk foods on television (Rush, 2009). Fast food outlets are closer to relatively deprived neighbourhoods where Pacific people live than are healthy food stores (such as supermarkets) (Rush, 2009), which when coupled with a lack of time and money results in more purchases of unhealthy fast food meals by Pacific people (King et al, 2012). Pacific people in New Zealand as in other Western settings are also disconnected from the production of their food, so food does not have the same *malie* nature it can have on the Islands, and cannot contribute to holistic wellbeing in the same traditional way (King et al, 2012). This lack of spiritual connection with food, along with economic and adjustment issues, can explain why Pacific people in New Zealand understand the relative nutritional value of Western foods, appreciate the health risks of eating unhealthy food, yet purchase and consume disproportionately large quantities of unhealthy or non-nutritious Western foods (King et al, 2012). Poor food choices and negative food related health outcomes may be further exacerbated by the persistence of cultural practices, such as communal celebratory feasts and an emphasis on communal eating, which continue to be expressed by Pacific New Zealanders despite a lack of proportionate emphasis in such food consumption practices on underlying cultural principles, including a traditional focus on improving holistic well being of individuals and communities through communal eating practices (King et al, 2012).

Acculturation levels help to illustrate to what extent the changing context in New Zealand has affected Pacific New Zealanders' health outcomes. Studies have shown that there is a positive correlation between the adoption of unhealthy behaviours and the degree of assimilation to dominant cultural norms for Pacific people and other immigrant minority

groups living in relatively deprived circumstances (Borrows et al, 2011). This is especially the case with traditional Pacific cultural principles, which emphasize holistic wellbeing and conscientious food consumption. As one non-Pacific New Zealand nurse put it, some Pacific people in New Zealand “have caught’ en on to our bad habits before they have caught’ en on to our good” (Fitzgerald, 1980, pg. 809), and this has resulted in more health problems (including food related disease) for those Pacific people who have assimilated more than for those who have sought to retain traditional values and avoid acculturation to New Zealand norms. By contrast, Pacific people in New Zealand who have retained traditional principles tend to have better health outcomes; Borrows et al (2011) suggests that “there may be something protective in the process of maintaining original cultural habits towards good health behaviours” (p.g. 714).

Traditional Pacific food related practices have in many cases been extensively modified in the New Zealand context, to the point that they may actually encourage unhealthy eating. Celebratory feasts are the most obvious example of this modification. As in traditional settings, an abundance of food is expected to be provided by hosts and consumed by guests at feasts in New Zealand (King et al, 2012). However, in New Zealand there are more unhealthy (non-Pacific) food options available, and food at feasts is not strictly apportioned out to each guest, but is provided in a buffet style. Such modifications go too far in adoption of New Zealand food consumption practices, and coupled with the lack of respect for the *malie* of the food in New Zealand, as well as a lack of retained focus on cultural principles emphasizing individual and communal well being, create a high potential of overeating for its own sake at feasts.

Some traditional values related to food appear to remain unchanged for Pacific people in New Zealand, however in a Western context these values by themselves tend to predispose Pacific people to weight related diseases. For example, the continued emphasis on the need

for an abundance of food to be provided to guests, and the obligation of guests to consume the food provided, persists in New Zealand (King et al, 2012). Despite the fact that the New Zealand context differs greatly from the traditional Pacific context in that food is usually abundantly available in the former and only occasionally available in the latter. Pacific children in New Zealand are fed as in other settings with an emphasis on weight gain, since health is equated with having a higher weight (Bruss et al, 2005); this results in higher measures of childhood obesity and pre-diabetes in Pacific children than in other ethnic groups in New Zealand (Statistics New Zealand, 2006), conditions which predispose children to food related disease such as Type 2 diabetes, cardiovascular disease, and obesity in adulthood (Rush, 2009).

Aside from societal and cultural issues, high food related disease prevalence in Pacific people in New Zealand is also confounded by institutional discrimination, and difficulties in the cross-cultural interactions between Pacific patients and non-Pacific health providers. This is obvious since “even after socioeconomic status and other factors are controlled for...[and despite] Pacific peoples turn[ing] up for GP appointments at higher rates [than other ethnic groups]”, Pacific Islander health is the worst in many measures of all ethnic groups in New Zealand society (Medical Council of New Zealand, 2010, pg. 9). The role the healthcare system plays in the persistence of food related disease prevalence in the New Zealand Pacific population will be explored more below.

#### *Pacific peoples relation to the New Zealand health care system*

Numerous studies have revealed ethnic biases in the New Zealand healthcare system, which result in worse medical care for minority patients than for New Zealand Europeans. For Pacific people this institutional bias is clear, and leads to difficulties in the adequate treatment of food related diseases. The 2001 – 2002 National Primary Medical Care Survey (Report 7) found that General Practitioners (GPs) reported that they were less likely to have a

“high level of rapport with their Pacific patients, ordered fewer tests, and referred patients to specialists less often, despite their greater and more complex health needs” (Medical Council of New Zealand, 2010, pg. 10). One of the reasons for this is due to commonly held stereotypes about Pacific patients. Another survey of health practitioners in New Zealand found that health providers described Pacific people as having irregular eating habits, eating fewer vegetables than was healthy and having less than adequate knowledge of the nutrition in Western foods. Researchers found later in interviewing Pacific peoples that these were not accurate characterizations, but instead due to misunderstanding of cultural cues from Pacific people on the part of health providers, coupled with presumptions made by health providers based on common stereotypes (Fitzgerald, 1980). While misunderstandings such as these were neither intentional nor malicious, they exemplify how commonly held stereotypes about Pacific people could negatively affect health outcomes through misdiagnosis or mistreatment.

Particularly damaging is the stereotype, perpetuated in the media, that Pacific people are unhealthy solely because of bad individual choices, and too lazy to do anything about it (Loto et al, 2006). To the extent that health providers believe this stereotype, they may feel less motivated to assist Pacific people in improving their health. This is unfortunate, as evidence suggests that Pacific people do in fact care about their health (Medical Council of New Zealand, 2010) and are aware of the nutritional qualities of foods available in New Zealand (King et al, 2012). What is more likely is that acculturation and adjustment issues, living in relative deprivation, economic concerns, societal and institutional discrimination contribute along with individual food and lifestyle choices to food related disease in Pacific people.

Though the above factors play a part, poor interactions with the New Zealand healthcare system are also due simply to poor rates of participation by Pacific people in some aspects of healthcare. ‘Did not attend’ (DNA) rates with secondary care services for



outpatient appointments are reported to be higher among Pacific peoples, with the Capital and Coast District Health Board reporting a 17.1% DNA rate for Pacific people, compared with an overall DNA rate of 9.1% (Ministry of Pacific Island Affairs, 2011). Also, the National Primary Medical Care Survey found that the average time spent with a GP annually was 18.8 minutes less for Pacific patients than for European patients (Ministry of Pacific Island Affairs, 2011). High DNA rates and low time spent with GPs probably reflect the difficulties Pacific peoples face in interacting with the healthcare system, such as a lack of cultural responsiveness from the health care providers, cultural beliefs, transport difficulties and failure to receive time away from work commitments (Ministry of Pacific Island Affairs, 2011).

Of these issues, a prominent factor for Pacific people is the cost of healthcare. The New Zealand 2006/2007 Health survey reported Pacific peoples were significantly more likely to report cost as a reason for not attending a GP appointment than non-Pacific people. Cost was the main reason cited for non-attendance (33.4%), followed by lack of time, lack of suitable appointment times, and not wanting to 'make a fuss'. The lack of collection of prescribed medications was also linked to cost. While New Zealand has made advances within the healthcare system to provide Pacific peoples with subsidised rates for primary care services, the cost barrier still remains and the rates may not be reflecting the reality of circumstances for many Pacific peoples (Ministry of Pacific Island Affairs, 2011).

A final factor preventing full participation of Pacific people in the New Zealand healthcare system is health education. Evidence suggests that many Pacific people are often not aware of health services available (including Government services), and this lack of awareness effectively restricts their access to the Primary care sector. Health literacy, measured in 2006, indicated that Pacific people were significantly less literate than non-Pacific people; factors such as lower socio-economic status, limited education, and language

barriers being significant contributors. It has been shown that those affected by limited health literacy have a worse health status than those who have adequate health literacy (results increasing with age) (Ministry of Pacific Island Affairs, 2011).

In conclusion. “Overall, Pacific peoples receive less effective care. Access to care and the quality of care is improving but outcomes are not equivalent to other ethnic groups. The reasons for this are complicated, and seem to include a combination of late presentation, receiving appropriate medication and treatment less often, and less effective ongoing management. This is influenced by the cultural attitudes and expectations of both Pacific peoples and those in the health care system, and by levels of financial resources” (Ministry of Pacific Island Affairs, 2011, pg. 38). The institutional discrimination that Pacific people face, combined with discrimination by individual health practitioners, and larger socioeconomic and cultural issues, combine to lead to less than favourable interactions for Pacific people with health services which could help them with treatment of food related disease. The challenges Pacific New Zealanders face in interacting with the New Zealand healthcare system suggest there is even more reason for this group to find their own solutions to food related disease which does not involve health treatment by the healthcare system. This indicates that health education, health prevention, and healthy lifestyle promotion activities should be considered.

#### *Potential solutions for the reduction of food related disease in New Zealand Pacific populations*

Encouragingly, despite the challenges a number of effective programmes and initiatives have already been developed by both Pacific communities and New Zealand health services for reducing food related disease. The most successful seem to emphasize and utilize Pacific cultural values and practices to bring about health change.

In fact retention of traditional cultural principles and practices appears to in itself result in better health outcomes for Pacific New Zealanders. As the Pacific Islands Families (PIF) study proved, Pacific people (mothers and their children) who strongly expressed Pacific cultural practices (“low acculturated” to the dominant mainstream New Zealand context), especially when weakly expressing mainstream New Zealand cultural practices, scored better on health measures than did Pacific New Zealanders who were highly acculturated to the dominant mainstream New Zealand cultural context (Borrows et al, 2011). This makes sense when taking into account that Pacific people in New Zealand live in neighbourhoods with high concentrations of other Pacific people, live in relative deprivation to the rest of society, and have relatively strong local traditional Pacific cultural principles and practices to guide their healthy living decisions. Given that Pacific people in New Zealand tend to have much better developed Pacific social and cultural capital resources surrounding them, and by contrast have relatively underdeveloped New Zealand mainstream social and cultural resources close at hand, it is not surprising that those who pursue lifestyles focused on the use of relatively strong Pacific resources inherent in their communities appear to fare better in health measures. This is the protective effect which Borrows et al (2011) suggested maintenance of original cultural habits could play for Pacific people in New Zealand, and which other research has supported.

## **Chapter Two**

### **The Present Study**

As discussed, above studies have shown that Pacific people and other immigrant minority groups living in relatively deprived circumstances that assimilate more to dominant majority culture tend to adopt unhealthier behaviour than that of their peers who retain traditional cultural values (Borrows et al, 2011). Borrows (2011) suggests acculturated Pacific people in New Zealand do not have the same cultural and social support mechanisms when compared to New Zealander Pacific who maintain traditional Pacific cultural principles which emphasize holistic wellbeing and conscientious food consumption (King, 2012).

The proposed study is descriptive and exploratory. It aims to examine eating related values, principles and practices of individuals of Pacific ethnicity who are living in New Zealand and explore how this influences their diet and health. While this study will not definitively seek to prove a causal link between degree of acculturation and health outcomes for Pacific people living in New Zealand, it will explore themes of acculturation and the degree to which acculturation may be an influence on diet and health.

### **Method**

#### *Setting*

Participants were recruited from Pacific Churches throughout Wellington, New Zealand and from the Pacific Health Directorate at Capitol and Coast District Health Board, Wellington, New Zealand. Twenty four of the participants were members of the Mafutaga Tagata Matutua exercise group, housed at the Pacific Islanders Presbyterian Church (PIPC), in Newtown, Wellington, New Zealand.

#### *Participants*

The sample was comprised of thirty participants. The average age of participants was 68.3 years (SD: 11 years). Participants ranged in age from 45 to 81 years. Participants originated from three countries; New Zealand (13.3%), Samoa (73.3%) and the Cook Islands (13.3%), with 70% of the participants being female and 30% male. 100% of the participants identified as a Pacific Islander, with those born in New Zealand identifying as 'New Zealand born Samoan'. The average year of immigration to NZ from Samoa or the Cook Islands was 1965, with the average age of immigration being 19 years.

Ethical approval for this study was obtained by the Victoria University of Wellington Psychology ethics committee in Wellington, New Zealand.

### *Procedure*

The Churches and Health Directorate outlined above were approached by the researcher who provided a brief verbal explanation about the study and the approximate time commitments required to participate in it. Individuals interested in taking part in the study were asked to contact the researcher directly or to arrange an interview. Opportunities for focus groups were requested by participants, with the lead researcher deciding to utilize this opportunity. Focus group times were arranged through the Minister of the Church. Prior to conducting the interview/focus groups all participants were guided through the information sheet, outlining privacy and confidentiality, intentions for use of the data collected, and a brief outline of the researcher and supervisor conducting the study. Areas of uncertainty were discussed and clarified for all participants prior to signing the consent form. Participants were offered thirty dollars to participate in the study.

Interviews and focus groups were recorded via a dictaphone and were transcribed verbatim by the researcher. The interviews and focus groups varied in length from 50 minutes to 90 minutes with an average duration of 70 minutes, including time for both the information and debriefing statements to be issued and signed by participants. Data collection occurred

over a three month period from January to March 2014. Demographic information, including age and gender was collected, however, socio-demographic data, such as social deprivation levels, were not collected.

### *Measure*

The focus group and interview questions were initially developed by the researcher and her supervisor and approved by the Victoria University Psychology Ethics committee. Interview questions were developed to examine individual's level of acculturation to the New Zealand environment and culture, food habits and food consumption in relation to cultural practice and identity, participants' understanding of health and health outcomes, as well as to examine the perceived influence cultural practice has to play on physical health, weight and weight related illness.

A key consideration regarding the development and use of the above questions were issues of cultural perspectives, protocols, languages (a translator was used when required) and cultural etiquette. Questions were developed based on research by King et al (2012) who qualitatively investigated the socio-cultural factors associated with food security and physical activity for Pacific people living in New Zealand, in conjunction with the Pacific Island Family study (Borrows et al, 2011), which examined the association of Infant Health Risk Indicators with Acculturation levels of Pacific Island mothers living in New Zealand.

Once the research questions were agreed the researcher conducted three pilot interviews (individual participants). The pilot interviews were reviewed, with minor changes made to the protocol for the future interviews and focus groups. Three individual interviews were conducted following the finalisation of the questions, followed by 8 focus groups, consisting of three participants per group. The following questions and associated topics were followed in each of the interviews and focus groups:

1. How does being a Pacific person and being involved in the Pacific community influence your eating values and food choices?
2. What difficulties have you had in following Pacific eating patterns and preferences while living in New Zealand?
3. How are healthy eating and physical activity practised within your New Zealand Pacific community?
4. What difficulties have you had in managing your diet and eating preferences living in New Zealand?
5. Do you practise healthy eating at an individual level, but relax your rules for healthy eating when in a Pacific group setting such as a wedding, birthday or other community event? If so, why do you do this?
6. Could you please describe to me a traditional Pacific diet?
7. What do you think are the long term health implications of following a traditional Pacific diet while living in New Zealand?
8. What do you think are the long term health implications of consuming high fat and high sugar foods?
9. What assistance would you like from the government to help you become a healthier individual, family, and community? Why do you think you need this help?
10. Could you describe to me some traditional Pacific practices and customs regarding food?
11. Do you participate in NZ sports and recreation, and have contact with non –Pacific families / friend?
12. If you had a choice, what kinds of food would you eat? / What are your food preferences?
13. What meaning does food have for you? E.g traditions or wellbeing around food.
14. How do you feel about your personal health?

Note: Additional open discussion was also encouraged and facilitated when initiated by interviewees to add greater context and depth to the subjects covered.

To determine acculturation in the study, a proportion of the interview questions used were extracted from standardized measures of acculturation, the PIACCULT (Pacific orientation) and NZACCULT (New Zealand orientation) scales, which were developed by Burrows et al (2011) to quantitatively determine acculturation. When acculturation levels of participants were unclear based on initial responses, the lead researcher incorporated additional questions included within the PIACCULT and NZACCULT scales to ensure a more accurate determination.

The term “health” was not defined at any point throughout the interview or focus group and was left at the discretion of the individual for personal interpretation; this was due to the varying understanding and interpretation (and belief) regarding the definition of ‘health’ by individuals, including that of ‘health food’, ‘good health’ and personal ‘health and wellbeing’.

Focus groups were the preferred option for the research. This is a relatively new approach to data collection within the field of qualitative psychology, however is steadily growing in popularity within qualitative health psychology (Willig, 2008). The focus group approach allows the opportunity for participants to respond to one another’s comments, as well as challenge and debate perspectives between the members of the group; resulting in a comprehensive, rich data set based on the notion of jointly constructed meanings (Willig, 2008).

Scales and/or questionnaires were not considered for use within the study due to research into this subject area being relatively new. Restricting participants responses to a specific questionnaire or survey would have limited the quantity and arguably quality of the data collected throughout the interview and focus group process. Additionally, it has been



shown that cultural meaning from non mainstream cultures is in danger of being marginalised when formal tools of discursive analysis are employed, such as scales and questionnaires, in part because these tools were developed in a mainstream cultural context. (Tamasese, Peteru, & Waldegrave, 1997).

### *Data Analysis*

*Thematic analysis* was undertaken to identify key themes embedded within the data (including levels of acculturation). The initial analysis was performed by the researcher based on the methodology of Braun and Clarke (2006). According to Braun and Clarke “A theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set” (Braun & Clarke, 2006, pg. 82).

Analysis involved five key steps; familiarization with the data (incorporating the process of transcription), generating initial codes (systematically coding interesting features within the data), searching for new themes (organising codes into themes), reviewing themes (confirming themes reflect the codes from the original transcripts), and defining and naming themes (generation of clear definitions and titles for each theme).

Thematic analysis was the nominated qualitative approach for the study, as opposed to discourse analysis or grounded theory. This decision was based on the flexible approach of thematic analysis, being compatible with both constructionist and essentialist paradigms within psychology (Braun & Clarke, 2006). Thematic analysis also allows space to highlight key areas of concern while still creating a rich and detailed account of the data, rather than seeking to build a theory (grounded theory); this is appropriate given the very early nature of research on this subject within the field of psychology.

The initial analysis was conducted in four phases. Phase one was predominantly focused on the transcription of the interviews, followed by line-by-line coding of each

transcript. Phase two involved collating the codes into potential themes, examining the frequency of the themes across the full sample. The two final phases confirmed the themes in relation to the codes initially identified. Themes were identified within the initial transcripts for confirmation and accuracy. This incorporated randomly selecting 33% of the transcripts from the full sample (10/30) on a number of occasions in order to confirm the saturation of the themes. A high rate of accuracy was agreed between both the researcher and the lead supervisor. An independent supervisor and researcher also reviewed the sample for agreement of theme identification, revealing a high level of agreement across the three individuals ( $\kappa = .95$ ).

## Chapter Three

### Results

Upon completion of the analysis, four major themes were derived with three to five supporting sub-themes per theme. The themes identified were: Pacific cultural identity, Translation of Pacific culture into the New Zealand context, Challenges to health due to living in New Zealand and Solutions. Table one outlines the four dominant themes and the underlying sub-themes. Themes and sub-themes are further expanded below.

Table one:

Theme	Subtheme
1. Pacific cultural identity	<ul style="list-style-type: none"> <li>• Cultural practices</li> <li>• Relationships</li> <li>• Mana and personal esteem</li> </ul>
2. Translation of Pacific culture to the New Zealand context	<ul style="list-style-type: none"> <li>• Changing food practices</li> <li>• The higher value of Pacific food</li> <li>• Lifestyle and education adaptations</li> </ul>
3. Challenges to health due to living in New Zealand	<ul style="list-style-type: none"> <li>• Issues of food access and availability</li> <li>• Lifestyle misalignment</li> <li>• Nature of New Zealand food and practices</li> <li>• Role conflicts</li> <li>• Loss of traditions</li> </ul>
4. Solutions	<ul style="list-style-type: none"> <li>• Education</li> <li>• Education / improves resources</li> <li>• Improved resources</li> <li>• Variations on food pricing</li> <li>• Responsibility and accountability</li> </ul>

#### *Theme one: Pacific cultural identity*

Theme one, *Pacific cultural identity*, describes the interaction of food and the Pacific diet in relation to cultural practices and customs. Through participants responses it became clear that food played a central role in their Pacific cultural identity, both at the individual and group levels. A number of subthemes associated with theme one were also identified throughout the process of thematic analysis. These are (in order of significance); Practices, Relationships and Personal Esteem.

*Sub theme – cultural practices*

A key consideration in participant's discussion of Pacific Culture was that of practices. The term 'practices' refers to socially coordinated actions orientated around an agreed set of goals, practiced over a number of generations. Practices discussed had a focus on communal food consumption, however the overall consensus from participants was that all cultural food practices, including preparations, consumption and associated behaviours, helped to strengthen Pacific cultural identity.

Participants noted that a key component to a good life was being 'happy'. Food was identified as an enabler to happiness and the celebration of life. Happiness and food within a significant proportion of the participants could not be separated; meaning a number of participants reported food must be eaten to enable happiness, no matter the nutritional value, or lack thereof.

"I think we just eat food to celebrate life and to survive, that's my perspective on it some other people might see it differently"

"Don't worry about the eating [nutritionally], be happy. If you are happy, that's everything"

The way in which food was traditionally prepared was a critical point when discussing Pacific Cultural identity. All of the participants interviewed agreed that a meal prepared in an umu, the traditional Pacific method of cooking, utilizing an earth oven, was the 'best' way of cooking. This was because of the enhanced flavour and texture as well and the health benefits resulting from the cooking method. This is due to the lack of cooking oil and fats needed in addition to the fat contained in the main food items cooked, unlike

European cooking methods which require oil for methods such as frying or roasting. Although not directly stated, cooking in an umu also enables participants to use a traditional Pacific cultural practice in their food production.

“Most of our cooking is done through umu, like the hangi, very different from here, there’s more additives that you can include in your cooking now, compared to those days.”

“Different from today, yes, we always ate out of the umu, that was the stones, that was the food cooked, not in the ground, above the ground, unlike the hangi, the earth just dig a little bit, heated so the stones would sink and soak, and the food was put on in leaves covered, so I suppose the palangi equivalent for that would be pressure cooking or steam, really the best way to cook really.. yeah.”

The use of the umu also tied together strongly with the importance of seasonal availability of produce and its role in cultural customs and practices. Seasonal availability (when in the Pacific) dictates the food eaten and when, as well as the activities undertaken to source the specific food. In relation to health and wellbeing, participants identified seasonal availability as an important factor contributing to good health, identified the importance of fresh food items (unprocessed) and also the consideration that a person or family may only consume food that is available, often in limited quantities, as once the food is consumed it may be difficult to source again. This created a context where food consumption was naturally regulated by the environment, although at the same time where available food was “healthy”, at least as perceived by respondents.

“Yeah, I mean I think the difficulty for me is having everything fresh, because when you go to the islands you notice the big difference in what you eat, like everything is fresh off the land, fresh off the sea, so it’s getting everything fresh, for instance coconut cream, if you were to taste something made of fresh coconut cream from over in the Islands, it’s very different to what it tastes like from coconut cream in a can, or things that are processed, so it’s getting everything fresh”

“In Samoa we grow, it takes time, in here in New Zealand we just go and buy it from the shop.”

Overall the dietary situation respondents described in the traditional Pacific Island context suggested a naturally restricted, “healthy” (as described by participants) food consumption pattern regulated by the seasons and balanced by the need to work hard (burn a lot of calories) in food production. The implicit suggestion was that the food consumption and production patterns in the traditional island context were “in balance”, and did not need further self-regulation to result in a healthy lifestyle. This implication was made clearer by contrasting comments participants made about the New Zealand lifestyle, where food choice and food consumption were seen as imbalanced with food production (for more, see theme three: challenges to health in living in New Zealand, sub-theme nature of New Zealand food and practices).

In addition to food production/consumption being described by participants as “in balance” in the traditional Pacific island context, consumption and production was also integral to cultural identity. This is in large part because food resources were both produced

and consumed by the same communities and required a large amount of community attention to be maintained. This was clarified by contrasting depictions of food consumption and production in the New Zealand context, where food production is not performed by the consumers, and where food must be purchased rather than grown or harvested as in the traditional Pacific island context.

“Samoa is not the same as New Zealand, if you want beef you go to buy, in Samoa, you do your own farm”

“You just go and dig from the plantations, no money, no money. Back home you just go to the other persons plant and just help yourself, just go and help yourself.”

“Sometimes we had ripe banana, and maybe a soup. We would wait to the evening to have a big feed, we would have fish, fish from the sea, cos in those days no fridge, the fish from the sea straight away and cook in the pot and we eat, that’s all. No money to buy, we eat free from the plantation”

The final two aspects of practices in relation to Pacific culture were linked with the role and status of elders. It was made clear by all of those who participated in the research that elders must be respected and truly are the holders of wisdom and knowledge. Food and its associated practices was viewed as a significant way of expressing respect to elders and those of high status. According to custom, food prepared in the umu for any event or occasion should be initially offered to elders, specifically the parts of the meal which hold the most flavour and are of the finest quality. Fresh produce and also any large or exceptional fish

caught must also be taken directly to the elderly, or for example, the village Chief, who will decide the distribution of the food him/herself and the community.

“In Samoa they respect the Ministers and all the old people. The Ministers and the old people always eat first, always show respect.”

Elders also hold key roles as educators in the community, and participants described the responsibility elders traditionally had to teach a healthy lifestyle to younger generations. This included instructing younger generations on healthy foods and food consumption. Amongst Pacific participants in the study who appeared to retain traditional cultural values, these traditional roles of elders as educators appeared to persist in the New Zealand context.

“We try, we try to tell our kids, we try to tell them to stop it, one drink, not all the time eh! Or food too, ice cream, chocolate, not all the time, yeah, parents look after kids like that.”

#### *Sub-theme – Relationships*

As mentioned above, three sub- themes were identified within theme one, Pacific Culture. The second sub-theme outlines the significant role Pacific Culture and food plays in sustaining relationships. Participants identified food as an enabler capable of connecting and enhancing relationships. Food was seen to be a tool, or mechanism, for the expression of cultural meaning that may have otherwise been lost. This role of food was mentioned numerous times throughout the interviews, and appears to be entwined within the expression and beliefs of traditionally communal Pacific culture.



“...why it’s good to come together once a month, so I’ll know who’s... if I can see my palangi daughters in laws not being happy then I will blame my son, but that has happened because we have come for a meal, a meal that will determine substance and wellbeing of my family, not just my family, not just by food... I can see where they are emotionally, and last weekend, I have a Scandinavian daughter in law and she wasn’t happy so made her do the blessing and it worked out well cos she cried and then we found out what the problem was, I just about dinged my son with the fry pan, but he had been working too long hours and leaving her, and that just came out cos we were to have a meal.”

“If you were in my house more than an hour, it’s kind of saying we need to have a meal, we need to share a meal, and you can be innovative anyway you like, for me, it used to be Aunty Ida’s pikelets”

Food was consistently identified as the centrepiece of a Pacific home and participants noted that the act of consumption as an expression of emotion and happiness was equated with larger volumes of food being eaten and shared. The interdependence of Food and Pacific Culture was a very prominent aspect of personal relationships, to the extent that it may not be possible (in the Pacific cultural context) to have a meaningful relationship with others if food is not incorporated into the equation.

“Food is a centrepiece of my home and it always has been. But what it’s been able to bring out of the family is amazing, and if we talk about one of the

grandchildren doing well, its oh pass the taro, oh gee that was really good, let's have a bit more of this, you know, if we're not happy, nobody wants to eat"

*Sub-theme – Mana and personal esteem*

Food providing mana and personal esteem (sub-theme three) was closely linked to the notion of Pacific cultural identity. Recognising that being able to provide a meal for the family, no matter the nutritional value, was critical for a parent's self worth and a way to respect and align with, Pacific cultural customs and practices.

"There are no limits to what you could eat, whether they're healthy or what, for me to fulfil my role as a mother, a caretaker for my family, to feel good about who I am and the culture that I come from."

"Our culture has a big focus on food, you identify food as part of the mana within yourself and family, so, anybody and anybody who ends up knocking up you at your house, whether it's to buy a cup of sugar or just to say hello, you greet them, they come in and there you are straight away you've got a bowl of fruit out, or you've got whatever food's quick."

*Theme two: Translation of Pacific culture into the New Zealand context*

Theme two; translation of Pacific culture into the New Zealand context, identifies and describes the adaptations needed to be made in order to assimilate into the NZ context. Two prominent sub-themes emerged throughout the thematic analysis process; Changing food practices, and Lifestyle and education adaptations.

*Sub- theme - Changing food practices*

Throughout the interview process it was evident that according to the participants a number of changes were required by a Pacific individual, family and community upon immigrating to New Zealand. As well as those who immigrated, participants who identified as New Zealand born Pacific were also able to strongly relate to changes that have occurred in more recent years. Changes to the food and food preparations over time were discussed in both a positive and welcoming light, as well as something that creates uncertainty and must be managed in order to maintain Pacific culture in the New Zealand context.

“...and the food has changed dramatically since I can remember. Because in events that we have, we would have a lot of taro, a lot of heavy stuff, a lot of pork, a lot of real fatty... you know.. and not as much green. All buffet. Always buffet and you could just go and get as much as you want. That’s the big changes I’ve seen, more greenery now the food we see laid out on the buffet tables that there were previously.”

The incorporation of New Zealand food items into Pacific cooking, and Pacific events was noted as a change, however also a necessity due to lack of availability of some Pacific food items (to be discussed within theme three). The general consensus from participants was that it was possible to cook and incorporate New Zealand food, however, it must be noted that this food was not in any way seen as a complete or adequate replacement.

“The difference depends if you know how to cook it; how to put it together to eat it. It’s different, but it’s not far away. Here there is a lot of potatoes and foods you cannot find in Samoa, but all things are the same, if you come here

and know how to cook, it's good for your life, you make your own one and its good for your life and your family.”

As indicated above, changes to the Pacific diet due to living in New Zealand were met with ambivalence by the participants; despite this ambivalence to the dietary changes, the prioritisation of Pacific food was a key message conveyed by the majority of the participants. Pacific food such as taro and fresh fish were preferred food options for participants and would often be prioritised over other food items needed. Barriers such as cost were mentioned in this portion of the interview by some participants; particularly those that expressed a high level of acculturation to New Zealand. However for all participants, Pacific foods were valued more highly regardless of the costs. The previous sub-theme (Relationships) considered in conjunction with the current sub-theme (Changing food practices) suggests, according to participants understandings and perceptions, that Pacific food will provide greater happiness than food sources from other locations. The below quotes clearly indicate the importance of sourcing Pacific food, while also outlining the happiness eating such food is expected to bring.

Q: If you had a choice, what kinds of food would you eat? / What are your food preferences?

“Same food, Samoan foods, taros, bananas, fish!”

“Taro, banana, fish”

“Coconut. It's our first priority, taros. Fish is so expensive!”

“It doesn't matter how good the food is, if there is no taro and no banana, it's no good!”

“When we go here, everyone got jobs because there were many jobs, then you buy anything you like, whether you like taro, it’s too expensive, but you still buy it cos you missed the food from back home, and you enjoy it.

“For me, if you have the taste of the food, no matter how hard it is to get it, or expensive, you try your best to get it. It’s no good to buy stuff and you don’t like it. There are sometimes I don’t feel like having anything, but one thing, like one seafood, and you try your best, or ask your children to get that for you, so that’s the other thing, the taste.”

*Sub-theme – The higher value of Pacific food*

Consistently within the interviews it was identified that Pacific food holds more than simply nutritional value for those of Pacific ethnicity. Participants indicated Pacific food items also carry a psychological / spiritual value that New Zealand food lacks. Due to this added psychological/spiritual value, participants thought it necessary for Pacific elderly to consume Pacific food on a daily basis in order to maintain good health and wellbeing, implicating (for those interviews) that health and wellbeing incorporates numerous facets, including physical, psychological as well as spiritual health. It was also stated by one focus group in particular that Pacific food is seen as a connection to their homeland and traditional roots; something that Pacific people must be keep and maintain as much as possible whilst living abroad / in New Zealand.

“...but I think with our elderly, that they need that [taro], you know, maybe not a lot, but they need that cos that was their stable diet from back home, and sometimes they’re not satisfied until they have had that little piece of taro.”

“Once you eat taro or banana you can feel satisfied for the whole day. It’s not the same, New Zealand food. With potato, you feel hungry again later. Even with a piece of taro, even a small piece you can feel satisfied for the whole day. For me, if I have a small piece I can be ok for the whole day, just a cup of coffee.”

“It’s a way to get strength, to build your strength [eating Pacific food]”

Translator: “You enjoy. They are very connected to the homeland when visitors come and they bring it (food), that’s very special. It’s like a delicacy, because it has come a long way. They are eating it (New Zealand food), it’s not the same as when you are connect to the lands food, over here you have to eat to live, there’re not saying it’s boring, but they don’t really have any connection to food from New Zealand, whatever’s available.

#### *Sub-theme - Lifestyle and Education adaptations*

An adaptation of lifestyle and education was a prominent sub-theme following from the central second theme of translation of Pacific culture onto the New Zealand context. Lifestyle and education adaptations emphasised two main areas of change, which included increased exercise promotion throughout community facilities and organisations as well as health literacy education, each subject to be taught in the Pacific languages.

The incorporation of exercise groups into the community was identified as having increased in recent years, with many different groups dependant on age, gender and sporting preference being formed. The majority of participants noted the benefit of these exercise groups particularly for the elderly, since these groups served the dual functions of keeping

them well and also keeping them engaged within the community. The latter was seen as important, given the adaptation and evolution Pacific culture and Pacific people have to make to adjust to the New Zealand context.

“There’s an increased number of community based boot camp programmes, exercise programmes that now exist in Porirua and large Pacific populations and NZ born generation are more aware of the consequences of bad choices although psychologically they might not be at a point where they can manage that”

“In the community, they’ve got some... healthy lifestyle exercise that they do, they also... this is through the Church, they also have walking groups that they go up in Porirua, that they walk up to that outlook. They also, in the community, they also have services that provide exercise for the elderly as well.”

The incorporation of food and lifestyle education in Churches and on the Pacific radio in order to increase health literacy in the Pacific community was noted to be of significance and value. It was deemed important due to the transition to New Zealand resulting in many changes to diet and lifestyle, as well as the emergence or increased intensity of illnesses. The education provided within the Churches and on the radio is taught in a range of languages in order to reach the maximum amount of the New Zealand Pacific population. Messaging and education ranges from medical advice and treatment options to preventative education, incorporating exercise and diet advice (advice for healthier meal preparations, utilising traditional Pacific methods of cooking).

“I listen to the radio on Tuesday mornings. We have a Cook Island Doctor who comes on the radio every Tuesday to try and help his people. To talk about cancer and diabetes, about what’s good to eat, and what’s good to do with your body. I listen to him, I think he has a good programme. He does that every Tuesday.”

“Education is the key part in my understanding, to get the message out.”

“There are cooking hints, with corned beef, it’s quite fatty, taught to nuke it, drain the fat, nuke it, drain the fat, so you’re draining all the fat now [all taught at church]. And also not with so much coconut, ya know, coconut cream in some of our Taro, like when we do Taro bananas.”

### *Theme three: Challenges to health due to living in New Zealand*

Theme three, Challenges to health due to living in New Zealand, is the most extensive of the themes identified. Challenges were a significant area of discussion within the interviews and focus groups, with a number of the participants wanting to discuss these in great depth as well as educate the lead researcher concerning the challenges faced by a number of the members of the Pacific community. The responses given and the underlying beliefs held by participants varied in relation to level of acculturation; often resulting in significantly different and almost polar opposite discussions / statements arising. Five key sub-themes emerged through the thematic analysis process: Issues of access and availability to food, Lifestyle misalignment, Nature of New Zealand food and practices, Role conflicts, and Loss of traditions.



*Sub-theme - Issues of food access and availability*

Participants, independent of their level of acculturation, described the challenge faced in New Zealand regarding the food options available, and more specifically the alternative options being of a higher fat content, or of a less desirable standard of quality and taste. A common example presented by those interviewed was the use of canned corned beef in New Zealand, which was identified to be extremely high in both fat and salt and damaging for an individual's health and wellbeing, compared to fresh beef which was the preferred option for participants, and would have been the historically traditional option in the Pacific Islands. In addition to traditional Pacific foods being fresher and usually healthier, traditional foods also held much more significance than current "replacement" foods present in a monetary (non-barter) economy such as New Zealand.

"Pacific Island traditional diet could consist of cultivating naturally what's in the garden, and I think that's been... there have been food in New Zealand that has been of the same kind of food and is more higher fat.... I think too, in terms of hierarchical system in the Pacific, the best food is reserved for the people at the higher level of the hierarchy, usually reserved for people who are chiefs, church ministers get the best of everything, even today, so you'll find that in some Pacific functions, for example the top tier of the wedding cake goes to the minister, or things like a wedding or a traditional celebration, there's an offering made between families and to leaders, like church ministers that consist of things like corned beef cans, and that replaces traditionally how we used to trade things pre monetary systems, so cattle was gifted and pigs were gifted and things like that. Here, what's being used is almost a surrogate, or replacement food... so that's sort of how it's changed I guess."

The challenge of food items not translating well within the New Zealand context strongly reflects the additional challenges, such as access and availability of food and produce in New Zealand. However, these challenges were not agreed across the interviewees, with strong contrasts in opinions presented by those identifying as low- and high-acculturated.

Participants identifying as low-acculturated did not indicate any problems in access to and availability of Pacific food, or healthy food in general. Those identifying as low-acculturated expressed happiness at the options available to them within the supermarkets and at the local vegetable markets. While they noted prices were sometimes higher than they would like, due to prioritisation of their health and wellbeing they were willing to pay the higher prices rather than jeopardise their health and wellbeing with the purchase of unhealthy cheaper food options. Participants also indicated the ease of growing vegetables within the family garden, providing both access to any vegetables desired and also availability in growing seasons. The use of a green house was suggested as a solution to increase heat and humidity in order to grow produce that would normally be limited to a tropical environment; participants were realistic that some items (such a mangoes) would not be readily available in New Zealand, however this was not signalled to be a significant challenge.

*Low acculturation:*

“Well, its good, very good, everything in here, in NZ and food here is good, can get anything”

“I have a vegetable garden at the back of my house, so that is part of my, exercise, is digging. But there is also, its, it’s also providing vegetable for the whole family and not just my immediate family, but the extended family”

“You can plant your own vegetables if you have the space in your place”

“They have the market and it’s a little cheaper, try to find a little cheaper”

“Doesn’t worry me, whatever the price is, if it’s going up, I spend the money on the food. I don’t smoke, I don’t drink, and I don’t play the poker machine. People think I’m lying, but I’m not”

Those identifying as having high levels of acculturation had a different perspective on access and availability of Pacific foods within New Zealand. High-acculturation participants felt it was not possible to grow vegetables within the family garden due to the lack of space, quality of the soil, and also the lack of time due to other commitments. They were also unsatisfied with the amount of Pacific produce available at markets or supermarkets, and often commented that when such food items were available they were often of a low quality. Comparative to those of low acculturation, this group of participants did not feel it was possible to prioritise health and wellbeing due to the barriers listed above.

*High acculturation:*

“But coconut juice and mangoes you don’t get readily here. But for mum she always craves that kind of food, yams and other things, but you can’t get it readily here. But recently more cost than anything”

“It’s more likely to be an access issue, so Pacific Island traditional diet could consist of cultivating naturally what’s in the garden, and I think that’s been... there have been food in New Zealand that has been of the same kind of food and is more higher fat. So the traditional diet is about not having access to a piece of land where we cultivated a lot of vegetables, and I think that’s a barrier here compared to what we were doing in the Pacific.”

Perceived difficulties in access and availability of Pacific foods were quickly linked to high costs by high acculturation participants. The expense of Pacific food was noted as an extreme concern to this group, despite low acculturation participants not having the same concerns, as the excerpts below show. Low acculturation participants did not focus on barriers to access or availability of Pacific foods, as they did not feel there was a concern, or a need for discussion on the issue.

*Low acculturation:*

“Oh I don’t have any problems. I make sure I eat. I make sure I eat at the certain times, when you are supposed to be eating for the rest of the day. I make time for that.

“I do too, yeah, just watch what you eat”

Researcher: Do you have any problem with cost?

“no”

“I have no trouble”

“I try to buy the foods that are good for my health, no matter the cost”

Researcher: How do you find the prices of fruits and vegetables in New Zealand?

“It’s good, yeah its good”

“It’s good, it’s alright, you can plant your own vegetables if you have the space in your place, it’s alright, they have the market and it’s a little cheaper, try to find a little cheaper”

By contrast, high acculturated participants felt they were unable to purchase the desired foods due to their income not matching their needs, thus resulting in the purchase of higher fat cheaper food, which was often met with an element of shame and disappointment (see theme one; Mana and personal esteem).

*High acculturation:*

“It’s quite expensive [coconut juice], when you do find it here, it’s quite expensive”

“It’s the cost, of eating healthy, especially when you’ve got a big family, I’ve got four kids and my husband, and trying to get lean meat, cos we’ve tried it, but its just finding... for a country that is supposed to be the key manufacture in meat, our meat is so expensive, so for us, cos my family is quite a keen trainer, he loves training, he loves eating healthy but when we try, we try and eat as healthy as we can with our children, but it’s so expensive, it’s really expensive. I try and go to the markets to get the veggies, while at the same time trying to get meat that we can afford and that’s good for us, because Island men, my husband has meat because he does physical work for a job,

and also getting meat that's appealing to the kids, so I can force them to eat their veggies as well as the meat, at least the meat will be tasty, and so that they will eat their veggies... The struggle that we have with it is maintaining the healthy eating because of affordability.”

“It depends, because I know the expensive food is the good food eh, but if you cant afford that food you buy the cheap one, and that's the worst! So sometimes I try to buy the food that's good for my health. Yeah, Yeah, depends on what we have, what money we have. The bad food is cheap and the good food is expensive..”

It is important to note that both low and high acculturation participants came from the same communities and belong to the same social groups, which suggests (although this was not directly measured) that they likely have similar socioeconomic and societal contexts. Despite their probable socioeconomic similarity, their views on affordability and accessibility to healthy food varied in direct relation to their levels of acculturation.

#### *Sub-theme - Lifestyle misalignment*

Misalignment of eating practices and lifestyle timetables was a common sub-theme discussed by participants. As indicated in theme one, Pacific culture is collective and relationship focused. Due to the collective nature of Pacific culture, participants (of both low and high levels of acculturation), emphasised the need for families to eat together, and this was seen specifically as a way for families to maintain good health and wellbeing. This is likely because eating together was emphasised in the traditional Pacific island context, where food production and consumption were central to cultural practises and strengthened social bonds as well as perceived wellbeing (of the individual and group). By contrast, in the New

Zealand context participants of both low and high acculturation stated that eating together was challenging due to late and/or early working hours, additional after school activities such as sports or in some cases, transitioning to a second source of employment for additional income. Participants described that in cases such as these family members would eat independently of one another, resulting in poor food choices due to meals consisting of takeaways (for convenience) and/or cheap options which may include a high amount of starch, high levels of fatty meats and often processed foods containing high levels of preservatives, which were identified by participants as detrimental to health and wellbeing, yet consumed despite this knowledge.

“If I come home, some of my family are working, it’s very hard to say at six o’clock we have dinner, because some of them don’t finish at that time”.

Translator: “He’s talking about the togetherness of the family, because him and his wife, they are retired and they don’t work anymore, they can’t wait for the two others, his two daughters to eat together because they are still working and when they finish they go to exercise and other things, so when they finish they just come and have their own food”

“I was working at night time, ten years, you know when I was working at night I would come home feeling empty in my tummy, I would sit down and eat a lot, a big plate of food, in the morning, that’s my one plate of food for morning and lunch, so after eating go to bed and four o’clock I’m ready to come to work, so I don’t know what happened to those days”

A second facet within the sub-theme of lifestyle misalignment was the issue of motivation and self management regarding the need for and ability (motivation) to maintain lifestyle changes to improve health and wellbeing. Again, a remarkable difference was presented between the two identified groups of low and high acculturation levels. Those presenting with low levels of acculturation, when asked how they felt about their personal health, often stated they were extremely happy with their current state and outlined their lack of medical issues, including a lack of diabetes and heart problems (illness common in the Pacific community). These participants would express their gratitude to those around them, as well as crediting their religious values for their good health. Some of those interviewed would mention ailments such as arthritis or trouble with vision, however this was consistently counterbalanced with an understanding that these ailments were normal for their age, making the distinction between age related illness and weight related illness.

*Low acculturation:*

Researcher: One more question, how do you feel about your personal health?

“I’m ok, good thank you”

“Its very good now, good breakfast this morning and a cup of coffee”

“We exercise”

“Its good thank you”

“No diabetes, no trouble”

“No heart problems”

“We are happy, when you see old people walking with the stick; they are younger than all of us!”



“Feel perfect! Feel great, praise the lord we still feel good”

“Oh I don’t have any problems. I make sure I eat. I make sure I eat at the certain times, when you are supposed to be eating for the rest of the day. I make time for that.”

“I feel very comfortable with my health. Like I said, no doctors can get rich off me. I have to make the appointment and they ask what for? And I say just for a check up and they laugh cos it’s been 27 years. And they say no problems, I say thank you.”

Those with low levels of acculturation would often reference family members, or other members of the community, who were comparatively not as fortunate with their health and wellbeing, often suffering from conditions such as Type 2 diabetes, cardiovascular disease, respiratory diseases as well as skin infections (unintentionally, a significant number of these people identified were also included with the current study).

Those interviewed with higher levels of acculturation usually expressed their dissatisfaction with their current state of health, finding it difficult to control eating habits (including quality and quantity) as well as motivational issues regarding engagement in exercise or physical activity. Participants within this group did not deny their current perceived unhealthy physical state and were very open to discuss any medical issues they were currently experiencing due to their health. Participants within this group described the death of a number of family and friends due to weight related illness, indicating such losses were used as a prompt to initiate conversation within Pacific families for making a change;

however often the changes (perceived to be positive) were unable to be maintained over a length of time.

*High acculturation:*

“oh, I know I could improve, like um, I’ve done yo yo diets and all that stuff. And I know I need to get back into the gym or into exercise and so that, I know I need to improve my eating. I think its... I know that I must within myself. That I know where I have been a year ago and where I am now, is not where I was a year ago. I know I’ve got to do that, I think it prioritising and disciplining around myself”

“My personal health? I feel I could do a hell of a lot better. But, I think to be honest, I think it just comes down to laziness and not really being greedy with time to myself, cos when I finish work I just want to go home and relax, I’m not in the mood for walking, you know, just for the sake of walking, I’m not a swimmer, so I don’t want to go swimming, definitely could improve, I could, I suppose eating habits could improve too, but my lifestyle is in such a way that I can’t dedicate certain times to eating, like for example 8am breakfast, 12pm lunch, I couldn’t do that lifestyle, its just too hectic, but yeah, could definitely improve. I definitely could improve.”

“But just what happened this morning, with our friend (friend died of heart attack) you think man that’s close to home, it’s too close to home, you’ve got to take that stuff seriously. And you know, it may not be fool proof, but it’s also about quality of life, so not being able to do something because I’m overweight is not acceptable. And I’ve got my niece who is almost like a

granddaughter or daughter for me that I'm caring for, and I've already said to my sister that she going into swimming, cos I can see by her body, that she's like us"

"I know, when I sit down and think about it, spiritually and the values of it, because the culture food is more of a gathering of family you talk. Spiritually is feeding your body you know. So, they are all important, but it's something that I tend to forget now and then because of your day to day life you're so busy that you're not careful with the way you look and choose food. I think it's just the way life is, so fast, working and doing other things and you forget the importance of why you eat and the choice you make with food. So when I do have time. This is a very important question. When you look back on it, the traditions and spiritual side, it's on the back burner, but I would like to be in that situation again, but right now. I know the importance, but its not a priority right now as well."

#### *Sub-theme - Nature of New Zealand food and practices*

Three key ideas were identified within the sub-theme of the Nature of New Zealand food and practices, these were; Fast food being too readily available in New Zealand, Dissatisfaction with New Zealand food storage practices, and a Pacific diet must be paired with an active lifestyle. Low and high acculturation participants all generally agreed that these were critical challenges to health faced by Pacific people living in New Zealand.

Fast food being too readily available in New Zealand, as well as being perceived as cheaper than Pacific food or healthy food, was a key point made by many of the participants, who indicated this as a cause for detrimental health of a large proportion of the New Zealand

Pacific population. Targeted advertising by fast food chains directed at children and youth was also cited as a cause of unhealthy eating tendencies. The abundance of fast food restaurants and takeaway outlets was described as being higher in areas of low deprivation such as Porirua, Wellington, with a significant amount of advertising being directed at children, subsequently placing a large amount of pressure on parents to provide fast food for their child's happiness. Both low and high acculturated individuals expressed concern over the easy access and low cost of fast food, as well as the demand for it among Pacific populations.

“Young people just eat junk these day and fizzy drinks. My Grandchildren, oh... they really, they have to have a birthday at Mc Donald's, it's a treat for them, I'll just go and ill just have coffee. I don't eat their food”

Dissatisfaction with New Zealand food storage practices was also commonly mentioned throughout the interview and focus group process. Participants were extremely unsatisfied with the storage methods commonly used in New Zealand, such as freezing food items or keeping food (both cooked and raw) in a fridge for prolonged periods of time. Participants indicated that such food storage practices lead to illness, and suggested this was a significant factor contributing to the poor health of a number of the Pacific population within New Zealand. The ability to source fresh food and produce in the Pacific Islands was a preferred option, and participants indicated there was not a need for food to be stored or kept for any length of time in that context. Participants felt that those with poor health would not be in such a situation had they stayed in their homeland and consumed a traditional diet of fresh, unprocessed foods, however it was noted that the Islands were not as 'they once were',

with frozen foods from the west now being introduced to their diet (which was noted with disappointment by the participants).

“One of the benefits of being home (in Samoa), whatever you get, fish or pork or chicken, it’s all fresh, it comes straight from the sea or wherever. It comes straight into the pot and on to the table, it’s not like here where you get frozen food”

Translator: “They say they think if they stayed in Samoa they would be strong now. But its different now. There are a lot of frozen foods now”.

A number of those interviewed described the need for a Pacific diet to be paired with an active lifestyle, which is not the case with New Zealand (also noted was the high level of sedentary employment within New Zealand). Participants felt a key challenge to their health was the ease with which food was sourced in New Zealand, involving little or no physical exertion. This is in stark contrast to the traditional lifestyle in the Pacific Islands which involved sourcing food off the land, consequently involving a large amount of physical exertion. Participants identified Pacific foods (often favourites) such as taro and coconut milk to be high in calories and fats. However, historically such fats were needed for the energy required working on plantations or when working on a fishing boat. While adaptations have been made within the Pacific community (discussed in theme two) to incorporate exercise groups into the New Zealand Pacific community, participants indicated this was not enough exercise to expend the food being consumed (especially when considering the number of takeaways and ‘bad’ foods being consumed in addition to Pacific food). Participants stated

that this lack of balance resulted in weight gain and poor health and wellbeing for a number of the members within the community.

“Living in Samoa its good to follow that tradition, because it’s the type of food to give you energy to go to the plantation, here in NZ, it will be a killer (Pacific diet), cos we tend to sit more, we have vehicles that we travel in, and we just... and that’s why we get a lot of fat people, cos they just eat and sit instead of going out to the plantations and walking everywhere. Well that’s what I think, I’m no doctor.”

“The only difference when we came here... the main food we had, we also had to do a lot of exercise, whether you are going to the sea, the land or the plantation, it’s all exercise and you can’t do that here now, they are physical, they are physically balanced I would say, but when you come here (to NZ), if we ate the same food here, I don’t think... it might not work, you need to do the work to burn off the taros”

“In Samoa we have a lot of work to do, it’s all exercise, so you are sweating all the time, not like here”

#### *Sub-theme - Role conflicts*

The fourth sub- theme, role conflicts, was a key challenge to health for those granted with a high status or respected title within the New Zealand Pacific community. Participants who fell into this category expressed the pressures surrounding them to portray certain behaviours; behaviours they perceived to be expected by members of the community.

Participants feeling such pressures were of high acculturation and as previously discussed, often had difficulties with self management and struggled to maintain a level of health that was satisfactory (identified by the individual). The below extracts demonstrate two methods of coping with the perceived role expectations; one participant identifying the role as enabling healthier choices, especially when within the public eye (a self perceived positive outcome of the challenge), with the second participant admitting to not following through on the advice provided and potentially over eating at events or celebrating due to a lack of self-control (a perceived negative result and outcome).

*High acculturation:*

“It wasn’t until I got this job in the health sector that I had to actually take more responsibility to portray a healthier lifestyle and I had to be seen as a role model”

“Sometimes I will be a toast master and I tell the people you eat what you can eat, not too much because when you have finished the first plate you can come in three or four times, but don’t over take, but when I go in the table, I just go! I don’t take my advice! I forgot it!”

*Sub-theme - Loss of traditions*

Loss of traditions over time was identified as a significant challenge to participant’s health whilst living in New Zealand. Both those of low and high acculturation mutually agreed on this challenge due to the potential loss of Pacific Culture occurring as more of the community are identifying as New Zealand born and are adapting and adopting New Zealand practices and principles (becoming highly acculturated). Participants noted the difficulties in

maintaining good health and wellbeing at a family and community level due to the loss of traditions and loss of connection to their home land. A number of participants stressed the point that knowing and communicating in their native language was of extreme importance (A key link to theme one, Pacific Cultural Identity), one participant stating that a loss of the Samoan language would be a loss of Samoan identity.

“Children always eat late. But that’s over there, but over here we usually eat together. It’s our custom over there, usually the children eat late because they serve the older people first before they eat, and mostly over there the kids help the mum to do the cooking, and we come and get the food ready for our parents to eat first, or any older people to eat first.... That’s the life in Samoa, not in New Zealand. I don’t know why they change when they come here... I guess people change when they come here”

“In our house, people eat different times; we don’t sit down and eat together. If you talking traditional, it’s also how the time changes, traditional is not the same as now, some families are able to maintain it, according to their structure, cos when you have parents, that’s when these formalities, so if my parents were alive we would have the same formality, because they not, so everyone comes at their own time and does their own thing.”

“You know the other thing, we don’t want to lose inside our family, is our Samoan language, cos I know the kids are going to the school here, they use English, I said you can use English, but don’t forget your Samoan... don’t lose your Samoan identity.”



*Theme four: Solutions*

Theme four; solutions, identifies a number of the suggestions outlined by participants as important areas of focus for the NZ Government. Four distinct sub-themes were derived from the interviews; Education, Improved resources, Variations on food pricing, and Responsibility and accountability.

*Sub- theme – Education*

Increasing education was identified by the majority of participants as one of the key ways of addressing the previously discussed challenges, and more specifically providing a tool for individuals and families to prevent illness related to weight and food consumption choices. Participants made a clear distinction between different avenues of education, such as specific health literacy education, as well as general education, which would enable more options for an improved lifestyle (enable more possibilities to engage with populations in low deprivation environments). Better education would also increase workforce opportunities, resulting in higher incomes and a stronger sense of self and self worth. Participants expressed an inability to budget and manage finances in a controlled manner, This difficulty also extended to budgeting of food and food portions; expressing the inability to manage meal sizing and make educated decisions as to how much food is required for certain occasions.

“Education, the key here is education of the child and the parents, they need to be able to have some sort of teaching that is available in regards to their health, how to choose, or how to eat well. They need to come inside the Church and have these programmes. The government is too much policy... they need to come into the Churches, they’re not using the money, filtering it

down to appropriate people who they need, cos they say Pacific Island Obesity etc, but they're not actually, I don't know... they don't meet with the people."

"Well, helping us to get through school so we don't have to be on the lower social economic continuum, meaning that we're forever struggling and worrying and threatening of this and threatening of that, so we don't have a, a natural sense of wellbeing, we're always struggling to reach our aims, so reach our aims and reach or goals."

"We don't have the education of trying to budget"

#### *Sub-theme – Education / improved resources*

The current sub-theme, Education / Improved resources presents two areas heavily discussed by participants that combine the notion of improved education, as well as improved resources, indicating that often the two may not be delivered in isolation. A number of those interviewed were adamant that healthy meals must be provided in all schools across New Zealand, often for both breakfast and lunch, no matter the decile or racial configuration of the school. Participants of both low and high acculturation supported this as they had both seen the effects of weight related illness within their families and communities (those with high acculturation, often first hand) and expressed the importance of teaching children, through the delivery of healthy meals, that healthy food and healthy food choices should be valued and prioritised.

"I heard on the radio and the news, the government is trying to give free milk to some of the schools, not every school, but some of them, I wish they can do

that for all the schools, the children should know that this a better thing for them to live on, rather than fizzy drinks and things like that”

The second solution provided which blended the line between education and improved resources was the addition of community gardens to Pacific population within New Zealand. As discussed within theme two, the connection to food and knowing where it came from is extremely important for psychological and spiritual wellbeing for those identifying as Pacific. It was also discussed in theme three, that being able to grow and maintain a vegetable garden was a challenge when living in New Zealand, due to limited space and resources. Having the ability to grow a garden as a community both utilises community resources and fits with the naturally collective nature of Pacific culture. A community garden provides families the opportunity to teach younger generations the skill of growing fresh produce, as well the value of fresh and organic vegetables. The garden would also address challenges of access and to some degree, availability.

“Provide a way of our families to actually source things to grow, to grow their own gardens and encourage families to grow their own veggies, or even provide areas where the community can all come together and grow a garden together and work together as a community, so it becomes an exercise thing but also get the fruit afterwards.”

#### *Sub-theme - Improved resources*

Having additional financial support from the New Zealand Government for the Pacific community was a solution presented many times throughout the interview and focus group process. However, it is important to note that financial assistance was not signalled to

be for one individual or family (such as increasing benefits or income support) and was instead suggested as potentially helpful to fund communal activities such as exercise classes. As discussed in theme one, elders are the most respected members of the community, with this value clearly supported through the below extracts; indicating the need for financial support for the elderly exercise classes. This was seen across the board for participants, independent of the level of acculturation exhibited.

“Free up the swimming, let us to the swimming, we are trying to get our swimming ticket. To support our exercise classes for the old people, we are training every Tuesday and Thursday. If the government supported us that would be good, some money, but not too much. National is tough! Cut this, cut that! Maybe Labour will get in next time.”

“I think financial, support”

“Not for one person, but for the community”

“Be nice to set up the exercise, like here, why can’t we have twice a week? Cos once a week is not enough”

“They need to work together as a partnership, with the Churches cos there are more numbers in there, and in Churches there is a family, so that it’s not just an individual child that is at school, the whole family is involved in the church, so if there was a health programme, for example there is the senior exercise, so they need to put some money in it, they don’t have a lot of funding, it’s a great initiative from the grass roots, so they are providing all the organising, the work for it, but there is no agency coming to provide funding

just to sustain this in the longer term, cos these are all volunteers, so programmes like that they need to be implemented in Churches as well. I mean that's just one idea, there is a lot more."

Increasing workforce opportunities for Pacific people was a solution offered by a number of the male participants (although it should be noted the women in the focus groups did not disagree with this solution). The two extracts below were taken from two transcripts of men (low acculturation) who expressed the governments need to create a larger workforce / generate more workforce opportunities, especially for those in lower socio demographic communities. Participants indicated that during earlier periods in their life when work had not been a concern communities were healthier, and happier. This was attributed to many reasons, including increased engagement with others (psychological), increased physical activity (physical) and the ability to purchase 'healthier' foods, as well as Pacific foods (nutritional / psychological / spiritual), due to the larger disposable income.

"I just think, you know, more work, we should all go to work to help out, but not only one person, the whole family"

"There were a lot more jobs in the 50s and 60s, people had more than one part time job, there were heaps of jobs... I will never forget that time in NZ"

#### *Sub-theme - Variations on food pricing*

Healthy food being expensive and bad food being cheap was one of the biggest challenges expressed by participants with high levels of acculturation. A potential solution to this problem, through price increases to "bad food", was passionately expressed by every

participant interviewed. Variations to food prices, or more precisely to increase the price of ‘bad food’ such as takeaways, chips and sugary drinks and to decrease the price of ‘healthy food’, including fruit and vegetables as well and bread and milk was identified as the key solution; to be potentially one of the only solutions needed. Participants discussed in depth how this might be instituted by the New Zealand Government suggesting tactics such as increasing and decreasing the taxes placed on the various items. Participants who had noted they did not have a problem with cost and/or access to healthy food (also identified as those with low levels of acculturation) were supportive of the price variation as they saw the need for this for those who were struggling to make good choices; choices which were often based on price (combined with a lack of education).

“What do we need from the government? To subsidise, to make it cheap, milk and bread compared to some of a bottle of coke that we see. So, reduce the prices of these kinds of things that people need for the kids every day.”

“I just think healthy food should be cheaper and junk food should be more expensive. And if it was that way then, yeah, I think it would help a lot of families. I mean look at the cost of lollies and fizzy drinks and chippies, compared to apples and you know.. all the vegetables and all the healthy stuff, and noodles cheap as, so those are the types of diets that, especially Pacific will probably be living on, is the cheap stuff. If you’ve got kids you’ve got to provide lunch for, it’s impossible.”

“Fizzy drinks are so cheap now eh, so they’d better put the prices up on the alcohol and fizzy drinks so people don’t buy them, cos I know my kids they

like buying Coca-Cola everyday, but I've been telling them it's not good, I say don't drink that, they are 40 year old and I'm still telling them not to drink fizzy drinks."

*Sub theme - Responsibility and accountability*

Responsibility and accountability were key points made by those of low acculturation when asked the question: "What assistance would you like from the government to help you become a healthier individual, family, and community?" Those of low acculturation responded that it was not the government's responsibility to take care of those who had made choices that resulted in preventable disease, and therefore these individuals should not be given additional targeted resources separate to the general public of New Zealand. The below extracts are examples of such positions. It should be noted that these extracts were said passionately and participants were adamant in the attitudes and beliefs they expressed on this subject.

*Low acculturation only:*

"It's not up to the government really. It's up to the people themselves. You can't rely on the government your whole life. You really can't. What you put through your mouth is your decision. It's your body."

"It's up to you to help yourself... They create the own problems themselves. They create themselves. They don't listen to anybody"

The below extracts are not directly solutions; they offer a difference between the Pacific and New Zealand context in regard to food choices/situations, suggesting positive

outcomes as a result of limitations. It was identified that having unlimited amounts of choices for food, often regarded as a positive in modern society, actually can lead to bad food choices and be ultimately detrimental to a person's health and wellbeing (contributing to diseases). (Note: this is called "the paradox of choice"- greater choice leads to less clear solutions/opportunities (Schwartz & Ward, 2004). This was also stated previously in relation to modern societies in general, where access to greater variety of food has led to overconsumption of food, and access to higher fat and higher sugar content food has in general led to unhealthy and imbalanced food selection (Caplan, 1996; Sorensen et al, 2003). This notion is strongly linked to theme one, Pacific Cultural Identity and the Sub-theme of Cultural practices, which outlined the value of seasonal availability and the consequent moderation of food intake that takes place.

Translator: "They talk about the variety over there it could be ten (options for food), over here (in NZ) it's fifty. Over here there is more. They say it's too much"

Translator: "He's talking about different kinds of food, and because back in Samoa you have paw paws and bananas and he comes here and there is a variety of foods, which also comes with a lot of diseases. That's what he's talking about. But it doesn't really change what we eat, what I can say is in the olden days it was hard for those who arrived here early, in those days, to get what we have now, because of the availability of all the different foods and also we find that the Asian also come in and different denominations that bring in their foods, some of the foods are the same as we get at home, but the difference is the preparation."



*Traditional Pacific lifestyle has now changed*

Throughout the current study the use of the term ‘traditional Pacific’ has been utilized based on the responses from the participants who reflected on their experience when living in the islands. However the average year of immigration to New Zealand from the Islands was 1965, with an average age of 19 years (average age of participants within the current study: 49.3 years). Participants recognised that the traditional Pacific diet that they knew and strived for today was not a diet currently practised by the majority of the Pacific population today (living in the Pacific Islands). The below quotes demonstrate this shift in diet within the Pacific Islands:

“I do see it when I go back to the Islands, there’s so much that has been brought into the Islands, from the outside, from China, from the US, all the processed food that appeals to them, the whole diet thing has changed.”

“So my upbringing there, the food they had was healthy, its good food, but I think with the changes of... last time I went back was 2009 and of course from all the Western influence and cheap meat that’s going over there, so they have access to that, and it’s cheaper than some of the things that’s good for you, so that decides your choices as well, if you don’t have a lot of money, then of course you’re going to pay for the mutton flaps.”

In addition to changes in diet, there appears to have been an overall change in expression of Pacific culture in the islands. This is widely credited to the westernization of Pacific islands (Curtis, 2003; King et al, 2012; Davis, 2004), which has corresponded with

increased obesity and food-related mortality rates. Although the focus of this study was on food, diet and personal health, participants also suggested that traditional Pacific culture as practiced in the islands had changed over time:

“When I look at it, they’re going for the convenience now, and not going back to the old ways of growing a preparing your own food, but going for what the western worlds are introducing into it.”

It is important to mention this shift in cultural practices in the islands to emphasize that comparisons made in this study to “traditional Pacific cultural practices” are not meant to reference the current state of affairs in the Pacific Islands, but instead a previous non-westernized sociocultural context, which informs the decision-making and attitudes of participants in this study by way of comparison to their experiences in the New Zealand context.

## **Chapter Four**

### **Discussion and Conclusions**

Regardless of the level of acculturation of interviewees, there was a clear respect for traditional Pacific cultural practices, as well as a preference for an environmental context similar to that traditionally in the islands over that in New Zealand. While this could be viewed as a romanticized perspective of the traditional island context, it does highlight how difficult the transition to the New Zealand cultural and social context has been for many New Zealand Pacific. As has been mentioned before, this is reflected in poor health outcomes, particularly in relation to food-related disease. This is not unlike the experiences of many migrant populations as they transition to a new cultural setting. As Borrows describes, “At the time of migration, people are at special risk for adoption of negative health risk practices” (Borrows pg. 714, as cited in Carballo & Nerukar, 2001; Prior et al 1987; Salmond et al, 1985).

In the case of New Zealand Pacific, adjustment to the new cultural and social context of New Zealand, coupled with cultural traditions that can, in the new context, encourage an overconsumption of food, seems to have created a situation where food-related disease has a higher likelihood of affecting each individual relative to the New Zealand population as a whole. This is further exacerbated by difficulties New Zealand Pacific experience when interacting with the New Zealand healthcare system. A moderating factor seems to be the degree to which the individual has incorporated dominant New Zealand cultural norms; those New Zealand Pacific individuals who retain more cultural traditions tend to maintain better (healthier) food consumption and lifestyle practices than individuals who have assimilated more to dominant New Zealand cultural norms. The discussion below will draw from the perspective of participants in this study and also from previous research on this subject to illustrate these points. It will also suggest why traditional island cultures and environment

may have created a healthier context for New Zealand Pacific than the current New Zealand context, why acculturation seems to correlate with poor health outcomes, and what solutions participants in this study and in previous research have proposed to enable better health and wellbeing for their population. In agreement with the findings from this and other studies, participants proposed solutions that utilized traditional modes of cultural principles and practices to enable better health and wellbeing.

*Traditional Island context-cultural traditions and food consumption viewed as “in balance”*

Participants universally agreed a traditional island context was better than a New Zealand context for living a healthy lifestyle and consuming healthy foods. This supports the conclusions of other studies which found that Pacific individuals had better health outcomes, and perceive better health outcomes to be possible, in traditional island contexts than in modern contexts such as that experienced in New Zealand (Anderson et al, 2006). This may seem paradoxical, as the modern New Zealand setting would appear to have comparatively more robust health services, better selection of foods (including healthy foods), better housing, and overall more potential for a “healthy” lifestyle for the population as a whole. In fact the opportunity to live a better life was described by participants as the main motivator for coming to New Zealand. While “a better life” was primarily defined as having better, more stable employment, it did also extend in some cases to include better access to health and social services in New Zealand comparative to the islands.

Given these motivations for migration, why is the New Zealand context now seen as a place where health outcomes are less likely to be positive for New Zealand Pacific? The findings of this study suggest that the delicate balance of cultural and environmental factors in the traditional island context collectively served to reinforce healthy wellbeing for individuals and communities, whereas this balance is harder to achieve in the New Zealand context. Many participants in this study expressed difficulty with maintaining a healthy

lifestyle, despite having access in New Zealand to non-traditional Pacific lifestyle options that could enable positive health outcomes. King et al (2012) describes this imbalance (between culture and context) as a “cultural disjuncture” (pg, 134) which New Zealand Pacific people can mitigate by utilising the strengths of their traditional cultural principles while adapting practices to fit the New Zealand context. The current study supports the assertion that such a strategy could lead to better health outcomes; this will be further explored in the solutions section below.

In the traditional island context limited food resources available in the environment forced Pacific peoples to be conscious of their food intake, as well as develop cultural mechanisms which enabled them to maintain as healthy a lifestyle as possible in an often challenging context. Specific difficulties included a periodic lack of food resources due to seasonal variation, and limited overall resources (due to being confined to an island), as well as the need to work hard and burn many calories in food production (de Garine & Pollock, 1995). Although periodic food deprivation was common, many of the traditional foods available in the islands were healthy, in terms of providing vitamins, protein, and low-density calories. This is especially true in comparison to the often high-fat, high-sugar, or processed foods available in modern societies (Mennell, 1991; Caplan, 2006), such as in the New Zealand context.

To cope with their surroundings and often limited resources, Pacific people developed cultural values and practices which emphasized sharing of food resources to strengthen social and communal bonds; feasts, to encourage communal eating when food was periodically in abundance, to counterbalance periods of deprivation, and to strengthen social bonds; a positive social valuation for individuals/families who had abundant food stores, which incentivized collecting and storing of food; and a higher social status for those who were

larger in body size, which signified wealth and prestige and incentivized weight gain when possible (King et al, 2012).

In isolation, these practices and values would appear to promote unhealthy overconsumption of food, at least in times when food resources are readily available. However, in addition to the environmental context which limited overall food resources, there were also numerous cultural principles which served to moderate food consumption. One of these principles was the emphasis on the interconnectedness of community and individual health and wellbeing, which was also linked with food production and consumption. Being “healthy” in island terms encompassed not only responsible food consumption, but also food production, exercise of communal practices, and communal and individual economic wealth (King et al, 2012). All of these factors needed to be in balance so that individuals and the community could live a healthy lifestyle. Food consumption was seen as an integral part of maintaining communal wellbeing, and as such it was perceived to provide not just nutritional and physical, but also spiritual and cultural, sustenance. Because food was valued, food consumption practices were formalized to reflect its significance in society. At communal events, food was apportioned and provided to community members in accordance with their status in the community, with village elders and leaders eating the best quality food first. Despite this prioritisation, there was an appreciation that food production and consumption needed to be shared among the community so that all members could eat adequately. These principles guided Pacific islanders to consume food and maintain their health within well-defined cultural bounds, so that despite living in a “feast or famine” environmental context, Pacific people traditionally struck a balance between their environmental challenges and their need to eat well and live healthy lives (King et al, 2012).

*Challenges in adapting food practices to the New Zealand Context*

Much of the difficulty for New Zealand Pacific people appears to be that the traditional values, principles and practices related to food production and consumption that worked well in the traditional island context do not translate well to the entirely different environmental and social context in New Zealand. Based on the results of this and other studies, New Zealand Pacific migration to New Zealand seems to have resulted in one of two cultural responses. Pacific individuals have either comprehensively accepted dominant New Zealand cultural principles, while continuing to engage in modified Pacific cultural practices (high acculturation); or they have retained traditional Pacific cultural principles, and used these to guide the selective adaptation of cultural practices (low acculturation). This study and others have found that the latter low acculturated New Zealand Pacific seem to have more success in achieving good health outcomes, in part because individual holistic wellbeing is a fundamental traditional Pacific cultural principle (Burrows et al, 2011; King et al, 2012).

In the case of Pacific people who have highly acculturated to the New Zealand context, this study and others have found perceived as well as real difficulties for these populations in dealing with food-related health issues, for two reasons. First, as theorized by Borrows et al (2011), since most New Zealand Pacific live in relatively deprived, predominantly Pacific communities, those who acculturate lose much of the connection to local well established Pacific cultural traditions, family and community associations that can support them in living a healthy lifestyle. The dominant New Zealand cultural norms and practices which they adopt, as they are represented in relatively deprived communities, can lead to unhealthy behaviours and lifestyle. In comparison, New Zealand Pacific with low acculturation levels can take full advantage of strong, local traditional Pacific cultural and communal resources to enable better health and wellbeing.

Although relative deprivation was not measured in the current study the results supported this theory; highly acculturated participants described how their stated de-prioritising of traditional Pacific cultural norms, principles and practices (including less focus on communal eating, wellbeing and on the spirituality of food consumption) in favour of dominant New Zealand cultural norms left them with what they perceived to be unhealthy lifestyle practices. They further noted that adoption of these dominant New Zealand cultural norms and practices was a likely cause of negative health outcomes for themselves, when compared to retention of traditional Pacific cultural norms and practices.

Secondly, the current study found tentative support for an additional comparative advantage that low acculturated New Zealand Pacific have over those that are highly acculturated in achieving better health and wellbeing. Low acculturated New Zealand Pacific in the current study appeared to rely more on traditional cultural principles than high acculturated New Zealand Pacific. This focus on cultural principles seemed to guide low acculturated participants to healthier lifestyle choices and food consumption choices in the New Zealand context. Relevant traditional Pacific cultural principles described by King et al (2012), and supported by the findings of this study, included an emphasis on the importance of holistic communal and individual well being and the holistic sustenance (spiritual, cultural and nutritional) that Pacific foods can provide Pacific New Zealanders. While both low and high acculturated participants engaged in Pacific cultural practices, in fact in many cases participating in the same social events together, they described their behaviours differently in ways that supported the argument that low acculturated participants were more closely following cultural principles to guide them effectively in achieving holistic wellbeing.

In particular, low acculturation participants described eating in moderation at celebratory feasts, only taking the food that they believed their body needed for good health. This is in accordance with the overarching traditional Pacific cultural principle that



emphasizes maintenance of holistic well-being of the individual. It appeared that by keeping this or related principles in mind, low acculturated participants can maintain healthy food consumption patterns even at communal feasts where food is available in abundance. Furthermore, in the New Zealand context, where food is more plentiful than in the traditional island context, low acculturated participants appeared more likely to eat in moderation on a daily basis than high acculturated participants; this demonstrated successful adaptation by these participants to the New Zealand context, using the cultural principle which prioritizes holistic well being as a guide to healthy eating practice and a healthy lifestyle in general.

By contrast high acculturated participants, while participating in the same or equivalent communal feasts as well as in other food consumption settings, often stated that they overate or could not control their food consumption, despite being aware that this was an unhealthy practice. They further stated more generally that they did not feel they had the ability to follow traditional Pacific cultural principles (such as respect for the underlying spirituality of communal eating practices) due to time and cost pressures in their daily lives.

Despite this shift from traditional cultural principles, the high acculturated participants did participate in modified traditional Pacific cultural practices in New Zealand. They also expressed an appreciation for some of the overt traditional Pacific cultural practices and values, including an emphasis on the importance of communal eating in the formation of social bonds, the obligation of hosts to provide food and guests to consume food, and the positive motivation to eat food in abundance when it is available.

However due to the environmental differences (greater food availability, the presence of unhealthy foods, and greater food variety) between the New Zealand context and the traditional Pacific island context, maintenance of these overt cultural values and practices without retention of underlying cultural principles and meaning (that can help moderate food intake) may lead to unhealthy food consumption practices by high acculturated Pacific New

Zealanders. The current study indicated that even in self-evaluation high acculturated Pacific New Zealanders are aware that they are consuming food in unhealthy quantities, choosing unhealthy foods, and not fully incorporating the underlying cultural principles (notably a focus on well being) into their New Zealand lifestyles. This was similar to findings in other studies with regard to high acculturated New Zealand Pacific (King et al, 2012; Borrows et al, 2011).

These results are reflected in medical statistics as well, which show that Pacific populations on average have negative health outcomes regarding food related disease (Medical Council of New Zealand, 2010). Based on the results of this and other studies (King et al, 2012; Borrows et al, 2011; Rush, 2009; Fitzgerald, 1980), it is reasonable to suggest that average negative health outcomes for New Zealand Pacific may have to do in part with the lifestyle habits of high acculturated New Zealand Pacific, particularly this group's lack of prioritization of underlying traditional cultural principles such as holistic wellbeing.

One underlying cultural principle which guided actual practice for low acculturated Pacific New Zealanders appeared to be an enhanced appreciation of the holistic sustenance (spiritual and cultural as well as nutritional) that traditional Pacific foods held for them. This is also discussed in other research, notably King et al, 2012. Appreciation of traditional Pacific foods as more than just caloric resources appears to result in these foods being perceived as more nourishing per quantity consumed; for more detail see theme two, sub-theme 'The higher value of Pacific food'.

A greater appreciation of the holistic sustenance that Pacific food can provide may mean that less quantity of this food needs to be consumed by low acculturated Pacific New Zealanders to obtain the same degree of nourishment. This principle of holistic nourishment of Pacific food is complimented by the principle that communal food consumption is

intended for the holistic well being of the community and individual (King et al, 2012). Low acculturated participants expressed their desire to eat moderate amounts of Pacific food at communal events in order to achieve wellbeing, as opposed to other community members who did not express this intent and who often consumed food in unhealthy quantities. For detail see theme two.

While the setting, food availability, food production, and types of food may have changed significantly from the traditional Pacific to the New Zealand context, low acculturated participants have maintained a focus on eating for the sake of physical, spiritual, and cultural wellbeing, that guides them to adapt food consumption patterns to suit an end goal of well being regardless of context. In fact, using cultural principles to guide adaptive activities was recommended by King et al (2012) as a way of dealing with the “cultural disjuncture” which New Zealand Pacific have to deal with in adapting to the changing New Zealand context.

High and low acculturated participants were in agreement that traditional Pacific foods had a higher value than other foods available in New Zealand for New Zealand Pacific; however high acculturated participants cited cost as a barrier to consumption of traditional Pacific food, while low acculturated participants did not express the same difficulties with the cost of Pacific foods. This could be because these participants felt nourished by less consumption of traditional Pacific food, and stated that they only needed small quantities of such food to feel satisfied; for that reason they did not need to purchase large quantities of traditional Pacific foods, making cost less of an issue. The lack of reported cost burden could also be due to a higher prioritisation of Pacific foods by low acculturated New Zealand Pacific; despite the cost, they were willing to pay for these traditional foods that were of high value to their perceived wellbeing. While other studies did not note a lack of reporting of cost burden in low acculturated New Zealand Pacific, King et al (2012) did note that New

Zealand Pacific ascribed more than just caloric significance to traditional Pacific foods, and participants in that study also mentioned that they did not need to eat large quantities of such food to feel satisfied.

The adoption of dominant cultural norms may cause health problems for high acculturated New Zealand Pacific that their low acculturated counterparts do not have to deal with. Studies have shown that high acculturated migratory minority groups have a greater tendency to adopt “bad” cultural practices from the dominant culture rather than “good” (Borrows et al, 2011). In the case of Pacific New Zealanders, the current study and other studies found that these behaviours included substituting unhealthy western foods in the place of healthy traditional foods; eating at irregular hours and sometimes alone; and eating “buffet style” at feasts, rather than according to the more strict food apportioning and distribution that took place in traditional Pacific cultural feasts (Borrows et al, 2011; King et al, 2012). Negative health outcomes can result from the adoption of these lifestyle changes by high acculturated Pacific New Zealanders without the retention of cultural principles that can guide them to healthier living.

Ultimately the difference between the two groups in their lifestyle choices and perceived difficulties in the New Zealand context suggests that low acculturated Pacific New Zealanders in the study have been able to lead healthier lives due to better maintenance of both the practices, and the underlying principles, of traditional Pacific culture. This has the added benefit of drawing on strong, well-established local Pacific social and communal resources present in many Pacific communities in New Zealand, as opposed to less well-established dominant culture resources available in the same areas. Those with high levels of acculturation indicated difficulty leading healthy lives, with a number of high acculturated participants expressing regret at ignoring or de-prioritizing these deeper cultural (and

spiritual) principles in their own lives; these participant concerns are presented in theme three, sub-theme 'Lifestyle misalignment'.

By themselves, traditional Pacific cultural values and practices that emphasize eating communally, an obligation to offer and to accept food, and eating as a form of celebration can collectively lead to overeating and unhealthy food practices. This is particularly true given the emphasis on communal eating in Pacific cultural practice, which has been shown in studies of other cultural contexts to enable individuals to feel less guilt in eating unhealthy foods than they would in everyday eating situations (Kniazeva & Venkatesh, 2007). This is also especially true due to environmental factors in New Zealand that differ from that in a traditional island context, notably a more sedentary lifestyle and more availability of food (King et al, 2012).

Findings from this and other studies suggest that traditional principles, such as those that emphasis holistic well being (of individual and community) and a greater appreciation of the sustenance food can provide (spiritual, cultural and nutritive) can all serve to moderate food consumption patterns encouraged by traditional Pacific values and practices, as well as guide Pacific New Zealanders to pursue healthier behaviours overall in the New Zealand context.

### *Solutions*

Both low and high acculturated participants in the study agreed that traditional cultural practices and principles were likely to offer the best solutions for improving the health and wellbeing of New Zealand Pacific. Pacific New Zealanders are able to draw on cultural strengths (notably strong, cohesive and caring communities and a traditional emphasis on holistic wellbeing) to better manage food consumption and overall health issues. However, to be successful these approaches must rely on underlying cultural principles to successfully guide modification of cultural practices to the New Zealand context. "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”(King 2012, pg. 133)

There was a great deal of agreement in the suggested solutions of study participants, solutions suggested in other research, and projects currently being implemented throughout New Zealand. Broadly speaking, the proposed or implemented solutions were either community led or led by the government through policies or projects. Commonly suggested solutions are summarized in Appendix A.

The most promising of the summarized solutions are likely to reference the traditional Pacific context or cultural principles. Initiatives that better emulate traditional communal food production and consumption patterns would bring about greater appreciation of food, which in turn could foster more mindfulness in food consumption and a return to valuing food for not just caloric sustenance, but also spiritual and cultural. These types of initiatives include community gardening projects, where Pacific New Zealanders grow and harvest fruits and vegetables together; community initiatives to collect and make available for sale healthier food options in communities; and healthy cooking classes, lead by and for Pacific communities in New Zealand.

One popular initiative, which shows ingenuity at adapting to the New Zealand context, is communal exercise groups. Numerous free and low-cost communal exercise groups for Pacific New Zealanders have achieved great results around New Zealand, mainly by emphasizing traditional communal bonds, but also by focusing on satisfying the traditional principle of holistic individual and communal wellbeing (Bell et al, 2001). What is encouraging to see is that these initiatives specifically mediate the effect that a change in lifestyles, from the traditional island setting to the New Zealand setting, has on health outcomes. In a traditional island setting, food shortages and laborious work involving high

caloric exertion would make recreational exercise redundant. However in the New Zealand context where high-calorie food is available in abundance and working conditions are more sedentary, many Pacific New Zealanders have realised that recreational exercise is a necessary addition to their daily routine in order to achieve a healthy state of being.

One suggested solution encountered in research, which is not yet known to have been trialled, is the greater promotion and utilisation of traditional Pacific cultural health leadership roles in developing communal health problem-solving structures. For example, Cook Islanders could appoint and train traditional (Cook Island) *tauga* or experts to take the role of initiating and facilitating discussion around food related disease in community meetings to bring leadership, focus and structure to communal health discussions. As one interviewee put it, “what we probably need [to improve Pacific people across all contemporary subjects in New Zealand society] is more *taugas*” (King et al, 2012, pg. 135)

In daily life, Pacific New Zealanders can more consciously follow cultural principles to achieve better health outcomes. For example, celebratory communal feasts can be modified to include healthier foods and a more traditional serving style, with strict apportionment of food, that limits the potential for overeating. Additionally, Pacific people adapting to other Western settings have had great success in returning to traditional Pacific diets (Davis, et al., 2004 and Curtis, 2003), and these examples could be followed by New Zealand Pacific.

At an institutional level, health providers and public servants should continue to reform the health system, in light of the fact that health services provided in New Zealand are not as effective at helping minorities such as Pacific people comparative to New Zealand Europeans. Other studies have also suggested greater reform and understanding in the health institutions and sector are important for further improvement of New Zealand Pacific health outcomes (Rush, 2009; Medical Council of New Zealand, 2010). With greater training and

cross-cultural understanding, interactions between providers and patients can improve; with greater acceptance of multicultural ideology in government there will be more policies to rectify institutional biases in the healthcare system. One of the most effective means of incorporating better understanding of Pacific culture into the healthcare system, and correspondingly incorporating better understanding of the healthcare system and institutions into Pacific communities, is to recruit and train Pacific New Zealanders into professional healthcare roles in New Zealand, particularly to work with Pacific communities. There are a number of initiatives currently sponsored by the government to do so, including a Certificate in Pacific Nutrition, which focuses on delivering better nutritional services to Pacific populations in New Zealand; 80% of graduates from this programme are New Zealand Pacific (Rush, 2009). More extensive grants and scholarships are provided by the Ministry of Health under the Public Health Workforce Development Programme for Pacific individuals who desire to work in healthcare.

At a policy level, the government can intervene in the pricing of healthy and unhealthy food options. Based on participant's responses, as well as responses of participants in other studies (Rush, 2009), one of the key policy changes recommended was reduction in the price of fresh produce (fruits and vegetables), which could be accomplished through lowering taxes on these foods. Complementary to this, participants also recommended that takeaways and highly processed food items should be taxed more to increase their prices. This would make it more possible for Pacific communities to consume healthy foods and less possible for these communities to consume unhealthy takeaways and processed foods.

More direct intervention by the government in food markets, access to food, and food quality was suggested by participants in this and other studies (Rush, 2009). This could potentially change health outcomes more fundamentally for Pacific New Zealanders, particularly those living in high deprivation areas. Participants identified the large and



increasing numbers of takeaway outlets within high deprivation areas, and suggested that these outlets be reduced or a capped number in each area be set for these outlets, in order to limit the amount of unhealthy food choices for those living in the community. Participants also suggested it might be possible to enforce stricter guidelines for the nutritional content of food available in such outlets. While both of these policy interventions could potentially bring about dramatic improvements in the health outcomes of New Zealand Pacific living in relative deprivation, they might be controversial policies for the public-at-large to accept. One means of encouraging wider public acceptance of such policies would be to demonstrate their cost-effectiveness; since prevention of food-related disease is invariably much cheaper than treatment of food-related disease, earlier interventions that prevent access to unhealthy food and promote access to healthy food are likely to save taxpayers in the long-run. Public motivation and commitment would be required to carry out such policy changes, and prior to that research based on public health models would need to be conducted to determine the feasibility of making such changes.

A final suggested policy solution from study participants which may warrant further exploration is the lessening of restrictions on Umus. Umus are a traditional Pacific cultural means of food production that creates healthy food, because food is steamed and much of the fat drains out in the cooking process. In addition, Umus promote traditional Pacific modes of communal interaction, since they bring together communities for food production and consumption. While it's clear that Umus, which can pose a potential fire hazard, need to be regulated safely in the New Zealand context, many participants in the study commented that current restrictions on Umus prevent them from easily partaking in this traditional, health food practice. Policies which more easily enable Umus in New Zealand could help with improvement of Pacific New Zealander health outcomes.

### *Limitations*

The findings of this study must be considered in light of some limitations. Braun and Clarke (2006) state that thematic analysis is not designed to create generalisations of findings, but to be a tool for identifying core meanings evident within the specific research sample.

In addition, the age range of the participants may have been a limitation due to the lack of spread, combined with the relatively small sample size. Participants were recruited from a small range of locations, which may have acted as a limitation due to the potential for likeminded perspectives, values and beliefs to be presented through the interview process. Fortunately this did not prevent the presence of both low and high acculturated individuals in the study, which enabled some comparison between the groups. Despite this range in acculturation of participants, the limitations expressed above mean that caution should be taken in generalising the findings of this study to wider settings.

Lack of sociodemographic data collected resulted in the lead researcher being unable to determine correlation/causation, if any, between socioeconomic status or relative deprivation and health outcomes, or between low/high acculturation and socioeconomic status/relative deprivation. This is particularly a limitation as it is difficult to determine to what extent acculturation may lead to poor health outcomes, and to what extent this may be an outcome of relative deprivation, which has been shown to also lead to poorer health outcomes (Statistics New Zealand 2013; Borrowers et al 2011). While this is difficult to determine here, there is some evidence that acculturation of Pacific people to New Zealand is a strong predictor of health outcomes, regardless of the level of relative deprivation-in a study by Burrows et al (2011), Pacific people mainly living in relatively deprived communities in South Auckland showed large variation in health outcomes, which correlated with their levels of acculturation to New Zealand society.

Finally, a standardized measure of acculturation, such as the PIACCULT test and NZACCULT scales developed by Borrowers et al (2011) was not used within the current study

to quantitatively determine acculturation levels. The lack of a standardized measure of acculturation limited the extent to which acculturation can be accurately measured in participants in this study. However by contrast the use of thematic analysis to determine acculturation (by inference) had the advantage of more comprehensively assessing individual participants cultural practices and attitudes, as well as better capturing non-mainstream cultural meanings embedded in the discourse, which acculturation scales might have missed. Nevertheless this did introduce a potential margin of error into the study in terms of precisely determining acculturation levels.

#### *Future research*

Future researchers may wish to collect socio-demographic data to assess deprivation levels and compare acculturation and deprivation with corresponding health outcomes. Within the current study all of the participants born in New Zealand were identified as high acculturation (New Zealand born Samoan), and they also were the majority of total high acculturation participants in the study. It would be beneficial to differentiate and compare health outcomes for a larger sample population between those Pacific people of low acculturation and those of high acculturation born in the islands but now living in New Zealand, to determine if there are any variations in health outcomes or lifestyle. Similarly it would be beneficial to research high-western acculturated groups versus low-western acculturated groups in the Pacific islands to demonstrate if there is any correlation with health outcomes. Obtaining the data listed above would enable more evidence-based policy development in order to improve the health outcomes of these populations.

Finally, it is interesting to note for future studies that there was a spread of acculturation within the small sample of Pacific New Zealanders recruited for this study from a limited set of social contexts. This suggests that acculturation of Pacific New Zealanders

cannot be explained by social context alone, and therefore requires more in-depth research to determine the causative factors.

### *Conclusion*

In conclusion, King et al (2012) writes that “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...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” (pg 134). Low acculturated participants in this study appeared to have accomplished the challenging task of adapting traditional Pacific practices of food consumption and healthy living to successfully respond to the new context encountered in New Zealand. They have done so by using principles of traditional Pacific culture as a guiding reference in determining how to alter cultural practices to suit a new context. By contrast, high acculturated participants in the study appeared to adapt to the New Zealand context less successfully in terms of food consumption and healthy living, mainly because they did not retain or focus on traditional Pacific principles as much.

Unsurprisingly, and in agreement with the conclusion stated above, community level initiatives which have been the most successful in improving health outcomes for New Zealand Pacific have utilized and referenced traditional Pacific cultural principles and values to effectively modify cultural practices to fit the New Zealand context. Correspondingly, the best policy interventions by the government could encourage a return to traditional cultural practices and principles, encourage greater understanding between Pacific New Zealanders and government healthcare providers, and better enable Pacific New Zealanders to live a healthier lifestyle.

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### Appendix A

Recommendations / potential solutions to improve the overall health of the Pacific New Zealand population:

	<b>Solutions (initiatives) suggested</b>	<b>By study participants</b>	<b>In other research</b>	<b>Example currently being implemented</b>
<b>Community-led initiatives</b>	Exercise Groups	✓	✓	Mafutaga Tagata Matutua
	Health Education/promotion Groups	✓	✓	Health Promoting Church Programme; West Auckland Pacific Health Promotion Projects
	Gardening Projects	✓	✓	Gardening Project
	Healthy food markets and food distribution		✓	Healthy Kai Programme
	Healthy cooking classes		✓	Fresh for Less
	Encourage the re-development of traditional community advisor roles, e.g. Taugas, to advocate for healthy food choices	✓	✓	No known activity
	Holistic community health and wellbeing promotion		✓	Healthy Village Action Zones Programme
<b>Policy initiatives, Government-led projects</b>	Recruit more Pacific people into professional healthcare roles	✓	✓	Certificate in Pacific Nutrition; Pacific Public Health Workforce Development
	Tax takeaways and highly processed foods, sugary drinks	✓	✓	No known activity
	Subsidize fresh produce	✓	✓	No known activity
	Better health and nutrition education, especially training on healthy substitute foods	✓	✓	Project Energize (child-only focus)
	More restrictive limitations on the number of fast food/takeaway outlets in high deprivation communities		✓	No known activity
	Guidelines around the nutritional content of foods available in high deprivation communities		✓	No known activity
	Enable easier access to permits for Umus	✓		No known activity

(Rush, 2009; Bell et al, 2001; Pells, 2006; Medical Council of New Zealand 2010; Ministry of Pacific Island Affairs, 2011; Statistics New Zealand, 2013)