

# **Pacific Nutrition:**

How has the Certificate in Pacific Nutrition  
influenced attitudes and behaviours of  
graduates families and communities?

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## List of Abbreviations

AUTEC:	Auckland University of Technology Ethics Committee
BMI:	Body mass index
CPN:	Certificate in Pacific Nutrition
CVD:	Cardiovascular disease
MOH:	Ministry of Health
NCDs:	Noncommunicable diseases
NZ:	New Zealand
PA:	Physical activity
PiA:	Physical inactivity
T2D:	Type 2 Diabetes
TLL:	Traffic-light labelling
TTT:	Train The Trainer

## Glossary

<i>Fale</i>	Home, house
<i>Fa'a-Samoa</i>	To do things a Samoan way
<i>Fiapoko</i>	Know it all
<i>Pisupo</i>	Corned beef
<i>Talanoa</i>	Conversation
<i>Talanoaga</i>	Gathering, meeting

## **Attestation of Authorship**

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or institution of higher learning.

Signed: .....

Date: 29-09-2017 .....



## Dedication

This thesis is dedicated to my nana Saimealafo Tapaleao; my loving parents Tapaleao Lafita'i Tapaleao and Meresieni Tapaleao; my siblings Rev. Va'alele, Tupulagafou, Leuo Talia Patrick, Irene, Fusi, Tai, Moana; my nephew Ta'i; my nieces Sisi, Eta, Peli, Resa, Polu; and my best friend Vini.

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## Abstract

Prevalence of obesity amongst Pasifika communities in New Zealand has increased exponentially over the years, with nutritional choices playing a leading role. Many researchers and health professionals have attempted to devise solutions and programmes to counteract the obesity epidemic among Pasifika people, with some focusing on education and nutritional behaviour. The study reported on here evaluated the influence of a Certificate in Pacific (CPN) course on the behaviours and attitudes of participants who graduated between the years 2011 and 2016. It also aimed to explore how the CPN course influenced the attitudes and behaviours of their families and communities. The *Talanoa* methodology was used to individually interview eight participants who were of Samoan, Tongan and Maori ethnicity (two male, six female) living in the southern part of metropolitan Auckland, New Zealand. The researcher encouraged participants to share their experiences with the CPN course and how it might have influenced their dietary attitudes and behaviours. The findings uncovered six recurrent themes: educating yourself and understanding; family first; being of service; walking the talk; learning from past experiences and breaking habits. All participants felt that the CPN course had had a positive influence on the attitudes and behaviours of their families, communities and themselves. Participants said that the CPN course had taught them practical information that they felt their Pasifika communities and families would be able to adhere to and actively implement in their lives. The CPN course provided participants with healthy alternatives to cooking commonly eaten Pasifika foods, thereby making it more achievable for participants, their families and communities to initiate long lasting, sustainable dietary habit changes. Furthermore, participants felt strongly that in order for Pasifika people to adhere to the messages of healthy eating, they needed strong Pasifika role models, like the graduates of the CPN course, who were living examples of the messages they shared. As only a small sample of graduates from the CPN course were interviewed, further research would be needed to explore the impact of the course across all graduates.

## Chapter 1: Introduction

“There is no limit to where Pacific people can go and what they can do. We are limited only by our own imagination and courage”  
(Beckford & Fitzsimons, 2010, p. 96).

This chapter will focus on setting the scene for this study and provide an extensive description of the rationale for running the Certificate in Pacific Nutrition (CPN) course and what the course entails. The second section covers the aims of this study and the reasons to undertake this research, before concluding with an overview of the thesis.

### 1.1 Food culture and nutrition

The development that food has undergone over the years has shown that food was more than just nutrients to people (Kittler, Nahikian-Nelms & Sucher, 2015). The food culture in itself is diverse and can mean many things. Corvo (2015) illustrates that the food culture can mean relationships and friendships, and can look like a dinner invitation or a relaxing night out with friends eating pizza, or it can be seen as the passing down of traditional family recipes. One of the most essential aspects of the food culture is its ability for others to use food as a way of identifying who they are and where they come from (Gotto, Vue & Wolff, 2011) and in a world so diverse, food has a way of bridging the gap and providing similar grounds for all (Corvo, 2015). Anyone can connect certain foods to certain cultures despite their own cultural background, for example curry with the Fijian/Indian culture and sushi with the Japanese culture. Food has been a focal symbolic representation of one's cultural identity and history (Kittler et al., 2015). Food is associated with special memories and is often one of the cultural norms that people of various ethnicities hold on to when they move to a different country (Kittler et al., 2015). While surroundings and every day life activities change when in a foreign country, traditional food is one of the cultural treasures people can preserve. However, a new food culture has emerged rapidly, overshadowing what Kittler et al. (2015) described as the gastronomic practice (home cooked meals, passing down traditional family recipes from one generation to another).



To this day, the culture around food is still evident and strong, however, over the years the acknowledgement given to the relationship between food, nutrition and optimal health has grown. In earlier times, white bread was predominantly consumed by the upper class and brown bread by the poorer, lower class. Now brown or wheat bread is consumed based on health and not socio-economic status (Kittler et al., 2015). With context to health, food has been defined and understood as any substance that provides the necessary nutrients needed to maintain life and growth when consumed (Kittler et al. 2015). What is recurring more often is that people perceive to have no time to make dinner and so are dining in fast food restaurants and prefer pre-cooked, frozen or tinned food and pizza instead (Kittler, et al., 2015). As a result, people consume less nutrient dense food that affects their health (Gotto et al., 2011). Unhealthy dietary behaviours and attitudes are one of many health factors associated in premature death as a result of diet-related diseases. These behaviours and attitudes have become more common in many Pasifika peoples in NZ and globally.

## **1.2 Pasifika definition**

According to Bedford and Didham, 2001, (as cited in Anae, Macpherson & Spoonley, 2001), 'Pacific peoples' is the collective term used to describe people from the Pacific regions of Polynesia, Melanesia and Micronesia. In NZ, 'Pasifika' or 'Pasifika people' is used by the Ministry of Education to also describe people living in NZ who have migrated from the Pasifika regions of Polynesia and also Melanesia and Micronesia (Ministry of Education, 2006). 'Pasifika peoples' does not refer to one ethnicity, nationality, gender or culture. The term is used to include a wide range of peoples who migrated from the South Pacific region and are now living in NZ and who have a strong family and cultural connection to their countries of origin (Ministry of Education, 2006):

“'Pasifika peoples' are not homogenous, hence the use of 'peoples' rather than 'people'. The terminology includes those people who have been born in NZ or overseas. It is a collective term used to refer to men, women and children who identify themselves with the islands and/or cultures of Samoa, Cook Island, Tonga, Niue, Tokelau, Fiji, Solomon Island, Tuvalu, and other Pasifika or mixed heritages. The term includes a variety of combinations of ethnicities, recent

migrants or first, second, third, fourth and subsequent generations of NZ born Pasifika peoples” (Ministry of Education, 2006, p. 3).

Therefore the terms ‘Pasifika’ and ‘Pasifika peoples’ will be used throughout this Master’s thesis to represent the different ethnicities of the participants in this study and furthermore those living in NZ.

### **1.3 Pasifika food culture**

Food is at the heart of many Pasifika cultures (Beckford & Fitzsimons, 2010). For many of these cultures food has been a symbol of love, sharing, gifts, wealth and the act of bringing people together. In most cases, it is an act of respect to have food in plentiful amounts, especially for visitors. Food is often the yardstick by which Pasifika gatherings are measured (Faiai, Hawley, Kocher, McGarvey, Muasau-Howard, Sternberg Lamb, 2017). A good wedding is one that has plenty of food and vice versa, a bad one has less. For Tongan individuals the idea of what it means to be healthy does not come down to size. In the Tongan culture bigger is beautiful, bigger means wealth and bigger means your family has enough money to feed you and your family (Fotu, Goundar, Mavoa, McCabe, Ricciardelli, Schultz, Swinburn & Waqa, 2007). Some Samoan people would often say *“o tatou o le laualo lava”*, in translation it reads, “so long as there is food, so long as we eat”. However, food, and more so the over-consumption of food, has played a leading role in the declining health of many Pasifika peoples.

It is difficult to fathom the poor health state that many Pasifika peoples are currently living with, when Pasifika peoples followed relatively healthy dietary practices centuries ago (Curtis, 2004). For thousands of years, the natives of the Pacific were secluded from the rest of the world, letting their social, cultural and economic patterns be developed untouched (Curtis, 2004). In the 17<sup>th</sup> and 18<sup>th</sup> centuries when the Europeans began arriving, Pasifika peoples were described as strong, muscular and mostly in good health (Curtis, 2004). During a time when urbanisation was non-existent and people lived in rural areas, physical activity (PA) was a natural part of Pasifika people’s lives (Curtis, 2004). It required physical strength and stamina to find food for daily meals. Growing their own crops and vegetable beds, fishing, climbing coconut trees and hunting was all a part of their necessary daily activities in order to

survive. However, over the century's migration and change in culture has left Pasifika peoples little room to grow their own crops (Amosa, Bell, Scragg & Swinburn, 2001). The World Health Organization (2010) found that the abandonment of traditional diets and their replacement with imported processed foods, contributed to the high prevalence of obesity in Pasifika peoples and the problem has worsened over time. As a result, Pasifika peoples began to adopt unfavourable dietary attitudes and behaviours that saw the onset of many health complications. Such behaviours now include using animal fats such as butter, lard and dripping to fry their meat and vegetables (Black et al., 2008) eating all, if not most of the fat off meat and consuming larger portions of food than the recommended portion sizes (Jackson, Law, MacMahon, Norton, Ricketts, Swinburn, Walter & Whitlock, 1998; Black et al., 2008). The result manifested themselves in the form of chronic diseases, namely overweight and obesity, for Pasifika peoples.

#### **1.4 Obesity and overweight epidemic**

Where the problem is killing more people than underweight, the prevalence of overweight and obesity has reached epidemic proportions, and in many countries, has become a serious health burden (World Health Organization, 2016). Obesity is an elaborate disease that is affecting people across all ages, socioeconomic groups and in both developed and developing countries (World Health Organization, 2017a).

Approximately 200 million adults were obese in 1995 worldwide (World Health Organization, 2017a). It has since doubled with more than 600 million adults obese and a further 41 million children obese in 2014 (World Health Organization, 2016a).

The disease is understood as abnormal or excessive fat accumulation that presents a risk to health, with the fundamental cause of obesity being an imbalance between energy input and energy expenditure (World Health Organization, 2016a). An individual is classified as overweight or obese depending on their body mass index (BMI), which is a simple index of weight-for-height ratio. The formula for calculating BMI is equal to an individual's weight in kilograms divided by their height in metres squared. Refer to Figure 1 (World Health Organization, 2016a). As a result of dietary behaviours driven by factors such as socio economic, body weight increases in relation to height. Adults who have a BMI greater than or equal to 30 are classified as obese (World Health Organization, 2016a).

$$\text{BMI} = \frac{\text{Weight (kg)}}{(\text{Height (m)})^2}$$

Figure 1-1: BMI formula

Source: NZ Nutrition Foundation (2013)

Overweight and obesity has been recognised as a contributor to non-communicable diseases (NCDs) such as Type 2 Diabetes mellitus (T2D), metabolic syndrome and other major chronic diseases such as cardiovascular diseases (CVDs) and cancer (Ministry of Health, 2017), which will be discussed in greater detail in Chapter 2. Furthermore, obesity is also linked to premature death with 2.8 million deaths in 2014 due to increased BMI (World Health Organization, 2009a).

Obesity puts a strain on the costs of healthcare and social resources, including prevention, diagnosis and treatment as the prevalence continues to climb (World Obesity Federation, 2015). Apart from the physical impacts of obesity, the disease affects individuals psychologically as they may begin to fall into depression and have low self-esteem because of being stigmatised by societies prejudice towards them (World Obesity Federation, 2015). This in turn affects their quality of life, mental health, educational achievements, and even future employment endeavors.

The global increase in the prevalence of overweight and obesity has been closely linked to the change in people's access and availability to unhealthy foods and beverages that are usually low in cost compared to healthier alternatives (World Health Organization, 2017c). Obesity is a problem that is crippling our society physically, emotionally and financially and if current trends continue, it has been estimated that the disease will affect over 1 billion adults by 2025 (World Obesity Federation, 2015).

## 1.5 Obesity: A Pacific epidemic

Previous NZ research by Finau, Finau & Tukuitonga (2003) has demonstrated that health is not only seen as being physically well. For Pasifika peoples, all aspects of life measure good health:

“It is a personal, a family and a community state of well-being that requires our collective effort. The environment and the behaviour of individuals, families and communities determine the beauty of health. Therefore when housing, food, governments, cultures, work and different aspects of our lives are positive, our state of well-being will be positive” (p. 13)

When posed with the question “what does health look like for you”? Lui (2003) found that participants synonymously described health as living a balanced life. According to Lui (2003) health was attained when an optimistic balanced relationship between three elements: God, people and land, existed. When a person’s physical, mental and spiritual needs were in balance people were more able to meet their obligations to themselves, their family, village and community. Similarly; Pulotu-Endemann (2001) illustrates Pasifika health through the *fonofale* model where when one post of the *fale* is wavered and unstable then the entire *fale* is imbalanced and in this respect; unhealthy. In spite of migrating to developing countries in search for a better life for their families the quality of life for many Pasifika peoples has declined due to dietary-related diseases. Consequently, the *fale* for many Pasifika communities is imbalanced and with health disparities such as obesity comes a decline in every other aspect of their *fale* (Pulotu-Endemann, 2001).

Obesity has been accepted as normality and an inevitable cultural construct in many Pasifika communities because the epidemic is so commonly seen within the home, the church and within the extended families (Cowley, Paterson & Williams, 2004). At the early onset of life Pasifika peoples grow up seeing and experiencing first-hand the epidemic within the home so it becomes a part of their life, who they are and how they see themselves.

Amongst Pasifika peoples, overweight and obesity rates are high with over one fourth of the adult population classified as clinically obese (The World Bank, 2016). In 2014, Tonga (58 per cent) and Samoa (54 per cent) rated the highest among all Pasifika countries in obesity prevalence (The World Bank, 2016).

## **1.6 Obesity among Pasifika peoples in NZ**

The burden caused by poor nutrition and food insecurity has led to an increased percentage of obesity mortality in the general population of New Zealand (NZ) (Black, Dyall, Metcalf, Jackson, Schaaf & Scragg, 2008; Fight the Obesity Epidemic, 2016). Obesity is now recognised as a health epidemic both nationally and internationally with Pasifika and Maori communities being rated amongst the highest in NZ in both children and adults (Amosa, Bell, Gatland, Simmons, Swinburns & Wang, 2001).

For over 1000 years, NZ has become home to many Pasifika peoples who migrated for work related purposes in hopes of an opportunity, a brighter future, and an education for their children (Bedford, 2009). Responding to the 2013 census in NZ (Statistics New Zealand, 2013), 295,941 Pasifika peoples made up 7.4 percent of the total population of which most were NZ-born. Samoans remain the largest ethnic group at 47.8 percent of the Pasifika people's population (144,138), while the Fijian population was the fastest growing Pasifika ethnic group from 2006 to 2013 (Statistics New Zealand, 2013). The majority of Pasifika peoples lived in the North Island with 65.9 percent (194,958) of Pasifika peoples living in the Auckland region and 12.2 percent (36,105) living in the Wellington region (Statistics New Zealand, 2013).

The updated results for 2015/16 from the NZ Health Survey (Ministry of Health, 2016a) found that since 2006/07, overall adult obesity in NZ has increased (from 27 percent to 32 percent) with 67 percent of Pasifika adults classified as obese. Further to these results, 47 percent of Maori adults were classified as obese (Ministry of Health, 2016a). The burden of obesity for many Pasifika and Maori communities in NZ is primarily caused by sedentary lifestyles and poor nutrition (Ministry of Health, 2016a). Many Pacific health leaders have expressed that their firm belief is that the pathway to leadership is through providing services (Beckford & Fitzsimons, 2010); however regardless of the programmes and services made available for Pasifika communities,

no significant improvements have been made by interventions to combat the rise of obesity here in NZ (Statistics New Zealand, n.d.).

## **1.7 The Certificate in Pacific Nutrition**

Since 2007 the NZ Heart Foundation and Pacific Heartbeat (PHB) team have implemented health education programmes specific for Pasifika communities, focusing on addressing poor nutrition behaviours and attitudes contributing to their health issues (Heart Foundation, 2016a). With the development of a nine-day Certificate in Pacific Nutrition (CPN course), the Heart Foundation, Ministry of Health (funding) and the Auckland University of Technology (CPN only) have created avenues enabling Pasifika health workers and Pasifika communities to be upskilled in order to deliver nutrition-based programmes back to their communities in a way that will be easily received. The CPN course is primarily targeted at Pasifika workers but it is open to anyone working with or wanting to work with Pasifika peoples and communities. The CPN course is most applicable to those already working in their community (paid and voluntary), who are able to advise and support others in making healthy food choices.

The CPN course is a nine-day nutrition course that is split into three parts and covered throughout three days.

From the current Auckland University of Technology paper descriptors:

Paper one, Healthy Lifestyles, provides practical information on purchasing and preparing healthy food choices for Pasifika peoples living in NZ and emphasises foods typically consumed by Pasifika peoples, provided in a culturally safe setting. The learning outcomes include discussing the relationship between nutrition and healthy choices, being able to produce a meal plan using healthy cooking methods and recipes, describing hygiene requirements associated with healthy foods and eating and explaining how the body digests and absorbs food. The content covered in Part One includes an introduction of the Ottawa charter for Health Promotion, NZ Food and Nutrition Guidelines for Healthy Adults/older adults, healthy food choices including Pasifika foods available in NZ. Other content covered include the language of nutrition, identification of good food sources of major nutrients, digestion and absorption, healthy cooking techniques, recipe analysis to lower fat, sugar and salt content, food labels, food safety, food costs, meal planning and budgeting.

Paper two, Heart health and risk factors for heart disease, provides an introduction of food and nutrition for Pasifika peoples living in NZ and provides a broad understanding of nutrition issues relating to healthy lifestyle and prevention of diseases in a culturally safe setting. The learning outcomes include an understanding of how the risk for lifestyle diseases increases with age, an understanding of obesity, diabetes and heart disease and the prevention in Pasifika communities in NZ. Other content covered included demonstrating ways to increase physical activity, demonstrate the ability to deliver a presentation of a health education session in the community and demonstrate an understanding of lifestyle risk factors for wellness and importance of prevention of diabetes, obesity and heart disease in Pasifika communities. The content covered in paper two also include how the heart works, obesity, diabetes, physical activity, tobacco, alcohol and adult learning teaching methods.

Paper three, Nutrition status of Pacific people and children in NZ, provides a broad understanding of nutrition issues relating to healthy eating for Pasifika people in selected stages of the life cycle. Learning outcomes and content include food and nutrition guidelines for pregnant and breastfeeding women including food safety, babies and toddlers, children and young people aged 13 years or more and the Health and Nutrition status of Pacific Children and Adults living in New Zealand. In addition to, the practical implications of the Ottawa charter for health promotion and presentation skills are reinforced.

A wide range of teaching and learning strategies are used to support students to learn in a practical, interactive and culturally appropriate way. Group work and cooperation are emphasised. Physical activity breaks intersperse the sessions and the sessions have a lot of laughter and lively discussion (personal observation). The teachers are mainly Pasifika and have huge experience working with Pasifika peoples

Students enrol with the Auckland University of Technology and each paper is assessed with a variety of tests, learning tasks, and practical and presentation events. Students who meet the assessment criteria for all three papers are awarded the AUT Certificate of Pacific Nutrition and this becomes part of their official academic record.



The course began delivery in 2002 and since then over 1000 students have graduated; mainly from Auckland but also from other parts of the country (including Māori in the far North) but mainly where there is a high Pacific population e.g. Wellington.

## **1.8 Aims and objectives**

This study aims to understand the effectiveness of the CPN course in influencing attitudes and behaviours of its graduates, their families and the wider community.

Three study aims have been identified to help achieve the latter:

1. Explore participants understanding of the importance of nutrition
2. Understand how the CPN course has influenced participants lives
3. Examine how knowledge from the CPN course has been disseminated to families and communities

While this thesis will focus strongly on the health of Pasifika peoples, Maori health will be mentioned briefly to emphasise the similarities in health outcomes in NZ between the two ethnic groups. This is to reflect the data received from participants who were predominantly Pasifika (Samoan and Tongan) with one Maori participant. For future research, a similar study that evaluates the effect of the CPN course among Maori participants, focusing predominantly on Maori health with a larger number of Maori participants is suggested to elicit data that will draw more significant results.

## **1.9 Significance of study**

The declining health of Pasifika peoples has become the subject of discussion over the years where many researchers, academics, and health professionals, have stated reasons behind why Pasifika health is poor and what Pasifika peoples need and have to do to change this. While there have been many policies, solutions and interventions designed and implemented to help combat the problem - of which some have been very effective and well received - the reality is that the health of Pasifika peoples continues to be a problem at a global, regional and national level. Pasifika health is a topic some may feel has been over studied so why do this research when there are a number of studies readily available?

Since undertaking a tertiary qualification studying Health, the researcher's main focus from undergraduate right through to postgraduate studies has been obesity in Pasifika peoples. This was a decision based purely on personal experiences and feelings

towards this epidemic, which affects the lives of many Pasifika peoples. The consequences of obesity have been harsh, and taken the lives of many close relatives and friends of the researcher. For many years, the researcher has seen the effects of obesity in her brother, sister, nephews, nieces, aunts and uncles. The burden of obesity puts a strain on their physical, mental and emotional wellbeing to the point that you see them slowly give up. After many first hand experiences with this disease, you realise that being free from the chains of obesity is not easily done. Individuals affected by obesity are not lazy because the researcher has witnessed their attempts to make a change to become healthier. The burden caused by obesity has become a reality for the researcher but it has also inspired the researcher to make proactive movements towards trying to alleviate the epidemic. The researcher chooses to focus on the health of Pasifika peoples because it is an attempt to lessen the weight on her people who are at the mercy of such diseases like obesity alike.

Her mentor, Professor Elaine Rush, who also gave her other options of research study to undertake, presented the researcher with this research question. The researcher became interested in this research question particularly because it involved Pasifika communities, which has been a topic of interest to her throughout her studies. The researcher knew that food played a major role in the culture of many Pasifika communities, but it also played a huge part in the outcomes of their declining health so the CPN course appealed to her. Before the researcher could begin with the study, she had to enrol herself into the course to gain a better understanding of the material taught and how Pasifika nutrition was represented throughout. The CPN course was not like any other course the researcher had ever been a part of. It was unique in the way teachings were delivered and received and it also echoes to students the importance of healthy nutrition in a bid to achieve good health. The learning from the CPN course was valuable and beneficial not only to the researcher but also to her families and communities with whom she shared her new knowledge. The learning from the CPN course stretches beyond traditional classroom teachings and it is engaging, inclusive, effective and easy to understand. It is a course that should be accessible to everyone should they have the chance to enrol. The CPN course covers many areas of nutrition, the importance of good nutrition and how students can use these teachings to help their own families and communities. The health problems

Pasifika peoples continue to face have become my own problems too and one that is hard to turn a blind eye to, but the CPN course could support Pasifika communities in making sustainable changes to achieve good health through dietary behaviours.

Therefore the desire to conduct more research into the influential impact that the CPN course had on attitudes and behaviours on those who took part was vital to explore.

### **1.10 Thesis overview**

This thesis is comprised of five chapters. Chapter 1 provides the introduction, which explores health through a Pasifika lens, and provides an overview of the study and the rationale for the research. Chapter 2 reviews the background literature on nutritional behaviours of Pasifika peoples residing in NZ, thus providing a foundation for research to be conducted. It describes important concepts linked with impacts of poor nutrition such as malnutrition, and the detrimental health outcomes of Pasifika peoples. A review of research concerning nutrition programmes is also provided, as well as an examination of health issues linked to diet, and factors which support improving obesity prevalence. Chapter 3 provides information on the methodological framework of the study, and describes the ethical approaches that were undertaken. In-depth information on how the aims of the thesis were aligned to the design approach and consultation processes, are further outlined. Chapter 4 provides an extensive look at the results derived from the interviews with participants. This chapter presents the findings of all participants in a lead up into the next and final chapter where these findings are further portrayed through key themes. Chapter 5 discusses the results in-depth, comparing with previous studies to draw further conclusions. All of which are portrayed through key themes that were derived and are in order of importance in accordance to the number of times participants referred to each theme throughout their interviews. Finally this chapter ends with a look into the limitations, strengths and recommendations of this study and a final conclusion of the research.

## **Chapter 2: Literature Review**

### **2.1 Introduction**

The need to address the issue of poor nutritional attitudes and behaviours of Pasifika peoples cannot be emphasised enough. The Heart Foundation has been actively trying to address this issue by implementing health education programs specific for Pasifika communities (The Heart Foundation, 2016b). With the development of a nine-day CPN course, recognized as a qualification from AUT, the Heart Foundation have created avenues that enable the up skilling of Pasifika health workers and Pasifika communities. The outcome is that Pasifika peoples are able to deliver nutrition-based programs to their own communities and families in a way that will be easily received. The CPN course teaches about the relationship between the types of food eaten, and the effect food can have on ones health. Students are taught how to make every day traditional foods healthier, and life stages from 0 to 65+ years of age are covered in the CPN course. The CPN curriculum includes knowledge from the Pasifika Islands Families (PIF) study and understanding how knowledge is used after qualification will add value to dissemination of PIF findings.

This study will look at how the learning from the CPN course has influenced the attitudes and behaviours of graduates' families and communities. Conducting this research will reveal how the CPN course has influenced graduates to improve their dietary behaviours after completing the CPN course. Furthermore, to explore whether graduates were able to influence their families and communities to adopt healthier dietary behaviours as well.

The chapter begins with a look into the relationship between nutrition and NCDs and its effect on a global, regional and national scale. Following this is a section that will discuss the link between nutrition and health outcomes for Pasifika peoples in NZ. The final sections will evaluate past studies that looked at the effect of nutrition programs to improve diet, and demonstrate the gap in the knowledge base around nutrition programmes and lifestyle changes.

## 2.2 Malnutrition

The burden of malnutrition affects people all over the world, with 1.9 billion adults globally being overweight and 462 million underweight (World Health Organization, 2016b). A further 528 million women worldwide who are at the reproductive age are anaemic (World Health Organization, 2016b). Malnutrition is a term sometimes misunderstood as applying only to someone who is underweight (Eat Right, 2017). However, malnutrition is more complex and can be experienced when a person has an imbalanced, excessive, or deficient intake of energy and/or nutrients (World Health Organization, 2016b). Similarly, obesity can be characterised as a form of malnutrition, if the individual became obese through excessive intake of a nutrient-poor diet.

Malnutrition can be categorised into two broad groups of conditions. The first is undernutrition – this includes stunting, wasting, underweight and micronutrient deficiencies or insufficiencies. Stunting is a term used to identify a child who has impaired growth and development as a result of poor nutrition, repeated infection and inadequate psychosocial stimulation (World Health Organization, 2017c). Wasting or thinness can also be understood as severe process of weight loss - where weight is too low for age - often associated with acute starvation and/or severe disease (World Health Organization, 2017d). It was estimated that 41 million children under 5 years old are overweight or obese, while some 159 million are stunted and 50 million are wasted (World Health Organization, 2016b). Underweight occurs when weight is too low for height (World Health Organization, 2017c) and micronutrient deficiencies is experienced when people lack important vitamins and minerals, where iron deficiency anaemia is the most common micronutrient deficiency disorder in the world (World Health Organization, 2017e).

Overnutrition is the second broad condition within malnutrition, and is where individuals develop overweight or obesity, one of the most modifiable risk factors for a number of major diet-related NCDs such as heart disease, stroke, type 2 diabetes (T2D) and cancer (World Health Organization, 2016a). NCDs are also known as chronic diseases; therefore infectious agents do not cause them. NCDs often last for a long period of time, progressing slowly, and are often the result of a mixture of genetic, environmental, physiological and behavioural factors (World Health Organization, 2017f). Although people who are overweight and obese consume an excessive

amount of food, they can still be malnourished because of an inadequate intake of vitamins and nutrients (World Health Organization, 2017e). The prevalence of overnutrition has risen over the years with NCDs being the leading cause of mortality in the world (World Health Organization, 2017f).

### **2.3 NCDs: a global threat**

Also known as chronic diseases, NCDs including heart disease, stroke, cancer, chronic respiratory diseases and diabetes are long-term diseases that generally progress slowly and are the leading cause of mortality in the world (World Health Organization, 2017f).

In 2015, 40 million of the 56 million deaths that occurred all over the world were due to NCDs, and 48 per cent of mortality in low and middle income countries occurred prematurely (World Health Organization, 2017f). CVDs accounts for 17.5 million deaths each year followed by cancers (8.2 million), respiratory diseases (4 million) and finally T2Ds, which accounts for 1.5 million per annum (World Health Organization, 2017f). Sadly, 80 per cent of premature deaths that were attributed to heart disease, stroke and diabetes were preventable (World Health Organization, 2017f). NCDs are often described as preventable diseases and the likely onset of NCDs are linked to risk factors including a person's cultural, lifestyle, social and environmental background (World Health Organization, 2017f). NCDs are the result of four particular behaviours including tobacco use, the harmful use of alcohol, physical inactivity (PiA), and unhealthy diets which then lead to four key physical and metabolic changes that are manifested in raised blood pressure, raised blood sugar, raised cholesterol and overweight or obesity (World Health Organization, 2017f). However for the purpose of this research, unhealthy diets, overweight/obesity and PiA will be the focal points of discussion going forward.

### **2.4 NCDs: The prevalence in Pasifika peoples**

While the Western Pacific Region experience the double burden of malnutrition – undernutrition and overnutrition - the NCDs epidemic has become a serious threat to life, health and development within the region (World Health Organization, 2017h) where the prevalence in low and middle-income countries such as Samoa, Tonga, Fiji, Niue, Nauru and the Cook Islands (The World Bank, 2016) continues to be the leading

cause of disease and mortality in its people (Girin, Hoy, Kessaram, McKenzie, Roth, Vivili & Williams, 2015).

To counteract the climbing prevalence of NCD in the region, in 2013 the WHO supported Pasifika countries in implementing NCDs interventions known as Package of Essential (PEN) NCDs intervention. These included counselling on healthy diets, PA, stopping tobacco use, reducing alcohol use and specific recommendations on the most effective medicine and action to help prevent, diagnose and treat NCDs and its complications (World Pacific Region Organization, 2017). PEN interventions have already been adopted in the Cook Islands with daily exercise activities, Kiribati where communities work closely with nurses to begin growing vegetable gardens, sport activities and weight loss competitions; and in Fiji where the WHO risk-assessment chart for NCD has been utilised (World Health Organization, 2013). It was reported that more than half of the regular outpatients in Fiji were at low risk of having CVDs as a result of using the risk-assessment (World Health Organization, 2013).

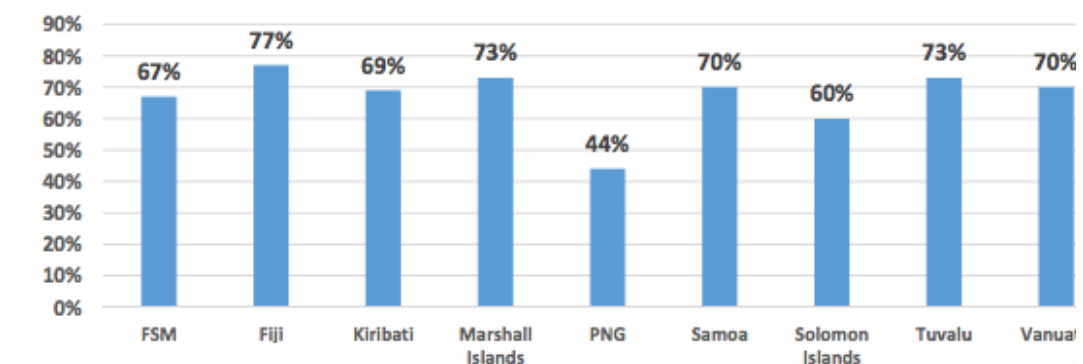


Figure 2-1: Estimated Percentage of Total Deaths caused by NCDs

Source: The World Bank (2016)

Despite Pasifika community's hard efforts to address the health issues caused by NCDs, health professionals express that much more still needs to be done. It was reported from the Pacific NCD Summit in 2016 (The World Bank, 2016) that the prevalence of NCD in the Pasifika region was still increasing (Figure 2-1) with diabetes being the most prevalent across all Pasifika countries (The World Bank, 2016). With NCDs accounting for more than eighty percent of mortality, CVDs and T2Ds are the two leading causes

of mortality in the Pasifika region (Girin, Hoy, Kessaram, McKenzie, Roth, Vivili & Williams, 2015). Furthermore, NCDs accounts for fifty percent of premature mortality in the region (under 70 years old), most of which are preventable (Gouda, Papoutsaki & Thomas, 2016). Of the four main behaviours that lead to the onset of NCDs, unhealthy diets was reported the greatest risk factor in the onset of CVDs induced deaths in the Pasifika region followed by PiA posing a significant risk of death brought on by CVDs, T2Ds and cancer (The World Bank, 2016). Tackling unhealthy diets and insufficient PA among Pasifika peoples have been focal elements used by health researchers and professionals in attempts to alleviate the health crisis in the Pacific. When PA and healthy diets become a lifestyle choice and habit it can have a positive impact on ones health and ultimately their quality of life (McReynolds & Rossen, 2004).

## **2.5 Importance of PA and nutrition**

When increased levels of PA accompany a healthy diet, good health and overall wellbeing is achieved (Ministry of Health, 2016b). PA and good nutrition are two significant modifiable risk factors that have been reported to reduce health disparities significantly, provided individuals apply them throughout their lives (Crowe, McMahon, Probst & Stanley, 2017). The WHO (2017g) emphasises that PA should not be mistaken for exercise. Where exercise is a planned, structured, repetitive and purposeful activity where the main objective is to improve or maintain one or more components of one's physical fitness (World Health Organization, 2017i), PA stretches beyond this:

“Any bodily movement produced by skeletal muscles that require energy expenditure. PA includes exercise as well as other activities which involve bodily movement and are done as part of playing, working, active transportation, house chores and recreational activities” (World Health Organization, 2017g).

PA has significant health benefits to protect individuals from NCDs, however 1 in 4 adults globally are not active enough (World Health Organization, 2017g). PiA is one of the key risk factors for NCDs such as CVDs, cancer and T2Ds and more than 80 percent of adolescents globally are physically inactive (World Health Organization, 2017f). PiA



and unhealthy diets are evident in people's increased blood pressure, increased blood glucose, elevated blood lipids and obesity (World Health Organization, 2017f). These metabolic risk factors lead to CVDs, which is the leading cause of premature death of all NCDs (World Health Organization, 2017f). PiA is not the same as sedentary behaviour, because PiA can be defined as adults who engage in little to no PA – less than 30 minutes, five days a week of PA (Ministry of Health, 2016b). Therefore, regular moderate to intense PA is paramount in reducing the risk of developing NCDs. Staying physically active can help prevent or manage the onset of NCDs.

In 2013, just under 3 percent of all illnesses, disability and premature death were attributed to low physical activity in NZ (Ministry of Health, 2016b). It was reported that Pasifika peoples were more likely to be physically inactive than their non-Pasifika counterparts and in 2015/16, 20 percent of Pasifika adults and 17 percent of Maori adults engaged in little to no PA. Staying physically active in conjunction with a healthier diet can help improve the health status of many Pasifika peoples suffering from a NCDs should they make PA a daily part of their lifestyle.

## **2.6 Nutrition**

Nutrition is been defined by the WHO (2017b) as the intake of food in relation to the dietary needs of the body. To be in good health one needs to have good nutrition, beginning in the earlier stages of life, which is further defined as a well-balanced, adequate diet that combines regular PA. Food and nutrition guidelines have been used as benchmarks for individuals for a number of years to ensure that they have met their recommended intake for the day, which in turn equates to an adequate and well-balanced diet (Ministry of Health, 2015a). The Ministry of Health (MOH) Food and Nutrition guideline covers the life course from infants to pregnant women and older people, providing recommendations on foods such as breads and cereals, milk and milk products, lean meat, poultry, seafood, eggs, legumes, nuts and seeds, and fruit and vegetables (Ministry of Health, 2015a). The MOH provides population-specific food and nutrition guidelines for infants and toddlers (0 to 2 years of age), children and young people (2 to 18 years of age), adults, pregnant and breastfeeding women, vegetarians and older people. Unfortunately, individuals do not always follow the guidelines for a nutritious diet, which result in poor health outcomes, including overweight and obesity and subsequent diet-related non-communicable diseases

(NCDs). Overweight and obesity and soon after, diet related NCDs begin to develop which are forms of malnutrition.

## **2.7 Nutrition and health of Pasifika peoples in NZ**

As unfavourable eating habits become more common, Pasifika nutrition continues to be a central focus of discussion in NZ in an attempt to ease the obesity epidemic. In the past many researchers have dedicated time to create interventions to improve the dietary habits of Pasifika peoples (Amosa, Bell, Scragg & Swinburn, 2001; Carter, Courten, McCabe, Pryor, Schaaf, Scragg & Swinburn, 2007; & Paterson, Puniani, Rush & Snowling, 2007) however the need for more effective interventions that encourages long-term sustainable changes is required.

The 2008/09 NZ Adult Nutrition Survey (Ministry of Health, 2012) provides an extensive report on nutrition between Pasifika and Maori adults focusing on dietary habits such as breakfast, fat and fruit and vegetable consumption.

Those who eat breakfast regularly have less weight gain, lower BMI and improve nutrient intake compared to skipping breakfast (Halsey, Huber, McMeel & Reeves, 2013). The 2008/09 NZ Adult Nutrition survey reports Pasifika peoples were less likely to eat breakfast and choose low fat or trimmed milk. Overall, 42.2 percent of Pasifika and 48.6 percent of Maori males ate breakfast daily, 29.3 percent and 27.2 percent of Pasifika and Maori men ate breakfast 3-6 days a week and 28.6 percent of Pasifika and 24.2 percent of Maori men ate breakfast 0-2 days a week. Less than half of Pasifika female (48.1 percent) and 48.4 percent of Maori female ate breakfast daily, 33.1 percent and 28.4 percent of Pasifika and Maori women ate breakfast 3-6 days a week and 18.8 percent of Pasifika female and 23.1 percent of Maori female ate breakfast 0-2 days a week.

Pasifika participants were asked how often they removed the excess fat from meat and skin from chicken and of those who ate meat, 39 percent of Pasifika male and 50.7 percent Pasifika females reported regularly or always trimming the fat off meat. These results are almost similar to those for Maori participants with 42.6 percent Maori males and 51.6 percent Maori females reported regularly or always trimming fat off meat. Of those who ate chicken, 25 percent Pasifika male and 39.4 percent Pasifika female reported regularly or always removing the skin from chicken. Similar to Maori

participants with 21.7 percent and 34.5 percent Maori male and female participants regularly or always removing the skin from chicken (Ministry of Health, 2012).

The MOH daily recommendation for NZ adults' fruit and vegetable intake is to eat at least three servings of vegetables and two servings of fruit daily (Ministry of Health, 2012). In this survey, a serving was defined as being the same size as one potato or half a cup of peas. Less than half of Pasifika males and females (40.9 percent and 48.9 percent respectively) said they met the recommendation for vegetable intake, while more than half of Pasifika male (54.3 percent) and female (62.4 percent) reported meeting the recommendation for fruit intake. Slightly different to Pasifika, over half of Maori female and male participants (59.1 percent and 51.8 percent) reported meeting the vegetable intake recommendation and fruit intake (50.4 percent male and 56.9 percent female). Furthermore, Pasifika peoples were more likely to drink soft drinks and energy drinks three or more times a week and Pasifika females were more likely to eat fast food and takeaways three or more times a week as opposed to non-Pasifika females (Ministry of Health, 2012).

Pasifika people's dietary habits may be associated with a number of health consequences, which were further reported in the survey. According to Ministry of Health (2012), the body mass index (BMI) of Pasifika males and females increased between 1997 and 2008/09 (Pasifika males 31.5kg/m<sup>2</sup> and Pasifika females 33.0kg/m<sup>2</sup>), and Pasifika peoples had a significantly higher BMI than non-Pasifika peoples (Maori males 29.9kg/m<sup>2</sup> and Maori females 30.7kg/m<sup>2</sup>). Pasifika peoples were more than twice as likely to be obese compared to non-Pasifika peoples and the prevalence of obesity peaked at 56.2 percent in Pasifika males (compared to 40.7 percent of Maori males) and a further 59.5 percent in Pasifika female (compared to 48.1 percent of Maori females), a substantial increase from 1997 (Ministry of Health, 2012a & Ministry of Health, 2012b). The consequences of Pasifika peoples' overweight and obesity prevalence are associated with NCDs such as T2Ds, which reportedly affects 14.8 percent of Pasifika males and Pasifika females aged 15 years. The evidence suggests that improvement in the dietary habits of Pasifika peoples is needed, but the underlying issues that contribute to these habits need to be looked into and understood in order to make effective action plans.

Other factors that are at play need to be considered in order to better understand the dietary habits of Pasifika peoples in NZ. The nutrition problem that Pasifika peoples face has been attributed to factors including health literacy, food insecurity and housing and income. All of which has contributed to their lack in access to more quality foods (Baumhofer, Look, Quensell, Rothfus & Yoshimura, 2014).

## **2.8 Health literacy**

Health literacy has been defined as the capacity to find, interpret and use information and health services to make effective decisions for health wellbeing. Health literacy is further defined as:

The cognitive and social skill which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health. Health literacy means more than being able to read pamphlets and successfully make appointments. By improving people's access to health information and their capacity to use it effectively, health literacy is critical to empowerment (World Health Organization, 2009b).

In 2014, one of the outcomes of the United Nations General Assembly meeting around the progress achieved in the prevention and control of NCDs was a commitment to continue developing and strengthening multi-sectoral public policies and action plans to improve health literacy, with a great focus on populations with low health literacy. One example of an action plan was the introduction of the traffic-light labelling. Traffic-light labelling (TLL) classifies food and beverages from green being most healthy to red being the least healthy option. Furthermore, TLL provides information quickly and visibly at point of sale. Pictorial warnings on food products were highly effective as they overcame language barriers and literacy levels and the introduction of the TLL was universally understood by the public (World Health Organization, 2016a). The outcomes of being health illiterate can affect access to healthcare, self-care and interactions between healthcare professionals and patients (Brown, Clark, Duncan, Hopkins, Lassetter, Morgan & Vanservellen, 2014); and more often it is individuals with low health literacy who are linked to poor health status such as obesity, diabetes and

mental health (Baker, Braun, Onaka & Sentell, 2011). A number of studies have examined the relationship between health literacy and health outcomes however after an extensive review of the literature, only two studies examined the connection between health literacy and the health outcomes of Pasifika individuals. In their study, Brown et al. (2014) examined the health literacy of 354 Native Hawaiian and Pasifika Islanders in the United States by conducting a descriptive cross-sectional survey. Results showed that 45.3 percent of participants had a possibility or high likelihood of limited health literacy, and almost half of the participants had difficulty interpreting nutrition facts labels. Baker et al. (2011) surveyed 3,122 Asian American and Pasifika Islander's and found that 25 percent of participants demonstrated low health literacy, which was also linked to poor health (11 percent diabetic, 32.8 percent overweight and 25.6 percent obese). Although very few studies exist on health literacy among Pasifika peoples, the evidence suggests that low health literacy is highly apparent in individuals with poorer health outcomes. The rates of poor health outcomes are high in Pasifika peoples and it will be valuable to conduct further research to see whether there is a correlation between health literacy and health outcomes in NZ.

## **2.9 Food security**

Food security is globally understood differently and has various definitions, but they all mean the same: that all people should have sufficient access (includes physical, social and economic access) to safe and nutritious foods and liquid (including water), needed to lead healthy and active lives at all times (McDonald, 2010). However food security is an idea that humans have struggled to ensure throughout time. As McDonald (2010) argued, providing sufficient food to all people continues to be a problem as food prices continue to rise and events such as flooding, war and drought resulting in a number of people in many parts of the world not receiving proper nutrition. When determining if people have the food that they need, factors such as ecological, social, economic and political factors need to be considered and further analysed at an individual, household or community, national, international and global level (McDonald, 2010). In NZ, the Ministry of Health defines food security as access to adequate, safe, affordable and acceptable food (Obesity Action Coalition, 2017). Food security exists when people have physical and economic access to sufficient, safe and nutritious foods to meet their dietary needs for an active healthy lifestyle at all times (Rush & Rusk, 2009).

The reality for most Pasifika families is that food insecurity is experienced with fifty per cent of Pasifika households having five or more people living under one roof (Rush & Rusk, 2009). The 2008/09 Adult Nutrition survey (Ministry of Health, 2012) reported that majority of Pasifika participants lived in households that had moderate (50.2 percent males and 56.6 percent females) or low (20.2 percent males and 22.4 percent females) food security – a significant decrease from 1997 in a number of Pasifika male and female who lived in households that were fully/almost fully food secure. Money is a driving factor to the contribution of food insecurity for most Pasifika families who work in low-paying jobs ultimately forcing them to live under these circumstances, and usually with extended family members (Rush & Rusk, 2009). At the end of the day, Pasifika peoples feel that the only foods they can buy are the cheaper and usually unhealthier foods. According to Paterson, Puniami, Rush & Snowling (2007), food insecurity for Pasifika families was portrayed as running out of food, having absolutely no money to buy food, and experience extreme hunger with having to skip meals (Paterson et al., 2007). Food insecurity affects Pasifika people's financial ability to buy nutrient-quality foods, forcing them to resort to unfavourable food choices such as energy dense diets high in refined grains, added sugars and fats in an attempt to save money. The studies suggest that Pasifika peoples do not choose to eat bad food but that the nutrition problem they face is largely affected by income. The studies point out that the problem is beyond the control of the individual and Pasifika families main concerns are for their children and extended families to be fed regardless of what is in those foods. Evidence suggests more robust research that considers the income of Pasifika peoples and how this can be incorporated into action plans to improving dietary habits is needed so that health professionals alike can create more effective interventions and solutions.

## **2.10 Housing and income**

Kenealy, Ryan and Southwick (2012) shared that the subject of health and financial resources came through powerfully in participants who expressed that healthy lifestyles were reliant on the adequacy of resources at their disposal. A lack of knowledge was not the driving force behind participants' unhealthy lifestyle. A lack in resources such as money resulted in participants' unhealthy lifestyle and their ability to make better choices. The determining factors of health for these participants

eventually came down to money, straightforwardly concluding that “If you got money you can go to the doctor; you can pay your bills, buy good food and pay for a roof over your head” (Kenealy et al. 2012, p. 40). Where a strong narrative of poverty and limited resources was recognised, a chance of gaining good hygiene, housing and wellbeing was also hindered.

## **2.11 Nutrition programs to improve diet**

A number of studies have examined the influence that nutritional education programmes have in improving the dietary habits of communities, with a mixture of results. Some studies saw positive outcomes in behavioural changes for their participants and are outlined in the following section.

### *2.11.1 Professional-led interventions to improve dietary habits*

Bowes, Hamilton, Miedema & Reading, (2016) assessed the efficacy of a six months PA and nutrition intervention followed by six months of self-management for Canadian adults and reported an improvement in nutritional knowledge and habits in participants. Certified exercise psychologists led the PA aspect of the intervention and registered dietitians led the nutrition component. The results showed an increase in participant’s consumption of healthy foods during the active intervention and the changes were maintained throughout the self-management phase. Knowledge on healthy foods also improved and participants reported a greater likelihood of choosing healthy foods. Bowes et al. (2016) recruited participants using the radio, newspaper, physician and self-referrals. Individuals were then allocated into two intervention groups. This study is relevant to this research because the CPN course followed similar recruitment processes for potential students for example, promoting on Pacific radio stations and using online forums. Furthermore, a registered nutritionist led the nutrition component of the CPN course.

### *2.11.2 Impact of a common ground between trainer-participant helps to improve dietary habits*

Using a train-the-trainer approach to help educate children about nutrition, Carson, Gutsin and Reiboldt (2016) found that recruiting trainers who shared common ground with participants, such as ethnicity and cultural background, deemed more effective. Furthermore, supporting trainers through customized training aimed at improving

confidence and motivation when delivering, and most importantly programs that would teach trainers to lead by example, were critical in seeing sustainability and effectiveness in future programs alike (Carson et al., 2016). Like Carson et al. (2016) study, the CPN course was also taught by Pasifika individuals, as well as non-Pasifika trainers. While there was no purposeful attempt to ensure that trainers were of Pacific descent, it is still relevant for this research to determine whether having Pasifika as well as non-Pasifika trainers made a difference among graduates. While Carson et al. (2016) used quantitative methods to draw data; this research will rely heavily on qualitative methods such as semi-structured interviews to elicit rich data.

### *2.11.3 Church-based nutrition interventions*

Many researchers have used the church setting as a platform for promoting health in predominantly middle and low-income communities. The results have varied with studies receiving modest to very significant impact as a result of the intervention.

A study by Amosa et al. (2001), conducting a nutrition and PA intervention in three Samoan churches over a year period found a modest impact on weight, intensity of PA and dietary behaviours. During the intervention phase of the study, participants in the intervention group reportedly lost weight. However in the one-year maintenance phase, participants had completely regained all the weight that was lost. Furthermore, Amosa et al. (2001) reported the disappointing results in the lack of change in knowledge and nutrition-related behaviours. Amosa et al. (2001) acknowledged that the disappointing results were attributed to insufficient time given for intervention at the community level. A significant amount of time was dedicated to training individuals from each church to take the nutrition education sessions however the individuals that were trained felt incompetent and lacked confidence to lead sessions which resulted in fewer sessions being held. Despite these factors, there was some evidence that participants began to treat healthy eating as a serious priority. The changes in the mentality of 'eating healthy' were happening slowly, but Amosa et al. (2001) reiterated that they were there. Participant's attitudes towards healthy eating were changing and participants were considering health when they bought or prepared food.



A study by Biro, Brown, Cowart, Reider, Stein and Wasserman (2010) proved that although funding was received for church activities like training, needs assessment and meetings, that funding was not vital to achieve successful results. The community-driven intervention was designed by a team of African-American nurses to promote health and help alleviate obesity prevalence by teaching participant's sustainable, long-term dietary-related changes. Post-pilot data showed that positive results were experienced by most of the African-American church members who reported that the changes they were encouraged to make by the trainers were easy for them to maintain. Changes included reducing the method of frying, increasing their intake of fresh vegetables and whole grain and reducing the intake of fatty meats, full-fat dairy, French fries and high-sugar soda and fruit juice. Participants were also given substitutes for the foods they were asked to eat less of and trainers felt that focusing on a selected few items helped their participants achieve positive results. This was related to the fact that asking their participants to make drastic changes to their diet would call for less effective results and ultimately low compliance to the intervention. Biro et al. (2010) found that a lot of the success of the intervention was attributed to the community-driven aspect of the programme. The support from the pastors for each church community was the winning key for the programme because they inspired their congregation as being role models and instilling trust in them that the health programme would be successful.

While the methods used in the studies by Amosa et al. (2001) and Biro et al. (2010) took slightly different approaches, the studies share similar thoughts about embracing and also celebrating change, despite how slow it may go. Furthermore, the studies show the importance of enabling such communities to feel empowered to take action on their health and that of their families and in this case church communities. Despite there being disappointing results, the church setting is still an ideal platform for health initiatives targetting the Pasifika community because many Pasifika peoples are associated with a church or religion (Amosa et al., 2001). These studies are relevant to this research because the CPN course follows similar methods by training community members in nutrition knowledge so that they can disperse such information to their own communities.

## **2.12 Gap in existing knowledge**

“In research, we seek to be original and to make an original contribution to knowledge” (Jesson, Lacey & Matheson, p.10, 2011). While evidence suggests a number of successful interventions to improve out of control dietary behaviours, none have looked specifically into the effects of a tertiary nutrition course. Furthermore, none have looked specifically at Pasifika communities living in the South Auckland area who were past graduate students of a nutrition course. In other words, there is a gap in the literature, which this study aims to address and this confirms the significance of conducting this research.

## **Chapter 3: Methodology and Methods**

### **3.1 Introduction**

This chapter will discuss the chosen design and methodology for this study. This chapter will also discuss how the research questions were formulated to examine the learning's from the CPN course, and understand how these have influenced the attitudes and behaviours of graduates' families and communities.

### **3.2 Study aims**

This research provides an in-depth investigation of how the CPN course has influenced attitudes and behaviours of graduates' families and communities. This research has three study aims, which have been formulated to guide the research in understanding the place and influence of nutrition within the lives of participant's families and communities. The three study aims that this research addresses in later chapters (four and five) are:

1. Exploring where the interest for nutrition began for participants
2. Identify how the learning from the CPN course influenced changes in attitudes and behaviours around nutrition and if so, how and in what way?
3. Examine how participants have shared their knowledge from the CPN course to families and communities

### **3.3 Methodological framework**

The decision to adopt a qualitative form of inquiry was largely prompted by the fact that this approach would help answer the research question best. Furthermore, qualitative research asserts subjectivity in that the views of the participants and the researcher will be acknowledged, respected and incorporated as data; and such methods help to reveal the truth and assert a holistic view (Grbich, 2013). The researcher felt that past CPN graduates had a lot of underlying reasons that prompted them to enrol into the CPN course, and in order to reveal their stories and experiences, a qualitative form of inquiry was deemed the most suitable approach.

### 3.3.1 *Research Paradigm*

In research, there is no one belief, no one religion and no one truth. One has to be open-minded and consider that a conclusive answer cannot be explained by scientific facts alone (Braun & Clarke, 2013). The essence of research studies are founded upon beliefs known as paradigms, a medium of beliefs and perceptions that can be considered as a collection of personalities of the ages (Braun & Clarke, 2013). A paradigm is a general perspective and a way of breaking down the complications of the real world (Braun & Clarke, 2013). The paradigm of qualitative researcher's defied the assumption that there is only one correct vision of reality or knowledge (Braun & Clarke, 2013). Their perspective comes from the idea that there are multiple versions of reality (Braun & Clarke, 2013).

Through a qualitative approach this piece of work will draw on the interpretive paradigm, and apply its principles in relation to influence in attitudes and behaviours around nutrition.

The interpretive paradigm shares the belief that what is known and what is real is constructed through meanings and understandings developed informally and experientially (Krauss, 2005). It assumes that separating one's self from what is known cannot be done. The researcher and the participant are so connected that "who we are and how we understand the world is a central part of how we understand ourselves, others and the world" (Cohen & Crabtree, 2006, p. 1). Stories and experiences, which are shared from the participants through dialogue, are confidently interpreted as precise as possible by the researcher, which is fore fronted in the analysis process (Giddings & Grant, 2002).

### 3.3.2 *Research Methodology*

This study design utilises the *Talanoa* methodology, following the specific approach underpinned by the ideas of Vaoleti (2006). Before *Talanoa* was introduced as a methodological framework, *Talanoa* was a concept that had been around since the beginning of life. *Talanoa* was predominantly understood as a platform for Pasifika peoples to talk with their families and acquaintances formally and informally. The pure essence of *Talanoa* has always been understood as a time or moment for families to come together to discuss important matters. *Talanoa* has always been linked to

memories of ones' elders who have shared stories about their past life and the history of their family. The Samoan legends of old that were passed on from generation to generation were never recorded in writing but were told through stories or *Talanoa* (Afele-Fa'amuli, Dignan & Katirai, 2009). Sometimes a *Talanoa* would have a negative connotation in that children know that a scheduled *Talanoa* would be a lecture in disguise. *Talanoa* was also understood as a group of acquaintances coming together at the end of a long day at work with the plantation to sharing a beer and a number of jokes. The latter ties into one understanding – that the concept of *Talanoa* has always meant the telling of a story, a conversation, a *fono* or a meeting. The *Talanoa* methodology was selected as opposed to other Westernised methodologies because it deemed to be the most culturally appropriate methodology to use with the participants involved in this study which were predominantly of Pasifika ethnicity.

One of the key facets of qualitative research is describing and understanding people's experiences of social phenomena (Boeije, 2010) by investigating their world and how they see, feel, sense and mirror it (Birks & Mills, 2014). This study followed the qualitative Pasifika research method: *Talanoa* because whether in a formal or informal context, *Talanoa* still encourages Pasifika participants to share their issues, realities, aspirations and stories (Vaiotei, 2006). *Talanoa* was chosen as the most appropriate method because the participants were Pasifika ('Ahio, 2011 & Wong Soon, 2016) and because they can relate to such, a conversation through *Talanoa* allowed for more authentic, real and pure information to be shared to the researcher from their participant (Vaiotei, 2006). For the purpose of this research design, a more technical research-related approach will be adopted in which *Talanoa* is not only seen as the 'talk' of participants but about the way in which that 'talk' is arranged and interview data are analysed for academic research purposes (Vaiotei, 2006).

### **3.4 Research Methods**

This section will discuss the selection of participants and justify the selection criteria of participants (sampling), the selection of interview as methods and the process of conducting interviews including any changes that were made after each phase of the interviewing process.

### *3.4.1 Participant recruitment*

#### *3.4.1.1 Phase One*

Purposive sampling, following a homogeneous sampling strategy (Major & Savin-Baden, 2013), was used to recruit participants who had graduated from the CPN course (O’Leary, 2010). Participants were recruited provided that they had graduated from the CPN course between the years of 2011 to 2016, were currently living in the Counties Manukau region, were either of Samoan, Tongan, Cook Island or Niuean nationality, and were either a health workforce employee or community member.

It was vital for participants selected to have graduated from the CPN course as students had to have passed all assignments in the course to be well equipped and prepared to disseminate their learning’s to their families and communities. In turn, this would reduce the chances of teaching the wrong nutrition information. The decision around limiting the scope to CPN students, who graduated in 2011 to 2016, was made because an evaluation of the CPN course had been previously conducted for the years 2007 – 2011.

The Counties Manukau region was selected to focus on due to the high demographic density of Pasifika populations living in the area, while focusing on one area of Auckland aligned with the scope of this study. In 2013, 112,990 (37 percent) of the Pasifika population were living in the South Auckland region (Counties Manukau Health, 2015) compared to the Waitemata District which covered the North Shore and West Auckland areas – where only 7.3 percent of the Pasifika populations lived (Waitemata District Health Board, 2015).

Selecting Samoan, Tongan, Niuean and Cook Island participants was ideal in order to gain a wide and diverse perspective, stories and experiences based on the assumption that Pasifika ethnicities are not synonymous and therefore graduates of different ethnicities would bring to the table unique stories and ultimately, unique findings. This was also to minimise any potential sense of researcher bias in only selecting Samoan participants because the researcher was also Samoan. There was some debate between the researcher and the staff at PHB regarding including Tokelauan and Tuvaluan graduates because there was a high enrolment rate of this ethnicity in the CPN course. However, the majority lived in the Waitemata District, namely in West

Auckland which did not align with the selection criteria. The condition that participants had to either be working within the health sector or a part of a community health committee such as within the church, was because that was the criteria selection for the course, where selection priority was given to health workforce employees.

Distribution of invitations to participate was done through email by two of the staff from PHB, who were also the lecturers on the CPN course. This was done because these staff members were in charge of the email contacts and distribution list for the CPN course, and to safeguard access to the personal information of previous and current students of the CPN course. CPN students signed disclaimers prior to beginning the CPN course, which noted that personal information should not be accessed by anyone other than educators and/or staff members of the CPN course and PHB. The initial sample strategy was to screen twelve participants with an even distribution of ethnicities across participants. For example, selection would have three participants in each of 4 Pacific ethnic groups (Samoan, Tongan, Niuean, Cook Island), and within each group there would be at least one male participant. Furthermore, amongst the three participants, one should be a health workforce employee and the last two should be community members. This selection criterion was developed in order to elicit rich data from different societal levels and perspectives. Participants were selected based on the first eligible participants to reply until all required positions within the study sample were filled.

The first round of invitation emails was sent out to 63 potential participants, with ten responding with interest in further discussion. Of these ten respondents, seven participants carried on to complete the interviews, while the remaining three respondents failed to reply to an email confirming date, place and time to have their interview. Although it is unknown why two of these respondents did not follow through with the interview, one respondent expressed that they were not comfortable in the researcher bringing a support person along to their home. After it was explained by the researcher that the support person would be waiting in the car, as this was part of the safety protocol for the researcher, the respondents did not change their decision and therefore further contact ended.

### **3.4.1.2 Phase Two**

The researcher and supervisors were still eager to recruit a few more study participants to reach the intended sample size of twelve. Thus, it was decided that snowballing would be implemented in a second phase of participant recruitment, to achieve this. As a result, a second ethics application was submitted and approved these amendments, with a further 18 emails sent out by the PHB staff, and a further four emails sent by the researcher to participants already interviewed to approach other CPN graduates. This process yielded a further one respondent, at which point the researcher and supervisory team determined that there was an adequate number of participants for a qualitative study at Master's degree level, and put a halt to recruitment.

In total, of the eight participants who were interviewed, five were Samoan, two were Tongan and one participant was of Maori descent, with six being female participants and two male participants. The reason why there was no respondent from the Niuean and Cook Island group was most likely due to a low enrolment rate of this ethnicity into the CPN course. While the researcher acknowledges the low respondent rate for participation, it is also important to note that selecting students who graduated between 2011 to 2016 reflects a potentially long time since completion, and several circumstances, including field of employment, or contact details may have changed. These circumstances could include; the possibility of a change in email addresses, no access to Internet to check emails, and CPN graduates may have moved out of Auckland or NZ completely. While the response to take part in the study was low, the experiences shared by the participants of this study were valuable and rich data.

Five of the participants were health professionals, while the remaining three were representatives for a church health committee, school committee, and referred from a general practitioner (GP). Ages of participants ranged from 20 to 57 years old. Rapport was achieved first by reminding participants of their rights and ability to freely decide whether they wanted to participate. Their decision to participate of their own free will signified that participants felt comfortable enough to share their stories with the researcher. Making friendly conversation through emails and again making participants feel empowered by ensuring that they could have their interview wherever they felt most comfortable and safe to speak built further rapport.



Table 3-1: Demographics of participants

Participants	M/F	Ethnicity	Occupation	Graduated Year
P1	F	Samoan	Health worker	2016
P2	F	Tongan	Church representative	2012
P3	F	Samoan	Health worker	2015
P4	F	Samoan	Health worker	2016
P5	F	Maori	School representative	2011
P6	M	Samoan	Referred from GP	2014
P7	F	Samoan	Health worker	2015
P8	M	Tongan	Health worker	2013

### 3.4.2 Data Collection

One-to-one face-to-face semi-structured interviews were used for this study (Creswell, 2014) where open-ended questions were asked so participants felt encouraged to share their stories and experiences from the CPN course. Face to face interviews, conducted in the form of a talanoa or conversation, were deemed most culturally appropriate for this study, and more so with the participants involved because being Pasifika, sharing stories (Wong Soon, 2016) and experiences in person provides more essence and helps participants to feel a deeper connection (Ahio, 2011). It was important for the researcher to conduct the interviews in person to gain a more personal relationship with the participants. This was to further signify that the researcher was interested in hearing their stories and their experiences. The researcher felt she could understand in more depth what participants shared through their facial expressions, hand gestures and tone of voice and this was one of the benefits of face-to-face interviews. This could not have been achieved had a phone interview taken place instead. In spite of the many benefits of using face-to-face interviews, a few challenges were met. It was challenging when interviews were conducted in public places such as cafés because the researcher had minimal control over noise and also people traffic, for example trying to find a quiet corner in a café to

try and avoid nearby customers listening in on the conversation in a way to try and make the participant feel as comfortable as possible. The interview guide was helpful in keeping the conversation flowing, however sometimes participants did not understand what the question was about. The researcher found herself having to try and put the question into simpler words in order for participants to respond to those questions. Overall the researcher experienced only very minimal challenges during data collection stages.

The researcher worked closely with staff from the PHB to design the questions for participants. PHB staff wanted to ensure that the right questions were being asked to help answer the bigger research question. Two draft copies before the researcher finalised a set of questions in consultation with PHB staff. After the first interview, PHB staff made minor changes to a few questions before a finalised set of questions was identified, which was used throughout the remaining interviews. Interviews were semi-structured and interview questions were based around the material covered in the CPN course, the effectiveness of the teaching of various topics and whether participants remembered any key messages from such topics. Other questions asked about the impact that the learning from the CPN course had on participant's families and communities, which was one of the main questions this thesis set out to answer. Please refer to Appendix A for the full interview guide.

Each interview took place in an environment chosen by the participant, to ensure that participants felt most comfortable to share their stories. This was important for the researcher because participants needed to feel that they were in a safe place to share their stories (Farrimond, 2013). Two interviews were held in participants' homes, where one participant agreed to complete their interview at their workplace and the remaining five participants were comfortable to have their interviews at a local café. Where cafés are public and at times can get real busy, the researcher purposely chose to sit at a table located in a quiet and mostly empty corner to avoid anyone listening into the conversation and also for the researcher to be able to hear the audio-recording better when it came time to listen to it. Interviews lasted between 30 to 120 minutes and took place in the suburbs of Manurewa, Weymouth, Manukau, Otara and Sylvia Park, in the southern part of metropolion Auckland, NZ.

After transcribing the interviews, the next step was to read and re-read the transcripts to gain a further understanding of participants' stories shared. Audio-recorded interviews were transcribed and analysed by the researcher following a thematic analysis approach (Grbich, 2013), which is further outlined in sections 3.5 and Chapter 5.

### *3.4.3 Ethical consideration*

The researcher sought ethics approval from the Auckland University of Technology Ethics Committee (AUTEC) before the collection of any data took place. Ethics approval to conduct one-to-one face-to-face interviews and to audiotape the sessions were granted by AUTEC on 23 August 2016, reference number 16/266 (Appendix B). Information sheets, consent forms and research questions were not translated into any specific Pasifika language because as a requirement of the CPN course, students would be able to speak and understand English, therefore the researcher felt that there was no need for these forms to be translated. All interviews were conducted by the same person (the researcher) and ranged from 30 minutes to 120 minutes. Each participant was gifted a koha of \$25 Pak n Save voucher at the end of their interview in appreciation of their time dedicated to the study.

### *3.4.4 Voluntary participation*

As mentioned previously, all recruitment was done through a third party, PHB staff, however the researcher had written the emails that were sent out for recruitment. The email (Appendix C) explained the purpose of the research and the nature of participants' involvement should they choose to participate. Every email sent out included a Participant Information Sheet, which discussed the study in more detail (Appendix D). The Participant Information Sheet also noted that participants who agreed to participate in the study would agree to two rounds of *talanoa*. The first round would be an individual interview while the second round was a *talanoa* that brought all participants together to enable the researcher to share the research findings. Potential participants were informed that their participation was voluntary and should they choose to withdraw throughout the duration of the study, they could do so without any obligation or explanation.

### 3.4.5 *Informed consent*

Participants who agreed to take part in this study had to contact the researcher by email to discuss a place, day and time to complete their interview. The researcher explained in the email that they would be required to complete a consent form should they agree to continue with the interview. Before each interview, participants were asked to take their time reading the consent form (Appendix E) and were encouraged to ask questions if they had any. When participants were happy with the consent form, they signed and participants were given a copy of the consent form and information sheet while the researcher kept the original. Participants were told that their interview would be audio-recorded on the researcher's phone and that recording would end at the completion of the interview. All participants were happy with their interview being audio-recorded and agreed to meet for the second round of *talanoa*, which had also been approved by AUTECH.

### 3.4.6 *Confidentiality*

As confidentiality is a vital component of any research, the researcher understood her responsibility in protecting the confidentiality and identity of all eight participants. All material whether written, spoken or recorded remained confidential. Where the second round of *talanoa* meant that the identity of participants involved would be revealed, what each participant shared in their interviews, and disseminated in the findings, was further protected by using codes to identify quotes. For the purpose of confidentiality, *Talanoa* participants were identified by alphanumerical code as P1 - P8 throughout this thesis.

## 3.5 **Data Analysis**

Data analysis is a "process of inductive reasoning, thinking and theorizing" (Bogdan & Taylor, 1998, p. 140). It is a process that requires the researcher to be fully immersed in the data and then organising that data and bringing meaning to the mass of data collected (Rallis & Rossman, 2012). Analysis of data can start as early as when the researcher frames his or her question or analysis can be done at the end of data collection, however regardless of when the analysis starts, data analysis is an ongoing process (Rallis & Rossman, 2012). The data collection process for this research took

place over a 12-month period (May 2016 – May 2017) and analysis of data was conducted after all interviews were complete.

Data analysis can be time-consuming and fascinating where it requires certain distinct procedures to bring order, structure and meaning to the data (Rallis & Rossman, 2012). While there are many different ways to analyse data (Bui, 2014), one procedure may include: data reduction, data coding and lastly data interpretation (Rallis & Rossman, 2012). This research will discuss its own processes within these three procedures.

### *3.5.1 Data Reduction*

The data reduction phase of data analysis is a difficult and complex process that requires the researcher to select, magnify, clarify, convert and reduce data from transcripts to create meaning from the abundance of words (Farcomeni & Greco, 2015). In order to achieve the latter, the researcher was required to read and re-read transcripts and re-listen to audio recorded interviews to help identify categories and themes that focused on the three main questions and also to aid in the data coding and data interpretation process (Rallis & Rossman, 2012). This phase of data analysis enabled the researcher to reduce the mass of data collected into a series of categories and themes that would later represent them (Bogdan & Taylor, 1998) which has been portrayed below in Table 3-2. The data reduction process began after each interview was conducted and transcribed. Table 3-2 shows interviews in the sequence they were completed and the researcher based on the following three broad coding questions manually selected the data:

1. **How** did the CPN influence attitudes and behaviours?
2. **Why** were attitudes and behaviours influenced this way?
3. **What** was the outcome of these influences?

Going through this phase of the data analysis allowed for the researcher to process the mass of data collected in a consistent manner following the three broad coding questions, which led to the next phase of data analysis known as data coding.

### *3.5.2 Data Coding*

Using a colour-coding system, potential themes were identified and highlighted. Furthermore, additional notes were made in the margins of each transcription to

support the researcher in the identification of themes. Categories of meanings from experiences were identified, constructing a research key of themes and sub themes related to the research question to highlight and isolate the themes occurring in the transcripts. Six themes were identified as a result of the analysis made to further understand how the CPN influenced the attitudes and behaviours of graduates' families and communities. Each theme will be further outlined in Chapter Five to underpin the findings of this research.

Table 3-2: Data Reduction and Coding

Participants	How		Why		What	
	Breaking habits	Being of Service	Family first	Past experiences	Education	Walk the talk
P1	x	x	x	x	x	x
P2	x	x			x	x
P3		x	x		x	x
P4	x	x		x		
P5	x	x	x	x	x	x
P6	x	x	x	x		
P7	x	x	x			
P8		x	x		x	x

Table 3-3: Codes, themes and indicative quotes

Examples of codes	Themes	Indicative quotes
All knowledge sharing was with family first	Family first	“My kids love veggies . . . and people are like why and I say well I want to educate them so they have a better understanding of what health is”
Learn and understand more to be better equipped to help communities/families	Educate yourself and understand	“Learning about the food groups really showed me how to find that balance, it’s not one size fits all”
Fear of history repeating itself, therefore increased awareness to ensure that it does not	Learning from past experiences	“When I lost my brother it was a life changing experience for me . . . I still blame myself to this day that I didn’t do enough to help him, so if I can help my kids now so that they have those habits when they get older, hopefully they’ll carry it through”
Graduates occasionally referring to doing it (CPN) for their “people”	Being of service	“You know if you can save lives just by educating our people, I think I need to do more especially helping our Polynesian community”
Introducing new ideas and ways to cooking	Breaking habits	It’s like, Dad try some brown rice and he’s like “what’s that kind of rice” . . . it’s using the food they’re used to and making small changes not to freak them out”
Success stories from graduates. Proof of them improving their own health	Walking the talk	“After the CPN I said, there’s no point in me preaching about healthy eating if I don’t do it myself, so it starts from me. So I have to do it!”

### *3.5.3 Data Interpretation*

The data interpretation phase was the final data analysis process, which focused on making sense of the findings and providing a clear illustration of participant's experiences shared. The interpretation of the data was illustrated through the themes presented in Chapter Four and Chapter Five.

## **3.6 Reflexivity in the Research process**

As a Pasifika researcher, it is difficult to disconnect from the people in your community and even more so when discussing a burning issue you so intimately understand and relate to, and this made it even more important for me to ask the right questions. Exploring this research question meant not only addressing a gap in existing knowledge but it will also render as an act of service to a community which was so close to my heart. I am a New Zealand-born full Samoan, who has sound knowledge and understanding of the protocols of my Samoan culture and beliefs. However, there was a need for me to also be familiar with other Pasifika ethnic groups.

In reality, there was a possibility that participants from a different Pasifika background to myself, might find it difficult to share their stories openly. These thoughts came to mind because I had experienced similar challenges within my own community. Having to approach 'real' Samoan participants, responses may have been influenced by some underlying judgements that NZ-born people cannot completely relate to, and understand their stories. However, Pasifika Health Research (PHR) guidelines (Health Research Council of New Zealand, 2014) provide a robust guide and approach for the fieldwork and engagement strategies with various Pasifika ethnic groups. The PHR guidelines indicate that Pasifika research can be strengthened by Pasifika cultural values and beliefs, and emphasised the importance of holding close to relevant ethical Pasifika standards, values and aspirations (Health Research Council of New Zealand, 2014). Furthermore, the PHR guidelines suggest Pasifika Island ethnic groups share similar cultural links, and any study regarding Pasifika health should encompass four key cultural values prominent for all Pasifika ethnic groups: respect, holism, reciprocity and communal relationships (Health Research Council of New Zealand, 2014). Within a Pasifika research setting, respect is portrayed in the way Pasifika researcher respect participants' cultures and worldviews. Respect, which is given throughout each phase



of the research, strengthens the relationship between participant and researcher. Holism in the Pasifika worldview relates to a balanced life encompassing the environment, social and spiritual life (Lui, 2003). Therefore any knowledge participant's share with the researcher should be returned by means of positive outcomes and benefits for Pasifika peoples and their health. In any Pasifika health research it is important that the relationship between the participant and the researcher is reciprocal in that both researcher and participant will benefit from the study. This further enables the relationship between the researcher and participant throughout the process of the research. Finally, communal relationships relate to Pasifika people's service to their community and their duty to care for their community. This further supported the approach through engaging with participants and guided the interview process.

### **3.7 Summary**

This chapter has provided an overview of the *Talanoa* methodology used for this study. It has explained the rationale for the study, provided an in-depth description of the process of the design, methods and along with a justification for methods of data collection, data analysis and ethical consideration by the researcher.

The next chapter will outline the findings for each participant, exploring recurrent themes derived from the *talanoa* with all participants ranked according to the recurrent themes, which came up in talanoa.

## Chapter 4: Findings

### 4.1 Introduction

This chapter will discuss the findings per participant's responses under the five main themes from the interviews, namely: educate yourself and understand, putting family first, learning from past experiences, breaking habits, and walking the talk.

Participants in this study were family-oriented and it was predominantly their experiences with families that shaped the development and emergence of these themes. Themes are presented in the order of importance by number of times themes appear according to participants and their experiences. Participant's experiences will begin with a brief description on why they enrolled into the CPN course. The researcher assigned alphanumerical codes to each of the eight participants, from Participant 1 (P1) through to Participant 8 (P8).

### 4.2 Participant 1

P1 enrolled into the CPN course out of a desire to learn more on healthy eating so that she could help her family, community and others living with a disability learn how to eat healthy:

“Because I wanted to learn how to eat healthy and also to help other people in the community, especially those with disabilities to eat healthy, and my family as well”

As the *talanoaga* progressed, it was soon realised that P1 drive to learn more about healthy eating stemmed from past events that took place in her personal life.

#### 4.2.1 *Learning from past experiences*

The biggest motivator that pushed P1 to enrol into the CPN course was when her husband suffered a stroke. Regrettably he passed away not long after. After experiencing this tragedy, P1 really felt the urge to want to learn more about how to eat healthy in order to prevent another stroke affecting any of her children and family. She said:

“Well I'm always conscious of my health but I think what really triggered [it] was when my husband had the stroke . . . before my

husband passed away, I became interested in nutrition . . . just with my husband's situation, how can I help control that so that he can eat healthy and live longer? I wanted to know, that's why I [was] interested in learning what will help us control preventing getting all these problems by following the diet, what we eat, and the exercise. Like the computer, garbage in garbage out so same as us, garbage in garbage out. That's why I was interested in taking the course . . . because I wanted to learn how to eat healthy and also to help other people in the community, especially those with disabilities to eat healthy, and my family as well".

#### *4.2.2 Educate yourself and understand*

P1 shared a lot about wanting to learn more about eating healthy because she was a mother, but also a healthcare worker. She felt a strong obligation to know and understand all that she could around healthy nutritional behaviours because she was a role model for not only her children and family, but most importantly for her community:

"I've come to understand that stroke for Pacific Island and the Asians, these problems are in our genes. We are prone, or we have more chances of having high blood pressure and having arthritis and gout compared to the Palagi's. I understand these problems, one reason is due to our genes and that is something we cannot control. But the risk of it we can control through our diet and exercise. We deal with a lot of people with stroke so by understanding the diet, what we need to eat in order to live a healthy life, I need to understand it before I can say it to the people so I can advise them. Especially when you're working in the health sector, you need to know these things. I wanted to know that's why I was interested in learning what will help us control preventing getting all these problems by following the diet, what we eat and exercise"

### 4.2.3 *Being of service*

Since graduating from the CPN course in 2016, P1 said she had been putting the learning from the CPN course into great use. Now that P1 had gained an education and moreover a deeper understanding of how to eat healthy, she was ready to share that knowledge with her community. P1's eagerness and passion to share all she learnt to her community, withholding nothing, was reflected in her expressions and in how passionately she spoke about her experiences. Actively being involved in her community, P1 has been sharing and teaching her communities what she was taught and shared amazing testimonies from her communities. She said:

"I'm teaching health and wellness as part of the financial literacy program. So I do the portion size, I look at the different four food groups and I talk about what we need to keep an eye on when we do cooking. We encourage cooking at home, so that you can save money and also have a healthy lifestyle in the sense that you know what you are putting in the food. You avoid putting too much salt, oil and sugar. That's covered in the financial and I teach that. And we also do cooking, the actual cooking like what we do at our CPN courses. We talk about following your shopping list so you shop smarter and shop around to find the cheapest places where you can save money. Portion control, four food groups, talking about diabetes, changing types of oils. Those are the practical things that our people need to understand. Things that they are familiar with, things that they use daily in their lives like when they're cooking"

On the discussion of the topics covered in the CPN course, P1 said that the topics were useful and practical topics she knew her community would benefit from:

"I think the key messages will be the four food groups, the portion size, and the salt and sugar, and the oils controlling those things. I found them really interesting and I think quite useful for me, very, very useful. Portion control, four food groups, talking about diabetes, changing types of oils. Those are the things they are familiar with, things that they use daily in their lives like when they're

cooking. So we talk about following your shopping list so you shop smarter and shop around to find the cheapest places where you can save money. And now we talk also about cooking and having home made meals compared to buying takeaways”

However, P1 would talk to her community on topics she felt they would relate best to and furthermore be able to understand better:

“Well, it depends, well the types of oil that I talk to them [about] is canola oil. I always say it’s cheaper, it’s the best oil. They say they didn’t really know much about that. I can’t really do food labelling with them because the people, the adults, you have to pitch the right information to the right group.”

P1 also encourages her communities to bring their families along to the workshops so that they would support and hold each other accountable when trying to eat healthy. Children of community members were reported encouraging their parents not to buy them fast food so often because they started to understand that such foods was not a need but a want:

“So I have families with children, so we encourage the whole families to be involved. So when the children come with the Mum during the workshop they listen, and they say oh Mum we don’t need that. If that’s not a need it’s only a want Mum. So now the children now say to the Mother’s, they say Mum don’t buy McDonald’s. The children are used to McDonald’s and getting spoilt all the time. So now the children now say to the Mothers don’t buy McDonald’s. The children are used to McDonald’s and getting spoilt all the time so now they say no Mum save the money it’s not a need. We can make McDonald’s at home. See, so the change in behaviour for young kids to understand that now to start saving money and make food at home”

P1 shared that by teaching her communities how to eat healthy, not only were they more motivated to continue eating healthy, P1 found that her community began to participate in more PA and were also motivated to achieve their personal goals. Although unrelated to healthy eating, P1 shared that it was because of the difference healthy eating was making to their overall wellbeing that these community members were able to achieve their own personal goals. P1 shared about stories of two strong women who went through her workshops:

“I have a Mother, she’s on dialysis and this lady, the doctors tell her don’t eat this, don’t eat this, don’t eat this. She never listens. She eats whatever she wants. After coming to the financial literacy, now she’s learnt that there are things she can control and that is through diet and doing her exercise. Because her husband passed away, she thought that she wants to go now, but because of the program, she now wants to live longer and save money for her son. By living longer she’s working on her diet. She’s buying only the things that she’s supposed to eat, having a healthy meal and cutting down on the things she had before. She used to go dialysis, comes back home, gets tired and sleeps. Now she goes to dialysis, comes back home, eager to change in her walking shoes, and get changed and go to the pool to do the water walking. It has really changed her perspective of life”

“I have another lady, she had arthritis and also diabetes. Her husband gave up work to look after her but by coming through the program, her husband has gone back to work because she is there controlling her diet and she is able to do things herself now. Now, she has started a small business because I linked her to a course, sewing, because that is what she likes and now she is doing sewing again”

Talking about her experiences sharing tips and information on healthy eating, P1 said:

“The result is that people are really excited about it. They laugh about it because they know that it’s true. The Tongan’s about the pisupo, the Samoan’s about the pisupo, they always want to eat the pisupo and say that the oil is the best part. So I always remember were eating healthy so I have to let them drain, no, heat up the pisupo to get rid of the oil and show them how much fat in there”

The knowledge that P1 has gained from the CPN course has impacted her community in many positive ways. She has been able to witness her communities make realistic changes to their eating behaviours by teaching them basic nutrition knowledge that they did not know before going to her financial literacy program:

“The financial literacy program is for carers who has somebody with a disability or somebody who is caring for an elderly at home, so elderly parents and people with a disability due to accident or health reasons, just for Pacific Island and it’s a free course. This is my third week, I run it in Henderson for the Tuvalu group, so I run it from 6.30pm – 8.30pm. I go out to the families, one on one and allocate the times. So that’s how I’m applying [the learning from the CPN course]. Even when I go to families with disabilities and how they’re feeding, I always talk to them about eating food, help with bowel motions”

#### *4.2.4 Family first*

Due to the events that befell her late husband, P1 became more dedicated into ensuring that her children did not suffer the same fate. She began to apply the CPN teachings in her home and although her children found it hard to adapt to, P1 continued to stress the changes because she did not want to go through the tragic events she and her family endured with her husband. P1 had learnt and understood the health benefits from eating right so she continued to lecture her children because she knew the outcomes would be life changing and worth it:

“My family at home, when I see my children eating, I talk to them about cutting down on the salt. You know salt is the number one

cause for high blood pressure? Because I'm a stroke champion that's why I also talk about the salt because they know the experience, I said I don't want you to go have the stroke like Dad. You know what it was like, the struggle we went through to care for Dad and the frustration that he went through because he had the stroke. They used to love eating with me but now when I sit down, they start the salt and I say take the salt away from the table, that's enough you know, and they say Mum you know it's not even salty and I say it is salty alright"

"We always have vegetables with our food. Now we try to grill and bake instead of fry, and BBQ"

P1 has found it much more difficult to encourage her two daughters to eat healthy but she continues to try and help them make changes:

"My son he's into fitness, he's very fit so he's conscious of what he eats and also my two son in laws. It's my daughters that are a bit hard but I say you have to! So now my other daughter, she's pregnant she's been diagnosed with diabetes. So I say it will affect your baby as well. . . even the sugar I say to my daughter you have to cut down on the sugar. Because I put one sugar and say there's your tea and she say's Mum its not even sweet, and I say no that's enough control the sugar"

Her determination to practice healthy eating attitudes and behaviours was also projected onto her extended family with P1 taking control at family gatherings and using every opportunity to talk about the benefits of healthy eating:

"Even when I went to my family, they tried to cook the pisupo so I went and bought the three pisupo and they wanted to cook just like that, just fry with the onion and leave all the oil, so I said that's not healthy. So I bought a packet of vegetables and I said drain the oil. So I said you may like it now, but you're going to have a lot of



problems because of it, so drain the oil and add the vegetables. My brother has diabetes and the other has high blood pressure, and my sister has diabetes but they just want to eat the pisupo. I keep talking to them but they say yea I know but it's not very nice so I just say it's your life, at least I'm telling you but you don't want your foot amputated because of what you eat"

The stories and experiences that P1 shared with her children and siblings showed the magnitude of her love for them and how she desperately wants her family to be healthy. She continues to teach and adopt new eating attitudes and behaviours in her home in hopes that her children and siblings would follow suit and sustain those changes to improve their own health:

"It's just actual doing, talking to the family and just doing it myself too"

#### *4.2.5 Breaking habits*

P1 shared that she often talked about practicing different ways to cooking foods with her Pasifika community. It was understood that her community predominantly fried their food and thus rarely experienced other techniques of cooking. These were the types of habits that her community was exercising and she wanted to teach them healthier alternatives:

"They (Pasifika community) just have to understand and just reduce and just be conscious of that and the different ways to cook, use boil or barbeque or grill other than frying. . . we understand that you're not going to change all of a sudden but slowly change"

Breaking old habits is difficult especially when it is a practice that someone has done for most of their lives. However, P1 would continue to remind and encourage her community to introduce change slowly and to stay committed to that change:

"They [community] laugh about these things and I say, if you are eating 4-5 pieces of pork chops or lamb, slowly change your portion from four to three to one. Were not going to say it's not hard to

change, we understand you're not going to change all of a sudden so just cut down slowly. But we understand that this is the palagi measure you know, they just have to understand and just reduce and just be conscious of that and the different ways to cook, use boil or barbeque or grill other than frying"

#### 4.2.6 *Walking the talk*

P1 stressed from the beginning of her interview that before she began to teach her family and communities about healthier eating attitudes and behaviours that she must have been living it herself. It was important to P1 that she set a prime example for those she was supporting along the way, so she worked hard to get herself into a healthy state and continues to practice those behaviours:

"You're more conscious of what you eat now and the way you cook your food and when you look at food in the shop. Even at home when I eat the food I say don't put too much salt in the food . . . it's actually doing it myself . . . before I used to eat, like I love chicken and chips. I used to travel from Ellerslie to Onehunga because I loved the crunchy chicken. But now I'm very conscious of that and people are like how are taking away the skin? I say it's not healthy. I am losing weight, I was 82kg last week and now I am 80kg, but it's my portion size. I'm controlling my portion size and cutting down the sugar as well as the sweet stuff. It's like you have to do it for yourself to be able to talk about it. After the CPN I said, there's no point in me preaching about healthy eating if I don't do it myself, so it starts from me. So I have to do it!"

When asked if there were anything she would change to improve the CPN course, P1 said that she would not change anything from the course itself. P1 only recommended that the PHB staff look into a refresher course because she could not remember everything that was taught. The refresher would help her to remember the more complex topics that were covered throughout the course so that she could understand it and share it with her family and communities:

“I think there is more that we can [do] but it depends on the audience that we deal with. For me, I would like to have just a recap for the group. It would be nice if we can get together one day to talk about CPN stuff we talked about just to refresh our memories. I talk to families about the protein. I say you know you don’t need to have expensive bacon, so long as you have your milk. I tell the older people you need to have your milk, one or two and kids can have dark blue milk. Some people say dark blue milk is good for old people as well and I say no no no too much calcium but some people say it’s good for old people too so yea my recommendation would be to refresh on things like that. You don’t really remember everything because, for me I can talk about food groups stuff like that. But some of the stuff we talked about, the protein, incomplete and complete. Those are the stuff, so what I still remember are the complete when you have your toast and whole meal bread with the baked beans. That’s what I want to tell the families, you can have that and that’s a protein. You have your protein, you have your carbs, things like that. I would go back and do a refresh so I can ask individually like what’s this?”

Ultimately, P1 was greatly influenced by the CPN course and she was able to make positive changes to eating attitudes and behaviours to not only herself but also her children, family and her community. She now had all these tools to enable her to actively engage with those she cares about to make healthier changes and she needed to be there to continue to motivate them to sustain them:

“These are the practical things that we do every day in our lives that are important and we have to keep hammering, keep saying it over and over again and also keep practicing it”

### **4.3 Participant 2**

P2 was involved in the 2-day nutrition course with PHB, after being chosen by which her church to complete the same. Upon completing that course, she grew more interested in nutrition and wanted to extend her knowledge further by enrolling into

the CPN course where she was able to learn and gain a deeper understanding of what it meant to be healthy:

“Our church participated (sic) in funding from the government and the church wanted me to go to the community one [nutrition course]. After we do the two-day community [nutrition] course, that motivated me to do the nine day [CPN] course”

#### *4.3.1 Educate yourself and understand*

The CPN course taught topics in a way that was easy to understand for participants like P2 who spoke highly about it:

“Everything they covered, when you sit in there you really understand. It was fun, like it was really fun for me and I enjoyed being there. I enjoyed the practical stuff as well. They do it [teach] in a way that you can understand”

P2 understood that certain foods were unhealthy but she did not comprehend how much harm it did to the human body:

“The topics were shocking. I didn’t know how many teaspoons of sugar were in fizzy drinks and the kind of food that we eat every day. It was kind of disgusting but it was eye opening. Now and then I look at my book from the CPN course to remind myself now and then”

When asked about the key messages that she took from the CPN course, P2 shared a lot about the topics and tips that were practical for her. She said:

“They said exercising is very good, thirty minutes a day, that’s the main thing for you to get better, and the portion on your plate. They said every time if you want to eat, don’t eat after six. Eat before, you don’t want to eat and fall asleep it will make you more obese (sic). Have water on the table so you can drink water and then next time you eat, you’re already full. That’s what I try to stick to yea, because like they said the very main thing they cover is like how were going to

like know what the bad fats and good fats and label reading, and they said make sure you always eat before you go shopping because you're going to eat everything and make sure you don't fall for the discounts and that, that's the main thing. Yea we don't read the label we buy the stuff that's high in sugar, but now we make sure always go shopping with a list, only buy the stuff on the list"

Graduating from both the 2-day and 9-day CPN course motivated P2 to want to extend her knowledge on nutrition even further by gaining a higher qualification. Although she has yet to achieve this goal, P2 is still hopeful and determined to see it through:

"There is an opportunity for me to extend my study, I was sent a letter for an opportunity to study at AUT for four years. I want to do that but not now. I have got little kids, so maybe when my kids go to school. One day I will go finish off this course and I will take it on, but for now I have to stay home"

#### *4.3.2 Being of service*

The church community has supported P2 throughout her journey in completing the CPN courses she was a part of. She has shown her gratitude by sharing what she learnt to her community in proactive ways that have produced positive results:

"I help run the cooking skills at church and we are still running our cooking skills at church once a week since 2012. This week we tried to make pasta where we made our own pasta sauce instead of buying it from the shop. It is free food and a lot come to that one [cooking skills] and they go back and say they are making that at home. . . and now when we have our church functions we don't do those pigs, yea now we do the small meals and portion, and we do a zumba class every Saturday"

#### *4.3.3 Breaking habits*

While the cooking skills classes have been successful over the years, P2 shared that she faced her fair share of challenges when she tried to share healthy tips with her church

community. It was a case of changing habits and way of thinking of her church community so they could welcome something new:

“They said eating healthier is too expensive. They see it that way. No it’s not. Unhealthy food is more expensive than healthy one. All you have to do is buy little amount of meat, and then you get a whole bowl of vegetables, put it in your bowl. They said oh you need meat and I said if you’re old you don’t really need meat”

“When I just started, they said oh this is too expensive, we can’t be full on that but I say oh that’s enough, drink water you can be full on that – food, water and then eat your food. If you want to stay healthy that is what you are going to do, but if you don’t want to listen to me that’s fine that’s your choice. You all sent me to go and learn what to do, to learn something to change our lifestyle because there are too many of us obese but when I come back, oh this has to change and that but it’s not up to me it’s you, and they turn around and say bla bla bla, no way. If you don’t want to take it fine with me but at least I gave it to you”

Challenges are to be expected when there is an interruption in the normality and routine of people’s lives. Although P2 expressed a sense of frustration, she also acknowledged that changing habits within her community needed to happen slowly. She said:

“But it’s starting slowly, slowly. That’s the main thing for people going into the CPN course, don’t give up. Even though it’s hard because if you want to reach out to the community, you have to keep trying and one day it will happen. It will be a big challenge for you to go out to the community and Islander’s they love their pork, roast pig, it’s very hard and also the culture but you have to keep trying. It’s not going to happen overnight, you can’t click and everything will change but you have to keep trying to reach out to them”

#### 4.3.4 *Family first*

The learning from the CPN course made P2 realise that the types of food her family was eating contributed largely to their health issues. In the greater scheme of things, a diet consisting mainly on takeaway and fast food was not going to be beneficial for her family in the long run. As a result of this, P2 cut back the regularity of takeaway consumption and started to cook food at home instead:

“The most hard thing to see is that it is shocking that it is coming to my family. Like my family now is going through heart disease and I say it must be the food that we are eating. So now once a month or twice a month as a treat for my kids we eat KFC but every day it has to be home cooked. We always used to bring our food here and they can help themselves but no, this little plate is for my 3 year old and this is all the food they need”

P2 also tried the recipes she made at the CPN course for her family dinners and worried that her children would not react kindly to the healthy food, though she was surprised:

“When it came to the food I made with the CPN course, I thought my kids wouldn’t like it but they loved it. The vermicelli salad and food with heaps of vegetables”

While the CPN course taught P2 ways to improve eating behaviours, the course also influenced her lifestyle money wise. P2 shared that the CPN course taught her how to budget on food and found that her family was saving more money buying healthier foods:

“We always used to go shopping for something else but we come back with something else. But when we stick to shopping list, oh it was a huge difference. We can make the meal, what we are going to have every night. So we plan for eleven people and we are still doing that now. Before we would spend nearly \$300 a week on food, but now we only spend \$150 including our toiletries, and we are still doing that now. Even though it’s a little \$5 mince, I make a whole

pot of it and we feed the whole house with \$5 because I buy that \$5 mince and add heaps of vegetables”

P2 shared her secret tip into how she successfully stuck to her shopping list:

“Don’t take your kids and husband to shopping, go by yourself – that’s my tip”

#### 4.3.5 *Walking the talk*

P2 admits that change for her was difficult because eating unhealthy foods was normal for her, however the CPN course taught her how she could begin to adopt small and healthy changes. Her knowledge around nutrition was scarce so P2 applied what was taught at the CPN course and began making small and realistic changes within her to be a better role model to her children:

“It’s really hard for them (Pasifika community) to change cos the kind of food they’re used to. Speaking from experience I used to love all that stuff, I loved KFC but when I changed to eating healthier, I look at KFC and said why my life is so messy but now take aways once in a while. It used to be every night if I feel too lazy to cook but I said to my husband we can’t feed eleven people every night on takeaways so now it is home cooked meals. That’s why we said it saves a lot. Every now and then when we go to the park, even though they laugh at me because I can’t walk – yes I struggle to walk but I’m still trying”

“Even my husband said you need to lose weight, you need to look after yourself we have to look after our kids. We can’t leave them behind. I have six kids”

When asked if there were anything she would have changed to improve the CPN course, P2 said that she would not change anything. However, P2 shared passionately on the importance of sending the right people to complete the CPN course. P2 expressed that Pasifika communities needed individuals who would be committed to going out and teaching them the content they learnt from the CPN course. To sum up,



P2 encourages that future CPN students persevere to help the wider Pasifika community:

“Nah they are really good at what they are doing, but the only problem is the people that participate in the course. They say they can do this and that in their community but once they go out to their communities and people judge what they do, they just stop. I think they just go home and stay there, they don’t really reach out to the community. I don’t know what the point is in going there if you don’t want to do the thing that you are supposed to do in the community. If you are sent by the community or your church, keep doing what you are doing. Don’t give up because once you give up that’s it”

#### **4.4 Participant 3**

Work was the main reason why P3 had enrolled into the CPN course as she needed to increase her knowledge around food and nutrition for work research:

“I’m employed by Counties and were doing a research in conjunction with Auckland University and it was part of the training to sit the CPN course. The research is working with pregnant women with a high BMI and there were four arms. The arm I was to take part in was the intervention arm of delivering nutrition to working with women to do a gradual weight gain instead of spiking – for long term better outcomes”

Speaking on her thoughts about the topics taught in the course, P3 found that not only was the course enabling her to talk about nutrition to her research participants but she was able to apply it to her own and that of her families lives:

“The topics were really interesting, I didn’t know what to expect. A lot of focus around heart disease of course, but more in depth, more in detail and better understanding for me because I was associating it with my family”

#### *4.4.1 Educate yourself and understand*

P3 had always been interested in nutrition, but the CPN course was able to add more depth into what she already knew. This new knowledge would then be beneficial to share with her participants when the time came to begin their research and it would also be new knowledge to share with her family:

“I have always been interested in nutrition and so when this came along, it was like I was just embracing it, running with it. I loved it, and for me it was validating what I knew and correcting what I thought I knew”

P3 found that going through the CPN course would help her engage better with her research participants and furthermore empathise with their own struggles and stories:

“You know, I just see it, if it is a challenge I just address it. Normally I have been able to back that with some information, some statistics, some experience. I actually thought if I want to work with these women I need to walk the talk, so I can see where they struggle, I can see where they are at and I can understand”

The learning from the CPN course helped P3 to understand that the steps to eating healthier is different for everyone and that it is important to find the best way that suits each individual:

“Learning about the food groups really showed me how to find that balance, it’s not one size fits all”

#### *4.4.2 Family first*

There was a lot of sharing about self and family with P3 partly because she had not yet worked with her participants for their research to comment on feedback. However, it was understood just how important her family meant to her and how far they had come with the healthier habits they had started to form.

For P3, being around long enough to spend time with family and create more memories were reasons behind achieving health. Becoming a new grandmother was more motivation for her to achieve health:

“Found out I was going to be a grandmother for the first time and just kicked in, yea so I did food, I did the exercise and became a grandmother. And I wanted to be fit before my grandchild came on the site. And that’s how it’s affected me”

The healthier changes she was making with her lifestyle started to be noticed and followed by her son who not long after started to produce amazing results as well:

“To take the learning from the CPN course into my home, my youngest now who is 18 has just transformed and all we did was cut out sugars without me bleating and just saying you know, just quietly reduce the sugar foods in our groceries. He gets a lot of comments and compliments. In fact his cousins didn’t recognise him and his transformation so yea, it’s that ripple effect as well. You know, I didn’t feel it was all about me, so it has filtered through”

“I can only tell you about the transition I have seen in my home you know, like I said with my son and like I said with myself. So that has been the transition, it has been embraced and we have just ran with it so the results have been remarkable but it has never been about that, it has just been about healthy eating, but the rest is a bonus”

#### *4.4.3 Walking the talk*

The CPN course added great value to P3 life and she found that the learning influenced her attitudes and behaviours towards nutrition in a positive manner. P3 began to realise what was important, which was her family and grandchildren, and she knew that she needed to be healthy to be around for them so she made changes:

“The CPN course affected my lifestyle in every way. So I was quite a bit overweight at the time, and when I learnt this I thought, and then I started looking out. The first module I looked at was my family. The

second and third I started looking at myself. And so I made a decision to go back to boot camp and then the rest is history. I only started with the sugar – that's all I needed to do because we always eat the vegetables. I lost 21kg and I've kept that off and maintained it. I'm also going to New York next month to do the marathon so that was the key for going back to boot camp. My trainer who I've always trained and walked said I'm taking this group to New York. I said no that's fine, you go to New York I just want to do the exercise. Along the way I changed my mind. I've learnt a lot and I keep developing"

#### *4.4.4 Being of service*

There was a key learning that was taught in the CPN course that P3 found most important to her and one that she tries to remember when she is talking about nutrition out in the community:

"I've said it from day one since learning this and I still, that my main one is ethnicity, age, lifestyle, hereditary, yea it's important or at risk, more importantly maintain a healthy lifestyle. They are the first and foremost key messages I hold close and stay with and I guess to go out with the community. You see what group you're talking to you might need to change that but it is my number one message because hereditary plays a big part to that"

Speaking on how the transition has been in passing on knowledge from the CPN course has influenced her research participants, P3 said:

"The research isn't finished, we can't say so it's too early but what I do know is that the women I currently work with, not too many in the eighth week have gained weight so we don't know if the pills or it is the intervention. So the bigger picture will be once the research is over. So in terms of transition, it's only early days to see in our women but you can see that they have learnt something"

When P3 was asked if she would change anything about the CPN course she said that she would not change a thing. Rather, P3 prompted that others should be encouraged to enrol into the CPN course to experience the rewards that had opened up for her:

“I wouldn’t change a thing, I couldn’t fault it. I liked everything, it was a reality check and a deeper insight to me, my family, to the community so there was nothing I didn’t like. Can’t say what I liked the most, I loved it all and in that reason I can’t fault it or I couldn’t find anything else to improve on. I just thought it was a great course and I just found that everyone should do it whether you are doing it for research, just do it for yourself. It’s great knowledge, I see the CPN is something that reaches all levels of understanding. You don’t have to be academic and there’s a lot of visual tools in that course so I think everyone would benefit from it. Be nice if the government made it compulsory in the work place – you get paid to go to the course”

## **4.5 Participant 4**

P4 was not asked to enrol into the CPN course for work related purposes nor did a community send her. P4 made a personal decision to enrol into the course because she wanted to make healthy changes within her family, the community she worked with at the time and the wider Pasifika community. P4 had seen and experienced the detrimental effects that unhealthy eating had on her family and the Pasifika community and she wanted a better life than the latter.

### *4.5.1 Learning from past experiences*

Healthy eating was taken more serious by P4 when she lost her brother to a diet-related disease. P4 blamed herself for her brother’s death because she felt that there was more that she could have done. As a result of the tragedy with her brother, P4 became more determined to ensure that healthy eating became a part of her children’s lifestyle:

“The interest in nutrition started with my brother. When I lost my brother it was a life changing experience for me. How many times I

tried to help him but I left it too late and I still blame myself to this day that I didn't do enough to help him, so if I can help my kids now so that they have those habits when they get older, hopefully they'll carry it through"

The Pasifika community was really important to P4 because she sympathised with them and could understand their health struggles. Not only did she enrol so that she could learn more to help her family, but it was also so that she could help a community she held so close to her:

"Also just being in a community where there's a high rate of heart disease, diabetes and obesity. It just really hits hard just my own people are going through that and high rates of obesity. Even with the kids I was working with, so many students I was asked to work with all overweight and it's all because the food were eating. It was eye opening and I just wanted to learn more, and I didn't know how to help them, I didn't know the information I needed to help them, so I enrolled"

#### *4.5.2 Educate yourself and understand*

P4 had no previous knowledge of nutrition, in fact at the time she enrolled into the course she was working as a Rheumatic Fever advocate in secondary schools. Her passion to serve for the community resonated strongly through the entire *talanoaga*. However, P4 did not know much about healthy eating so it was important to her that she educated herself so that her family, students and the wider Pasifika community could get the support she felt they needed. The CPN course taught her a vast of new skills and information on healthy eating attitudes and behaviours:

"The topics that were covered were valuable because I didn't even know half that stuff. I didn't really know how certain foods affect certain parts of our organs or parts of our body, so just having that in-depth knowledge, I felt like a doctor. It just made me want to learn more, know more and now that I have that knowledge, now I know the types of foods I was eating totally wrong. So as you get

older, there are certain foods that give you the energy, and even for my training and my own health and wellbeing, just recognising certain foods. I never ate beans in my entire life until I went on that course. So in my cupboard my kids are like what are those Mum? What is this? So yea, it's good to teach them why they are good for us"

Speaking on the topics that she found most interesting, the topics that went in-depth about the role foods plays on the body was the most interesting for P4:

"All [topics] was interesting but one that really interested me was the digestive system. Just that light bulb moment just went off. That really just, wow, I didn't really know any of that and when you explain it to people who don't know that knowledge they are just like oh really?"

#### 4.5.3 *Family first*

Family was important to P4 who shared that while she lost her brother to diet-related diseases, the effects of unhealthy eating attitudes and behaviours was still affecting her Mother. Introducing changes to their meals with healthier alternatives was not difficult for P4 to do. She was the lady of the house and therefore she was not afraid to make changes because it was all for the betterment of her family:

"My interest in nutrition started with my brother and also my own personal journey because I'm still on my own journey so I try to incorporate that at my home with my kids and my parents – because my Mum has had rheumatic fever and she's had heart problems her whole life so I write the rules in my home. I'm the one that's shopping and paying for everything so I say this is what's going to change. My kids say "but" and I say no, I'm earning the money"

Since passing on knowledge to her children and families, P4 shared that she gets to spend time with her children just teaching them how to be healthier:

“Passing on the knowledge just changed the way we cook now and shopping. I’m reading food labels with my daughter now. When I grab it and I show this is how we read the labels. What used to take us less than half an hour we take up to two hours now because my daughter gets so into reading the labels”

The experiences that P4 has been through with her family have affected her deeply and it came through in her interview how determined she was to help her family and also herself:

“its just heart wrenching you know especially when you’ve lost someone close to you because of obesity. So within my own family there is heart disease and I’m the only one that hasn’t been affected to this day. I always get checked once a year by my Mum’s cardiologist, but I’m find I just keep looking after myself”

#### 4.5.4 *Being of service*

P4 spoke highly of the work that she had done within the schools she worked with. Many of the extracurricular activities she organised and helped run were done voluntarily. Even though she was not getting paid for her work, she continued to go above what was expected of her to do despite being employed as a Rheumatic Fever support worker. Her passion was expressed powerfully throughout the *talanoa* as she shared her stories:

“I love being in the community and helping them, my heart is there for the community. I was volunteering a lot of my time teaching nutrition, running weight loss programs and bike programs after school. I helped twenty families who thought I was a nurse but I was just helping them and they said no one has ever taught us this much about nutrition. It wasn’t part of my rheumatic fever work but I loved helping the community”

However, despite all the valuable work that P4 had invested her time into, she faced many challenges that did not allow her to continue. Things that were out of her



control happened and as a result, P4 lost her contract to continue working within the schools and ultimately put a halt to the work she was doing. It was more than just losing her job because P4 saw that her platform to talking and helping students and their families to be healthier was gone too:

“I really wanted to stay with the ADHB. They were backing me to take this out there in the community, within the school community as well but when my contract ended, that was the major barrier. ADHB were willing to support me but when I left Otahuhu College, they said I couldn’t continue with what I was doing because I wasn’t under ADHB anymore. The school didn’t want me now that I wasn’t with ADHB but nobody wanted to do it or were eager as I was to really educate our community. There were a lot of kids I supported, the school wouldn’t let me keep in touch with them anymore. I have been turned down a lot lately because I don’t have that experience but my heart is still with the community. I didn’t go to this course to just let all that knowledge sit there you know. When I was under the ADHB the school was more than happy to support me. Whanau Ora gave me funding for my bike program but now the bikes just sit there in a storage room not being used. So the school wouldn’t let me continue with the bike program because I wasn’t under the ADHB anymore. I don’t know why it has to be about a contract ending, I would’ve done it for free”

Even though P4 has faced so many setbacks, she is still passionate and determined to find a way to help her community again. P4 had to find new work to continue supporting her family and although it is not aligned with her passion in health, P4 is confident that she will find a way to utilise her knowledge again:

“To be honest, I’m not even using it at the moment because when my contract ended for ADHB, it took me right out of that area that I’m really passionate about and now I work for WINZ and every time I try and talk to my team about nutrition and stuff they’re like we don’t wanna know about that. I think I might just create my own

program because I'm really passionate about health and nutrition especially for our little ones. I love the people I serve with my job but my heart is out with the community and not sitting at a desk. I always think about how I'm in this job now and I'm not happy because I'm not engaging with my community. I know they say I'm making a difference but I want to make a difference for people's wellbeing"

#### 4.5.5 *Breaking habits*

The CPN course helped P4 to realise that there needed to be a change in the way she always cooked food in her home in order to achieve healthy eating. For P4 realising this has enabled her to cook her parent's corned beef in a much healthier alternative without leaving a bad taste in their mouth:

"I think the key messages for me is that there are other ways of cooking – you think you have to cook everything with butter, oil, fat but there's other ways. They always talk about they wanna eat healthy but they wanna leave the taste and the flavour but there's other ways. I think that was one. Just changing the way you cook. Especially my Mum, she would take all the fat off the chicken and then she would fry the skin. She would say oh were not allowed the chicken skin then she fries it in oil. She didn't click. So I think that was the key message. Were so used to cooking our food the same way but our people don't realise that there's another way that you can keep the flavour and it tastes just as good. Ever since I've done the corned beef, my dad and mum just enjoy it without the fat now"

Within her home, it was more than just breaking habits but also about creating new and healthier ones. For P4, it started slowly where she introduced new foods and ideas for her family to try:

"At first it was hard or the kids to adjust, they were like why this Mum, instead of that? I've actually tried all the salad at home. We just stuck with the normal lettuce, tomatoes you know – but just

doing this variety, even my parents like it. I never knew how to make those types of salads before. Even corned beef, you know just warming it up and draining the fat out. It's really good for my Mum because she has heart problems so she's not allowed any foods high in fat, but yet she still cooking with the fat but I just put it in a bowl and punch a hole in the top and drain the fat – it tastes better than eating all that fat”

#### 4.5.6 *Walking the talk*

Since graduating from the CPN course, P4 has been actively applying the knowledge she has learnt to her daily life so she can be an example to her children:

“The nutrition side of things have changed my lifestyle. I do trainings three times a week with our community fitness so when I used to train I used to lack a lot of energy but having beans in my diet, that sustains a lot of my energy now. The night before I incorporate that in my diet so when I go training in the morning I don't feel dizzy or tired. It sustains my energy levels and so that by lunch I'm not starving”

The CPN course has introduced new ideas of eating foods that P4 never thought would work well for her and it has slowly become a normal part of her daily routine:

“For my own personal journey it's helped me a lot just having that understanding just how our body works, how certain foods affect certain organs in our body. From doing the CPN, I realised you don't have to cut certain foods, just a certain way to cook it. There's a certain way you can still incorporate sugars, carbs but certain diets say you have to take those things out. I don't know why I didn't realise you could eat peaches and porridge, I used to put heaps of raw sugar. Now I just use peaches and porridge and it's yum. I realised from the course about how to cook fresh with peaches, I love it now. I don't go without it. I don't buy raw sugar anymore, we just use peaches for the porridge”

When P4 was asked about any recommendations she would suggest for the CPN course, she replied that she wished the CPN course taught at a higher level of education as well. Her experience in taking the CPN course was predominantly positive as the course had opened up a door of passion that P4 grew to commit to and still does despite the setbacks she has already come across. Ultimately, the CPN course has positively influenced her attitudes and behaviours in nutrition and it has been evident in the work she has done in her homes and within the school community:

“I wish it was a degree! A lot of people ask me oh do you have a degree? Everybody thought I had a degree in nutrition. Even the nurses, they said did you just complete a degree? I said no it was a nine-day course. But I remember being on the first time on that course, the information learnt there was just so valuable and still is valuable. There needs to be more people passionate like me out there to educate our people because there is a need for it. I just wish more people should do it you know”

#### **4.6 Participant 5**

It was during her high school years that P5 completed the CPN course. When asked why she decided to enrol into the CPN course, P5 responded that it was to educate her about nutrition so that she could petition to ban junk food from her school canteen:

“So I was at school at the time and I was part of the student council. What we were trying to do at the time was get all the junk food out of our tuck shop and we were trying to get support from the Board of Trustees and they were asking where is all this coming from. So Mary who supported us got me to do something about it and put me through to the CPN and then once I did it, it was like the first thing I actually did. Then we went to the school board and they agreed so the kids didn’t want the food in it. So we pushed for it because we were spending our money on it every day. They were selling chips and pies and now they are selling sushi and sandwiches. It’s a bit expensive but it is healthier and a lot of kids buy it and the parents are happier too. So same business but they just changed their menu”

#### 4.6.1 *Educate yourself and understand*

Education had always been an important part to P5 life as it was her platform to introducing her to the CPN course. P5 had a strong passion to follow through with her plans and take action by educating herself first. A lot of what she has learnt from the CPN course has been shared to not only her family but also other people she crosses paths with. Before they could justify their reasons behind removing junk food from the school canteen, P5 needed to know more about the importance of healthy eating. The CPN course taught P5 new ways to cooking familiar foods and also helped her throughout her pregnancy and ensuring she gained healthy weight:

“Just learning different ways of cooking normal, regular every day food you eat and different techniques to reduce fat and salt, just learning those was really helpful for me. My Dad loves corned beef and so one of the ladies there made a dish with corned beef and drained the fat, and so little techniques like that, that was helpful. So I was like I can eat that, I just have to cook it this way. So when we have chicken I don’t add any oil and it comes out nice and crispy. When my Dad has corned beef and taro he doesn’t know I’ve reduced the oil and the type of coconut cream and he doesn’t even notice it”

“The topics covered were really good, even the pregnancy ones because of the diets. So when my two girls came I was like it was hard. When you get pregnant you get super fat – I didn’t, it was because I wanted to help myself and the kids and how do I be healthy and make my babies healthy. Yea I knew what I was supposed to eat and what I couldn’t, so I put on healthy weight gain. I only put on 10kg which was healthy. Everyone thought I was super small but no it was healthy but after I had children I went back to my weight pre pregnancy”

The CPN course also taught P5 how to shop smarter and spend less:

“When we go shopping on average I spend \$130 a week for 5 people in my house and my aunty spends triple that for 7 people a week. It’s not hard you know, especially with a bigger family you just buy wholesale products. It’s a lot easier but being trained with CPN they helped me with budgetting and it’s not something a lot of people will show you”

When asked what the key message was for her, P4 said:

“Cooking techniques. We can still have our regular foods, we can still have that just by cooking it a little different instead of cooking it with oil and not smothering it in soya sauce”

#### *4.6.2 Being of service*

After successfully passing their petition to remove junk foods from their school canteen, P5 shared her knowledge out to the community when she had the chance to. She helped her community with trying healthier recipes, introduced them to healthy foods they were unfamiliar with and also helped with budgetting advice:

“What I learnt was that people aren’t lazy, they’re just not educated. A lot of my Island families I deal with have never heard of silver beet or eggplant. I worked with a family of 10 people who said they never have enough money. I said give me your budget and I’ll work with you for two weeks. I ended up showing the techniques with one of the Mum’s and she said this is not how my Mum used to do it – and I thought yea it goes down and down. Anyway, I showed her quick recipes of cookies and muffins and she does it all the time and it’s easy and saves her time. I felt good helping this family and the only reason she approached me was because she was trying to lose weight so I said it all starts in the kitchen. Whatever you make they’ll eat. Little things like that. You got to have people willing to change and willing to learn. At the end of the day the Mum was like I’ve been big all my life and half her kids are big and she just wanted a totally new way for her family”

### 4.6.3 *Family first*

P5 shared a lot about her family throughout her interview and expressed how important they meant to her. Although she started the CPN course to help pass their petition, as the course went on she realised that the learning could be applied within her family as well:

“My kids love veggies, you’ll be amazed they run straight to the veggies and not ice cream and what not and everyone freaks out and people are like why and I say well I want to educate them so they have a better understanding of what health is. I have two kids and when they do get chocolates they treat it as a treat and not as a meal”

The CPN course has helped P5 to support her Father in improving his health, which has seen amazing results:

“My Dad is diabetic and now he has lost 30kg over the last 5 years and that was just pure diet. He went back to work last year because of this. I always tell my Dad to stop going to the bakery. He goes every single day and he said I need a pie. I said just have breakfast every morning. So he went into hospital and had put on 10kg and so he said I was right so now he has breakfast every morning. He’s not always hungry until lunchtime because of having breakfast. All my nagging has actually paid off for my Dad. My Dad is like my best friend and I don’t do it to be mean but I do it because I love him. He’s been doing his habits for 50 years so I know it’s not going to happen overnight but he’s making small changes and that’s what matters to me”

Introducing healthier attitudes and behaviours in her home was challenging as P5 shared that her family were not very open to it. However, P5 shared that this was something that needed to be done so she stayed committed. When asked how the CPN course had affected her family P5 said:

“Oh they hated it! I do the shopping every week and I hate it when they buy junk food. So if I do the shopping they have to eat what I buy otherwise when I buy it I annoy them with that and I tell them go have something sustainable”

#### 4.6.4 *Walking the talk*

Much of P5 motivation to begin the petition was partly related to her own challenges with health and weight struggles:

“I was a lot bigger when I was at school, and when we did the survey for the tuck shop a lot of people felt that way. Especially when you’re a teenager about your weight. I think with those insecurities, that’s what pushed me to do something about it. I exercise 30 to 40 minutes every day but I knew there was more to it, like what was it about food? So that’s what pushed me with my self esteem like this can help me to help other people”

The CPN course has influenced P5 attitudes and behaviours to not only nutrition but to life itself. She shared that graduating from the CPN course has made her realise more than just how to be healthy, it has given her tools that she can use in many aspects of her life:

“What I know now compared to what I knew when I was 17, it’s weird. A lot has happened. I’m a Mum now with two little girls and my whole focus is just to have two healthy little girls that grow up to be totally happy and not have the doubts and insecurities I had. I don’t want to be like you’re the reason the kids are the way they are, but when they grow older I hope they’ll appreciate what I did for them. Every Saturday we go to the beach or the park. I don’t do it to get them to lose weight or exercise, I do it to get them out of the house. My oldest loves YouTube. I don’t mind it but you can sit there for an hour and I was thinking my brother sits on the Ps4 all day. He’s not interested in the world and has a really bad attitude and a lot of children are going into the virtual world these days and



I've seen it with my nieces and nephews. Now with my kids I want them to have choices like I want to go play outside and play on the trampoline or with a ball or with a dog. So CPN has not only opened my eyes food wise but also opened my eyes life wise. People think it's only about food but it's not about food it's a whole life thing. It's a life lesson like okay these are the tools to create a sustainable healthy life when you get older. It started with one step for me and that was CPN"

## 4.7 Participant 6

Most of the participants interviewed had enrolled into the CPN course because of an interest to improve their knowledge around nutrition. P6 had enrolled because of a life-changing experience he had battled and overcame through.

### 4.7.1 *Learning from past experiences*

When asked why he had enrolled into the CPN course, P6 said:

"I was given the option from Middlemore hospital staff nurses after doing the exercise program. They thought it would help with my recovery, the nutrition side. After having the operation I really did want to make a lifestyle change for the better so yea I was looking at every opportunity to going into that pathway to make a change"

Graduating from the CPN course, P6 has been able to speak from experience and also share with his community the importance of healthy eating being someone who lived through such an ordeal:

"Every opportunity I have when people talk about my own situation, in regards to lifestyle change and food, I have no hesitation in sharing my findings and the nutrition course has been really good. You know I can talk from experience but just the knowledge I learnt from the course. You know if you can save lives just by educating our people, I think I need to do more especially helping our Polynesian community"

His past experiences affected his life deeply and it was felt strongly that P6 did not want those he loved to go through it as well:

“I think for me, because of my own medical heart event, I sort of don’t want people to go through my own experience . . . I like my food, the typical Polynesian but I needed to be a little wiser with my choices”

#### *4.7.2 Educate yourself first and understand*

Education became a big part of P6 life when he suffered a major heart event that forced him into making changes to the way he was eating. He needed to learn how to eat healthy so he enrolled into the CPN course.

P6 shared how important it was to him that he applied healthier attitudes and behaviours towards nutrition within his own life to help with his recovery process:

“I thought they [topics] were really good, I really enjoyed it. Yea understanding how food impacts the body and understanding reading the labels and the different ways to cooking food. It was a good variety. I thought that was very critical in the life changes I need to put in place”

The CPN course has impacted his life and P6 has been able to apply tips that were taught in the course where possible:

“When we go shopping I know how to read food panels and make better food choices and what to look out for when we go grocery shopping. That’s just a big change in itself you know, biggest typical South Auckland person you always go for what’s the cheapest but recognising what’s in the food and reading the food labels – it’s not about buying the cheapest option it’s just buying the best to keeping your body strong”

Although P6 began to apply such behaviours within his own life, he shared that a lot of what he learnt was also shared back to his friends and community.

#### 4.7.3 *Being of service*

For P6, the *talanoa* around his experience that he openly shares has been rewarding because it has been his way of ensuring that those closest to him do not go down the same path he walked:

“We have group discussions in our church and I’ve used a lot of the handout materials that I had from completing the course and I just try to be an advocate for when it comes to church – a missionary for better choices and just helping people to open their eyes and don’t be so blinded”

When he was asked about any barriers he faced when trying to pass on knowledge, P6 said:

“I think a lot of the challenges is people are creatures of habit and it’s not unless they really want to make a change, and a lot of time’s it’s kind of forced on them. They change because of their own health issues. Yea people might have been eating these things for so many years and it’s kind of difficult to make those changes but sometimes those changes are forced upon them because of bad decisions. For our Polynesian people when they get older you know they have medical issues start to creep in so if we can share reasons why they go through their own medical issues, you know that saying, prevention is better than cure. It’s about trying to help our younger generation make better choices”

#### 4.7.4 *Family first*

It was expressed early in his interview how important family was to P6. The health events that occurred in his life have made him more aware of the importance of healthy eating. The determination in P6 to ensure that his family experienced good health was felt strongly through everything he had shared:

“Yea my family, they’re very conscious of what I’ve gone through so they don’t want to have their own lives short circuited by making

wrong choices in regards to food and uhm especially when we've got four grandchildren and we've spoken to their parents about staying away from you know sweet things and things that are going to impact their lives you know, sticking with water and staying away from fizzy drinks and high sodium – all that knowledge has been impacted from the nutrition course, so yea knowledge is power”

He completed the CPN course with his wife and they have both become strong advocates of healthy eating. They do their best to instill what they learnt from the CPN course into their children where and when possible:

“The course has been good, I did it with my wife so we have no problems when we go shopping. You know, we look out for the best and we try to teach our children and educate them and they try to make changes themselves. You know we go to church and try to share the message to people there too, so it's all good”

When he was asked how he passed on knowledge within his home, P6 shared that it was a lot about replacing foods he found out to be unhealthy with healthier alternatives:

“My family were very big on noodles and you know noodles we've come to learn are really not good for you because it's a processed food option and every other chemical so we've steered them away so when we sit down and see their food options we can talk about it so it's all good”

The CPN course positively influenced P6 life and that of his families by introducing healthier attitudes and behaviours to be adopted within them. When asked if there was anything he would change to help improve the course, P6 replied:

“They deliver in a very positive way and a fun way that really helps the participants not only gain the knowledge but feel comfortable, and at the end of the day it's about creating that learning environment where people can not only gain that knowledge but feel

comfortable sharing and encourage for when people leave to be great advocates for sharing that knowledge. Great organisation. I highly recommend CPN to anybody and more importantly our Polynesian people. They need to wisen up about how companies promote their products and just be aware of the pitfalls of advertising and also just being aware of reading the information panels on the food labelling. I think it goes a long way in making them choose better and choose wisely”

## 4.8 Participant 7

Nutrition was not an interest to P7 until she had enrolled into the CPN course. Although she initially had to enrol because of requirements with her job, P7 found that the CPN course opened up a new interest for her:

“I did the course as part of my team – it’s for nutrition for Mother’s so as part of our training that was one of the courses we had to do for work. To be honest, I think the interest started on that course. I never took much interest in it [nutrition] before but then I had to learn something about it so it opened my eyes to a lot of things”

Even though P7 had no intention of advancing her interest in nutrition, it happened naturally for her and before she knew it, she was applying what she had learnt in her own life and that of her family’s.

### 4.8.1 *Educate yourself and understand*

From the CPN course, P7 knowledge around nutrition had improved and she gained new information that she could actively apply to her own life. The CPN course made her realise that there were certain behaviours she needed to change in her home and it had to start with her:

“When it came to kids in sports, we’ve got that culture just pizza and chips. We were doing things back to front almost. We were congratulating them for such a good game then fed them crap after. Even sugar in food and drinks I was putting in kids lunch boxes, when

I added it all up you know the bars, the biscuits just seeing things for what they really were”

She had already made the decision to be educated herself when she enrolled into the CPN course but P7 soon realised that it was more than just knowing, she needed to apply it as well. Soon after, P7 started to adopt new and healthier attitudes and behaviours within herself:

“A lot of the salt intake and fat was really interesting because I didn’t realise how much fat and salt was in a lot of foods. The salt intake, that was a really important one and one that really stuck with me because I think that was one of the main changes I made in my home. So the salt doesn’t go on the table anymore. Now I’ve changed it to oxo cubes because it’s reduced salt ones as well so I buy the beef, chicken and vegetable so I use that instead of the salt now. So I’ve replaced salt with all those spices and it tastes exactly the same and it’s changed things a lot and the kids don’t really notice it and don’t even say Mum where’s the salt! And I add more things, like in regards to making mince I add rolled oats when I make meatballs and you can’t even tell the difference. I use a \$10 mince and four cups of rolled oats and I grill instead of frying it and my family love it. They don’t notice that there’s porridge in the mince. That was from the CPN course, learning little things to add to our foods like hiding vegetables like carrots in our meat, and you can’t even taste it”

#### *4.8.2 Being of service*

The material taught in the CPN course was a stepping-stone for P7 and her colleagues into launching their program. P7 shared that a lot of the recipes that were shared throughout the CPN course was added to their program. What was learnt from the CPN course was beneficial to their program and in them supporting their participants:

“The CPN tutors helped us put it all together with the recipes. We had regular meetings at PHB to get this going and they helped us and

were our facilitators for the first couple of courses. We made My Kitchen Rules as part of our work for Mums from zero to two years, we do infant nutrition and cooking meals so we have started these courses for any young Mum's and we do cooking, that's where I introduced rolled oats because we do mince. It's a free course for young Mum's with children between zero to two years. We do it for three weeks, for two hours once a week and we do the cooking class and share the meal at the end"

#### *4.8.3 Family first*

Going through the CPN course has made P7 realise that a lot of behaviours around food that she had never thought was harmful needed to change. P7 began making a lot of changes that was going to benefit her children's health and also introduce more healthier attitudes and behaviours in her home:

"It made us a lot more conscious about things we were putting in our mouths – especially for our kids. I'm really conscious about the 5 plus a day and at least having veges in our meals, and exercise. Portion control was a really big one. What we used to do was put all the food on the table but now we plate everyone's food and put it on the plate or else it's too tempting to keep putting food on our plate. It has also helped financially because we have food left over for lunch the next day"

P7 has started to teach her children to be healthier by cooking with them and making the meal time process a chance to bond with her children:

"I've shown the kids and my husband different ways of cooking. Now we always have to have at least one vege if not two on our plate. You know biscuits, there's like five teaspoons of sugar in one chocolate chippie and I used to give my children four for lunch. It's so unnecessary and if we have to make those kind of changes, they were find with the changes. Children are really easy to change if you take them through it and teach them what you know. Involving them

in the cooking and telling them man if you wanna play rugby you have to eat healthy or else you're going to burn out on the field. And also the fizzy, you have to go for the water"

When asked how to children responded to the changes she was making, P7 said:

"I think my children were at good ages to understand exactly what we were trying to do so the small changes were the best way to do it – just cutting things out a little bit. Really small changes really"

#### 4.8.4 *Breaking habits*

While P7 found that making changes with her children was somewhat easy, she acknowledged that it was most hard when it came to her parents. The issue was more around P7 trying to introduce a new or foreign idea that would interrupt the normality of her parent's lives. She said:

"If we talk about barriers I think it was our own people who weren't ready to change. When I think about my Dad, he loves salt with pigs head but we have to come with ways to make that a better option for them like trying to add lettuce maybe, to that meal. It's more trying to connect with the older community. I think it's up to us younger ones to make that change with family groups and I think with my family I'm the one to make that change so I have to make my parent's meals so that I can cook it a healthier way you know. You can't expect our oldies to take it and run with it you know. It's like, Dad try some brown rice and he's like "what's that kind of rice" but you know it's using the food they're used to and making small changes not to freak them out"

P7 went on to say that she felt much of older Pasifika people's attitudes towards food were largely attributed to their culture:

"You know, it's the food with us. When you come to my house and you didn't like the food, you're going to talk about my food man. Food is so important to us. Culturally we get boxes of corned beef



and chicken as gifts. Why not get boxes of veges aye? But I know that would be frowned upon by everyone”

P7 also shared that for some of the younger individuals, it is the habit of buying what is convenient and fast, not what is healthy, and that usually results in buying takeaway of fast foods:

“For young ones it’s cheaper and faster to get the food. You know it’s too much time to them and they can just get the same from maccas. They just buy all these ingredients and then they get lazy to make it. It’s trying to get them and empowering them to try and do these things and making meals for six under \$20. You can do it but are you going to give enough time to do it you know? They’re just so busy with sports so they just stop and grab food that’s easy to get. That’s why we say if you have a crockpot made dinner for the night before – but that comes with a lot of planning”

When P7 was asked about any recommendations she would add to improve the CPN course, she commented on the latest changes made in the deliverance of the CPN course. She said:

“I do think that because ours was different, I love the way ours was done. We had to be there and it was interactive but if you put me in front of a computer I wouldn’t give it that much. Were not really individual workers, we’re team workers so if we were to get stuck we can just get help, but with a computer you’ll just lose interest. We found it was like a huge family and you’re always excited to come back but with a computer online course you wouldn’t really be like that. Doing it on your own, I thought I can’t see any of our people doing it that way. So that’s something I would change, I would take it back with doing it together like how we did before. It loses the whole sense of learning it and you’re learning together. I wouldn’t do it now if that was the way it is run now because it was interactive and gave you the feeling that ‘this was our team’ you know”

When the researcher asked the P7 if she would make any changes to the material that was taught she said:

“I just think anybody that’s even remotely interested for their family should just do it. Just for our people to get a bit more understanding because that’s all we need man. We love our food, we love being with our family but let’s make our families a little bit healthier, let’s give them something to put in that basket of knowledge. Let’s empower our people to make changes for themselves because that’s the only way they will do it, if they take control of their families, especially Mum’s they can think man I’m going to take control of my family especially when they’re the ones who cook the most for their families. Dad’s will always be the hardest to change but Mum’s can try and say you know let’s give this a go”

#### **4.9 Participant 8**

When asked what prompted him to enrol into the CPN course, P8 said that he felt he needed education to add value to his curriculum vitae in hopes of finding work. Furthermore, P8 felt that the CPN course would support him in helping his Tongan community become healthier:

“To be honest, being around in NZ you need a lot of favours and you know you need to upgrade your CV and you need some good support from other people. I heard on the radio 531 and I just told my wife, just give it a go, because it says communities, church, any group or whatever, they can fund you, you’re more than welcome to come. So I ring them and they send the package then I fill everything up and send it back to them. So I started the course with them and it was just a heart of willing and I also need something else, I needed a piece of paper on my CV or maybe the fact that I need it for me to apply for a job. There’s a lot of products people are selling about losing weight if you take this without eating bla bla bla, taking some pills and stuff but for me that was not motivating, I don’t think so. I need to go and study and see what’s inside there on the other side of

people doing stuff like that. So I can teach my side, so yea something like that”

#### *4.9.1 Educate yourself and understand*

It was understood early on in the interview that education was a vital part of P8 life. He enrolled into the CPN course because he wanted to gain more knowledge to further his career prospects despite already having sound knowledge around anatomy and physiology. Before starting the CPN course, P8 was already a qualified nurse from Tonga so he understood the importance role food played in ones body. However, P8 shared that despite all this, the CPN course still taught him more than what he had already known. He said:

“My wife and I are qualified nurses from Tonga and I am a student doing anaesthetic technician. So we both have some kind of heart, were willing to help the people. It’s not about the money or make us popular or whatever. For me, it’s inside my heart to help the people you know. I don’t care about the money or what other people are looking for but yeah, it’s the right motive that I have inside me to get to the training, and the course that I went on. The topics covered were really helpful. It drilled in deep into my knowledge, it’s bringing me more technique of how to prepare my food and what to look for. Like if I don’t have a complete protein I need something else to complete it. It really gives me a lot of ideas and something I can take beyond what I’m capable of, like what I know. This is what I know, and then they teach me to go beyond that knowledge for further stuff. So I know something that I can add onto my meals to make it more healthier, even to taste better, so yea it’s expanded my knowledge, that’s how I found it”

#### *4.9.2 Being of service*

Since graduating from the CPN course, P8 has taken up many opportunities to share his nutritional knowledge with the Tongan community. He has spoken about his experiences and also cooked food for them. P8 shared a lot about his willing heart to

help his people and that much of his motivation stemmed from a genuine desire to help, and not receive much in return:

“I completed the CPN course in 2013 and went onto complete the train the trainer course for CPN. They called me to come back and give it a little go. I attended two seminars and then from there they decided to allocate me around Auckland only for the Tongan community because I am fluent. So with all the knowledge and the skills that I had from the course, I managed to help out the Tongan community. Basically all women, so it’s like three generation attend the meeting: grandma, Mum, daughter. It was about healthy kai and preparing meal – especially cooking. Mostly food for Tongans, you know how we love our Island food. So I had a chance to deliver it in Tongan”

The skill he has learnt from the CPN course has also been beneficial within his church. P8 shared that he uses his love for cooking healthy meals and applies it within his church community. He said:

“Once a year there is a Methodist Free Wesleyan church conference in Tonga and one group has a chance to host the conference. So this year is our chance to host. So we prepare a lot of food, feed the people that attend, it’s like one-week conference. So every time I go home, I always give them my tips of how to cook healthy meal. So there’s a chance for me to tell them it’s cheap to prepare that food. Healthy. Not only that, they will love to eat the food. The smiles they have, they love it”

#### *4.9.3 Family first*

The CPN course encouraged P8 to introduce healthier behaviours within his home. Not only with his wife and children, but also with his extended family too. P8 shared that he would be mocked by his family for trying to be healthy but he would still make his healthy meals.

“Wherever I go, if I cook I would always do a little bit of *fiapoko* sometimes. I know they will hate me but for example, the corned beef. There’s a lot of fat, I put it in the microwave and drain the fat. So I kind of live that life. I just talk it out to my family, especially my Mum back at home and sister I say go get some healthy food, plant your own garden, cook from the sea, so we live off the sea and land”

When asked about how the CPN course affected his wife and children, P8 shared that it was embraced within his home. He was able to change their attitude towards their eating behaviours:

“I think basically we hardly get any takeaways. Sometimes, to be honest I feel like Mc Donald’s but I tell myself oh I don’t really like having a lot of takeaways and we hardly have it, maybe once a month buy takeaways. What we do now we go to a Chinese shop and watch them cook the food for us. One of our favourite food that we buy is the noodle soup and it’s got lots of bok choy in it. We watch them cook it. So I always take my wife there and my son, sit outside and wait for them to finish cooking and then get the noodles and we start eating. Its kind of healthier and lighter than all those fatty food most of us buy from the takeaways for like occasions like family feed”

P8 has applied his knowledge a lot with his family. He now tries to take healthier meals to family gatherings as opposed to the unhealthier meals he used to take. He shared that since the CPN course, he takes into consideration his family’s health more often than before:

“Whenever they say oh were donating food for cousin’s farewell I say okay. I always turn up with something like sushi, you know something light enough. I will turn up with something light and healthy and they’ll say oh thank you for knowing that we are diabetic and overweight, you bought some healthy food and stuff. So I can see some good compliments from my aunties and extended families”

When P8 was asked if there was anything that the CPN was lacking or needed to improve on, he said no. However he did share an encouragement for others who may be interested in something like the CPN course:

“Regarding to the course, I think a lot of Island people with mature brain, mature attitude should do the course. Not just for the sake of your church or for your community. Because what I recognised is that the community they send the wrong people. They were motivated by the fact that yea I’m gonna go and study and graduate and that’s it. That’s wrong. I saw that it happened all the time. They said I’m not gonna say who but some communities they send the wrong people to do the course. They really need someone who will come back and reflect and teach them. Yea, just sending the wrong people is not good so yea send the right people”

P8 went on to say:

“It’s about living that life, like you can plant your own garden, you can get some cheap veges from the shops and use them, but basically for me is living it. You cook it everyday, get used to it and practicing it. It’s not about just talk. It’s walking the talk. Live it. Yea that’s the simple message I want to pass out if anyone of Pasifika Island people wanna hear my voice, live it. You know live that life. Practice it every day so the next generation can see you eating a healthy meal and buying your healthy food instead of like spoiling your kids with McDonalds and rubbish stuff, that’s all I can say. I would rather live and practise it”

#### **4.10 Summary of chapter**

This chapter has looked at the findings derived from each participant and their experiences shared in relation to the CPN course. Recurrent themes were discussed such as the influence of the CPN course on family, education, past experiences, breaking unhealthy habits and adopting healthier habits and walking the talk. The next

chapter will review the aims of this research, outline the overall findings and identify limitations and suggestions for further study.

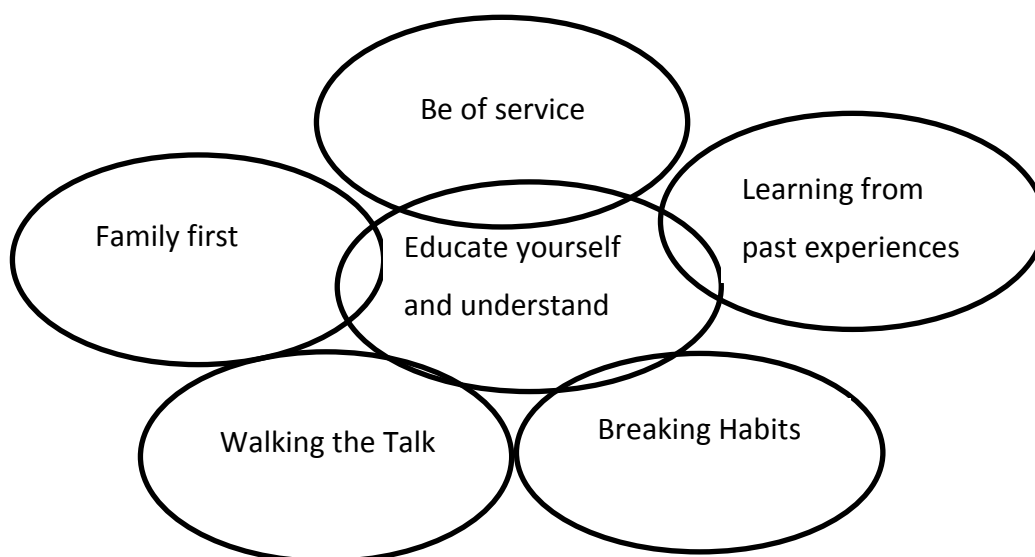
## Chapter 5: Discussion

### 5.1 Introduction

The current study aimed to identify how the CPN influenced attitudes and behaviours of its graduates, their families and communities. This chapter will discuss the overall findings in correlation to the themes and current literature. Overall findings showed that all participants' attitudes and behaviours around food were positively influenced as a result of the CPN course, and all participants had passed on their knowledge from the CPN course to their families. Seven participants had also passed on their knowledge from the CPN course to their communities. Strengths and limitations as well as suggestions for further study are also discussed.

Six interrelated themes were identified and are discussed in turn.

Figure 5-1: Themes



### 5.2 Educate yourself and understand

Nutrition educational programs and interventions have shown to improve attitudes and behaviours of participants (Rustad & Smith, 2013) including those of this study, their families and communities. All participants had previously acquired some basic knowledge and understanding of the impact of nutrition and nutritional choices on health e.g. junk foods such as fizzy drinks, chips, and chocolates are unhealthy, compared to fruits and vegetables which were more healthy. Also, participants were



aware that some Pacific foods they were used to eating were unhealthy but they did not understand why. What many participants indicated they lacked was some more in-depth knowledge and understanding of how to eat healthy and the learnings from the CPN course helped to bridge this gap and develop this understanding. For example, participants were able to rationalise why draining the fat from corned beef was important to their health because they now knew that the fat they were draining was saturated or the 'bad fat'. This is consistent with other studies (Rustad & Smith, 2013; Copeland, Ko, Ravindran, Rodriguez & Yoon, 2016) that have demonstrated significant increases in knowledge pre and post-intervention among participants in a nutrition education intervention. The studies found that participants had learned new information about healthy eating and cooking and that it improved their knowledge concerning sodium in processed foods, diet and cancer, nutrient and calorie-dense foods, interpreting nutrition labels, using herbs and spices, and performing PA. Nutrition education programs like the CPN course further posits that healthy eating attitudes and behaviours can be achieved by those enrolled in the course.

All participants shared the same topics, tips and skills with their families and communities. Topics included portion control, shopping on a budget, ways to bulk up food, cooking demonstrations and techniques, reading food labels and healthier alternatives to cooking Pacific foods that were regularly consumed. Portion control was introduced into the homes of all participants who used tips such as plating the meals as opposed to putting all the dishes onto the table, and drinking a glass of water before eating as a way for their families to ease into the change. Cooking demonstrations deemed effective because the CPN course showed healthier alternatives to cooking Pacific foods that participants were familiar with. Techniques included microwaving corned beef to drain the fat, removing chicken skin, replacing full fat coconut cream with a lite coconut cream or diluting with water, and choosing to bake or steam food as opposed to frying. Salt intake had also reduced by adding spices and herbs in meals as opposed to only salt. Taking further measures to ensure that salt intake is reduced, salt was not placed on the dinner table anymore. The ability to read and understand the Nutrition Information Panel on food packages enabled participants to compare products and in turn, buy the food that had more nutritional value. As a result, not only were participants learning to buy more

nutritious food products, they were able to realise the lack of nutrition that were in the foods they bought regularly, such as noodles for example.

The participants of this study had no formal training or qualification on nutrition and over the span of nine days, the CPN course covered a wealth of information and topics relating to nutrition and health. The learning content covered basic to advanced nutrition information, however participants only referred to a handful of those topics. The participants mainly related to the basic nutrition information because it was easier to understand and relate to and therefore easier for participants to share with their families and communities. The topics that were most difficult to remember were topics about the relationship between food and the human body, such as the digestive system. Furthermore, the CPN course is taught over duration of nine days and in that timeframe, participants are taught a wealth of nutritional information. These results were similar to that of Carson et al. (2016) who also followed a TTT approach where sixteen lessons in nutrition and PA were taught in the span of sixteen weeks. Carson et al. (2016) found that the curriculum was overwhelming for participants who had no background education in nutrition. Although content was taught using interactive and multifaceted training methods to encourage retention of learning, it still deemed difficult for those who lacked prior education on nutrition. To counter the challenge, Carson et al. (2016) suggested for participants to have time with material prior to lessons to familiarise themselves with the content. Therefore it can be justified further that for graduates with no formal training on nutrition, to try and remember everything they have learnt in nine days can be stressful and unrealistic. In order to support retention of information around healthy nutrition attitudes and behaviours, a CPN refresher course that focuses strongly on the more difficult topics was highly suggested by participants of this study and therefore should be strongly considered. When working with Pasifika communities who have no formal training on nutrition, ample time to cover the more advanced topics needs to be taken into consideration. Difficulty to understand information relating to nutrition in turn decreases the possibility of communities to retain such information. Nutrition education programs need to ensure that advanced nutrition topics are taught in a way that is easily received for Pasifika communities.

Improving knowledge on nutrition information was paramount for four out of the five participants who were healthcare workers because part of their job was to deliver nutrition workshops. Participants were working closely with community members who were living with, or caring for someone with a diet-related disease; new and young Mother's, secondary school students with rheumatic fever, and individuals who wanted to lose weight. Therefore, participants held a large responsibility to be well informed of ways to eat healthy and understand the basic components of nutrition and its connection with overall health. Attaining the right knowledge and understanding of nutrition gave the participants more confidence to teach members of their community about nutrition and in turn improve performance. Congruent to the studies by Bearon, Irving, McClelland, Mitchell and Webber (2002), where a train the trainer (TTT) approach was used for managers to deliver nutrition education, all participants showed an increase in confidence levels as a result of the training. Subsequently, participants gained more information on how to eat healthy, how to cut on food costs and improve nutritional status. In turn their ability to perform nutrition relevant behaviours and teach behaviours to others, such as shopping on a limited income, had improved. Further to this, the study by Bustillos and Sharkeys (2015) demonstrated that seven community health workers had significantly improved their confidence levels in teaching Texas community members basic nutrition knowledge. The evidence posits that low self-efficacy levels can affect community member's effectiveness to perform. Therefore in the greater scheme of things, having confidence will be valuable for future students of the CPN course as they would feel confident to perform and teach the wider Pasifika community about nutrition knowledge.

### **5.3 Being of service**

While there were five participants who were healthcare workers, only three participants were actively engaging with their communities on a regular basis, teaching nutrition knowledge. Their lessons included portion control, ways to shop smarter and on a budget, reading food labels, cooking demonstrations and ways to bulk up meals. Participants chose to focus on these topics more because they felt it was what their community needed. Furthermore, it was topics that their communities would understand and relate to better and in turn, would more likely be able to apply within

their own homes. Moreover, the practical topics like cooking demonstration were effective for participants because the visual aspect was helpful and productive. As a result, their communities were responding well to the topics and began to practice what was taught within their own homes. Previous studies have focused on cooking demonstrations (De Jong, Fichera, Foley, Lenoy & Spurr, 2011), portion control (Burnette, Dreith, Fast, Harman & Maertens, 2015), shopping smarter (Bleich & Wolfson, 2014), and reading food labels (DeVill-Almond & Halliwell, 2014) as avenues to promote healthy eating among community members and have been successful. The studies further posit that individuals can improve their dietary intake and behaviours when one or more of the latter aspects are adopted within their every day lifestyle. Although participants teach a handful of topics to their communities, what they are teaching adds value to their communities and steers them closer to making healthier dietary attitude and behavioural changes.

However, the other five participants did not have communities they could work with and therefore could not speak on experiences as such. The platforms that they were exposed to often came in the form every day conversation. For example, settings like the gym, when a member of the public would approach one of the participants for nutrition advice, then the teaching of nutrition knowledge would take place here.

Moreover, most of the participants often shared nutrition knowledge and information within their church community because it was the most accessible to them given that five of the three participants were only community members. Where the church was a place for participants to have informal conversations with their friends, they began to also use it as an opportunity to teach them about healthy eating. In NZ, many Pasifika peoples centre their lives on the church and studies (Feo, Fleming, Fou, Gatland, Simmons & Voyle, 1998; Becker, Bone, Levine, Rand & Stillman, 1993) have supported that churches play a major role in health promotion and is an ideal setting for delivering health promotion workshops. According to studies (Blisset, Braithwaite, Dilorio, Jackson, Periasamy, Rahotep & Resnicow, 2002; Campbell, Carr, Resnicow, Wang & Williams, 2007), health is included as part of the church's overall mission and the church setting has provided the opportunity for health workers to reach a large number of community members. Many studies that have been conducted in churches to address dietary behaviours have been successful (Amosa et al. 2001; Blisset et al.

2002; Campbell et al. 2007;) and further support the latter statements. In the grand scheme, utilising the church can be an ideal setting to run the CPN course and follow-up classes, where the whole church can get involved too. One participant felt disempowered and intimidated to teach nutrition knowledge to her church community because they did not take her seriously. Therefore, allowing the PHB staff to run the course within the church could further eliminate this barrier for participants who experience this type of challenge.

The learning from the CPN course taught participants various skills, techniques and methods on how to eat healthy. Participants were able to utilise the knowledge they had gained from the course and tailor their support depending on their families and communities' situation. Whether an individual was living with a diet-related disease, pregnant, wanted to lose weight or was elderly, participants knew the right information their families and communities needed to improve their situation.

## **5.4 Family first**

The Pasifika worldview, as further depicted in the Fonofale model, is that all aspects of the family are looked after first and foremost. Family was important to all participants and whether immediate or extended, families were the first people that participants taught nutrition knowledge to. All participants had experienced first hand the consequences of unhealthy eating and what they wanted for their families was a healthier future, namely for their children and grandchildren. Responsibility to ensure healthier foods were readily available to their families was actioned and participants began to introduce foods never consumed in their homes before, such as beans. Moreover, meals became healthier with the increase in vegetable consumption and small changes such as reduced sugar and salt intake started to occur.

Different approaches were used to introduce healthy attitudes and behaviours to eating. While some participants allowed the change to happen naturally for their parents and children, other participants took a more forceful approach. Two participants in particular forced their parents and children to eat, cut out or reduce the intake of certain foods. What these participants had in common was that they both lost a loved one as a result of diet-related diseases so it was their way of dealing with their loss and as a result, ensuring that their parents and children would be able to

lead healthier lives. For the participants who let their families' changes come naturally, they made changes to their own dietary attitudes and behaviours, making it a part of their daily lives. Consequently, participants saw that their children started to follow in their footsteps. Although the way that healthy eating attitudes and behaviours was introduced was different for all participants, there were noticeable and positive changes occurring among all their families.

## **5.5 Learning from past experiences**

Past experiences changed the lives and outlook on life for some participants. These experiences included the death of a loved one, a participant living through a close to death ordeal and dealing with body issues and low self-esteem. All were important turning points in these participants' lives who were then encouraged to take healthy eating more seriously and furthermore prompting them to enrol into the CPN course. Although losing a family member to diet-related diseases was a responsibility that two participants said they took the blame for and felt guilty about, it was a daily reminder for two participants to make healthy eating attitudes and behaviours a normal part of their families lives. The status of his health was only taken seriously when one participant was confronted with a serious heart condition. The participant shared that prior to this, he never paid serious mind to his health until he was clinically diagnosed with a life-threatening condition. This is a mindset that he wants to end with him and as a result of his experiences, he has made sustainable changes to his diet and encourages his families not to make the same mistakes he did.

Individuals who are overweight or obese have continued to be stigmatized and judged by society and this in turn has affected their mental and emotional wellbeing (Smith, Sweeting, & Wright, 2014). Further supported by Herbert, Hyde, Karunaratne, Komesaroff and Thomas (2008) study, all participants had experienced stigma and discrimination because they were overweight or obese and the incidents worsened when they reached high school. Furthermore, participants felt that medical professional, policy makers and the media who labelled them as a burden to society imposed blame strongly on them. Weight struggles and self-acceptance were issues that one participant, who was in secondary school at the time, was dealing with while completing the CPN course. However, gaining nutrition knowledge from the CPN course not only empowered her to action healthy changes within her school but also

within herself. The number of overweight and obese young Pasifika adults continues to outweigh their non-Pasifika counterparts (Ministry of Health, 2012) but the CPN course can help bridge this gap. This would allow for more young Pasifika adults to be exposed to nutrition knowledge that can support them to lead healthier lives and in turn decrease their overweight and obesity prevalence.

Lessons can be learnt from past experiences and the stories shared by participants in this study demonstrate that the mistakes from the past do not have to define oneself. However, past experiences can be used as motivational tools to empower individuals to make better choices with food and further encourage their families and communities to make these changes too.

## **5.6 Breaking habits**

When talking about dietary habits the most common habit that participants spoke on was cooking preparation methods. It was understood that their Pasifika families and communities were more inclined to fry their food as opposed to any other cooking method. The CPN course taught participants various cooking methods and techniques which participants started to implement within their homes and communities.

Methods and techniques included baking, steaming and boiling their meals. If they had to fry their food, participants would use vegetable oil instead of butter because they understood the difference between saturated and unsaturated fats.

Furthermore, two participants understood how these fats were processed in their bodies but some could not remember details.

It was not just about breaking habits, but also about replacing those habits with solutions and alternatives that participant's families and communities can use instead and the CPN course had these answers. All participants' came from large families so it was important that there would be enough food and to make healthy food that participant's parents and children would eat. 'Ahio's (2011) study further emphasises that the concept of having enough food was not a foreign idea to Tongans who always prepared enough food for guests to eat and also take plenty home. The emphasis was not on the quality of the food but the quantity. Similar to the findings of this study, participants acknowledged the large families they came from and that quantity of food was important. However, participants started to prioritise the quality of the food their

families were eating and therefore were more open to new and healthy ideas. To bulk up their meals, participants were taught to add oats, carrots and also beans into the mince and found that although they had never made mince this way, their families enjoyed it. Congruent to the study by De Jong et al. (2011), Aboriginal community members who took part in a cooking skills workshop were unsure of eating beans for the first time. When they ate it, the men in the study reported they really enjoyed it and wanted to make such meals again and they were excited to make them for their children. The meals that were prepared were not only healthy but also easy and the study found that because of this reason, participants responded well to making the meals in their homes. Similar to participants in this study who started to replace sugar in oats for fresh fruit and remove the skin from the chicken, the habits that were starting to be broken were replaced with solutions that were easy to implement. It is important to encourage Pasifika communities to break unhealthy dietary habits and sustain these changes. However, countering these changes with easy solutions and alternatives is vital in ensuring that healthy dietary habits become long-term attitudes and behaviours. One thing which was mentioned by participants was change to plating foods instead of buffet was successful.

If the CPN made participants realise one thing it was that change is processed differently by everyone and for elderly Pasifika parents, change would not happen so smoothly. Changing the way Pacific foods were prepared and making it healthier to eat was difficult for some of the participant's elderly parents to accept. Much of this was because Pacific foods were all they knew and were familiar with. The thought of taking away all that was familiar to their parents was difficult for participants. A different approach was used when participants tried to initiate healthier changes with their elderly parents. It was soon realised that participant's needed to introduce healthier attitudes and behaviours slowly and in bite sized chunks, especially for their elderly parents who had been eating foods a particular way for a long time. As Biel, Hansson and Martensson (2003) reiterated:

“one problem with people who have established strong habits is that they are less likely to attend to information targeted at the well-practiced behaviour . . . a new intention to behave in an environmentally friendly manner is not easily established” (p. 11)



Small changes would look like replacing coconut cream for a lighter option or diluting it with water, draining the fat from the corned beef and adding a generous amount of vegetables to the dish, removing chicken skin, using spices as opposed to salt, and plating food instead of putting everything on the table. Small changes even meant still serving pigs head but adding lettuce to the side because this was the best way that participants would do it for their elderly parents. Participants did not want to force their parents to change their entire diet because they knew it was not realistic. Rather participants' wanted to introduce attitudes and behaviours that would be retained in the long run so introducing it slowly, participants' believed would be the most achievable way when talking about elderly parents. As one participant further explained, the last thing you want to do is to scare your elderly parents into eating foods they have never seen or eaten before, such as brown rice for example. It was vital that change was to be made slowly for participant's elderly parents. One participant even shared that her elderly mother would remove chicken skin but then would fry it separately and still eats it. Similar to that of Hardin's (2015) finding, health practitioners in Samoa found that much of their patient's health behaviours was attributed to it being the *fa'aSamoa* (Samoan) way. One practitioner went on to say:

“What I am saying is, they eat those fatty foods every day. They know they should be eating differently, but it's the *faa-Samoa* way. We just don't have a culture of vegetable eating” (p. 125)

Making changes to the eating attitudes and behaviours of Pasifika individuals, namely the elders, needs to happen slowly and introduced in bite-sized portions. Participants felt that this was the most realistic measure to take that would produce more sustainable outcomes. Furthermore, to change or take something away, there needed to be a replacement, a solution or an alternative. Introducing healthier changes to attitudes and behaviours needed to be handled delicately and for participants this meant that corned beef could still be consumed so long as fat was diluted. Their elderly parents could still have pig's head but served with lettuce to balance the meal. Taking away Pasifika delicacies from its people is difficult to change because it is a culture, a part of who they are, further supported by Hardin's (2015) findings. For the participants in this study, it was about making small and realistic changes and removing the expectation that Pasifika peoples, namely elders, are to take this change

and run with it straight away. The overall message was that change should happen slowly and participants would celebrate the efforts of Pasifika peoples trying to adopt healthier eating attitudes and behaviours. Working with older Pasifika communities and trying to convince them to try new foods can be deemed as difficult, however it is important to address these changes in an achievable and effective manner. It is difficult to stop older Pasifika communities from eating Pacific foods therefore finding ways to improve the meals they are familiar with and making it healthier would be helpful and may encourage healthy eating attitudes and behaviours that are sustainable long-term.

## **5.7 Walking the talk**

After completing the CPN course, participants instantly became role models in their families because they believed it was their duty to their children and parents. Being parents to growing children, participants felt it very important for them to uphold the healthy changes they were making because their children looked up to them. Furthermore, participants felt that if they would be able to instill healthier attitudes and behaviours while their children were young, they would be more inclined to keep it with them when they are older. In line with the study by Casson, Grogan, Newson & Povey (2013) which looked at the experiences and understandings of families decisions to attend a childhood obesity intervention, parents who did attend the intervention understood that it would be beneficial for their children's health, and also that it would be good for their children to see their parents actively involved in the intervention and see them as their role models. It was important to participants that if any positive influence to eating attitudes and behaviours would change, it had to start with them. P1 put it perfectly:

“It's like you have to do it for yourself to be able to talk about it.

After the CPN I said, there's no point in me preaching about healthy eating if I don't do it myself, so it starts from me. So I have to do it!”

Participants started to be living examples of everything they had learnt from the CPN course and started to show it in their actions and their daily lives. Participants shared on their weight loss successes as a result of making healthier changes to their diets. A lot of the changes they made started small. It first started by removing the skin from

the chicken, and reducing and ultimately removing sugar from their diet. They started to see the physical changes in their body and also the improvement in their energy levels. P4 shared that introducing beans to her diet, which she had never heard of prior to the CPN course, helped her to stay energised throughout her exercise sessions. Speaking of exercise, participants started to include physical activity in their daily lives and slowly started to increase the prevalence of it. For P2, KFC ceased to be a normal meal for her but she started to see it as a treat and would only have it once a month or every two months. The CPN course influenced participants' behaviours and also attitudes towards food and eating healthily. P1 shared that her outlook had changed completely. As a result of the CPN course, she was more conscious of what she ate, how she cooked, and how she perceived certain foods in the shops. Ultimately, the CPN course was the eye opener and the nudge that participants needed to become healthier themselves.

As a result of their commitment to change, participants began to notice their children practicing healthier attitudes and behaviours. Participants noticed their children would choose vegetables more regularly, started to give up added sugar to their diets because they saw their parents practice this, and their children were also encouraging them not to buy takeaways or Mc Donald's as often as they used to anymore. Participants were sharing about how their children were starting to get involved with reading food labels during grocery shopping trips. Children were starting to adopt healthier eating habits and this was also evident from the former losing weight. Participants were noticing their children trying to prepare their meals at home and their children were even trying to practice portion control. Some participants did not impose change onto their children but rather let it happen because they wanted to. Two participants however took a more authoritative approach when telling their children to change certain eating behaviours and what these participants had in common was that they both lost loved ones because of diet-related consequences. Both participants shared that their children did not accept change easily and would question why they had to eat certain foods. However, they were the ones paying so it was a what-I-say-goes type of technique they used. The word for this was (tough) love and even though participants used different ways to encourage and inspire their children to practice healthier attitudes and behaviours, it was understood that

everything they did for their children was because they loved them. The love of a parent cannot be measured by the same ruler.

Participants were motivated to be healthy role models to ensure that their children had a future embedded in healthy eating attitudes and behaviours. Participants in this study showed that there needed to be motivation, a purpose and a meaning behind their actions. A lot of participants ability and successes to sharing their learning and disseminating it out to their families and communities was largely influenced by who and what was motivating them. One participant felt that it was important that students of the CPN course were there for the right reasons and not just to gain some sort of qualification. Motivation is key to ensure that students of the CPN course are driven to continue teaching nutrition knowledge to their families as well as communities.

Telling people to eat healthy will not be effective if you are not showing that you practice these behaviours yourself. For the message to go out effectively, Pasifika peoples want to see that advocates of health are living healthy lives themselves. The message has to come from strong role models within the Pasifika community, and not from people who are considered outsiders. This in turn will show Pasifika peoples that change is possible when those they look up to are practicing what they preach. Talk is cheap and in this case it proved that actions did speak louder than words. To sum up, it is important that Pasifika communities have advocates who are serious about healthy eating and committed to making the changes happen. The dire need to have Pasifika advocates who walk the talk is paramount for Pasifika communities so that they can be inspired to be healthier. Participants in this study proved to be adequate advocates who were filled with motivation, passion and drive to see their people achieve health. Having individuals who can advocate for Pasifika health and be a living testament to the cause can in turn influence the greater Pasifika community to follow suit.

The insights derived from the interviews demonstrate the essence of Pasifika culture and the efficacy of the CPN course in making positive and sustainable changes to the attitudes and behaviours of nutrition among Pasifika communities. The CPN course has made a difference in graduates, their families and communities lives and has

enabled them to take better control of their lives. The CPN course has equipped individuals with productive tools to lead healthier lives and make realistic changes to dietary attitudes and behaviours. The CPN course has proven to be a good and valuable course and one that has the tools needed to support those like the Pasifika community to live healthier throughout their lives.

## 5.8 Limitations and strengths

The scope of this Master's study was limited as the researcher was only able to screen eight participants and part of this limitation was attributed to many things such as inactive email addresses and the possibility that graduates of the CPN course had no access to the Internet. For future study, the researcher would recommend that the staff of the PHB endeavor to regularly update future students' details should they wish to have another evaluation of similar design for the CPN course. The researcher was restricted in what she was able to do in order to attract more participants for the study because of the process of going through a third party. Furthermore, no other platform was used to gain participants other than sending out an email. While many emails were sent out to hopeful participants, only a few were returned and this could be based on the fact that graduates had changed their email addresses, may not have had access to internet while some did not have an email address.

Furthermore, this study only involved interviews with five Samoan, two Tongan and one Maori respondent and therefore their experiences could not be said to represent those of the larger Pasifika population of CPN graduates in South Auckland, NZ. This study only involved participants living in the South Auckland region so future study could possibly look at extending the scope nationwide and in other parts of NZ where the course has been delivered.

The strengths of this study were that the small number of participants enabled the researcher to elicit rich data from all participants and repetitive themes were derived. The researcher was Pasifika and this was a strength because participants could relate on that level despite being of a different Pasifika ethnicity. It was as if participants were having a *talanoa* with one of their own and so participants felt comfortable and safe to share their stories and experiences. Values around culture and faith could be understood on a deeper level and in turn elicit the rich data that was pertained.

Furthermore, the researcher was also a graduate of the CPN course so there was a greater understanding of the CPN from that spectrum. Using a Pasifika methodology can be seen as a strength because through this study, it further reiterates that this way of pertaining information was proactive and successful for Pasifika individuals.

## **5.9 Recommendations**

This study represented the stories and experiences of Pasifika CPN graduates living in the South Auckland region. For future research, extending the research scope nationwide to include results from West Auckland and other areas in NZ would be beneficial for the staff at PHB. This would enable them to see how the CPN course is influencing other Pasifika individuals nationwide and may provide other recommendations to further improve the CPN course, and possibly attract more funding to perhaps roll out the CPN course throughout New Zealand to enable many more to benefit from its impact.

Furthermore, an equal representation of Pasifika ethnic groups would be another recommendation going forward. Not only would this elicit rich data but it would also help to voice the experiences of all Pasifika ethnic groups. With more participants, focus groups could also be included in data collection alongside face-to-face interviews. This in turn could help generate a flow of thoughts from other participants and create discussions that otherwise face-to-face interviews may not.

Lastly, participants mostly shared about their experiences with their families as opposed to how learning was passed onto their communities. The researcher felt that participants were not given the opportunity to utilise what they had learnt from the CPN course in a bigger and formal setting. A recommendation would include the staff at the PHB to consider looking into other ways to support their graduates after they have completed the course where they are presented with more opportunities to share knowledge. For example, the staff could look into teaching the CPN course in a community setting such as the church, universities, high schools and sports clubs where they can allow graduates to teach some topics and be involved in the workshops. When more research is conducted on the CPN course, future participants would be able to speak more on sharing knowledge to not only their families but their communities also. The more Pasifika communities learn about healthy eating attitudes

and behaviours, the better the chance of improving their health in the long run. To cite P7:

“I just think anybody that’s even remotely interested for their family should just do it. Just for our people to get a bit more understanding because that’s all we need man. We love our food, we love being with our family but let’s make our families a little bit healthier, let’s give them something to put in that basket of knowledge. Let’s empower our people to make changes for themselves because that’s the only way they will do it”

## Chapter 6: Conclusions

Overall, the experiences shared from all participants showed that the learning from the CPN course had a *positive* influence on the attitudes and behaviours around food on the participants, their families and their communities. The CPN course encouraged participants to be active role models and walk the talk by making healthy eating attitudes and behaviours a lifestyle change. As a result, participants started to see an acceptance to the need for change within their communities and namely their families and although the change was happening slowly, it was an improvement. As many of the participants expressed, unhealthy eating attitudes and behaviours had become a habit for their families and communities so it was about introducing new and healthy habits in slow and small portions. This study showed that the learning from the CPN course enabled graduates to be role models who continue to practice healthy eating attitudes and behaviours and in turn influence their families and communities to follow suit. For a positive outlook on healthier eating attitudes and behaviours to occur, Pasifika communities need the right people who will advocate for their health and wellbeing. Advocates who know what they are doing, what they are talking about and who are walking the talk. Role models need to come from within because Pasifika communities need Pasifika role models who understand their life, culture and their situation on a professional and also a personal level. Individuals such as graduates of the CPN course are ideal advocates and role models that Pasifika peoples need to help them adopt and retain healthier eating attitudes and behaviours.



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## Appendix A: Interview Guide

### Interview Questions:

- What year did you complete the Certificate in Pacific Nutrition course?
- What made you want to enrol into this course?
- Where did this interest in nutrition or health begin for you?
- What were your feelings towards the topics covered in the Certificate in Pacific Nutrition course?
- Were there any particular topics that interested you more than others?
- What key messages do you know about nutrition that your community or family would benefit from most?
- How has the course affected your lifestyle?
- How has the course affected your family's lifestyle?
- How have you passed on the things you learnt to your family and wider community?
- What, if any, specific changes have you made to your own lifestyle following the completion of the course?
- After completing the Certificate in Pacific Nutrition course, how has the transition been for you in terms of sharing the knowledge you learnt and passing it on?  
OR
- After completing the course, what challenges did you face when you tried to pass on the knowledge to your family and wider community?
- 
- What barriers did you face after the CPN course?
- What opportunities were you presented with after the CPN course?
- Was there much support for you from your community leader/pastor/manager after the course?
- Was there anything lacking you know could have helped you more with reaching out to the wider community? OR What else could have helped you more in reaching out to the wider community?

## Appendix B: Ethics Approval Letter

The logo for Auckland University of Technology (AUT) is displayed in white, bold, sans-serif capital letters on a black rectangular background.

### AUTEC Secretariat

Auckland University of Technology  
D-88, WU406 Level 4 WU Building City Campus  
T: +64 9 921 9999 ext. 8316  
E: [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)  
[www.aut.ac.nz/researchethics](http://www.aut.ac.nz/researchethics)

19 January 2017

El-Shadan Tautolo

Faculty of Health and Environmental Sciences

Dear Dan

Re: Ethics Application: **16/266 How has the learning from the Certificate in Pacific Nutrition course influenced the behaviours and attitudes of graduates' communities and families?**

Thank you for your request for approval of an amendment to your ethics application.

The amendment to the recruitment protocols has been approved.

Note: I advise that snowballing recruitment may occur through interviewees telling their contacts about the research, and inviting them to get in touch with researchers, rather than contact details being passed over.

I remind you that as part of the ethics approval process, you are required to submit the following to the Auckland University of Technology Ethics Committee (AUTEC):

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 22 August 2019;

- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 22 August 2019 or on completion of the project.

It is a condition of approval that AUTECH is notified of any adverse events or if the research does not commence. AUTECH approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTECH grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz).

All the very best with your research,



Kate O'Connor

Executive Secretary

**Auckland University of Technology Ethics Committee**

Cc: [glo.tapaleao@gmail.com](mailto:glo.tapaleao@gmail.com); Ineke Crezee

## Appendix C: Email Invitation

*Malo e lelei and warm Pacific greetings to you all.*

*I hope this email finds you well and in good health.*

*I am writing to tell you that we, Pacific Heartbeat, are working with Gloria Tapaleao and AUT, in a research about the Certificate in Pacific Nutrition course (CPN) that you did in the past.*

*My colleague, Gloria Tapaleao, is studying for her Masters of Health Science at AUT, and as part of her study, she is leading this research.*

*I am therefore, contacting you as graduates of the Certificate in Pacific Nutrition, about the research in case you are interested to take part.*

*If you are interested to be part of this research, please read the attached information sheet from Gloria, and if you decide to take part, then please email Gloria back on [glo.tapaleao@gmail.com](mailto:glo.tapaleao@gmail.com) so she can contact you directly to explain more and answer any questions you may have.*

*We would kindly ask that you submit your response to participating in this study **before 31<sup>st</sup> October 2016.***

*A \$25 Pak n Save voucher will be gifted to you by Gloria as a koha to thank you for your participation and helping Gloria with this research.*

*If you are not interested, you do not have to respond and if you do not respond, no one will contact you, but you may receive a letter in the mail, which you can simply disregard.*

*Thank you for your consideration*

*Pacific Heartbeat*



## Appendix D: Participant Information Sheet



TE WĀNANGA ARONUI  
O TĀMAKI MAKĀU RAU

### Participant Information Sheet

#### Date Information Sheet Produced:

21 July 2016

#### Project Title

How has the learning from the Certificate in Pacific Nutrition course influenced the behaviours and attitudes of graduates' communities and families?

#### An Invitation

Talofa lava, my name is Gloria Tapaleao and I would like to invite you to take part in a research that gives you an opportunity to share your story about your experience from the Certificate in Pacific Nutrition (CPN) course. This research is being conducted towards my Masters degree here at the Auckland University of Technology. All interviews will be conducted individually, keeping your identity confidential. Your participation will be greatly appreciated though not mandatory. As my way of saying thank you for your support in this research, a \$25 Pak n Save voucher will be gifted to you as koha. If during the research you do not wish to continue being a part in my research, you are welcome to withdraw any time, without giving a reason.

#### What is the purpose of this research?

The purpose of my research is to examine how the learning's of the Certificate in Pacific Nutrition course have influenced your communities and family's behaviours and attitudes towards healthy eating. The importance in finding out such information means that we are able to find out the level of influence the course has in impacting Pacific communities' eating behaviours in a positive light. Furthermore, the research will support the continuity of the Certificate in Pacific Nutrition course. The benefits of this research for you as a participant may find that you talking about experiences post the Certificate in Pacific Nutrition course may motivate you to help more communities improve their dietary habits. Sharing your experience may further ignite the desire and demand for more Pacific professionals and communities to enrol into the Certificate in Pacific Nutrition course in a way to give back to their communities and families. As the primary researcher, this study will be beneficial for me in terms of helping me gain a Master's degree upon completion. This will further assist me in expanding my research knowledge and skills upon completion of the Master's degree.

#### How was I identified and why am I being invited to participate in this research?

You are receiving this information because you have responded to an email sent to you by the staff at Pacific Heartbeat as you fit the criteria needed for this research in that you are of Pacific Island descent and live in the South Auckland region. With the help of Sue Pirritt, Takui Langi and Mafi Funaki-Tahifote and the Pacific Heartbeat database, they have sent you an email because you are a past graduate of the Certificate in Pacific Nutrition course and felt that you were able to potentially contribute to this research.

## How do I agree to participate in this research?

Your participation in this research is voluntary and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible. Should you wish to accept this invitation, you will need to complete a Consent Form before any interview can begin. Once an expression to take part in the research has been given by yourself, I will contact you personally to discuss a place where you will be comfortable to meet in person so that you can complete the Consent Form. If you have any other queries to discuss you may also raise them at this initial meeting. Please note that the initial meeting is just to a meet and greet and to sign and complete Consent Forms, therefore there will be no interviewing for the purposes of the research conducted at this point.

## What will happen in this research?

In this research, as a participant you will be interviewed in your home or any location you feel comfortable to do so, and this will be done individually. Interviews will be recorded for transcribing purposes when I as the researcher come to write up stories and experiences you shared. Your interview may take up to 3 hours to allow ample time for you to share your experiences. Although you will only be interviewed once, we will have three face-to-face meetings. The first meeting as described earlier, is our meet and greet and to complete the Consent Forms. Our second meeting is where our interviews will be conducted and finally the last meeting where I will invite all participants who took part in my research to a final *Talanoa* session where I can present my findings and you can ask questions. However, you do have the option to have your interview at the meet and greet meeting where you will be asked to sign the Consent Form. Therefore, in that instance, you will then only have two face-to-face meetings. It is important to note here that while you will eventually meet the other participants who took part in this research, all that you shared with me during our one-on-one interviews will not be disclosed. Therefore, other participants will not know that a certain quote was said by you and furthermore all participants will be asked to respect the privacy of each individual. The final meeting will take place at 9 Kalmia Street, Ellerslie.

## What are the discomforts and risks?

Although it is highly unlikely you will experience any discomforts and risks, it is always good to address that it may be that some interview questions you may be asked could cause you to feel uncomfortable in answering. This may be due to a personal matter which you may not feel confident in sharing with me.

## How will these discomforts and risks be alleviated?

In the event that you do feel any discomfort or risks then you may pause, postpone or withdraw from the interview.

## What are the benefits?

Although there are possible risks and discomforts, there are also benefits to the research. Sharing your experiences about the CPN course and how it has influenced yourself, your families and your communities can be an empowering experience. I say this in the sense that your story may encourage others to want to take the CPN course so they can help their own families and communities and bring us closer to a goal of improving nutrition behaviours of Pacific communities nationwide. As well as this research being beneficial for you, your supporting me completing this research means that I can gain my Master's Thesis qualification and further improve my research abilities so that I may continue to grow professionally. There may be a likelihood that this research will be used in other publications other than my Master's Thesis and this may include other Journal Articles.

## What compensation is available for injury or negligence?

In the unlikely event of a physical injury as a result of your participation in this study, rehabilitation and compensation for injury by accident may be available from the Accident Compensation Corporation, providing the incident details satisfy the requirements of the law and the Corporation's regulations.

## How will my privacy be protected?

All personal information including interview transcripts and audio recordings will be stored in a USB stick and locked away in a secure cabinet in my supervisor's office (MB203 – AUT University). Completed Consent Forms will also be stored away in a secure cabinet in my secondary supervisor's office (WT1218 – AUT University). Hard copy of Consent Forms will be shredded once they have been stored onto the USB stick. Upon completion of the research, all data collected will be stored for six years before being destroyed by deleting all data from USB stick.

## What are the costs of participating in this research?

The main cost of participating in this research would be you giving up your personal time. This may be up to at least 8 hours of your time, which includes all three meetings scheduled to take place. Less if you choose to opt for two meetings where your interview will take place once your Consent Form has been signed. There will also be petrol cost for when you make the travel out to the final meeting to take place at 9 Kalmia Street, Ellerslie.

## What opportunity do I have to consider this invitation?

You will be given up to one to two weeks to consider this invitation.

## Will I receive feedback on the results of this research?

Yes. As explained earlier, upon completion of writing the thesis, I will invite all participants who took part in this research to a *Talanoa* session to take place at the National Heart Foundation, 9 Kalmia Street, Ellerslie, Auckland NZ. Here I will give a summary of my results and present my findings and what you shared as a participant. There will also be a chance for discussion and questions by you as a participant. I have chosen to do it this way to continue supporting the cultural respect that this research started on, and that is to share through *Talanoa*.

## What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, *Dr El-Shadan Tautolo*, [dan.tautolo@aut.ac.nz](mailto:dan.tautolo@aut.ac.nz), (09) 921 9999 ext 7527 or +6421 120 7523.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTC, Kate O'Connor, [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz), 921 9999 ext 6038.

## Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

### Researcher Contact Details:

Gloria Tapaleao, [glo.tapaleao@gmail.com](mailto:glo.tapaleao@gmail.com)

### Project Supervisor Contact Details:

Dr. El-Shadan Tautolo, [dan.tautolo@aut.ac.nz](mailto:dan.tautolo@aut.ac.nz)

Dr. Ineke Crezee, [ineke.crezee@aut.ac.nz](mailto:ineke.crezee@aut.ac.nz)

Approved by the Auckland University of Technology Ethics Committee on *Tuesday 23<sup>rd</sup> August, 2016*, AUTEK Reference number *16/266*.

## Appendix E: Consent Form



TE WĀNANGA ARONUI  
O TĀMAKI MAKĀU RAU

*Project title:* ***How has the learning from the Certificate in Pacific Nutrition course influenced the behaviours and attitudes of graduates' communities and families?***

*Project Supervisor:* ***Dr. El-Shadan Tautolo***

*Researcher:* ***Gloria Tapaleao***

- ☐ I have read and understood the information provided about this research project in the Information Sheet dated 11 October 2016.
- ☐ I have had an opportunity to ask questions and to have them answered.
- ☐ I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- ☐ I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- ☐ I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- ☐ I agree to take part in this research.
- ☐ I wish to receive a summary of the research findings (please tick one): Yes ☐ No ☐

Participant's signature:

.....

Participant's Name:

.....

Participant's Contact Details (if appropriate):

.....

.....

.....

.....

Date:

***Approved by the Auckland University of Technology Ethics Committee on 23 August  
2016 AUTEK Reference number 16/266***

*Note: The Participant should retain a copy of this form.*

## Appendix F: Pacific Heartbeat Support Letter

To Whom It May Concern:

This letter concerns **Fa'amanu Gloria Tapaleao** who has spoken with us about a research proposal which if undertaken will fulfill the thesis requirements for a Master's Thesis in Public Health. The proposal is to talk with graduates of the Certificate in Pacific Nutrition delivered by Pacific Heartbeat, The Heart Foundation, funded by the Ministry of Health and awarded by the Auckland University of Technology. This Certificate has been offered for since 2002 – 14 years.

Gloria has already shown commitment to better understanding as she is in the final stages of completing the course as a student herself.

We believe Gloria's Master's research will be useful to ourselves and also the Ministry of Health and wider Pacific communities. Pacific Heartbeat will support Gloria by:

- sending out invitations to graduates inviting them to take part in the interviews and to contact Gloria
- advising Gloria as necessary to ensure that the questions asked are relevant to the overall research question:

*How has the Certificate in Pacific Nutrition influenced the attitudes and behaviours of graduates' families and communities?*

Gloria will be supervised by Dr El-Shadan Tautolo with support from Dr Ineke Crezee and Professor Elaine Rush.

We understand that Gloria will be seeking ethics approval through the Auckland University of Technology Ethics Committee and provide input to the invitation to participants and the questions that will guide the interviews conducted using a talanoa approach.

Sincerely,

Louisa Ryan, Manager

Pacific Heartbeat, National Heart Foundation of New Zealand