He Kai Kei Aku Ringaringa:
Food Security on the West Coast

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Abstract

This research project ‘He Kai Kei Aku Ringaringa, Food security on the West Coast Te Tai o Poutini’ had the following aims:

1. To understand the lived realities of those experiencing food insecurity on the West Coast and how this impacts on their health
2. To identify organisations who support those with food insecurity on the West Coast, or are part of the food supply, and explore how these groups can work collaboratively to enhance community food security

The research was carried out in 2020 in three different phases:

Firstly a mapping exercise was carried out to identify services and agencies that support community food security on the West Coast (Haast to Karamea). The mapping also included an email survey to schools and other education providers on the West Coast.

Secondly in order to understand the lived experience of those living with food insecurity on the West Coast, key informant interviews were carried out with people who were or had past experience of food insecurity. Focus groups and key informant interviews were also held with partner agencies who work with those experiencing food insecurity. Additional key informant interviews were also held with four people working in education settings.

The third phase of the project was reporting back the findings of phases 1 and 2 to agencies on the West Coast, in order to generate recommendations how community food security on the West Coast can be enhanced.

The mapping exercise indicated a range of government and charitable or community led strategies across the West Coast to support those experiencing food insecurity. As a result of Covid-19 there has been a greater emphasis on the co-ordination and support for organisations working in this space. Both the key informant interviews and the focus groups revealed that food insecurity is present on the West Coast. The high costs of food, transport and a lack of services available compared to other areas were noted by participants. People reported the impacts on their own and their family’s health and wellbeing, especially mental health. People also reported seeking help had been a difficult decision due to the stigma associated with poverty. A range of experiences were reported by those who sought help which from varied from positive supportive experiences to those that were not. Those who work in support agencies indicated a willingness and energy to work together to alleviate the experience of food insecurity for their communities.

The survey and key informant interviews with those in education settings revealed that schools and early childhood centres are aware of the children within their school who may need extra food. This was provided discretely, through a variety of mechanisms. Many schools reported they accessed government or charitable support to provide food for children.

He kai kei aku ringaringa literally means the food in my hands, or metaphorically can refer to the resources one has available. There were several recommendations that were suggested by community people and agencies that could enhance food insecurity on the West Coast. These focused on support to people experiencing food insecurity to reduce barriers to seeking help, and greater coordination of agencies that work to support those with food insecurity. More broadly, there was also a focus on community food security initiatives, such as food rescue and research into the local food supply.

Mihimihi - Acknowledgements

Ka nui te mihi ki a koutou katoa e tautoko ana i tēnei mahi rangahau.

Thank you to all of those who have contributed to this research.

Firstly to the people who shared their stories with us, we hope we have reflected your words accurately within this report.

We would like to thank the many people and organisations who participated in the focus groups. We would also like to acknowledge those people working in the education setting who took the time to respond to our survey.

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Finally we would like to acknowledge the University of Otago, for funding this research.

The stories of those who we interviewed impacted us personally. It is appalling that in a food producing country such as New Zealand we can interview people who are going without food. It is our small hope that this research can contribute toward a food secure future for the West Coast.

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1.0 Background

1.1 What is Food Security?

Food Security is an internationally recognised term and exists 'when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life' (1).

The four facets of food security are:

Food availability: There is enough food of safe and edible quality, supplied by domestic production or imports.

Food access: Individuals and families can access enough resources (money or entitlements) to purchase or acquire enough food for a nutritious diet. Resources are widely defined and include all commodities such as social arrangements or traditional/cultural rights to natural resources.

Utilisation: Utilising food through adequate diet, clean water, sanitation and health care to reach a state of nutritional wellbeing. This facet acknowledges the importance of non-food components relative to food security.

Stability: To be food secure, people must have access to enough food at all times. They should not be in jeopardy of losing access to food as a consequence to crisis, season changes, climate, lack of money or work.

Food and Agriculture Organisation of the United Nations (2006)(2)

Food Sovereignty refers to the degree of control of which people, or the population, have on food supply, including prioritising the nations produce to feed the people living there (3).

1.2 The right to adequate food

In 1948, the Universal Declaration of Human Rights, article 25, stated that everyone has a right to a living situation adequate to maintain the health and well-being of their family, including basic needs such as food, clothing, medical care and social services no matter their employment status (4). In 1976 the right to adequate food was expressed in Article 11 of the International Covenant on Economic, Social and Cultural Rights in the following text:

1. *The State Parties to the present Covenant recognise the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realisation of this right…*
2. *The State Parties to the present Covenant, recognising the fundamental right of everyone to be free from hunger….*

The concept of the right to adequate food was then further broadened by the United Nations in 1999 in the following comment.

Concept of the Right to Food (General Comment 12)

The right to adequate food is realised when every man, woman, and child, alone or in community with others, has the physical and economic access at all times to adequate food or means for its procurement.

The Committee considers that the core content of the right to adequate food implies:

- the availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture;

- the accessibility of such food in ways that are sustainable and that do not interfere with the enjoyment of other human rights. (5)

These statements reiterate that food security is at the core of public health. It is a basic human right, a non-negotiable component of our being and primary indicator of our overall welfare and ability to flourish.

1.3 What is food insecurity and what is the extent of the problem in New Zealand?

Food insecurity exists when access to food is limited, uncertain or compromised (6). Food insecurity is a growing issue in New Zealand as the cost of living rises and household income remains insufficient to feed many families adequately. In New Zealand, income inequalities increased as a result of neo-liberal economic reforms and benefit cuts of the late 1980s and 1990s (7, 8). This saw a parallel rise in charitable food banks to support those experiencing food insecurity (9). For Māori the experience of food insecurity was associated with the colonisation of New Zealand, especially through land loss and the associated loss of an economic base that provides intergenerational wealth(10). In addition the economic changes introduced since the 1980's impacted Māori employment and levels of hardship (11).

In 2008/09, the New Zealand Health Survey found that 7.3% of New Zealand households had low food security (12). In the same survey, 22.8% of households reported that having a variety of food to eat due to lack of money was sometimes an issue, and 11.5% sometimes run out of food due to lack of money (12). Additionally, 15.7% reported that they sometimes/often feel stressed because they do not have enough money for food (12). The impact was most severe in households with low socio-economic status. In New Zealand, household income is a determinant of food security and people who are receiving low incomes are more likely to experience food insecurity (6). People who live in households that are categorised as Quintile 1 & 2 (least deprived) are less likely to experience food insecurity than those living in the most deprived households (quintile 5) (13). In the New Zealand Health Survey, more than half of the food insecure group received a benefit and more than three-quarters of those experiencing food insecurity lived in a rented house (13). More than two-thirds of those who were food insecure reported a gross household income of ≤$50,000 (13).

In New Zealand, data from 2019 revealed that nearly one in five (19%) of children lived in households experiencing moderate-severe food insecurity (14). More than one third (34.8%) of children living in the most deprived households are living with food insecurity (14). The parents of these children reported feeling stressed that there was not enough money to purchase food and that food does run out (14).

Similarly data from the Growing up in New Zealand longitudinal cohort study, that followed 6000 children from their birth in 2009/10 has found at 9 months of age almost half of the mothers or primary caregivers said they bought cheaper food and around one in eight (12%) had used food banks, food grants or gone without fruit and vegetables (15). This study has found that households tended to move in and out of food insecurity over time. This study found a low household income below $50,000 per annum, and especially an equivalised household income below $25,000 per annum is strongly increased the risk of food insecurity (10). An equivalised household income is a statistical measure that accounts for the number of dependants living in a household.

1.4 How does food insecurity impact health and wellbeing?

The adverse effects of food insecurity are felt in a multitude of ways and the impacts are widespread for whānau and the wider community. Food provides more than physical nourishment, it plays a pivotal role in connecting people and supporting them to feel well mentally and emotionally. For whānau Māori, being able to uphold their value of manaakitanga (support/hospitality) by sharing food is a significant contributor to wellbeing (6). Access to enough safe and appropriate food is a basic human right, and when this is not attainable overall wellbeing is affected (4).

A model of hauora, Te Whare Tapa Whā, by Mason Durie, illustrates the four dimensions of health and wellbeing and highlights the importance of each health component being optimal so that others are not compromised (16). The four dimensions include Taha Tinana (physical), Taha Wairua (spiritual), Taha Whānau (family) and Taha Hinengaro (mental health). Where there is food insecurity, all dimensions of hauora are simultaneously compromised.

1.4.1 Food insecurity: the impact on nutrition

Food insecurity impacts hauora at all stages of the life-course, however its impact is especially concerning for children. In the 2018/2019 health survey, the main nutrition consequence of food insecurity for children was lack of variety in their diets (12). A varied diet containing a range of nutrients, flavours and textures is important to overall health, wellbeing and longevity. Eating patterns with limited variety are problematic because they are likely to contain insufficient nutrients, which impact negatively on short and long-term health outcomes (17, 18). These results indicate children experiencing food insecurity are unlikely receiving the critical nutrients required for growth, development, learning and the ability to enjoy a fulfilling life (14).

Additionally, a lack of variety of vegetables in early childhood impacts long-term eating behaviours in relation to the acceptance of foods (19). Children are more likely to identify with parental feeding practices and food choices in adolescence and adulthood, therefore if children are not exposed to a varied diet in early life, they are less likely to consume a wide range of foods later (20). These risk factors combined with the inaccessibility of healthy food for people living with food insecurity undoubtedly place them at an increased risk of developing acute illness and non-communicable disease in addition to stress and poor mental health (21).

It is well documented that whānau experiencing food insecurity feed their tamariki first, putting their needs before their own (6, 22). Any money or allocation for food is spent with children in mind, ensuring that they have nappies, formula and any other basic needs covered. This often means parents experience hunger and consume a nutritionally inadequate diet in an attempt to alleviate hunger and distress. With limited money to spend on food, the priority becomes satiety, keeping bellies full which often means shopping for quantity over quality and purchasing cheap foods high in carbohydrates (22, 23) and limiting fruit and vegetables (10). Whilst these foods successfully ward off hunger, they have long-term health implications as they are often lacking nutritional value. Graham (2018) quoted one participant *"I wasn't eating enough really, to keep the milk going……." P.394, (22).* Whilst the participant was eating white bread to alleviate hunger, she was unable to access enough good quality food to produce breastmilk which is protective for mother and baby (22). Food insecurity creates food choices driven by satiety rather than nutritional value and it can be difficult to break these habits, even if income rises (6). Children living in food insecure homes are less likely to have tasted and prepared a wide variety of foods for themselves and are therefore more likely to carry these habits into adulthood (6). Children living in food insecure homes are also more likely to be given unhealthy food and drinks in early childhood (10). This is in part related to the easy accessibility of unhealthy food and drinks, a desire by caregivers to minimise food waste by offering easily accepted foods, as well as societal pressures to offer children 'treats' so they are not left out (10).

Becker et al (2017) conducted a study investigating the relationship between food insecurity and eating disorder pathology (24). The study was the first of its kind, and aimed to reveal the frequency of typical eating disorder behaviours such as binge eating, over-eating, night eating, vomiting, laxative/diuretic use, skipping more than two meals in succession and exercising harder or more frequently because of overeating (24). The study showed a clear association between individual and household food insecurity and frequency of eating disorder behaviours, and a dramatic increase was seen in those participants who reported experiencing child hunger (24). These findings add weight to the literature describing the effects of malnutrition in children and illustrate that food insecurity impacts growth and development and long-term outcomes in children. The effects of experiencing hunger and the stress associated with it are life-long.

Fruit and vegetable intake has continued to decrease every year since 2006 and in 2018/2019, one-third of the New Zealand adult population ate the recommended daily intake for fruit and vegetables (13). People living in socio-economically deprived areas

were less likely to meet the recommendation (17). Adequate fruit and vegetable intake is important in reducing excess weight gain, cardiovascular disease and some cancers (17).

As well as being less likely to meet the recommended intake for fruit and vegetables, people who experience food insecurity were more likely to eat fatty processed meats and processed foods of poor nutritional quality (25). Thirty-one percent of those experiencing moderate-severe food insecurity in New Zealand describe their diet as having limited variety, and nearly 20% eat less as a result of food insecurity (14). Furthermore, people living in food insecure households are more likely to develop unhealthy eating behaviours due to inadvertent pattern of dietary restriction as a result of little or no food, and abundance due to receiving income or assistance (24).

Graham & Stolte (2018) explored the priority of 'nutritionism' which they define as the "implicit and explicit consideration of food in terms of only its nutrient composition and the prescriptive connection between nutrients and bodily health" (26). Dietary recommendations are written based on scientific evidence, often without the lens of food insecurity, making the assumption that everybody can afford basic food items. Additionally, nutritional education programmes at times highlight the disconnection between health promoters and day-to-day lived experiences of those who are food insecure (26). In cases where there is limited access to fresh foods, and multiple food outlets (such as the West Coast), it becomes more difficult to meet the nutrition recommendations for long-term health and more of a priority to feed whānau and ensure they are full. A direct quote from Graham et al (2018) illustrates this construct and the complexities around access to food *"cheap loaves of white bread from the store situated within walking distance filled her stomach and alleviated the worst of her hunger. However, the lack of adequate nutrition impacted on her ability to produce enough quality breast milk…."* p.1867 (26). Often, when whānau do prioritise food, there are more difficult decisions to make in order to redistribute monetary resource: do they heat their home, or buy warm socks?

Beavis et al (2019) interviewed four Māori households to understand their experience of food insecurity and found that being able to grow small vegetables and herbs in domestic gardens meant that whānau consumed more vegetables and money was able to be redirected to other needs however tenancy agreements often limited their ability to do this (6). In addition to physical health benefits, gardening supports whānau to remain connected to their whenua (land) and when there is surplus produce, the ability to share reinforces manaakitanga and therefore increases overall wellbeing (6). For indigenous people, the right to food is linked closely to rights to land and culture. The loss of food gathering sites and traditional practices following colonisation has impacted the range of traditional foods available for Māori (10).

1.4.2 Food insecurity: the impact on mental health

People experiencing food insecurity are likely to experience psychological distress as a result of struggling to feed their family and choosing between basic necessities (27). Food insecurity often varies in severity as it is usually dependent on other necessary living costs such as rent, heating, education, communication, car running costs and education (28). According to Statistics New Zealand, food is the second largest

expense (29). However, in people who are food insecure, food is often purchased with any money that is leftover after paying other bills (22). The distressing nature of food insecurity and the health consequences undoubtedly creates trauma, which can occur from one-off experiences of food insecurity or long term situations (30). People who are food insecure are more likely to engage in risky behaviours and to not seek medical care when they first require it, because they are trying to feed their whānau rather than tend to medical needs (30).

In New Zealand, 16% of households are stressed about lack of money for food and 14% experience stress when there is no food to share at social occasions (12). People who are food insecure are more likely to experience chronic disease, poor physical health, developmental delay and mental health issues including depression, anxiety, post-traumatic stress disorder and eating disorders (24, 31-36). Families experiencing food insecurity face limited choice of food, discrimination, social exclusion and are more likely to exhaust social networks quickly due to continuously asking for help, or not being able to host others (26). All of these factors eventually contribute to poor health, limited education opportunities, decreased immunity, decreased attendance at school and feelings of shame. Social connection and acceptance enhance resilience, which improves overall health and wellbeing. A study in the United States of America investigated the relationship between the supplemental nutrition assistance programme (e.g. food stamps) and earned income tax credit and suicide rates (overall and gender specific) in 50 US states over 15 years (37). The study concluded that increased accessibility and usage of the supplemental nutrition assistance programme was associated with lower suicide rates, and a standard deviation increase in availability may have decreased the number of deaths by more than 30,000 over 15 years (37).

Government-administered welfare requires extensive administration and is often designed to reduce spending and to support the societal narrative that poverty is a choice, and that people must be able to do more with less (26). A study in the United States of America identified several government policy decisions that limit the ability of citizens to access enough food including: insufficient money to cover basic living and food costs, lack of healthy food outlets in proximity to state housing and policies preventing the donation of products that are not able to be sold, but are still edible to people experiencing food insecurity (38).

A study in the United States of America interviewed 21 food bank clients and focussed on examining their experiences of shame, guilt and stigma (39). The study showed that participants felt a great deal of shame in not being self-sufficient and often attempted to present as being food secure in order to fit in with society, usually because they felt nervous of their situation being characterised as a ‘personal failing’ (39). A concerning finding is that people experiencing food insecurity felt they could not be seen to be enjoying life as they would be at risk of being seen as the ‘undeserving poor’ or fitting into the stereotype of living off the system (39). Swales et al found that people who adopt roles of being a ‘helper’ or ‘provider’ are more likely to seek and support help than those who do not (39).

People experiencing food insecurity already experience a high level of internal shame, guilt and trauma associated with feeling inadequate, or 'poor'. It is important to consider that many people who are food insecure are unlikely to seek support when they need it, and the level of support required may be downplayed in an attempt to hide their situation (39) (22) . Additionally, everyday experiences such as grocery shopping often cause significant stress and embarrassment for people experiencing food insecurity. Graham (2018) states "the act of placing cheap, inexpensive grocery items into a half-empty supermarket trolley can expose impoverishment, making passing an even more difficult prospect" (p.392) (22). People experiencing food insecurity feel internal shame and stigma and are also subject to disparaging facial expressions and remarks from other shoppers and staff members, particularly in the instance of returning an item due to lack of funds (22).

1.5 Community Food Security

There are many definitions of food security, however it is useful to differentiate between community and household food security.

Why Hunger (2021) define community food security as:

> *"a condition in which all community residents obtain a safe, culturally appropriate, nutritionally sound diet through an economically and environmentally sustainable food system that promotes community self-reliance and social justice"* (40)

A community may be food secure and have households within it that are food insecure, and vice versa. It is important to note that where community food security is compromised, household food security will also be compromised to a degree. An example of this is on the West Coast; given the reliance on road access by alpine passes to receive food deliveries, when there is particularly stormy weather and roads are closed, supermarket shelves are sometimes lacking low cost or fresh options. Therefore, regardless of whether or not an individual household is food secure, at a community level the food is not available to purchase. Additionally, if food is produced locally but is not available to community members, or there is inadequate resources to support low-income people to purchase food, community food security is at risk (41). Furthermore, if the food available is not competitively priced due to limited competition, food is less likely to be affordable for all households (41). Food Security interventions need to consider community food security together with household food security in order to achieve the best outcomes.

1.6 The West Coast

The West Coast (Te Tai o Poutini) is New Zealand's longest region, spanning more than 600 kilometres in length and divided into three districts: Buller, Grey and Westland. Despite its length, the West Coast is the most sparsely populated region in New Zealand, home to just 31,575 people (0.64% of the New Zealand population)

(42). The West Coast is home to 3687 Māori people, making up 12% of the West Coast population (42). The mana whenua of Te Tai o Poutini, is the iwi Ngāi Tahu and the hapū Ngāti Waewae and Ngāti (Kāti) Māhaki ki Makaawhio. The West Coast landscape

The region is known for very high rainfall, feeding the spectacular rainforest and natural environment. Tourists visit the West Coast to enjoy the scenery, outdoor environment and to see the Fox and Franz Josef Glaciers. The West Coast is accessible by road via three alpine passes: Arthurs Pass, Lewis Pass and Haast Pass and by air at Westport and Hokitika airports, accessible from Wellington and Christchurch respectively. There are three main towns- Westport, Greymouth and Hokitika and many smaller towns such as Reefton, Karamea, Murchison, Franz Josef, Fox Glacier, Haast and many more.

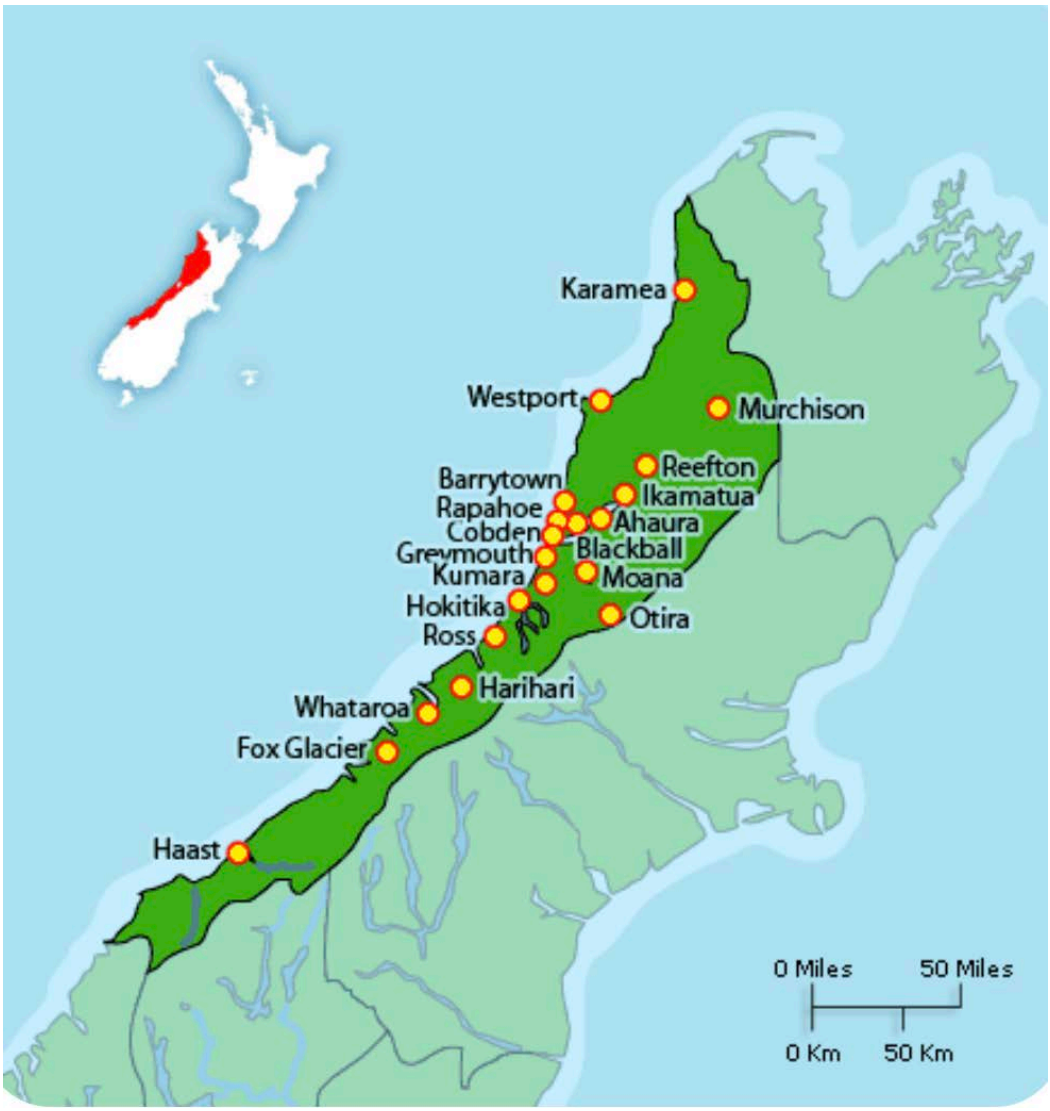


Figure 1: Map of the West Coast by Riverstone Retreat, Karamea

1.6.1 Food supply and access to food on the West Coast

The remoteness of the West Coast is of particular interest in the context of community food security. Road access to the West Coast is limited to three alpine passes: Arthurs Pass, Lewis Pass and Haast Pass. The majority of food is delivered by road, a further determinant of community food security should any of these roads be closed for a period of time. Additionally, there are six main supermarkets on the West Coast; two in Westport, two in Greymouth, one in Hokitika, and one in Reefton. Additionally, there are small Four Square supermarkets in Reefton, Hokitika, Karamea and Franz Josef. Families living in the most remote locations are required to travel ~150km to reach any supermarket. There are no farmers markets, one green grocer and two butchers.

Food is not only obtained by purchasing, but by bartering, hunting, fishing and growing. The West Coast backcountry is renowned for hunting, particularly deer (venison) and the infamous whitebait is popular nationwide as a delicacy available for 10-12 weeks each year. Many people spend time fishing, and the rural nature of the West Coast lends itself to taking care of chickens (eggs) and for farmers (and friends and family of), meat from the farm.

For whānau Māori, the availability of traditional food contributes to their wellbeing and includes kaimoana. Five mātaitai exist on the West Coast, including Okarito Lagoon, Manakaiaua/Hunts Beach, Mahitahi/Bruce Bay, Tauparikaka and Okuru/Mussel Point (43). Mātaitai reserves are closed to commercial fishing and empower tangata tiaki (guardians nominated by iwi) to make rules and limits based on sustainable kaimoana (10, 43). The purpose of mātaitai reserves is to support the replenishment and sustainability of kaimoana for generations to come (10).

Whilst the West Coast has a temperate climate, the annual rainfall and extreme temperatures inland mean that most people growing vegetables use a tunnel house to protect their crop. Lemons, feijoas and apples are grown residentially and shared with neighbours and friends. The West Coast has many roadside stalls selling berries, eggs, honey, vegetables and other seasonal fruit which is welcomed by local people. The West Coast is home to five major factories - Silver Fern Farms, Talleys, Westland Milk Products, ANZCO Foods Kokiri and Westfleet Seafoods. Westland Milk Products and Silver Fern Farms are responsible for employing hundreds of people in Hokitika, which supports families to earn a living wage. Mining on the West Coast has dropped significantly in the last decade which has affected the number of jobs available and ultimately, the number of people in paid employment.

The West Coast thrives off tourism in the summer months, therefore tourism operators, hospitality staff and businesses and retail outlets are affected in quieter months and as a result of the novel Covid-19. Additionally, the nature of the farming industry is indicative of constant change in the community and employment, as once a year many farm managers and share-milkers often pack up and move towns for better opportunities (44). Whilst farmworkers and seasonal workers may be earning money, the tourist hot spots (such as Franz Josef) are located away from main towns where there are supermarkets which therefore affects accessibility to food and food aid if there is lack of money to purchase food.

The West Coast has several food banks, and informal community support networks to assist people in need of food to feed their family. The types of support include traditional food parcels, food vouchers and shopping for food in a food bank using a points system. There are many organisations, agencies and education settings supporting people informally as required.

The West Coast has no regular public transport to support people who cannot drive or transport themselves. There is the option of a taxi, however these are inaccessible for people who live rurally, or who are on low incomes. Countdown in Greymouth deliver grocery orders for $14 (over $80) or $9 (over $200). There are two Work and Income (Ministry of Social Development) offices in Westport and Greymouth and Heartland Services in Hokitika. Many services are now available online or by telephone; although people who are food insecure are less likely to be able to access internet or have phone credit, or access public services due to lack of transport.

1.6.2 Who is likely to experience food insecurity on the West Coast?

On the West Coast, more than 10% of the population live in households categorised as quintile 5 which based on this alone, indicates that food insecurity is present on the West Coast within our community (45). The Ministry of Social Development offer services to support the development of people and communities. Work and Income, a division of the Ministry of Social Development, specifically support people who are unemployed, require supplementary income, or people in need of financial help in times of hardship. On the West Coast, there are two offices (Westport and Greymouth). As at December 2020, 3026 (9.5%) West Coast people were supported by main benefits which are jobseeker, sole parent and supported living payments (46). Of the total Māori population on the West Coast, 14% are receiving a main benefit (46). Additionally, Work and Income support people by providing emergency assistance for unexpected events or unforeseen circumstances such as emergency food assistance, a high power bill, a new fridge or medical care. These are approved on a case-by-case basis and are dependent on other support received and the individual circumstances such as income and living situation. In the New Zealand Health Survey, more than half of the food insecure group received a benefit and more than three-quarters of those experiencing food insecurity lived in a rented house (12). More than two-thirds of those who were food insecure reported a gross household income of ≤$50,000 (12).

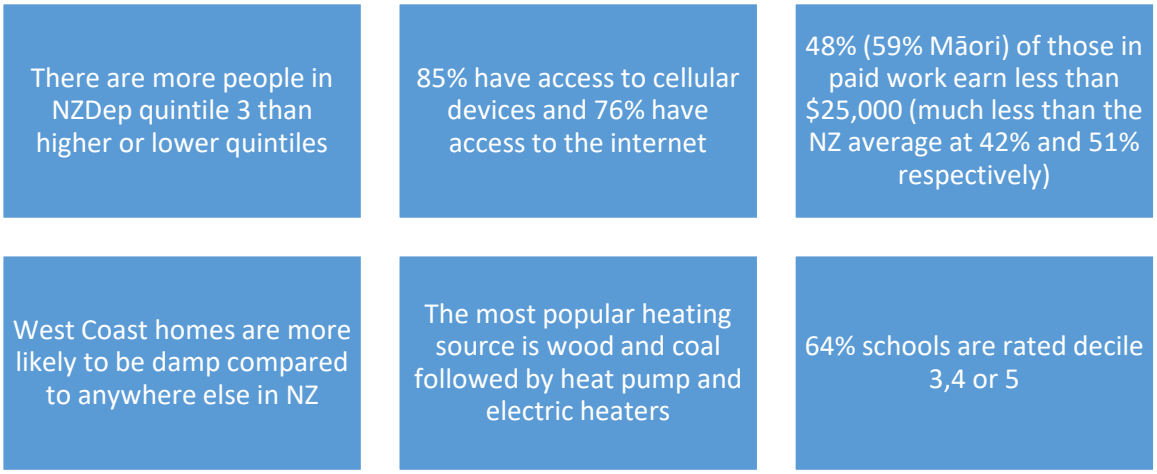


Figure 2: A story of our region. Data sourced from Statistics NZ, West Coast District Health Board and Ministry of Education.

1.7 A note about Global Pandemic - Covid-19

The first case of Covid-19 was reported in New Zealand on 28 February 2020, and on 25 March 2020 the entire nation entered a level four lockdown for 33 days in an attempt to eradicate the virus and save lives (47).

The declaration of a global pandemic affected the food supply, and certainly affected the accessibility of a variety of products which disproportionately impacted people on low incomes (48). People who are food insecure, or are on low incomes may shop more regularly as they cannot afford to purchase food in bulk. It was reported that many people who presumably could afford it, were 'panic buying', and there were instances that budget or no-brand products were unavailable to those who relied on their existence to feed their family (49, 50). Essential items such as toilet paper became a delicacy, and were largely inaccessible for a period of time. This would have undoubtedly placed families in a worse situation than before (49, 50).

Additional support was available from the Ministry of Social Development to people living in New Zealand throughout this period, and other agencies (such as food banks) became very creative about how they provided support to people (51). Virtual support was provided and parcels or food vouchers arranged, alongside other necessities such as coal and wood on the West Coast. Many agencies reported that they worked together more to support the community throughout this time. Manaaki 20 was set up by Te Pūtahitanga o Te Waipounamu to support whānau ora organisations to continue thriving in challenging times (52). Poutini Waiora (West Coast) received some support from Manaaki 20 in order to support them to continue their meaningful mahi on the West Coast, boosting food security for whānau. Manaaki 20 also has a PUNA emergency fund, which any whānau can apply for to get some support to pay essential living costs in the current climate.

2.0 He Kai Kei Aku Ringaringa: Food insecurity of the West Coast - Te Tai o Poutini Research Project

2.1 Background to this research on the West Coast

Community and Public Health (a division of Canterbury District Health Board) employs Health Promoters working in a range of fields relevant to their expertise or community need at any given time. Nutrition Health Promoters were working on many projects, including the delivery of nutrition programmes Appetite for Life and Cooking Skills and were aware that budget was a significant factor in food choice and offered many tips and supportive messages to 'help people eat well on a budget'.

For the Nutrition Health Promoters it was confronting to realise that many people in the community were unable to purchase food at all, let alone healthy food. The recipes that were meticulously planned to cost $2/serve were met with comments such as 'we would have to save for that' and distressed community members. It was following one of these sessions that the issue and academic definition of Food Security was raised.

Following initial conversations, a very small group of interested people met for the first time. This group consisted of health promoters, dietitians, West Coast District Health Board Planning and Funding and a couple of community champions. The first year of meetings consisted of exploring the literature and meaning behind food security and discussing what was being observed and how it fitted together with the reading and learning we were doing.

In 2016, Community and Public Health (CPH) commissioned a literature review on food security interventions in New Zealand, which guided the small working group to investigate the problem of food insecurity on the West Coast. In 2017, twenty-eight participants took part in a three hour workshop at CPH, facilitated by Dr Cheryl Brunton (West Coast Medical Officer of Health). The participants came from a variety of backgrounds and organisations and included social workers, food banks, supermarket owners, NZ Police, community champions and iwi (53). The discussions and responses at the workshop indicated that food insecurity was indeed prevalent and widespread on the West Coast, particularly for people on low incomes, single parents and the elderly and mostly illustrated by limited availability and unaffordable prices (53). Food insecurity was evident by the poor quality of food choices and the demand for food aid (53).

Following the workshop, a larger working group was composed and featured several people offering different perspectives. Regular meetings took place, and eventually a structure was found and trialled to support initiatives and progress in this area. In 2019, Dr Cheryl Brunton who also worked in an academic role at the Department of Population Health, University of Otago – Christchurch discussed the issue of food insecurity on the West Coast with her colleague Christina McKerchar. Christina and Cheryl with input from Jade Winter who was then in a Nutrition Promotion role for CPH worked together to submit a funding application to research the issue of food security

on the West Coast in more detail. This application was approved and research work began in June 2020.

This project entitled He Kai Kei Aku Ringaringa, Food security on the West Coast Te Tai o Poutini has the following aims:

1. To understand the lived realities of those experiencing food insecurity on the West Coast and how this impacts on their health
2. To identify organisations who support those with food insecurity on the West Coast, or are part of the food supply, and explore how these groups can work collaboratively to enhance community food security

2.2 Study design

The research was carried out in three different phases: Firstly in order a mapping exercise was carried out to identify services and agencies that support community food security on the West Coast (Haast to Karamea). The mapping also included an email survey to schools and other education providers on the West Coast. This mapping was ongoing throughout the project and the results of this are written in chapter 3.

Secondly in order to understand the lived experience of those living with food insecurity on the West Coast, key informant interviews were carried out with people who were or had past experience of food insecurity. Focus groups and key informant interviews were also held with partner agencies who work with those experiencing food insecurity. Additional key informant interviews were also held with four people working in education settings.

The third phase of the project was reporting back the findings of phases 1 and 2 to agencies on the West Coast, in order to invite feedback on how community food security on the West Coast can be enhanced.

2.3 Participant interviews

Ethical approval, category A, was obtained from the University of Otago Human Ethics Committee (20/053). Recruitment began immediately following notification of ethical approval.

All participants were provided with an information sheet (Appendix 1) which was verbally explained as well as provided in writing. If the participant was satisfied with the information provided and the study description, a consent form (Appendix 2) was provided to verify that they had read and understood the information sheet, understood what the study was about and that their participation was voluntary, and that they could withdraw at any time with no disadvantage to themselves. Participants were excluded from the study if they did not give informed consent, or if they changed their mind at any time.

In order to recruit the key informants, a Research Assistant (JW) met with several agencies working with people to introduce the study, and the context of its relevance to their profession and clientele. This led to advertisement of the study among the consumers of their service and wider colleagues. Additionally, the study was advertised on Facebook, on the 'West Coast Community Noticeboard' Facebook page.

Inclusion criteria were people living on the West Coast who were currently, or had previously, experienced food insecurity. Prior to recruitment, potential participants received a phone call in order to introduce the study, collect demographic details and determine their level of food insecurity. The brief questions and conversation included the food insecurity questions used in the New Zealand Nutrition Survey (12). All of those who received a phone call and initial screening were included in the study.

Key informant interviews took place in various locations depending on where the participant lived and their situation. The interview locations included Homebuilders Greymouth, Presbyterian Support Greymouth, Poutini Waiora Greymouth, Number 37 Community House Westport, Heartland Services Hokitika, in the participants home and via Zoom videoconferencing. Ten participants were interviewed with consent for the purpose of this study.

Initially, the interview time consisted of meeting and building a rapport with the participant, offering them refreshments. The study was further explained and participants were given an opportunity to read the information sheet and have any questions answered before they gave informed consent. Consent was sought to audio-record the interviews. Eight interviews were recorded and two participants declined to be recorded therefore notes were taken. The duration of the interview ranged from 15 minutes to over one hour and this was guided by the participant. The recordings were securely transferred to a laptop and submitted to a private transcription service, or alternatively were transcribed by CM or JW.

The interview prompts were written by the research team and based on the assumption that the topics discussed would depend on the situation of the participant and what they were willing to share with us. Prompts included but weren't limited to: household situation, transport, living on the West Coast, shopping for food on the West Coast, price of food, strategies used to make food last, seeking help, programmes in schools, experiences seeking help and looking to the future.

As a koha (token of appreciation), participants of this study were offered a $30 grocery voucher on the completion of their interview. This was either given in person, or posted if the participant was interviewed via Zoom. Participants were asked if transport was a barrier to the participation and petrol vouchers were provided to many so that their participation did not affect their financial situation.

2.4 Focus groups and agencies

Several organisations and community leaders were contacted by telephone or email and provided a brief outline of the study and the context of its relevance to their field of work, client base and enhancing the health and wellbeing of the wider community. The aim of the study was discussed, as was the time and energy commitment required from participants. Information sheets were provided to allow for discussion amongst colleagues and manager approval if necessary. Focus group participants were offered a koha of a $30 grocery voucher on the completion of the focus group.

Focus groups took place in Greymouth (Municipal Band Hall) and Hokitika (Heartland Services). A total of nine participants took part in a focus group.

Focus groups ran for 1-1.5 hours and were facilitated by JW and CM. One researcher took responsibility for leading the facilitation and prompting participants, whilst the other filled the role of the note taker. The role of the note taker was to ensure the digital recorder was working and to record interactions such as body language not captured by the recorder. Prompts were used to assist with the flow of discussion and to draw on the knowledge and experience of participants for the purpose of this research. .

The focus group prompts were written by the research team and based on the assumption that the topics discussed would depend on the situation of the participant and what they were willing to share with us. Some of the prompts were used less than others, however were a useful tool in ensuring data saturation. The prompts included but weren't limited to: services provided and the coverage their service provides geographically (e.g. Hokitika, or Karamea-Haast), typical client base, referral/self-referral rates, support offered, capacity-is it sufficient, barriers to people accessing support and ideal scenarios.

2.5 Organisation interviews

Four organisations working directly with people experiencing food insecurity were unable to attend the focus groups and alternatively agreed to be interviewed. The research team were flexible in the way in which they gathered data because of the unique geographical distance between towns and inability to conduct a focus group in Westport and South Westland.

The prompts used for these one-on-one interviews were the same as the focus groups and were digitally recorded or notes were taken. At the conclusion of the focus groups, participants were acknowledged for their contribution to the study with a $30 grocery voucher.

2.6 Education settings

Four people working in education settings participated in key informant interviews and these were transcribed and coded. In addition, thirty-five schools and seventeen early learning centres were sent an email introducing the study and explaining its relevance to their goals and purpose in the community. Schools are arguably the heart of the community, particularly on the West Coast where there are many rural schools which therefore give the teaching staff more of an opportunity to get to know their whānau. The email addresses for the schools and early learning centres were obtained from www.educationcounts.govt.nz.

The questions consisted of the following:

- How many pupils do you have on your school roll?
- What decile is your school?
- Does your school receive Fruit in Schools, Milk in Schools, KidsCan, breakfast in schools or any other support?
- What do you see on a daily basis in terms of food accessibility and poverty?
- Does your school have a garden, or fruit trees and how are these utilised?
- Finally, what would be useful for your school in this kaupapa? Are there any programmes that you think you need (like Fruit in Schools) that your school is not eligible for etc?

Early learning centres were asked the following questions:

- How many tamariki are on your roll?
- Do you provide kai or do tamariki bring their own lunch?
- What do you see on a daily basis in terms of food accessibility and poverty?
- Do you have a process for supporting whanau who are struggling to make ends meet and therefore feed their children?
- Does your centre have a garden, or fruit trees and how are these utilised?
- Finally, what would be useful for your centre in this kaupapa?

The schools and early learning centres were also asked if they would like to receive a copy of the final report. All of the responses that were received were entered into an excel spreadsheet.

2.7 Analysis

2.7.1 Focus groups and interviews

Data was analysed inductively where themes are derived from a close reading of transcripts. The following steps recommended by Green and Thorogood (2014) guided a thematic content analysis (54).

1. Familiarisation of the data (by re-reading transcripts and listening to recordings)
2. Identification of codes and themes
3. Coding the data
4. Organisation of codes and themes using thematic analysis to draw key themes from the data

Initial coding was shared between JW and CM and then discussed in the meeting to ensure that coding was an accurate perception and true reflection of the data. From here, final coding was completed and data was organised into themes.

2.7.2 Education settings

Responses received from schools were copied and pasted into a Microsoft Word document and collated by JW once data collection was complete. The four key informant interviews were coded and their responses were combined with the survey results.

2.8 Dissemination of findings hui

The final data collection phase consisted of facilitating a dissemination of findings hui. The purpose of this hui was to:

a) Give a background to food security and the study
b) Inform key organisations and partner agencies (some of which participated in interviews or focus groups) of the initial findings gathered from the research thus far
c) Seek input and gather feedback in order to develop final recommendations

Invitations were sent by email to approximately thirty people from various organisations. The people were selected based on their engagement thus far in the study and their interest in food security with full consideration that many would not be able to make it due to time constraints, geographical location and inability for the work to fit the scope of their role.

The hui was held in Greymouth in December 2020. In order to give background to and discuss the study, a PowerPoint presentation was used. Notes were taken on paper whilst the facilitated discussion and korero took place, to capture the valuable feedback and suggested direction from those who attended. Catering was sourced from a local supplier to nourish and thank those who gave their time to attend.

3.0 Initiatives that support those who are experiencing food insecurity

The following chapter presents the results of a review of initiatives at both national and local levels that support those who are experiencing food insecurity. Both national level initiatives such as funding available through the Ministry of Social Development as well as community based very local initiatives are discussed.

3.1 National initiatives

There are many government and charitable initiatives taking place nationwide. These include funding allocations, projects and charities all working towards food security for everyone in New Zealand.

In addition to the standard support available, in response to Covid-19 the Ministry of Social Development is investing $32 million over two years to support foodbanks, food rescue and other community organisations in order to support them to continue reaching those who need food (55).

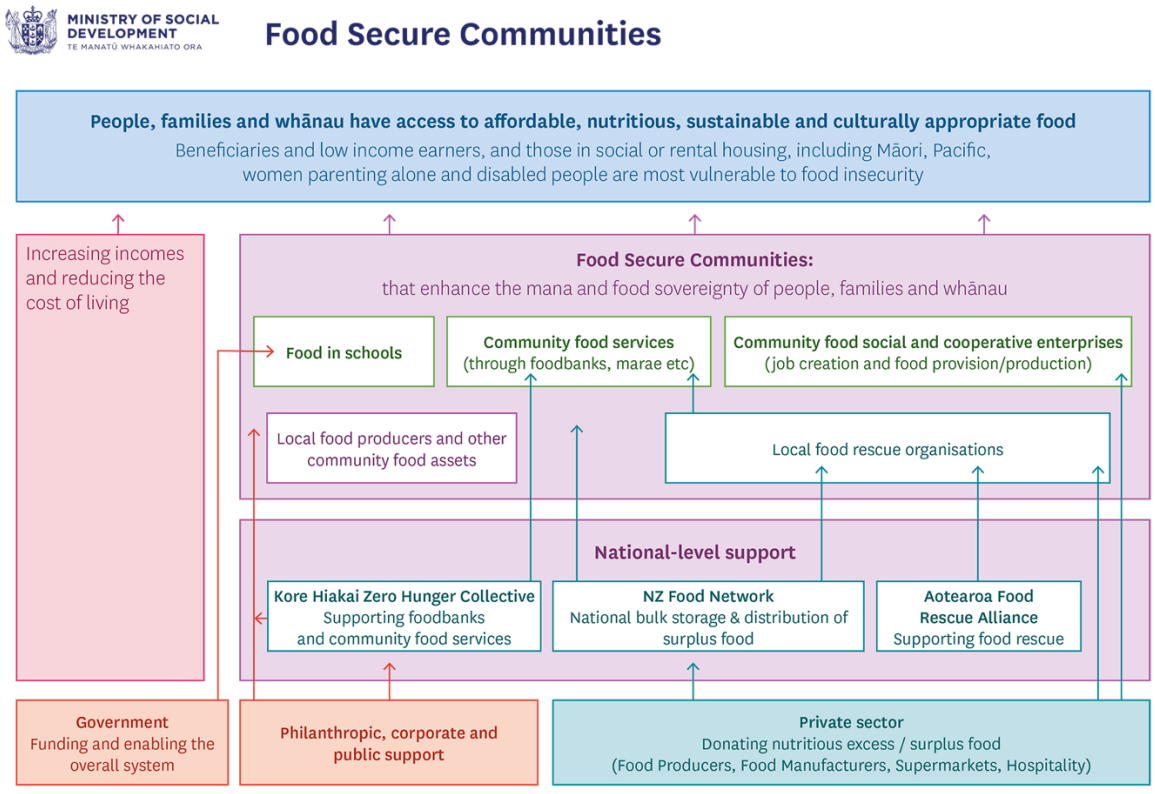


Figure 3: Food Secure Communities sourced from Ministry of Social Development

3.2 Income support

There are two Ministry of Social Development offices on the West Coast, in Greymouth and Westport. Additionally, there is a Heartland Services office, a rural initiative to connect rural communities to government agencies, in Hokitika. Work and Income support people who are experiencing food insecurity in various ways, including main benefits, temporary additional support, disability allowance, winter energy payment and accommodation supplement (56). Temporary additional support is a weekly payment, usually for 13 weeks, to support people who do not have the resources to pay for their essential living costs (57). Although temporary additional support is the primary mechanism for emergency food grants and payment cards, there are other benefits available (such as the winter energy payment, accommodation supplement, childcare support and disability allowance) to offset other costs therefore indirectly increasing the amount of money available to spend on food.

Despite 19% of New Zealand children living in food insecure households, just 10.5% of families reported using food grants or banks (14). Families living on means-tested benefits are more likely to be food insecure than those who are not (14). The number of families living on the West Coast and receiving main benefits has increased and therefore it is likely that food insecurity will increase (46).

Table 1: The change in how many people received Temporary Additional Support (includes Emergency Food Grants) by district, regionally and nationally

	2019-2020	2020-2021	2019-2021
West Coast Region	18%	5%	24%
New Zealand	19%	15%	37%
Buller District	24%	-6%	17%
Grey District	12%	5%	17%
Westland District	22%	36%	65%

Table one illustrates the increase or decrease in the number of people receiving Temporary Additional Support (TAS) from Work and Income (57). TAS is a short-term helping hand for people struggling to pay for essential needs (57). People do not have to be receiving benefits to be eligible for TAS, although it is income-tested (57). In the last two years, the number of TAS grants received in New Zealand has increased by more than a third and in Westland, there were 65% more TAS grants received (58). Buller and Grey district have both increased by 17%, lower than the national average. A contributor to the dramatic increase for Westland could be the loss of work whilst tourist activity was impacted (59). The Westland District is composed of the Glacier townships which are responsible for employing hundreds of people to facilitate tourist activity and accommodate tourists (59). These enterprises suffered during the Covid-19 pandemic.

Table 2: The change in how many people receive Main Benefits by district, and nationally

	2019-2020	2020-2021	2019-2021
New Zealand	8%	18%	28%
Buller District	0%	6%	6%
Grey District	8%	12%	22%
Westland District	1%	19%	21%

Table two displays the increase or decrease in the number of people receiving main benefits from Work and Income. Note that main benefits include Jobseeker Support, Sole Parent Support and Supported Living payments. From 2020-2021, main benefit payments increased nationally and in all West Coast districts. It is interesting to note that the number of people receiving main benefits in the Westland District increased from an increase of 1% in 2019-2020 to 19% in 2020-2021. This reflects the impact of the change in the job climate following the pandemic.

3.3 Schools initiatives

3.3.1 Ka Ora, Ka Ako healthy school lunches programme

In response to food insecurity and to New Zealand's high levels of child poverty, in 2019, the Government announced a two-year initiative to explore delivering a free and healthy daily school lunch to Year 1–8 (primary and intermediate aged) students in schools with high levels of disadvantage. Initially the programme was a pilot, however in 2020 the programme was rapidly expanded due to the economic impacts of Covid-19 (60).

Schools either choose lunches from an external supplier or can make the lunches 'in-house' depending on what works best for the school and their community. There are nutrition and food safety and food waste guidelines for schools that participate in the programme. Lunches are provided at a maximum 'per child, per day' cost of $5 for students in Years 1–8, and $7 for students in Years 9+ to reflect the larger portion size required for older students. As of March 2021, 8 schools in the Grey and Buller Districts were participating in this initiative (60). According to the Ministry of Education

> *"A range of factors are considered when selecting schools and kura to take part. The main tool used to determine the socio-economic barriers present in a school's community is the Ministry of Education Equity Index. This looks at a full basket of factors in a child's life, not any one factor, to understand the socioeconomic barriers present in a school's community. For example, family circumstances, income, number of home and school changes, and more. School deciles are not used as a measure of need"* (60).

3.3.2 Fruit in Schools

Fruit in schools is a government-funded initiative providing fruit to low decile (1 and 2) and schools and year 1-8 children only (61). United Fresh manage the initiative and 5+ a day produce resources linked to the curriculum to support learning objectives (61). As of 2021, 561 of New Zealand's lowest decile schools receive fruit, reaching more than 124,000 students (61). In a report released in 2018, the benefits reported by principals included fewer sick days, increased concentration, better behaviour and generally healthier pupils (62). A 2015 school decile rating review meant that less schools on the West Coast were eligible for Fruit in Schools, with no schools now eligible however seven schools do still receive it (63, 64).

3.3.3 KidsCan

KidsCan was founded in 2005 and aims to help children impacted by poverty in New Zealand (65). KidsCan accepts donations from people and businesses willing to support children with basic needs (65). Low-decile schools and low equity index Early Learning Centres around New Zealand apply for support, specifying how many tamariki would likely benefit from support (66). School aged children (year 1-13) receive a fleece lined jacket for every child, shoes and socks for students who need

them, food for those who need it and sanitary products (66). Early Learning Centres receive a fleece lined jacket, shoes and socks, nit treatment, daily fruit and a cooked lunch for each child (65). KidsCan supports schools with a decile rating of less than four, but is flexible in their approach that if there is need, and staff to implement the programme then they will supply what is needed (65). Six schools on the West Coast receive support from KidsCan (65).

3.3.4 Milk in Schools

School children in New Zealand received free milk in schools from 1937-1967, and this was revived by Fonterra in 2013 after a successful pilot programme in Northland (67). In 2017, free milk was provided to 70% of primary schools and reaching more than 140,000 children (68). A study completed in New Zealand examined the difference in growth and bone health in children aged 5-10 years old attending schools participating in milk in schools and revealed that while weight and height trajectory was the same in both groups, bone health was significantly improved in children participating in the programme (68). Additionally, children attending schools receiving free milk were more likely to achieve the recommended daily intake of dairy on weekdays (68). At the end of 2020, Fonterra announced the Milk for Schools programme would discontinue to allow expansion of the KickStart breakfast programme and additional donation to the New Zealand Food Network to distribute dairy products to food banks and charities (69).

3.3.5 KickStart Breakfast programme

KickStart breakfast programme is a community partnership between Sanitarium, Fonterra and the New Zealand Government (70). Launched in 2009, the programme initially invited decile 1-4 schools to take part (70). In 2013, the New Zealand Government began supporting the programme which led to the inclusion of all schools-regardless of their decile (70). In 2019, more than 1000 schools were feeding tamariki a nutritious breakfast as a result of this programme, and in 2021 the programme aims to reach all decile 1-5 schools (69, 70). The simple application process is completed online by a senior administrator or principal of the school and requires little more than the details of the school, when they intend to begin the programme and for confirmation of adequate storage space, utensils, cutlery and serve ware (71).

3.4 Food Rescue and Food Banks

3.4.1 New Zealand Food Network

The New Zealand Food Network (NZFN) is a not-for-profit organisation collecting surplus bulk food from growers, producers and wholesalers around New Zealand and distributing it to people who need it most (72). NZFN stores the food in chillers, and distributes it to local community food hubs as and when required (72). Food hubs consist of food rescue, food banks, community agencies and iwi working directly with people experiencing food insecurity (72). There are 46 registered food hubs in New Zealand, with 22% of these in the South Island (73). There are currently no food hubs registered with the NZFN on the West Coast (73). The NSFN works in partnership with Kore Hiakai Zero Hunger Collective, Aotearoa Food Rescue Alliance and the Ministry of Social Development (72).

3.4.2 Kore Hiakai Zero Hunger Collective

Kore Hiakai Zero Hunger Collective is a collective of six agencies (Auckland City Mission, Wellington City Mission, Christchurch City Mission, Salvation Army, Vision West Community Trust and The New Zealand Council of Christian Social Services) who have partnered together to bring about change (74). The Collective describes Food Security as a “wicked” problem, requiring a two pronged approach: people need food, but there is a need for long-term solution (75). The website has a comprehensive map detailing the location of food banks, pātaka kai, community supermarket/fruit and vegetable co-op, community meals, food rescue and community garden/māra kai/orchard/food forest (76).

3.4.3 Aotearoa Food Rescue Alliance

Aotearoa Food Rescue Alliance is a support network for food rescue organisations, food banks and community food services in New Zealand to help them to build their capacity and capability (77). Their work is evidence based and driven by a robust action plan comprising four main points: collaboration, best practice, capacity building and advocacy (78).

3.4.4 Kiwi Harvest

Kiwi Harvest works with a range of food businesses including supermarkets, cafes and wholesalers to rescue good food that they are unable to sell (79). Kiwi Harvest is part of the Aotearoa Food Rescue Alliance, and save more than 170,000 kilograms of food from going to the landfill each month (79). Kiwi Harvest distributes food by partnering with various organisations and community groups including food banks, marae, churches, kura and schools, kōhanga reo and kindergartens, youth groups, elderly services and other food hubs providing similar services (80). Currently no organisation or community group on the West Coast receives food from Kiwi Harvest.

In addition, there are other initiatives designed to take the pressure off whānau such as free period products in schools, healthy school lunches, free/cheaper medical appointments for children and winter energy payments (81).

3.4.5 The Food Bank Project

The Food Bank Project was founded in 2015 when the Salvation Army, Countdown New Zealand and Lucid (a design company) joined forces and created an online store where you can make a donation, by way of selecting specific grocery items or packs, or monetary amounts (82). Donations made on the website are delivered to Salvation Army foodbank hubs in selected areas (82). Currently in the South Island, there are four Salvation Army foodbank hubs receiving donations (83). The website has a list of the items most needed at any given time, and options to support specific situations, for example a period pack, or lunchbox pack (84).

3.4.6 Koanga Kai

Koanga Kai is fund established in 2021 available to whānau Māori through Te Putahitanga o Te Waipounamu, the South Island Whānau Ora Commissioning Agency. It enables whānau to apply for funding to support them with both resources and expertise to establish a mara kai (garden), and other food related activities that enhance food sovereignty.

3.4.7 Community Initiatives

In an attempt to respond to a serious and ever-growing issue, the New Zealand community and government is responding in various ways. There are many initiatives of varying scales running in an attempt to support people who are food insecure, however these are typically a ‘response’ rather than proactive step to reduce the risk of food insecurity or prevent it from occurring. There are more than 80 registered community gardens, excluding informal projects or those that have not been registered (85). These appear to be a combination of agency-led and community champion-led projects with varying success depending on the resource available.

Pātaka Kai is a resident led, grassroots solution to immediate and local need encouraging co-sharing of food via a community pantry, which may be located outside a member of the community’s house, or on the premises of a community group or agency (86). The idea of Pātaka Kai is that you take what you need, and leave what you can (86). The concept prides itself on having no forms to fill in, no criteria and no expectation of anything in return. It is human kindness and manaakitanga at its most raw- supporting fellow people to eat and live well (86). Community meals are present in many communities, being run by church groups, charities and community agencies. They are usually volunteer run, with food having been donated from retail stores and gardens.

Additionally, the ‘buy one give one’ model is popular because it allows people to give whilst also supporting their own needs. Eat My Lunch operates in Wellington and Auckland and is a ‘buy one, give one’ model, where consumers purchase a lunch to be delivered and for every lunch bought, a kiwi kid who would otherwise go without, also receives a lunch (87). The company was founded in 2015, and since, has provided more than 1.6 million lunches to children (87).

3.5 Commercial Suppliers of Food on the West Coast

Given the rural layout and population distribution of the West Coast, there are many food outlets. For the purpose of this section, ‘main supermarkets’ will be reported which do not include small dairy shops which are present in most small towns. It is assumed that most people living on the West Coast do not complete their ‘main shop’ at these stores, but top up as needed with essential items such as milk and bread.

Figure 4: Main commercial suppliers of food on the West Coast

3.6 Current Food Security Initiatives on the West Coast

The Food Security Network came together in 2019 to work towards a more food secure future for the West Coast. Network members include people from various organisations, agencies and community leaders with the same goal. There are four workstreams in the food security network: research and policy, food rescue and redistribution, community food supply and raising awareness of food security.

The Food Security Network has put together a list of food security initiatives happening across the West Coast. These are a combination of formal support systems, such as food banks and informal community initiatives such as free vegetables outside private properties. The ever-changing nature of food insecurity and each individuals own circumstances determine the cycle and continuation of these initiatives. Figure 5 details only a sample of initiatives.

Additionally, there are several food banks available to people living on the West Coast. Whilst some food banks are run in a traditional way, giving food baskets, others have adopted different, creative ways of giving. These include a grocery voucher which is based off how many people are living in the household and their age and a coupon system, where people go ‘shopping’ in the food bank with their coupons. The benefit to these systems is that they give people autonomy and choice, two powerful mechanisms of wellbeing often fragmented in people living with food insecurity.

Greymouth

Soup Kitchen
Family Start provide unsold food from Cafes to families needing food asssitnace
'Orchard of Legends'
Community Pantry
Whare Manaaki- community kai and cooking skills
Community members offering surplus fruit and vegetables

Reefton

Free soup and toast
Discussions around creating a foraging map
Community hub and garden

Westport

Te Hā o Kawatiri- Maara kai active
Gardening group and tutoring at community house
Food bank/City Harvest food rescue
Breakfast club available to school children

Hokitika

Community member doing childrens school lunches
Pataka Kai (community pantry)
Community garden at Lazar Park
Hokitika food & skills
Community members offering surplus fruit and vegetables

South Westland

School orchards- Heritage fruit tree project
South Westland Food Bank

*Figure 5: Food Security initiatives across the West Coast 2020/2021**

This information has been provided by Heather Allington and Rosie McGrath and compiled by the Food Security Network. Please note this list may be outdated at any time as initiatives change in response to their communities.

Please contact heather.allington@cdhb.health.nz to update with any changes.

3.6.1 Greymouth:

- Soup kitchen Greymouth – Wednesdays at Trinity Church 12-1:30pm
- Family Start receives some unsold food from local cafes as a donation to freeze and give to families as needed
- Incredible Edibles West Coast have an 'Orchard of Legends', Grey District Council supported this initiative. They also have vegetables and herbs to pick around town. Now need a new person to lead this
- Pataka Kai – community pantry at the Baptist Church
- Taylorville- a community member grows their own vegetables and has a free fruit and vegetable stand
- Whare Manaaki – multiple initiatives for food security starting up and community kai every second Sunday
- Old Karoro School community garden. Run by Māori wardens
- Salvation Army Food Bank: Tuesdays, Thursdays, Fridays 10-12. 768 5045

3.6.2 Arahura: Arahura Pa

- Presently there are three men who are supporting rangatahi to learn skills re gardening; white baiting; fishing; etc. Whānau are also motivated to start a Maara kai.

3.6.3 Reefton:

- Reefton church ladies provide free soup and toast on a Monday at the Area School during the winter months
- The Reefton Health Committee/Meeting has had discussions of developing a foraging map
- Who cares Reefton Inc Community Hub is starting up a community edible garden

3.6.4 Blackball:

- Heritage fruit tree grafting workshops held 2019/2020

3.6.5 Westport:

- Buller Food Bank/ City Harvest Food Rescue (now Food Bank Aotearoa)– aiming to come to the rest of the West Coast too.
    - Some of this goes to Buller Schools breakfast club
- Number 37 Potikohua House are supporting and teaching people to compost, raise seeds and build and maintain small gardens. A community garden has flourished

there following MSD funding from Food Secure Communities funding budget with a key community influencer and leader doing the mahi
- Te Hā o Kawatiri- Maara Kai garden is still very active
- Breakfast club – available for students from all schools (incl high school) daily.
- Salvation Army Westport

3.6.6 Granity:

- The Sharing shed is where people can drop off and pick up surplus food

3.6.7 Hokitika:

- Woven Hokitika (a volunteer makes lunches for children)
- Green Team Hokitika (involves DOC, Westland Milk, New World and various others).
  Although Food Security is not the current purpose of this group there may be some links
- Hokitika food vouchers: vouchers are now distributed to people requesting assistance
  The contact person is Jan Fanselow 0277178700
- West REAP Pataka Kai / pantry
- Edibles in planter boxes: Lazar Park

3.6.8 South Westland:

- School gardens / orchids – Heritage Fruit Tree project
- South Westland Food Bank. No longer using vouchers. Parcels of food based out of Franz Josef.
- South Westland Emergency Relief Fund (SERF). Provides emergency relief for South Westland Communities impacted by emergency events such as Covid-19. For example can provide petrol and food vouchers for families

3.6.9 Education Settings

Some West Coast schools have received the Healthy School Lunch funding from the government and started in 2021

- Some have fruit in schools and milk in schools
- Heritage fruit tree initiative in South Westland and some central schools
- Many Early Learning Services have edible gardens

4.0 The experience of household food insecurity on the West Coast

Ten people who were currently, or had previously, experienced food insecurity were interviewed. Nine of the participants were female and nine identified as being of New Zealand European ethnicity, while one participant identified as Māori. Seven of the participants lived in Greymouth, whilst two resided in Westport and one in Hokitika. Nearly all participants had dependent children living at home. The individual circumstances of each participant is described in Figure 6.

Figure 6: Participant characteristics

As discussed previously, each interview was transcribed, and then coded to identify common themes. The following themes were identified by participants in relation to their experiences of living with household food insecurity. They have been grouped

into two major themes ‘the struggle to make ends meet’ and “support and seeking help”.

In discussing their struggles to make ends meet, participants discussed juggling high living costs in relation to their household incomes, and especially the high cost of living on the West Coast. Many coping strategies were shared, however the impact on participants wellbeing including that of their children was also a matter of concern.

Participants discussed the importance of support networks in coping and also their experiences seeking help through either government or charitable agencies. Finally many suggested what kinds of supports would be helpful to them to alleviate food insecurity.

4.1 The struggle to make ends meet

4.1.1 Juggling high living costs in relation to income

The struggle to survive and pay bills associated with the cost of living was discussed by all participants. The high cost of accommodation in relation to income was a major factor for many.

> *“I have got a friend who gets about $220 from Work and Income a week. She pays $170 a week on rent, so you do the maths” Participant 10*

Many participants expressed that they had an ‘order of priority’ which was usually rent, utility bills and food. The dilemma of having a number of different costs, which were all urgent was identified by participants.

> *“Do I pay my rent? Do I pay my power? Or do I buy food? If I buy food and my power gets cut, I am not going to have anything to cook my food on” Participant 10*

> *“I remember times when you know we would be searching down the back of the couch for you know another $2 so that we could hopefully find the $20 we needed to top up the power so we wouldn’t have to wait another three days until payday….” Participant 1*

The amount of money available to spend on food was usually determined by external factors, such as how many hours they received at work that week, whether or not any unexpected costs such as school trips or additional heating was required, or the cost of the power bill.

> *“ you throw like wood in there…that has to taken out of the food be budget” Participant 2*

> *“My pantry is never well stocked. I have different money coming in from different sources at different times so do lots of little shops rather than big shops. Sometimes after the weekend there is little money left. Kids school lunches are a priority” Participant 9*

Other costs of living that impacted on the participants who had children, included clothing, haircuts and children's activities.

> *"My mum pays for the kid's haircuts and clothes. If my Mum didn't help the food budget would be even smaller. My accounts are often overdrawn" Participant 9*

> *"Do we eat healthy or do we fund the kids activities (dance and girls brigade)" Participant 7*

The cost of transport and maintaining a car were also discussed:

> *"That's one of the expenses of being poor, you know you don't keep your car in running standards because you can't afford to fix that tyre and you can't afford to get a puncture repair done so you're running on your spare and then your spare blows out and yeah…. It's just expensive" Participant 1*

Many noted that the transport costs of living on the West Coast.

> *"The cost of petrol is higher on the West Coast" Participant 6*

The amount of income a household received directly impacted the amount available to spend on food. Food insecurity affected participants who represented a range of different employment situations; from those who worked full time, to those who were not in paid employment due to family commitments or chronic illness/injury. The following section describes the different income situations for each of the participants interviewed. Figure 7 illustrates the income and employment status of the participants interviewed.

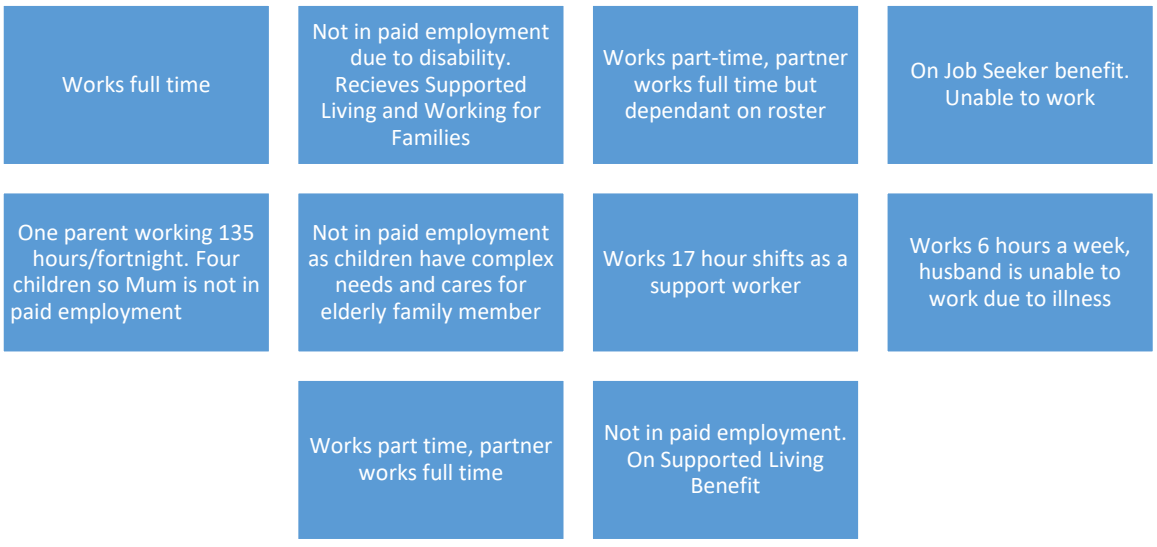


Figure 7: A snapshot of household income

Key informants discussed that to find and maintain appropriate employment is multifaceted and complex. Participants discussed situations of having a low household income despite being in paid employment.

> *"We are on a really low salary here. My husband had to take a lower grade job than what he should be on. He should be in managing a farm but he's actually on base level. I buy powdered milk because you can stretch it further, we live on a dairy farm, but because it's been winter we haven't been able to take milk, and also with this farm I don't know if we are allowed to take milk. Some farms and some farmers don't allow it" Participant 5*

In addition to low income the impact of working long hours was also discussed with one participant discussing their situation.

> *"It's been tough since starting a new job. I'm on minimum wage working 17 hour shifts (overnight) caring for four men" Participant 7*

Others discussed situations were members of their household were unable to work due to sickness or disability.

> *My partner has epilepsy due to head injuries and chronic regional pain syndrome… he can't work… Participant 8*

This participant also discussed working part-time in order to juggle parenting responsibilities.

> *I work part-time which is like six hours a week" Participant 8*

In addition to the difficulty of obtaining well-paid employment another barrier that was identified by participants was the cost of living on the West Coast including both the cost of food and the cost of transport.

4.1.2 The high cost of living on the West Coast

The logistics and expense of living on the West Coast was highlighted in the interviews namely the lack of choices in terms of food outlets and the cost of travel to purchase food. Many of the participants had lived in other parts of New Zealand and were able to compare their experiences of food shopping.

> *"When we were up in Marlborough sometimes Pak n Save would have apples for not even $1.00 a kilo, or broccoli for 50c or tomatoes down to 99c a kilo- you don't get that here. They just don't have the buying power" Participant 5*

Participants especially commented on the cost of healthy foods available on the West Coast.

> *"I find here living on the Coast is one thing I've found is that the cost of food is so much more expensive than living anywhere else. Especially healthy food. Primarily healthy food actually, meat, vegetables, fruit, anything like that is just, it is expensive to live healthily" Participant 8*

Participants identified that cost of food was associated with a lack of food outlets and a lack of competition. The supermarket 'Pak n Save' was mentioned by many participants as a cheaper alternative to other supermarkets which was not present on the West Coast. Participants also discussed a lack of specialist food outlets such as green grocers or butchers as impacting on the cost of food.

> *"Definitely not having a Pak n Save, not having any specific butcheries or fruit and vege shops here that does make a definite difference because yeah there's not the competition and, and I understand that because there's not the population base to create the competition" Participant 1*

> *"Fruit and vegetables are very expensive on the West Coast. There are no produce shops. I have lived in other parts of New Zealand and would buy a box of bananas for $5 and dehydrate them" Participant 7*

Participants identified the high cost of healthy fresh foods including fruit, vegetables, meat and milk as impacting on decisions around what to feed their children.

> *"Cheaper to feed my kids on junk food than it is to actually feed them vegetables and meat and stuff" Participant 2*

> *…vegetables, meat and the basics are actually really dear, and you don't really have the variety of going, going where the likes of Christchurch you can ger milk for $3 you know. So yeah it's expensive" Participant 2*

Some participants discussed that if they had to travel to Christchurch they would take advantage of the lower cost of foods and try and 'stock up'.

> *"I travel to Christchurch basically once a month for work and do two or three days over there and I go to the Heller's factory shop and down Marshlands Road to all the fruit and vege shops and I can get a week's worth of meat for 25-30 bucks whereas here I would spend 70 bucks" Participant 1*

Another participant who had family in the North Island discussed the cheaper fruit and vegetable prices in the places they had grown up.

> *"When we go up (to the North Island) I honestly stock up on veges and fruit up there and bring them back down just because it's (cheaper)…. But here it's like a delicacy, at one point a kg of feijoas was like $11.99" Participant 9*

Other participants who lived in Westport commented on the lack of a large supermarket in Westport and discussed that they found the Countdown in Greymouth often the cheapest option simply because it was the largest supermarket on the West Coast.

> *"Used to have to go to Greymouth so would go to Countdown, but in Westport its Fresh Choice or New World and they are both expensive" Participant 5*

Some participants also discussed that they had found food grants difficult to access on the West Coast.

> *"I've been on the Coast for five years now and it's definitely one of the most hardest places to locate food grants" Participant 3*

4.1.3 Coping strategies

In order to try and manage the high cost of food and feeding their families the participants interviewed all discussed a number of different strategies that they used including careful shopping and budgeting, and bulk buying when they could. Many had a very detailed knowledge of the price of foods in different stores and shopped in different stores for different items.

> *"I am a bulk buyer. I am somebody who will tend to go along to one supermarket and I will compare prices. So, New World seems to be cheaper for baking stuff like flour, sugar and so I will grab that from New World. And so, I will just compare prices and wherever is the cheapest, I will that get that item from there". Participant 10*

Others discussed using a calculator when shopping, and buying only essential items.

> *"Usually I take the calculator. And it's sort of like I'll just get everything that's absolutely necessary. And if once my budgets it's like everything else just gets left behind". Participant 10*

(Interviewer) "You just put it back?"

> *"Yeah exactly so yeah or I just, yeah sort of go well I've got the absolutely necessaries yeah". Participant 10*

(Interviewer) "Is there anything that you, you know that is still really necessary that you have to put back, you know do you find yourself in that situation where you're tossing up things?"

> *"Yeah exactly meat or blooming you know. And yeah and yeah it's a big concern because I worry about whether you're doing damage to your kids because you can't afford it. You know is it stunting or whatever, their development" Participant 10*

The high cost of meat was also raised by other participants and many tried to use only a small amount of meat in order to try to save costs.

> *I used to cook with a lot of meat because there is 6 of us, so we need a a lot of food but I have had to try and whittle it down – instead of using a kilo of mince try and use 700g instead because otherwise it just disappears too fast Participant 5*

Apart from only shopping for essentials many people discussed cooking meals that were made from cheaper ingredients or used items such as pasta to 'stretch' meat.

"One of my go-to cheap meals is budget pasta, baked beans, small amount mince and any kind of vegetable" Participant 9

School lunches were a particular concern for many mothers. Some had been in positions of having to wait to go shopping for school lunches once a payment had been made into their bank account.

There has been a couple of times I have had to ring the school and say my kids haven't actually got any food, I'll get my Working for Families at 10 in the morning, and I'll go to the supermarket and I'll run them some food as soon as I can Participant 5

Another coping strategy specific to the need to have food available for school lunches was baking from scratch.

So every Sunday is my bake day, Sunday I just spend the whole day baking …for the week but I mean I get in to it you know but still, and I try to make different things that there's treat ones in there but also like healthy ones in there too. That's for their lunches as well Participant 8

Limiting unhealthy treat foods in school lunches was raised by some parents interviewed.

"We don't buy much crap – I never buy biscuits, I buy those little chip packets that they have in their lunch and they get mother earth muesli bars. We had ice-cream the other day, for the first time in ages". Participant 8

Other participants noted that prepared meal options such as food from fast-food outlets were unaffordable for their large families. Another strategy used by many participants was hiding food especially snack or lunch food such as fruit from children.

"Yes, every second week we're struggling on our off weeks to make the food last weekly. I quite often have to pack my son's stuff in a bag and hide it in the room and allocate him so much food per day or else he'll just eat it all and then I've got nothing to feed him for the rest of the week." Participant 3

(Interviewer) "And your son's five?"

"Yeah".

It is clear that participants are putting a significant amount of time and energy into both shopping and budgeting carefully, as well as preparing food to try to provide enough food for their families. This placed a considerable stress on many of the participants.

4.1.4 Effects on wellbeing

The relentless struggle of trying to feed their families had a significant effect on mental and physical wellbeing. The toll on wellbeing was significant for all participants

It's draining to go to sleep one night and think to yourself – oh my god, shit, what am I going to feed us tomorrow with? You know? And you can't even sleep properly because all you can do it worry about that and you are moving around to and fro. You can't get to a proper slumber because it's always on your mind, you know? And it always comes down to the same old thing, feed the child and you starve.

Did you have days like that?

I had heaps of days like that. Multiple days where I would go along and I would cook a meal and I would feed my daughter, I would feed my husband and my husband would be 'are you having dinner?' and I would be, 'yeah, I ate dinner while you were out doing blah, blah, cutting wood or whatever'. But the truth was that I hadn't. Participant 10

There were many examples of parents going without food especially fruit in order to prioritise their children's needs. Others discussed their worries about the impact of a lack of food security on their children's health. They also discussed the impact of their children missing out on societal norms due to a lack of money to host events such as birthday parties.

Interviewer: Birthday parties?

We can't do them any more they are so expensive. *You still have children who are very upset that they don't get a birthday party. But now can't do them anymore because yeah you've got your food, presents, decorations. If you wanted to play games, because when they get to certain age, they don't just want to sit around and eat the food, they want to play games as well, so you've got to think about that and buy supplies for the games…Participant 5*

Another participant discussed their guilt as a parent in borrowing money from their adolescent children who had part-time jobs in order to pay for household expenses such as the power bill. This induced a fear that others would think they were unable to care for their children. The stress of copying with a lack of money for adequate food impacted many of the participants mental wellbeing.

"….I ended struggling for years; year after year after year. It did have its toll in the end, it caught up to me in the end" Participant 10

"I was constantly stressed. I have got depression triggers and one of them is transport and another one's money" Participant 1

Therefore due to food insecurity, many participants were going without basic foods such as fruit, and were also experiencing significant ongoing stress and worry, that in many cases impacted their mental wellbeing. Given this impact on wellbeing, the role of support networks both from family and government and charitable agencies is vital. The support networks of participants and their experiences in seeking other forms of support is outlined in the following section.

4.1.5 Support and seeking help

4.1.5.1 Personal support networks

As participants reflected on their experience of food insecurity, many expressed their appreciation for their own support networks and how they are able (or unable) to support them to live life well. Many will rely on family for support if they are able to, rather than seeking help from outside agencies.

> *"….support from Mum- she's really the only one that we asked for monetary support. My husband doesn't like to ask for help" Participant 5*

Others said that their parents, grandparents or friends helped them with additional costs such as haircuts and children's sports. Additionally, one participant commented on the additional expense of the school holidays, in particular that children are home and eating more food, so the family travel to their grandparent in order to cope with the extra costs. Some participants expressed feelings of guilt or shame in having to rely on family members.

> "*My family has helped out a lot. My Nana spends no money so helped out. I felt terrible asking her. It is nice not to be in that position anymore" Participant 9*

In addition to financial support some of the support provided was skill based. For one participant, her Mother was a budget advisor and had passed many of these skills on. However some participants had no local family support networks available to them on the West Coast. Participants who had no support network expressed their reasons which included not getting on with family members, having friends and family who themselves had no extra money or time to help, losing phone numbers of kind people that were helping them or leaving the North Island and all of their friends and family.

> *"On saying that it is really difficult when you don't know anyone. I mean up home we had family visit we'd like say have home kill and we could you know they'd drop us off some meat but here, no support" Participant 8*

Another issue raised was that if people had no phone, internet and transport due to having no money, the barriers to accessing help from anyone are large and insurmountable.

> *"I had no phone, no connection to friends, no transport so I couldn't go and visit anyone or anything like that so I was sort of very much alone" Participant 1*

Therefore when support from family or friends was unavailable participants sought help from outside agencies.

4.5.1.2 Experiences seeking help

Generally most participants described seeking help from outside agencies as a difficult experiences tainted with shame and stigma. Many described delaying seeking help due to the stigma associated with this.

"I hated it every time I would put off as much as I could ever going in there I didn't want to ask for help in any way shape or form because it just felt so condescending" Participant 1

"WINZ is a place you feel ashamed to go into. It is not something I like doing." Participant 9

In addition to delaying seeking support, many commented on dehumanising experiences once they decided to seek help. In some case's participants commented on their perception on interactions with staff.

"It's very demeaning. They look down on you. They talk to you like shit. They just think you're scum. And it's like you already feel shit enough" Participant 2

Participants conveyed their experiences of applying for support. While there was understanding from participants about the need to provide information about their financial situation many found the amount of documentation required excessive.

"They make you jump through so many hoops, and you've got to have all of your documentation with you every single time, even though they've already taken it off you like 10 times" Participant 5

Participants expressed that the timeliness for help is not always when they need it, with some people waiting 2-3 days, or in some cases up to five days for support from multiple services.

"You go in there genuinely needing help and they're like prove this, prove that, prove that. And then you've gotta go get bank statements and….it could be three hours later and then you might get it or "no you've gotta talk to my manager" ... and then I have to wait for a phone call. And sometimes you don't get that phone call for two/three days. It's just the whole system is just wrong" Participant 3

Others expressed their frustration at being asked how they might 'fix' a situation of not having enough money to pay for food.

"It's sort of a bit invasive really, it's like what can you do to fix this… I could try to do my groceries on more of a budget… well I am already budgeted out" Participant 2

Additionally, participants spoke about how their individual situation meant that although they were experiencing hardship, they did not qualify for income support. In this situation participants turned to loans.

"We are $50 over the threshold by getting any help from anyone. If we need to go to the Sallies we get declined because we earn too much and can't have a letter from Work and Income. It's a snowball and you just hope someone can lend you money….if worst comes to worst we will get our loan from DTR quite often" Participant 3

Another situation that was raised by one participant was the impact of gambling harm on the family.

"I wasn't on a benefit but my husband was gambling everything and I was sort of trying to feed the kids, but I didn't qualify for WINZ because of his income" Participant 2

However some participants had good experiences when they sought support. One participant acknowledged staff at WINZ generally did want to support people.

"*Most of the time they (WINZ) are pretty good and they do want to help" Participant 9*

Others commented on the significant difference an individual case manager could make.

"…the case manager who came up and called out my name and she smiled when she saw me and I had to say to her look I'm so grateful that you smiled because I, this was so awful, so hard to come in. And she seemed really surprised but I had to tell her that because I needed her to do it for other people too" Participant 1

Interestingly participants cited their concern for Work and Income Case managers, suggesting that their wellbeing is taken care of as often they appear 'jaded'. In terms of support from food banks or from WINZ, many participants found that they preferred having a voucher or card that they could spend at the supermarket. They found the card especially good, as this removed stigma as they were able to pay for groceries in a way that did not draw attention. While all participants welcomed food bank parcels and were grateful for any assistance, some struggled with their contents, particularly if they had not come across the ingredients before or did not have any basic ingredients already to turn them into a meal. For those adults who grew up in food insecure households and "grew up with nothing", lentils are unfamiliar and foreign and to receive them in an already stressful time stretches their mental and emotional resources further.

There were many positive accounts of asking for help, the majority fitting into one category: being treated with decency, understanding and as an equal member of society. Services offering pastoral care and resource to support people to navigate the system were valued by participants as it gave them the confidence to apply for the support available to them.

"they understand, yeah they actually understand and I mean they give with a different, you know when you're giving with love it makes a hell of a lot of difference than giving. They give from a different place and I believe that that comes from the tikanga… people working at Whānau Ora have walked real paths in life, and have in that experience and compassion" Participant 8

In addition to the human interactions with people working in support many participants were able to identify programmes and charities that they found supportive in alleviating food insecurity. Figure 8 summaries the various programmes and initiatives raised.

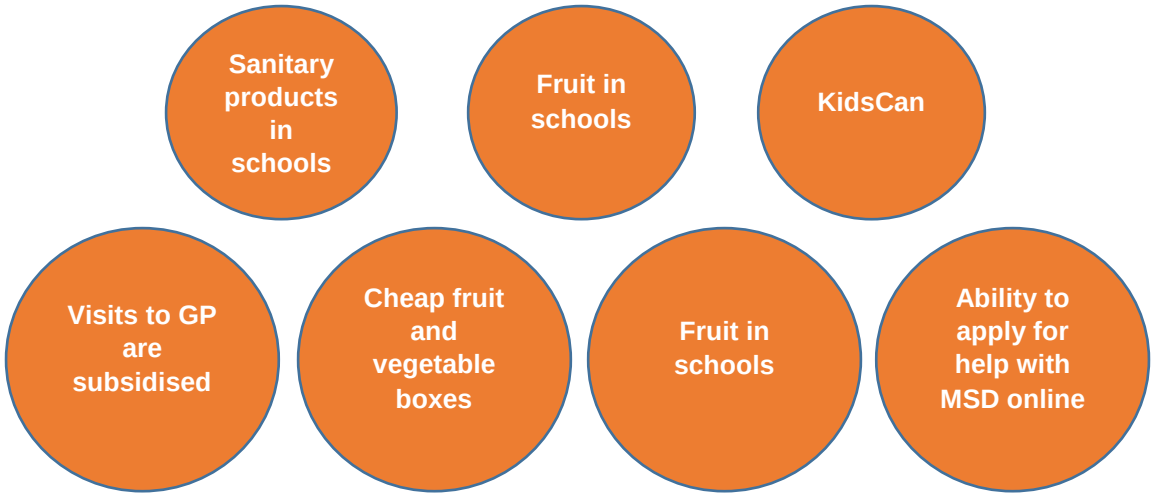


Figure 8: Summary of programmes and initiatives raised

4.1.6 Looking to the future

Having experienced the pain, trauma and stress of food insecurity, participants were able to give many recommendations and thoughts about the future and what is important and what would have been helpful to them.

Many participants commented that an increase in income would enable their household to afford food. One participant simply cited that her husband just needs to be paid more- living wage, not minimum wage, with another citing that benefits need to be increased.

> *"…well I think it would be good if you know there was an increase in benefit so that you know I could cover those extra costs (menstruation, extra food)" Participant 2*

Additionally, one participant thought the ages and stages of children needed to be taken more into account in terms of income support. Other government level change was suggested, in particular removing GST off fruit, vegetables and other nutritious essentials and putting a tax on junk food to make consuming a nutritious diet more achievable.

> *"…and it would be good if they'd take the GST or tax off likes of meat and vegetables and those healthy foods and put them on junk food. It's you know cheaper to give my kids coke or blooming fizzies rather than letting them have a glass of milk… it would take a great pressure off a lot of people.. just knowing they can feed their kids healthy meals…five plus a day… there's no way we could afford five plus a day" Participant 2*

Individuals also commented on the practicalities of feeding a family, suggesting that it would be nice if families did not have to think so hard about how they are going to 'attack' the supermarket. One participant suggested a programme could be set up where people come to a central place and make five meals for their family that they

could all put in the fridge and it would be cheap because everyone makes the same thing and there are bulk purchases of everything.

Additionally, empathy was shared for organisations trying to support those who are food insecure, with one participant saying that they simply need to be given more funding. Additionally, being given the makings for an entire meal is important as there often appears to be ‘bits and pieces’ and people are left wondering what they can do with limited ingredients. There are suggestions that being given a small food parcel and a voucher would be helpful as there isn’t usually fresh food given. Improvements to the current food bank system have been suggested, such as an online system to apply for assistance and drop off/pick up, which would remove the “struggle from start to finish” people experience with trying to access support during limited opening hours and navigating shame.

In schools and early learning centres, participants think that fruit and vegetable gardens are important, alongside lunch provision particularly on the days prior to ‘payday’, where bank accounts are often empty and cupboards are bare. Food waste and the frustration that much of the food waste on the West Coast is thought to go to the pigs came through in the interviews. One participant said that it would be good to set up a food rescue service to get foods unable to be sold or leftover from cafes and give it to people who need it.

4.1.7 Summary

To summarise all participants had experienced or were experiencing struggles to feed themselves and/or their families coping with high living costs, and especially the high cost of food and transport on the West Coast. Many had developed a range of different coping strategies and relied on a variety of supports. In spite of this many had experienced an impact on their wellbeing, especially mental health as a result. To alleviate the impact of food insecurity participants were forthcoming about a range of different strategies at both government and community levels. In the following chapter the results of focus group discussions with agencies who work with people experience food insecurity are presented.

5.0 Focus groups with Agencies and Organisations

As outlined previously, two focus groups were held with a total of nine participants, who represented a range of organisations that support those who experience food insecurity on the West Cost. In addition, four interviews were held with people who were unable to attend the focus groups in person either due to timing or travel constraints. The focus group and interviews were transcribed and analysed thematically and the results are presented in the following text. They are presented under two major themes, firstly 'the experiences of individuals and families' and secondly 'the experiences of organisations'.

In the first section about the experiences of individuals and families who seek help, the participants were able to share in detail about the complexity of circumstances individual faced, cost of living, and different employment situations. Similar to the key information interviews participants in the focus groups were able to comment on barriers faced by those accessing support and the impact on health and wellbeing.

In the second section on the experience of organisations, participants were able to comment on how they took cultural considerations into account, the impact of Covid-19, what is working well currently, and what would be useful in the future.

5.1 The experience of individuals and families

5.1.1 Complexity of circumstances

Participants commented on the complexity of the situations they are presented with and how they try to understand the reasons people are reaching out. It was acknowledged that every situation is individual, and there is no 'one size fits all' way of helping people; it comes down to understanding their needs. Participants commented that some clients had complex needs.

> *"We have clients who ring us almost weekly for help……some people twice a week….over and above their benefit…. their lives are really complex and challenging"*

> *"Some of the families have up to twelve agencies involved in their lives…."*

Participants discussed that clients include both people receiving benefits and those who are employed, particularly those receiving minimum wage or solo parents juggling part time work and childcare. They discussed that many clients were "incredibly resourceful people", however when they sought help they were in survival mode and needing resources to meet their whānau needs.

5.1.2 Living Costs

The high cost of accommodation was recognised by participants as impacting their client's ability to pay for food. Both focus groups and all interviews commented on the cost of living in comparison to income. Participants discussed that the unavailability of rental properties pushed accommodation prices up. Participants revealed that some of their clients were trying to feed their families on as little as $30 per week due to higher costs in accommodation and in other areas. The extra costs associated with utility bills such as power, telephone and wireless broadband were commented on by participants.

> *"There are families everywhere struggling to put food on their table. An unexpected bill makes it impossible. You might be able to get assistance afterwards- but what if you need it now?"*

> *"All they need us an unexpected bill… and power during the long winter. From what I know, it is normally power because they want to keep the baby warm, so what do you do?*

As a results of high expenses, participants discussed that it was easy for people on low incomes to get into debt, usually out of desperation. Participants commented on the lack of care and responsibility from the lenders, however it was acknowledged that there appeared to be less instant finance vehicles driving around low-socioeconomic areas compared to the North Island.

Additionally, there was commentary on the cost of food on the West Coast compared to Christchurch, and that many clients would "*scramble everything they've got to be able to go to Pak n Save you know to stock up, because we just haven't got cheap options".* Furthermore, significant price differences between districts and towns also featured in discussion and it appears that Greymouth is thought to be the cheapest place to shop on the West Coast.

Additionally, the participants discussed that in some cases clients are second or third generation beneficiaries. In these and other circumstances clients may not have had the opportunity to learn skills such as gardening, cooking and budgeting or have had the opportunity removed from them (i.e. renting a house whereby gardening is not permitted, or having no access to appropriate appliances or utilities to store food).

> *"I think it needs to start with the kids at high school. Start educating them… they may not be getting this at home because mum and dad don't know…. or mum and dad both work so they don't have time… so they learn this is how you manage your money, this is what you can do with food"*

Another major factor discussed by participants was the insecurity of paid employment impacting many clients.

5.1.3 Employment situations

Participants recognised that many of their clients experienced a lack of security in their work, whether it is seasonal, part-time, casual or in an industry that is unstable due to geological reasons or as a result of Covid-19. Clients also included people with stable jobs who are earning minimum wage are running out of money at the end of their pay period and are often requiring regular top-ups in order to provide their whānau with the basics.

> *"sometimes we've got even families that have two parents working and are still struggling on a day to day basis"*

According to participants, work is difficult to find on the West Coast and is made even more challenging if there are transport and childcare challenges to contend with. Recent legislative changes around tax and income related to white-baiting were raised as impacting some family's financial situation.

5.1.4 Barriers to accessing support

Participants shared a number of barriers they thought were preventing people experiencing food insecurity from receiving the support they need.

> *"I would say the ones we see regularly are not my concern. It's the ones who we don't see are the ones I worry about. Who are just trying to battle on and for whatever reason don't pick up the phone to say I need help"*

Participants recognised people might not seek help for a wide range of reasons; from stigma and discrimination, transport issues or unique to small communities where everyone knows each other, the feeling of embarrassment because they may be recognised;

> *"I'm working with a family whose father lost his job and they're kind of going well we have never been to work and income and we are not going to start now and they're going to give us this huge stand down and besides that I know the lady that works behind the counter that knows the neighbour across the road…."*

In addition, many people simply do not know that they may be eligible for support to help them through their situation, and may not know where to start. Some services provide advocacy and advice to support their clients.

> *It's almost like people think they have to be on a benefit in order to access Salvation Army for assistance, or to access… we really need to get something in the paper that talks about the fact that we're not just here for people who are not working"*

Participants commented on the feelings of judgement their clients face when their individual situations and circumstances are not treated with empathy and often leave people experiencing food insecurity feeling too scared to return to the service.

5.1.5 Effects on health and wellbeing

Participant responses were very clear: food insecurity affects health and wellbeing. The impact on mental health was raised by many.

> *"When there isn't enough food, you can become depressed and suicidal. I have helped people who have wanted to take their lives. They have showed me their cupboards and they are bare. You ask them what happened? They had to get wood/coal, pay a bill. For weeks and weeks, they have had other things that they have had to put before food"*

> "*The mental health team do a lot of referrals to us because of fluctuations in people's incomes and expenditure"*

The participants discussed that many clients experienced anxiety and worry about food insecurity. They especially acknowledged parents will be stressed wanting the best for children but being unable to provide. In addition, explaining to children why they cannot have what other children have in their lunchboxes impacts client's health and wellbeing. Some participants suggested addiction was a factor in why many clients sought support for food insecurity.

> *"I would say that the highest impact on individual or families ability to buy food, would be their addictions whether it's like an energy drink, or cigarettes, alcohol…"*

In addition the physical impacts of not being able to eat well and potential malnourishment and/or risk for developing preventable chronic illness was discussed. Significant the West Coast the access to appropriate healthcare and medicine was recognised as a factor impacting food insecurity. It was recognised by participants that people with complex, long term health conditions who are limited in their ability to work are inevitably trapped in a cycle of living on a low income.

> *"If you are on a benefit and you get sick or you get sick and you have to go on to a benefit, it is a huge drop in income"*

In addition, many clients would need to travel to Christchurch for treatment. It was recognised by participants that often travel grants for treatment in Christchurch do not fully cover the costs of leaving the household, arranging childcare and organising other affairs. Inadvertently, sudden or planned trips to Christchurch for medical treatment place a significant financial burden on the household.

Additionally, service providers were increasingly concerned about elderly people, and those who are isolated because they live rurally or with limited access to transport and/or communication.

5.1.6 Lack of support networks

Participants commented on their client's lack of support network and how this affects their ability to access support in several ways including financially, transport sharing, support with childcare, moral support and sharing of food.

> *"and they don't seem to have, the family backup "*

One participant commented on the importance of distributing food and meals through Age Concern, as there are many elderly people in the community who are unable to cook and as a result, are food insecure.

> *"Most issues around food for our clients are around cultural appropriateness and lack of social support. For example, one family got a fridge to be able to store fresh food, however they could not carry the fridge into the house and had no friends to call on. Who do they ask?"*

In the above comment both a lack of social support and the cultural appropriateness of support were raised. The experiences of organisations in providing support to clients are highlighted in the following section.

5.2 Experiences of organisations

5.2.1 Cultural considerations

A participant working for a Māori Health Organisation commented on the 400% increase in referrals they received and the high level of food insecurity experienced by Māori.

> *"Typically 20-25% of … clients are experiencing food insecurity. The Tamariki Ora nurses in particular see a large number of clients experiencing food insecurity and give food and extra help where possible"*

In order to meet this high level of need staff were flexible in their approach.

> *"if a whānau needs something… I am not going to say no because it still impacts on what I do anyway… we try and work ways around it and be more flexible and more focussed on the whanau than anything else"*

Examples of the support given include taking people to the supermarket in the car, and working to ensure they are getting all of the support they are entitled to. Māori health organisations are guided by the whānau ora approach in their work. This approach puts the whānau at the centre of their work. An example of this is many

whānau work closely with a whānau ora navigator who works with a whānau so that they can identify their needs and plans for the future and get support to work towards these.

> *"the families I work with they respond so much better and feel more empowered… a number of mothers I was working with….we had a whānau ora navigator work alongside them and they have started doing some study…."*

Participants also identified that another population group at risk of food insecurity are recent migrants and new comers to the West Coast. For example there is no halal butcher and if supermarkets stock halal meat, it often takes a high level of English literacy to understand the packaging. Produce, such as coconut and taro, is often unavailable and Asian communities find it difficult to eat traditionally because they cannot source enough fresh vegetables at a low cost.

In addition to cultural considerations the impact of Covid-19 on food insecurity was raised by participants.

5.2.2 Covid-19 impacts

Covid-19 impacted the wellbeing of most clients in some way. During lockdown clients found that children ate more increasing their grocery bill, whilst other household costs did not decrease because the family were at home.

> *"…with lockdown children being home, they're eating more so it's been really prevalent when I've checked in with families how they're doing… "*

One participant supported 1400 people during lockdown with food and grocery vouchers. The cancellation of community lunches took away the experience of valuable social connection and physical nourishment many clients looked forward to on a weekly basis. Participants also said that were forced to cancel counselling sessions, and assessing/counselling clients by phone/video call added a layer of stress to their lives. One positive outcome of Covid-19 is that agencies pulled together to ensure a coordinated approach which meant that clients were supported as best as possible during unprecedented times.

5.2.3 What is working well?

Participants expressed their joy at the current collaborations taking place and reiterated that lockdown was a 'blessing in disguise' in connecting agencies and inevitably learning more about each other. One example of effective collaboration is agencies being able to refer between each other to save the client from having to approach another service for support. Instead, the next service knows about the client's situation, reducing need for the client having to repetitively talk about their circumstances.

Some specific initiatives were also identified by participants as working particularly well. Participants spoke about how giving vouchers instead of, or as well as, food parcels worked well for both providers and clients as it gave them choice, and they were better able to utilise what was given to them. Additionally, one food bank is trialling a supermarket model, whereby clients are able to spend 'points' on various food items.

A gardening programme in Buller at a Community House is very well received by community members and is run by a person with significant passion, knowledge and generosity for the project.

> *"So our garden facilitator is very involved in sustainable living and so we do a lot of work… and a lot of that is growing your own food and he's a big believer in edible communities as well so we are now working on getting edible trees in the community as well…."*

As well as their analysis on what was working well, participants were also asked about challenges they faced in their work.

5.2.4 What is not working well?

Participants expressed concerns about if the organisations involved supporting those with food insecurity were reaching all those in need. There was concern that people might not feel they could ask for support.

> *"I think its empowerment of the families themselves so that they feel okay to ask for help and that there are ways out of where they are…. we are certainly not doing that… there is more to be done… it's not enough"*

There was also concern raised that if clients did seek support that the processes used were invasive and could potentially put people off seeking help.

> *"they won't use it as they feel they are being questioned and the process is quite rude and judgemental"*

In relation to food, and food supply the unsuitability of parts of the West Coast for growing food was acknowledged.

> *"the West Coast can be a difficult place to grow their own stuff"*

5.3 Looking to the future

It was acknowledged that food insecurity is a complex and multifactorial issue requiring many layers of consideration. There was also in the case of food insecurity experienced by Māori, a specific recognition by participants of the impacts of colonisation on Māori health inequity. As the below participant noted 'there is no one silver magic bullet'.

> *"There is no one silver magic bullet… I see a mesh of things. I would see the support to know how to cook things cheaply, what to get, an increase in incomes….also isolation and being able to access supermarket travel in the rain….increasing incomes is the way to go, but unless you know how to utilise that extra income in some ways it is not going to change the end result"*

Participants were asked specifically to share their ideas about what might work to build a food secure future for the West Coast. These ideas are listed below.

5.3.1 Community hub space

A community hub space, where cooking and gardening skills are available to learn. Community organisations all contribute to the running, funding and upkeep of this space. Ideally, there would be counselling and advocacy services available. Participants spoke about the importance of empowering whānau and the population level changes that need to occur so that people feel okay to ask for help, and know that there are ways to help them out of their situation.

5.3.2 Fruit and vegetable boxes

> "*bags of fruit and vegetables for I don't know $10-15. And with each of those bags each week would come a recipe, an easy recipe that you could do with some of the ingredients that were in there….. also, SuperGrans used to exist and they would go into homes and teach people to cook"*

Fruit and vegetable boxes with a recipe included, and people available to teach cooking and gardening in client own homes. There was discussion around the anxiety that community cooking classes may induce for some people, particularly those who are most vulnerable. Small groups, or individual sessions would reduce the shame and stigma, and work with the individuals cooking equipment at home, empowering them to continue and reassuring them that they had everything they needed to provide nourishing food for their families.

5.3.3 Enhancing community food security

> *"Without community food security the individual is reduced anyway"*

Participants experience of working with their clients filtered through in conversation and demonstrated a very comprehensive understanding of food security at a

community level, and how this impacts individual food security. There was acknowledgement of the geological risks on the West Coast, such as the Alpine Fault rupturing and susceptibility to extreme rainfall and road closures.

> *"My utopia would be having food grown in our communities for our communities... and for those accessing it to ideally provide some labour to grow it. So we are ticking a number of boxes. The worry I have is the Alpine Fault happening and we are on our own….. it's about our own community surviving"*

5.3.4 Community gardens

The food grown in communities were discussed and many voiced that in the ideal world, there would be fruit trees and vegetables grown in public places for the community to tend to and share. There was some commentary around ensuring all children in school are presented with an opportunity to learn gardening, and community gardens being an ideal platform for this.

> *"biggest long-term dream is that urban gardeners will be supporting people in the community with their gardens…kind of like a support worker"*

> *"I think in the ideal world the community gardens…you could put chooks there…good education for kids*

In addition community planter boxes were raised by one participant.

> *"there's another organisation called the Just Do It trust who will do up a planter box, put the soil in it, show you how to plant your silverbeet or whatever, and kind of walk alongside you"*

5.3.5 Food supply mapping

An organisation working with new comers to the West Coast mentioned that a food map detailing where to source ingredients (e.g. halal meat, fresh vegetables including exotic ones and organic food) and an updated directory of suppliers outside of the West Coast would support the Food Security for people of other cultures, who are trying to cook food to suit their tastes and cultural preferences.

5.3.6 Government level change

Participants emphasised the importance of government level change and the power held by people creating and enforcing policy and legislation. In particular, taking GST off fruit and vegetables was a popular topic among participants, many of whom believed that making healthy food available is the most favourable and effective route to take.

> *"I hear you know, talk of there being a sugar tax which to me is crazy, don't have a sugar tax have a subsidy on healthy food. Make healthy food more*

affordable… putting a sugar tax isn't going to help anything. Subsidise the healthy food"

A further example is reviewing policies and 'red tape' around the donation of home-killed meat to food banks, as there are many farmers and hunters on the West Coast who would donate if this was permissible.

5.3.7 Formal networking between agencies

"Covid-19 was a blessing in disguise as it forced agencies to talk rather than work in silos. Everyone connected…"

Finally, participants reinforced the importance of networking between agencies, and the development of formal networks to allow for collaboration. Providers believe this would save time, reducing anxiety for people accessing care. There is belief that making more funding available for organisations to work together, and a coordinator role to specifically focus on this would streamline the work and assist with collaboration. Most of the food distribution is informal and voluntary, so often depends on capacity as to whether or not people get the support they need. Reducing and removing as many barriers as possible will ensure a more food secure community.

"just because things are hard doesn't mean we shouldn't do them"

6.0 What is happening in education settings?

Education settings can play a role in alleviating the impact of food insecurity on children through the provision of food. New Zealand has had a range of initiatives to provide food in schools over time. In order to understand food provision in the education environment on the West Coast, the researchers travelled to a school and had key informant interviews with two teachers and two principals. Both the teachers interviewed were in support roles for other schools or for their wider community.

In order to try to get a more complete picture of what was happening in school an email survey was sent to 35 schools and 17 early childhood centres on the West Coast. 15 schools and 5 early childhood centres responded to the survey. The responses to the surveys along with quotes from the key informant interviews are summarised below.

6.1 How many pupils are on your school roll?

The majority of participating schools answered this question, which had a 93% response rate. The variety of responses to this question are implicit in demonstrating that the West Coast is rural and consists of many schools operating on a small roll.

The number of pupils at each school ranged from 12 to 551, and 53% of respondents had a school roll of <100, whilst 93% had a school roll of <200. More than one third had less than 50 pupils attending.

6.2 What decile is your school?

Deciles indicate the average socio-economic status of a school community (63). They are calculated with student addresses provided to the Ministry of Education, and alongside Census data (such as overcrowding, % of parents receiving benefits) deciles are calculated and determine the extent of the funding schools receive (63). Decile ratings of those who participated in this study are shown in Figure **. Decile 1 represents a school whose students come from areas of high socio-economic deprivation and decile 10 where students have low levels of social economic deprivation. Fifty-three percent of schools were rated decile 5 and under.

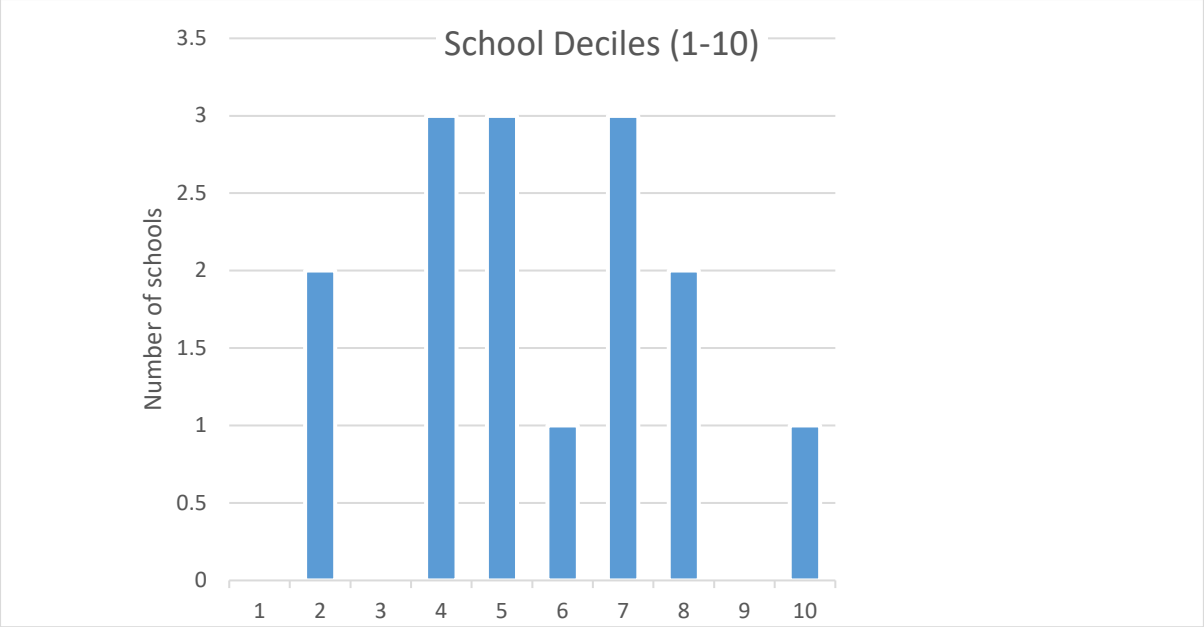


Figure 9: Decile ratings of schools surveyed

Many schools commented that this system did not accurately reflect need in their school community. One school, whose surrounding community had been dramatically impacted by job-losses due to Covid-19, responded to this question by stating their decile and indicating that their decile rating was up for review because their current decile is no longer indicative of their school population. Others commented that the socio-economic backgrounds of their students tended to be stratified.

> *"We are a decile 5 school. We really are 2 schools. We've got Decile 1 and Decile 10. We've wealthy people and we've got a lot of kids here who are having social and economic issues". Principal 1*

A teacher from the same school explained in more detail the socio-economic profile of the school community.

> *"the big… issue with us being a 5 is that when you look at a lot of the kids we have in at school there is still quite a bit of poverty there but we have a decile rating of 5 cause there is a lot of wealthy farmers here. But you might have, you know you might have one farmer that owns five farms that's worth 20 million so that can actually when it's such a small community you know when we're looking at disparity and averaging it across like they do someone with $20 million they might have 20 farm workers working for them but they might still be you know on not much more than minimum wage or that so…, I wouldn't say it's necessarily a fair reflection of what decile we should be" (Teacher 1)*

Similarly, another principal commented in relation to their schools decile 5 rating that it did not reflect the needs of the school community.

> *"Currently we are seeing higher needs than what a decile 5 school would typically see- namely social needs, oral literacy and the ability to create and maintain friendships. When both parents are working full time out of necessity often just trying to stay afloat, and they don't see their children much".*
> *Principal 2*

Another teacher commented on children's movement to different schools as a result of the transient nature of jobs in the dairying industry.

> *"We had a 14 year old who came here and this was their 11th school. There are people who move around a lot, they will spend a year working here, the next year in Matamata and then go to say Balclutha. I'd say there a quite a few people without good connections. The vulnerable people here haven't got good connections. There are lower socio-economic people in our community but they tend to people wrapped around a bit, families or people who've known them a long time. It's those ones that move around a lot I think are the ones that are at risk".* Teacher 2

It should be noted that since the survey, the Ministry of Education has moved away from using the school decile system to assess need, and is now using the equity index as described in the section on the Ka Ora Ka Ako Food in schools section of this report. Further information is available on the Ministry of Educations website on the following link. https://www.education.govt.nz/our-work/consultations/recent-consultations/education-funding-system-review/

6.3 What support does your school receive?

At the time of data collection, 80% of schools were receiving Milk in Schools, which was disestablished in December 2020. Only 13% of respondents received support from KidsCan, whilst one third were running a Breakfast Club and 27% received Fruit in Schools.

> *"I know how important it is for kids to have good quality food and I also know it's important they don't go hungry. We do a breakfast club". Principal 1*

Barriers to receiving support included decile rating restrictions, which, according to schools, are not indicative of the needs they are seeing within the school. Further obstacles include difficulties applying for smaller numbers of items, and personal ideological beliefs.

> *"Have used (KidsCan) in the past but find it difficult applying for individual items such as shoes… We usually just buy a bunch of polar-fleeces ourselves for kids who need them…"Survey response*

> *"Breakfast in schools- no, I don't believe in it" Survey response*

6.4 What do you see on a daily basis in terms of food accessibility and poverty?

Some schools commented that the food provided to school for their students was generally very healthy.

> *"We are very fortunate in that the majority of our students eat very healthy. We have a heat up system where students can bring along food to be heated so we see a lot of toasted sandwiches and leftovers from the previous night's dinner. We did have a couple of families that left us during Covid-19 who we were supplying food to daily" Survey response*

Many participants commented on the lack of fresh food in lunchboxes and the high prevalence of packaged foods in lunchboxes. Often, schools are seeing that most students bring food however it is usually insufficient quantity, quality, or both. The impact of distance to supermarkets was especially noted by schools from geographical isolated areas of the West Coast.

> *"We are 115km from the nearest supermarket. Purchasing fresh fruit and vegetables, plus other necessities is mainly shopped on a monthly basis… although set at decile 7 we are really decile 2/3 as most of our whānau are low order dairy farm workers not owners" Survey response*

> *"the thing I notice here is cause we're so far from you know a New World or a 4 Square the kids are having lunches here which is good you know I've seen places where they, where it's worse. The junior kids in particular I'm talking about generally most of them will have some sort of food item in their lunchbox but the big problem is it's a lot of processed food, you know it's not fresh fruit, it's not fresh vegetables and that's just not really getting there. And a lot of that's to do with the fact you know if you live on a farm in Hari Hari or you work in Hari Hari or Whataroa then you're looking more for an hour return you know to get, to get fruit and vegetables. And I mean like we know especially fruit and vegetables are generally more expensive too than a lot of those unhealthy options like the 14 pack of Eta Ripples chips" (Teacher 1)*

A proportion of schools suggested that whilst most of their students came to school with food, there are always some children needing regular support and monitoring to ensure their needs are being met.

> *"We have a good six students attending Breakfast in school every day. Times are very tough for all families out there at the moment" Survey response Decile 2 school*

Principals commented that they, and their staff, are aware of children who are 'at risk' and discretely offer extra food. In addition, snack and lunch times are carefully monitored.

> *"We have food at school for anyone who 'forgets their lunch' and/or needs a top up" Survey response Decile 10 school*

Respondents emphasised the widespread effects of food insecurity on their school, explaining that their teachers often notice behaviour issues, emotional dysregulation and an inability to concentrate as the first signs of food insecurity amongst their pupils.

> *"We have three students we touch base with every morning to see how they are, what kind of day they are having and if they have had breakfast or not. Often the only way we know if kids are hungry is by waning attention in class, poor concentration, then the behaviour comes out but it is just because they are hangry". Principal 2*

6.5 Does your school have a garden, or fruit trees and how are these utilised?

All schools have gardens and fruit trees in varying stages of growth. Many schools have apple trees which are not yet fruiting from a Health Promoting Schools initiative in 2019. Participants shared the varying ways in which their garden and fruit trees are utilised, which are listed below:

- Given to students to take home
- Used in cooking and home economics classes
- Parents come in to school, pick vegetables and make lunch for the children
- Working on Garden to Table programme
- Students eat fruit from the tree
- Food is shared with whānau
- Sell the produce

> *"We are currently developing our school garden into a significant venture. We are developing fruit tree propagation. We have school chickens. The long-term aim is to distribute this food for our school community as at our weekly assemblies" Survey response Decile 4 school*

> *"I do a lot of cooking with my students and that is eaten and shared daily. I also have teachers who are aware I have food available and they may bring the students here to grab something for breakfast, morning tea or lunch" Survey response Decile 4 school*

6.6 What would be useful for your school?

Most schools responded that school food programmes such Fruit in Schools programme would be an incredible support to their school community.

> *"Fruit in schools would be amazing as we are also trying to educate students about good healthy choices" Survey response Decile 4 school*

They reasoned that their fruit trees are not always fruiting, children who do arrive with food often do not have nutritious lunches and the possible learning and health outcomes from fruit provision in their schools would have an immeasurable effect on

the community. Those attending rural schools do not have easy access to fresh food because they are forced to travel long distances to purchase produce, if they can afford to.

There was also interest and a range of opinions about the newly introduced Food in School's Ka Ora Ka Ako programme. For example when asked about food provision in schools this teacher who had worked in a country where food provision in schools was more established than New Zealand said;

> *"When I was in England I did some teaching in the UK and definitely noticed the schools there the lower decile schools would all get given lunch at lunchtime and …all the teachers said (it) like made a huge difference you know. And you've got that, even link, well you've got to think it even linked to attendance…, if a kid actually knew that they were going to get a good feed at lunchtime…It does make you wonder doesn't it if you think about how much…money we put in to schooling and putting this and this to tick boxes makes you think would you be better to have a $7 day budget allowance for a kid to have a good lunch it actually… So you know worth looking in to, if by spending $7 on lunch if it makes their education 20% better then it's a good investment for the government isn't it? Teacher 1*

Another school commented in the survey that they were considering being part of the school lunch programme however were concerned about infrastructure.

> *"We have been provided an opportunity to be part of the Ministry of Education funded school lunch programme. We are seriously considering this. We consulted with our community who unanimously support the initiative. Some of the feedback indicates that families struggle to provide lunches in the two to three days before the next pay cycle. We don't know whether we have the infrastructure to implement the programme" Survey response Decile 4 school*

Another school response was that the additional government support is not needed in their situation. In this instance this school had a very small roll with less than 20 children so were able to meet the needs of students with the resources they already had.

> *"We take care of our own- small roll and so just like family. Kids get a top up if needed- no drama and no questions asked" Survey response Decile 10 school.*

Two responses both from a high-decile schools which reflects their communities relatively high socio-economic status was that additional government support should be prioritised towards schools that draw a roll from lower socio-economic areas.

> *"I think any funding in this regard should rather be used on children at schools where it is really needed" Survey response Decile 8 school*
>
> *"My personal belief is that resourcing for such programmes should be used by schools/communities that really need them". Survey response Decile 8 school*

However one principal from a low decile school responded that they had;

> *"just turned down free school lunches from the Ministry as we feel it takes away from parental responsibility and then parents don't parent" Survey response Decile 2 school*

They further explained that;

> *"Education breaks poverty so we are trying to educate kids as to what they can do to help themselves" Survey response Decile 2 school*

This view was limited to one school and did not reflect the majority of those surveyed. For example another survey response from a different decile 2 school was simply;

> *"We gratefully receive any support available for our community".*
>
> *Survey response Decile 2 school*

6.7 Early Learning Centres

Five early learning centres responded to the survey. There responses provide a window into food provision in early childhood education on the West Coast. The questions and a summarised responses are listed below.

6.7.1 How many tamariki are on your roll?

The five respondents had between 30 and 110 children on their roll.

6.7.2 Do you provide kai or do tamariki bring their own lunch?

In all five Early Learning Centres, families provided their children with lunch. Two of the centres provided children with morning and afternoon tea, which consisted of fresh fruit and vegetables, and sandwiches.

6.7.3 What do you see on a daily basis in terms of food accessibility and poverty?

Similar to the school responses, participants reported that processed food was a feature in lunchboxes. Survey respondents stated these foods did not provide enough sustenance to get tamariki through their day. Some families did provide highly nutritious lunchboxes and others were high in packaged food, making it seem like there is no 'in between' for one preschool.

Early Learning Centres reported that they know their whānau well, which enables them to predict who may need a little more help, and when (for example the 1-2 days prior to benefit day). Most centres regularly supplement 1-2 children on their roll, and provide sandwiches, cheese, fruit and vegetables and muesli bars to children needing extra food.

> *"We are very fortunate to have whānau who provide nourishing and full lunches we do have to sometimes give advice and ideas to parents to encourage them to make food"*

6.7.4 Do you have a process for supporting whānau who are struggling to make ends meet and therefore feed their children?

Although no participating centre had formal procedures in place for supporting whānau, a consistent answer from all participants was: feed the child, no questions asked. The primary priority is the welfare of the children. One centre did comment that they receive targeted funding from the Ministry of Education which allows them to buy food, gardening items, clothes, nappies and subsidising fees which takes the pressure off whānau.

> *"Always a tricky subject to bring up with parents"*

"We will always feed a child that has insufficient food, or if we think the quality of the lunch is in question we will make a sandwich, boil an egg or give a bowl of yoghurt. I often have my own fruit in the fridge and will use these for a child when required"

"Our whānau know they can always ask (for food) and its never a problem"

6.7.5 Does your centre have a garden, or fruit trees and how are these utilised?

All participants had a vegetable garden, and/or fruit trees. Whilst seasonal availability varies, children are exposed to gardening from a young age and in many cases, food preparation. Some centres had enough kai to share with whānau and send home with the children.

"We have a vegetable garden and planter boxes. Our centre children are involved in the preparation, planting, cultivation, and harvest of vegetables, blueberries and strawberries. The children eat the produce at morning or afternoon tea, either fresh or in baking done by the children"

6.7.6 What would be useful for your centre?

One centre applauded the support given to them by the Heart Foundation about food and nutrition. Others commented that budgeting and individual nutrition sessions with parents could have positive impacts.

Additionally, Early Childhood Centres said that support to provide food through the early childhood centre may be useful.

"it may be an idea to have food available for whānau to take if they ever need it as a lot of people are embarrassed"

Another said they currently provide food to children through their own funds therefore outside charitable support could be useful.

"Perhaps access to a box similar to KidsCan so that we can give out food to children who are hungry. We currently fund this ourselves"

7.0 Discussion

This research provides an insight into the experience of food insecurity for people living on the West Coast. Food insecurity does impact West Coaster's and will continue to do so in relation to economic conditions. Although people move in and out of food insecurity over the life course, the experience of food insecurity is directly related to income and wealth (15). In the last two years, the impact of Covid-19 has been dramatic especially in South Westland. There has been a 65% increase in the number of Temporary Additional Support (TAS) grants in Westland (58), and an increase of 17% in the Buller and Grey district.

The experience of being food insecure was unique to each of those interviewed. People interviewed came from a range of different backgrounds, some were in paid low wage employment, whereas others relied on income support from the government. All experienced a degree of stress and anxiety in relation to food insecurity, which at its worst manifested in mental ill health. All discussed their strategies to cope which included shopping, budgeting and cooking carefully, however all had been in positions of needing to rely on food assistance. The decision to seek support was often one accompanied with feelings of shame and stigma. For many the decision to finally seek support was a last resort once all other options had been exhausted. Once support was sought experiences ranged from positive kind interactions, to ones that reinforced the stigma associated with food insecurity, which people found dehumanizing.

Similarly, the focus groups and interviews with those people from agencies working closely with those who experience food insecurity, reiterated many of the themes raised by the key informant interviews. These research findings align with previous research that has sought to understand the experience of food security however most previous studies have been carried out in urban areas, and have not adequately detailed the experiences of those who live in relatively geographically isolated areas (6, 15, 22). Unique to the research being carried out on the West Coast, was the recognition of the costs associated with living in remote areas and increased living costs due to high food and transport and freight costs. There is no public transport on the West Coast. There are also limited social services available to support people compared to other areas of New Zealand. The impact of the costs of having to travel to Christchurch for health conditions was also a unique finding of this research.

The survey and interviews with those working in education settings, showed that this sector is aware of the issue of food insecurity. Many schools reported a range of different strategies to support those children who come to school without adequate food. Many schools reported that the decile system did not accurately reflect the level of need within a school community. It is concerning that some in the education sector who responded the survey are ideologically opposed to food support in the school, due to beliefs about 'parental responsibility'. This tended to be a minority view. However, it reflects salient narratives in New Zealand in relation to child poverty, which tend to blame people for poverty rather than be informed by the evidence that shows how structural and economic conditions have created inequities (88). Arguably, New Zealand citizens including children have a right to adequate food, and the New

Zealand government as a ‘duty bearer’ have a responsibility to uphold this right (5). In this research the parents interviewed were deeply concerned about feeding their children, often going without food themselves. Some reported hiding food for school lunches and prioritising school lunch food especially because it is seen by other children and teachers. In this way parents will try to hide the impact of food insecurity.

In contrast the majority of responses from the education sector indicated they were very aware that it ‘is tough for families out there’. They discussed in detail about the impact of parental low incomes on the ability to feed their children, and the difficulties of accessing fresh fruit when the nearest supermarket is over 100km from where people live. Many in the education sector also supported children who came to school without lunches through a variety of different measures including from their own funds. Many indicated they would value increased support for schools with either programmes such as Fruit in Schools or KidsCan. One school indicated at the time of the survey (2020), they had sought input from their community as to whether to adopt the Ka Ora Ka Ako Food in Schools programme. As of March 2021, Ministry of Education data showed eight schools in the Grey and Buller districts had introduced the programme. The Ministry is evaluating this programme. For the West Coast it will be important to evaluate the impact of this programme locally, given the unique challenges faced by West Coast communities in food insecurity.

The research sought to comprehensively record both the experiences of food insecurity and the plethora of community activity to alleviate food insecurity. Key informant interviews provided rich insight into the West Coast experience. Attempts were made by researchers to seek a range of people including those who lived in remote parts of the Coast for example South Westland. The mapping also attempted to cover the plethora of community activities to alleviate food insecurity. However, there will be some community activities we were unaware of that are not in this research.

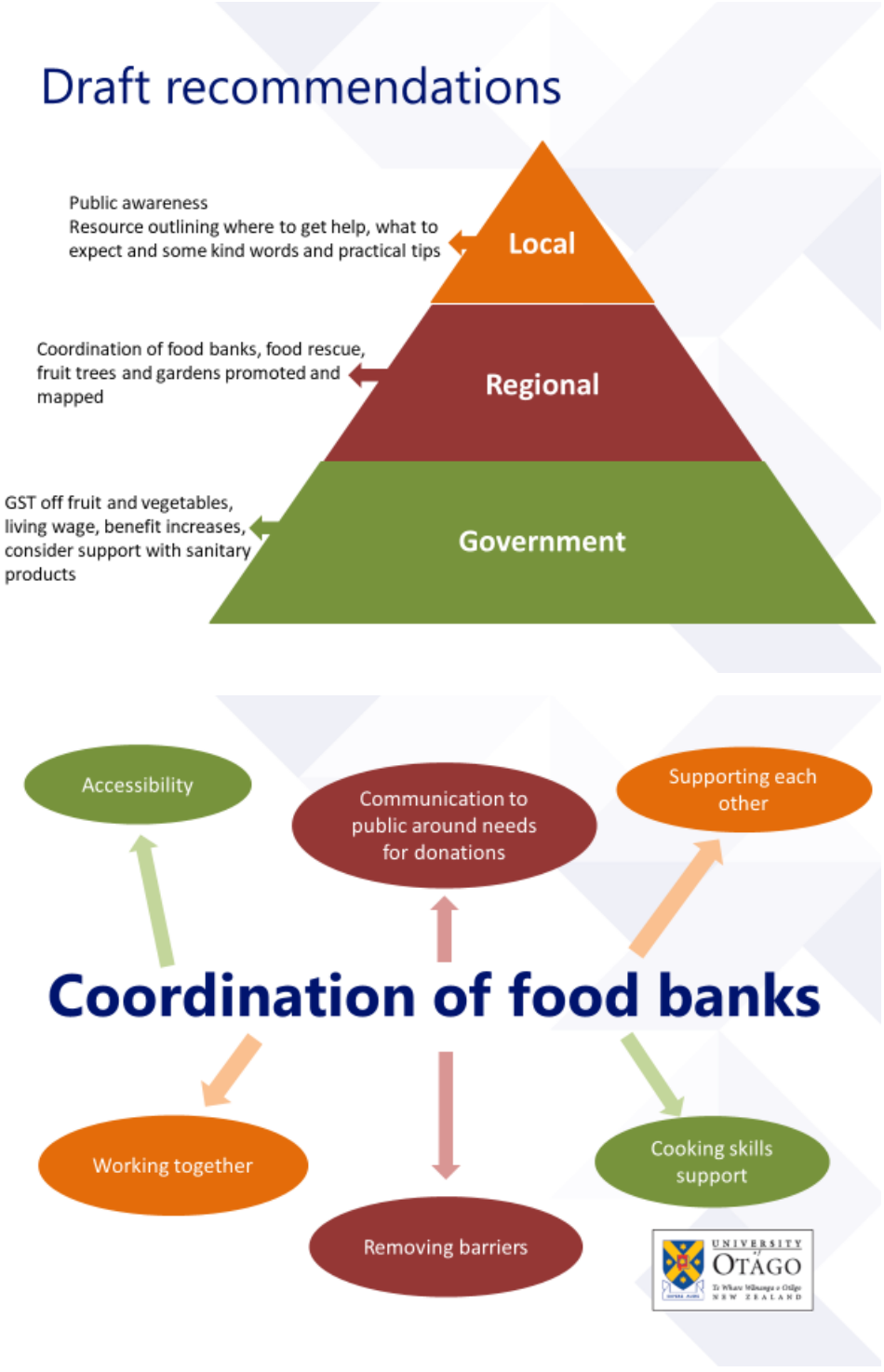
One of the key findings of this research was that the cost of food especially fresh fruit and vegetables is a significant factor for many people on the West Coast. In order to gain some clarity about the cost of food on the West Coast, Jade Winter, and staff from Community and Public Health recorded food prices in West Coast supermarkets, as part of the NZ Food Costs survey that the Department of Human Nutrition, University of Otago has carried out for a number of years. The results of this year’s survey are not yet available. However when they become available they will be published on the following link: https://www.otago.ac.nz/humannutrition/research/food-cost-survey/. This will enable a comparison of food prices on the West Coast with other centres in New Zealand such as Christchurch.

This research has a number of strengths. The research questions were initiated from work previously carried out by the West Coast community food security network. Although the research was carried out by the University of Otago, a research assistant based on the West Coast with extensive community networks was employed. The West Coast community food security network were informed and supportive of the research throughout. This research was also carried out during 2020, so was able to

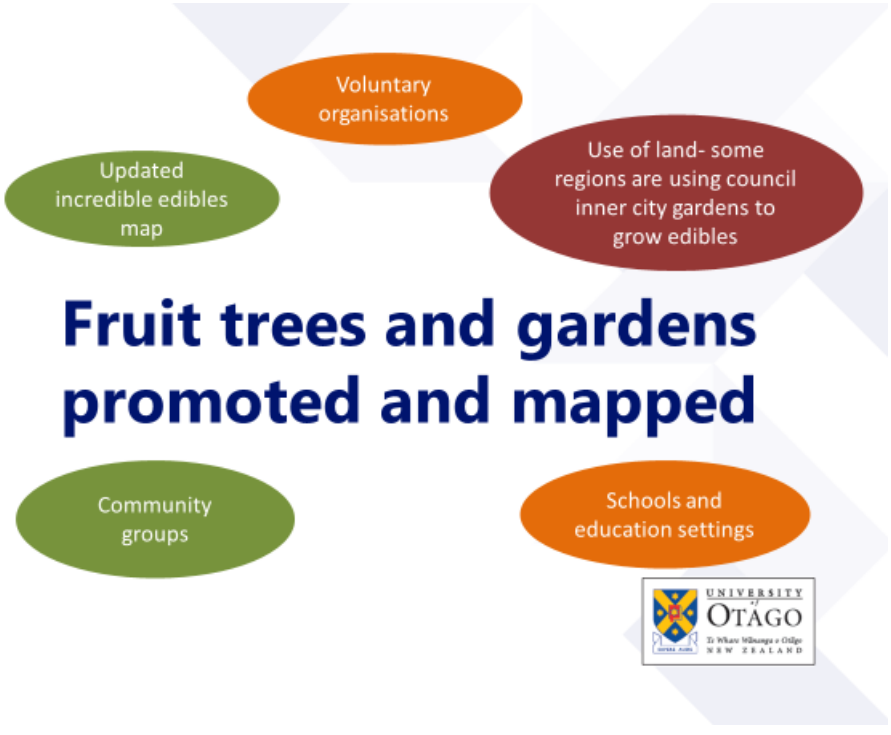
in part capture the impact of Covid-19. Due to Covid-19, food insecurity was recognised by the Government as an issue. A ‘Food Secure New Zealand’ has been prioritised by the Ministry of Social Development with support for the Kore Hiakai network, and food rescue and food banks. This has informed some of the recommendations suggested.

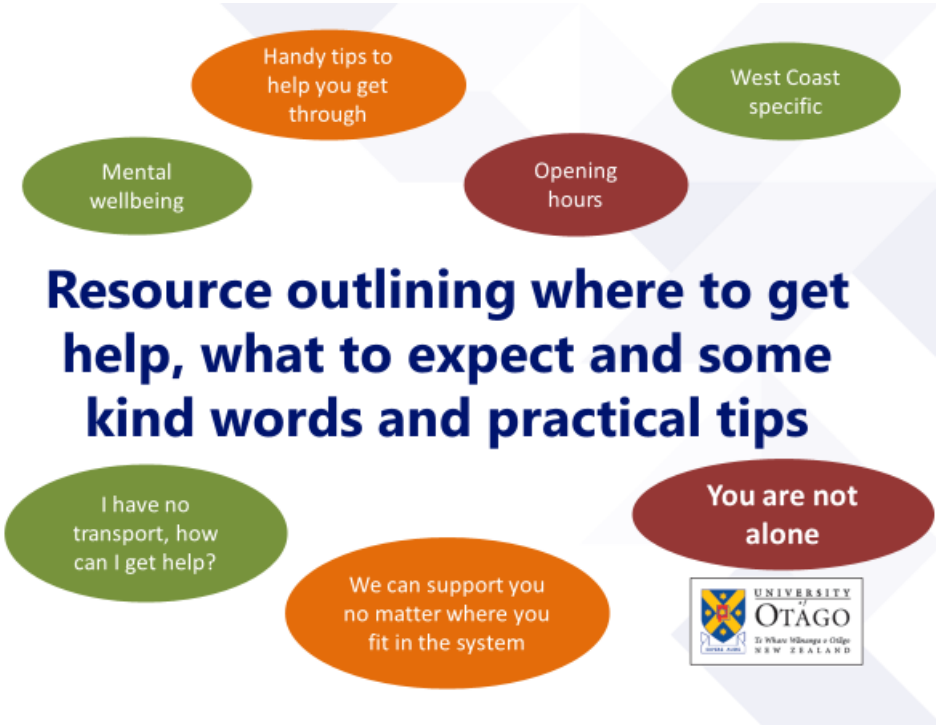
7.1 Feedback and Recommendations from Dissemination of Findings Hui - December 2020

The initial results of this research were communicated to key stakeholders at a hui in December 2020. The following draft recommendations were shared and discussed with those who attended.




Restaurants
Cafes
Shops
Food Rescue
Supermarkets
Where to?
UNIVERSITY OF OTAGO


Voluntary organisations
Updated incredible edibles map
Use of land- some regions are using council inner city gardens to grow edibles
Fruit trees and gardens promoted and mapped
Community groups
Schools and education settings
UNIVERSITY OF OTAGO



The feedback provided at the hui about these recommendations is summarised below. The recommendations tended to be both around community food security and food supply issues, and raising awareness about the supports available for those experiencing food insecurity.

7.1.1 Community food security initiatives

- “Form a food rescue and distribution group”
- “Map of West Coast based food companies and forming relationships with them. How much food goes to waste? Include growers, farmers, supermarkets, dairies, food distribution companies, Westland Milk Products, Silver Fern Farms.”
- “Would it be worth holding a food security meeting just for food producers/distributors?”
- “How can farmers who are willing to donate meat do so safely?”
- “More research is needed into the legislative requirements around this to reduce food waste and feed people.”

7.1.2 Support for people experiencing food security and the organisations who work in this space

- “Raise awareness of food insecurity within organisations and the community”
- “There is a need to be able to offer additional support for people who are navigating the system”
- “Communicate with food banks about what they need to best serve people and consider where to distribute this information (e.g. social media, newspaper, posters)”
- “Advocacy for additional funding and resource for a position to lead collaborative work in this space.”
- “Love to see more community led initiatives such as a pay-it-forward page on social media, where people are empowered to help each other, and because they may have already contributed, feel OK to ask for support”
- “Cooking or a concept similar to SuperGrans in the community”

7.2 Conclusion

Food insecurity exists on the West Coast. This is likely to increase due to the economic impacts of Covid-19. There is widespread stigma associated with food insecurity. This means many will hide their need for support, and be reluctant to seek help Therefore agencies directly involved in supporting people with food insecurity need to continue to show empathy in their practice.

Food insecurity is an outcome of structural factors, often outside the control of individual. New Zealand evidence shows individual food insecurity is most strongly associated with household income, however there are many community strategies that can enhance food security and provide support for individuals and the community.

Community food sovereignty can also be built through projects that support and sustain local food supply. This is an important consideration for West Coast communities given the increased costs associated with food and transport.

Key Recommendations

To support community food security on the West Coast

- Explore the feasibility of a West Coast based food rescue programme
- Employ a West Coast Food Security Coordinator to support collaborative work in this area.
- Map the food supply on the West Coast
- Form relationships with West Coast based food companies
- Continue to initiate and support community programmes that enhance food sovereignty such as community and household gardening, community cooking programmes and food co-operatives.
- Evaluate the impact of the Food in Schools programme for West Coast schools

To support for people experiencing food security and the organisations who work in this space

- The right to adequate food is a human right. The New Zealand government as a 'duty bearer' has a responsibility to uphold this right for its citizens.
- Recognise there is widespread stigma associated with food insecurity. People will often seek help as a last resort.
- Show empathy in practice. Support people to 'navigate' the system.
- Recognise the structural factors that impact food security at an individual level.
- Investigate the barriers to growing food in rental properties, and work to reduce these.
- Investigate a transport strategy for getting people to the supermarket- e.g. a rideshare application for mobile devices

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9.0 Appendices

Appendix 1 – Information Sheet for Participants (Individual)

Ethics Committee Reference Number: 20/053. 28 July 2020

He Kai Kei Aku Ringaringa

Food security on the West Coast - Te Tai o Poutini

INFORMATION SHEET FOR

PARTICIPANTS

Introduction

Kia ora. Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether to participate. If you decide to participate, we thank you. If you decide not to take, part there will be no disadvantage to you and we thank you for considering our request.

What is the aim of the project?

This project is about food insecurity on the West Coast. Food insecurity is experienced when food runs out and you may not have enough money to buy food. Everyone's experience of food insecurity is different, and the experience of people living on the West Coast is likely to be unique. We seek to understand the experience of people living with food insecurity on the West Coast, and the impact this has on your wellbeing.

Another aim of this project is to identify organisations who support people living with food insecurity, and support them to work collaboratively together.

Who can participate in the project?

We would like to interview people who are experiencing or have experienced food insecurity, and are 18 years or older and who are currently residing in the West Coast. Prior to being interviewed you will be phoned and asked to answer a brief survey about your experience of food insecurity.

If you participate what will you be asked to do?

If you volunteer to take part in this project you will be asked to participate in an interview to discuss your experiences of food insecurity, and your ideas for how organisations can provide support. The interview will take approximately 60-90 minutes. You will be asked about your experiences of food insecurity and the impact this had on your wellbeing, and your experiences seeking support for food insecurity. The interview will be digitally recorded and transcribed, with your permission.

The precise nature of the questions, which will be asked, have not been determined in advance but will depend on the way in which the interview develops. Consequently, although the University of Otago Human Ethics Committee is aware of the general areas to be explored in the interview, the Committee has not been able to review the precise questions to be used.

In the event that the line of questioning does develop in such a way that you feel hesitant or uncomfortable you are reminded of your right to decline to answer any particular question(s) and also that you may withdraw from the project at any stage without any disadvantage to yourself of any kind.

All participants in this study will be gifted a $30 food voucher as a thank you for their participation.

Is there any risk of discomfort or harm from participation?

Discussing personal experiences, particularly those concerning experiences of food insecurity may bring up sad or upsetting memories. Please let us know if there are any sensitive issues you would like researchers to avoid; you will not be asked to discuss things that cause you any distress and you may withdraw from the focus group at any time if you wish to do so. If sensitive issues are raised as a result of the subject area, and if you become upset or need to access support, we will give you information about how to do this. Please be aware that you may decide not to take part in the project without any disadvantage to yourself of any kind.

Who is funding the project?

This research project is funded by the University of Otago.

Data Collection and Confidentiality

Information collected for this study will only be used for the purpose of this study and will not be offered for other uses. Before the interview commences you will be asked if you are comfortable with this being recorded. The interview will be recorded using a portable recorder. This is to assist researchers in the transcribing of data (interviews) into written or print form. Please be aware that the interview maybe transcribed by a professional transcriber who will be asked to sign a confidentiality agreement. If you would like to review a copy of your transcription please advise the interviewer. Personal information such as participant's names, age and contact details will be collected for arranging interviews. The details that are not linked to research data will be destroyed once they are no longer needed.

Recorded interviews and their transcriptions as well as other details will be stored on a password-protected computer and locked filing cabinets at the University of Otago, Department of Population Health. The principal and co-investigators will be the ONLY individuals to have access to participant information. Data obtained from this research will be saved for at least 5 years in secure storage and then confidentially destroyed.

The results of the project will be published in a report and may be published in academic journals and will be available in the University of Otago Library (Dunedin, New Zealand) and every attempt will be made to preserve your anonymity.

If you agree to participate, can you withdraw later?

You may withdraw from participation in the study at any time if you choose to do so. However once the information from interview is written in a research report it will be difficult to remove any information included in the report. Therefore if you participate in an interview and decided to withdraw from the study, please advise the researchers within one month of the date of the interview.

Any questions?

If you have any questions about our project, either now or in the future, please feel free to contact either:-

Mrs Jade Winter and Ms Christina McKerchar
Hokitika

c/- Department of Population Health
University of Otago – Christchurch
021 0293 5476

Jade.Winter@otago.ac.nz

Department of Population Health
University of Otago – Christchurch
03 364 3638

Christina.Mckerchar@otago.ac.nz

This study has been approved by the University of Otago Human Ethics Committee. If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (ph +643 479 8256 or email gary.witte@otago.ac.nz). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.

Appendix 2 – Information Sheet for Participants (Organisation)

Ethics Committee Reference Number: 20/053. 28 July 2020

He Kai Kei Aku Ringaringa

Food security on the West Coast - Te Tai o Poutini

INFORMATION SHEET FOR

PARTICIPANTS

Introduction

Kia ora. Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether to participate. If you decide to participate, we thank you. If you decide not to take, part there will be no disadvantage to you and we thank you for considering our request.

What is the aim of the project?

This project is about food insecurity on the West Coast. Food insecurity is experienced when food runs out and you may not have enough money to buy food. Everyone's experience of food insecurity is different, and the experience of people living on the West Coast is likely to be unique. We seek to understand the experience of people living with food insecurity on the West Coast, and the impact this has on your wellbeing.

Another aim of this project is to identify organisations who support people living with food insecurity, and support them to work collaboratively together.

Who can participate in the project?

We would like to hold focus groups with people who work for organisations that support people who are experiencing food insecurity in the West Coast.

If you participate what will you be asked to do?

If you volunteer to take part in this project you will be asked to participate in a focus group to discuss your experiences of supporting people who are experiencing food insecurity, and your ideas for how organisations can provide support. The focus group will take approximately 60-90 minutes. The focus groups will be digitally recorded and transcribed, with your permission.

The precise nature of the questions, which will be asked, have not been determined in advance but will depend on the way in which the focus group develops. Consequently, although the University of Otago Human Ethics Committee is aware of the general areas to be explored in the interview, the Committee has not been able to review the precise questions to be used.

In the event that the line of questioning does develop in such a way that you feel hesitant or uncomfortable you are reminded of your right to decline to answer any particular question(s) and also that you may withdraw from the project at any stage without any disadvantage to yourself of any kind.

All participants in this study will be gifted a $30 food voucher as a thank you for their participation.

Is there any risk of discomfort or harm from participation?

Discussing personal experiences, particularly those concerning experiences of food insecurity may bring up sad or upsetting memories. Please let us know if there are any sensitive issues you would like researchers to avoid; you will not be asked to discuss things that cause you any distress and you may withdraw from the focus group at any time if you wish to do so. If sensitive issues are raised as a result of the subject area, and if you become upset or need to access support, we will give you information about how to do this. Please be aware that you may decide not to take part in the project without any disadvantage to yourself of any kind.

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Recorded focus groups and their transcriptions as well as other details will be stored on a password-protected computer and locked filing cabinets at the University of Otago, Department of Population Health. The principal and co-investigators will be the ONLY individuals to have access to participant information. Data obtained from this research will be saved for at least 5 years in secure storage and then confidentially destroyed.

The results of the project will be published in a report and may be published in academic journals and will be available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve your anonymity.

If you agree to participate, can you withdraw later?

You may withdraw from participation in the study at any time if you choose to do so. However once the information from the focus groups is written in a research report it will be difficult to remove any information included in the report. Therefore if you participate in a focus group and decided to withdraw from the study, please advise the researchers within one month of the date of the focus group.

Any questions?

If you have any questions about our project, either now or in the future, please feel free to contact either:-

Mrs Jade Winter and Ms Christina McKerchar Hokitika

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This study has been approved by the University of Otago Human Ethics Committee. If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (ph +643 479 8256 or email gary.witte@otago.ac.nz). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.

Appendix 3 – Consent Form

Ethics Committee Reference Number: 20/053. 28 July 2020

He Kai Kei Aku Ringaringa

Food security on the West Coast - Te Tai o Poutini

CONSENT FORM

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that:-

1. My participation in the project is entirely voluntary;

2. I am free to withdraw from the project before its completion;

3. Personal identifying information [e.g. audio recordings] may be destroyed at the conclusion of the project but any raw data on which the results of the project depend will be retained in secure storage for at least five years;

4. This project involves an open-questioning technique. The general line of questioning is about your experiences of food insecurity and the impact this had on your wellbeing, and your experiences seeking support for food insecurity. The precise nature of the questions which will be asked have not been determined in advance, but will depend on the way in which the interview or focus group develops and that in the event that the line of questioning develops in such a way that I feel hesitant or uncomfortable I may decline to answer any particular question(s) and/or may withdraw from the project without any disadvantage of any kind.

5. Discussing personal experiences, particularly those concerning experiences of food insecurity may bring up sad or upsetting memories. I know if there are any sensitive

issues I would like to avoid; I will not be asked to discuss these and may withdraw from the interview or focus group at any time I wish to do so.

6. I will receive a $30.00 voucher for participating.

7. The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve my anonymity.

I agree to take part in this project.

....

(Signature of participant) (Date)

.....

(Printed Name)

……..

Name of person taking consent

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