

Impact Evaluation of Wellington Fruit & Vege Co-ops

Executive Summary

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Fruit and Vege Co-op Overview

The Fruit and Vege Co-op began as a pilot programme in Cannons Creek in 2014 as a way of providing affordable, healthy produce to people living in an area with no local supermarket. It is a collaboration between Regional Public Health and Wesley Community Action. Today, they organize 11 fruit and vege co-ops across the greater Wellington region that run weekly from Jan-December (excluding Christmas holidays). These co-ops deliver up to 9 tonnes of fresh, local produce to 1400 households every week.

The produce is delivered, and a team of volunteers pack the orders for pickup or to be delivered to the distribution hubs. Members place an order and pay for the bags one week in advance. There is no commitment to ordering every week. An order costs \$12 week (\$15 in Kāpiti for a larger order), which includes a bag of mostly local and seasonal fruits and vegetables. The estimated retail value of each order is over \$20.

Evaluation need

The Fruit & Vege Co-op presently measures the number of members engaged and the weight of food distributed. However, the co-op offers more than affordable fruit and vegetables. Anecdotally, the co-op builds community, betters health, and increases food security. There is a need to formally evaluate the value and impact of the co-op from the perspective of active members.

Aim of Evaluation

This impact evaluation aimed to capture a deeper understanding of Fruit & Vege Co-op values that drive membership participation in the programme. Four primary value pillars were utilized to assess membership participation: Financial, Health and Wellbeing, Social Connections, and Environmental.

Executive Summary Infographic

Financial

Affordability

Budgeting

Non-capital benefits

"We are on one income. Basically, our staples were potatoes and onions – and frozen veggies. If we had a bit extra if we didn't have to buy peanut butter or cat food, we'd buy one capsicum. This [coop] has opened up just so much. That's my fruit and veggie budget (12\$)."

"Without coop there, I wouldn't be able to buy what I want. Otherwise, I would struggle."

Health and Wellbeing

Improved diet patterns

Increased food and nutrition security

Physical and mental health

Empowerment

"I remember when weeks when I would just eat instant noodles all week, and it wouldn't be good for me, but I didn't know any other way of preparing food. So I would just eat whatever tasted good. ...It means I have healthier food in my cupboard now."

"Before I joined the coop, it was horrible, I felt awful, but we were on a strict budget and I was telling the kids "no you can't have the whole pear – you split that four ways!" because it's like I paid huge money for that. Now I can tell my kids, "go ahead, eat fruit". Which is the right thing to say, right? – I want to be able to tell my kids go ahead and eat fruit"

Social Connections

Enhanced community connections

Co-op as a community pillar

Volunteering

Knowledge transfer

"It becomes a part of your life; it ebbs and flows throughout the week and we know everybody and the church times. It is really integrated. And if you have a passion for it, you have room for it...that consistency is important. We are a community where everybody helps. It is not just eating. It is the whole process."

"I see the joy in the communication of people with different backgrounds [financial implication] who start talking. You meet people and yeah, you get talking and you go through your bag and you go, 'oh, you know last week, did you like this?' and it brings up a conversation with the community and a bond. And now I know that person."

Environmental Impact

Reduced waste

Reduced greenhouse gas emissions

Enhanced connection

"When you go to the supermarket, you still have lots of plastic bags and other packaging. When you get everything from the fruit and veggie coop, it's all in its natural state. There's no paper or plastic tray. It's like when it comes straight out of the garden, so that's good for the environment."

"I really like the fact that my money is going to local growers"

Introduction

Drawing on previous research and with consultation from programme managers, four pillars were chosen to represent broad themes influencing food choice and member participation: social connections, financial, environmental impact, and health and wellbeing.

Pillar	Definition
Social connections	The community built at the coop including relationships, conversations, and recipe exchanges.
Financial	Costs savings for you and/or your family.
Environmental impact	Reduced environmental impact (i.e.: plastic bags, local food, food waste etc.).
Health and wellbeing	Improved physical, mental, and/or spiritual health.

We explored what these pillars mean to the members of the co-op, as well as the individual and community-level priorities influencing participation in the Fruit and Vege Co-op. This membership evaluation followed a community-based participatory research methodology (CBPR). CBPR is a research process in which all collaborators contribute expertise, share decision-making, and take ownership of the research.

Twenty-seven members participated in the evaluation from Cannon's Creek, Naenae, Wainuiomata, Titahi Bay, and Waiwhetu. The participants completed a qualitative survey where they ranked the four pillars in terms of why they used the fruit and vege co-op and partook in focus group discussions (FGDs) where they were asked a series of questions about each pillar and their overall experience with the co-op.

Impact Evaluation Results

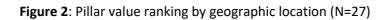
Survey Results

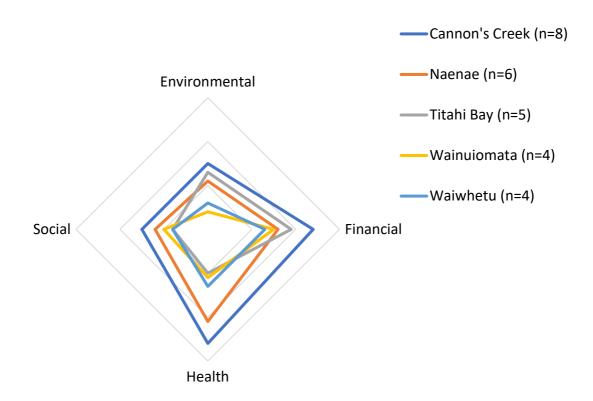
The highest ranked pillar was financial, followed by health, social, and environmental, respectively. As represented in figure 1, the distribution of the shape represents the higher ranking and, in this evaluation, the financial pillar was followed by closely by health. The social and environmental pillars both had lower rankings with minimal difference between them.

Social Financial Health

Figure 1: Co-op pillar value ranking results

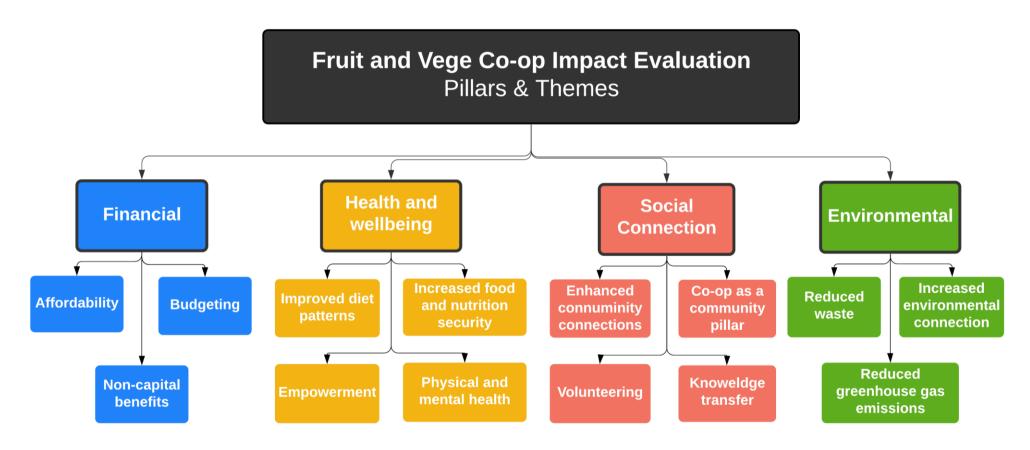
There were also differences between each location. Figure 2 displays the difference in rankings between each coop, with the size of the quadrilateral proportional to the sample (n) in each evaluation location. Individual spider plots for each location are found in Appendix 1.



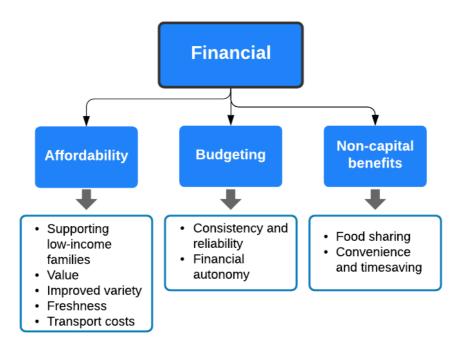


The results from the FGDs were evaluated and the members' insight was thematized based on the four pillars. Figure 1 presents a thematic map of the four value pillars and emerging themes from all five FGDs. Each will be elaborated separately below.

Figure 1: Thematic analysis of membership themes for four value pillars



Financial Pillar - #1



The fruit and vege co-op members experience greater food security with increased access to affordable, high-quality fresh fruit and vegetables. There were three emergent themes of the financial benefit pillar: affordability, budgeting, and non-capital benefits.

Affordability

Affordability emerged as the clearest financial benefit of the co-op. Affordability supported low-income families, that often live off the benefit, to overcome financial barriers and access fruit and vege. It also improved the value, variety, and freshness of their fruit and vege and reduced transportation costs associated with weekly shopping. Simply put, "without coop there, I wouldn't be able to buy what I want. Otherwise, I would struggle."

Budgeting

The co-op empowered its members to budget. Budgeting provided members constancy and reliability in their food source and they had more financial autonomy with other areas of life due to savings on fruit and vege. Members liked that the structure of the co-op is a pre-paid, set-price payment.

Several members noted that in the absence of the co-op over the holiday season, it was much harder to access cost-effective products. They said that during this season, they had additional stress and financial burdens placed on their families.

Non-capital benefits

There were also non-capital benefits that helped those involved in the co-op. These brought financial returns indirectly through food sharing and time-savings. Many members shared stories of how they traded items from their bags based on preference. Often, this is a way to build new relationships:

"being able to share our bag with others helps with swapping things, so it is not just our family, but others that we can connect to. There are a lot of low-level exchanges."

The co-op is also convenient for people to use and saves them time. Often, the co-op has been integrated into people's busy schedules and the long window of pick-up is convenient for people to access.

Financial pillar supporting quotations

The following four examples are a select few quotations from the FGDs that elaborate on the financial pillar and substantiate the themes of affordability, budgeting, and the non-capital benefits of using the co-op.

Case 1: "Most of us have mentioned it's way cheaper than the shops. It's also really good value and quality for the money You get access to the variety for the cost that you couldn't do for yourself. If you go to the supermarket, you can't get what you would get from the coop at all."

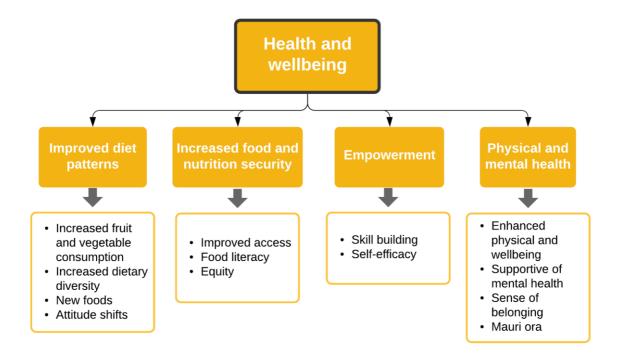
Case 2: "I'm on the benefit at the moment, and when you go to the supermarket and try to buy fruit and vegetables, it's very expensive. Often, I would find that I was only buying vegetables each week, I couldn't afford to buy fruit. It was just an extra cost that was too expensive for me to afford."

Case 3: "I have got 3 children and it helps our family budget. For us, it is incredibly useful to know that there will always be fruit and vegetables around and that we can just go to the supermarket to top things up...instead of spending lots of money, we can spend \$5 or something like that and it gets us through the week. It allows us to spend money on other things, like meat, because I know that I have a base for our meals. For us, it makes the difference between only having mince and being able to get chicken or something else - we have enough."

Case 4: "For me, I am lazy, and I don't want to buy veggies. So, for me, I was working at the time when I first joined the coop, so it was hard to work out doing all of the shopping. I used to do the shopping all at the end of the week and it was a scramble. But now, I still go shopping on Friday, but it is just to complement the stuff from the bag. So, I suppose it was mainly for convenience. And someone already picked it, so I didn't have to choose; I didn't have to agonize over any stuff."

Health and Wellbeing Pillar - #2

The Health and wellbeing pillar surfaced as the most influential reason for memberships in two of the five focus groups and was the second most influential reason for participation among the other three groups (after financial). This pillar was summarized into four dominant themes emerged: Improved diet patterns, increased food and nutrition security, empowerment, and physical and mental health.



Improved diet patterns

Members largely agreed that their dietary patterns have shifted after joining the co-op to now include more fruits and vegetables, displacing less healthy food items. Before joining the co-op, members articulated their diets consisted of a lower variety of fruits and vegetables. The popular consensus within focus groups was that dietary diversity has improved after joining the co-op, with members stating "the fruit and vege co-op gets me quite a nice variety of fruit and vegetables that I get for a whole lot cheaper" and that it "encouraged my children to try more fruit and vegetables." Diet diversity is well-known to be a key indicator for improved health outcomes, which was echoed by members "the more colours, the better for you!" and "eating a wider range of vegetables and fruits is good for your microbiota."

Additionally, the fruit and vege co-op has introduced many members to new items they previously have not had the opportunity to try. It's also opened minds to new foods members thought they didn't enjoy,

Increased food and nutrition security

Food and nutrition security is defined by all individuals having reliable access to sufficient quantities of affordable, nutritious food to lead a healthy life. Expense was a common deterrent for numerous members and their households towards achieving food and nutrition security. Other barriers included

a lack of food literacy, which was strengthened by member participation in the co-op. Those with children often found their kids have an increased appreciation for growing, preparing, and eating fruits and veggies. The affordability and access provided by the fruit and vege co-op allowed members to include more nutrient-rich foods into their diets. One member described the fruit and vege co-op as being inclusive of all socio-economic status households, saying "I think it's a way of distributing wealth. All sorts of people — no matter their budget — are going to the same pot and it makes it more sustainable and affordable for everybody."

Empowerment

Skill building and self-efficacy were subthemes of the broader theme of empowerment, of which numerous members celebrated their personal growths. Creativity and skill-building were cited by three focus groups regarding the utilization of unique or novel foods that were previously not used before joining the co-ops: "it makes you think about how to use something that you might not have known or bought it." Another added that the co-op is a "huge culinary adventure!"

"It makes me feel like a parent," one member said regarding their ability to provide healthy fruits to their kids. Additionally, the feeling of accomplishment from crafting new recipes and creating foods from scratch is "therapeutic." Another added they enjoy the "mystery" of the fruit and vege co-op, exclaiming that it is "like having Christmas every week! It's the little surprises of things you weren't expecting!"

Physical and mental health

Physical and mental health presented themselves in numerous capacities from fruit and vege co-op members. Physical exercise, getting vitamins, and weight loss were all anecdotal experiences provided by focus group members as examples of enhanced physical health and wellbeing, with one member encapsulating the connection well "if your food is not fresh, then the exercise you will be doing is not fresh either."

Some members shared their personal struggles with mental health issues, and how the co-op is a more inclusive and inviting space than going to the supermarket. Through their relationships with food, they have improved their mental health and wellbeing. One member cited during the Christmas break closure; they notice a difference in their ability to maintain stability. For others, the co-op supports mental health through a sense of belonging, by encouraging them to interact with community members. Many agreed that being involved with the co-op brings mauri ora – or life force – to people that they can't find at the supermarket.

Health and wellbeing pillar supporting quotations

The following four examples are a select few quotations from the FGDs that elaborate on the health and wellbeing pillar and substantiate the themes of improved dietary patterns, increased food and nutrition security, empowerment, ad improved physical and mental health.

Case 1: "Before I joined the coop, it was horrible, I felt awful, but we were on a strict budget and I was telling the kids "no you can't have the whole pear – you split that four ways!" because it's like I paid huge money for that. Now I can tell my kids, "go ahead, eat fruit". Which is the right thing to say, right? – I want to be able to tell my kids to go ahead and eat fruit."

Case 2: "The thing that I really like about the fruit and veggie coop is the mystery of it. It's almost a little bit like having Christmas every week! It's the little surprises of things you weren't expecting."

Case 3: "For me, it makes me feel like a parent because I actually have healthy food for my kids. I look at the fruit basket and think 'I am winning.' When my kids say 'I am hungry' I know that I have fruit to offer them. If they don't want it, tough luck! The healthy stuff is there! Before the fruit pack, especially 2 or 3 days before payday, but now we always have that balance. So yeah, it makes us feel like we are winning."

Case 4: "I know now about cooking that I didn't know then. This is a huge culinary adventure!"

Case 5: "It is empowering knowing you can start something from scratch and prepare a meal for yourself. It's really therapeutic."

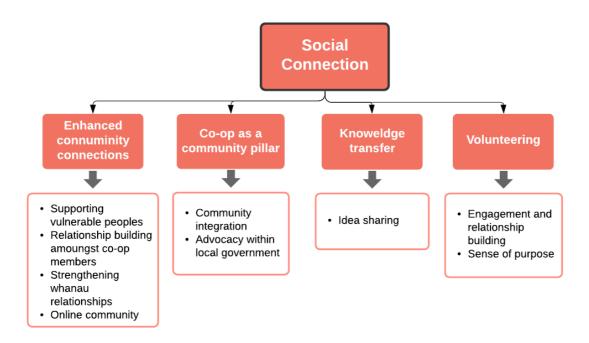
Case 6: "I certainly remember eating a lot less fruit and veggie before we joined this coop. Mainly because of cost, but also due to not knowing what to do with things."

Case 7:" It gets me out of the house. Being cooped up in a house, it's much better for one's physical, mental, emotional, soul, wellbeing, getting out of the house at least once a week."

Case 8: "Mauri ora and aroha: I see the happiness in people when they come and get their veggies; I don't see that at a supermarket."

Social Connection Pillar - #3

Social connection describes the social ties between people including socialisation, support, and sense of belonging. The co-op contributed to the fabric of each community: it facilitated enhanced community connections, strengthened relationships both between co-op members and within their whānau, and developed innovative online communities.



Enhanced community connections

The co-op provided a platform for building connections. This occurs within members, amongst members, and between volunteers: "the coop space is great for connection." Many members joined the co-op looking for a way to engage with their community and found that the co-op provided an authentic way to converse, form relationships, and bond with others. In particular, the co-op supported vulnerable peoples to best understand their context and ways to offer support, outside of food. Members described that they leave the co-op every week with a deep sense of belonging and connection to their community.

Often, enhancing community connections supports other services within the communities addressing poverty and there are many non-capital exchanges between organisations. For example, one of the fruit and vege co-ops donates the surplus to the local food bank and receives free access to their hall as a distribution hub.

The members also described how the co-op has strengthened relationships within their own whānau. Often, this is through spending more time in the kitchen preparing healthy meals together.

Co-op as a community pillar

The co-op has become a major pillar of community within the packing and distribution hub locations. The co-op has become integrated within the communities and the members described that the consistency was integral for the high, sustainable uptake and usership.

As one member remarked that the co-op facilitates connection, and this keeps them coming back: "because humans are always looking for connections. It is what keeps us going back to places."

The co-op also runs in parallel to other community development programmes, such as the Real Good Kai cooking programme and the Good Cents budgeting course in Cannon's Creek. Often, there is cross-promotion and participation between members. In one location, the co-op has provided an outlet for socio-political change in the broader community. The co-op coordinator has advocated for healthy eating, support of low-income families, and infrastructure development with local MPs:

Volunteering

Volunteering to pack and distribute the bags offered a large source of social connection. Volunteering enhanced relationships and gave people a sense of purpose. Many of the volunteers have been a part of the co-op communities for years and have built strong relationships with each other: "it is a real team, the crew up here." Often, this involves conversation over tea, coffee, and biscuits and involves people of diverse age and demographic backgrounds.

Several volunteers described that through volunteering, their relationships have developed into friendships and that they feel like "an extended family." They claim that it is the people that keep them coming back, for years. A large part of this is providing spaces for people to grow and feel a part of something, especially for isolated or vulnerable peoples. Simply put, "being a volunteer is a huge sense of joy."

Knowledge transfer

Social connection often occurred through co-op members sharing knowledge, particularly through exchanging recipes. Often, this involved members learning how to use new ingredients. The participants explained that they love the exchanging recipes and the cultural exchange that occurs as they learn how to use different produce from around the world.

Social connection pillar supporting quotations

The following four examples are a select few quotations from the FGDs that elaborate on the social connection pillar and substantiate the themes of enhanced community connections, the co-op as a community pillar, volunteering, and knowledge transfer:

Case 1: "So from a social context, feeling part of a community and a group – it's huge actually! I think for people who maybe live alone, or don't have a car – all sorts of things – that mean that perhaps you have limited chance to interact with your community."

Case 2: "The relationships in this community, I find a lot of people that are struggling. Even, when they walk in, I can tell that he wants to buy something, and he can't afford it. So, I try to help those people and I try to help them. They are a part of my family too, you know? I know a lot about what is going on with their families and they share their stories and I pray for them. It all contributes to their wellbeing. I don't want to be naive about what is going on. I want to make sure that people are not walking stressed. Whatever the surplus is, I take it to the people who need it. I know exactly who they are. I know the pressure when you can't afford so with the surplus, I give it to them on top of their order."

Case 3: I see the joy in the communication of people with different backgrounds [financial implication] who start talking. You meet people and yeah, you get talking and you go through your bag and you go, 'oh, you know last week, did you like this?' and it brings up a conversation with the community and a bond. And now I know that person. So, for me, it brings out the conversation and korero - it is a communication thing. When we see people down the street, we stop, and we start up a conversation because we have seen them before. Whereas before, they would just walk past you."

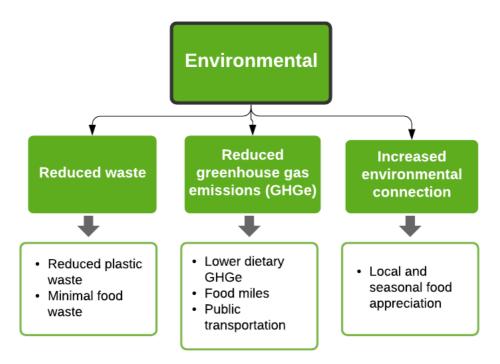
Case 4: "But for us, it is a family thing. Katie, my daughter, when she was one started here and... wait... she was 9 months... and she has grown up here, she has grown up with this extended family and they know how to hang around the older people. We have a lot of older people; I am one of the youngest and so we all know how to hang out. Where else do you meet such a cross-section of people?"

Case 5: "And it brings in different cultures. Cause I see in Taita, we get different cultures coming in. And sometimes, we sit in here and we talk about how to cook stuff from different places."

Case 6: "It becomes a part of your life; it ebbs and flows throughout the week and we know everybody and the church times. It is really integrated. And if you have a passion for it, you have room for it...That consistency is important. We are a community where everybody helps. It is not just eating. It is the whole process."

Environmental Pillar - #4

The environmental pillar explored member's values associated the environmental considerations while using the fruit and vege co-op. Members felt participation in the co-op overall reduced their environmental footprints through three emergent themes: Reduced waste, reduced greenhouse gas emissions, and increased environmental connection.



Reduced Waste

Reducing waste, both plastic and food, emerged as the leading theme for the environmental pillar. Members expressed their enthusiasm for helping the environment by using less plastic through the reusable co-op bag program, stating "we are using reusable bags which is awesome", another adding that "there would have been so many plastic [bags] used before."

Food waste was also recognized as a major environmental detriment, contributing to wasted nutrients as well as a source of greenhouse gas emissions. Members from all five focus groups agreed that produce they receive from the fruit and vege co-op rarely goes to waste, with one member summarising it well "the fruit and veg – you have to eat them! You can't waste them." Because some co-op produce may have otherwise gone to waste on the farm, one member exclaimed: "the coop eliminates [on the farm] food waste!" Another member highlighted that the produce has less travel time, and, therefore, "it's fresh so it lasts longer. So, that's important." Some members even prevent food waste by sharing what they don't use with others in their community.

Reduced greenhouse gas emissions (GHGe)

Lower greenhouse gas emissions from a planetary health perspective emerged as a common concern considering climate change and environmental degradation issues. Multiple members linked plant-based diets rich in rich in fruits and vegetables as helping to offset the GHGe from other resource-

intensive foods such as meat. Values also emerged regarding reduced food miles from sourcing mostly local and regionally produced foods, such as oranges, apples, pears, kiwi, and mandarins. The members valued how to co-op increased their access to local produce: "the co-op's close proximity within their community, there is not a lot of transport miles because the food is local, and the pickups are close to home."

Public transport was a common theme at three of the focus groups, with one member sharing carpooling as a way to increase access and reduce transportation costs - "I have a neighbour with an electric car. They are very keen for anyone in the neighbourhood to borrow it. We then encourage all the neighbours that come to share the carpool. Just have one car coming instead of four." Others mentioned lower transport costs "due to multiple deliveries being done at once." Two members mentioned that the walkability of the co-op reduces transportation emissions stating, "less pollution because we don't drive" and "plus, I walk to get the [produce], so there's less carbon from that!"

Increased environmental connection

New Zealand sourced foods were strongly appreciated values from members at each of the focus groups, "I really like the fact that my money is going to local growers" and "we know that it comes from local growers, so it's New Zealand made." There was a sense of community connection towards supporting the local growers and seasonal foods as members of the co-op, summarized by one member "it does make you feel more in touch with the environment."

Environmental pillar supporting quotations

The following four examples are a select few quotations from the FGDs that elaborate on the environmental pillar and substantiate the themes of reduced waste, reduced GHGe, and increased environmental connection.

Case 1: "When you go to the supermarket, you still have lots of plastic bags and other packagings. When you get everything from the fruit and veggie coop, it's all in its natural state. There's no paper or plastic tray. It's like when it comes straight out of the garden, so that's good for the environment."

Case 2: "We're supporting the little to medium guys, which is really important. With the whole thing about corporates taking over our food is an issue."

Case 3: "Getting the fruit and vegetables makes me feel closer to the environment because we know the seasons and where the food has come from. We are aware that it is fresher, and it mustn't have come too far- it is much fresher than the shops."

Case 4: "I was talking to my kids about that – the food miles thing. So, I was like, you know, the fruit and veggies we eat each week (and I wasn't 100% sure of myself), I think they're from local as well."

Case 5: "If people are eating more fruit and veggies, that's a good thing for the planet. Lots of scientist's thing we should be eating a more plant-based diet, in terms of global warming."

Case 6: "My entire family, we eat all of the veggies. We never really waste anything. We try to use everything that is in the bag. Even if the kids don't like it, I will use it in something else."

Discussion

New Zealand, like other developed countries, is experiencing multiple forms of malnutrition – undernutrition, overnutrition, and/or micronutrient deficiencies. Malnutrition is related to diet, stemming from imbalanced in energy consumption and under consuming foods rich in essential nutrients like whole fruits and vegetables. Over time, unbalanced dietary patterns give rise to non-communicable diseases (NCDs) such as cardiovascular disease and Type 2 Diabetes Mellitus. NCDs disproportionately impact lower-income and minority community members and are strongly correlated with socioeconomic inequality. Access to fresh, affordable, and culturally appropriate fruits and vegetables is often the biggest barrier to healthy dietary patterns.

In addition to the 9+ tonnes of fresh, local produce to 1400 households a year, this evaluation suggest that the fruit and vege co-ops are pilars within each respective community. The co-ops provide members with a way to connect to their community members, the environment, improve their whānau's health, and foster a deeper sense of efficacy within their lives.

This evaluation provided a safe space for members to share their voice and subjective experiences with using the fruit and vege co-op in relation to each of the four pillars. The four pillars approach provided a holistic framework to capture the multitude of perceived and actualised benefits members received from participating in fruit and vege co-ops. The ranking of the pillars substantiated these findings and identified priority pillars within and between each examined co-op.

The Four Pillars

The financial pillar was the highest effected by the members. The co-op was cost-effective and allowed families to afford health, high-quality fruit and vege. Members stated that the value of the items are incomparable to the supermarket, allowing low-income families to eat well. Public health and community development reports, academics, and government departments consistently rouse the need to implement interventions that make nutritious food more affordable and the co-op provides an operational way to advance food security and members' access to healthy, nutritious food.

The pillar of health and wellbeing was the second highest motivation for participating in the fruit and vege co-op. In each focus group, members articulated how participation in the co-op has improved their and their whānau's diet quality and thus health by increasing the quantity and variety of fresh fruits and vegetables consumed each week. Considering that fewer than 1/3 of the New Zealand population consumes the recommended amounts of fruits and vegetables, the fruit and vege co-op is a public health success regarding improving nutrition security among lower-resource communities. (Ministry of Health, 2019).

The co-op provided a platform for building and enhancing **social connections** within each community. It supported a diverse range of peoples in each community, and provided an avenue for increased socialization between members as they shared time, recipes, and space during volunteering and collection. Members of the co-op also strengthened relationships at home as they prepared food with their whānau.

The **environmental pillar**, though last, was still perceived as an important component within each focus group. Members celebrated reduced plastic waste, increased connections to local and regional farmers, and reduction in overall food miles. The COVID-19 pandemic has highlighted the fragility of

global food systems, and the fruit and vege co-op has proven to be a successful model that can help strengthen food sovereignty and resilience while supporting local New Zealand farmers.

Recommendations

Increasing Membership

Members who attended the FGDs expressed their gratitude and appreciation for the service and advocated that increasing membership throughout the Greater Wellington region should be a primary goal for the co-op model.

This evaluation illuminated key insights into members' incentives for joining and continuing to use the co-op, garnering insight on how to attract and retain future members. Figure 2 features each focus group's unique pillar prioritization, and while varied, the financial (rank 1) and health (rank 2) pillars were unanimously the top two incentives for member participation.

Financial incentives — particularly in lower resource communities — should be prioritized when designing promotional campaigns and adverts. We suggest that future promotional material should highlight the price savings and value by directly comparing the price of the co-op with the supermarket. The members preferred the pre-pay or automatic payment model, indicating that it helps with their weekly budgeting. Although the savings were a large component of using the co-op, members also felt dignified that they were paying for their produce as opposed to a "hand-out" model (i.e. food banks).

The co-ops' effect on the health and wellbeing of members can also be leveraged. The participants appreciated the recipe cards and capacity building opportunities to use all the food items in the bags. We suggest that these continue and that RPH continues to invest in adjunct cooking workshops for the members. We also recommend that the co-op is promoted amongst health "outlets" as a commonly known place for people on a journey of improving their health, to start. This includes more active referrals from schools, dieticians, and doctors.

The social connections pillar was an ancillary benefit recognised by many of the members and included enhanced community connections, knowledge transfer, and perceiving the co-op as a community centre. Word of mouth marketing is well known to be one of the most effective strategies for product and service promotions (Singh J. et al., 2018). Word of mouth marketing could be leveraged to increase membership through a peer-to-peer referral programme (i.e.: free week of groceries for every 2 new referrals).

The members appreciated the convenient locations and flexibility of pick-up. Future co-ops should identify locations where access to fruit and vege is low and consult with the community to determine convenient times for pick up. Feedback was also provided around maintaining an active program over the holidays, which the co-op has previously been closed.

Last, we also recommend that this evaluation is used in promotional material using FGDs quotations (with consent). There are many relatable, relevant experiences captured in this evaluation that could incentivise others to join.

Conclusion

This evaluation determined that the fruit and vege co-op is economical and improves members' health and wellbeing, social connectedness, and offers a sustainable way to purchase fresh fruit and vege, with members most often using the co-op for financial and health reasons.

The fruit and vege co-op serves as a successful public health promotion public health programme, providing opportunities for lower-resourced communities to access locally produced fresh fruits and vegetables at an affordable price. The co-op found success by building grassroots relationships with key community stakeholders, which ultimately fostered community trust and membership. Findings and member feedback found in this report can help guide future co-ops seeking to build healthier and more resilient communities.

Findings from this research also suggest that the four-pillar approach could be utilized in other community-co-op evaluations and can be upscaled or refined to fit the contexts of each evaluation.

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