

An Aotearoa New Zealand Diet for Metabolic Health and Family Wellbeing: Participant Insights (pilot study)

Dr Denise M Conroy, Principal Scientist, Plant and Food Research

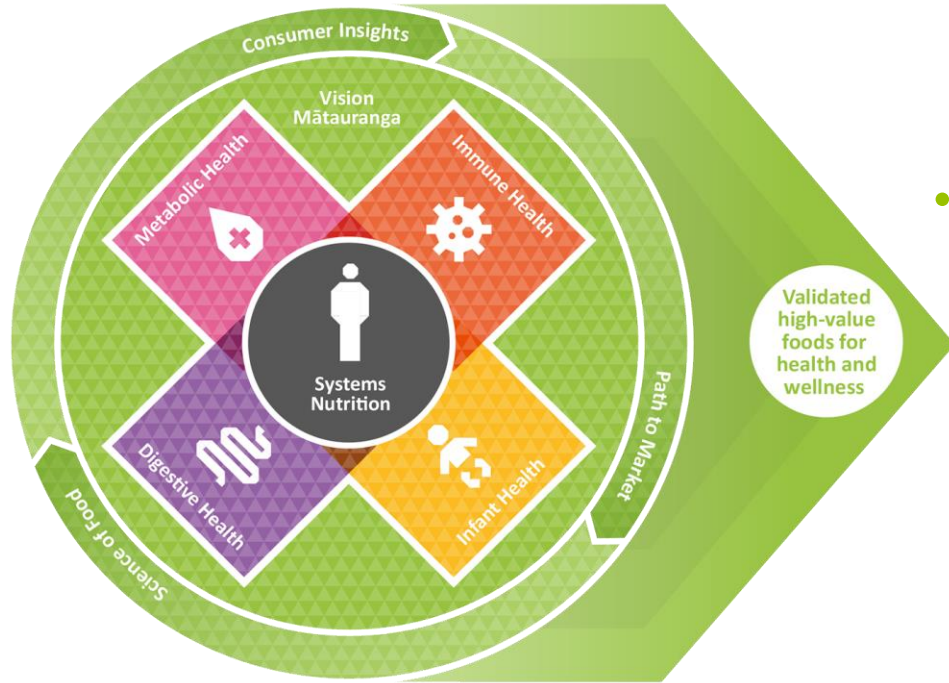
Dr Jenny Young Visiting Researcher, Plant and Food Research

Challenge Host



Challenge Collaborating Parties

High-Value Nutrition Ko Ngā Kai Whai Painga National Science Challenge – A systems nutrition approach



- **HVN mission**

- To grow the science excellence and knowledge New Zealand needs to create and deliver food to the world that people choose to stay healthy and well

- **Consumer Insights:**

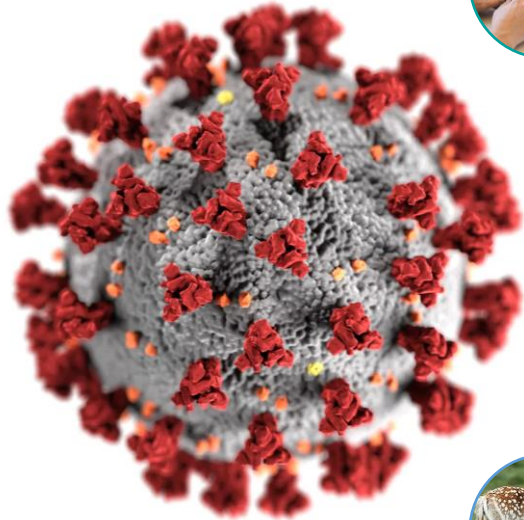
- A ‘**platform programme**’ to support the research of the Priority Research Programmes (Immunity; Gut Health; Metabolic Health, & Infant Nutrition) AND Industry partners, by providing **pre-competitive** market insights.
- Concerned with identifying consumers’ **beliefs, attitudes, values, and perceptions** regarding the role of food in maintaining health and wellness in HVN’s target markets.

Consumer Insights – Tranche 1 (China focused)



Consumer Insights - Tranche 2 continued amid Covid limitations

Following discussion with the HVN Directorate new programmes were agreed upon for consumer insights, and research activities continued despite Covid-19 disruptions



June 2020 the survey undertaken in 2019 was repeated to identify any changes in consumer attitudes/behavior in a Covid affected world



Oct 2020 – Feb 2021 a study of 16 Auckland based Daigous investigated whether purchase patterns of health and wellness food products were changing in a post-COVID environment; the study also explored the role of Daigous in connecting New Zealand brands and Chinese consumers



May 2021 – to date: A new programme, HRWP was under development (a Covid pivot), and the consumer insights team was invited to design a sub-study to support this work. Firstly in a pilot, and then as a main study. DC on the Senior leadership Team for this study. This was extended to include “Brand” work



The consumer insights team was available to assist New Zealand F&B companies with their contestable programmes e.g. designed a survey for a deer milk product

**He Rourou Whai Painga
(HRWP)
PILOT**

Research Aims

- The aim of the **PILOT** study was to test the feasibility for a Main study
- The aim of the Consumer Insights **sub-study** was to provide intelligence to the Clinicians regarding:
 - Barriers reported by Participants to staying compliant
 - Anything that supports Participants complying
 - Family responses to the programme
 - Best and worst experiences
 - What they would really like to be included
 - What they would like to be excluded etc.
- **We wanted to understand the underlying factors which may better enable compliance, preferred message delivery modes, possible barriers - to strengthen the protocol of the main Study**

Method:

- 21 in-depth interviews over zoom (at 3 timepoints) N=7 women
 - Pre-Intervention: To gain insight into pre-intervention habitual diets, cooking practices, lifestyles
 - During-Intervention: To gain understanding of the experiences of the first weeks
 - Post-Intervention: To assess the overall experience
- On-line focus groups (Post Intervention): 3 groups N=12
 - (included a branding section on the He Rourou mark)
- Semi- structured interview guide
- Transcription by Otter voice recognition software
- Thematic analysis of transcript data commencing with open coding and then advancing to interpretation of contrasts between participants and reasons for these differences

Findings 1: Pre-Intervention - 6 main themes

- **Ingrained Patterns:** Participants had their routines and habits
- **Situational pressures:** Such pressures e.g., working parent, often used as excuses for poor food choices
- **Self-image:** Many Participants had poor self-image, fear of failing (again), low agency
- **Unhealthy Food Relationship:** Participants reported a 'negative cycle' eat 'bad' food, feel bad, eat more 'bad' food to feel better.....
- **Family ties very strong:** Concern for other family members and how they would 'cope' with this diet
- **Hope:** Really want to gain control, improve self-esteem and learn new habits – for the entire family

Findings 2: During Intervention (after approx. 6 weeks)

Off to a good start!

- Participants excited and pleased to be making changes – more mindful- now eating breakfast
- Food enjoyment / new flavours / Less time in kitchen / better than expected- more food/ adaptations e.g., tortilla chips
- Feeling better emotionally (less moody) and physically- weight loss reported. (Happiness was evident)
- Gratitude for the opportunity of being on the programme
- Fear of losing the gains already made / Strategies for Christmas in place

- Kathy: *“Very well. Like I'm quite amazed myself at how well it's going”.*

- Isla: *“Massive changes, actually, I feel very light and myself. I feel I'm sleeping better too ...I mean, it's just happened recently. And it's the change in my diet.*

Findings 2: During Intervention- Off to a good start!

- **What is working/successful**
 - Portion control - understandings of satiety improving (e.g. less meat/ less rice)
 - Lapses occur but are better managed- a healthier mindset – able to inform others
 - Family involvement –(teenagers cooking)
 - Less / no need to think for self
- **What is not working**
 - Logistical issues with breakages (Eggs and Yoghurts)- concerns over wastage of food
 - Too much food “overwhelming” / Food given away
 - Lack of guidelines as to how to eat- Not enough variety- more guidance for lunches- more info on meals
 - Possible external sabotage (both inside and outside family)
 - Some want support from a group - How to empower them (again) e.g., networks to learn from/lean on. Also having a contact person re missing/damaged foods
- Some want blood tests/measures to track how they are faring/ others want to wait and see

Findings 3: Post Intervention,

How did they cope? What led to greater adoption?



- (Kathy): Intrinsically motivated- Desire to return to former self/ values personal strength willpower. As a determined participant, Kathy strived to lose weight. Although her cholesterol did come down, disappointed with results (+6kgs) - had felt compelled to eat through the food extras, despite uncertainty - would have preferred more support throughout the trial.
- (Dani): Extrinsically motivated- traditional Thai meals, flavour lover- duty for extended family : very disappointed with the overall health results of the study (recorded a high blood pressure reading and cholesterol worsened). Introduced to new foods (e.g., feta cheese) and has subsequently stopped consuming. Would have liked support during this lifestyle adaptation and found the isolation difficult. Overall, Dani has gone back to eating similarly to how she did prior to the trial, with some changes to fat and sugar intake- wants foods that will suit her personally.
- (Shona): Emotional Food relationship: family connection/ need for acceptance- serious body issues/ Despite success in the first phase, a loss of momentum occurred due to lack of family support (husband) and struggle with family upheavals. Improvements made but wished there was more change

Findings 3: Post Intervention

How did they cope? What led to greater adaptation?

- (Celia): Sensible practical/ down to earth / kiwi style traditional – learnings made overall, but disappointment with lack of change in blood test results
- (Chris): Active/ cultural food patterns dominate/ low interest in regular cooking: Disappointment and depressed with the test results; did not appear to stick to the programme; low interest in food preparation, culturally driven
- (Isla NZ Maori): Challenged by home situation, seeking change, emotional cycle with obese son/ food: Claimed huge leaps and learnings: enormous pride in son who took control of his eating, - new ways of relating to food will help in on-going busy lifestyle
- (Helena Samoan): Younger, trapped in a dominant McDonald's takeaway pattern, unhappy with self, Dysfunctional family? Gained much new knowledge, gradual changes in the final 6 weeks, including regular exercising, had realistic expectations that more change was possible- self determined to succeed despite low buy-in from some family members

On-line Focus Groups (Post Intervention):

Motivations to join:

Split between health/
genetic predisposition
diabetes and desire for
weight loss (appearance
driven)

Food: overwhelming
quantity; Dinners were
delicious, other snacks
lacked any variety

Success for those who
embraced the opportunity
to change and made other
changes as well

Disappointment in test
results for some, esp. if
trying to understand the
role food plays

The Marae Group – Overall a very worthwhile intervention

- I just think yeah, there's definitely a better awareness as to how the food makes me feel throughout the day. Yeah, not sluggish. Way less headaches. Knocked out the caffeine, things like that. Just yeah. Which I think probably was triggered by the program. Just yeah, you got to get on board.”
- But the other thing is I noticed that I wasn't as hungry especially with the breakfast cereal, I used the one in the brown paper bag.....it was the ancient grains kind of mix. And I noticed that I didn't get as hungry during the day if I had that.
- I think I would like to have been shown how to use the different ingredients. Because like, honestly, I was brought up on spaghetti, and weet-bix and golden syrup sandwiches. So yeah, adding the spices, adding the different foods together would have been really cool if I could have watched a video of someone actually cooking the meal. And then I was like, oh, okay, cool. Got it

The Marae Group – Overall a very worthwhile intervention, but.....

Personal support

- Because I'm sure lots of us struggled through it. So it would have been great to hear, you know, rather than email, a phone call from anybody that was running a study to say, oh, how are you doing? Anything like that would have been great. Rather than by email all time”.
- So I think it would have been nice if we'd all meet with each other, you know, perhaps once a week to see how it went for that week. If anybody didn't know, if they were having problems with the foods that they were eating. And so we could share ideas on what to cook or make for lunches and breakfast.

Affordability into the future

- Um, for me, it will come down to affordability because literally, you know, the price of food at the moment is so expensive. And I don't think, you know possibly we could, I even struggle sometimes, but I don't think a lot of families would be able to carry on eating like that. Because yeah, it's just too expensive these days.

Overall Conclusions

- **Issues to focus on:**
 - **Food:** quantity (overwhelming extras) / Breakages in transit / lack of variety (e.g., same exact snacks and yoghurts)
 - **Communication:**
 - Participants had unclear expectations on what the study was about / might achieve- (weight loss was a target for some)
 - Lack of clarity/ guidelines on what to eat –needs more personalization- Most stuck it out to the end and followed the programme very literally
 - **Participants want to understand** how different foods can help their body and their metabolism
 - **Different types of support needed:**
 - Having a support group/ contact during the intervention very important for some (not all). Many felt adrift and became unmotivated in last 6 weeks
 - Having support after the pilot- especially for those coping with the lack of improvement in results.

Useful consumer findings – directly strengthening the Main study protocols



Finding	Action
Participants had reported the term “diet” to suggest weight loss and found the word triggering	Removed the word ‘diet’ from all written and oral communication
Participants reported the need for more information and a need for belonging and connection with other participants	Design of an interactive web site for participants
Some participants had reported feeling they needed to eat everything that was provided	Reduction of the quantity of food products provided – better communication of what to eat and why e.g. remove ‘snack of your choice’



Useful consumer findings – directly strengthening the Main study protocols - continued



Finding	Action
Participants reported a lack of understanding and some confusion over how and when to use foods	The inclusion of brief, 1-minute videos on the web page on how to build good habits
Participants reported their results were provided but were meaningless to them.	More explanation of medical terms, e.g., the importance of healthy blood pressure. Provision of an explanation of their medical results at the end of the project Self -knowledge will help encourage compliance



What Next?



- Full integration of consumer and clinical work
- Feedback has been well received and fully embraced for the Main study, including:
 - Greater support for Participants (videos, in-person, on-line Q&A etc)
 - Review of logistics
 - Greater variety of snacks etc.
- The **study successfully launched on July 18th**
- Design in Place for consumer programme – similar format, larger number of Participants, Māori interviews to be conducted by Māori social scientist Dr Kiri Dell (contracted).
- A second project on perceptions of the HRWP mark/brand is also being conducted

Perceptions of the He Rourou Whai Painga mark (Focus Groups)

- Brand work
 - Ethics in place
 - Interviews with Industry both partners and those choosing not to partner - **Completed**
 - Interviews with domestic consumers – **Completed**
 - Interviews with O/S consumers (Australia) – **Completed**
- Workshops with Industry planned for Brand work



*Discussions based on a fictional olive oil product

Thank You!

- Denise.conroy@plantandfood.co.nz