

HIGH-VALUE
NUTRITION

Ko Ngā Kai
Whai Painga

NUTRITIONAL SCIENCE FUELLING INNOVATION

High-Value Nutrition NZ Conference 2017

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Host Institution





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National
Science
Challenges

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High-Value Nutrition - A National Science Challenge

High-Value Nutrition - using research excellence to enable the transformation of New Zealand's food and beverage industry into an exporter of high-value, scientifically-proven foods for health.

- New Zealand has defined eleven "National Science Challenges".
- "High-Value Nutrition" is the third largest (83M NZ\$ 2015-2025).
- Focus on **innovation and value generation in the NZ food and nutrition.**
- Hosted by the University of Auckland.
- Positioned at the **public/private research interface: involving NZ universities, institutes and companies.**

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HVN Reasoning

- **What** are we doing ?
- **How** are we doing it ?
- **For whom** are we doing it ?
- *How do we differentiate ourselves ?*



HVN Narrative

- We **add value** to NZ food and **nutrition science and products...**
- pursuing a **comprehensive approach** to better understand human nutrition and health...
- to improve **Infant, Metabolic, Immune and Digestive Health in Asian Consumers.**



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HVN Narrative

- We **enhance** genuine and iconic NZ foods and **develop** new NZ foods...
- comprehensively analysing the foods and consumers who eat them to **scientifically prove health** benefits...
- focusing on **Infant Immunity, Early Diabetes, Immune Defenses, and Digestive Comfort** in Asian consumers.

Plant & Food
RESEARCH
KAWHARAU MARAMARA ORO



Discover. Innovate. Grow.™



MASSEY UNIVERSITY
TE KUNenga KI PŪREHUORA
UNIVERSITY OF NEW ZEALAND

agresearch
the million, million what!

THE UNIVERSITY OF
AUCKLAND
Te Hōkanga Matua o Aotearoa
NEW ZEALAND

UNIVERSITY
OF OTAGO
Te Whare Wānanga o Ōtago
NEW ZEALAND

MALAGHAN
FOODS
INSTITUTE

CAWTHRON
The power of science™

HEALTH RESEARCH
INSTITUTE
OF NEW ZEALAND

Lincoln
University

GENUS
FOODS

pwc

tface

UNIVERSITY OF
VICTORIA

Brumpton Feed Science Advisory
Limited

firstlight

Zenith

MIRAKA

The
22 MARK
CORPORATION

STANFORD

BRUNNEN
LABORATORY

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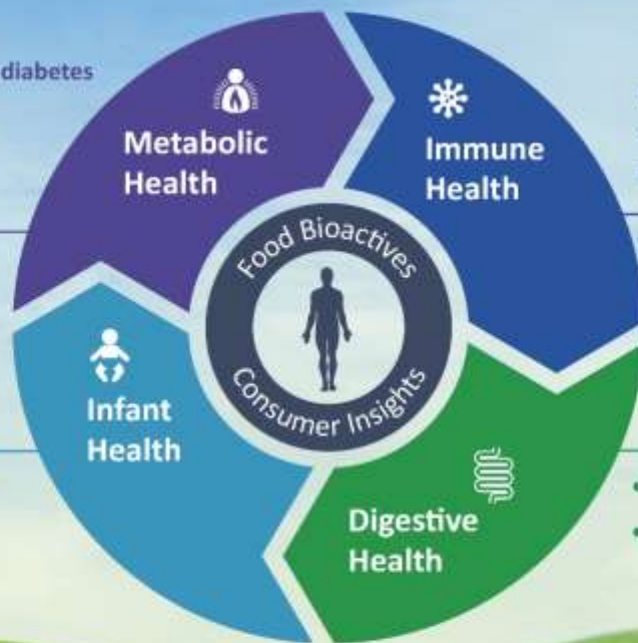
Ko Ngā Kai
What Pāinga

High-Value Nutrition NZ Conference 2017

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High-Value Nutrition National Science Challenge research themes and projects

- TOFI: Thin on the outside, fat inside: preventing diabetes
- Kiwifruit for glucose control
- Combined proteins for lean body mass
- Grass-fed beef for cholesterol control



- Building immune defence
- Natural milk for allergy management
- Greenshell™ mussels to manage inflamed joints

- Complementary feeding for immune protection
- Fibres for sustained energy release

- Characterising irritable bowel syndrome
- A2 Milk for gut comfort

Science Push

Gut Health: IBS
Infant Health: Weaning
Immune Health: Defenses
Metabolic Health: Diabetes

Green-shell mussels
Combined proteins
Natural & A2 milk
Grass-fed beef
Kiwi fruit
Fibres

Business Pull Enablers

Food Bioactives – Asian Consumers



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HIGH-VALUE NUTRITION

Ko Nga Kai
What Painga

Our whole systems approach to High-Value Nutrition science

Our biology

Organ networks
Cellular networks
Molecular networks
Genetic interaction



Our environment

Where we live
Cultural backgrounds
Social networks
Food choices

Our research focuses on understanding biological processes as complex integrated systems.
Nutrition to keep us healthy and well requires an holistic approach.

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Ko hiri Ka
Whai Painga

Today & Tomorrow

- **HVN** strategy
- Keynote: gut-brain axis – P. Dechelotte
- *Local* consumers – *global* trends – P. Wennstrom
- Innovation and Intellectual Property
- **HVN**: metabolic, digestive, immune and infant HEALTH – **SLT**



- **HVN**: designing bioactive foods – **SLT**
- More **HVN** science: attending scientists & posters

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What Pāinga