

The New Zealand Institute for Plant & Food Research Limited

Plant & Food
RESEARCH

RANGAHAU AHUMĀRA KAI

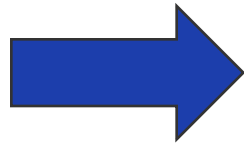
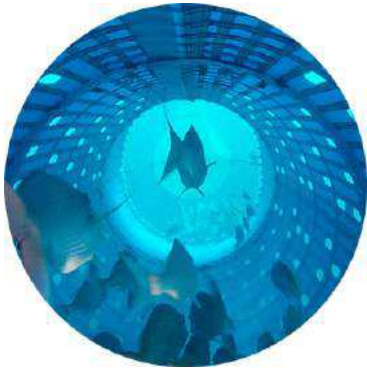


Validated natural products with PFR: Composition, development, quality, safety and efficacy

Sue Marshall (Seafood Technologies, Nelson)

18 March 2016

Science & technology across the value chain



Raw materials

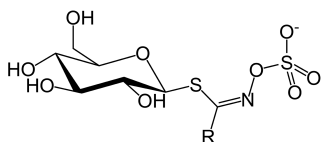
Breeding, growth & harvest

Functional foods, extracts, bioactives, biomaterials, formulated products



Natural products research: Terrestrial plants and marine organisms

Discovery



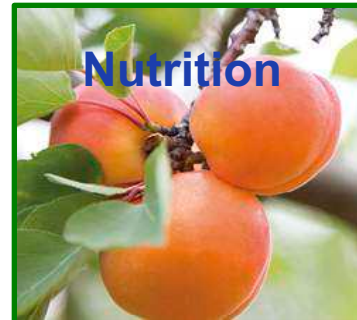
Breeding to enhance actives

Extraction & purification



Bioactivity

Nutrition



Analysis

Product & process development

Safety & stability

Consumer & sensory



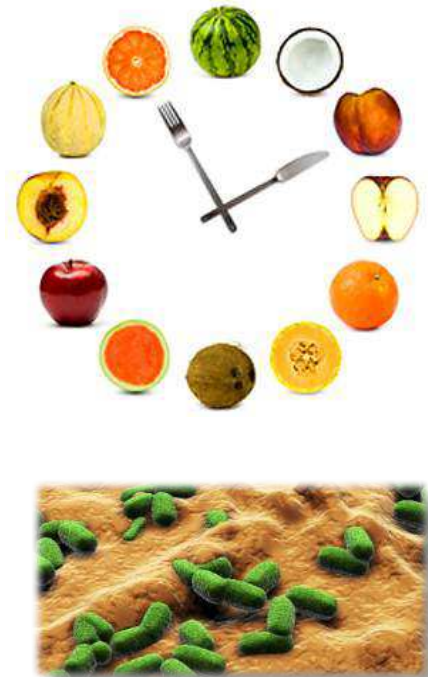
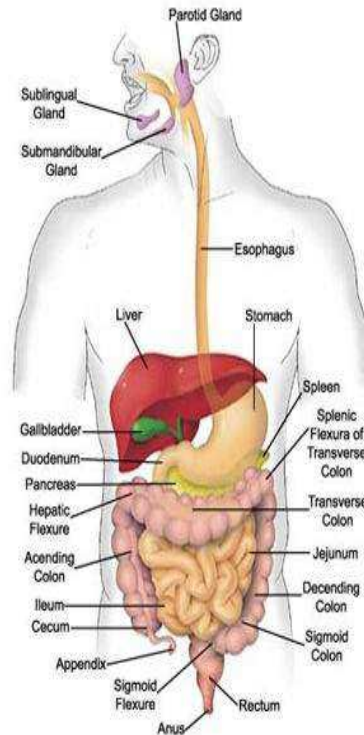
Product applications





**A few
examples of
what we do**

The science of eating and digestion



Scientific data to support health claims



Food Composition Database:
nutrient composition



Food-Health Relationships
Database: validated
information on effects of
food and components on
human health

**“Zespri® Green Kiwifruit
can contribute to normal
bowel function”**



Analysis & discovery



Huge range of analyses for components, contaminants and breakdown products



Matching bioactivity with molecular composition

Extract
composition
(chemical
analysis)



Screening in
cell-based
assays (activity
& mechanism)



Animal feeding
trials



Human feeding
trials (physical &
mental health,
cognition,
inflammation,
immunity...)



Out of the lab: Process development & concept products



PFR Marine products pre-pilot plant, Nelson





**We have a wealth of
expertise,
experience, and
facilities to support
your products & the
growth of your
business**



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Thank you

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