



The 57th Nutrition Society of New Zealand and 47th Nutrition Society of Australia Joint Annual Scientific Meeting was held at Massey University on 5th – 6th December 2023

Editorial

Conference on ‘nutrition and wellbeing in Oceania’

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Oceania is currently facing a substantial challenge: to provide sustainable and ethical food systems that support nutrition and health across land and water. The Nutrition Society of Australia and the Nutrition Society of New Zealand held a joint 2023 Annual Scientific Meeting on ‘Nutrition and Wellbeing in Oceania’ attended by 408 delegates. This was a timely conference focussing on nutrition challenges across the Pacific, emphasising the importance of nutrition across land and water, education settings, women’s health and gut health. Cutting-edge, multi-disciplinary and collaborative research was presented in a 4-day programme of keynote presentations, workshops, oral and poster sessions, breakfast and lunch symposiums and early career researcher sessions. The conference highlighted the importance of collaboration between nations to address the challenge facing nutrition and wellbeing across Oceania. A systems approach of collaboration among scientists, industry and government is vital for finding solutions to this challenge.

Keywords: Sustainability: Food systems: Nutrition: Wellbeing: Oceania

Nutrition and wellbeing in Oceania

The triple burden of undernutrition, overweight and obesity and climate change has been described as a global syndemic⁽¹⁾. As a result, Oceania is currently facing a substantial challenge: to provide sustainable and ethical food systems that support nutrition and health across land and water^(2,3). The Nutrition Society of Australia (NSA) and the Nutrition Society of New Zealand held a joint 2023 Annual Scientific Meeting on ‘Nutrition and Wellbeing in Oceania’ attended by 408 delegates. This was a timely conference focussing on nutrition challenges across the Pacific, emphasising the importance of

nutrition across land and water, education settings, women’s health and gut health.

The conference was promoted widely across the Pacific with the goal of including researchers and nutrition practitioners from throughout Oceania. Invited keynote speakers addressed topics specific to Oceania such as food systems, sustainability, children’s nutrition and non-communicable diseases. The conference included 121 oral presentations, 72 posters and 15 workshops led by researchers and nutrition practitioners from across Oceania. With support from the International Union for Nutrition Sciences, travel grants were made available to early and mid-career researchers from the Pacific Islands

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enabling wider representation. Overall, the strong Pacific focus of the conference provided delegates with a greater feeling of community with their Oceanic neighbours.

Plenary highlights

Nutrition in our land and water (Plenary 1 and 2) was opened by Professor Nick Roskrige (Massey University) who provided a powerful message of food sovereignty and food security in Aotearoa and the Pacific. Nick shared about Indigenous foods of Aotearoa, with rich information about the foods' important cultural and nutritional value. Dr Sam Murray presented on the resilient communities in the Pacific, followed by Dr Priscila Machado (Deakin University) discussing a diet quality score in global health context. Plenary 2 continued on the theme, with Dr Ty Beal presenting on the role of sustainable diets; Eli Kliejunas (University of Auckland), described research on the greenhouse gas emissions of New Zealand households' food purchases, and James Goode (University of Tasmania) provided modelling data on the impact of replacing red and processed meats with plant-based alternatives and the estimated effect on insulin sensitivity.

Nutrition in education settings (Plenary 3) was opened by Dr Sarah Burhart (University of the Sunshine Coast), who has been working with local communities in the Pacific, investigating the power of school food and local agriculture. We also heard from Associate Professor Pragya Singh (Fiji National University) about nutrition and physical activity in schools in Fiji, and lastly from Danika Pillay (Massey University) who has been investigating methods to assess food availability in New Zealand primary schools.

Gut health (Plenary 5) was opened by Professor Michael Schultz (University of Otago) speaking on Inflammatory bowel diseases and nutrition; Professor Nicole Roy (University of Otago) discussed the diet, gut physiology and the microbiota-gut-brain axis. The session was closed with an emphasis on fibre from Dr Mathre Snelson (Monash University) on the impact of fibre on systolic blood pressure, and found it was dependent on gut microbiota composition, and Dr Yanan Wang (CSIRO) discussed the value of consuming high fibre bread on the microbiome diversity.

For Women's health (Plenary 6), we heard from Associate Professor Lisa Moran (Monash University) who discussed the evidence for lifestyle on polycystic ovary syndrome, and Dr Evangeline Mantzioris (University of South Australia) on emerging evidence on Mediterranean diet and women's reproductive health.

Nutrition and wellbeing (Plenary 7), a key part of the overall theme for the conference, included an opening presentation on policy perspectives for lifestyle interventions in the Pacific from Fuimaone Darryl Laifai Pupi, from the Ministry of Health Samoa, followed by Dr Fa'asisila Savilia (University of Auckland) on navigating Pacific People's nutrition and health research. The session was closed with a talk from Jenna Perry (University of Sunshine Coast), about school food programmes in the Pacific Island countries and Dr Nikki Renall (Massey

University) on dietary fibre intake and metabolic disease in Pacific and New Zealand European women.

Monitoring healthy diets (Plenary 8) was the final plenary for the conference discussion on food and nutrition monitoring, with presentations from Australia, Ms Renee Sobolewski (Foods Standards Australia New Zealand) and New Zealand, Dr Berit Follong (University of Auckland). The closing session of the conference included Mr Joseph Nyemah Nyemah from Food and Agriculture Organisation (FAO) of the United Nations, who gave a compelling address on FAO's approach to addressing non-communicable diseases. This final presentation was an excellent example of the power of an oration, and the importance of contextualising our nutrition science work with policy and government priorities.

Workshops

Workshops provided an interactive forum for presenters and delegates. Fifteen workshops were held over four concurrent sessions. There was a wide range of topics from those focused on careers, special interest groups, school food, healthy aging, emerging research methods such as co-design, use of social media, new technologies and specific clinical topics such as diet-microbiome interactions. Over 230 attendees attended the workshops, with many attending multiple sessions. The evaluation indicated that delegates found the workshops valuable, particularly due to the interactive nature and networking. Participants would like to see workshops in future conferences with suggestions for topics given.

Other special symposiums and sessions

The early career researcher and postgraduate sessions included the pre-conference Early Career Masterclass (sponsored by Foodcom) and the lunchtime Meet the Experts session. These sessions enable valuable networking opportunities and sharing insights on career development.

An update session from the Oceanic Nutrition Leadership Platform (ONLP) was delivered by ONLP Chair, Professor Sheila Skeaff (University of Otago) who provided a snapshot of the 2023 training programme held in Yungaburra, Queensland, Australia. The session also allowed celebration of the growing network of ONLP emerging nutrition leaders across the Oceania region, aiming to build capacity for early- and mid-career individuals working in nutrition-related fields by fostering relationships and application of leadership skills.

The conference launched the Federation of Oceanic Nutrition Societies (FONS) with inaugural president Dr Sarah Burkhart (University of the Sunshine Coast), aiming to bring together people for the advancement of nutrition science, health and wellbeing throughout Oceania. This launch included moving presentations by Mr Sefano Katz (Pacific Blue Foundation, Fiji) and Dr Jeanne Pau'uvala Teisina (Tonga/New Zealand) and



Fig. 1. The Federation of Oceanic Nutrition Societies (FONS) logo was developed to signify the purpose and values of the Societies

launched the FONS logo developed to signify the FONS purpose and values (Fig. 1). The logo was unveiled by rolling out a woven mat in the shape of a wave that symbolises family and fellowship, networking and collaboration and bringing people together across the Oceanic region. The mat symbolises a space for people to come together to have a conversation (talanoa, yarn or korero); the food basket represents nutrition; the Island represents the many islands across the Oceanic region; and, the green colour represents sustainability.

The Dairy Australia-sponsored symposium was delivered by Dr Nick Smith (Riddet Institute) who discussed nutrient trade in Oceania. Through his mathematical modelling, Dr Smith provided insight into global and national food production, trade and availability, and their effects on global nutrition needs. A strong argument for the importance of data accessibility was made, highlighting how it can help countries understand their nutrient undersupplies, dependence on trading partners and the links to nutrition security and environmental factors. This access to data is crucial for informed system-wide understanding and policy decisions to advance nutrition.

The morning tea and lunchtime sessions were dedicated to the 72 posters.

Nutrition society of Australia awards of excellence

The NSA Awards of excellence session recognised award-winning contributions to nutrition science. Fellowships of NSA were awarded to Professor Bing Wang (Charles Sturt University) and Associate Professor Allison Hodge (Cancer Council Victoria). Professor Wang was recognised for her contributions of special merit to the scientific study of molecular and cell biology, biochemistry, bioinformatics and neuroimaging in both animals and humans. Professor Wang provided an overview of her research programme to elucidate the molecular and cellular basis of how nutrient components alter metabolic responses important in health and disease prevention from foetus to late life. Associate Professor Hodge was

recognised for her contributions of special merit to nutritional epidemiology, including nutrition in relation to cancer, diabetes and cardiovascular outcomes. In her role, she also works closely with health promotion and communications colleagues at Cancer Council Victoria to advise on health messages and ensure their scientific validity. The NSA Mid-career Researcher Award was bestowed upon Associate Professor Therese O'Sullivan (Edith Cowan University). This award recognises excellence in nutrition science for researchers who are in the 5–15 years period after being awarded a PhD. Associate Professor O'Sullivan provided an overview of her research programme investigating the potential health benefits of dairy fat in the diet.

Summary

The joint 2023 Annual Scientific Meeting on 'Nutrition and Wellbeing in Oceania' highlighted the importance of connection and collaboration between nutritionists throughout the Pacific to address the key challenges we face in providing sustainable food systems that support culture, nutrition and health in our communities. From grounding the conference in the knowledge of indigenous food systems and their contribution to food security and food sovereignty; numerous plenary sessions on cutting-edge and multi-disciplinary research; to putting into perspective the role of science in developing food policy at the national and international scale, the role of different forms of knowledge was celebrated. With the launch of the Federation of Oceanic Nutrition Societies, the conference provided a mechanism and hope to foster the advancement of nutrition science, health and wellbeing throughout the Oceania.

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Author contributions

KML, CS, JRB, PH, MG, VMF and SM drafted the manuscript. All authors approved the final version.

Competing interests

There are no conflicts of interest.

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