

# Nutrition & Health Innovation Research Institute

Developing and implementing better nutritional and lifestyle  
approaches to improve health and wellbeing across the lifespan



# Introducing the Nutrition & Health Innovation Research Institute

Established in 2021 as a Strategic Research Institute of Edith Cowan University, the Nutrition & Health Innovation Research Institute (NHIRI) is a team of successful researchers, aligned with a common purpose of discovering and sharing real -world solutions to improve health and quality of life

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# Our vision

Healthy people  
Healthy communities

# Our mission

Reduce chronic  
disease by  
developing,  
translating and  
implementing  
nutrition and health  
innovation research

# What we do

The Institute brings together research programs under four themes:

1. Discovery and excellence
2. Technology and innovation
3. Real-world impact
4. A sustainable future

Collaborating with our partners, our research informs programs and policies that will have real impact on improving health and well-being, and provide the evidence-base to inform practice.

We explore new innovative and digital technologies and health promotion opportunities to contribute to translation and implementation of nutritional approaches to improve health.



# The challenge

Healthy people and healthy communities. We all want this. While the perception is that we are healthier now than ever before, the data tells a different story.

We are facing an epidemic of “civilisation diseases” – also known as silent killers.

These include obesity, diabetes, heart disease, stroke and kidney disease. Their impact varies by culture, demographic and geography, but nearly half of Australians have one or more chronic conditions. Poor nutrition is the number one cause of morbidity and mortality world-wide, accounting for nearly one in five deaths. This has enormous social and economic impacts on the community

In this day and age, disease is largely managed by a medical model. We have shown that research into nutrition and modifiable lifestyle factors is our best chance of curtailing the expensive and deadly epidemic of chronic diseases.



# Translating our research

An important area for the Institute is translating the research from the lab to real-world settings. We inform and support ways of increasing fruit and vegetable intake, the cornerstone of a healthy diet.

Our research provides evidence-based insights into how fruits, vegetables and other whole plant foods play a vital role as:

- a main source of nutrients and bioactive plant components
- maintaining a healthy microbiome, and
- being crucial in the management and prevention of chronic disease

## Systems approach

We believe a systems thinking approach is helpful to address the complex nature of human health.

This method provides new opportunities to understand and, test and revise our understanding of the nature of things, including how to improve people's health.

# Examples of some key research challenges we seek to answer

Our research areas cover a wide range of areas across the life span. Some examples of key areas of research and the questions we are seeking answers to.

## **Nutrition in pregnancy, early years and childhood**

How can we support parents to give their children the best nutritional start in life?

How can we use a range of health promotion approaches to develop healthy eating behaviours from infancy?



## **Preventing and managing chronic disease through diet and lifestyle change**

Can we better understand how and why plant-food rich diets protect against chronic disease?

What are the most effective ways to strengthen and support those affected by chronic disease through diet, exercise and nutrition?





## **New technologies and innovation to improve human nutrition, mental and physical health**

Does providing individuals with knowledge of their own level of blood vessel disease motivate them to improve their diet?

How can we use new technologies to improve nutrition, choice and efficiencies in aged care?

## **Healthy productive living**

How can organisations improve employee's health and productivity through nutrition?

How can we use our knowledge to educate individuals on:

Diet and health

Dietary patterns and eating behaviours

Food and mental health



## **Systems change in built and natural environments**

How can we improve food environments and food security to support optimal nutritional health throughout life?

How can we affect positive change to current Food Policy and Health?

# Connect with us

NHIRI has more more than 100 researchers including recognised global leaders in their research fields.

Our researchers are internationally recognised, publish highly cited articles in high impact journals and contribute to development of national and international public health policy, guidelines, recommendations and practice.

We also publish and promote high quality research and facilitate translation of evidence into practice. Engagement and collaboration with industry, government, research bodies, and other stakeholders is also critical.

Our researchers are open to opportunities to develop new collaborations to enhance our understanding of targeted nutritional approaches to improve health, and to develop novel and effective implementation strategies.



# NHIRI Core Team

Nutrition & Health Innovation  
Research Institute  
STRATEGIC RESEARCH INSTITUTE



**Prof**  
**Jonathan Hodgson**



**A/Prof**  
**Josh Lewis**



**Prof**  
**Amanda Devine**



**Prof**  
**David Suter**



**A/Prof**  
**Therese O'Sullivan**



**A/Prof**  
**Rae-Chi Huang**



**A/Prof**  
**Leesa Costello**



**Dr**  
**Catherine Bondonno**



**Dr**  
**Marc Sim**



**Dr**  
**Lauren Blekkenhorst**



**Dr**  
**Nicola Bondonno**



**Dr**  
**Liezhou Zhong**



**Dr**  
**Zulqarnain Gilani**



**Dr**  
**Mary Kennedy**



**Dr**  
**Jack Dalla Via**



**Dr**  
**Annie De Leo**



**Dr**  
**Myles Murphy**



**Dr**  
**Simone Radavelli-Bagatini**



**Dr**  
**Cassandra Smith**



**Dr**  
**Benjamin Parmenter**



**Dr**  
**Abadi Gebre**



**Dr**  
**Ros Sambell**



**Dr**  
**Claire Pulker**



**Prof**  
**Gina Trapp**



**A/Prof**  
**Paula Hooper**



**Dr**  
**Wai Lim**



**Cheryl Croce**



**Bianca Lovi**

# Work with us

When you partner with us, you create opportunities for your organisation to participate in catalysing the process for positive change. You connect to an organisation that uses a cross disciplinary approach, invested in the translation of cutting-edge research, destined to impact the health and wellbeing of every person in every community.

The ECU Nutrition & Health Innovation Research Institute partners with companies, governments, non-profits and other organisations to address complex issues through our research, teaching and engagement activities. We welcome the opportunity to discuss with you the various ways we can work together to build a stronger healthier community.

**If you would like to explore ways to work together, please contact us.**

**e: [nhiri@ecu.edu.au](mailto:nhiri@ecu.edu.au)**

**w: [nhiri.ecu.edu.au](http://nhiri.ecu.edu.au)**

