# Nutrition & Health Innovation Research Institute

# Strategic Plan 2022 - 2027

# Welcome

The Nutrition & Health Innovation Research Institute was established as a Strategic Research Institute of Edith Cowan University in 2021. The Institute brings together established groups of successful researchers, aligned through a common purpose of discovering and sharing real - world solutions to improve health and quality of life.

Australia is facing an epidemic of chronic diseases including obesity, diabetes, heart disease, stroke and kidney disease. Nearly half of all Australians have one or more chronic conditions. This has enormous social and economic impacts on the community. Research into nutrition, other modifiable lifestyle factors and health innovation are our best chance of curtailing this expensive and deadly epidemic.

Our team investigates how good nutrition and health behaviors can improve quality of life and prevent premature death. Our focus is on translating and implementing this knowledge into evidence-based practice and policy, for the benefit of the wider community.

Our work is relevant across the lifespan from the early years through to a rapidly aging population. It informs governments, industry, clinical practice, health and medical organisations, community groups and individuals. We work with large data sets, develop and evaluate innovative tools and resources and conduct high - impact trials and interventions. We use artificial intelligence to anticipate and understand chronic disease; and we use 3D food printing to improve the eating experience for vulnerable communities. Our discoveries are innovative and scaled for communities in Western Australia and Beyond.

We are delighted to present to you our inaugural Strategic Plan. This plan will guide our work for the next five years supported by the advice and guidance of our eminent Institute Advisory Board. Please join us on this journey.

**Professor Jonathan Hodgson**
**Director**

**A/Professor Joshua Lewis**
**Research Program Lead**

# One vision

Healthy people
Healthy communities

# One mission

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

# Our values guide the way we work

**Excellence**  We demonstrate the highest personal and professional standards

**Rational Inquiry**  We are motivated by evidence and reasoning

**Integrity**  We are ethical, honest and fair

**Trust**  Our relationships are built on trust

**Inclusivity**  We celebrate diversity in the communities we serve

**Respect**  We consider the opinions and values of others

# Our purpose
## is to discover and share real world solutions to improve health and quality of life

We are committed to a future of research innovation and excellence

We are committed to involving consumers and community in all that we do





We are committed to creating partnerships for improved well-being and quality of life

We are committed to empowering and supporting people in a diverse and inclusive environment

Our strategic themes are the foundation for delivery of our mission

# Discovery and excellence

Objective:  Support a pipeline of curiosity – driven research to improve health

## Strategies & Actions:

- **Use large observational data sets for new discoveries**

  Over the next five years we will:
  - Establish at least five new collaborations on large national and international data sets
  - Produce more than 100 publications ranked in the top 10% of journals internationally from existing and new collaborations
  - Senior researchers will support and mentor early and mid-career researchers to lead research projects utilising data resources.

- **Conduct high – impact trials or interventions**

  Over the next five years we will commence at least 3 new intervention studies

- **Develop and evaluate new research tools or resources**

  Over the next five years we will:
  - Develop, test and implement food composition databases
  - Develop, evaluate and share new resources
  - Develop new biomarkers of phytochemicals, nutritional intake or disease stages
  - Develop expertise in cutting – edge statistical methods

# Technology and Innovation

**Objective:** Develop and adopt new and innovative technologies to improve health and quality of life

## Strategies:

- Develop 3D food printing to improve the eating experience for vulnerable communities
- Developing AI and machine learning to anticipate, understand and prevent chronic diseases
- Monitor and explore new ways to utilise technologies to improve health

## Actions:

Over the next five years we will:

- Implement 3D food printing in aged care settings (aged care providers to provide PhD stipends)
- Identify funding opportunities for 3D food printing and AI
- Annual reviews of 3D food printing and AI – host a symposium in collaboration with industry leaders highlighting the latest technology
- Develop grand challenges in AI and 3D food printing – building capacity to innovate and attract required capabilities (e.g. computer scientists)

# Real - world impact

Objective:  Scale and innovate discoveries to communities in Western Australia and beyond

Strategies & Actions:

- Become a consumer-facing digital presence
  - Develop a website and social media presence to engage audiences
  - Develop a communications strategy (including blogs and podcasts)
  - Establish an Institute consumer group

- Be known as an influential stakeholder in decision making
  - Participate in external advisory panels and expert content sites
  - Collaborate with external agencies on policy development

- Design policy briefs / consensus statements or clinical practice guidelines to influence systems change
  - Bring stakeholders to share ideas on what end users need
  - Leverage external agency relationships

# A sustainable future



Objective:  Connect, support and develop high - performing leaders for a sustainable future

## Strategies & Actions:

- Develop mechanisms for a long term view on strategic plan
  - Horizon scanning for opportunities (e.g. government initiatives)
  - Inventory of skills / projects / partners (heat map)
  - Develop a succession plan
  - Focused program-relevant internal meetings

- Plan and mentor for success
  - Launch a targeted mentoring program. Utilise available mentoring programs (e.g. IMNIS / PHAA)
  - Skills training (e.g. commercialisation; data analysis)
  - Targeted leadership training
  - Workshopping grants with feedback on unsuccessful grants

- Identify and develop networks outside the Institute
  - Develop a stakeholder map
  - Joint EMCR Journal clubs with relevant organisations
  - Diversify funding opportunities through connections with key collaborators

# Our five - year goals

- We will strengthen our financial sustainability with a diverse funding base, this will include an average of 20% per year growth in Category 1 funding and 30% per year growth in funds from other sources
- There will be a 50% increase in the number of Institute members, including higher degree students, early- and mid-career researchers and research leaders
- We will have at least five new independently funded research fellows in our ranks
- Publication numbers will grow by more than 15% per year, with more than 90% published in Q1 journals
- We will be acknowledged as a valued partner and source of knowledge by external agencies
- We will have established productive collaborations based on at least five new large data sets