

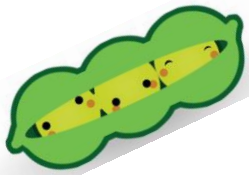




# Knowledge Translation in Practice: learnings from two case studies

Professor Rebecca Golley  
Deputy Director  
Caring Futures Institute





# Child and Families Research Program

**Prof Rebecca Golley**



**Dr Lucy Bell**



**Dr Brittany Johnson**



**Dr Sarah Hunter**



**Claire Gardner**



**Research Staff**

- Dr Georgia Middleton
- Sam Morgillo
- Sam Shaw
- Kevin Lau

**HDR Students**

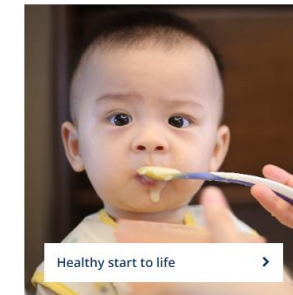
- Shabnam Kashef
- Alex Manson
- Dim Dutch



[www.earlychildhoodobesity.com](http://www.earlychildhoodobesity.com)



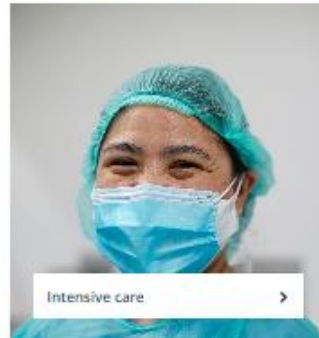
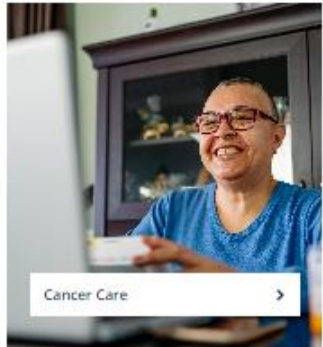
[Healthy conversations @Playgroups](#)



**Caring for Caregivers**



### Our areas of focus



Utilising an integrated Knowledge Translation approach we evaluate and implement innovative and disruptive care and caring solutions **in key areas of focus** to overcome challenges facing health, care and social systems.

To deliver our vision and mission, the Caring Futures Institute will build and support the capacity and capabilities of an interprofessional academic and research workforce that can rapidly generate and embed evidence-informed policy and practice to improve care and health outcome now and into the future.



What am I going to be talking about?

*An exploration of the science  
and art of knowledge translation*



# Context

## ACAORN

### Mission statement

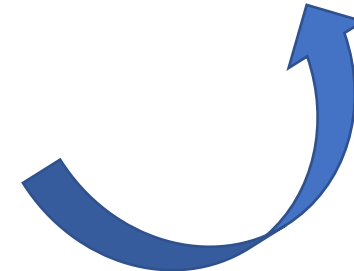
The Australasian Child and Adolescent Obesity Research Network (ACAORN) was established to foster and coordinate research collaboration among Australian and New Zealand child and adolescent obesity research groups to identify key research questions and seek funding to address these with high quality research.

<https://www.anzos.com/acaorn>



Our team is working on 3 streams of research to create an integrated approach to introducing childhood obesity prevention interventions into routine practice.

<https://earlychildhoodobesity.com/research/>



# Context



CSIRO

- \* a step-by-step plan for giving kids a healthy start to life
- \* train your child's tastebuds
- \* over 100 recipes you and your children will love

the CSIRO wellbeing plan for **kids**

The poster features a circular inset image of a family (mother, father, and two children) sitting at a table eating together. The text is in a clean, modern font, with "kids" in a large, bold, orange font.

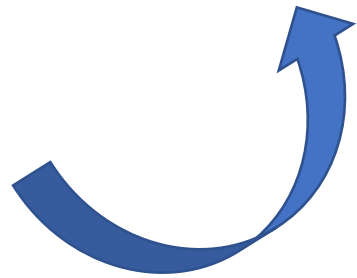
## Increasing children's vegetable intake with VegKIT

CSIRO, Flinders University and Nutrition Australia are working together to deliver VegKIT, an integrated five-year project designed to deliver tools and interventions for increasing children's vegetable intake.

The banner features a background image of a child's face with a red bell pepper slice held up to their eye, making it look like a lens. The text is overlaid on a semi-transparent grey box.

### What's your Healthy Diet Score?

Discover how your diet measures up against Australia's healthy eating guidelines

The banner shows a person's arm and shoulder in a kitchen setting, with the text overlaid in white on a dark background.

<https://www.vegkit.com.au/>

<https://www.csiro.au/en/research/health-medical/diets/csiro-healthy-diet-score>



# Knowledge Translation Strategies for Impact

- EPOCH CRE
  - Monitoring tools
- VegKIT
  - Partnerships
  - Tools
  - Registries
  - Alliances



Monitoring tools

Problem identification

Awareness raising

Screening

Evaluation



# Rapid assessment tools to measure lifestyle behaviours in 0-5-year-olds

- ▶ Established measures of obesity-related behaviours are not feasible for use in all settings:
  - ▶ Length
  - ▶ Participant and end-user burden
  - ▶ Cost
- ▶ Need for quick and robust measurement of diet, physical activity, screen time and sleep
- ▶ No short tools measuring obesity-related behaviours in 0-5years that are both validated and reliable<sup>1</sup>

# Development process

## ITEM SELECTION Content validity

- Systematic review of short tools<sup>1</sup>
- Content expert feedback to identify behaviours for measurement in tools

## ITEM PRE-TESTING Face validity

- Cognitive interviews with n=41 parents of 0-5-year-olds - feedback on readability, understanding, wording, tool design<sup>2</sup>

## ITEM TESTING Validity and reliability

- Parents (N=367) completed short tools twice over 1-2-week period and completed established reference methods

# EPOCH short tools

Dietary intake  
6-12 months

Dietary intake  
1-2.9 years

Dietary intake  
3-5 years

Movement  
behaviours & sleep  
6-18 months

Movement  
behaviours & sleep  
18 months-5 years

<https://earlychildhoodobesity.com/measurement-tools/>



# Use of short tools

- ▶ Routine and harmonised measurement of behavioural outcomes across research and practice including
  - Evaluation of scaled-up early obesity prevention programs
  - Population-level monitoring of health behaviours
  - Translation for use in healthcare settings e.g. screening, referral, monitoring, feedback to families

## A better way to measure the success of early childhood obesity prevention interventions

Trials of early childhood obesity prevention interventions don't always measure success in the same way.

Developed through an international, three-phase study, the COS EPOCH recommends the collection of 22 core outcomes in obesity prevention intervention studies in children aged from birth to five years.

Using COS EPOCH will help researchers compare studies and maximise the value of data collected across trials.

### The Core Outcome Set for Early intervention trials to Prevent Obesity in Childhood (COS EPOCH)

#### Dietary intake

(in children aged >1 years)

1. Child diet quality
2. Child dietary intake
3. Child fruit and vegetable intake
4. Child non-core food intake
5. Child non-core beverages intake
6. Child meal patterns



#### Sedentary behaviour

15. Child screen time
16. Child time spent sedentary



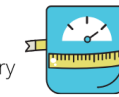
#### Sleep

17. Child sleep duration



#### Anthropometry

7. Child weight-based anthropometry



#### Physical activity

18. Child physical activity
19. Infant tummy time



#### Emotional/cognitive functioning

8. Child wellbeing



#### Outcomes in parents/caregivers

20. Parent/caregiver physical activity parenting practices
21. Parent/caregiver sleep parenting practices
22. Parent/caregiver nutrition parenting practices



#### Economic

9. Economic evaluation



#### Environmental

10. Food environment
11. Household food security
12. Family meal environment
13. Sedentary behaviour/physical activity home environment
14. Early Education and Care (ECEC) environment



For more information please contact:  
Dr Vicki Brown  
Centre for Research Excellence in Translating the  
Early Prevention of Obesity in Childhood,  
Institute for Health Transformation,  
Deakin University, Australia.  
[victoria.brown@deakin.edu.au](mailto:victoria.brown@deakin.edu.au)



# VegKIT

- Partnerships for embedding evidence into existing programs
- Knowledge Translation products
  - Tools
  - Registries
- Collectives



# Partnerships

Open access

Protocol

**BMJ Open** Cluster randomised controlled trial of a menu box delivery service for Australian long day care services to improve menu guideline compliance: a study protocol

[Link to full text](#)

Shabnam Kashef <sup>1</sup>, Dorota Zarnowiecki <sup>2</sup>, Vic Jennifer C Arguelles <sup>4</sup>, David N Cox <sup>5</sup>, Rebecca K Gc

Open access

Protocol

**BMJ Open** Application of the multiphase optimisation strategy to develop, optimise and evaluate the effectiveness of a multicomponent initiative package to increase 2-to-5-year-old children's vegetable intake in long day care centres: a study protocol

[Link to full text](#)

Dorota Zarnowiecki <sup>1</sup>, Shabnam Maeva O Cochet-Broch <sup>3</sup>, Jennifer



International Journal of *Environmental Research and Public Health*

Article [Link to full text](#)  
**Menu Audit of Vegetable-Containing Food Offering in Primary School Canteens in Sydney, Australia: A Preliminary Study**

Janne Beelen <sup>1,\*</sup>, Jessica E. Heffernan <sup>1</sup>, Maeva Cochet-Broch <sup>1</sup>, Shadia Djakovic <sup>2</sup>, David Chung <sup>2</sup>, Rebecca K. Golley <sup>3</sup> and Astrid A. M. Poelman <sup>1</sup>

<https://heas.health.vic.gov.au/training/training-early-childhood-sector>  
[https://youtu.be/p792qu\\_XC4s](https://youtu.be/p792qu_XC4s)



<https://research.csiro.au/taste-and-learn-early-years/>

## Training for the early childhood sector

Learn how to plan healthy menus and promote healthy eating with our free online training modules!



NEW Promoting healthy eating in long day care	Planning healthy menus for long day care
<b>Time to complete:</b> This module takes less than one hour to finish, and is self paced	<b>Time to complete:</b> This module takes less than one hour to finish, and is self paced
<b>Who is this training for:</b> educators, management, directors	<b>Who is this training for:</b> cooks, directors, educators





# Resource registry

The registry is an interactive online library of evaluated initiatives that promote children's vegetable intake.

## VegKIT – Initiatives to Improve Children's Vegetable Intake in Long Day Care



Find initiatives

EVALUATION AND EFFECTIVENESS **1** | ALIGNMENT WITH THE BPG **1** | PUBLISHED 2020



### TYPE

Controlled trial or comparative study



### OUTCOMES/OUTPUTS

Impacts on vegetable intake, Impacts on vegetable knowledge/awareness, Creates behaviour change relating to vegetable consumption (i.e. knowledge skills attitudes beliefs confidence satisfaction etc.)



### SCALE

Local (within 1 site/town/city)



### SETTING

Long daycare



### POPULATION TARGETED

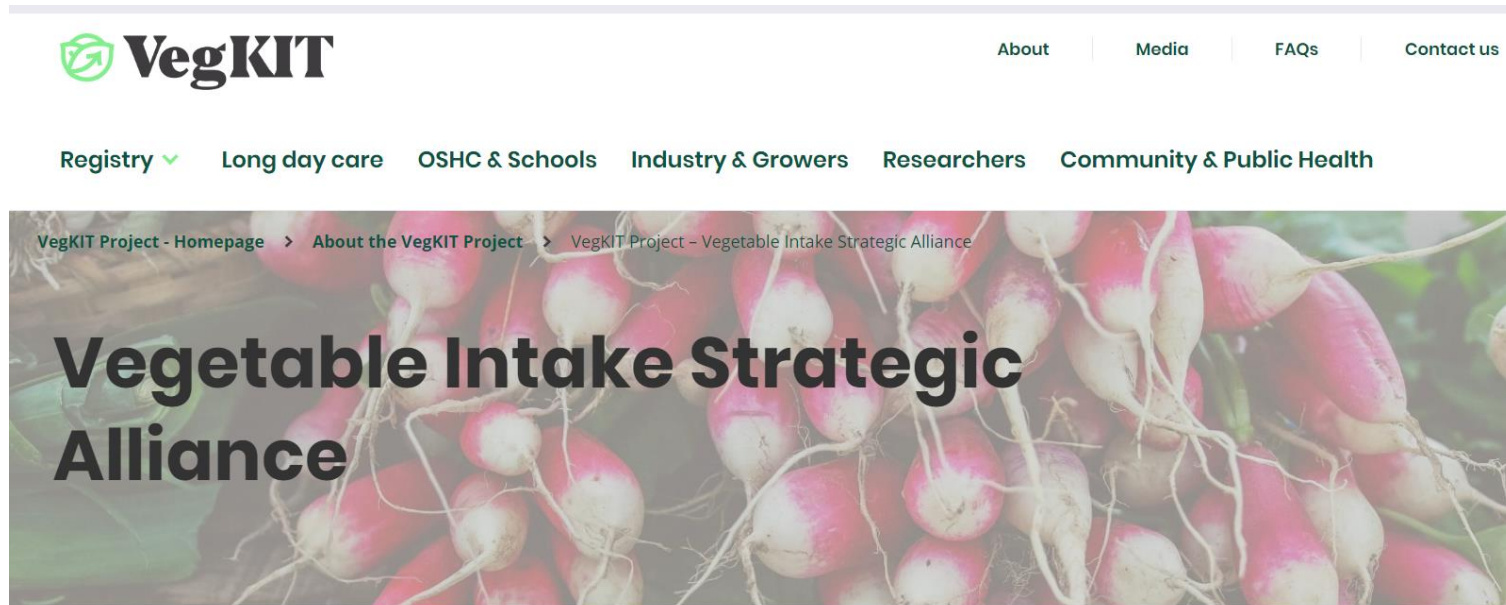
Children - early years (birth - 4 years)



### FOCUS

Vegetable are the only focus

# Collectives, Alliances, Networks



**VegKIT** About Media FAQs Contact us

Registry Long day care OSHC & Schools Industry & Growers Researchers Community & Public Health

VegKIT Project - Homepage > About the VegKIT Project > VegKIT Project - Vegetable Intake Strategic Alliance

## Vegetable Intake Strategic Alliance




VEGETABLE INTAKE STRATEGIC ALLIANCE

**WORKING TOGETHER  
TO INCREASE CHILDREN'S  
LIKING OF VEGETABLES**

**Position Statement**  
by the Vegetable Intake Strategic Alliance (VISA)

*Literature Review*

## **A Systematic Review of Key Factors in the Effectiveness of Multisector Alliances in the Public Health Domain**

Bonnie Wiggins, BAPsych (Hons), MMktg<sup>1</sup> ,  
Kim Anastasiou, BNutrDiet (Hons)<sup>1</sup>, and David N. Cox, BA (Hons), MSc, PhD<sup>1</sup>

American Journal of Health Promotion  
2021, Vol. 35(1) 93-105  
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[Link to  
full text](#)

# Take home messages

- The Knowledge-To-Action Framework is a great place to start to explore an integrated Knowledge Translation approach
  - i-PARIHS useful if using facilitation as a KT strategy
  - Develop an engagement plan
- Develop a knowledge translation plan
  - Implementation plan
  - Dissemination and communication plan
- Match Knowledge Translation strategies to setting and context
  - More evaluation of the KT frameworks and KT strategies needed
- Knowledge Translation is both a science and an art
  - Relationships may be the most important component of success

Paper which references the Knowledge-to-Action framework found [here](#).

# Acknowledgements



<https://www.flinders.edu.au/caring-futures-institute>

## Funding

NHMRC

MRFF

Wellbeing SA

Flinders University

Hort Innovation

## Colleagues

Flinders Caring Futures  
Institute

EPOCH – USYD,  
Deakin, QUT, Cork

VegKIT – CSIRO,  
Nutrition Australia (Vic)



The VegIT project has been funded by Hort Innovation, using the vegetable research and development levy and contributions from the Australian Government. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture. The project is underpinned by a consortium of members from CSIRO, Flinders University and Nutrition Australia Victoria Division

# CONNECT

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Flinders University acknowledges the Traditional Owners and Custodians of the lands on which its campuses are located, these are the Traditional Lands of the Arrernte, Dagoman, First Nations of the South East, First Peoples of the River Murray & Mallee region, Jawoyn, Kurna, Larrakia, Ngadjuri, Ngarrindjeri, Ramindjeri, Warumungu, Wardaman and Yolngu people. We honour their Elders past, present and emerging.