

Do healthy eating strategies in early childhood education & care settings work?

PLAIN LANGUAGE SUMMARY - JUNE 2023

KEY MESSAGES & RECOMMENDATIONS

POLICY MAKERS & PRACTITIONERS

1. Continue to support delivery of healthy eating programs in ECEC as a strategy to:
 - improve children's diet quality
 - improve children's fruit and vegetable consumption
 - possibly reduce excessive weight gain.
2. Focus on programs that include:
 - educator-led lessons
 - the physical environment
 - policies
 - engaging parents and communities
3. Invest in coordinated population-wide implementation support

RESEARCHERS

1. Conduct more research to explore:
 - healthy infant feeding behaviours (children aged 6 months to 2 years) in ECEC services
 - children's healthy eating behaviours in family day care settings, which are accessed by more disadvantaged groups.
 - programs within low- and low-middle-income countries
2. Evaluate the impact of healthy eating interventions on child cognitive and behavioural outcomes, and formally assess adverse consequences and cost effectiveness.
3. Use a standardised set of core outcomes to measure changes in healthy eating behaviours to better enable comparison across studies for future meta-analysis.
4. Examine the impact of specific ECEC intervention strategies on child health outcomes to identify priorities for future implementation support.





What is this review about?

This review asked:

- Do programs delivered in ECEC settings improve children's dietary intake?
- Do these programs promote healthy weight?
- What is the impact of these programs on language and cognitive skills, social/emotional and quality of life?
- Are programs cost-effective?
- Do they cause any unintended adverse effects?

We also looked at the effects of programs that included different strategies of the WHO Health Promoting Schools framework (such as curriculum, environment, and partnerships), and the effects of programs on high and low SES populations.

Why is this important?

Unhealthy eating habits increase the risk of chronic disease such as heart disease, type 2 diabetes, and certain types of cancer.

Global recommendations highlight the importance of ECEC settings to support the development of healthy eating behaviours and for population-wide obesity prevention efforts.

To promote lifelong healthy eating habits and improve overall health we need to understand more about what works to promote healthy eating habits in ECEC.



Eating habits that are established early in life carry on into adulthood.

What did we do?

1

We systematically searched online databases and grey literature sources for high level evidence from studies that assessed the effectiveness of healthy eating programs in ECEC settings.

2

Studies of randomised controlled trials were included if they used a comparison with either a) usual care; b) delayed program delivery; or c) an alternative program.

3

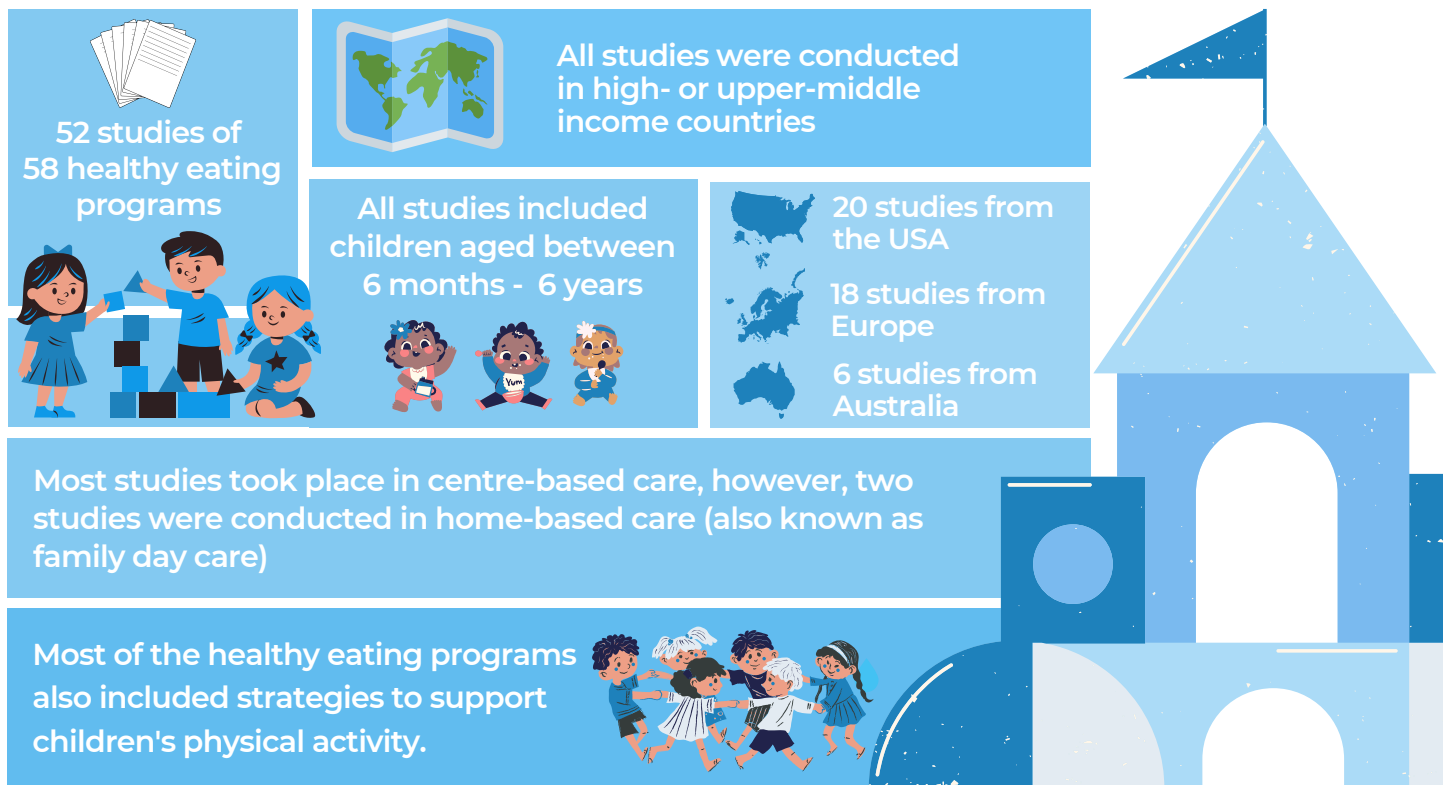
We included studies that measured at least one diet or anthropometric outcome at least 3 months after the program began.

4

Results from studies were pooled together, where possible, to calculate an overall summary of the effectiveness of healthy eating programs.

We did this by conducting a **meta-analysis**; a statistical method used to combine the results from multiple studies.

What is included in this review?



WHAT WERE THE MAIN FINDINGS?

1. Healthy eating interventions delivered in ECEC settings:
 - may improve child diet quality,
 - likely increase fruit consumption,
 - may increase vegetable consumption,
 - may have favourable effects on child weight and risk of overweight/obesity.
 - likely have no impact on consumption of less healthy foods and consumption of sugar sweetened drinks
2. Very few studies have reported on costs or the potential adverse effects of interventions.
3. Little is known about the impact of ECEC-based healthy eating interventions on child social/emotional outcomes, language and cognitive outcomes, and quality of life.
4. There were no differences observed by socio-economic status.
5. We also found that most interventions:
 - target the environments, partnerships, and curriculum
 - often also include strategies to promote physical activity

A summary of the limitations of the evidence

Several factors may limit the certainty of results. We have low confidence in the summarised evidence because the healthy eating programs were conducted in different ways and interventions were delivered and assessed in different ways.

Many of the people who received these interventions were aware that they were being assessed. This can sometimes influence their reporting of the study outcomes. Not all studies provided data about everything we were interested in and there was missing data at follow-up in many of the studies.

About Us

This research was conducted by researchers at the University of Newcastle, Deakin University, Hunter New England Population Health and the National Centre of Implementation Science (NCOIS). NCOIS is an NHMRC funded Centre for Research Excellence associated with the University of Newcastle.

Key contact & research lead: Associate Professor Serene Yoong - s.yoong@deakin.edu.au

Full Text Available

Yoong SL, Lum M, Wolfenden L, Jackson J, Barnes C, Hall AE, McCrabb S, Pearson N, Lane C, Jones JZ, Dinour L, McDonnell T, Booth D, Grady A. [Healthy eating interventions delivered in early childhood education and care settings for improving the diet of children aged six months to six years](#). Cochrane Database of Systematic Reviews 2023, Issue 6. Art. No.: CD013862. DOI: 10.1002/14651858.CD013862.pub2. Access online: <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013862.pub2/full>

