



**EVIDENCE SYNTHESIS**  
IRELAND



## Evidence Synthesis Ireland Fellowship Scheme 2020

### Review Centre/Group Mentor (RCM)

Serene Yoong  
Luke Wolfenden

### Review title

**A systematic review of healthy eating interventions delivered in early childhood and education care settings to improve the dietary outcomes of children less than 6 years.**

### Review type

Review of effectiveness

### Review details

#### **Background**

Diet during infancy and early childhood can have long term implications on child growth, health and developmental trajectories. Many young children however have poor diets that do not meet dietary guideline recommendations. Early childhood education and care (ECEC) is a recommended setting to deliver healthy eating interventions, as they offer existing infrastructure and access to a large number of children at a formative period of their lives.

Therefore the primary objective of this systematic review is :

- To describe the effectiveness of ECEC based dietary interventions for improving child dietary outcomes.

Secondary objectives of this systematic review are:

- To describe the effectiveness of ECEC based dietary interventions for improving measures of child weight status
- To describe the effectiveness of ECEC based dietary interventions for improving child cardiovascular disease risk markers
- To describe the effectiveness of ECEC based dietary interventions in improving child cognitive, mental health and quality of life outcomes
- To describe the absolute cost or cost-effectiveness of the included interventions
- To describe any adverse events or unintended effects related to included interventions

## **Criteria for considering studies for this review**

### ***Types of studies***

We will include only randomised controlled trials (RCTs) (including cluster-RCTs, stepped wedge RCTs, factorial RCTs and multiple baseline RCTs).

### ***Types of Participants***

We will include interventions that seek to improve the dietary intake of children attending an ECEC service. A variety of participant groups may be included in such trials, including (but not limited to):

- Children aged 6 years and under attending the ECEC service.
- Parents, guardians or carers of children attending the ECEC service.
- Professionals responsible for the care provided to children attending the ECEC service, including ECEC service directors, educators, volunteers, cooks or other employed staff.
- Those responsible for the oversight and accreditation of ECEC services, including government authorities, or regulatory agencies, or those with the capacity to influence the nutritional practices of ECEC services such as those involved in the food supply chain.

### ***Types of interventions***

We will include healthy eating interventions that are primarily delivered within an ECEC setting. The ECEC setting, includes services such as preschools, nurseries, long day cares, family day care and kindergartens that offer care for children aged 0 to 6 years, prior to compulsory schooling.

We will include ECEC interventions that aim to only influence diet, as well as healthy eating interventions combined with other behavioural intervention components including physical activity and sleep. Included interventions may be single-component or multi-component interventions (i.e. interventions that include more than one strategy to influence eating behaviour/dietary intakes).

There will be no restriction on included intervention duration. Interventions that target both the ECEC service and other settings, such as the home, will be included if the ECEC setting was the main focus of the intervention.

### ***Control***

We will include studies that report the outcomes of an intervention versus no intervention (control), delayed intervention (wait-list control), usual care or alternative intervention (i.e. an intervention that does not seek to influence diet).

### ***Types of Outcomes***

#### ***Primary outcomes***

We will include any measure of child dietary intake. Such measures could include assessments of intake that occur during attendance at childcare, or overall dietary intake. Dietary intake may be

captured using objective methods including nutritional biomarkers such as doubly labelled water (measure of energy consumption), plate waste audits or direct observations (33). Child diet may also be evaluated using self-reported methods (e.g. parent reported dietary intake), such as short diet questions, food frequency questionnaires, food diaries, diet histories and 24-hour recalls. Measures of foods or beverages provided to children, for example, served or listed on childcare menus, but do not assess child intake will be excluded

**Estimated start and completion dates\*** – *please note these are subject to change and flexibility on the part of the Fellow is required*

**March 2020 – Jan 2021**