



Nutrition Society Congress 2024, 2–5 July 2024

## Outcomes of children’s cooking programs: a systematic review of intervention studies

Joyce Haddad PhD, APD<sup>1</sup>, Klazine van der Horst MPH, PhD<sup>1</sup>, Loan Catalano BSc<sup>1</sup> and Leslie Cunningham-Sabo PhD, RDN<sup>2</sup>

<sup>1</sup>Bern University of Applied Sciences; School of Health Professions, Nutrition & Dietetics, Murtenstrasse 10, 3008 Bern, Switzerland

<sup>2</sup>Department of Food Science and Human Nutrition, Colorado State University, Fort Collins, CO

Children’s cooking programs have been linked to increased cooking frequency and positive dietary outcomes <sup>(1,2)</sup>. A systematic review on children’s cooking interventions with a control group, in a variety of settings, on all age groups has not yet been conducted. Thus, we aimed to examine the effects of children’s participation in published cooking interventions on their cooking skills, food acceptance, and dietary behaviors; and the quality of the scientific evidence.

Following Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines, two independent electronic searches across six databases were conducted to identify cooking-focused interventions with comparison groups among participants aged up to 18 years old, published in English, between 2017 and 2022. Studies were assessed on quality using the Academy of Nutrition and Dietetics Evidence Analysis Library quality criteria checklist.

Among 1104 articles identified, 23 met inclusion criteria and described main results for distinct interventions. Interventions varied in participant age, settings, cooking sessions and program length. Knowledge of cooking skills, self-efficacy and involvement were the most frequent positive outcomes; improvements in dietary intake were rarely achieved. Seven studies were highly rated for research quality.

Lack of assessment standardization, variability in program characteristics, and insufficient intervention description made it difficult to discern best practices for children’s cooking programs.

Improvements in intervention development and measurement instruments are needed.

Interventions that include hands-on cooking lessons seem promising in improving knowledge and self-efficacy, however, further exploration is needed on the factors that make cooking programs successful long-term, while considering age and gender.

### References

1. Soliah LAL, Walter JM, Jones SA (2012) *Am J Lifestyle Med* 6(2), 152–158.
2. Hasan B, Thompson WG, Almasri J *et al.* (2019) *BMC Nutr* 5(29).