

Abstract



## Immediate and Longer-Term Effects of An Intensive Adolescent Cooking Intervention on Mental Well-Being and Cooking Self-Efficacy, Attitudes and Involvement <sup>+</sup>

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Background: Cooking more frequently is associated with a healthier diet. However, reported decreases in adolescents' cooking opportunities may contribute to poorer health outcomes. Few cooking intervention studies have used a randomised control (RCT) design or longer-term follow-ups. Additionally, cooking more often is associated with better mental well-being among teens but this has not been examined experimentally. Our objective was to investigate whether a cooking intervention affects cooking-related outcomes and mental well-being among adolescents.

Methods: A 5-day intensive holiday cooking program, followed by 6 weeks of weekly recipe and ingredient kits with a Facebook support group, was tested using an RCT design with a 12-month follow-up. Adolescents aged 12–15 y (n = 118; 64% female) completed baseline, post-intervention and 12-month questionnaire measures of mental well-being, cooking attitudes, cooking self-efficacy and current cooking involvement. Between-group differences accounting for baseline were estimated using repeated-measures mixed regression models.

Results: Post-intervention changes were significantly higher in the intervention group for mental well-being (4.7% higher, 95%CI [0.1–9.3], p = 0.04), home cooking involvement (0.4 times/week, 95%CI [0.1–0.7], p = 0.003), cooking self-efficacy (general: 14.0%, 95%CI [7.3–20.6], specific: 23.1%, 95%CI [20.6–25.7], both p < 0.001), and positive cooking attitude (11.5%, 95%CI [9.7–13.4], p < 0.001). Differences were maintained at 12 months for self-efficacy and attitude only (general cooking self-efficacy: 7.7%, 95%CI [3.4–12.1]; specific cooking self-efficacy: 15.0%, 95%CI [11.8–18.2], both p < 0.001; positive cooking attitude: 2.3%, 95%CI [0.1–4.4], p = 0.04). This study was not sufficiently powered for subgroup analyses, however exploratory analyses suggested possible effect modification by socio-economic status, weight status or teen cooking involvement.

Conclusions: Cooking interventions may increase cooking behavior and improve mental wellbeing during support phases of interventions, however cooking attitudes and self-efficacy are more likely to be maintained longer-term. Future research should investigate what factors help maintain cooking involvement and mental well-being among adolescents. Funding: Lotteries Health New Zealand, Foodstuffs Community Trust.



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