

## Mapping the potential of meal kits to influence parental food literacy: an application of behaviour change frameworks

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Cooking at home and eating together provide opportunities to improve family nutrition and promote healthy dietary habits. Commercial meal kit subscription services (MKSSs) (e.g. HelloFresh™, Marley Spoon™, EveryPlate™) may support parents to overcome obstacles to family meal provisioning and facilitate food literacy development. A gap exists in our understanding of how and why meal kits may elicit behaviour change, and opportunities to increase their behaviour change capability. This study aimed to examine the theoretical potential of Australian MKSSs to promote parental food literacy using the Behaviour Change Wheel (BCW)<sup>(1)</sup> and associated Theoretical Domains Framework (TDF)<sup>(1)</sup> and Behaviour Change Technique Taxonomy v1 (BCTTv1)<sup>(2)</sup>. A one-week subscription was purchased for all Australian-based MKSSs (n = 9) and key meal kit components (subscription and meal planning features, meal kit delivery and website content) were coded using the retrospective application of these behaviour change frameworks. Parental food literacy-related behaviours were informed by a Food Literacy framework<sup>(3)</sup>. Identified BCTs were mapped to the TDF using the Theory and Techniques Tool to identify theoretical mechanisms of action. The key meal kit components identified mapped to eight of the nine BCW intervention functions. These components primarily served the functions of enablement and environmental restructuring to support cooking at home. Thirty-five of the 93 possible BCTs were identified across the nine MKSSs reviewed, ranging from 19 to 29 BCTs per company, and linked to 13 of the 14 TDF domains. The most frequently identified mechanisms of action (TDF) targeted changes in motivation (n = 27) and capability (n = 19) to influence parental food literacy. Australian-based MKSSs incorporate a wide range of BCTs that target mechanisms of action associated with food literacy-related behaviours. These findings provide a strong theoretical evidence-base for the potential of commercial MKSSs to enhance parental food literacy. However, the extent to which these services may influence behaviour change or impact family food intakes is currently unknown. Therefore further research is required to evaluate the healthfulness and effectiveness of MKSSs.

**Keywords:** meal kits; nutrition, food literacy; behaviour change techniques

### Ethics Declaration

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### Financial Support

This research received no external funding.

### References

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