

# Integrating behaviour change science into a dietary intervention: Enhancing the He Rourou Whai Painga trial

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## Background



Nutrition trials are needed for providing high quality evidence to inform dietary guidelines. These trials are frequently challenged by poor participant adherence, making it hard to identify how that behaviour change impacts health (1). Consequently, within these trials behaviour change science can play a key role in designing effective interventions. In this study, the Behaviour Change Wheel (BCW) (2) was used to develop behaviour change support for 200 participants and their whānau/household members to adhere to a New Zealand-adapted Mediterranean diet within the He Rourou Whai Painga randomised controlled trial (3).

## Methods

Key steps of the BCW involved defining the target behaviour; identifying barriers and enablers to this behaviour from a target audience survey and an expert focus group; and integrating these with the Capability Opportunity Motivation Behaviour Model to identify effective behaviour change techniques to integrate into the trial design.

## Results

Nine behaviour change techniques were identified as promising and integrated into He Rourou Whai Painga. Key components of the support included the provision of food boxes containing up to 75% of energy; peer and dietitian support on private Facebook groups and Facebook Messenger; and nutrition education accessible on a participant-facing website. Process and impact evaluation, and adherence to the dietary pattern will be used to assess the effectiveness of the support.

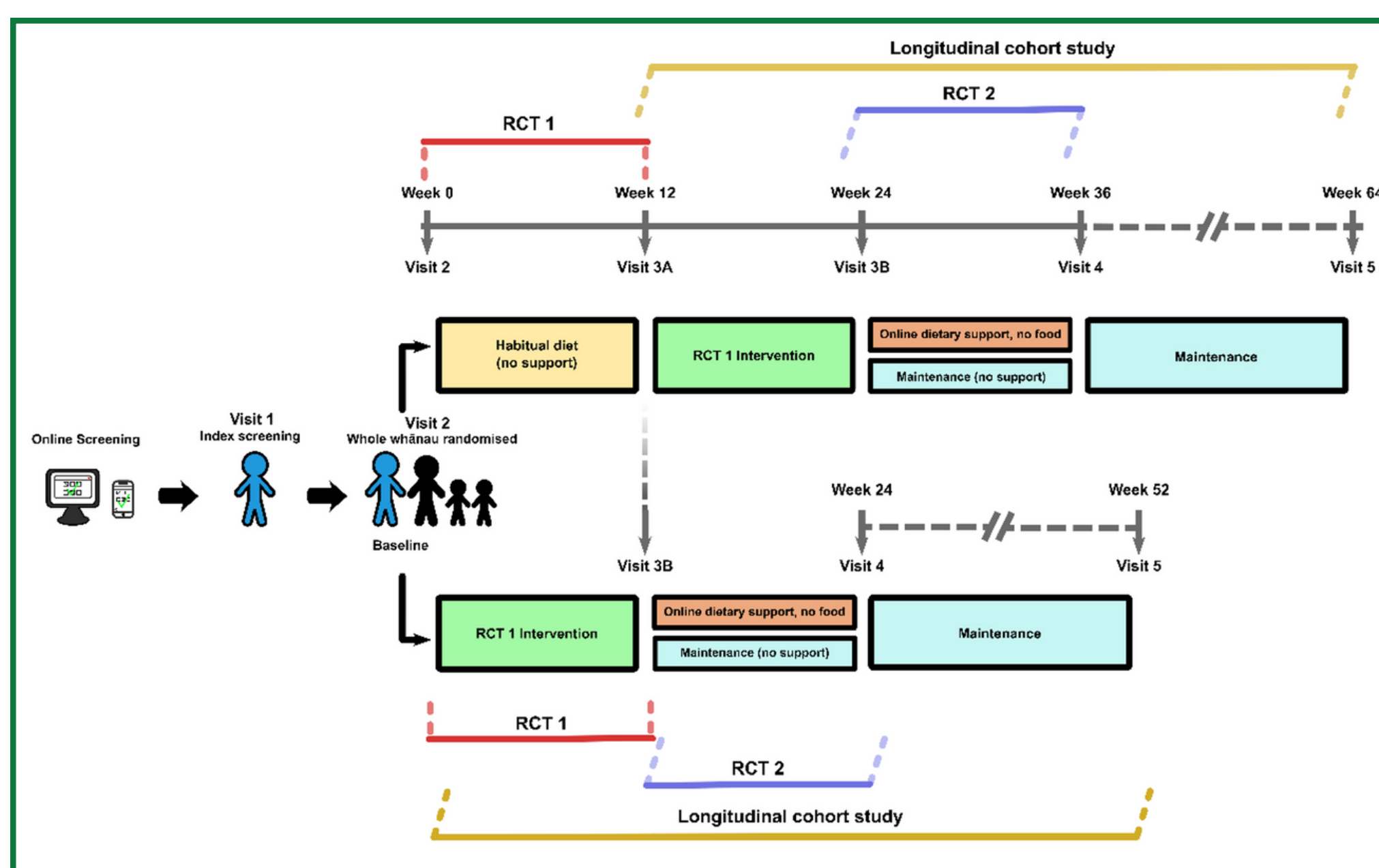


Fig 1. Study design of He Rourou Whai Painga trial.



## Conclusion

In contrast to implicitly selecting strategies based on researcher judgement, using the BCW provided a systematic way of designing trial components within He Rourou Whai Painga that are evidence-based and likely to support participants to adhere to the specified dietary pattern.

## Objective

Systematically select and integrate behaviour change techniques to support participant adherence to a New Zealand-adapted Mediterranean diet.

## References

- (1) Crichton et al. (2012). Long-term dietary intervention trials: critical issues and challenges. *Trials*, 13(1), 111.
- (2) Michie, S., Atkins, L., & West, R. (2014). *The Behaviour Change Wheel* (1st ed.). Silverback Publishing.
- (3) Lithander et al. (2023). He Rourou Whai Painga, an Aotearoa New Zealand dietary pattern for metabolic health and whānau wellbeing: protocol for a randomized controlled trial. *Frontiers in Nutrition*, 10.

