

## Abstract

# Sodium Reduction Targets for Fast-Food Products: Methods for Estimation and an Investigation of Potential Acceptability and Implementation <sup>†</sup>

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**Abstract:** Fast foods contribute to excessive intake of sodium in New Zealand (~3373–3544 mg/day). High sodium consumption is associated with hypertension, a leading risk factor of cardiovascular disease. Our objectives were to (1) estimate sodium reduction targets for New Zealand (NZ) fast-food products and to (2) investigate the potential acceptability of sodium reduction targets, including barriers and facilitators to implementation, and potential methods for execution and monitoring. Sodium contents and serving size of fast-food products were sourced from a 2019 fast food database (Nutritrack). A step-by-step process was used to create food categories and develop sodium targets that are currently met by 35–45% of products. Semi-structured interviews were held with 12 expert stakeholders who work within public health, government agencies, and food science via videoconferencing. Sodium reduction targets per 100 g and per serving were estimated for 17 fast-food categories. The targets ranged from 158 mg (salads) to 665 mg per 100 g (mayonnaise and dressings). On a per serving basis, the targets ranged from 118 mg (sauce) to 1270 mg (burgers with cured meat). The experts agreed that sodium reduction targets for NZ fast foods are needed and acceptable. Barriers to implementation include unequal participation by industry and limited data for monitoring. A voluntary approach led by cross-government collaboration, along with mandating if there is limited uptake, and a robust monitoring system were deemed to be important for implementation. The sodium reduction targets estimated for NZ fast foods were supported by the non-industry stakeholders. While further review and consultation with the industry may be necessary, the newly estimated targets provide a platform for one aspect of a much-needed government-led sodium reformulation programme for NZ, which should also include targets for packaged foods and consumer awareness.

**Keywords:** sodium; salt; target; benchmarking; fast foods; New Zealand

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**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki, and approved by the University of Auckland Human Participants Ethics Committee on 20/05/20 for three years (reference number: 024597).

**Informed Consent Statement:** Written informed consent was obtained from all subjects.

**Data Availability Statement:** Because of the commercial and legal restrictions to the use of copyrighted material, it is not possible to share the data from Nutritrack used for setting targets openly, but unredacted versions of the dataset are available with a licensed agreement that they will be restricted to non-commercial use. For access to Nutritrack, please contact the National Institute for Health Innovation at the University of Auckland at [enquiries@nihi.auckland.ac.nz](mailto:enquiries@nihi.auckland.ac.nz). The data from the interviews are unavailable due to ethical restrictions on the collection of data from human participants.

**Conflicts of Interest:** The authors declare no conflict of interest.

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