

Modelling the Impact of a Voluntary Food Reformulation Initiative to Reduce Sodium Intake in the New Zealand Diet †

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Abstract: Our study aimed to model the potential impact of a food reformulation initiative on the strategies, such as those recommended in the WHO SHAKE Technical Package.

sodium intake of New Zealand (NZ) adults. The initiative, HeartSAFE 2020, is led by the NZ Heart Foundation and has set sodium targets for foods in 17 categories. Participants' sodium intakes of 840 foods included in HeartSAFE 2020 were estimated using 24 h diet recall data collected in the 2008/09 NZ Adult Nutrition Survey (NZANS). The 2008/09 NZANS was conducted prior to the targets being introduced and was used for baseline data. We estimated the mean baseline and modelled sodium intake, assuming that all HeartSAFE targets were met, as well as the corresponding sodium reduction for each food category. Population level estimates were also analyzed by applying sampling weights. The sample included 4721 participants aged 15 years old and over. The mean baseline sodium intake from foods included in HeartSAFE 2020 was 1307 mg/day (95% CI 1279, 1336). Following alterations of sodium content using the HeartSAFE 2020 targets, the mean modelled sodium intake was 1048 mg/day (95% CI 1024, 1027). This corresponds to 260 mg/day (95% CI 252, 268) of the mean sodium intake reduction. Food sub-categories that resulted in the most sodium intake reduction were ready meals (710 mg/person/day), Asian sauces (546 mg/person/day), bacon (242 mg/person/day), canned baked beans (238 mg/person/day), and pizza (222 mg/person/day), for those who consumed these foods. Overall, meeting the HeartSAFE targets only resulted in a 20% reduction in sodium intake from the foods included in the program, and about 8% of total sodium intake. Current food reformulation targets are insufficient to meet the 30% sodium reduction target set by the World Health Organization. To do so, NZ will need to introduce more comprehensive

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Data Availability Statement: The data is publicly available from Ministry of Health New Zealand.

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