



## Decades old nutrition data leave NZ in the dark - updated nutrition survey needed

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Aotearoa New Zealand (NZ) faces a critical information gap on what New Zealanders eat and our overall nutritional status due to a lack of recent national nutrition surveys.

The last adult nutrition survey was conducted in 2008/09 and the most recent children's survey dates from 2002. With these decades-old statistics, NZ is essentially flying blind when it comes to knowing what and how people are eating and hence how best to improve population eating habits, nutrition and health.

We outline why a new national nutrition survey is needed and how the government, food industry, and public health typically use survey data. We also highlight the tools and methods available for a new NZ survey and put the potential costs in context.

National nutrition surveys (NNS) provide vital information on population eating habits, food and nutrient intakes, household food security, and the overall nutritional status of the population.

Detailed nutrition data from NNS are critical to inform effective and cost-effective public health policies, food industry actions, and community nutrition initiatives. NNS are also essential to monitor the safety and suitability of our food supply, set food standards, and monitor, evaluate and review food policies aimed at addressing food safety, nutrient deficiencies, food insecurity, and diet-related diseases including heart disease, obesity, diabetes, and cancer.

Data from our last adult nutrition survey (conducted in 2008/09) have been used to answer important questions on intakes of foods<sup>1</sup> and nutrients<sup>2-4</sup> in specific population groups<sup>5, 6</sup>; the relationship between dietary intakes and health<sup>7</sup>; prevalence of diet-related disease<sup>8, 9</sup>; and the effects of possible changes in diets on population health and cost savings<sup>10-13</sup>. The 2002 Child Nutrition Survey data have been used to investigate similar important topics<sup>14-17</sup>, including initiatives to improve children's diets<sup>18</sup>. Regular and up-to-date NNS also allow us to benchmark NZ food habits and nutrient intakes against other countries, track changes over time, monitor improvements or declines in food security, and estimate the impact of food fortification programmes.

The food industry is also reliant on comprehensive NNS data. Survey data help to inform industry research and innovation on food reformulation and new product development, and ways to support healthier dietary patterns. Additionally, industry uses NNS data to monitor the role their products play in the overall nutrition of New Zealanders, for example, the increased use of sugar alternatives in foods and drinks. <u>Appendix A</u> outlines how NNS data can inform effective food regulations.

#### A critical gap in knowledge

Since the last surveys, huge changes have occurred in the cost, marketing, and labelling of food as well as the types of food available. As new products are continuously developed and whole new categories of products appear in our food supply, these change overall nutritional intakes. Growth in food consumed outside the home, ready-made meals, plant-based, paleo- and keto diets, gluten-free foods, energy drinks, and non-sugar sweeteners unquestionably impact on food habits and health. Additional important changes to the food supply are listed in <u>Appendix B</u>.

There have also been changes in social media and technologies which could well have had an important impact. Examples include the rise of social media influencers promoting specific dietary patterns and the advent of air fryers as a new home cooking technique. The problem is that we simply don't know how all these changes have impacted on our population intakes and overall nutritional status. Some information on eating habits is captured through the Annual NZ Health Surveys (eg <u>fruit and vegetable intake</u>), but this data is extremely limited in terms of the insights it can provide.

One of the most significant aspects of NNS is their ability to highlight differences across socioeconomic, ethnic, and geographic groups. Māori and Pasifika populations, for example, are disproportionately impacted by poor nutrition and resulting diseases such as diabetes. Up-to-date nutrition data that is reliably representative of these population groups, can be used to design, implement, and monitor community-centred programmes to improve access to healthy food and support equitable health outcomes.

#### Survey tools and methods are ready to go

In 2021, the Ministry of Health and Ministry for Primary Industries funded a \$1 million project to develop tools and methods for a new NNS for children and adults. A new online 24-hour dietary recall tool (Intake24-NZ) was developed, biochemical measures of nutritional status were reviewed and prioritised, and improved food habits and food security questionnaires were created.

These tools are ready to be deployed in a new survey<sup>19</sup>.

#### The question of cost

Whilst the importance of a NNS is not disputed by academics, industry, or successive governments, the sticking point is the cost of the survey.

At an estimated ~\$15 million, a NNS is a significant investment. However, the benefits of a NNS to our society are immense: informing effective ways to reduce preventable dietrelated illnesses and healthcare costs. And the investment required is roughly the same as the cost of <u>one medium-sized traffic roundabout</u>. NNS costs equate to about \$3 per New Zealander. Compared to the costs of managing type 2 diabetes - just one of many dietrelated diseases (\$2 billion per year, rising to \$3.5 billion in the next 20 years<sup>20</sup>) - the cost is miniscule.

Costs have been managed in other countries with new lower-cost survey methods including rolling surveys, online data collection, and semi-automated web-based dietary assessment tools. NZ can learn from the experiences of such countries to design a cost-effective NNS. Al-based approaches also offer opportunities for reducing costs, including automated image analysis to identify and quantify foods consumed and more comprehensive food composition databases<sup>21</sup>.

#### The need for action

The urgent need for a new NNS has been highlighted by academics, communities<sup>22, 23</sup>, and industry<sup>24-26</sup>. Without recent data, designing interventions becomes guesswork, reducing the potential for success. We call on the Government to prioritise a new survey.

An updated NNS will ensure that government, public health, industry, and communities can respond appropriately to current nutritional issues and design cost-effective initiatives to address NZ's unique nutrition issues and needs.

## What this Briefing adds

- This Briefing highlights the importance of National Nutrition Survey data and calls for a new survey to be funded.
- A new survey would leverage substantial funding already invested by the Ministry of Health to develop tools and methods for a National Nutrition Survey.
- A new Nutrition Survey would inform more effective and cost-effective public health, industry, government, and community nutrition initiatives to reduce the health burden and costs of many preventable diseases.

## Implications for policy and practice

• The NZ Government should undertake a new National Nutrition Survey.

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#### **Competing interests**

Cliona Ni Mhurchu was Lead Investigator for a Ministry of Health contract to develop tools and methods for a National Nutrition Survey. The Ministry of Health had no role in the decision to publish or in the preparation of this communication.

Raewyn Bleakley and Donnell Alexander are from the New Zealand Food & Grocery Council. This is a member association representing the major manufacturers and suppliers (not retailers) of food, beverage and grocery products in New Zealand.

# Appendix A - How National Nutrition Survey data can inform effective regulatory changes

Effective food regulations in NZ and globally depend on good information on what and how people eat. Examples include regulations relating to front of pack labelling (eg, Health Star

Rating), back of pack labelling (eg, nutrition information panels and ingredients lists), and product composition. Data collected in a NNS provide information on where dietary problems or gaps exist and how changes to food regulations could have the greatest benefit.

One example is a current trans-Tasman regulatory system project investigating options to ensure industrial trans fats (iTFAs) are reduced as much as possible in the food supply in Australia & New Zealand. While work has been completed to determine the amount of iTFAs in the NZ food supply, the lack of nationally representative food intake data means we do not know how much of these types of foods are actually consumed by New Zealanders. Contemporary NNS data would provide important context for this work i.e. help understand the scope of the problem and thus determine the best option to limit iTFAs in NZ population diets.

A second example is iodine intake. NZ women have low iodine intakes. This has been rectified to some degree by the mandatory fortification of bread with iodised salt. However, changing dietary patterns and reductions in bread intake by some population groups, as well as effects of voluntary sodium reduction programmes, means iodine fortification levels or food delivery medium may require adjusting.

NZ has a strong reputation internationally, particularly in the Association of Southeast Asian Nations (ASEAN) region, for regulatory initiatives such health claims & nutrition labelling. It is important for NZ's global advocacy efforts that we use up-to-date population nutrition data to strengthen our initiatives and maintain international relevance

#### Appendix B - Examples of changes to the food supply since previous National Nutrition Surveys

Based on a recent survey of NZ Food and Grocery Council members

- The advent of "no added sugar" and "25% less sugar" variants for a range of food products across multiple categories.
- An increase in new high protein products and protein claims may have had an impact on overall protein intake, including from non-traditional sources.
- The addition of cholesterol-lowering phytosterols to products such as table spread and breakfast cereals.
- Portion control and serving size changes, with many brands now offering smaller portions of discretionary foods.
- Reductions in sodium and sugar through participation in the NZ Heart Foundation's reformulation programme (eg, sodium reduction of up to 40% in some breakfast cereals, and sugar reductions and increases in fibre content of others. Reductions in added sugar levels have also been seen in popular yoghurt and flavoured milk brands.
- Rapid growth of entirely new categories of foods that didn't exist in 2009. For example, bubble tea, oat, rice and almond milks, cashew and almond butters, and plant-based meat substitutes (based on pea protein). In addition, cell-cultured protein foods will soon appear on the market.
- Anecdotal data also suggest that foods such as tofu, kale, quinoa, sugar replacers (eg, agave syrup, stevia and aspartame), coconut oil, kimchi, sauerkraut, kombucha, zero lactose cows' milk and a wider range of gluten free options are making an important nutritional contribution to the diets of New Zealanders now.

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