

Benchmarking New Zealand Food Environment Policies against International Best Practice

Evidence Summary

Food-EPI

2020 - 2022

Table of Contents:

Evidence Summary	1
Introduction	4
2014 Priority Recommendations	5
2017 Priority Recommendations	5
2020 Priority Recommendations	5
Definitions	8
Important information	8
Abbreviations	8
Acknowledgements	8
Authors	8
EVIDENCE SUMMARY	9
1 Food Composition	9
COMP 1:	9
COMP2:	12
2 FOOD LABELLING:	13
LABEL1:	13
LABEL2:	15
LABEL3:	18
LABEL4:	21
3 Food Promotion:	22
PROMO 1:	22
PROMO 2:	24
PROMO 3:	25
PRICES1:	26
PRICES 2:	26
PRICES 3:	27
PRICES 4:	28
5 Food Provision:	31
PROV1:	31
PROV2:	34
PROV3:	36
PROV4:	40
6 Food Retail:	41

RETAIL 1:	41
RETAIL 2:	42
RETAIL 3:	43
RETAIL 4:	43
7 Food Trade and Investment:	44
TRADE 1:	44
TRADE 2:	45
8 Leadership:	46
LEAD 1:	46
LEAD 2:	48
LEAD 3:	49
LEAD 4:	51
LEAD 5:	52
9 GOVERNANCE:	55
GOVER1:	55
GOVER2:	56
GOVER3:	57
GOVER4:	58
10 Monitoring and Intelligence:	59
MONIT1:	59
MONIT2:	60
MONIT3:	62
MONIT4:	63
MONIT5:	64
MONIT6:	66
11 Funding and Resources:	67
FUND1:	67
FUND2:	68
FUND3:	70
12 Platforms and Interaction:	71
PLATF1:	71
PLATF2:	72
PLATF3:	73
PLATF4:	74
13 Health in All Policies:	76

HIAP1:	76
HIAP2:	77
References	78

Introduction

New Zealand has an unacceptably high prevalence of overweight and obesity. Two in three adults and one in three children are overweight or obese. Diet-related non-communicable diseases (NCDs), such as diabetes, cardiovascular diseases and cancer, are the biggest cause of death and ill-health in New Zealand and they are preventable.

Effective government policies are essential to make food environments healthier¹ and reduce the very high levels of obesity, NCDs, and their related inequalities. It is critical that the New Zealand Government implements preventive policies and actions to match the magnitude of the burden that unhealthy diets are creating in New Zealand. Monitoring the level of implementation of the policies and actions recommended by the World Health Organisation (WHO) is an important part of ensuring progress towards healthier diets for New Zealanders.

The Healthy Food Environment Policy Index (Food-EPI)

The Food-EPI has been developed by the International Network for Food and Obesity/NCDs Research Monitoring and Action Support (INFORMAS). INFORMAS assesses the level of implementation and priority of government policies and actions to improve the healthiness of food environments against the international best practice (Figure 1).

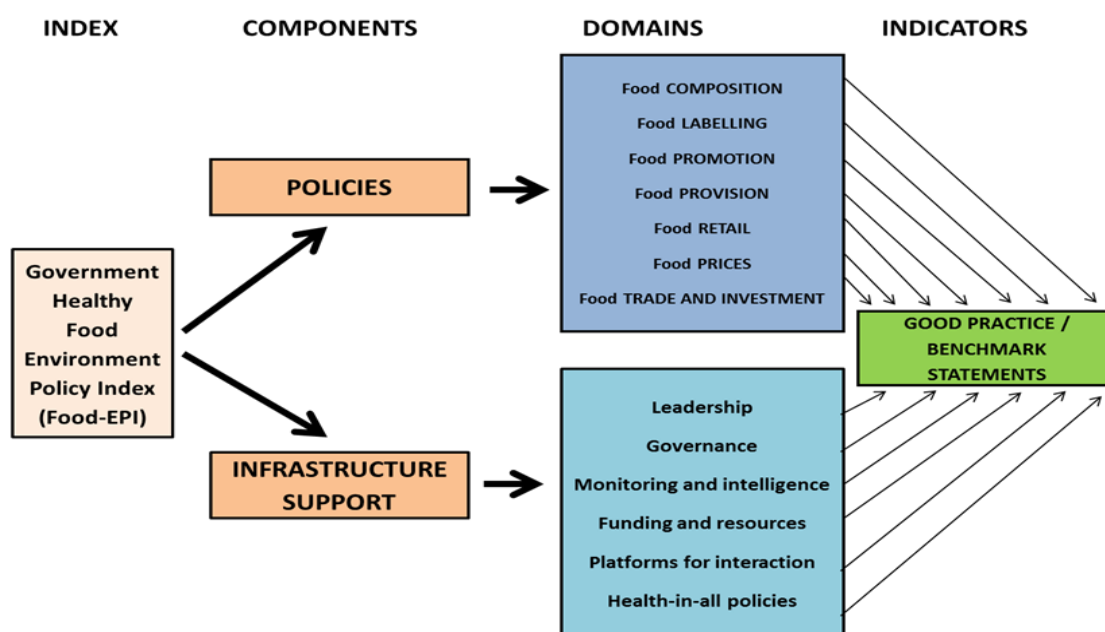


Figure 1: Components and domains of the Healthy Food Environment Policy Index (Food-EPI)

¹ Food environments are defined as the collective physical, economic, policy and socio-cultural surroundings, opportunities and conditions that influence people's food and beverage choices and nutritional status. Unhealthy food environments lead to unhealthy diets and excess energy intake which have consequences in levels of morbidity and mortality. Dietary risk factors (high salt intake, high saturated fat intake and low fruit and vegetable intake) and excess energy intake (high body mass index) account for 11.4% of health losses in New Zealand.

The index consists of two components (Policies and Infrastructure Support), 13 domains and 47 good practice indicators. The research team aims to rate the level of implementation of policies on food environments by the Government against international best practice.

The New Zealand Food-EPI 2014, 2017 & 2020

Food-Epi has been conducted prior to the last three general elections with 50 experts participating in the first Food-EPI in 2014, 70 experts in 2017 and 50 experts in 2020. It was found that the New Zealand Government was performing well, at the level of international best practice, regarding preventing unhealthy foods carrying health claims, providing ingredient lists and nutrition information panels on packaged foods, transparency in policy development processes, providing access to information for the public and monitoring the prevalence of NCDs and their risk factors. There has also been progress since 2014 with health star ratings, systems-based approaches with communities, developing healthy food and drink policy in the public sector, and improving platforms for interaction. However, major 'implementation gaps' were identified with the level of implementation in 2020 of about 70% of the policy indicators and half (50%) of the infrastructure support indicators rated as 'low' or 'very little, if any' compared to international best practice. The major implementation gaps noted were for food environment policies, especially for healthy food policies in schools, fiscal policies, food retail policies and protection of food environments from trade and investment agreements. Implementation gaps for infrastructure support were leadership to reduce obesity and improve public health nutrition, lack of a comprehensive obesity/NCD action plan, lack of a national nutrition survey and targets to reduce childhood obesity rates, inequalities and achieve WHO recommendations for average population sugar, salt and saturated fat intakes.

2014 Priority Recommendations	2017 Priority Recommendations	2020 Priority Recommendations
<i>Implement a comprehensive national action plan for obesity and NCD prevention.</i>	<i>Strengthen the Childhood Obesity Plan</i> including policy objectives and targets to reduce obesity prevalence and inequalities, and more and stronger policies to create healthy children's food environments and increasing funding for the implementation and evaluation of the plan.	<p>The Government <i>develops a long-term, multi-sectoral National Food Systems and Nutrition Strategy</i> with clear outcomes and indicators to improve sustainability, food sovereignty, health, and equity and to honour the rights of Māori to the protection of their health under the Te Tiriti o Waitangi*.</p> <p>The government appoints a <i>Food and Nutrition Scientific Committee</i> to work with the Ministerial Science Advisors to ensure policies related to food and nutrition are evidence-based and equitable.</p> <p>The Government ensures that the implementation plans for existing, relevant Government actions, such as the Child and Youth Wellbeing Strategy, include priorities to improve food environments, beyond the Healthy Active Learning.</p>
		<i>Implement a comprehensive national action plan for obesity and NCD prevention.</i>
<i>Set priorities in Statements of Intent and set targets for:</i>	<i>Set targets for:</i>	The Government adopts a two-tier system for reducing sodium and added

<ul style="list-style-type: none"> a. Reducing childhood & adolescent obesity b. Reducing salt, sugar & saturated fat intake c. Food composition (salt & saturated fat) in key food groups. 	<ul style="list-style-type: none"> a. Reducing childhood overweight and obesity by 8 percentage-points (from one-third to one-quarter) by 2025 with decreasing inequalities b. Reducing mean population intakes of salt, sugar and saturated fat based on WHO recommendations c. Voluntary reformulation of composition (salt, sugar and saturated fat) in key food groups. 	<p>sugar in key food categories: Setting <i>mandatory maximum levels</i> that reduce over time, and; setting and monitoring targets for voluntary reductions in sales-weighted averages.</p>
<p><i>Increase funding</i> for population nutrition promotion, doubling it to at least \$70m/year.</p>	<p><i>Increase funding</i> for population nutrition promotion to at least 10% of obesity/overweight healthcare costs</p>	
<p><i>Reduce the promotion of unhealthy foods to children and adolescents by:</i></p> <ul style="list-style-type: none"> ● Restricting the marketing of unhealthy foods to children & adolescents through broadcast and non-broadcast media ● Ensuring that schools and ECE services are free of commercial promotion of unhealthy foods. 	<p><i>Regulate unhealthy food marketing, as defined by the WHO nutrient profiling model, to children up to 18 years</i></p> <ul style="list-style-type: none"> ● In broadcast media, including during children’s peak viewing times (e.g. up to 9 pm). ● In non-broadcast media, including food packaging, sports sponsorship and social media. ● In children’s settings, including ‘school food zones’. 	<p>The Government introduces <i>regulations to restrict unhealthy food and beverage marketing to children up to 18 years old</i> through broadcast media (during peak TV viewing times), non-broadcast media (including food packaging, sport sponsorship and digital media) and in children's settings, using the WHO nutrient profiling models, tailored to the NZ context.</p>
<p><i>Ensure that food provided in or sold by schools and ECE services</i> meets dietary guidelines.</p>	<p><i>Ensure healthy foods in schools and early childhood education services</i> using the updated Ministry of Health Food and Beverage Classification System.</p>	<p>The Government <i>requires and supports schools and early childhood education services to develop food policies</i> which ensure healthy foods are provided and promoted.</p>
<p><i>Implement the front-of-pack Health Star Rating</i> labelling system.</p>	<p><i>Strengthen the health star rating system by urgently addressing anomalies in the design algorithm (especially for sugar), increasing funding for promotion and making it mandatory if there is not widespread uptake by 2019.</i></p>	<p>The Government makes the <i>HSR mandatory</i> and adopts the recommendations on changes to the algorithm and beverages of the 5-year review of the HSR System.</p>
<ul style="list-style-type: none"> ● <i>Introduce an excise tax</i> of at least 20% on sugar-sweetened beverages. 	<p><i>Introduce a substantial (e.g. 20%) tax on sugar-sweetened beverages</i> and explore using the revenue for programs to improve public health and wellbeing.</p>	<p>The Government <i>introduces a tiered industry levy of at least 20% on sugary drinks</i> and recycles the revenue for programmes to improve public health and well-being.</p>
	<p><i>Implement the new Eating and Activity guidelines</i> by increasing funding for their promotion and translating them for New Zealand’s social, environmental and cultural contexts.</p>	<p>The Government <i>actively implements and increases funding to promote Eating and Activity guidelines</i> which incorporate the social, environmental and cultural dimensions of eating.</p>

	<p><i>Conduct a new national nutrition survey for children within 3 years and institute a plan for future regular adult and children nutrition surveys</i></p>	<p>The Government conducts a <i>new national nutrition survey for children and adults</i> to be commissioned by 2021.</p> <p>The Government <i>regularly monitors the food environment</i> for health, equity and sustainability.</p>
		<p>The Government <i>expands its conflict of interest procedures to include commercial conflicts and transparency measures</i> so that consultation with the food industry can continue without it exerting undue influence on Government policy development.</p>

Bolded text indicates recommendations for which the Government has made progress

Definitions

Benchmark: A best practice exemplar or a standard or point of reference, against which aspects of food environments or policies can be assessed and compared.

Civil society: The aggregate of non-governmental organizations, institutions and individuals that manifest interests and will of citizens (academia, professional organizations, public-interest NGOs and citizens).

Diet-related non-communicable diseases (NCDs): Type 2 diabetes, cardiovascular diseases and nutrition-related cancers, excluding micronutrient deficiencies, undernutrition, stunting, osteoporosis, mental health and gastrointestinal diseases.

Food environments: The collective physical, economic, policy and socio-cultural surroundings, opportunities and conditions that influence people's food and beverage choices and nutritional status.

Government: National and local government, including Councils, District Health Boards, Te Whatu Ora and Public Health Units.

Government-funded settings: Government departments and agencies, publicly funded schools, publicly funded early childhood education services, elderly homes, hospitals and prisons.

Government implementation: Refers to the intentions and plans of the government, government funding for implementation of actions undertaken by non-governmental organisations, and actions and policies implemented by the government.

Healthy foods: Foods recommended in national food-based dietary guidelines, dietary guidelines or food-based standards.

Healthy food environments: Environments in which the foods, beverages and meals that contribute to a population diet meeting national dietary guideline are widely available, affordably priced and widely promoted.

Nutrients of concern: salt, fat, saturated fat, *trans* fat, added sugar.

Platforms: Formal government mechanisms (e.g. standing committees, ad hoc committees, advisory groups, task forces, boards, joint appointments) for interaction on issues.

Population nutrition promotion: Population promotion of healthy eating and healthy food environments for the prevention of obesity and diet-related NCDs, excluding all one-on-one promotion (primary care, antenatal services, maternal and child nursing services etc.), food safety, micronutrient deficiencies (e.g. folate fortification) and undernutrition.

Unhealthy foods: processed foods or non-alcoholic beverages high in saturated fats, *trans* fats, added sugars, and/or salt.

Important information

If 'foods' are mentioned, it means 'foods and non-alcoholic beverages'. Alcohol and breastfeeding/infant formulae are excluded from the Food-EPI framework.

The time frame is the last three years (election cycle).

Abbreviations

ASA: Advertising Standards Authority; DHB: District Health Board; ECE Early Childhood Education; ERO Education Review Office; FSANZ: Food Standards Australia New Zealand; GST: Goods and Services Tax; HEHA: Healthy Eating Healthy Action; HPA: Health Promotion Agency; HPS: Health Promoting Schools; HSR: Health Star Rating; INFORMAS: International Network for Food and Obesity/NCDs Research, Monitoring and Action Support; MBIE: Ministry of Business, Innovation and Employment; MoE: Ministry of Education; MoH: Ministry of Health; MPI: Ministry for Primary Industries; MSD: Ministry of Social Development; NAG: National Administration Guideline; NCDs: Non-communicable diseases; NHMRC: National Health and Medical Research Council; NIP: Nutrition Information Panel; NPSC: Nutrient Profiling Scoring Criterion; NZFCD: New Zealand Food Composition Database; SNAP: Supplemental Nutrition Assistance Program; SPEAR: Social Policy Evaluation and Research; SSC: State Services Commission; WIC: Special Supplemental Nutrition Program for Women, Infants, and Children; WHO: World Health Organisation; WTO: World Trade Organization

Acknowledgements

We would like to thank government officials who spent time answering queries and who checked completeness and accuracy of the evidence as presented in this document.

Authors

This document was written by Hinako Percival and Dr Sally Mackay.

EVIDENCE SUMMARY

1 Food Composition

There are government systems implemented to ensure that, where practicable, processed foods minimise the energy density and the nutrients of concern (salt, fat, saturated fat, trans fat, added sugar)

COMP 1:

Food composition targets/standards have been established by the government for the content of the nutrients of concern in certain foods or food groups if they are major contributors to population intakes of these nutrients of concern (*trans* fats and added sugars in processed foods, salt in bread, saturated fat in commercial frying fats)

High priority recommendation from 2020: The Government adopts a two-tier system for reducing sodium and added sugar in key food categories: Setting mandatory maximum levels that reduce over time, and; setting and monitoring targets for voluntary reductions in sales-weighted averages.

Evidence of Implementation:

There are no food composition targets specified by the Ministry of Health (MoH) or the Ministry for Primary Industries (MPI) for the nutrients of concerns.

Healthy Kids Industry Pledge

In 2016 MoH announced the Healthy Kids Industry Pledge, a voluntary initiative urging companies to set reformulation targets (1). The New Zealand Beverage Council, Nestle, Sanitarium and Coca-Cola were among some of the companies who pledged and took their part in reforming some of their products (1–5). The commitment from companies concluded in 2018. Some companies have chosen to continue to work towards their targets (personal communication, MoH, 2023)

Food Industry Taskforce

In 2018, the Food Industry Taskforce released a report in response to a request from the Minister of Health addressing factors contributing to obesity. The government responded to the report by stating that setting and reviewing nutrient reformulation is a priority recommendation for the food industry (6).

Heart Foundation's Food Reformulation Programme

The Heart Foundation's food reformulation programme is an initiative funded by Te Whatu Ora (personal communication, MoH, 2023). Early 2022 marked 15 years since the introduction of the programme. It supports companies to reduce sodium and sugar levels in key food categories (7). There are 54 targets (38 sodium, 13 sugar and 3 saturated fat targets) across 42 food categories/sub-categories. Because of the trans-Tasman nature of the New Zealand food supply, the programme aims to align its targets with those from the Australian food reformulation programme (Healthy Food Partnership). Voluntary targets for prioritised food categories/sub-categories are set on a rolling basis, in consultation with the food industry. Their goal is to engage with major manufacturers who collectively represent 80% of the market share within a specific food category (Personal Communication, Heart Foundation, 2023).

A nutrient and sales review is conducted at the end of each timeframe to assess the change of nutrients in products (particularly leading-selling products which have significant market share). In addition, companies are requested to provide annual product-level reports on their progress towards the targets. As well as influencing product reformulation, the targets also influence new product development.

The goal is to have 80% of the sales volume within a food category meeting nutrient target within the timeframe (typically 4-5 years) (Personal Communication, Heart Foundation, 2023).

A historical account of major reductions and work undertaken prior to 2021 is provided in the [15 year summary](#).

The Heart Foundation has stated that *ongoing monitoring shows that there is strong engagement from major food manufacturers, and they continue to reduce sodium and sugar in high-volume foods.*

Category reviews, 2020- 2022 (Personal Communication, Heart Foundation, 2023)

Key impact data for sodium and sugar content, with an emphasis on sales-weighted results.

Sodium

Bread

Leavened bread (e.g., packaged loaf breads) (n=564): Of the leavened products that make up the top 80% leavened bread sales volume, 75% now met the target, compared with 31% when the target was set four years ago. Since 2007 the sodium median of the top 80% (by sales volume) has reduced by 29%.

Flat bread (e.g., wraps, flatbreads and pitas) (n=177): The median sodium (401mg/100g) was 11% below the flatbread target (450mg/100g), with 66% products meeting the target. Of the 42 flatbreads that made up the top-selling 80%, 9 had been reformulated with a 21% median sodium reduction in the last 4 years.

Breakfast cereals

Cornflakes/puffed rice (n=22): 19% reduction in the sodium median, 79% (by sales volume) is compliant with the sodium target. There has been 13% (range 7-39%) sodium reduction in 12 reformulated products. Since the first target was set in 2010 there has been 41% reduction in the median sodium content.

Biscuits (eg Weetbix) (n=13): There has been 7% (range 1-36%) sodium reduction in 6 reformulated products. 99% (by sales volume) met the sodium target.

Mueslis/flavoured oats (n=90): 98% of mueslis (by sales volume) met the sodium target.

Other Ready-to-eat breakfast cereals (n=128): 9% reduction in sodium median. 95% of ready-to-eat cereals sales volume met the sodium target. Since the first sodium target was set in 2010 there has been 32% reduction in the median sodium content.

Processed Meat

Sausages (n=146): 6% reduction in sodium median (2015-2020) of fresh sausages. 50% met target. From all sausages (fresh and processed), there have been 7.6 tonnes salt per annum removed (2015-2020). 11% decrease in sodium median (2010-2020)

Bacon (n=143): 13.6% reduction in sodium median (2015-2020). In top 80% sales volume (n=30) 8.6 tonnes salt removed (2015-2020). 19.8% reduction in sodium median (2010-2020).

Ham (n=91): 13% reduction in sodium median (2015-2020). 19.8% reduction in sodium median (2010-2020)

Soups (n=323)

62% of the products met the sodium target (280mg/100ml). There have been 56 new products developed since the 2016 baseline; the median sodium of the new products (254mg/100ml) was 9% lower than the target. Of the 81 products representing the top-80% soup sales volume, 60 products (73%) met the sodium target.

Savoury Crackers

Plain crackers (n=177): Based on the products representing the top 80% sales volume (n=42), 69% either met the 610mg/100g target or achieved the optional 20% reduction for high sodium products. Of the 15 plain crackers that were reformulated, the median percent reduction in sodium was 22%. There was significant new product development with the 15 new products achieving a median sodium level of 526mg/100g.

Flavoured crackers (n=65): Based on the products representing the top 80% sales volume (n=26), 85% of flavoured crackers met the 800mg/100g target. Of the 13 new flavoured crackers, the median sodium content was 641mg/100g with 100% of them meeting the target.

Rice crackers (n=110): Based on the products representing the top 80% sales volume (n=39), 74% of rice crackers met the 610mg/100g target. The median sodium of the 12 new rice crackers was 567mg/100g with 75% of the new products meeting the target. 4.7 tonnes per annum of salt have been removed from matched-pair products (2017 - 2022). 11.9 tonnes salt have been removed from reformulated products (2014-2022)

Table sauces

Across the category (n=45) there has been 28% reduction in sodium median. 67% of products across the category met the sodium target. In the seven reformulated products there has been a median 8% (range 6-23%) reduction in sodium.

Sugar

Breakfast cereals

Cornflakes/puffed rice (n=22): 71% (by sales volume) of the category is compliant with the sugar target. There has been a median reduction of 11% (maximum 28%) in sugar in 5 reformulated products.

Biscuits (eg Weetbix) (n=13): 99% of biscuit sales volume met the sugar target.

Mueslis/flavoured oats (n=90): 86% of mueslis sales volume met the sugar target. There has been a median reduction of 12% (maximum 31%) in sugar in 18 reformulated products.

Other Ready-to-eat cereals (n=128): 9% reduction in sugar median. 43% of ready-to-eat cereals sales volume met the sugar target.

Breakfast cereals: 211 tonnes of sugar per annum removed from reformulated matched pairs of breakfast cereals.

Table sauce

Across the category (n=45) there has been 7% reduction in sugar. 76% of products met the sugar target.

Cereal and Nut/seed Bars

Across the category (n=441) there has been 22.6% reduction in the sugar median (2016-2022). 93 tonnes sugar per annum have been removed from matched pair reformulations.

International Best Practice Examples (benchmarks):

We are not aware of any countries that have mandated composition standards/targets for added sugar.

Many countries have set voluntary targets for implementation by industry. These have generally resulted in only limited impact, albeit in a positive direction. In general, voluntary targets appear to be more robust and evidence-based where government plays a leading role in their development. It appears better public health outcomes result when there are resources for monitoring, and incentives for industry uptake. Examples include:

- **Portugal (2019):** The Portuguese government led a process to gain commitment from industry to reformulate the levels of salt, sugar and trans fatty acids in different categories of food products. For sugar, the following food products were set to be reduced by 10% until 2022: chocolate milk, yogurts, breakfast cereals and soda drinks. For fruit nectars, a 7% reduction target was set, to be reached by 2023. A protocol for monitoring the reformulation of the levels of salt, sugar and trans fats in certain categories of food was also established (8). Progress has not yet been reported.
- **UK (2015):** The voluntary Sugar Reduction Programme challenged all sectors of the food industry (retailers, manufacturers and the eating out of home sector) to reduce sugar by 20% by 2020 in categories of food that contribute most to the sugar intake of children aged up to 18 years. Guidelines outlining a maximum calorie per single serve portion for most sugar-rich food categories were published (9). Between 2015-2019 there was an overall decrease of 3.0% of free sugar content for retailers and manufacturer branded products, and hardly any change in the average sugar content (24.6g/100g to 24.5g/100g) for the eating out of home sector. Overall, there was a 2.6% increase in the tonnes of sugar sold from the product categories included in the programme (10).

1 Food composition: There are government systems implemented to ensure that, where practicable, processed foods minimise the energy density and the nutrients of concern (salt, fat, saturated fat, trans fat, added sugar)

COMP2:

Food composition targets/standards have been established for out-of-home meals in food service outlets by the government for the content of the nutrients of concern in certain foods or food groups if they are major contributors to population intakes of these nutrients of concern (*trans* fats, added sugars, salt, and saturated fat).

Low priority recommendation from 2020: The Government sets a mandatory standard for deep frying oils (maximum saturated plus trans fats) for out-of-home meals and recommends targets for energy, sodium, saturated fat and sugar in Quick Service Chain Restaurant meals.

Evidence of implementation:

There are no food composition targets specified by the Ministry of Health (MoH) or the Ministry for Primary Industries (MPI) for out-of-home meals for the nutrients of concern.

The former Chip Group initiative aimed to improve the nutrient profile of food service deep-fried chips by reducing fat (total, saturated, trans) and salt (11). It was funded by both food industry and the MoH. The MoH did not renew the contract in 2020 by mutual agreement with Potatoes NZ (The Chip Group), however all of the resources are still available online and managed by Potatoes NZ (personal communication, MoH, 2023).

International Best Practice Examples (benchmarks):

Examples of mandatory composition standards for sodium:

Argentina (2013): The government adopted a law on mandatory maximum levels of sodium permitted in meat products and their derivatives, breads and farinaceous products, soups, seasoning mixes and tinned foods (8). From a 2017/2018 sample 5.7% of the sample's median sodium content was above the maximum sodium levels set and 90% were below the maximum levels set (12).

- **South Africa (2013):** Mandatory maximum sodium levels permitted in 13 food categories (including bread, breakfast cereals, margarines and fat spreads, savoury snacks, processed meats as well as raw-processed meat sausages, dry soup and gravy powders and stock cubes) were legislated in 2013 and mandated in 2016. Sodium targets were introduced in two phases. Food manufacturers were given until June 2016 to meet one set of category-based targets and until June 2019, to meet the next (8). Research found that the adult population salt intake reduced by 1.16g/day from 2015 to 2018/2019 (13).
- Many countries have set voluntary targets for implementation by industry. These have generally resulted in only limited impact, albeit in a positive direction. In general, voluntary targets appear to be more robust and evidence-based where government plays a leading role in their development. It appears as though better public health outcomes result when there are resources for monitoring, and incentives for industry uptake. Examples include:
- **Portugal (2019):** The Portuguese government led a process to gain commitment from industry to reformulate the levels of salt, sugar and trans fatty acids in different categories of food products. For sugar, the following food products were set to be reduced by 10% until 2022: chocolate milk, yogurts, breakfast cereals and soda drinks. For fruit nectars, a 7% reduction target was set, to be reached by 2023. A protocol for monitoring the reformulation of the levels of salt, sugar and trans fats in certain categories of food was also established (8). Progress has not yet been reported.
- **UK (2006, 2009, 2011, 2014, 2020):** Four sets of voluntary salt reduction targets for individual categories of food have been previously published by the government (in 2006, 2009, 2011 and 2014). In 2019 the government made a commitment to continue their efforts to improve the nutrition content of foods and drinks. The 2020 targets (to be achieved by 2024) include targets for retailers and manufacturers; eating out, take away and delivery sector covering 28 broad product categories and 84 sub-categories of food (14). Trend analysis indicates no change in estimated population salt intake since 2008/2009 (15).

2 FOOD LABELLING:

There is a regulatory system implemented by the government for consumer-oriented labelling on food packaging and menu boards in restaurants to prevent misleading claims and allow consumers to make informed food choices.

LABEL1:

Ingredient lists and nutrient declarations in line with Codex recommendations are present on the labels of all packaged foods.

Low priority recommendation from 2020: The Government requires added sugars to be added on the Nutrition Information Panel

Evidence of implementation:

New Zealand meets CODEX standards and regulation is in place to ensure compliance. The MPI manages New Zealand's participation in CODEX and sets strategic priorities which ensure that CODEX standards have the widest possible application (16).

- Labelling standards are included in the Australia New Zealand Food Standards Code (17). The MPI is responsible for the implementation of the Food Standards Code, which has been in force since 2002. Most labels must include the ingredient list. Ingredients must be declared in the statement of ingredients in descending order of ingoing weight (18).
- The general format for the nutritional information panel (NIP) is shown below and is required on most packaged food products. Where amount per serving and amount per 100g or 100ml must be indicated in the NIP. An ingredient list in descending order including additives is also required on most packaged foods (19):

NUTRITION INFORMATION

	Average Quantity Per Serving	Average Quantity per 100g
Servings per package: 10 Serving size: 35g		
Energy	566 kJ	1623 kJ
Protein	2.6g	7.4g
Fat, total	0.5g	1.4g
- saturated	0.2g	0.5g
Carbohydrate	29.7g	88.8g
- sugars	2.3g	6.6g
Sodium	179 mg	510 mg

INGREDIENTS :

Rice (94%), sugar, molasses, salt, emulsifier (471) (soy)

In 2009, the Council of Australian Governments (COAG) and Australia and New Zealand Food Regulation Ministerial Council (Ministerial Council) agreed to undertake a review of food labelling law and policy. An expert panel, chaired by Dr Neal Blewett, AC, was appointed and the report Labelling Logic, was released in January 2011 (20). The report contained 61 recommendations with some related to nutrition labelling and FSANZ has completed the required work on a number of these recommendations whereas others are on hold or still ongoing (21).

Nutrition Information Panel (NIP)

Added Sugar FSANZ Proposal P1058

- In August 2019, Australia, and New Zealand Ministerial Forum on Food Regulation (Forum) (now known as the Food Ministers' Meeting) requested FSANZ to review nutritional labelling for added sugars.
- In Late 2020, FSANZ held targeted consultation meetings with key representatives from the food industry, public health groups, jurisdictions, and government public health agencies, focusing on technical issues associated with quantifying added sugars in the nutrition information panel (NIP). The finalised report was published in 2021. It found that while there may be complexities in setting requirements for including added sugars in the NIP, there were no technical barriers (22).
- Proposal P1058 (Nutrition labelling about added sugars) was prepared in April 2022. The purpose of the proposal is to consider including added sugars in the NIP. Targeted stakeholder consultation meeting was held Sept 2022 (23). Next steps for this proposal were discussed with the FSANZ Board in March 2023 (24), however due to the complexities associated with the added sugar label it was concluded that more time is needed. There will be further discussions at the April 2023 Board meeting (Personal Communication, FSANZ, 2023).

Energy Labelling on Alcoholic Beverages FSANZ Proposal P1059

In August 2019, the Forum also referred work on energy labelling of alcoholic beverages to FSANZ.

- In December 2021, FSANZ completed preliminary work to explore the issue, including an evidence assessment and an analysis of regulatory and non-regulatory options to address the issue. Based on this work, in May 2022, FSANZ prepared Proposal P1059 (Energy labelling on alcoholic beverages) to consider changing the Australian New Zealand Food Standards Code (the Code) to require energy labelling information on alcoholic beverages (25).
- In late July 2022, FSANZ held targeted consultation meetings with the alcohol industry, public health and consumer groups and jurisdictions to seek stakeholder views on draft options for energy labelling on alcoholic beverages (personal communication, FSANZ, 2023).
- In mid-January 2023 FSANZ released a public Call for submissions, proposing to amend the Code to require declaration of energy content information, in a prescribed format, on the label of packaged standardised alcoholic beverages (e.g. beer, wine and spirits) and beverages containing no less than 0.5% alcohol by volume (ABV) that are not standardised alcoholic beverages (e.g. ready to drink beverages (RTDs)) (personal communication, FSANZ, 2023).

In June 2022 Associate Health Minister Peeni Henare stated that government is working on developing a national physical activity plan and work to clearly identify added sugars on food labels as current initiatives to combat obesity (26)

International Best Practice Example (benchmarks):

Many countries, including Australia, have introduced legislation requiring all pre-packaged food products (with some limited exceptions) to list product ingredients and nutrient contents. The rules define which nutrients must be listed and on what basis (e.g. per 100g/per serving).

2 FOOD LABELLING: There is a regulatory system implemented by the government for consumer-oriented labelling on food packaging and menu boards in restaurants to prevent misleading claims and allow consumers to make informed food choices.

LABEL2:

Robust, evidence-based regulatory systems are in place for approving/reviewing claims on foods, so that consumers are protected against unsubstantiated and misleading nutrition and health claims.

Low priority recommendation from 2020: The Government investigates the application of the Nutrient Profiling Scoring Criterion to restrict the use of nutrient content claims on packaged unhealthy foods (especially 'irrelevant claims' such as 'no cholesterol' claims on plant-based foods).

Evidence implementation:

Food Standard 1.2.7 – Nutrition, health, and related claims

- Nutrition, health, and related claims are regulated through Food Standard 1.2.7 shared by Australia and New Zealand. Food Standard 1.2.7 Nutrition Health and Related Claims regulates nutrition content claims and health claims on food labels and in advertisements (online, social media, television, radio, and printed advertisement) (27).
- In New Zealand MPI is responsible for enforcing requirements of Standard 1.2.7 including evaluating evidence supplied for self-substantiated claims (27,28). The Standard 1.2.7 was last revised in 2018 (29).
- The main purpose of Standard 1.2.7 is to (30):
 - *'Reduce misleading health claims on food products.'*
 - *'Increase consumer confidence in food labels.'*
 - *'Give businesses a chance to innovate and promote new products with proven health benefits.'*

A health claim means a claim that states, suggests, or implies that a food or a property of food has, or may have, a health effect. Nutrition content claim means a claim that is about the presence or absence of any of the following: a biologically active substance, dietary fibre, energy, minerals, potassium, protein, carbohydrate, fat, the components of any one of protein, carbohydrate or fat, salt, sodium, vitamins or glycaemic index or glycaemic load and does not refer to the presence or absence of alcohol and is not a health claim (31). There are two categories of health claims in New Zealand: 'General Level Health Claims' and 'High-Level Health Claims' (27).

- **General level health claim** means a health claim that is not a high-level health claim (31).
- **High level health claim** means a health claim that refers to a serious disease or a biomarker of a serious disease (31).
- The uptake and compliance of standard 1.2.7 have been assessed through surveys conducted by MPI in 2014/15 and 2016/17 (27) Between these two surveys it was found that the number of nutrition content claims meeting the requirements of the code had increased from 57% to 86% respectively.
- A Health Claims Scientific Advisory Group was established to provide scientific and technical advice to FSANZ between 2015 to 2017 regarding high level health claim (32).
- Other MPI work programme activities associated with Standard 1.2.7 include the provision of consumer and industry information on the standard, liaison with industry on the development of dossiers and the development of internal procedures to assess dossiers (personal communication, MPI, 2017). A resource is available from MPI explaining the detailed steps required to complete a systematic review to the requirements of the Food Standards Code. MPI also works actively with researchers and manufacturers to advise on appropriate research design and systematic review strategies prior to a notification to FSANZ (personal communication, MPI, 2023). MPI has continued to update information on their website.
- MPI engages with health claims regulators in other countries to better align global regulatory understanding of health claim requirements for foods (personal communication, MPI, 2023).
- To make a **general level health claim**, if a food product meets the Nutrient Profiling Scoring Criterion (NPSC), food businesses can utilise one of the 200 pre-approved food-health relationships in the Standard. If businesses wish to self-substantiate a food-health relationship as a general level health claim, this must be done in a specific way

following strict requirements set out in Schedule 6 of the Food Standards Code. This includes a systematic review and other contextual information about how products fit within the diet of the population. FSANZ must be notified when this evidence has been compiled and FSANZ then publishes the food health relationship on their website. This publication does not indicate acceptance, approval, or validation of the food-health relationship. For foods produced under the NZ-only Supplemented Food Standard (2016) the same degree of evidence is required, but businesses notify New Zealand Food Safety, rather than FSANZ (28).

- In 2014/15 little to no general claims met the requirements and by 2016/17 over half of the claims met requirements.
 - In 2022 approximately 6% of labels had general health claims (Nutrition Society Conference, 2022)
 - 45% of general level health claims met requirements. This is a small decrease from 2016/17 (51%) (Nutrition Society Conference, 2022)
 - 70% of preapproved general level health claims met requirements (Nutrition Society Conference, 2022)
- The specific requirements to make **nutrition content claims** and comparative nutrition claims of food and beverage is outlined in Schedule 4 of the Code. Comparative claims must meet minimum standards relating to the difference between the nutrient content of the food and a reference food (e.g., at least 25% less energy than the same quantity of reference food to make a “lower in energy/calories” claim). Section Specific conditions required for all nutrition content claim (e.g., to claim ‘low fat’ the food contains no more fat than 1.5g/ 100 mL for liquid food; or 3g/ 100 g for solid food). For claims about properties of food not listed in Schedule 4, the claim can only state that the food contains or does not contain the property of food or contains a specified amount. Where a nutrition content claim or a health claim is made about any food component, that component must be included in the nutrition information panel, so that the average amount in the food is clearly displayed. The NPSC does not apply for nutrition content claims (33).
 - Out of all products with general level health claims approximately 43% of labels had nutrition content claims with up to 20 claims per label/product (Nutrition Society Conference, 2022).
 - For **high-level claims** there are 13 pre-approved food health relationships. As with general level health claims the food must meet the Nutrient Profiling Scoring Criterion (NPSC) (34). High level health claims cannot be self-substantiated and must be established by FSANZ to be included in the Food Standards Code.
 - In 2014/15 and 2016/17 a survey to assess uptake impact and compliance was conducted. During this survey no high-level health claims were made and therefore was not included.
 - In 2022, only a small number of products featured high-level claims but almost all of them did not meet all regulatory requirements (Nutrition Society Conference, 2022)
- **Labelling logic recommendations**
 - Recommendation 3 from Labelling Logic: Complete. A Food Labelling Monitoring and Enforcement Framework has been developed (20).
 - **The New Zealand Food Safety Strategy 2022-24**
 - Released in September 2022, the New Zealand Food Safety Strategy prioritises that ‘*We will support the food sector to maximise domestic and international trade opportunities through ‘using food science to develop a robust plan to support food health provenance claims for industry to enable high value exports.’* MPI is currently exploring options for increasing resources and proactive communications with stakeholders (including industry and research groups), to facilitate a better understanding of the strict regulatory requirements for making health claims (35).
 - **Consumer Protection**
 - Laws that protect the consumer in NZ include the Fair-Trading Act and the Consumer Guarantees Act. It is stated that ‘goods must meet the guarantees of acceptable quality, and matching description’ (36,37).
 - **FSANZ Food Standards Development Workplan**
 - Food Standards Work Plan –proposed standards development and variations to standards for applications and proposals as of February 2023 with Nutrition-related work included these applications (38).
 - P1030 – composition and Labelling of Electrolyte Drinks.
 - Changes to the composition and labelling requirements for electrolyte drinks in Australia New Zealand Food Standards Code were gazetted in August 2022. Nutrition content claims on electrolyte drinks are limited to their compositional constituents: carbohydrate; sugar or sugars, energy; and/or one or more of prescribed electrolytes

(calcium, sodium, magnesium, potassium, and chloride) to reflect these products' intended purpose and reduce the potential for consumers to be misled. Nutrition content claims relating to one or more of the prescribed electrolytes are required to include the word 'electrolyte'. Health claims are limited to three pre-approved claims including hydration and maintaining performance. A claim that an electrolyte drink is isotonic may only be made if it fits within osmolality range set by FSANZ. The name 'electrolyte drink' is a prescribed name to enable electrolyte drinks to be more easily identified among similar products (39).

P1049 – carbohydrate and sugar claims on alcoholic beverages.

- A targeted consultation was held in July 2022. Submissions will be called for in the second quarter of 2023. The Board is expected to complete approval, and the Food Ministers Meeting will be notified in the fourth quarter of 2023. Finally, if no review is requested, anticipated gazettal will occur in the first quarter of 2024 (38).

Allergen labelling (40)

- Changes to allergen labelling requirements in the Code were gazetted in February 2021. The new requirements labels help food allergic individuals find allergen information on food labels more quickly and easily to allow them to make safe food choices Food allergen information will be more consistent and clearer by requiring simple and plain English names in a specific format and location on food labels. Food businesses have until 25th February 2024 to transition to the new requirements.

Pregnancy warning labels on alcoholic beverages P1050 (41)

- New requirements for mandatory pregnancy warning labels on packaged alcoholic beverages were gazetted in the Australia New Zealand Food Standards Code on 31 July 2020. Businesses have three years from 31 July 2020 to implement these requirements.
- Packaged alcoholic beverages with more than 1.15% alcohol by volume for retail sale in Australia and New Zealand (or sold as suitable for retail sale without any further processing, packaging, or labelling) must display a pregnancy warning label unless specifically exempt. This does not include alcohol that is packaged in the presence of the purchaser (e.g., fill your own containers at a brewery).
- Labels must either have the 'pregnancy warning mark' or 'pregnancy warning pictogram', depending on size of the package, as shown below.



International Best Practice Example (benchmarks):

United States (2016): Nutrition Facts labels for foods and beverages with added sugars must list the number of grams and the percent Daily Value (%DV) for added sugars (42).

- Regulation on the use of health claims on food varies widely by country. A limited number of countries **do not** permit the use of health claims on food products including:
 - **South Africa (2010):** The use of the words 'health' or 'healthy' or other words or symbols implying a foodstuff or substance in the foodstuff has health-giving properties is prohibited (43).
 - **Brunei (2001):** No words implying that health or an improved physical condition may be achieved by consuming any food can appear on a food label (44).
- In many other countries, health claims are strictly regulated, with mandatory processes in place regarding what health claims can be made and on what products. Examples include:
 - **Australia/New Zealand (2016):** FSANZ Standard 1.2.7 sets out the claims that can be made on labels or in advertisements about the relationship between a food or a property of a food (such as a vitamin or mineral), and a health effect (general or high-level health claims). The Standard establishes the conditions under which claims can be made. It also provides exemptions for the use of 'endorsements' on labels or in advertisements if the endorsement and the endorsing body meet certain requirements set out in the Standard (45).
 - **United States (1994):** Health claims are generally not permitted if a food contains more than 13g of fat, 4g of saturated fat, 60mg of cholesterol, or 480mg of sodium. Sugar and whole grain content are not considered (46).

2 FOOD LABELLING: There is a regulatory system implemented by the government for consumer-oriented labelling on food packaging and menu boards in restaurants to prevent misleading claims and allow consumers to make informed food choices.

LABEL3:

A single, consistent, interpretive, evidence-informed front-of-pack supplementary nutrition information system, which readily allows consumers to assess a product's healthiness, is applied to all packaged foods.

High priority recommendation from 2020: Mandatory Health Star Rating (HSR): The Government makes the HSR mandatory and adopts the recommendations on changes to the algorithm and beverages of the 5-year review of the HSR System.

Evidence Implementation:

Front of packaging labelling (Health Star rating)

The Health Star Rating (HSR), introduced in 2014, is a voluntary front of pack labelling system that rates the overall nutritional profile of packaged food and assigns it a rating from ½ a star to 5 stars, for when comparing similar foods, foods with more stars are healthier than foods with fewer stars (47). Assisting consumers choice between similar packaged foods. The HSR is a joint Trans-Tasman government initiative developed in collaboration with food industry, public health, and consumer groups (48). The Ministry of Primary Industries is responsible for administering the HSR system in NZ (49). The HSR is aligned with the Australian and NZ dietary guidelines, and stars are allocated to food based on their nutrition content (energy, risk nutrients: saturated fat, sodium, total sugars, and beneficial components: dietary fibre, protein, fruits, vegetables, nuts, legumes) (50,51). There are tools and resources including the HSR calculator to help industry adopt the HSR. There is a process to address anomalies and a dispute resolution process (51).

-An example of the health star rating label is printed below:



The committees that guide implementation are (48,49):

1. The Food Ministers Meeting (FFM) (previously the Australia and New Zealand Ministerial Forum on Food Regulation), made up of ministers responsible for food regulation and is chaired by the Australian Government Minister responsible for the Food Standards Australia New Zealand (FSANZ) Act. It is ultimately responsible for all decisions relating to HSR.
 2. Food Regulation Standing Committee (FRSC) comprises of Trans-Tasman government officials that ensure food standards across Australia and NZ are consistently implemented and enforced.
 3. The trans-Tasman Health Star Rating Advisory Committee (HSRAC) oversees and implementation and monitoring of the HSR system, with NZ holding 3 of the 10 seats. It includes representatives from industry, government, consumers, and public health.
- Recent research has indicated that approximately 24% of products have HSR on the label however, 32% of purchasing volume included products with HSR labels. This indicates that HSR are being placed on popular products (Nutrition Society Conference, 2022)
 - Research has found that although HSR did not impact household purchasing however it has had an influence on product reformulation (Nutrition Society Conference, 2022)

The five-year review was undertaken by independent consultants, MP consulting. This consisted of wide stakeholder engagement including public consultations in 2017, 2018 and 2019, alongside public workshops. The FFM considered the five-year review report prepared by the independent consultants and they agreed to 10 recommendations on 17 July

2020. Industry had until November 2022 to make any updates to their labelling because of these changes (52) (Personal communication, MPI, 2023).

2019 **Review- 10 recommendations**

1. The HSR system be continued and **supported in full**. Implementation of this system continues.
2. HSR graphic Option 5, the energy icon, be removed from the HSR system. **Supported in full.**
 - As of 15 November 2020, the energy-only icon (originally referred to as option 5) will no longer be a valid HSR display option. Products already labelled with the energy icon will need to remove and update with a permitted HSR graphic. Industry had until November 2022 to remove the HSR energy icon (53).
 - Previously, products that would usually get a low star rating such as drinks and confectionery could solely use this label to display the number of kilojoules rather than the HSR for that product.
3. Governments, industry, public health, and consumer bodies continue to promote the HSR system. **Supported subject to funding.**
 - Currently investigating the best ways to provide information on the Health Star Rating system to consumers (personal communication, MPI, 2023)
4. Changes be made to the way the HSR is calculated.
 - A) Fruits and vegetables that are frozen, fresh, or canned (with no added sugar salt or fat) automatically receive 5 stars
 - B) Total sugars should be more strongly penalised
 - C) Improve sodium sensitivity for products high in sodium
 - D) Dairy categories should be refined
 - E) Jellies and water-based ice confections should be re-categorised

All changes from A-E were fully supported and implemented on 15th November 2020
5. Changes be made to the way the HSR is calculated for non-dairy beverages to better discern water (and drinks similar in nutritional profile) from high energy drinks.
 - New category 1- Non-dairy beverage calculator was introduced on 15th November 2020. Automatic 5 star for packaged water, automatic 4.5 star for unsweetened flavour water, juices no longer get 5 stars.
6. HSR system implementation continue to be jointly funded by Australian, State and Territory and New Zealand governments.
 - Supported. HSR system will be jointly funded until 14 November 2025.
7. Minor changes be made to the governance of the HSR System.
 - Support is subject to funding. Management of the HSR Calculator and TAG database has been transferred to Food Standards Australia New Zealand (FSANZ). A revised monitoring approach is being developed. NZ now has more representation on the HSRAC (has gone from 1 member to 3) (personal communication, MPI, 2023)
8. Enhance the critical infrastructure to support implementation and evaluation of food and nutrition-related public health initiatives
 - Support subject to funding. Food Standards Australia New Zealand has received funding to develop an Australian branded food database, to support the implementation and monitoring of health and food regulatory initiatives. In New Zealand, MPI contract access to the GS1 on pack label database, which is a branded food product database of mainly supermarket foods available in the New Zealand Food Supply. Scoping work is underway for a national nutrition survey in New Zealand (Personal communication, MPI, 2023). m
9. The HSR system remain voluntary, but with clear uptake targets set.
 - 50% by 2023, 60% by 2024, 70% by 2025. May become a mandatory system if target not met. Ministers will consider mandating the system if these targets are not met (54).
10. The existing Guide for Industry to the HSR Calculator and the HSR System Style Guide be combined, revised, and strengthened. Revised HSR calculator.
 - Supported in full, a new guidance document has been developed with input from stakeholders

Industry had until November 2022 to implement the system changes outlined above on most products, there are stock in trade provisions of a year for longer shelf-life products.

Health Promotion Directorate, Te Whatu Ora (formerly Te Hiringa Hauora | Health Promotion Agency (HPA)) worked with the Ministry for Primary Industries (MPI) and the Ministry of Health (MoH) to roll out a consumer awareness campaign for the Health Star Rating System (HSR), which began in March 2016. Health Promotion involvement in HSR ended in June 2018 following the publication of the monitoring and evaluation report. Follow-up surveys occurred in 2017 and 2018. No further consumer awareness programmes have been conducted.

Currently there is no entity for nutrition within the recent merger of DHBs into Te Whatu Ora.

November 2022, changes to the HSR were introduced. These changes involve rating products with high sugar and salt lower (such as sugary breakfast cereals and fruit juices” and automatic 5 stars to minimally processed fruit and vegetables. It was also stated that if the uptake of the HSR system does not reach 70% by 2025, government will consider making this system mandatory. November 2023 the next uptake monitoring will be conducted and to assess progress against an interim target of 50 (55).

International Best Practice Example (benchmarks):

UK: Traffic light labelling has been recommended for use in the UK since 2006. In 2013, the Government published national guidance for voluntary 'traffic light' labelling for use on the front of pre-packaged food products. The label uses green, amber and red to identify whether products contain low, medium or high levels of energy, fat, saturated fat, salt and sugar. The format of the label and thresholds for nutrients of concern for red, amber and green can be found elsewhere (56). A combination of colour coding and nutritional information is used to show how much fat, salt and sugar and how many calories are in each product. The voluntary scheme is used by all the major retailers and some manufacturers (56). Traffic lights are displayed on about two thirds of UK food products.

Australia/New Zealand: The government approved a 'Health Star Rating' (HSR) system as a voluntary scheme for industry adoption. The system takes into account four aspects of a food associated with increasing risk for chronic diseases; energy, saturated fat, sodium and total sugars content along with certain 'positive' aspects of a food such as fruit and vegetable content, and in some instances, dietary fibre and protein content. Star ratings range from ½ star (least healthy) to 5 stars (most healthy). Implementation of the HSR system began in June 2014 and is overseen by the Australia and New Zealand Ministerial Forum on Food Regulation, the Front-of-Pack Labelling Steering Committee, the Trans-Tasman Health Star Rating Advisory Committee, the New Zealand Health Star Rating Advisory Group and a recently established Technical Advisory Group. The Technical Advisory Group is currently evaluating progress as well as conducting a formal review of the HSR system, including an assessment of the underlying algorithm. In New Zealand, as of March 2016, about 900 products have stars on them (March 2016) (57).

Chile: In 2012, the Chilean Government approved a Law of Nutritional Composition of Food and Advertising (Ley 20, 606) (58). In June 2015, the Chilean authority approved the regulatory norms required for the law's implementation (Diario Oficial No 41.193). The regulatory norms define limits for calories (275 calories/100g or 70 calories/100mL), saturated fat (4g/100g or 3g/100mL), sugar (10g/100g or 5g/100mL) and sodium (400mg/100g or 100mg/100mL) content considered “high” in foods and beverages. All foods that exceed these limits need to have a front-of-package black and white warning message inside a stop sign that reads “HIGH IN” followed by CALORIES, SATURATED FAT, SUGAR or SODIUM, as well as “Ministry of Health”. A warning message needs to be added to products per nutrient of concern exceeding the limit (e.g. a product high in fat and sugar will have 2 stop signs). The regulatory norms provide specifications for the size, font, and placement of the warning message on products. The limits for calories, saturated fat, sugar and sodium are being implemented using an incremental approach, reaching the defined limits by 1 July 2018 (59). Although no studies are available yet, the regulation is reported to be already well implemented with many products already carrying the warning labels.

2 FOOD LABELLING: There is a regulatory system implemented by the government for consumer-oriented labelling on food packaging and menu boards in restaurants to prevent misleading claims and allow consumers to make informed food choices.

LABEL4:

A consistent, single, simple, clearly-visible system of labelling the menu boards of all quick service restaurants (i.e. fast food chains) is applied by the government, which allows consumers to interpret the nutrient quality and energy content of foods and meals on sale

recommendations from 2020: no recommendations

Evidence of Implementation:

There is no government-initiated mandatory or voluntary labelling of foods and meals in any restaurants or outlets across New Zealand. In some chains voluntary information is available.

Relevant recommendations from the **Labelling logic report** (20,21):

- commissioned by Australian food minister are 18: *‘That the declaration of energy content of standardised food items on the menu/menu boards or near the food display or menu should be mandatory in chain food service outlets and on vending machines. Further, information equivalent to that provided by the Nutrition Information Panel (NIP) should be available in a readily accessible form in chain food service outlets’.*
 - The Forum agreed that no further action is required on this recommendation.
- The Australia and New Zealand Food Regulation Ministerial Council has agreed that jurisdictions that have implemented point of sale nutrition schemes should work together informally to aggregate their data. 54: *‘That chain food service outlets across Australia and New Zealand should be encouraged to display the multiple traffic lights system on menus/menu boards. Such a system should be mandatory where general or high-level health claims are made, or equivalent endorsements/trade names/marks are used’.*
 - The Forum agreed that no further action is required on this recommendation recognizing that progress has been made on point-of-sale nutrition schemes

Policy guidance for menu labelling in Australia and New Zealand

- Submissions were taken through Australian Government Department of Health Consultation Hub between 8 April 2021 to 3 June 2021(60)
- Menu labelling is currently voluntary and not regulated in New Zealand. In 2019 the Australia and New Zealand Ministerial Forum on Food Regulation (now known as the Food Ministers Meeting) agreed that consistent menu labelling is ideal. The first needed step towards this is a policy guideline. This submission was an open consultation to develop a bi-national policy framework for menu labelling (60).
- The purpose is to understand the costs and benefits for menu labelling options and to identify what would be appropriate for New Zealand (60)
- Alongside the submission, a statement was released, *Consultation Regulation Impact Statement: Policy Guidance: Menu labelling in Australia and New Zealand*. This paper only considered menu labelling of energy (kilojoules) information for standard food sold at standard food outlets (i.e. standardised ready-to-eat food and drinks that are not required to bear a label). Other nutritional information was out-of-scope. This paper outlined 4 options of how menu labelling could work and asked for submissions to give feedback from both New Zealand and Australian stakeholders. Regardless of the feedback and option, it will be accompanied by an education strategy so that consumers are able to understand the labelling (61)
- In November 2022 Food Ministers gave their approval and endorsed the Policy Guidelines which will give FSANZ strategic guidance about Food Ministers’ expectations on menu labelling to support consumers to make informed healthy choices and create consistency across jurisdictions’ menu labelling regulations (62).
- Consultation outcomes showed a preference towards Option 3 (Mandated menu labelling for all standard food outlets and developing a Ministerial Policy Guideline on Menu labelling) (63,64).

International Best Practice Example (benchmarks):

South Korea: Since 2010, the Special Act on Safety Control of Children’s Dietary Life has required all chain restaurants with 100 or more establishments to display nutrient information on menus including energy, total sugars, protein, saturated fat and sodium (59).

USA (2018): Section 4205 of the Patient Protection and Affordable Care Act (2010) (65) requires that all chain restaurants with 20 or more establishments display energy information on menus. The regulations also require vending machine operators of more than 20 vending machines to post calories for foods where the on-pack label is not visible to consumers by 26 July 2018 (59).

New York City, USA: Following an amendment to Article 81 of the New York City Health Code (addition of section 81.49), chain restaurants are required to put a warning label on menus and menu boards, in the form of a salt-shaker symbol (salt shaker inside a triangle), when dishes contain 2,300 mg of sodium or more. It applies to food service establishments with 15 or more locations nationwide. In addition, a warning statement is required to be posted conspicuously at the point of purchase: “Warning: [salt shaker symbol] indicates that the sodium (salt) content of this item is higher than the total daily recommended limit (2300 mg). High sodium intake can increase blood pressure and risk of heart disease and stroke.” This came into effect 1 December 2015 (59,66).

3 Food Promotion:

There is a comprehensive policy implemented by the government to reduce the impact (exposure and power) of the promotion of unhealthy foods to children (<16years) across all media

PROMO 1:

Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children through broadcast media (TV, radio).

High priority recommendations from 2020: Marketing to children: The Government introduces regulations to restrict unhealthy food and beverage marketing to children up to 18 years old through broadcast media (during peak TV viewing times), non-broadcast media (including food packaging, sport sponsorship and digital media) and in children’s settings, using the WHO nutrient profiling models, tailored to the NZ context.

Evidence of Implementation:

There are no government regulations in place to restrict unhealthy food marketing to children through broadcast media.

Advertising Standards Authority (ASA)

The ASA governs the Children and Young Peoples Advertising Code, published in 2017. The Code includes specific food and beverage advertisements rules for children (up to 14 years) and young people (up to 18 years). The advertising of occasional food, as defined by the Ministry of Health, Food and Beverage Classification System is unable to be ‘targeted at children’ as defined by the Code (67). Public health academics have criticised the definition used by the ASA as it is too narrow in scope and does not accurately capture the advertising to which children are exposed, which is the definition the WHO endorses (68).

ASA Planned Review

Between 2017 and 2022 1.58 percent of complaints came under Children and Young Peoples Advertising Code.

In July 2022 ASA launched its planned review, accepting feedback on the current Code from advertisers, industry, public health, teachers, parents and children and young people until 31 August 2022 (69).

Alongside the launch, ASA released a list of key discussion issues that they would want feedback on (70):

- Age definitions: Currently children are defined as under 14 and young people as 14-18. Some believe that children should be defined as under 16 or that it should incorporate everyone under 18
- Audience threshold: Ads placed in media with robust data to show the audience is less than 25% children and/or young people or tools that are used to select audiences who are over the age of either 14 or 18 are deemed to not be targeting them. Some think this threshold should be lower. In the 2021 Alcohol Advertising and Promotion Code the audience threshold of 20% of minors was introduced (71)
- Brand advertising: Currently the code does not apply to brand advertising. Should the code apply to brand advertising in the future?
- Sponsorship advertising: ASA does not have jurisdiction over commercial sponsorship agreements, ads that refer to – or feature – an occasional food or beverage product sponsorship agreement are covered by the current code. Should the revised code extend to other sponsorship ads?

ASA began reviewing submissions and updating the Children and Young People's Advertising Code in the last quarter of 2022 (personal communication, ASA, 2023).

In April 2023, ASA released draft versions of the Children's Advertising Code and the Food and Beverage Advertising Code for further consultation. These drafts were developed based on initial consultations in 2022 and were released separately in response to feedback received. The Children's Advertising Code will replace the Children and Young People's Advertising Code and will apply to those aged 16 and under. Meanwhile, the new Food and Beverage Advertising Code will apply to all food and beverage advertising to children, including restrictions. During the second consultation period, which takes place between April 3 to May 1, 2023, ASA is looking for feedback on all aspects of the two draft codes. The submissions received will inform the final codes, which are expected to be released in late 2023 (72).

Key aspects included in drafts:

- New Food and Beverage Advertising Code include the restrictions on occasional food and beverage advertising to children.
- Age definitions: Committee's preliminary view is under 16 years for all purposes.
- Defined targeting criteria with more examples and list of media platforms to be updated.
- Codes apply to brand and sponsorship advertising.
- Restriction on occasional food and beverage products for sponsorship advertising by brands synonymous with them. Sponsorship must be the primary theme of the advertisement.
- Received 11 submissions on replacing FBCS and HSR with NPSC from FSANZ. ASA has contracted a nutrition expert to review available NPS. Majority of occasional products do not require NPS assessment. NPSC recommended for products that do.

United Nations Food Systems Summit

On the 23rd of September 2021 at the United Nations Food Systems Summit, NZ Government declared its commitment to restricting advertising of unhealthy food to children, as part of a transition pathway to healthy and sustainable food systems and contribution to achieving the United Nations Sustainable Development Goals (72).

In 2022 the MoH made submissions on the ASA's consultation on the review of the Children and Young People's Advertising Code. The newly established Public Health Agency, in partnership with Te Whatu Ora and Te Aka Whai Ora is considering how to progress work to address unhealthy food environments more widely (personal communication, MoH, 2023).

Protect kids from Junk Food Marketing group and other advocacy.

Protect kids from Junk Food Marketing group has been actively advocating towards legislation to be passed to prevent children from being exposed to harmful food and beverage marketing. Organisations committed to this vision includes Cancer Society, Hāpai Te Hauora, Healthy Auckland Together, Health Coalition Aotearoa, Te Hā Oranga, the University of Auckland and the University of Otago (73).

There is strong public support for change in the current food marketing environment in New Zealand, with two out of three New Zealanders supporting stricter regulation of food and beverage marketing and 78% of children agree that these advertisements are contributing to obesity (74).

Food Industry Taskforce

The Government response to the Food Industry Taskforce report in 2018 on addressing factors contributing to obesity prioritised the recommendation for the food industry to limit advertising, marketing and sponsorship related to energy-dense, nutrient-poor food and beverages (6).

International Best Practice Example (benchmarks):

- **Canada, Quebec (1980):** A ban on all commercial advertising (through any medium) directed to children under the age of 13 is in place.
- **Norway (2016):** Under the Broadcasting Act, advertisements may not be broadcast on television directed to children or in connection with children's programs. This applies to children 12 years and younger (similar in Sweden) (75).
- **South Korea (2010):** TV advertising to children less than 18 years of age is prohibited for specific categories of food before, during and after programmes shown between 5-7pm and during other children's programmes (76).

3 Food Promotion: There is a comprehensive policy implemented by the government to reduce the impact (exposure and power) of the promotion of unhealthy foods to children (<16years) across all media

PROMO 2:

Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children through non-broadcast media (e.g. Internet, social media, food packaging, sponsorship, outdoor advertising- including around schools).

High priority recommendations from 2020: Marketing to children: The Government introduces regulations to restrict unhealthy food and beverage marketing to children up to 18 years old through broadcast media (during peak TV viewing times), non-broadcast media (including food packaging, sport sponsorship and digital media) and in children's settings, using the WHO nutrient profiling models, tailored to the NZ context.

Evidence of Implementation:

There are no government regulations in place to restrict unhealthy food marketing to children through non-broadcast media.

Advertising Standards Authority Codes

The Advertising Standards Authority Codes outlined above include non-broadcast media in their scope. The code does not apply to food packaging and commercial sponsorship. However, as outlined above, to date only one complaint against the Codes has been upheld by the self-regulated Complaints Board (Coca Cola outdoor advertising using Santa Claus) and no other mediums – such as internet, social media etc have been upheld as the advert has not been deemed be 'targeting children' as the audience was not made up of over 25% children.

The 2022 planned review by ASA received submissions on this matter between July and August 2022 as mentioned in PROMO1 (70). In April 2023, two draft Codes were released and ASA has opened a second round of consultations (also mentioned in PROMO1). One change included in the draft is in including brand and sponsorship advertising in the Code (72)

Food Industry Taskforce

The Government response to the Food Industry Taskforce on addressing factors contributing to obesity prioritised the

recommendation for the food industry to limit advertising, marketing and sponsorship related to energy-dense, nutrient-poor food and beverages (6).

International Best Practice Example (benchmarks):

- **Chile (2016):** Restricts advertising directed to children under the age of 14 years of foods in the “high in” category and applies to all advertising material. The regulatory norms define limits for calories, saturated fat, sugar and sodium content considered “high in” foods and beverages. The regulatory norms define advertising targeted to children as websites directed to children or with an audience of greater than 20% children, and according to the design of the advertisement. Promotional strategies and incentives, such as cartoons, animations, and toys are included in the ban (77).
- **Portugal (2019):** Restrictions on advertising directed to children under 16 years of food and beverages that contain high energy content, salt, sugar and fats are in place. The advertising ban applies to websites, webpages, apps and social media profiles with content intended for this age group (77).
- **UK (2017 and 2021):** The UK Committee of Advertising Practice rules stipulate that online marketing targeted to under-16s is prohibited. This means that food and soft drink products that are high in fat, salt or sugar (HFSS) product ads are not permitted to appear in media that is specifically targeted at under-16s e.g. a children’s magazine or on a website aimed at children; or where under-16s make up a significant proportion (more than 25%) of the audience e.g. advertorial content with an influencer that might have broad appeal but also a significant child audience (78). From the end of 2022 all HFSS advertising is banned from television from 9pm-5:30 am and a restriction on paid-for advertising of HFSS foods online will come into effect (79).

3 Food Promotion: There is a comprehensive policy implemented by the government to reduce the impact (exposure and power) of the promotion of unhealthy foods to children (<16years) across all media

PROMO 3:

Effective policies are implemented by the government to ensure that unhealthy foods are not commercially promoted to children in settings where children gather (e.g., preschools, schools, sport, and cultural events).

High priority recommendations from 2020: Marketing to children: The Government introduces regulations to restrict unhealthy food and beverage marketing to children up to 18 years old through broadcast media (during peak TV viewing times), non-broadcast media (including food packaging, sport sponsorship and digital media) and in children’s settings, using the WHO nutrient profiling models, tailored to the NZ context.

Evidence of Implementation:

There are no government regulations in place to restrict unhealthy food marketing to children in children’s settings. The Government stimulated a review of the Advertising Standards Authority Code on Advertising to Children and Children’s Code for Advertising Food in 2019. Changes to Children and Young People’s Advertising Code in 2017 restrict advertising of occasional food in locations where children gather, including schools and early childhood education services (67). Work to update the Children and Young People’s Advertising Code is underway and planned to be published later in 2023 (Personal communication, ASA, 2023)

Food Industry Taskforce

The Government response to the Food Industry Taskforce on addressing factors contributing to obesity prioritised the recommendation that industries reduce unhealthy food and beverage outdoor advertising within 300m of primary and intermediate school gates (6).

International Best Practice Example (benchmarks):

Chile (2016): A series of regulations on the advertising of processed foods high in calories, fat, sugar, or salt applies. These laws specifically seek to regulate companies with brands that target children through misleading advertising and the use of cartoon mascots on commercial packaging. Chile's National Consumer Service has determined that food labels may no longer feature cartoon mascots designed to appeal to children (80).

4 FOOD PRICES: Food pricing policies (e.g., taxes and subsidies) are aligned with health outcomes by helping to make the healthy eating choices the easier, cheaper choices

PRICES1:

Taxes on healthy foods are minimised to encourage healthy food choices where possible (e.g. low or no sales tax, excise, value-added or import duties on fruit and vegetables)
no recommendations from 2020

Evidence of Implementation:

Goods and services tax (GST) applies equally to all foods in NZ. There is no reduction of taxes on healthy foods in NZ, and it was never actively considered by the government due to complexity and potential revenue shortfall. The current government policy is not in favour of introducing exemptions. There has been no change since 2013.

International Best Practice Example (benchmarks):

- **Australia (2000):** Goods and services tax (GST) exemption exists for basic foods (including fresh fruits and vegetables) (81).
- **Tonga (2013):** As part of a broader package of fiscal measures, import duties were lowered from 20% to 5% for imported fresh, tinned or frozen fish in order to increase affordability and promote healthier diets (82).

4 FOOD PRICES: Food pricing policies (e.g., taxes and subsidies) are aligned with health outcomes by helping to make the healthy eating choices the easier, cheaper choices

PRICES 2:

Taxes on unhealthy foods (e.g. sugar-sweetened beverages, foods high in nutrients of concern) are in place to discourage unhealthy food choices where possible, and these taxes are reinvested to improve population health

High priority recommendations from 2020: Sugary drinks industry levy: The Government introduces a tiered industry levy of at least 20% on sugary drinks and recycles the revenue for programmes to improve public health and well-being.

Evidence of Implementation:

The current Government do not intend to implement any new taxes. 'Unhealthy' foods (like all other food for sale) are currently subject to Goods and Services Tax (GST) of 15% (personal communication, MoH, 2023).

- In August 2017 the New Zealand Beverage Guidance Panel (NZBGP) presented a sugary drink tax policy brief for New Zealand including a 10,000-strong petition, however, this was declined by the 2017 government (83).
- June 2022 it was stated that the government is not considering a sugar tax (26)
- A review report of sugar taxes in New Zealand was completed by the New Zealand Institute of Economic Research for the Ministry of Health in 2017. After reviewing 47 peer-reviewed studies and working papers it found that the

evidence of sugar taxes improving health was considered weak and the evidence remains inconclusive. These conclusions were then passed onto the MoH (84).

- New Zealand Beverage Council has published on their website stating that sugar taxes are ineffective in reducing obesity in a real-world environment and has stated that they do not support the introduction of a sugar tax in New Zealand and asks for a more holistic approach (85)

International Best Practice Example (benchmarks):

Many countries (>50) around the globe have varying taxes applied to sugar sweetened beverages, energy drinks and similar products (86).

- **UK (2018):** A Levy applies to any pre-packaged soft drink with added sugar, containing at least 5g of total sugars per 100mL of prepared drink. Soft drinks that have a total sugar content of more than 5g and less than 8g per 100mL are taxed 0.18 British pounds (\$0.25) per litre and drinks that have a total sugar content of 8g or more per 100mL are taxed 0.24 British pounds (\$0.34) per litre. Exemptions from the levy for some other drinks apply. The levy applies to soft drinks produced and packaged in the UK and soft drinks imported into the UK (87).
- **Mexico (2013):** An excise duty of 1 peso (\$0.80) per litre applies to sugary drinks. Approximately 10% price increase. An ad valorem excise duty of 8% applies to foods with high caloric density, defined as equal to or more than 275 calories per 100 grams (86).
- **Hungary (2012):** A “public health tax” is applied on the salt, sugar and caffeine content of various categories of ready-to-eat foods, including soft drinks, energy drinks, and pre-packaged sugar-sweetened products. The tax is applied at varying rates. Soft drinks, for example, are taxed at \$0.24 per litre and other sweetened products at \$0.47 per litre. The tax also applies to products high in salt, including salty snacks with >1g salt per 100g, condiments with >5g salt per 100g and flavourings >15g salt per 100g (86).
- **Ethiopia (2020):** An excise tax applies on food products such as sugar-sweetened beverages and margarines, fats and oils with high levels of saturated fats or trans fats. Beverages with added sugars or other sweeteners are subject to a 25% tax. Fruit and vegetable juices are excluded. Margarine with more than 40% saturated fat, or more than 0.5% trans fat per 100g, are subject to a 50% tax. Hydrogenated fats and oils with more than 40% saturated fat or more than 0.5 trans-fat per 100g are taxed 40%, and those whose saturated and trans-fat content is not indicated. A 30% tax rate is applied to non-hydrogenated fats and oils with more than 40% saturated fat per 100g if their saturated fat content is not indicated (86).

4 FOOD PRICES: Food pricing policies (e.g., taxes and subsidies) are aligned with health outcomes by helping to make the healthy eating choices the easier, cheaper choices

PRICES 3:

The intent of existing subsidies on foods, including infrastructure funding support (e.g. research and development, supporting markets or transport systems), is to favour healthy rather than unhealthy foods

Low priority recommendation from 2020: The Government requires government programmes that subsidize/supply food for pre-school and school-age children (or in Early Childhood Centres and schools) to meet food and nutrition guidelines.

Evidence of Implementation:

- Subsidies on foods in New Zealand are quite small compared to other countries (e.g. agricultural subsidies in the US).
- Councils can approve and encourage applications for farmers markets on Council owned land, remove any stall fees and charges at farmers markets, regional councils can ensure appropriate transport links are available to markets and other fruit and vegetable outlets, cycle pathways, lighting etc. for night markets (personal communication, Public Health Service Tauranga, 2017). Councils usually support farmers markets by land allocation and bus routes. Support for farmers markets is quite common by NZ Councils.

International Best Practice Example (benchmarks):

Singapore: The government, through the Health Promotion Board (HPB) increases the availability and use of healthier ingredients through the "Healthier Ingredient Scheme" (formerly part of the "Healthier Hawker" program, launched in 2011), which provides in the first instance transitional support to oil manufacturers and importers to help them increase the sale of healthier oils to the food service industry (88). The Healthier Ingredient Subsidy Scheme offers a subsidy to suppliers stocking healthier items. Cooking oil is the first ingredient under the scheme, which subsidizes oils with a saturated fat level of 35 per cent or lower.

4 FOOD PRICES: Food pricing policies (e.g., taxes and subsidies) are aligned with health outcomes by helping to make the healthy eating choices the easier, cheaper choices

PRICES 4:

The government ensures that food-related income support programs are for healthy foods

High priority recommendation from 2020: Income support: The Government supports low-income households so they can afford a healthy diet.

Evidence of Implementation:**Special Needs Grant and Disability Allowance**

The Ministry of Social Development, through Work and Income, can provide recoverable or non-recoverable financial assistance to people to meet an immediate need for essential items such as food, health costs, power and other costs. These payments are available to any person provided they meet the income and asset test, and they are unable to meet the cost from any other source. A Disability Allowance may be available for someone on a limited income for additional, on-going costs of therapeutic value. This can include special foods which are beyond the normal costs of healthy eating, for example, lactose-free diet, coeliac disease etc (89).

On 1 April 2022 payments increased due to Annual General Adjustment (90)

Bargain Boxes – MSD and My Food Bag

Between October 2019 and February 2020, a trial was held with My Food Bag and the Ministry of Social Development. People applying for food grants through a Special Needs Grants were able to choose to receive a food bag option (Bargain Box) from My Food Bag instead of a monetary grant. During the trial food boxes did not cater for dietary requirements, clients have an option to choose money instead of the food box if this is an issue (91).

During the trial, feedback from clients were positive with 95% of participants rating it 'good' or 'very good'. However there was also some feedback that some participants that *they did not need or want to be told what to eat* (personal communication, MSD, 2023). The full evaluation of the trial has been superseded due to other high demands resulting from the COVID-19 pandemic.

During this time there was high demand on food banks and similar initiatives as well as funding to meet food needs. MSD funded the distribution of 500 'Back Up Boxes' from My Food Bag, which were distributed to the food banks and community groups in Auckland. These boxes contained non-perishable food items for 3 meals a day for 7 days (92).

My Bargain Boxes are currently available for order through their website (93). My Bargain Boxes now offer a choice from 12 recipes allowing customers to cater to dietary requirements, however My Bargain Boxes are no longer available through MSD food grants (Personal Communication, My Food Bag, 2023).

KickStart Breakfast – joint initiative by Fonterra, Sanitarium and MSD

- The NZ Government joined Kick-start breakfast as a supporter in May 2013, allowing the programme to extend from two to five days and committing \$9.5 million over 5 years to fund half the cost of the programme, as part of Government's commitment to optimal outcomes for children and young people (94). From term 1 in 2014, all schools were eligible to join. Fonterra and Sanitarium provide the product. The school community provides plates etc., location, food storage facilities and volunteers (95).

During COVID-19 lockdowns schools sent out existing supplies to the community and homes. In 2021 it was revealed that the initiative covered 1300 schools and in 2022 KickStart Breakfast celebrated serving their 50 millionth breakfast (95). In 2021 1,100 schools reported on the impacts of KickStart Breakfast (96):

- 75.6% reported improved general health and wellbeing.
- 74.8% reported improved in-class concentration.
- 60.5% reported improvement in children's behaviour.
- 51.4% reported that it helped build positive relationships with peers and teachers.

Fruit in Schools programme

The Government (Te Whatu Ora) funds the Fruit in Schools programme (FIS), which all decile one and two Year 1-8 schools can opt into. At the end of term 4 2022, 566 schools (25% of all primary schools) and over 122,000 students and staff were receiving produce, (either fruit or vegetables) each day during the school term starting the second week of each term. The programme is funded by Te Whatu Ora and managed by United Fresh. The annual cost of FIS is approximately \$8.3 million which covers both the management of the initiative and the supply of produce. An independent evaluation, July 2018, found FIS was highly valued by principals and aligned with international evidence on how to improve nutrition and reduce obesity in children (personal communication, MoH, 2023).

As of 2022 it has not been extended to decile 3 schools (97).

Healthy School Lunches – Ka Ora Ka Ako

In August 2019, the Prime Minister announced the free Healthy School Lunches programme. This began in Term 1, 2020 for year 1 to 8 students in schools in Bay of Plenty/Waiariki and Hawkes Bay/Tairāwhiti (98). Lunches will be required to be healthy and nutritious, based on the Ministry of Health's "Healthy Food and Drink Guidance – Schools"(99).

Initially it was part of a 2-year initiative to provide free and healthy lunches to Year 1-8 students across 120 schools in communities deemed to have the greatest socio-economic barriers nationally as per the Equity Index (100). The aims of Ka Ora Ka Ako are to reduce food insecurity for children and young people. In response to the COVID-19 pandemic, this programme has been expanded to 944 schools (219,359 students) in 2020 to ease the impact COVID-19 had on students (101). Expanding this service has supported job creation and economic recovery post pandemic, with approximately 2300 jobs generated by the programme (101). In 2020, Ka Ora Ka Ako received \$216.7 million in operating and \$3.9 million in capital expenditure funding through the COVID-19 Response and Recovery Fund over the next 2 years (101). Lunch menus are based on nutrition guidelines from the Ministry of Health (100).

COVID19, MSD – Funding.

Ministry for Social Development (MSD) provides food-related support under the Special Needs Grants and gives up to \$400 per week over a 6-month period, providing immediate assistance for food related costs. Prior to the COVID19 pandemic there was approximately 30,000 receivers. This increased to 72,000 in April 2020. There is no restriction to how this money is spent, including no emphasis on healthy foods. Individuals receiving the Special Needs Grants may also be referred to Foodbanks managed by NGOs for food parcels (102).

In June 2020, MSD invested \$32 million over two years to create the Food Secure Communities programme to support community food providers who distribute food to individuals experiencing food insecurity (103). The Care in the Community welfare programme, established in November 2021 with the introduction of the COVID19 Protection Framework, allocated \$143.9 million of its \$349.8million funding to extend the food secure programme. Up to the week ending in March 2022, food accounts for 80% of all hardship grants approved by MSD (104).

Food parcel guidelines – Kore Hiakai

Kore Hiakai Zero Hunger Collective, a non-profit NGO, published a nutritional guideline to standardize food parcels in June 2021, called *Aotearoa Standard Food Parcel Measure*.

- It recommends that food parcels should meet 80% of the recommended nutrition standard outlined by the MOH, allowing leeway based on produce availability and consumer choice (105).
- Prior to these guidelines, research showed that there were discrepancies with expected length of days a Food Parcel should last, and irregularities with nutritional content. Furthermore, only 32% of foodbanks surveyed (11 of 34) able to regularly provide fruits and vegetables. As foodbanks often rely on donated food items (106).
- The government has not published any regulations on the nutritional guidelines for food parcels (106)

- Foodbanks are recommended to follow guidelines from Kore Hiakai rather than it being mandatory (106)

The MSD Food Secure Communities funded umbrella organisation Kore Hiakai Zero Hunger Collective developed a new Aotearoa Standard Food Parcel Measure (What is Food Parcel sector research — Kore Hiakai Zero Hunger Collective). This measure provided guidance to the foodbank sector on the contents of a standard food parcel which considered nutrition, whānau choice and what was available in the foodbank. The Standard Food Parcel was designed to provide for 4 people. 3 meals a day, for 4 days. It also aimed to meet approximately 80% of nutritional standards, as defined by Ministry of Health Eating and Activity Guidelines (Nov 2020).

International Best Practice Example (benchmarks):

UK: The British Healthy Start program provides pregnant women and/or families with children under the age of four with weekly vouchers to spend on foods including milk, plain yoghurt, and fresh and frozen fruit and vegetables. Participants or their family must be receiving income support/jobseekers allowance or child tax credits. Pregnant women under the age of 18 can also apply. Full national implementation of the program began in 2006 (86).

USA: In 2009, the U.S. Department of Agriculture's implemented revisions to the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to improve the composition and quantities of WIC-provided foods from a health perspective. The revisions include: increase the dollar amount for purchases of fruits and vegetables, expand whole-grain options, allow for yoghurt as a partial milk substitute, allow parents of older infants to buy fresh produce instead of jarred infant food and give states and local WIC agencies more flexibility in meeting the nutritional and cultural needs of WIC participants (86)

USA: In 2012, the USDA piloted a "Healthy Incentives Pilot" as part of the Supplemental Nutrition Assistance Program (SNAP, formerly "food stamps"). Participants received an incentive of 30 cents per US\$ spent on targeted fruit and vegetables (transferred back onto their SNAP card). The Pilot included 7500 individuals (86). In New York City and Philadelphia, "Health Bucks" are distributed to farmers markets. When customers use income support (e.g. Food Stamps) to purchase food at farmers markets, they receive one Health Buck worth 2USD for each 5USD spent, which can then be used to purchase fresh fruit and vegetable products at a farmers market (86). In Philadelphia, the program has been expanded to other retail settings like supermarkets and corner stores.

5 Food Provision:

The government ensures that there are healthy food service policies implemented in government-funded settings to ensure that food provision encourages healthy food choices, and the government actively encourages and supports private companies to implement similar policies

PROV1:

The government ensures that there are clear, consistent policies (including nutrition standards) implemented in schools and early childhood education services for food service activities (canteens, food at events, fundraising, promotions, vending machines etc.) to provide and promote healthy food choices

High Priority recommendations from 2020: School food policies: The government requires and supports schools and early childhood education services to develop food policies which ensure healthy foods are provided and promoted.

Evidence of Implementation:

There is no minimum nutritional standard for school canteens in New Zealand.

The National Administration Guidelines (NAG) – Ministry of Education

The National Administration Guidelines (NAG) for school administration set out statements of desirable principles of conduct or administration for specified personnel or bodies (107).

- The NAG 5b states that each board of trustees is required to promote healthy food and nutrition for all students. The responsibility for complying with that requirement rests with the board of trustees, not with ERO or the Ministry of Education. ERO does not have any powers other than its ability to publish reports, and any powers of 'enforcement' would be through the Ministry.
- The NAG was repealed with the release of a new strategic planning and reporting framework on 1 January 2023 (107) Most of the requirements from NAG will shift to the Education and Training Act 2020, into new regulations, into the National Education and Learning Priorities (NELP), and into the National Curriculum (some of which will happen through the refresh) (108).
- NAG 5b shifted into new regulation 20 of the Education (School Boards) Amendment Regulations 2022 (Gazetted on 17 November 2022) Duty to promote healthy food and nutrition. The board of a school must promote healthy food and nutrition for all of the school's students (108).

A consultation on introducing a healthy drink only policy in primary schools was held in April 2022. Given the release of the new framework in 2023, there is a proposal to transfer NAG 5b into legal duty and add a duty meaning that school boards will only be allowed to provide healthy drinks in primary school (109)

- Initially it was planned that the duty would take effect in term 1 of 2023 with agreement and approval by Cabinet (109). In September 2022 it was stated that they have the intention of introducing the duty to both primary and secondary schools at the same time. However, this means that there will not be any immediate changes for schools anytime soon. The consultation did show a strong support towards all schools promoting healthy food and drinks not just for primary schools (110)
- The government is considering a similar approach to secondary schools in the future (109)

The Early Childhood Education Services Regulations 2008: Regulation 46

The Early Childhood Education (ECE) Services Regulations 2008 mention: Regulation 46 Health and safety practices standard: general, is the standard that requires every licensed service provider to whom this regulation applies to take all reasonable steps to promote the good health and safety of children enrolled in the service (111).

Guidelines for School Food Programme: Best Practice Guidance for Your School (Feb 2014) – Children's Commissioner

The Children’s Commissioner published Guidelines for School Food Programmes: Best Practice Guidance For Your School (February 2014). Principles: school food programmes should be child-centred, inclusive, and nutritionally sound, take a whole-school approach, and be sustainable and evidence-based. The guidelines include examples of successful school food programmes in appendix 1 of that document. These guidelines were revised in August 2018 (112).

Ka Ora Ka Ako (Healthy School Lunches Programme)

The Ka Ora Ka Ako/ Healthy School Lunches Programme, established under the NZ Government’s Child Youth and Wellbeing Strategy, was launched in 2019 (100).

An interim report evaluating the initial pilot programme was published in 2021, from data based off 38 schools (2700 students). Key results from this report include:

- ‘Large benefits’ for all primary and intermediate learners in respect of changing the types of food available and consumed (39% more vegetables and 15.7% less snack items consumed).
- ‘Large gains’ in fullness for learners who previously had insufficient food, with these learners, on average, feeling an 20% fuller after lunch than before the programme.
- ‘Large gains’ in mental wellbeing by the most disadvantaged learners (3.8 %)
- a statistically significant reduction in the proportion of learners with low health quality of life (9%)
- ‘Small but significant’ improvements for learners, on average, in terms of their overall health quality of life, as well as in their physical and emotional functioning (113).

A nutrition-specific evaluation report was published at the end of 2022. This looked at determining the contribution of Ka Ora Ka Ako lunch meals to the daily nutrient requirements (NRV) as well as comparing to international lunch programme nutrient standards.

Key findings include:

- Overall, 78.2 percent of the analysed nutrients surpassed the 33 percent NRV target, including key nutrients involved with learning, behaviour and educational achievement, such as folate, thiamin, vitamin B6, and vitamin B12.
- Two nutrients, protein and niacin, were provided in levels which exceeded 100 percent of the daily needs of ākongā in some age groups
- There were five nutrients which were substantially below the 33 percent target in analysed Ka Ora, Ka Ako meals: energy, carbohydrates (no target, but low compared to international standards), iron, calcium, and iodine.

A second evaluation of the expanded programme was completed in 2022. The Impact Evaluation is an independent evaluation focussed on wellbeing in secondary school students, impacts on attendance across all year levels, and providing case studies on stories of greatest change for whānau.

The evaluation findings show significant positive impacts overall in terms of ākongā wellbeing, food security, and the nutritional value of Ka Ora, Ka Ako meals.

The Ministry has undertaken further work to understand and respond to the evaluation report findings through commissioning He Kai Kei Aku Ringa, an independent kaupapa Māori evaluation of Ka Ora, Ka Ako led by Mana Pounamu Consulting. He Kai Kei Aku Ringa will evaluate the impact of the Iwi and Hapū Partnership model of Ka Ora, Ka Ako delivery specifically for ākongā, whānau, hapū, and iwi and the impact of Ka Ora, Ka Ako more broadly on ākongā and whānau Māori.

In 2023 new nutrition standards will be released for Ka Ora Ka Ako and will replace the previous guidelines used by lunch providers (114). The 2023 new nutrition standards were created based on feedback collected from schools and kura, suppliers, dietitians and nutritionists and the Ministry of Health. The changes to the nutrition standards were made to support increased uptake by students, to be more user friendly for suppliers trying to plan a healthy meal, and to address some of the concerns noted in the nutrition evaluation including low energy and carbohydrate content of meals and high sodium contents of meals (115).

- food items are now listed in grams and amounts are age specific.
- Age specific minimum weight for food groups
- Four main food groups instead of the previous nine
- Definitions for green, amber and red foods were refined.
- removed health star ratings for vegetables.
- Maximum weight limit for amber category food

- some food items changed category in traffic light system (115)

No policies for food service activities in school and early childhood education – Healthy Food and Drink Guidance - School

New Zealand has no policies implemented in schools and early childhood education services for food services activities.

- From June 2008 to February 2009 there was an additional clause that schools should only sell healthy food on their premises, removed by the National Government.
- The **Food and Beverage Classification System** launched in 2007 and was last updated in March 2016. In 2020, it was replaced by the Healthy Food and Drink Guidance.
- Health Promotion Directorate, Te Whatu Ora (Health Promotion) has supporting resources specifically designed for schools promoting water as the best drink option. These were last updated in 2021 (personal communication, HPA, 2023).
- **A survey by the University of Auckland (School-FERST)** in 2016 found that of the 819 participating schools (33% response rate), 38.5% of primary and 44.8% of secondary schools reported having a written school food and nutrition policy. Policies received from 145 schools were analysed. Overall scores for the strength and comprehensiveness of the policies were very low across all school types. Two-thirds of primary and intermediate schools and 23% of secondary and composite schools reported being 'milk and water only' (116).
- **Healthy Food and Drink Guidance - School**

Guidance for schools to develop their own policies was released in March 2020. Schools participating in Ka Ora Ka Oka and the school lunch providers are expected to meet these guidelines. The 'Healthy Food and Drink Guidance - School' was developed to help schools develop a policy to promote and provide healthy foods and drinks. The guidance aims to allow for children and young people to have access to healthy food and drinks at school and for them to develop healthier preferences and assist positive decision making. These guidelines cover all foods and drinks that are available to purchase in primary school, kura, secondary school or wharekura, food provided for special occasions or celebrations, free or charitable food, gifts of food and external food suppliers but excludes foods and drinks individual students or staff bring. The guidance follows the same traffic light system (green, amber, red) that was introduced through the *National Health Food and Drink Policy* by the Ministry of Health. It recommends school canteens to serve 75% green foods/drinks and have no red foods/drinks available (99).

This guidance addresses only the type of food and drinks, it does not address other factors such as food prices. A review conducted in 2022 found that more of the cheapest food options were sold than more expensive food items. Cheaper food items also tended to be items with high sugar and high fat foods and beverages. This review also found that schools voluntarily implementing policies tended to lack comprehensiveness. There is yet to be an evaluation of the effectiveness of this guidance. However similar guidance released in Victoria Australia in 2006 found schools who did implement the guidance struggled. An analysis conducted after 5 years found that all schools had less than 50% of green food/drink items. The review suggests that guidance alone is not enough, more support as well as greater investment of resources is necessary (117).

It was also found that when external organisations work with schools there are increased improvements in daily intakes of nutritious foods, children's hunger, concentration, and general health. This has been found with food provision programs such as Milk in Schools, Fruit in Schools, KidsCan, KickStart Breakfast and the recently started Ka Ora Ka Oka (117).

International Best Practice Example (benchmarks):

Finland (2017): Recommendations based on the Finnish nutrition guidelines provide food and nutrient recommendations for salt, fibre, fat, and starch content for school meals. No soft drinks, energy drinks or any other acidified beverages or beverages with added sugar are permitted to be served at school (118).

Jamaica (2018): Mandatory nutrient guidelines for beverages sold/served within all public educational institutions for children (i.e. early childhood, primary level and secondary level) prohibit sweetened beverages that exceed a maximum sugar concentration of 4g/100ml (effective 1st January 2021); and 2.5g/100ml (effective 1st January 2023). All unsweetened beverages are permitted. The guidelines also caution against beverages containing >10mg/serve of caffeine, discourage the use of artificial sweeteners and recommend beverage portions sold/served of <12 ounces (not including water) (118).

5 Food Provision: The government ensures that there are healthy food service policies implemented in government-funded settings to ensure that food provision encourages healthy food choices, and the government actively encourages and supports private companies to implement similar policies

PROV2:

The government ensures that there are clear, consistent policies in other public sector settings for food service activities (canteens, food at events, fundraising, promotions, vending machines, public procurement standards etc.) to provide and promote healthy food choices

High priority recommendation from 2020: Public sector healthy food: The Government applies the healthy food and drink policy it developed for the health sector across the whole government sector.

Evidence Implementation:

National Healthy Food and Drink Policy

A 'National Healthy Food and Drink Policy' was developed in 2016 by the DHB Healthy Food and Drink Environment Network. The policy was reviewed in 2018/19 resulting in a second edition to make the policy more practical and easier to follow while maintaining its alignment to the Eating and Activity Guidelines for New Zealand Adults (119).

- The resulting changes were relatively small and mostly specific to the nutrient criteria. By the end of 2019, six DHBs had adopted the national policy for DHB, one had adopted the national policy for organisations, six had their own policy, supported by or aligning with the national policy and seven were working towards national policy with plans to adopt in early 2020. (Personal communication. A similar policy appropriate for adoption by other organisations and workplaces has also been developed – Healthy Food and Drink Policy for Organisations (120).
- As of 2022, the Heart Foundation has supported the Ministry of Health with the implementation of the Food and Drink Policy across government agencies. A toolbox of fourteen supporting resources has been developed in partnership with other members of the national working group. There has also been engagement with seven government agencies. Six agencies have taken steps to implement the Food and Drink policy within their organisation. However, this has not progressed a great deal due to COVID-19 restrictions and lockdowns and other priorities for those agencies (personal communication, MoH, 2023)
- The National 'Healthier Lives' Science Challenge is funding the University of Auckland to conduct a review of the National DHB Food and Drink Policy. Results will be available mid-2023. An analysis published on the strength of policies found New Zealand Health Food and Drink Policy (NHFDP) in various District Health Boards (DHBs). The study found an increase in the adoption of NHFDP over time, but individual institutional policies were not as comprehensive as NHFDP. The study also found considerable variation in the comprehensiveness of nutrition standards across different institutional policies, which can create and exacerbate regional population health and nutrition inequities. The study suggests improvements for future iterations of NHFDP, such as adding more about how the policy will be made available, monitored, and evaluated, and who oversees implementation. Furthermore, the effectiveness of NHFDP would be strengthened if it were made mandatory. The study also suggests that evaluation of the nutrient profile of foods currently available in New Zealand DHBs is critical for identifying how differing policies impact on the actual food available to staff and visitors in hospital settings throughout Aotearoa (121).
- In 2021, nine out of the 22 organizations reported fully adopting the NHFDP. Of the remaining 13, six referred to the NHFDP when developing their institutional policy, and three were working towards full adoption. The mean scores (SD) for the three domains were 8.7 (1.0), 6.1 (2.6), and 3.8 (2.2), and the total score was 18.6 (4.8). Most individual institutional policies were not as comprehensive as the NHFDP, but some contained stricter or additional clauses that could be useful to incorporate into the NHFDP (122).

Childhood Obesity Plan: DHB Healthy food policies. All DHBs made a commitment to remove sugar-sweetened beverages from their campuses by Jan 2016. Childhood Obesity Plan is no longer active, however many of the individual actions that were in the plan have been completed and or embedded in business-as-usual activities (personal communication, MoH, 2023)

Prison Guidelines

The Department of Correction's Prison Operations Manual: F.01. Res.01 Catering states that meals provided to prisoners are in line with the Eating and Activity Guidelines set by the MoH and are checked by a dietician to ensure compliance. The Department's prison operations manual sets out performance standards surrounding catering, menus and responsibilities relating to prisoners with health issues, such as diabetes (122).

Rest homes and aged residential care guidelines

All rest homes and aged residential care facilities are certified and audited to ensure they provide safe, appropriate care for their residents and meet the standards set out in the Health and Disability Services (Safety) Act 2001 (123).

The previous Health and Disability Services Standard was updated to Ngā Paerewa Health and Disability Services Standard in 2021. 3.5 of this standard is *Nutrition to support wellbeing* this includes 3.5.4 *The nutritional value of menus shall be reviewed by appropriately qualified personnel such as dietitians* (124).

Websites that provide information on healthy eating for the public.

- The Health Promotion Agency launched the MyFamily platform in 2014/15 to support and assist families to make healthy food choices, supports sector with tools and resources to promote water (125). MyFamily was replaced (and all content migrated) by the Healthy Kids website (www.healthykids.org.nz) in the 2017/18 financial year.
- HPA launched Healthykids.org.nz in 2018. The website was developed following the publication of the Active Play Guidelines in 2017, which also included advice on sleep. This purpose of this website is to provide fun, free and low-cost ideas to help families eat well, move more and sleep well (126).
- Toi Te Ora has a website: (www.hapuhauora.health.nz) to provide ideas for making the healthy choice the easy choice at the marae and in the home (127).

International Best Practice Example (benchmarks):

Victoria, Australia (2016): 'Healthy choices: healthy eating policy and catering guide for workplaces' is a guideline for workplaces to support them in providing and promoting healthier foods options to their staff. The guideline is supported by the government-funded Healthy Eating Advisory Service that helps private sector settings to implement such policies. Menu assessments and cook/caterer training are available free of charge to some eligible workplaces (128).

- **Wales (2008):** Vending machines dispensing chips, confectionery and sugary drinks are prohibited in National Health Service hospitals (118).
- **Western Australia, Australia (2008):** 'Healthy options WA Food and Nutrition Policy' is applicable to all WA health system entities. The policy uses a traffic light classification system. The policy has minimum requirements for the offer and display of 'Green' items and restricts the offer and display of 'Amber' and 'Red'. Key updates to the policy implemented in 2021 include: sugar sweetened beverages cannot be sold, and 'Red' and 'Amber' products may not be displayed in prominent locations. Monitoring of compliance to the policy is undertaken by WA Health Service Providers and the Department of Health (129).
- **New South Wales, Australia (2017):** 'The Healthy Food and Drink in NSW Health Facilities for Staff and visitors Framework' applies to all food outlets where food and drink is available to visitors and staff in NSW health facilities. It is closely aligned with the 2013 Australian Dietary Guidelines, portion limits and the Health Star Rating system. Everyday foods and drinks must make up 75% or more of the total food and drink offering, occasional foods make up no more than 25% and sugar sweetened beverages are not sold. Portion limits and marketing restrictions also apply. NSW Health monitors the implementation of the framework (130).

5 Food Provision: The government ensures that there are healthy food service policies implemented in government-funded settings to ensure that food provision encourages healthy food choices, and the government actively encourages and supports private companies to implement similar policies

PROV3:

The government ensures that there are good support and training systems to help schools and other public sector organisations and their caterers meet the healthy food service policies and guidelines

Low priority recommendation from 2020: The Government increases funding for support and training of Government and children's settings to remove barriers and stimulate implementation of policies and actions to create healthy food environments at the equivalent level to the current physical activity budget.

Evidence of Implementation:

Support and training systems for schools and early childhood education (ECE) services

- There are guidelines on the Ministry of Education's website for schools to develop policies relating to the food environment in their school (131,132).
- The Ministry of Education has developed resources in consultation with the MoH to assist schools and ECE services in their focus on this area:
- **Fresh Made**
- Through Fresh Made, Heart Foundation supports food providers in education setting to improve the food they supply. Primary audiences are school tuckshops/canteens operators, boarding school caterers, early learning services, external food suppliers of online school lunch ordering system, wholesalers and distributors.
- The Fresh Made team provides the tools and knowledge to food providers to help make their food healthier. This includes menu and recipe assessment, advice on menu and recipe modification, suitable products and appropriate portion sizes for children and a website featuring menu checklists, visual make sheets, recipes, sample menus and tips.
- In 2022, Fresh Made is working with 11 companies, including country's leading tuckshop operator who operating in 250+ schools, one key external food supplier providing lunches to 40+ schools and one NZ's leading foodservice wholesaler and distributor supplying to more than half of NZ schools and early learning services.
- Fresh Made team sits in the nutrition advisory group of Ka Ora Ka Ako, government's free healthy school lunch program, to provide input to the development of the program's Nutrition Standards, to share information and feedback to make sure nutrition criteria of school lunches are consistent across different organisations and programs (Personal communication, Heart Foundation, 2023).
- **Tohu Manawa Ora/Healthy Heart Award** is an established, free programme coordinated by the Heart Foundation and partially funded by the MoH. It assists early learning services in creating an environment promoting healthy eating and physical activity to those under 5s and their families. There are three award levels that can be awarded depending on their food environment improvement (117).
 - The programme includes three award levels, reflecting a continuous, sustainable, empowering journey of growth and development from a firm foundation. The award names represent the harakeke metaphor; Rito, Whānau and Pā-Harakeke.
 - At the end of 2022, there were 1,087 early learning services engaged with the Heart Foundation, with 525 of these participating in the Tohu Manawa Ora | Healthy Heart Award.
 - A new Tohu Manawa Ora | Healthy Heart Award website has been launched to provide an easy-to-use platform for early learning services to work towards their awards and communicate with their nutrition advisor. Services can also access a suite of resources from the site to assist them on their journey (Personal Communication, Heart Foundation, 2023).
- **Food for Thought** uses an inquiry-based learning approach to help students (years 5-6) learn how to make healthy food choices.

- Food for Thought is owned by Foodstuffs and delivered by Heart Foundation to low-decile schools (decile 1-4) throughout the country.
 - It is a free nutrition education programme with nutrition resources, teaching activities and supermarket visits.
 - In 2022, the programme reached 1,600 children, from 74 classrooms in 29 schools. All of these were decile 1-4 schools.
 - Participating individuals have expressed increased knowledge and awareness of healthy food and of front of pack labelling. Families who participate significantly decreased their consumption of unhealthy foods compared to 12 months prior (Personal communication, Heart Foundation, 2023)
- **Fruit in Schools** is provided by Te Whatu Ora and began in 2005. This initiative provides participating schools a piece of fruit for each student each school day. High deprivation schools are eligible for Fruit in School and will have local providers deliver fruit to them (117,133).
 - **Garden to Table** is run by Charitable Trust since 2008. Garden to Table provides a curriculum which aims to connect the gardening, cooking and academic learning. The last evaluation of Garden to Table was conducted in 2013. Although this evaluation found no association between the participating schools and the children's consumption of fruit and vegetables, it was found to greatly increase students' knowledge about cooking and gardening and were more likely to have positive attitudes towards fruit and vegetables (117,134)
 - **KidsCan** is a food provision initiative addressing child poverty in low decile schools by providing food such as bread, baked beans, muesli bars, yoghurt and fruit (135).
 - **Kai culture workshop** is delivered by ARPHS to AUT ECE students about the importance of healthy kai in the ECE setting and how to achieve implementing a food policy in the settings. This was discontinued since 2020 (personal communication, ARPHS, 2023)
 - **Energize** delivers to local schools and communities, aiming to increase children's physical activity, improve nutrition and enhance their overall health with a focus on schools with a high Māori and Pacific roles and decile 1-5. Heart Foundation delivers Energize through funding by Te Whatu Ora | Health New Zealand Capital and Coast (Personal communication, Heart Foundation, 2023).
 - **Heart Foundation Nutrition Advisors**
The Heart Foundation offers flexible support to schools delivering nutrition and physical activity based on the schools identified need. These activities could include policy development, support with food provision, curriculum teaching and learning or professional development for teachers (Personal communication, Heart Foundation, 2023).
 - **Food Curriculum** is a partnership project with vegetables.co.nz. It supports home economics/food technology teachers to support students with the skills of cooking a meal within their budget, cultural and time constraints. Since 2017, the Heart Foundation and Vegetables.co.nz have worked with teachers to develop resources and tools that are aligned to the New Zealand Curriculum. The project is strongly supported by key education associations – HETTANZ (Home Economics & Technology Teachers Ass), NZAIMS (Assoc Intermediate and Middle Schools) and TENZ (Technology Education). Professional development workshops have been held around the country in 2022 to support this work (personal communication, Heart Foundation, 2023).
 - **Southern Canterbury District Health Board: The WAVE** (Wellbeing and Vitality in Education) team enabled ECE, schools and tertiary settings who identified nutrition as a health priority to work in areas such as policy development, promotion of water-only events and policy, ECE and school gardens, ECE and school lunch ideas and curriculum links. The WAVE magazine produced and distributed to all South Canterbury ECE, schools and tertiary providers x4/year included nutrition information amongst other health issues (136).
 - The **Healthy Active Learning initiative** is part of the Child and Youth Wellbeing Strategy, joint government initiative between Sport NZ, MOE, MOH (137). It received 47.6m in funding in the 2019 Budget provided over 4 years (2020-2024). The goal to improve wellbeing of tamariki through healthy eating, drinking and quality physical

activity with the focus on deciles 1-4 schools. It is a voluntary initiative, being delivered at no cost to education providers (137).

It consists of three components to drive better education and health outcomes:

- New Health and Physical Education and Hauora curriculum resources (Ministry of Education)
- Toolkits and a health promotion workforce to support adoption and implementation of healthy food and water-only policies (Ministry of Health)
- A physical activity workforce (Sport New Zealand) (138).

Schools and early learning settings are supported with resources, ranging from health promotion advisors, physical activity advisors, expanding health food and beverage policies and enhancing curriculum resources and guidelines (137). The physical activity arm of the programme is split into two phases; phase one (Between 2020-2022) is to have 300 targeted schools signed up and actively engaging, while phase two (Between 2022-2024) is projected to have a further 500 schools involved. The health promotion workforce, delivered by public health units across the country, develop an approach and model that best suits the needs of their region. An evaluation of this initiative is currently undertaken by Massey University and is to be completed in 2025 (personal communication, ARPHS, 2023).

Support and training systems for schools and early childhood education (ECE) services *that are no longer running:*

- **HEART START Toitoti Manawa** was a free curriculum-linked programme that helps build heart-healthy environment, which was partially funded by the MoH and offered by the Heart Foundation until 2018. It was offered to all schools across New Zealand (117,139). A review published in 2017 showed that the programme led to healthier options offered in school cafeterias, increased knowledge in students and staff and helped some schools develop their own food policy.
- **Fuelled4Life** was a voluntary Food and Beverage Classification System (FBCS) managed by the Heart Foundation with MoH and collaborates with education, health and food industry sectors. Together they aimed to make food in schools and ECE services healthier (140,141). **It was retired on 27 January 2020.** During its implementation, participants expressed a significant increase in knowledge of healthy eating.
 - 1792 schools and 2676 early learning services were signed up to Fuelled4life, which is 67.7% of schools and 56.9% of early learning services (personal communication, Heart Foundation, 2017).
- **Milk in Schools** ran from 2013 to 2020 which provided all primary school students with 200ml of low-fat UHT milk every day (142).
- **Health Promoting Schools (HPS)** was a MoH funded approach to health, where the whole school community works together to address the health and wellbeing of students, staff and their community. Schools include health and wellbeing in their planning and review processes, teaching strategies, curriculum, and assessment activities. HPS is originally developed by the World Health Organisation, New Zealand joined in 1991. **On 31st December 2019 it was decided that the Ministry of Health will stop contracting HPS and no longer exists in NZ** (personal communication, HPS, 2020).

Support and training systems for other settings

- **WorkWell** is a free workplace wellbeing initiative available in various regions throughout New Zealand. It is aimed at medium to large workplaces and those wanting to do a more comprehensive wellbeing programme. WorkWell provides advisor support, easy-to-use resources, networking opportunities and recognition through accreditation (143).
- **Good4Work** is an online workplace wellbeing tool designed for small to medium-sized workplaces and those that are just getting started with workplace wellbeing. It was developed by a partnership of Auckland Regional Public Health Services (ARPHS), Toi Te Ora Public Health Unit, Health Promotion Agency and Ministry of Health Healthy Families New Zealand. Good4Work takes you through a step-by-step process to help you complete actions to change your work environment and culture. Health Promotion is currently in the process of determining what happens with Good4Work, as it is built on an online platform that will no longer be supported from November 2023 (Drupal 7). It will need to be archived as it becomes a security risk after this time. As workplace wellbeing is no longer part of Health Promotion's current remit, options are being explored for transferring the content (personal communication, HPA, 2023).

- **Sport Northland has Active Workplace programme** which supports workplaces to create healthier environments. The focus is on activity and workplaces can choose additional key focus areas like nutrition (144).
- **Pacific Heartbeat**, a team within the Heart Foundation and supported by Te Whatu Ora, offers a variety of nutrition courses that caterers could attend. The Pacific community nutrition course is a short course that teaches participants to plan cheap and tasty meals. The Pacific workforce nutrition course is for health professionals and those that support Pacific communities to learn about the benefits of good nutrition. The AUT Certificate in Proficiency in Pacific Nutrition focuses on the relationship between the types of food consumed and the health impact. There is a new online Pasifika cooking course that was added which is for anyone wanting to improve their cooking skills starting at a basic level (145,146).

Discontinued support and training systems in other settings:

- In 2019 Health Promotion Agency introduced Healthy Kai Guidelines to support the health and wellbeing of people at work. A range of practical resources were developed to support organisations in providing healthy kai at work. At the end of 2022 the Healthy Kai Guidelines were removed from the HPA website, which now links to WorkWell, Good4Work and Ignite Aotearoa instead (personal communication, HPA, 2023).
- The **Activity & Nutrition Aotearoa (ANA)** website provided several Workplace Health guides (147), June 2021 ANA closed the website and previous resources will remain on the website until June 2024 (148).
- Wellplace.nz was a gateway for practical workplace information, ideas and resources to help implement a workplace wellbeing programme. HPA has a Wellplace.nz website with a range of healthy eating resources and links (149). The content on WellPlace was transferred over to the Emerge Aotearoa Group (a charitable trust providing a range of health and social services), and the WellPlace website was disestablished (in 2021). The content is now available on the Ignite Aotearoa website (Ignite Aotearoa - Ignite Your People's Wellbeing), and no longer associated with Health Promotion.

International Best Practice Example (benchmarks):

Victoria, Australia: The Healthy Eating Advisory Service supports settings such as childcare centres, schools, workplaces, health services, food outlets, parks and sporting centres to provide healthy foods and drinks to the public in line with Victorian Government policies and guidelines. The Healthy Eating Advisory Service is delivered by experienced nutritionists and dietitians at Nutrition Australia Victorian Division. The support includes training cooks, chefs, food service and other key staff, discovering healthier recipes, food ideas and other helpful resources to provide healthier menus and products (150).

Japan: The Basic Law on Shokuiku (*shoku*=‘diet’, *iku*=‘growth’) stipulates that at least one dietitian should be assigned at any facility with mass food service over 100 meals/sitting or over 250 meals/day. In schools, diet and nutrition teachers are responsible for supervising school lunch programs, formulating menus and ensuring hygiene standards in public elementary schools and junior high schools in accordance with the needs of local communities (151–153). Under the revised School Lunch Act 2008, the School Lunch Practice Standard stipulates proper school lunch including reference intake values of energy and each nutrient as per age groups (154). Moreover, it outlined costs of facilities and manpower (e.g. cooks) to be covered by municipalities and guardians only cover the cost of ingredients, amounting an estimate of 4000 yen/month/student for school lunch program (155).

5 Food Provision: The government ensures that there are healthy food service policies implemented in government-funded settings to ensure that food provision encourages healthy food choices, and the government actively encourages and supports private companies to implement similar policies

PROV4:

Government actively encourages and supports private companies to provide and promote healthy foods and meals in their workplaces.

no recommendation from 2020

Evidence of Implementation:

The Health Promotion guide to providing healthier beverage options for workplaces explained how to improve the range of beverages supplied in vending machines, cafeterias and at staff functions in workplaces. They are designed to help gain the support of management and staff to improve the quality of available beverages as part of workplace health, safety and wellness responsibilities (personal communication, HPA, 2023).

The Ministry of Health developed a '**Healthy Food and Drink Policy for Organisations**' for use by non-DHB, non-health sector organisations which aligns with the National Healthy Food and Drink Policy for DHBs (DHB Healthy Food and Drink Network). The Policy was updated in 2020 along with a toolkit of supporting resources to help with implementation (120).

In New Zealand, some local public health service units promote the **workplace health programmes** described in PROV3: WorkWell, Good4work and Wellplace.nz (Now called Ignite Aotearoa) (143,149,156).

The Taranaki District Health Board provides support to organisations with DHB contracts to implement the National Healthy Food & Drink Policy through the development of a toolkit, workshops, and ongoing support in policy development (when requested from the organisations) (157).

International Best Practice Example (benchmarks):

Victoria, Australia: 'Healthy choices: healthy eating policy and catering guide for workplaces' is a guideline for workplaces to support them in providing and promoting healthier foods options to their staff. The guideline is supported by the Healthy Eating Advisory Service that helps private sector settings to implement such policies. Menu assessments and cook/caterer training are available free of charge to some eligible workplaces (158).

6 Food Retail:

The government has the power to implement policies and programs to support the availability of healthy foods and limit the availability of unhealthy foods in communities (outlet density and locations) and in-store (product placement)

RETAIL 1:

Zoning laws and policies are robust enough and used, where needed, by local governments to place limits on the density or placement of quick-serve restaurants or other outlets selling mainly unhealthy foods in communities

High priority recommendations from 2020: Zoning laws: The Government enacts zoning legislation to allow and encourage local Governments to create healthy community food environments (including school healthy food zones, community gardens and reduced concentrations of unhealthy food outlets).

Evidence of Implementation:

- Permitted activities for each zone are set by the District Council through the District plans. Council does not regulate the type of commercial activity unless it is impacted by other regulations such as the Hazardous Substances legislation. Council does have the ability to regulate other activities using bylaws/policies such as the Trading in Public Places Bylaw. This is primarily to regulate temporary mobile vendors. Historically, the public health role of the Councils focused on sanitation and food safety and the control of infectious diseases by having a healthy physical environment. However, the Health Act 1956 imposes on Councils a general duty to improve, promote and protect public health. Councils' bylaw making power is covered in the Local Government Act 2002. A territorial authority may make bylaws for its district for 1 or more of the following purposes: (b) protecting, promoting, and maintaining public health and safety.
- No NZ Council has specific rules for regulating the number and location of food outlets. If a Council was to develop a policy on this, it would need to undertake a process using the Special Consultative Procedure under the Local Government Act 2002. Alternatively, there could be new 'takeaway' rules developed to be given effect through the District Plan which would require a Plan Change Process under the Resource Management Act 1991. Both involve considerable research and consultation. The real difference between the 2 processes is that the Council's decisions on Plan Changes can be appealed to the Environment Court which can drag the process out considerably. Policy decisions developed under the Local Government Act can't be appealed but the process can be challenged to a Judicial Review to see if the process followed was sufficiently robust.
- An Agencies for Nutrition Action (ANA) Evidence Snapshot 'Promoting Healthy Eating at the Local Government Level' was published in March 2016 (159).

International Best Practice Example (benchmarks):

- **Northern Territory, Australia (2012):** The NT Community Store Licensing Scheme sets minimum standards for how licensed stores must operate including requirements to stock fresh and healthy food and to take reasonable steps to promote healthy choices. It also sets requirements regarding store retail and management practices. Licensing applies to stores that are determined to be an important source of food, drink or grocery items for an Aboriginal community and that are in a Food Security Area of the Northern Territory (160).
- **Canada (2011):** A subsidy programme helps provide populations in isolated communities with improved access to perishable, nutritious food. The retail-based subsidy enables local retailers and registered suppliers to access and lower the cost of perishable healthy foods like meat, fish, eggs, milk, bread, fruits and vegetables, all of which must be transported by air to these isolated communities. Eligibility is based on isolation factors and focuses on communities that lack year-round surface access (161).
- **South Korea (2010):** Special Act on Children's Dietary Life Safety Management, including the creation of 'Green Food Zones' around schools, banning the sale of foods deemed unhealthy by the Food and Drug Administration of Korea within 200 metres of schools (162)

UK: Around 15 local authorities have developed "supplementary planning documents" on the development of hot food takeaways. The policies typically exclude hot food takeaways from a 400m zone around the target location (e.g. primary

schools), but one city adopted a restriction on hot food takeaways to no more than 10% of units in any shopping area, districts and neighbourhood centres (163).

6 Food Retail: The government has the power to implement policies and programs to support the availability of healthy foods and limit the availability of unhealthy foods in communities (outlet density and locations) and in-store (product placement)

RETAIL 2:

Zoning laws and policies are robust enough and are being used, where needed, by local governments to encourage the availability of outlets selling fresh fruit and vegetables.

High priority recommendations from 2020: Zoning laws: The Government enacts zoning legislation to allow and encourage local Governments to create healthy community food environments (including school healthy food zones, community gardens and reduced concentrations of unhealthy food outlets).

Evidence of Implementation:

- There are no zoning laws in existence to encourage the availability of outlets selling fresh fruit and vegetables in NZ.

International Best Practice Example (benchmarks):

- **Singapore (2011):** 'Healthier Hawker' program involves the government working in partnership with the Hawker's Association to support food vendors to offer healthier options such as reduced saturated fat cooking oil and wholegrain noodles and rice, reduced salt soy sauce and increased vegetable content (164).
- **USA (1974):** The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) requires WIC authorised stores to stock certain health products (e.g. wholegrain bread) (165).
- **South Australia, Australia (2017):** The Healthy Kids Menu initiative encourages venues who sign up to offer healthier options for children. Recommendations were developed that provide support to industry (restaurants, cafés, hotels and clubs) to increase the promotion and availability of healthy foods and provides a Voluntary Code of Practice' for adoption by industry, which details the optimum standard for restaurants, cafes, hotels, and clubs in providing healthy menu options for children (166).
- **USA (2014):** The Healthy Food Financing Initiative (following a pilot) provides grants to states to provide financial and/or other types of assistance to attract healthier retail outlets to underserved areas (167).
- **New York City, USA (2008):** The 'Green Cart Permit' was developed with reduced restrictions on zoning requirements to increase the availability of fresh fruits and vegetables in designated, underserved neighbourhoods (168).

6 Food Retail: The government has the power to implement policies and programs to support the availability of healthy foods and limit the availability of unhealthy foods in communities (outlet density and locations) and in-store (product placement)

RETAIL 3:

The Government ensures existing support systems are in place to encourage food stores to promote the in-store availability of healthy foods and to limit the in-store availability of unhealthy foods

Low priority recommendations from 2020: The Government supports the food industry to develop SMART (Specific, Measurable, Achievable, Relevant, Time Bound) strategies and evaluate the Food Industry Taskforce commitments.

Evidence of Implementation:

Agency for Nutrition Action (ANA) Evidence snapshot case studies March 2016 (159): Establishing a food policy council, Toi Te Ora, Nelson CC sugar-sweetened beverage policy. Some public health units support sport and recreation centres to reduce the availability of unhealthy food and beverages as described in PROV2.

International Best Practice Example (benchmarks):

- **Northern Territory, Australia (2012):** The NT Community Store Licensing Scheme sets minimum standards for how licensed stores must operate including requirements to stock fresh and healthy food and to take reasonable steps to promote healthy choices. It also sets requirements regarding store retail and management practices. Licensing applies to stores that are determined to be an important source of food, drink or grocery items for an Aboriginal community and that are in a Food Security Area of the Northern Territory (160).
- **Canada (2011):** A subsidy programme helps provide populations in isolated communities with improved access to perishable, nutritious food. The retail-based subsidy enables local retailers and registered suppliers to access and lower the cost of perishable healthy foods like meat, fish, eggs, milk, bread, fruits and vegetables, all of which must be transported by air to these isolated communities. Eligibility is based on isolation factors and focuses on communities that lack year-round surface access (161).
- **UK (2020):** Legislation was introduced (applicable to in-store and online retailers selling food and drink) to restrict the promotion of pre-packed products that are high in fat, sugar and salt, for a specified list of food product categories, by location and volume price. Legislation is intended to be implemented by 2022 and will apply to medium and large retailers (50 or more employees) (169).

6 Food Retail: The government has the power to implement policies and programs to support the availability of healthy foods and limit the availability of unhealthy foods in communities (outlet density and locations) and in-store (product placement)

RETAIL 4:

The government ensures existing support systems are in place to encourage food service outlets to increase the promotion and availability of healthy foods and to decrease the promotion and availability of unhealthy foods

No recommended action

Evidence of Implementation:

- The Heart Foundation Hospitality initiatives were supported through funding by the Ministry of Health and provided information for food preparers: creating healthy recipes, writing a healthy menu (170). This initiative is now reoriented to focus on food and nutrition Heart Foundation services introduced.

- The Government response to the Food Industry Taskforce Report from 2018 on addressing factors contributing to obesity noted that the Government wishes to progress focused action in creating healthier retail environments, (e.g. limiting product placement and price promotions of energy-dense, nutrient-poor food and beverages in supermarkets) (6). There has been no further government support for this recommendation.

International Best Practice Example (benchmarks):

- **Singapore (2011):** ‘Healthier Hawker’ program involves the government working in partnership with the Hawker’s Association to support food vendors to offer healthier options such as reduced saturated fat cooking oil and wholegrain noodles and rice, reduced salt soy sauce and increased vegetable content (164).
- **USA (1974):** The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) requires WIC authorised stores to stock certain health products (e.g. wholegrain bread) (165).
- **South Australia, Australia (2017):** The Healthy Kids Menu initiative encourages venues who sign up to offer healthier options for children. Recommendations were developed that provide support to industry (restaurants, cafés, hotels and clubs) to increase the promotion and availability of healthy foods and provides a Voluntary Code of Practice’ for adoption by industry, which details the optimum standard for restaurants, cafes, hotels, and clubs in providing healthy menu options for children (166).

7 Food Trade and Investment:

The government ensures that trade and investment agreements protect food sovereignty, favour healthy food environments, are linked with domestic health and agricultural policies in ways that are consistent with health objectives, and do not promote unhealthy food environments.

TRADE 1:

The direct and indirect impacts of international trade and investment agreements on food environments and population nutrition and health are assessed and considered.

Low priority recommendations from 2020: The Government includes formal and explicit population nutrition and health risk assessments as part of their national interest analysis on trade and investment agreements, including honouring the rights of Māori to the protection of health under the Treaty of Waitangi.

Evidence of Implementation:

- A list of all New Zealand’s trade agreements (both in force and under negotiation) can be found online (171). Trade agreements between two or more countries can be known as either a Free Trade Agreement (FTA), Closer Economic Partnership (CEP), or Strategic Economic Partnership (SEP). International trade accounts for around two-thirds of New Zealand’s total economic activity. The site includes useful information on each of the agreements, including a form of the agreement, countries involved and time since entry into force. Trade agreements often cover Trade in Goods (Market Access, Rules of Origin, Customs Procedures, Chapters on institutional and legal matters, Trade Remedies, Sanitary and Phytosanitary Measures, Technical Barriers to Trade), Trade in Services (Market Access, Movement of Natural Persons), Investment, Intellectual Property, Government Procurement, Competition and Consumer Policy, Cooperation, [Trade and Labour](#) and [Trade and Environment](#). On the site, the full text of each concluded agreement can be found, as well as the National Interest Analysis for each agreement (171).

Both the strategic intentions 2021-2022 (172) and the annual report (173) of the Ministry of Trade and Foreign Affairs do not include any assessment of the impact of trade agreements on food environments, population nutrition or national nutrition and health policies. For the trade agreements in force, a search for the keywords ‘nutrition’, and ‘food’ in the text of the agreement as well as any national interest analysis for the agreement did not deliver any relevant results. We found no evidence available from public sources from the Ministry of Foreign Affairs and Trade or MoH or MPI, the Ministry of Business, Innovation and Employment (MBIE), treasury or other relevant government agencies that potential impacts on

nutrition and health are assessed in the negotiation of agreements (other than relying on the standard WTO clauses which have a very high bar for evidence of negative impacts on health).

Information on stated purposes of legislative proposals relating to food was sought from examining the Food Bill, introduced in 2010. This states among other things that the purpose of the act is to achieve the safety and suitability of food for sale and provide for risk-based measures that minimise and manage risks to public health; and protect and promote public health's (clause 4). While a reference to protecting and promoting public health is positive, there is little in the act that would implement this aspect of the Act's purpose in a broad way going beyond traditional food safety concerns. For instance, the Bill states the primary duty of persons who trade in food is to 'ensure that it is safe and suitable'. Concepts of safe and suitable are defined in the Bill but in rather limited ways. There was a report on submissions to the Food Bill in May 2014 (174).

International Best Practice Example (benchmarks):

US/EU: It is mandatory in the US and countries of the EU to undertake Environmental Impact Assessments for all new trade agreements. These assessments sometimes incorporate Health Impact Assessment (175).

7 Food Trade and Investment: The government ensures that trade and investment agreements protect food sovereignty, favour healthy food environments, are linked with domestic health and agricultural policies in ways that are consistent with health objectives, and do not promote unhealthy food environments.

TRADE 2:

The government adopts measures to manage investment and protect their regulatory capacity with respect to public health nutrition.

Low priority recommendations from 2020: The Government ensures that specific and explicit provisions are included in trade and investment agreements, allowing the New Zealand government to preserve its regulatory capacity to protect and promote public health.

Evidence of Implementation:

International investment agreements have the potential to restrict a country's regulatory capacity with respect to public health nutrition. A range of proactive measures has been proposed to manage investment and protect public health nutrition regulatory capacity. For NZ it is uncertain whether trade negotiations include evaluation on whether granting incentives that lower production costs may jeopardize public health by making unhealthy products more affordable, no assurance that investment contracts do not tie the hands of regulators in ways likely to undermine health. Also, there is no clarification that a foreign investor cannot legitimately expect the host country not to issue nutrition measures and the terms, general exceptions, and the meaning of indirect expropriation and of fair and equitable treatment.

International Best Practice Example (benchmarks):

- **Many Countries:** Sanitary and phytosanitary (SPS) clauses in World Trade Organization (WTO) agreements. However, this usually does not apply to public health nutrition.
- **Ghana:** Ghana has set standards to limit the level of fats in beef, pork, mutton and poultry in response to rising imports of low-quality meat following liberalization of trade. The relevant standards establish maximum percentage fat content for de-boned carcasses/cuts for beef (<25%), pork (<25%) and mutton (<25% or <30% where back fat is not removed), and maximum percentage fat content for dressed poultry and/or poultry parts (<15%) (176).

8 Leadership:

The political leadership ensures that there is strong support for the vision, planning, communication, implementation and evaluation of policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities.

LEAD 1:

There is Strong, visible, political support for improving food environments, population, nutrition, diet-related NCDs and their related inequalities.

High priority recommendations from 2020: National Food Strategy: The Government develops a long-term, multi-sectoral National Food Systems and Nutrition Strategy with clear outcomes and indicators to improve sustainability, food sovereignty, health, and equity and to honour the rights of Māori to the protection of health under the Treaty of Waitangi.

Evidence of Implementation:

- The New Zealand government adopted the voluntary global NCD action plan from the World Health Organization (177), including 9 targets and 25 indicators for reducing premature mortality due to non-communicable diseases by 25% by 2025 (personal communication, Ministry of Health, 2017).

Strategic Plans, Ministry of Health

- The **Strategic Intentions of the Ministry of Health** are available online and provided on a yearly basis.
 - 2017 – 2021 Strategic Intentions the only item mentioned is under the third strategic priority ‘Improve outcomes for New Zealanders with long-term conditions, with a focus on obesity and diabetes’ however there is no mention of nutrition throughout the publication (178)
 - No mention of nutrition or obesity in the Strategic Intentions of the Ministry of Health 2021-2025. Mention of obesity and diabetes in previous strategic intentions, removed from this update with the shift of focus onto COVID-19 (179).
- **Health targets** are now called **health system indicators** and similarly to previous years, no mention of nutrition or nutrition related conditions (180)
- **The Health and Independence Report** (the Director-General of Health’s Annual Report on the State of Public Health) provides an overview of the current state of public health in three main sections: health status, factors that influence New Zealanders’ health and health system performance.
 - The 2017 Health and Independence Report (181) recognised that work such as green prescriptions, health-promoting schools and active families greatly supports nutrition and reduces obesity. The association of poor nutrition with negative mental health conditions was identified.
 - The 2020 Health and Independence Report highlights that obesity rates from the NZ 2019/2020 survey have remained unchanged since 2012/2013 in both youths (2-14 years) and adults at 9.4% and 30.9% respectively. Prevalence of obesity is highest in both Pacific and Māori compared to other ethnic groups. The report highlights the impact the COVID-19 pandemic had on diet, through a COVID-19 Kai Survey between 24 April to 13 May 2020, consisting of 3028 people during the first change of alert levels. It found that the pandemic created new challenges in the physical access to, and affordability of, healthy food in New Zealand. Supermarkets and food banks struggled to meet increased demand, with many running out of necessary food supplies. Unlike previous reports, there has been no mention on current initiatives to improve nutrition or reduce obesity (182).
- **New Zealand Health Strategy** was last released in 2016 and consists of two parts. Future direction and Roadmap of actions. The future direction outlines high level direction for over ten years (until 2026) and the roadmap of actions identifies 27 areas of actions to take over 5 years (183)
 - One of the actions in the **NZ Health Strategy Roadmap 2016-2021** (184) under ‘Tackle long-term conditions and obesity’ is related to prevention ‘Implement and monitor a package of initiatives to prevent and manage obesity in children and young people up to 18 years of age’ ^[11] _{SEP} Another related

action under 'A great start for children, families and whanau' is 'Promote healthy nutrition and activity for pregnant women and children to reduce the prevalence of childhood and adult obesity'.

- The NZ Health Strategy 2016 (185) has five-year signposts including '8h Obesity reduction initiative'.
 - As part of the 2022 health system reforms Ministry of Health will be developing a new New Zealand Health Strategy. It aims to shift the focus from outcomes to enablers of wellbeing (186).
 - A total of 6 strategies will be released. An overarching health strategy, Hauora Māori Strategy, Pacific Health Strategy, Health of Disabled people strategy, Women's Health Strategy, Rural Health Strategy. These strategies are planned to be released mid 2023 (187).
- **The NZ Healthy Ageing Strategy 2016** (188) has two priorities that focus on prevention and NCDs. Under the priority 'Ageing well': 'Older people are physically, mentally, and socially active, have healthy lifestyles and greater resilience with good nutrition provided as an example of healthy behaviours. One of the actions is to encourage services and providers to promote healthy eating, physical activity and healthy lifestyles which is to be implemented in the first two years of the strategy.
 - Lead partners listed included DHBs, health organisations, NGOs, and the Nutrition Foundation. Under the priority 'Living well with long-term conditions' (diabetes, obesity, CVD etc.) there is a need to provide information on the importance of healthy lifestyles. After reviewing the progress of the 2016 Healthy Ageing strategy in 2018, new priority actions were determined for 2019-2022 with only one possibly relevant to nutrition; 'Maintain and enhance older people's capacity through supportive environments, health promotion and disease minimisation and prevention' (189).
 - The NZ Healthy Ageing Strategy 2019-2022 remains unchanged from 2016-2018. It has only one action relevant to nutrition; 'Maintain and enhance older people's capacity through supportive environments, health promotion and disease minimisation and prevention' (189)
 - **The Ola Manuia: Pacific Health and Wellbeing Action Plan 2020–2025** has an aim in reducing type 2 diabetes for Pacific children and adults. This is through supporting various initiatives like the Healthy Active Learning that addresses this issue. The only outcome it measures is during the B4SC visits of Pacific children. No other statement of intent provided (190).

Strategic Plans, Health Promotion Agency

- Te Hīringa Hauora | Health Promotion Agency is now the Health Promotion Directorate of the National Public Health Service in Te Whatu Ora – Health New Zealand. The National Public Health Service is a shared service for Te Whatu Ora - Health New Zealand and Te Aka Whai Ora - Māori Health Authority. It works towards pae ora (healthy futures) by engaging with the wider determinants that impact on people's health, focusing on oranga/wellbeing, prevention, protection, and population-level intervention (personal communication, HPA, 2023).
 - **In the Statement of Intent for 2017-2021** 'nutrition and physical activity' is considered as one of the seven core areas of focus (191,192) with outcomes for 2021 to motivate and support communities to eat well, move more, and sit less as well as support the nutrition and physical activity sector with quality advice, evidence, and resources to support New Zealanders to eat healthy foods and be active.
 - In the HPA **Statement of Performance Expectations 2018/19** nutrition and physical activity is a major work domain for the HPA. Activities include: HPA supports Sit Less, Move More, Sleep Well guidelines and the Sport New Zealand Play principles launched in 2017 as guiders for nutrition and activity. Also, using the Healthy Kids website and Facebook page (193), HPA encourages healthy meal preparation and activity especially targeted at low income, Māori, and Pacific families. HPA promotes the MoH 2018 updated Eating and Activity Guidelines to the public and health professionals. Performance indicators are related to supporting the dissemination of guidelines and aligning with government priorities including prevention of childhood obesity and Healthy Families NZ.
 - The **Statement of Performance Expectations 2021/22** does not cover nutrition (194)

Media releases

- Media releases and news items from the MoH were investigated between 2017 to 2019 (195). Of the many media releases from the MoH during this time there was a total of 10 relevant media releases to nutrition, healthy eating, and non-communicable diseases. The common topics were the health survey and its results regarding obesity and food insecurity and the childhood obesity plan. Also discussed were the National food and drink policy and healthy food and drink guidance, the Food Industry Taskforce Report and Healthy Families. This was through a search of keywords including 'food' and 'obesity' and all releases dated 2017-2019.

- Between 2020 to 2022 there was 9 media releases from MoH related to nutrition, healthy eating and non-communicable diseases. Only one covers obesity (covering the results of the National Health Survey) and 8 articles on bowel cancer (195).
- On the government website www.beehive.govt.nz, a search for the media releases using keywords 'nutrition', 'obesity' and 'food' was conducted to find relevant articles:
 - Between 2020 and 2022**
 - Keyword 'nutrition' had 23 items with 8 relevant. These were related to nutrition related initiatives and programmes such as Healthy Active Learning, healthy drinks in schools and schools lunches
 - Keyword 'obesity' had 10 items with 1 relevant, related to healthy drinks in primary school.
 - Keyword 'food' had the same items as using the keyword 'nutrition'.
 - In total, based on these keywords there was only 8 relevant articles.

New Zealand has had three Health Ministers since 2020. Chris Hipkins (2 July 2020 to 6 November 2020), Andrew Little (6 November 2020 to 1 February 2023) and Ayesha Verrall (1 February 2023). On the website for speeches, releases, features and newsletters searched for the Labour-led Government time between 2020-2023 there was 17 items for 'obesity' 'food' and 'nutrition' with 4 relevant: improving child and infant well-being and commitment for reducing carbon footprint and food grants (196).

International Best Practice Example (benchmarks):

New York City, USA (2002-2014): As Mayor of New York City, Michael Bloomberg prioritized food policy and introduced a number of ground-breaking policy initiatives including 'Health Bucks', a restriction on trans fats, establishment of an obesity taskforce, a portion size restriction on sugar-sweetened beverages, public awareness campaigns, etc. He showed strong and consistent leadership and a commitment to innovative approaches and cross-sectoral collaboration (197).

Brazil (2014): The Minister of Health showed leadership in developing new dietary guidelines that are drastically different from the majority of dietary guidelines created by any nation to date and align with some of the most commonly cited recommendations for healthy eating (198).

Caribbean Countries: Active NCD commissions exist in six of the 20 CARICOM member states (Bahamas, Barbados, Bermuda, British Virgin Islands, Dominica, Grenada) which are all housed in their Ministries of Health, with members recommended by the Minister of Health and appointed by the Cabinet of Government for a fixed duration; all include government agencies and to a varying degree, civil society and the private sector.

8 Leadership: The political leadership ensures that there is strong support for the vision, planning, communication, implementation and evaluation of policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities.

LEAD 2:

Clear population intake targets have been established by the government for the nutrients of concern to meet WHO and national recommended dietary intake levels.

High priority recommendations from 2020: National Food Strategy: The Government develops a long-term, multi-sectoral National Food Systems and Nutrition Strategy with clear outcomes and indicators to improve sustainability, food sovereignty, health, and equity and to honour the rights of Māori to the protection of health under the Treaty of Waitangi.

Evidence of Implementation:

- There are no intake targets specified by the Ministry of Health (MoH) or the Ministry for Primary Industries (MPI) for the nutrients of concern.
- New Zealand adopted the voluntary non-communicable diseases (NCD) action plan and global monitoring framework of the World Health Organisation in May 2013, including a target to reduce population salt intake to 5 g of salt per person per day. The Ministry of Health is progressing actions supporting the NCD resolution. The Ministry has been

reporting to the WHO in 2016. The Ministry continues to work with key stakeholders and partners and support effective strategies and actions to address the burden of NCDs in New Zealand (personal communication, MoH, 2017).

- The Nutrient Reference Values (NRVs) are a set of recommendations for nutritional intake based on currently available scientific knowledge (199). Acceptable daily macronutrients ranges are given with an upper limit of 10% of energy from saturated and *trans*-fat, and upper level of intake for added sugars and an upper limit of sodium of 2000mg per day for those aged 9 years and over, 1000mg 1-3-year-olds, 1400 4-8 years. Reviews of nutrients take a phased approach by the Australian Department of Health and NZ Ministry of Health overseen by a steering and advisory group. A scoping study was conducted in 2011 and a methodological framework developed with public consultation undertaken in 2015. The review of fluoride for infants and young children is complete and was published in 2017. The review of the sodium upper limit and suggested dietary target for adults was published in September 2017 (200). A proposal for a review and update of the regulatory nutrient reference values in the Australia New Zealand Food Standards Code in light of the 2006 and 2017 Australia/New Zealand nutrient reference values was prepared in 2018 however progress on this has been delayed due to other priorities (38).

International Best Practice Example (benchmarks):

Brazil: The "Strategic Action Plan for Confronting NCDs" in Brazil, 2011-2022 specifies a target of increasing adequate consumption of fruits and vegetables, from 18.2% to 24.3 % between 2010 and 2022 and reduction of the average salt intake of 12g to 5g, between 2010 and 2022 (201).

Norway (2017): 'The National Action Plan for a Healthier Diet (2017-2021)' contains quantitative intake targets for nutrient of concern and specific food groups in the population. By 2021, the plan sets out a reduction of the following nutrients: Added sugar from 13 to 11%; saturated fat from 14 to 12%; and a 22% reduction in salt intake from 10g/day. There are specific targets to halve the proportion of youth that consumes sugar-sweetened beverages or sweets more than 5 times per week; to double the proportion of youth that eats fruit and vegetables daily; and to increase by 20% the proportion of youth that eats fish at least once a week. There are also targets to increase the intake of fruit, vegetables, whole grain products and fish by 20% in the general population (202).

8 Leadership: The political leadership ensures that there is strong support for the vision, planning, communication, implementation and evaluation of policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities.

LEAD 3:

Clear, interpretive, evidence-informed food-based dietary guidelines have been established and implemented

High priority recommendations from 2020: Healthy Sustainable Dietary Guidelines: The Government actively implements and increases funding to promote Eating and Activity Guidelines which incorporate the social, environmental and cultural dimensions of eating.

Evidence of Implementation:

- The contracts with the Ministry of Health include a clause that all messages must be in line with the food and nutrition guidelines of the MoH current (personal communication, MoH, 2020).

(163) Through the healthy kids website (healthykids.org.nz), *Quick Bites* newsletter and Facebook page, HPA encourages families to prepare healthier meals, be active together and sleep well. Food ideas and suggested activities are designed to provide solutions for low-income, Māori and Pacific families with young children. Through the Nutrition and Activity Hub (www.nutritionandactivity.govt.nz) HPA provides health promoters and others working in the nutrition and physical activity sector with resources, tools and information to support their work. A number of HPA resources are also available on www.healthed.govt.nz, such as how much sugar do you drink posters and behind the hype fact sheets (193).

Eating and Activity Guidelines for adults

Eating and Activity Guidelines for adults provides comprehensive advice on nutrition, physical activity and obesity prevention. There is a central guidelines document with eating and activity advice for all population groups accompanied by issues-based papers with in-depth information links to evidence and health education resources for the public.

The publication recommends:

- decreasing sodium intake but does not have a target level.
- decreasing free sugar intake but there is no target for free sugars

The WHO recommendation of <10% of total energy from free sugars and preferably <5% is in the section on choosing foods with little or no added sugar. The recommended intake for saturated fat and *trans* fats combined is <10% energy (203).

These guidelines were updated in December 2020 replacing the 2015 version (203), incorporating up- to-date guidelines for pregnant and breastfeeding women replacing the Food and Nutrition Guidelines for Healthy Pregnant and Breastfeeding Women: A background paper from 2006 (revised in 2008) (204). Physical activity guidelines were newly included with this update, based on the *2019 Canadian guideline for physical activity throughout pregnancy* (205). The general guidelines remained the same as the 2015 version aside from the adoption of the Australian serving size advice for adults and the 'what New Zealand adults are doing' section where the section was updated using more recent data, primarily from the 2018/19 New Zealand Health Survey (206). There is also a separate document available on the MoH website giving advice on these serving sizes. Guidelines now acknowledge the wide range of determinants that influence ones choice of food and activity. Guidelines also now refer to Pae ora (206).

Healthy Eating Guidelines for New Zealand Babies and Toddlers (0-2 years old)

Healthy Eating Guidelines for New Zealand Babies and Toddlers were updated and published on 30th September 2021, replacing Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0-2): A background paper from 2008. These guidelines are designed for health practitioners and others who provide advice on New Zealand babies and toddlers (207).

International Best Practice Example (benchmarks):

Brazil: The national dietary guidelines of Brazil address healthy eating from a cultural, ethical and environmental perspective, rather than based on number of servings per food group. The main recommendations are: 'Make natural or minimally processed foods the basis of your diet'; 'use oils, fats, salt, and sugar in small amounts for seasoning and cooking foods'; 'use processed foods in small amounts'; 'avoid ultra-processed foods'. They also provide advice on planning, shopping, and sharing meals, as well as warning people to be wary of food marketing and advertising (208) (209).

8 Leadership: The political leadership ensures that there is strong support for the vision, planning, communication, implementation and evaluation of policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities.

LEAD 4:

There is a comprehensive, transparent, up-to-date implementation plan (including priority policy and program strategies, social marketing for public awareness and threat of legislation for voluntary approaches) linked to national needs and priorities, to improve food environments, reduce the intake of the nutrients of concern to meet WHO and national recommended dietary intake levels, and reduce diet-related NCDs

High priority recommendations from 2020: Nutrition in National Strategies: The Government ensures that the implementation plans for existing relevant Government actions such as the Child and Youth Wellbeing Strategy address the national needs and priorities to improve food environments, beyond Healthy Active Learning.

Evidence of Implementation:

- The Childhood Obesity Plan was introduced in October 2015 (210) by the Ministry of Health. The Childhood Obesity Plan is a package of initiatives to prevent and manage obesity in children and young people up to 18 years. There were three focus areas with 22 initiatives: 1. Targeted interventions for those who are obese. 2. Increased support for those at risk of becoming obese. 3. Broad approaches to make healthier choices easier for all New Zealanders. Childhood Obesity Plan is no longer active, however many of the individual actions that were in the plan have been completed and or embedded in business-as-usual activities (personal communication, MoH, 2023)
- A Cabinet Strategy Committee did not support this approach (15 June 2015) A new health target was implemented from 1 July 2016 'By December 2017, 95% of obese children identified in the Before School Check (B4SC) programme will be offered a referral to a health professional for clinical assessment and family-based nutrition, activity and lifestyle interventions.' By quarter one 2019/20 17 out of 22 DHBs had met the target (211). The target was selected as the B4SC focuses on early intervention to ensure positive, sustained effects on health. The coverage of services such as Active Families needed to be expanded and the age of eligibility lowered from five to four years at an indicative cost of \$3.8 M per annum to be reprioritised from funding identified in the obesity stocktake.
- A reducing childhood obesity intervention logic model aligns with the direction of the Childhood Obesity Plan and recommendations of the World Health Organization Commission on Ending Childhood Obesity. The model sets out several shared goals, outcomes and indicators for the New Zealand Childhood Obesity Programme (212). However, there have been no regular progress reports on the outcomes of the plan.
- Many nutrition-related projects and areas of work are carried out within MPI to support the development of fit for purpose food regulations. These include monitoring and implementation of the New Zealand and Australian front of pack labelling (the Health Star Rating system), monitoring folic acid fortification and the New Zealand Total Diet Study (which has included measurement of fluoride, iodine, selenium and sodium) and significant input into global food regulations that are related to nutrition especially the Codex Committee on Nutrition of Foods for Special Dietary Uses and the Codex Committee for Food Labelling (213). :
- The mandate for fortification of non-organic wheat flour used for bread making with folic acid was announced July 2021 by MPI. There is a 2-year transition period for existing flour millers to make the necessary changes, ending 14 August 2023. Non-organic wheat flour that is sold as suitable for making bread must contain no less than 2mg/kg and no more than 3mg/kg of folic acid (214).
- New Zealand and Australia have a joint regulatory system for food standards related to labelling and composition. In the joint system, policy work is underway on a number of areas, including policy options for elimination of industrially produced trans fats (Personal communication, MPI, 2023).

Te Pae Tata Interim New Zealand Health Plan 2022 was issued on the 28th of October 2022. This plan is intended to cover and begin this transitional period as New Zealand moves from to the new health system, replacing 20 different district

annual plans. This plan has a particular focus on equitable health outcomes, embeds Te Tiriti, uses population health approaches, equity of outcomes and access while being a sustainable system (215).

- Section 2.1: *Implement healthy public policies locally and regionally, to reduce harm from alcohol and other drugs, tobacco, unhealthy foods, and obesogenic environments for all communities, with a focus on those with high proportions/ numbers of Māori, Pacific and other groups with inequitable outcomes.*
- *Commission approaches to support greater health and wellbeing making the healthy choices the easy choice for people at risk of chronic conditions and for families raising small children.*
- Pae Ora better health in communities - Addresses the role environment plays in health. One of these environments being commercial environment and promotion of unhealthy foods. The five strategies from WHO Ottawa Charter for health promotion will be implemented to approach these environmental factors.
Actions towards this includes:
 - implement healthy public policy locally and regionally to reduce harm from obesogenic environments for all communities, with a focus on communities with higher proportions of Māori, Pacific and other groups with inequitable outcomes.
 - commission approaches to support greater health and wellbeing making healthy choices the easier choice for people at risk of chronic conditions and for families raising small children (215)
- Section 4.1: *Implement evidence-based policy interventions to address health priorities for Māori, including tobacco control, alcohol, obesity and diet.*
- Māori health improvement
This section recognises that one of the enablers for health gain in Māori is implementing evidence-based policy interventions to address health priorities for Māori including obesity and diet. However, no plans for actions were stated in this section.
- No other sections of this plan address food environments, population nutrition or diet (215)

International Best Practice Example (benchmarks):

- **The Netherlands (2018):** *'The National Prevention Agreement'* aims to reduce smoking, overweight, and problematic alcohol consumption. The agreement includes voluntary ambitions, objectives, and actions on these three subjects for the period (2018-2040). The agreement formulates that the inhabitants of the Netherlands need a healthy social, economic, and physical environment that supports healthy living. This extends to schools, care facilities, restaurants, cafes, caterers, and supermarkets (216).
- **Ireland (2016):** *'A Healthy Weight for Ireland, the Obesity Policy and Action Plan 2016-2025'* (OPAP) prescribes 'Ten Steps Forward' that should be taken to reverse obesity trends, prevent health complications and reduce the overall burden for individuals, families, the health system, and the wider society and economy (217).

8 Leadership: The political leadership ensures that there is strong support for the vision, planning, communication, implementation and evaluation of policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities.

LEAD 5:

Government priorities have been established to reduce inequalities in relation to diet, nutrition, obesity and NCDs

High priority recommendations from 2020: National Food Strategy: The Government develops a long-term, multi-sectoral National Food Systems and Nutrition Strategy with clear outcomes and indicators to improve sustainability, food sovereignty, health, and equity and to honour the rights of Māori to the protection of health under the Treaty of Waitangi.

Evidence of Implementation:

- **The New Zealand Public Health and Disability Act 2000**, which the statement of intent refers to (218) sets the strategic direction and goals for health and disability services in New Zealand, including improving the health of Māori and other specific population groups.
- Relevant items in the **Ministry of Health Statement of Intent 2017-21** (178) are that the Government's cross-sector priorities in the health and social sector include supporting vulnerable mothers, children, and babies, and under health system outcomes, improving outcomes for groups such as Māori, Pacific, older people and children.
- **Strategic Intentions 2021 to 2025** by Ministry of Health has three focus areas, one of which is health equity for Māori and other groups to achieve pae ora. There is no direct mention of nutrition or nutrition related health topics (179).
- **Te Pae Tata Interim New Zealand Health Plan 2022** was issued on the 28th of October 2022 by Te Whatu Ora. This plan is intended to cover and begin this transitional period as we move from New Zealand's old health system to the new health system, replacing 20 different district annual plans. This plan has a particular focus on equitable health outcomes, embeds Te Tiriti, uses population health approaches, equity of outcomes and access while being a sustainable system (215).
 - Section 2.1: Pae Ora better health in communities
One of the actions stated is to implement healthy public policy locally and regionally to reduce harm from obesogenic environments for all communities, with a focus on communities with higher proportions of Māori, Pacific and other groups with inequitable outcomes.
 - Section 4.1: Māori health improvement
This section recognises that one of the enablers for health gain in Māori is implementing evidence-based policy interventions to address health priorities for Māori including obesity and diet. It further emphasises the need for improvement for early detection of lung cancer and cancer treatment in Māori population (215)
- Although Section 4.2 covers Pacific health there is no mention of diet or nutrition. However, it does address NCDs under high priority areas. This includes a whānau focused diabetes integrated care model, screening for early detection for diabetes and detection for diabetes related complications, reducing cancer health inequities in Pacific people (215)
- **He Korowai Oranga** (219) is NZ's Māori Health Strategy that sets the overarching framework that guides the Government and the health and disability sector to achieve the best health outcomes for Maori. Pae Ora (Healthy Futures) is the Government's vision and aim for the refreshed strategy. It builds on the initial foundation of Whānau Ora to include Mauri Ora (healthy individuals) and Wai Ora (healthy environments). It is a living web-based strategy. It supports the MoH and DHBs to improve Māori health by addressing the: NZ Health Strategy, NZ Disability Strategy and the NZ Public Health and Disability Act 2000. Wai ora includes access to healthy food. Pathway 3 includes focusing on reducing risk and strengthening prevention.
- **Whakamaua: Māori Health Action Plan 2020–2025** was released in July 2020 by Ministry of Health and is based off He Korowai Oranga. This plan mainly focuses on actions towards making the health and disability systems more equitable (220). It is acknowledged that one of the aims of He Korowai Oranga is Wai ora which identifies the environment as an important factor for Māori to connect to whenua. It goes further to state that environments must be compatible with good health, including healthy food (221).
 - Nutrition is not directly addressed however under priority area 4 one of the actions are to implement an action plan to prevent and manage long term conditions such as diabetes (220).
- Te Aka Whai Ora administers and monitors the **Māori Provider Development Scheme** to develop more accessible and effective Māori health and disability service providers, and the **Māori Health Innovation Fund (Te Ao Auahatanga Hauora Māori)** to support innovation in health services for Māori (222) A key priority for the current funding round is improving the health and wellbeing of whānau and children.
- **DHBs were the primary funders of Māori health providers.** Under legislation the NZ Public Health Act 2000, DHBs have a responsibility to support Māori involvement in service delivery. Each DHB has a Māori Health plan (223). DHBs are required to improve the health of Māori and reduce health disparities for Māori compared to other population groups in NZ. DHB Māori health plans are fundamental planning, reporting, and monitoring documents. DHB Māori health profiles present a snapshot of Māori health compared with non-Māori across a range of health and disability-related indicators (224).
- The MoH continues to report the **estimates derived from health surveys and nutrition surveys** by four subpopulation groups including age group, gender, ethnic group and an area level deprivation index

(225). Similarly, estimates derived from other data types (e.g. mortality) are presented by these subpopulation groups. A Māori health statistics page presents a range of statistics including socioeconomic determinants of health and there are statistics for Māori from the NZ Health Survey presented in this section (224).

- The **contracts between held by Te Whatu Ora and Te Aka Whai Ora with NGOs** or other institutions continue to include a section on Māori Health and state: “An overarching aim of the health and disability sector is the improvement of Māori health outcomes and the reduction of Māori health inequalities. You must comply with any:
 - Māori specific service requirements,
 - Māori specific quality requirements
 - Māori specific monitoring requirements”.
- In addition, the provider quality specifications for public health services include specific requirements for Māori:
 - C1 Services meet needs of Māori,
 - C2 Māori participation at all levels of strategic and service planning, development and implementation within the organisation at governance, management and service delivery levels,
 - C3: support for Māori accessing services”.
- **Healthy Families NZ** was launched in 2014 and is carried out specifically in lower-income communities (226): In 2022 Healthy Families NZ has 11 teams across nine locations embedded in a range of Lead Providers including Iwi, Whānau Ora, Local Government, Regional Sports Trusts and Pacific-led Social Change organisations. The current Healthy Families NZ locations are: Far North, Waitākere, South Auckland, East Cape, Waikato, Rotorua, Whanganui Rangitikei Ruapehu, Hutt Valley, Christchurch and Invercargill (227).
 - The 10 communities come from areas with higher-than-average rates of preventable chronic diseases (such as diabetes), higher-than-average rates of risk factors for these diseases (such as smoking), and/or high levels of deprivation.
 - The 10 communities are geographically spread and are a mixture of urban and rural areas, so the Healthy Families NZ can provide valuable evidence on what works (and what doesn’t) for a diverse range of communities (226) (See platforms for interaction 4).
- Some of the **Science Challenges** have a strong focus on reducing health inequalities (see Funding 2 for details).

In 2019, **KidsCan charitable trust** delivered a pilot programme with 26 early learning services in Auckland, Northland and Hawkes Bay. The pilot provides the centres with jackets, boots, nit treatment and food. The Heart Foundation has supported the initial pilot with menu advice and hands-on support for the participating centres. The programme is being extended to an additional 37 centres in 2020 (personal communication, Heart Foundation 2023).

The Heart Foundation partners with the HPA and Vegetables.co.nz to support families to improve their food skills and increase their consumption of vegetables. Currently, 25 food skill cards and over 120 recipe videos have been developed and promoted. Over the past year, this work has been adapted to support The Pacific team with resources and the National support agency for budgeting services with videos to use regarding budgeting (personal communication, Heart Foundation 2023).

Siu Ki Moana - Pacific Health Promotion Action Plan 2022

- Released by Health Promotion Agency (HPA), this action plan is described as “a gift for the future health system” and “a map to achieve equity for Pacific communities”. In this plan young Pacific people are the critical centre point, it acknowledges the role youth play in family structures, the community and the future and therefore health promotion. There is no direct mention of diet, nutrition, obesity or NCD’s, however it has stated to align with strategic priorities from national plans produced by Te Whatu Ora. Te Whatu Ora released the Te Pae Tata Interim plan where it addresses diabetes as a high priority area in the Pacific community (228).
- With the **Health Strategy** update, Ministry of Health will be releasing a Hauora Māori Strategy, Pacific Health Strategy, Women’s Health Strategy and Rural Health Strategy in mid-2023 (189).

International Best Practice Example (benchmarks):

- **Australia:** The National Indigenous Reform Agreement (Closing the Gap) is an agreement between the Commonwealth of Australia and the States and Territories. The objective of this agreement is to work together with Indigenous Australians to close the gap in Indigenous disadvantage. The targets agreed to by COAG relate to health or social

determinants of health. For the target 'Closing the life expectancy gap within a generation (by 2031)', one of the performance indicators is the prevalence of overweight and obesity.

9 GOVERNANCE:

Governments have structures in place to ensure transparency and accountability and encourage broad community participation and inclusion when formulating and implementing policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities.

GOVER1:

There are robust procedures to restrict commercial influences on the development of policies related to food environments where they have conflicts of interest with improving population nutrition.

High priority recommendation from 2020: The State Services Commission creates a conflict of interest plan along international best practice guidelines.

Evidence of Implementation:

- State Services Commission was renamed Public Services Commission in 2020
- There are legal expectations about lobbying and commercial influences, contained in legislation including the Crimes Act (229), Electoral Act (230), Secret Commissions Act (231) and others (communication, State Services Commission 2014). New Zealand does not have a legislated lobbying regime. There are no lobbying registers available in New Zealand. Before Parliament was the Lobbying Disclosure Bill which seeks to regulate lobbying in New Zealand. The following link contains information on the Bill including submissions made to Select Committee (232). This has been rejected.
- Submissions from stakeholders to policy documents are generally publicly disclosed in New Zealand.
- The current Health Star Rating Group is a mix of industry, academics, and public health nutritionists (48). Appointments of members to sit on working groups, committees, advisory groups and standing committees are made in accordance with any relevant legislation, the body's terms of reference and the Public Services Commission Board Appointment and Induction Guidelines.
- The Public Services Commission have codes of conduct for State Services (standards of integrity and conduct) (233) Advice and guidance is provided on understanding and implementing the guide. There are guidelines for board appointments and induction guidelines (234) and for managing conflicts of interest for public entities (235). The PSC conducts regular integrity and conduct surveys.

April 2023 New measures announced to increase lobbying transparency

- Remove swipe-card access
- Support third-party lobbyists to establish a voluntary code of conduct
- Review Cabinet manual re expectations on conduct and decisions on future employment
- Start long-term work on policy options to regulate lobbying

International Best Practice Example (benchmarks):

- **USA** (1995 and 2007): Mandatory and publicly accessible lobby registers exist at the federal level, as well as in nearly every state. Financial information must be disclosed, and the register is enforced through significant sanctions. A number of pieces of legislation uphold compliance with the register including Lobbying Disclosure Act of 1995 and the Honest Leadership and Open Government Act 2007.
- **Canada** (2016) During the development of the 2019 Canada's Food Guide, the Office of Nutrition Policy and Promotion, responsible for the Food Guide, did not accept any correspondence directly from industry stakeholders.
- **Australia:** Appointees to Council and Committees of NHMRC (including the Dietary Guidelines Governance Committee) are required to disclose their interests in line with the *Policy on the Disclosure of Interests Requirements for Prospective*

and Appointed NHMRC Committee Members (236). In addition, the Dietary Guidelines Expert Committee has an additional committee of independent experts to consider possible conflicts of interest and potential bias across the review process, and to develop management strategies for Expert Committee members and contracted evidence reviewers. <https://www.nhmrc.gov.au/health-advice/nutrition/australian-dietary-guidelines-review/committees>

9 GOVERNANCE: Governments have structures in place to ensure transparency and accountability and encourage broad community participation and inclusion when formulating and implementing policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities.

GOVER2:

Policies and procedures are implemented for using evidence in the development of food policies.

Low priority recommendation from 2020: The Science Advisors to Ministers who are engaged in policy development related to food and nutrition should work with a government-appointed food and nutrition scientific committee to ensure that policies are evidence based and equitable

Evidence of Implementation:

- The NZ science advisory system was developed in 2009 when the position of Chief Science Advisor was established (237). The current Chief Science Advisor is Professor Dame Juliet Gerrard FRSNZ HonFRSC who is accompanied by a small team of 6 (238). Their role is to advise the Prime Minister about how science can inform good decision making in Aotearoa New Zealand (239).
- National Science Challenges have a societal or environmental impact as a fundamental pillar in their framing and a focus of the Health Research Council is to support policy-relevant research. There is more microdata available to researchers. To support novel data science, catalyst projects are underway to encourage more use by the academic community. In 2016 the Department of the Prime Minister and Cabinet and the State Services Commission launched the Policy Project (<http://www.dpmc.govt.nz/policyproject>) to advance the training and culture within the civil service to support a more evidence focused policy practice (240).
- The first Chief Education Health and Nutrition Advisor in April 2017 was appointed to work across Government agencies to help NZ learners achieve their potential using international and national health and nutrition research (241,242). At the end of 2018, the Advisor resigned from the role and has not been replaced.
- There is a Chief Science Advisor to the Ministry of Health (243), the Ministry for Primary Industries and the Ministry of Education.
- The SSC produced advice for central government agencies based on this review which included advice about the use of accurate information/evidence and steps to ensure its availability when needed (244). An updated guidance series was released on the 30th August 2018. It reflects developments in the suite of Performance Improvement Framework products and services (245).
- The policy advice produced by several government agencies including the MoH is regularly reviewed by The NZ Institute of Economic Research (246).
- The latest report on performance improvement framework website for MoH was 2017 report: State Services Commission (SSC) Performance Improvement Framework (PIF) Review for Manatū Hauora, the Ministry of Health (247).
- FSANZ includes evidence in their regulatory impact assessments (personal communication, FSANZ, 2020).

International Best Practice Example (benchmarks):

Australia: The National Health and Medical Research Council Act 1992 (NHMRC Act) requires NHMRC to develop evidence-based guidelines. These national guidelines are developed by teams of specialists following a rigorous nine-step development process (248).

9 GOVERNANCE: Governments have structures in place to ensure transparency and accountability and encourage broad community participation and inclusion when formulating and implementing policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities.

GOVER3:

Policies and procedures are implemented for ensuring transparency in the development of food policies

High priority recommendation from 2020: The Government creates a transparency register of contacts with the government and commercial sector

Evidence of Implementation:

- The Public Service Commission reviews each government department each year on performance and these reports are available online through their website. The latest review report for the MoH and for MPI can be found online (249). FSANZ publishes all material related to processes and outcomes online. Public consultation on standards is possible on several occasions. Submissions from stakeholders are publicly disclosed.
- NZ was ranked first in the Open Budget Index rankings in 2017 scoring 89/100 (250) indicating a high level of fiscal transparency with extensive information available. In 2021 NZ ranked 3rd equal with a scoring of 85/100 due to failing to produce citizens budget ("Budget at a Glance" and "BEFU Basics") (251)
- New Zealand was ranked second in Transparency International's Corruption Perceptions Index 2018, behind Denmark, obtaining a score of 88% on a total of 1780 countries (252). In 2021 New Zealand ranked first with the same score of 88% with high levels of press freedom, access to budget information, high levels of integrity among people in power, and fair access to independent judiciaries. Areas where NZ can monitor its scores and improve, include access to information, order and security, fundamental rights and civil justice, lack of constraints on government powers and criminal justice, absence of corruption, regulatory enforcement, open government.

International Best Practice Example (benchmarks):

- **Canada (2016):** As a part of Health Canada's Healthy Eating Strategy, to help improve public trust (openness and transparency around stakeholder engagement activities related to healthy eating initiatives beyond formal consultation processes), Health Canada publishes a table of all correspondence, and all meetings with stakeholders with the intent to inform the development of policies, guidance or regulation related to healthy eating initiatives (253).
- **Norway (2006):** The Freedom of Information Act grants everyone the right of access to case documents, journals and similar registers for any agencies encompassed by the Act. The Act applies to all government agencies, municipalities and county authorities. The general rule is that access shall be granted, and exceptions to this rule require legal authority prescribed by or pursuant to law (254).

9 GOVERNANCE: Governments have structures in place to ensure transparency and accountability and encourage broad community participation and inclusion when formulating and implementing policies and actions to create healthy food environments, improve population nutrition, and reduce diet-related inequalities.

GOVER4:

The government ensures access to comprehensive nutrition information and key documents (e.g. budget documents, annual performance reviews and health indicators) for the public.

High priority recommendation from 2020:

Evidence of Implementation:

- Key budget documents (e.g. Vote Health), annual performance reviews of the different government departments and reports on nutrition guidelines and survey results are available for download online through the library of the MoH. In addition, in NZ the public can request specific information through the Official Information Act.
- Through the Official Information Act 1982, information on budgets spent on population nutrition promotion by MoH, MPI, the Health Promotion Agency and DHBs and PHUs can be easily obtained.
- The general approach is that information formally generated by the MoH is published on the web. Decisions about work programmes and funded priorities are published through the Ministry's statement of intent and output plan, both of which are on the web. Decisions about the publication of material on the web or through publications are usually made by business unit producing that information, but there are no formal policies covering what is published (information obtained from MoH through official information request). MPI publishes most reports on its website. In cases where reports are withheld from publication, it is because of commercial or other sensitivities.
- NZ was ranked 7th in the Open Data barometer in 2017 scoring 79/100 (255). NZ was ranked 6th in 2015. Open Data barometer has not been updated since.

International Best Practice Examples (Benchmarks):

- **Australia / New Zealand:** The Freedom of Information Act provides a legally enforceable right of the public to access documents of government departments and most agencies.
- **Norway (2006):** The Freedom of Information Act grants everyone the right of access to case documents, journals and similar registers for any agencies encompassed by the Act. The Act applies to all government agencies, municipalities and county authorities. The general rule is that access shall be granted, and exceptions to this rule require legal authority prescribed by or pursuant to law. The general rule is that access shall be granted, and exceptions to this rule require legal authority prescribed by or pursuant to law (254).

10 Monitoring and Intelligence:

The government's monitoring and intelligence systems (surveillance, evaluation, research and reporting) are comprehensive and regular enough to assess the status of food environments, population nutrition and diet-related NCDs and their inequalities, and to measure progress on achieving the goals of nutrition and health plans.

MONIT1:

Monitoring systems, implemented by the government, are in place to regularly monitor food environments (especially for food composition for nutrients of concern, food promotion to children, and nutritional quality of food in schools and other public sector settings), against codes/guidelines/standards/targets.

High priority recommendation from 2020: Monitoring Food Environments: The Government regularly monitors the food environment for health, equity and sustainability.

Evidence of Implementation:

Food composition

- **The NZ Total Diet Study** is conducted approximately every five to seven years and monitors concentration levels in foods and dietary intake of contaminants. Agriculture compounds and some key elements (including sodium and iodine) for key population groups. MPI undertook a New Zealand Total Diet Study (NZTDS) in 2016 with the final reports released in May 2018 (256).
 - Planning for the next NZ Total Diet Study is underway. The 2022-24 New Zealand Food Safety Strategy outlines that MPI will carry out a Total Diet Study focused on New Zealand infants and toddlers to assess exposure to certain food safety risks. In the absence of new National Nutrition Food Intake data for children and adults, the next NZ Total Diet Study will have a focus on infants and toddlers utilising new dietary intake information from a 2021 study on this age group. Timing is yet to be confirmed as to the date for full implementation (Personal communication, MPI, 2023).
- **Evaluation of trans-fats in imported oils**
- In 2017 FSANZ and the Ministry for Primary Industries completed an evaluation of *trans*-fats in imported oils. It was found there has been a significant decline in the importation of vegetable fats and oils that could potentially include *trans*-fats (257). Reported levels of *trans*-fats from product labels and industry product specifications indicated that the levels were consistent with results from previous analytical surveys undertaken from 2006-13. The 2017 evaluation and the earlier surveys indicate that dietary intakes of *trans*-fats have continued to reduce overtime (258).
- **New Zealand Food Composition Database (NZFCD)**
- The New Zealand Institute for Plant & Food Research Limited and the MoH jointly own the New Zealand Food Composition Database (NZFCD) which is a comprehensive collection of nutrient data in NZ. It contains nutrient information on more than 2600 foods, with 100 foods added or updated each year (personal communication, MoH, 2023). The nutrients sodium, fat, saturated fat, *trans*-fatty acids, sugars and total fibre are included. Accredited laboratories in New Zealand and Australia are used to analyse these nutrients in the foods. The output products of the NZFCD are NZ FOODfiles, the Concise NZ Food Composition Tables and a searchable website. An updated version of the FOODfiles and Concise Tables is published every 2-3 years. The 2021 version which consists of 2763 foods: 85 core components in the Standard Version and up to 360 components in the Unabridged Version (259).
- **Packaged foods in supermarkets.**
- Since 2011 researchers at The National Institute for Health Innovation have been collecting data on packaged foods available for sale in supermarkets and fast-food restaurants and was funded partially by the MPI until the end of 2018 (personal communication, MPI, 2020).
 - Since 2019 MPI have contracted access to a branded food product database collated by GS1 New Zealand. This searchable database contains images of over 51,000 New Zealand packaged food products

across all food categories (Personal communication, MPI, 2023). Foods are categorised according to the GS1 Global Product Classification (260).

Food promotion

- No monitoring of food promotion in place in New Zealand. Some research has been done in the area, but not nationwide and not across all types of media.

Food provision

- In 2016 ERO reported on the current status of food, nutrition and physical activity in schools and ECE, though the focus was on education and the curriculum rather than the food environment. It was gathered from 202 ECEs, 46 primary schools and 29 secondary schools to assess recommendations for childhood obesity initiatives (262).
- No monitoring of food environments in other public sector settings by the NZ government is currently conducted.

International Best Practice Example (benchmarks):

Many countries have food composition databases available. For example, the New Zealand Institute for Plant & Food Research Limited and the Ministry of Health jointly own the New Zealand Food Composition Database (NZFCD), which is a comprehensive collection of nutrient data in New Zealand containing nutrient information on more than 2600 foods.

UK: In October 2005, the School Food Trust ('the Trust'; now called the Children's Food Trust) was established to provide independent support and advice to schools, caterers, manufacturers and others on improving the standard of school meals. They perform annual surveys, including the latest information on how many children are having school meals in England, how much they cost and how they're being provided (263). They perform annual surveys, including the latest information on how many children are having school meals in England, how much they cost and how they're being provided (263).

The Netherlands: The Dutch Institute of Public Health and Environment monitor at product level any progress in product improvement of salt, saturated fat and calories (sugar and/or saturated fat). This uses the product databank (LEDA) as basis for which companies have to provide information about product contents (264).

10 Monitoring and Intelligence: The government's monitoring and intelligence systems (surveillance, evaluation, research and reporting) are comprehensive and regular enough to assess the status of food environments, population nutrition and diet-related NCDs and their inequalities, and to measure progress on achieving the goals of nutrition and health plans.

MONIT2:

There is regular monitoring of adult and childhood nutrition status and population intakes against specified intake targets or recommended daily intake levels.

High priority recommendations from 2020: National Nutrition Survey: The Government conducts a new national nutrition survey for children and adults to be commissioned by 2021.

Evidence of Implementation:

MoH funding development of methods for next nutrition survey

- **Annual Health Survey**

In 2011 all topic-specific surveys (including nutrition) were combined into a single continuous survey called the NZ Health Survey. Each year, the survey collects data from approximately 13,000 adults and 4000 children originally via a face-to-face interview in respondents' homes. However, the survey has been impacted by COVID-19 since 2020 (265). The survey includes core questions and measurements that are repeated each year, as well as a series of modules that

collect more detailed data on a topic. The refreshed survey will go into the field in 2021. The core survey collects the following data related to nutrition, obesity and NCD risk factors. Results from the core survey are reported annually.

- *Nutrition*: self-reported fruit and vegetable intake (adults); for children 2-14 years fruit and vegetable intake, breakfast consumption, fizzy drink consumption and fast-food consumption; and for children under 5 years breastfeeding and solid foods.
 - *Overweight and obesity*: measured height and weight (2+ years), waist circumference (5+ years).
 - *NCDs and risk factors (15+ years)*: measured blood pressure; self-reported high cholesterol, high blood pressure, heart disease, stroke, diabetes, arthritis, asthma, mental health conditions, chronic pain, physical activity, smoking, alcohol consumption, sleep (from 2017/18).
 - 2021/22 survey only reported on '*Nutrition*: self-reported fruit and vegetable intake (adults); for children 2-14 years fruit and vegetable intake, breakfast consumption, fizzy drink consumption and fast-food consumption; and for children under 5 years breastfeeding and solid foods.' And did not include 'overweight and obesity measures' and 'NCDs and risk factors' (personal communication, MoH, 2023)
- Some modules have collected data related to nutrition and NCD risk factors. The 2014/15 survey included biomedical module, which involved collecting data for nutritional status and NCD risk factors.
 - Household food (in)security for children was included in 2012/13, 2013/14 and 2015/16 and annually since 2019/20 (266)
 - The Annual Health Survey was most recently conducted between July 2021 and July 2022. The sample size used for data collection was much smaller in this survey due to COVID-19 resulting in about a third of the usual number of respondents (265). The Survey included looking at nutrition in adults and children (267). Obesity in 2022/21 *An experimental analysis using data from general practices* was released alongside the Health Survey 2021/22 (268)
 -
 - **Adults' Dietary Habits and Children's Dietary Habits (269,270)**
 - As part of the 2018/19 and 2019/20 Health Surveys a dietary habits module was included.
 - The dietary habits module covers: frequency of intake (of processed meats, red meat, fish or other seafood, legumes, nuts or seeds, biscuits or cakes, lollies, fast food or takeaways, drinks made from cordial, concentrate or powder, fruit juice and soft drinks or energy drinks); quality of intake (type of bread, milk, butter or spread and cooking oils used most often); cooking practices (removing excess fat from red meat before cooking or eating it); food groups excluded from diet (e.g. red meat, dairy products etc); and weight perceptions and intentions.
 - **Adults' Dietary Habits and Children's Dietary Habits** was published in October 2022. The findings of this report reflecting dietary intake of New Zealanders prior to the COVID-19 pandemic (271)
 - **Young Foods Study**
 - In 2020, MPI contracted the University of Otago to undertake the Young Foods Study, which aims to collect food and nutrition information on 300 young children living in high deprivation areas of Auckland, Wellington and Dunedin. Despite delays due to COVID-19, this project will be completed in early 2023 and, in conjunction with data from the Otago University First Foods Study, MPI will have access to food and nutrient intake data for over 900 infants and toddlers (6 months – 3.9 years of age). These datasets will be used to inform the next NZ Total Diet Study focused on infants and toddlers as described above (Personal communication, MPI, 2023).
 - **Nation-wide Adult Nutrition Survey**
 - The last nation-wide adult nutrition survey was carried out from October 2008-October 2009 (4721 adults aged 15+ years participated). The latest nationwide survey on children was conducted in 2002. Researchers can apply to access the micro-data (229).
 - The Ministry of Health and the Ministry for Primary Industries are jointly funding work by The University of Auckland and Massey University to develop the methods for a future nutrition survey. The methods under development are an online 24 -hour recall tool, updated dietary habits questionnaires, biomedical and anthropometric measurements. The work is takes place between October 2021 and September 2023. The development is guided by a Technical Advisory Group and a Māori Advisory Group.
 - **Health Promotion Agency Annual Report**

- HPA annual report 2020/21: The national Health and Lifestyles Survey measures trends in New Zealander's behaviours, attitudes and knowledge on a range of health and lifestyle topics including food and drink. This is a biennial monitor and has been carried out since 2008 (272).
- MPI had a request for a proposal in November 2019 to complete a food and nutrient intake survey of young children in New Zealand which was closed in December 2019 (273).
- Te Whatu Ora – National Public Health Service manages the Health and Lifestyles Survey (HLS), which is a national survey that measures trends in New Zealander's behaviours, attitudes and knowledge on a range of health and lifestyle topics including food and drink. The most recent results can be found in Kupe (<https://kupe.hpa.org.nz/>). Indicators related to eating/food were last updated in 2020 (274).

International Best Practice Example (benchmarks):

- **USA** (1959-present): The National Health and Nutrition Examination Survey (NHANES) is a program of studies designed to assess the health status, disease history, and diet of adults and children in the United States through interviews and physical examinations. The survey examines a nationally representative sample of about 5,000 persons each year (275). The survey is unique in that it combines interviews and physical examinations.
- **The Netherlands** (1987-present): The Dutch Institute of Public Health and Environment periodically collects data about the food consumption and food condition of the Dutch population in general and of separate population groups via the Food Consumption Survey. Currently, a Food Consumption Survey (Dutch population 1-79 years) is being conducted for the years 2019-2021. Prior Food Consumption Surveys have been conducted for the years 2012-2016 (Dutch population 1-79 years), 2010-2012 (elderly 70+), 2007-2010 (7-69 years), 2005-2006 (2-6 years), and 2003 (9-16 years) (264).

10 Monitoring and Intelligence: The government's monitoring and intelligence systems (surveillance, evaluation, research and reporting) are comprehensive and regular enough to assess the status of food environments, population nutrition and diet-related NCDs and their inequalities, and to measure progress on achieving the goals of nutrition and health plans.

MONIT3:

There is regular monitoring of adult and childhood overweight and obesity prevalence using anthropometric measurements

Low priority recommendation from 2020: The Government includes anthropometry monitoring, preferably within existing school-based health checks, as an indicator in the Child and Youth Wellbeing Strategy, and funds tailored whānau support services for children with obesity.

Evidence of Implementation:

- Annual Health Survey
 - The survey continues to measure weight and height and publish the results annually (265). The survey has over 13000 adults and 4000 children participating annually.
 - A questionnaire gathers information on key questions on nutrition, general health; anthropometry, NCDs. The health surveys also measure waist circumference among children and adults.
 - Obesity in 2022/21 *An experimental analysis using data from general practices* which was released alongside the Health Survey 2021/22 and is based off data collected from the Health Survey and covers both adults and children (268)
 - Annual report from Ministry of Health stated that the health survey found obesity rates had increased since the previous year in both children and adults (266). 2020/21 34.4% of adults were classified as obese and 12.7% of children up from 31.2% and 9.5% respectively. Previously obesity rates in children were relatively stable (276). This is equal to 1.4million adults and 100,000 children.
 - Children living in the most deprived areas in New Zealand were 2.5 times more likely to be obese compared to children living in least deprived areas after adjusting for differences in age, gender, and ethnicity.

- The New Zealand Health Survey collected data between September 2020 to August 2021. It is important to note that during this period the survey was suspended due to COVID-19 outbreaks (276).

- **B4 School Check**

The B4 School Check (277) is a nationwide programme offering a free health and development check for four-year-olds. B4 School Checks were rolled out nationwide in September 2008.

- The B4 School Check includes the measurement of height and weight for recording in the Well Child health book and B4 School Check database. The Ministry of Health prepared a document on the Access, Use and Disclosure Policy for B4 School Check Information System Users (278).
- Access to the data can be requested. All requests for access to B4SC data that do not fit neatly into one of the purposes for originally collecting the information held on the B4 School Check system are considered by a Ministry governance body guided by an access policy. (Personal communication, MoH, 2017).

International Best Practice Example (benchmarks):

- **UK:** England's National Child Measurement Program was established in 2006 and aims to measure all children in England in the first (4-5 years) and last years (10-11 years) of primary school. In 2011-2012, 565,662 children at reception and 491,118 children 10-11 years were measured (279).
- **WHO European countries (2008-present):** The 4th Childhood Obesity Surveillance Initiative (COSI) report was launched in 2017. COSI collects data from children in primary schools in the Republic of Ireland. The survey is carried out periodically. Data was first collected from children in 2008 in first class, in 2010 from first class and third class, in 2012 from first, third and fifth classes and in 2015 from first, fourth and sixth class. Trained researchers collected weight, height and waist circumference measurements. These figures were used to examine prevalence of normal weight, overweight, obesity and mean BMI (280).

10 Monitoring and Intelligence: The government's monitoring and intelligence systems (surveillance, evaluation, research and reporting) are comprehensive and regular enough to assess the status of food environments, population nutrition and diet-related NCDs and their inequalities, and to measure progress on achieving the goals of nutrition and health plans.

MONIT4:

There is regular monitoring of the prevalence of NCD risk factors and occurrence rates (e.g. prevalence, incidence, mortality) for the main diet-related NCDs

Low priority recommendation from 2020: The Government continues to invest in cardiovascular disease and diabetes risk assessments and investigates the inclusion of height and weight measurements and the use of the data for population monitoring.

Evidence of Implementation:

- **Annual Health Survey**

The current health survey reports on health status, health behaviours and risk factors (smoking, alcohol consumption, fruit and vegetable intake, self-reported physical activity, body weight, health conditions (blood pressure, high cholesterol, IHD, stroke, diabetes) (281).

- The 2014/15 survey conducted biomedical tests on a sub-sample (aim 5000) adults 15+ years, total, HDL cholesterol; glycated haemoglobin; indicators of kidney diseases and liver function; folate (blood), iodine, sodium, potassium (urine) (survey content guide) (282). These results were released in 2020.
- Blood pressure is measured among adults in NZ health surveys (265), 'Doctor-diagnosed' heart disease, stroke, diabetes, asthma, arthritis, mental health conditions, chronic pain, high blood pressure, high blood cholesterol are self-reported.

- **The Mortality Collection (MORT)**

The Mortality Collection (MORT) classifies the underlying cause of death for all deaths registered in New Zealand, and all registerable stillbirths (foetal deaths), using the ICD-10-AM 6th Edition and the WHO Rules and Guidelines for Mortality Coding. Deaths registered in New Zealand from 1988 onwards are held in the Mortality database (283). The National Minimum Dataset (NMDS) is a national collection of public and private hospital discharge information, including coded clinical data for inpatients and day patients (284). It is updated annually and includes leading causes of death, demographics and historical trends in mortality.

- **The New Zealand Cancer Registry (NZCR)**

The New Zealand Cancer Registry (NZCR) is a population-based register of all primary malignant diseases diagnosed in New Zealand, excluding squamous and basal cell skin cancers (285). Updated annually, it includes cancer registrations, deaths from cancer, most common cancers, leading causes of death.

- **New Zealand Burden of Disease, Injury and Risk Study 2006-2016 (NZBD)**

The New Zealand Burden of Disease, Injury and Risk Study 2006-2016 (NZBD) (286) was a systematic analysis of health loss by cause for New Zealanders of all ages, both sexes and both major ethnic groups. It includes estimates of fatal and nonfatal health losses from 217 diseases and injuries and 31 biological and behavioural risk factors. This information is intended to support health policy and planning. It includes estimates of health loss due to diet and high BMI.

- **Longer, Healthier Lives: New Zealand's Health 1990-2017** (287)

The report gives a summary of the health of New Zealanders between 1990 and 2017 and focuses on the trends and inequalities related to poor health and early deaths. It looks at measures such as disability-adjusted life years (DALYs) and years of life lost (YLLs), and also examines differences in health outcomes among different demographic groups. However, it doesn't specifically focus on nutrition, diet, food, obesity, or non-communicable diseases (NCDs), but instead provides a general overview of health outcomes in New Zealand.

- **Virtual Diabetes Register and Web Tool**

There is a virtual national diabetes register based on data from primary care. The diabetes register is collated annually and is an estimate of 5 national collections (288). This tool was updated and revised in 2021 (289).

- **Statistics NZ**

Statistics NZ compiles life tables every five years with information on life expectancy including patterns of mortality, NZ life-period tables, births and deaths (290).

International Best Practice Example (benchmarks):

OECD countries: Most OECD countries have regular and robust prevalence, incidence and mortality data for the main diet-related NCDs and NCD risk factors

10 Monitoring and Intelligence: The government's monitoring and intelligence systems (surveillance, evaluation, research and reporting) are comprehensive and regular enough to assess the status of food environments, population nutrition and diet-related NCDs and their inequalities, and to measure progress on achieving the goals of nutrition and health plans.

MONIT5:

There is sufficient evaluation of major programs and policies to assess effectiveness and contribution to achieving the goals of the nutrition and health plans

High priority recommendation from 2020: Programme Evaluation: The Government includes robust process and impact programme evaluations in any major investment made to improve population nutrition.

Evidence of Implementation:

- There is no comprehensive nutrition and health plan in NZ. **Healthy Families**

An updated Healthy Families NZ summative evaluation report was conducted by Victoria University of Wellington in 2022 (227).

The evaluation showed that Healthy Families NZ has continued to make successful progress in each location. The evaluation had found that since previous evaluation in 2019/2020 Healthy Families NZ teams are much more confident in their systems, particularly through lessons learnt through COVID-19. All Healthy Families NZ locations are continuing to focus on prevention for better health outcomes.

The Ministry of Health funding for Healthy Families NZ is about \$10 million annually in the second phase (2019-2021), totalling NZ\$82 million over eight years, with funding averaging about NZ\$8 per person per year across the 10 locations. Healthy Families NZ has been funded by MoH since its launch, however from the 1st of July 2022 it is funded by Te Whatu Ora (227).

- **National Healthy Food and Drink Policy**

- The 'National Healthy Food and Drink Policy' is being evaluated by researchers with funding from the Healthier Lives National Science Challenge with results expected mid-2023. The aim of the research is to find out how well the policy has been implemented, and its impact on food availability and purchases. It explores resources required to support the further implementation of the policy and maximise its adoption by public sector institutions (121). Initial results from this research are reported in PROV2 (121).

Ka Ora Ka Ako

- Ka Ora Ka Ako began in term 1 of 2020 and provides free and healthy lunches to Year 1-8 students across 120 schools in communities deemed to have the greatest socio-economic barriers nationally as per the Equity Index (100).
- In 2021/22 research was conducted by the Ministry of Education to analyse the nutritional quality of the school lunches provided by Ka Ora Ka Ako – healthy school lunches programme (261). From this research it was found that:
 - 77.5% of the 19 analysed nutrients were above 30% of the RDIs
 - Energy, calcium, iodine was low by international standards.
 - Sodium was high by national and international standards.

An interim report evaluating the initial pilot programme was published in 2021, from data based off 38 schools (2700 students). Key results from this report include:

- 'Large benefits' for all primary and intermediate learners in respect of changing the types of food available and consumed (39% more vegetables and 15.7% less snack items consumed).
- 'Large gains' in fullness for learners who previously had insufficient food, with these learners, on average, feeling an 20% fuller after lunch than before the programme.
- 'Large gains' in mental wellbeing by the most disadvantaged learners (3.8 %)
- a statistically significant reduction in the proportion of learners with low health quality of life (9%)
- 'Small but significant' improvements for learners, on average, in terms of their overall health quality of life, as well as in their physical and emotional functioning (113).

A nutrition-specific evaluation report was published at the end of 2022. This looked at determining the contribution of Ka Ora Ka Ako lunch meals to the daily nutrient requirements (NRV) as well as comparing to international lunch programme nutrient standards.

Key findings include:

- Overall, 78.2 percent of the analysed nutrients surpassed the 33 percent NRV target, including key nutrients involved with learning, behaviour and educational achievement, such as folate, thiamin, vitamin B6, and vitamin B12.
- Two nutrients, protein and niacin, were provided in levels which exceeded 100 percent of the daily needs of ākongā in some age groups
- There were five nutrients which were substantially below the 33 percent target in analysed Ka Ora, Ka Ako meals: energy, carbohydrates (no target, but low compared to international standards), iron, calcium, and iodine.

A second evaluation of the expanded programme was completed in 2022. The Impact Evaluation is an independent evaluation focussed on wellbeing in secondary school students, impacts on attendance across all year levels, and providing case studies on stories of greatest change for whānau. The evaluation findings show significant positive impacts overall in terms of ākongā wellbeing, food security, and the nutritional value of Ka Ora, Ka Ako meals.

The Ministry has undertaken further work to understand and respond to the evaluation report findings through

commissioning He Kai Kei Aku Ringa, an independent kaupapa Māori evaluation of Ka Ora, Ka Ako led by Mana Pounamu Consulting. He Kai Kei Aku Ringa will evaluate the impact of the Iwi and Hapū Partnership model of Ka Ora, Ka Ako delivery specifically for ākongā, whānau, hapū, and iwi and the impact of Ka Ora, Ka Ako more broadly on ākongā and whānau Māori.

In 2023 new nutrition standards will be released for Ka Ora Ka Ako and will replace the previous guidelines used by lunch providers (114). The 2023 new nutrition standards were created based on feedback collected from schools and kura, suppliers, dietitians and nutritionists and the Ministry of Health. The changes to the nutrition standards were made to support increased uptake by students, to be more user friendly for suppliers trying to plan a healthy meal, and to address some of the concerns noted in the nutrition evaluation including low energy and carbohydrate content of meals and high sodium contents of meals (115).

- food items are now listed in grams and amounts are age specific.
 - Age specific minimum weight for food groups
 - Four main food groups instead of the previous nine
 - Definitions for green, amber and red foods were refined.
 - removed health star ratings for vegetables.
 - Maximum weight limit for amber category food
- some food items changed category in traffic light system (115)

International Best Practice Example (benchmarks):

- **USA:** The National Institutes for Health (NIH) provides funding for rapid assessments of natural experiments. The funding establishes an accelerated review/award process to support time-sensitive research to evaluate a new policy or program expected to influence obesity related behaviours (e.g., dietary intake, physical activity, or sedentary behaviour) and/or weight outcomes in an effort to prevent or reduce obesity (291).
- **The Netherlands (2017):** The Dutch Institute of Public Health and Environment conducted in 2017 a midterm evaluation to calculate the effect of the agreed maximum norms for salt and sugar in the Agreement on Product Improvement (292). A midterm evaluation was performed to calculate the effect of the agree maximum norms for salt and sugar reduction, and four scenarios have been calculated with the Food Consumption Survey (293).

10 Monitoring and Intelligence: The government's monitoring and intelligence systems (surveillance, evaluation, research and reporting) are comprehensive and regular enough to assess the status of food environments, population nutrition and diet-related NCDs and their inequalities, and to measure progress on achieving the goals of nutrition and health plans.

MONIT6:

Progress towards reducing health inequalities and social determinants of health are regularly monitored

High priority recommendation from 2020: Monitoring Food Environments: The Government regularly monitors the food environment for health, equity and sustainability.

Evidence of Implementation:

- **Annual Health Survey**
- All Ministry of Health surveys report on estimates for different population groups particularly by ethnicity (including Pacific peoples), by age, by gender, by sex and by NZDep and disability status (265).
- Ministry of Health contracts includes a section on Māori Health and state: "An overarching aim of the health and disability sector is the improvement of Māori health outcomes and the reduction of Māori health inequalities. You must comply with any: a) Māori specific service requirements, b) Māori specific quality requirements and c) Māori specific monitoring requirements".

- **Ka Mākona - Kore hiakai, Zero Hunger Collective**

The Ka Mākona report is an update of the 2021 report based on benefit and wage increases and inflationary adjustments to wages and living costs.

In 2022, on average weekly grocery costs have increased 10% alongside increased fuel costs have increased weekly household costs by \$70 - \$100 a week. Changes in benefit and wage rates and other government initiatives in 2022 have helped many families in New Zealand however, this report found that many families are still struggling to have enough money weekly and to put food on the table. Kore hiakai suggest that the data collected for this report most likely do not reflect realistic severity of struggles. Weekly financial deficit is contributing to unsustainable debts.

Kore hiakai and others have advocated on the burden Ministry of Social Development overpayment debt has on low-income households. It was found that food insecure households with debt is common in New Zealand, with repayments averaging at \$110 per week. The use of 'buy now, pay later' schemes have increased to cover essential living costs including weekly groceries (294).

International Best Practice Example (benchmarks):

New Zealand: All annual Ministry of Health Surveys report estimates by subpopulations in particular by ethnicity (including Maori and Pacific peoples), by age, by gender and by New Zealand area deprivation.

11 Funding and Resources:

Sufficient funding is invested in 'Population Nutrition Promotion' to create healthy food environments, improved population nutrition, reductions in obesity, diet-related NCDs and their related inequalities.

FUND1:

The 'Population Nutrition Promotion' budget, as a proportion of total health spending and/or in relation to the diet-related NCD burden, is sufficient to reduce diet-related NCDs. Section to be updated after all OIAs received.

High priority recommendation from 2020: Nutrition Funding: The Government increases funding for population nutrition promotion to at least 10% of obesity/ overweight health care costs.

Evidence of Implementation:

New Health System 2022

As of July 2022 New Zealand moved into a new health system. The DHBs are merging and making a shift towards a health system that is "nationally planned, regionally delivered and locally tailored". Costs for running the system will be now managed nationally rather than regionally many times leaving more money to spent on delivery (295).

Ka Ora Ka Ako

In 2020, Ka Ora Ka Ako received \$216.7 million in operating and \$3.9 million in capital expenditure funding through the COVID-19 Response and Recovery Fund over the next 2 years (101). Lunch menus are based on nutrition guidelines from the Ministry of Health (100).

The Ministry of Health funding for Healthy Families NZ is about \$10 million annually in the second phase (2019-2021), totalling NZ\$82 million over eight years, with funding averaging about NZ\$8 per person per year across the 10 locations. Healthy Families NZ has been funded by MoH since its launch, however from the 1st of July 2022 it is funded by Te Whatu Ora (227).

Healthy Active Learning received 47.6m in funding in the 2019 Budget provided over 4 years (2020-2024) (296).

Health Promotion Agency's budget for Nutrition and Physical Activity Programme:

2020: \$368k

2021: \$107k

Previously, the budgets spent on population nutrition promotion by MoH and the Public Health Units of DHBs was obtained under the Official Information Act 1982 (297), however this was not repeated for 2020-2022 due to the impact of Covid and the secondment of many public health staff and other resources to Covid. Between 2017 and 2020 it was estimated that the average budget for MoH and DHB spending was \$38,500,00 per million (this includes HPA, HAL, Healthy Families).

Ministry for Social Development

Since the demand for food has increased significantly for community food providers since COVID-19 restrictions, Ministry of Social Development has invested \$47 million over the last 3 years to create Food Secure Communities programme to provide support for community providers who are distributing food to people and whānau experiencing food insecurity.

International Best Practice Example (benchmarks):

Thailand: According to the most recent report on health expenditure in 2012, the government greatly increased budget spent on policies and actions related to nutrition (excluding food, hygiene and drinking water control). Total expenditure on health related to nutrition specifically from local governments was 29,434.5 million baht (7.57% of total health expenditure from public funding agencies), which was ten times over the budget spending on nutrition in 2011.

11 Funding and Resources: Sufficient funding is invested in 'Population Nutrition Promotion' to create healthy food environments, improved population nutrition, reductions in obesity, diet-related NCDs and their related inequalities.

FUND2:

Government-funded research is targeted for improving food environments, reducing obesity, NCDs and their related inequalities.

High priority recommendation from 2020: Food in National Science Challenges: The Government ensures that improving nutrition and sustainable diets and reducing nutrition inequalities is a priority funding stream within the Science Challenges and is linked to the proposed National Food and Nutrition Strategy.

Evidence of Implementation

All funding recipients from the Marsden Fund and the Health Research Council NZ were evaluated.

- **Marsden funding**
- For Marsden (298), in 2017 (total budget \$84.6m), 2018 (total budget \$85.6m) and 2019 (total budget \$83.671m) the only funding for projects related to population nutrition or prevention of obesity and non-communicable disease was approximately \$5.24m between 2017-19 out of a potential \$253.871m. For Marsden, both in 2012 (total budget=\$54,960,000) and 2013 (total budget=\$58,965,214) there was no funding for projects related to population nutrition or prevention of obesity and non-communicable diseases, therefore, funding has increased.
 - For Marsden (298) in 2020 (total budget \$84.751m), 2021 (total budget \$82.705m) and 2022 (total budget \$77.391). In total approximately \$2.764m between 2020-2022 went towards projects related to nutrition, prevention of obesity or non-communicable diseases.
- **Health Research Council**
- For the Health Research Council (299) the amount of research budget spent on population nutrition and/or prevention of obesity and non-communicable diseases was: 12 research projects in 2017 totalling \$4.296m (3.4% of total funds), 6 research projects in 2018 totalling \$8.16m (6.5%) and 4 research projects in 2019 totalling \$1.695m (1.3%). This comes to a total of \$14.151m spent by the Health Research Council between 2017-19 relevant to these health issues. In 2015 3.9% (total budget=\$73,025,001) and 2016 7.2% (total budget=\$119,100,991) was spent on population nutrition and/or prevention of obesity and non-communicable diseases

- The total budget allocated to population nutrition and/or prevention of obesity between 2020 and 2022 was \$11.025m, with \$2.576m in 2020, \$4.142m in 2021 and \$4.307m in 2022.
- **Ministry for Primary industries**
- MPI policy and science functions contribute to some areas of nutrition work with unspecified budget allocation. Examples include health claims and monitoring surveys (300), funding specific work such as quantifying discretionary sodium intake in New Zealand. (personal communication, MPI, 2023).
 - The main funding programmes listed on MPI's website relate to Agriculture, Forestry, Environment and Natural Resources, Biosecurity and animal welfare (301). MPI also funds nutritional components, such as clinical trials to establish health benefits of primary products (fruits/vegetables/grains/dairy/meat/alternatives), and are contributing to the establishment work for the next National Nutrition Survey (personal communication, MPI, 2023)
- **The High-Value Nutrition Science**
- The High-Value Nutrition Science Challenge is focused on increasing export revenues rather than population nutrition in New Zealand (302).
- **The National Science Challenge:**
 - 'A Better Start' is working to reduce obesity and improve learning skills and mental health in NZ children (303). The mission is to find better ways to predict, prevent and treat obesity, learning and mental health problems in NZ children and teenagers. The work is a collaboration of experts and institutions. The focus is children early in life and most in need (Māori, Pacific, poorer children), to engage families and communities and take a holistic approach to obesity, learning and mental health difficulties. Funding is \$34.7 million over ten years 2015-2024. It is hosted by Liggins Institute. Themes have recently been re-titled in positive, non-deficit language with obesity now referred to as 'healthy weight' (304).
 - In 2022 \$1m was awarded by Better Start towards research for pacific health. This research includes looking at obesity, prediabetes, and type 2 diabetes.
- **The Healthier Lives challenge** is undertaking innovative research aimed at reducing death and disease burden from NCDs (cancer, CVD, diabetes, obesity) (305) prevention and treatment. There is a commitment to WHO goals of reducing the burden of NCDs by 25% by 2025 and reducing health inequalities between populations by 25% by 2025. There is funding up to \$31.3 million over 10 years (305).
- **Ageing Well** has a research stream 'Staying UPright and Eating well' (SUPER), aiming to test the impact and cost-effectiveness of physical activity and/or nutrition, and social group attendance, to reduce frailty and falls of older people (306).
- **The Life Course Project** is a collaboration with the two health and well-being National Science Challenges, Healthier Lives and Ageing Well. This initiative focuses on a life course perspective on health and well-being throughout the life span to intervene and reduce the impact of illness through early detection and prevention. The work will capture synergies across the three Challenges to form an approach to achieve a long, healthy, well-adjusted and productive life by examining early risk factors and associations for later disease, together with the prevention of major illnesses and methods to quantify the health and economic benefits of avoidance of non-communicable disease (305).
- The MoH has a **Pacific Innovations Fund**. In December 2019 almost \$10 million in funding was invested to better resource, drive and assess innovative community health projects that improve Pacific peoples' health and wellbeing (307).
- **Pacific Community Health Fund**
- The Pacific Community Health Fund is a program that provides financial support for health initiatives tailored to meet the specific needs of Pacific communities in New Zealand. Its goal is to improve health outcomes for Pacific communities by funding programs such as health promotion and disease prevention. The fund is managed by Te Whatu Ahurei, the National Māori Health Coalition, and is available to Pacific health providers and community groups throughout New Zealand (308).

International Best Practice Example (benchmarks):

Australia: The NHMRC Act requires the CEO to identify major national health issues likely to arise. The National Health Priority Areas (NHPAs) articulate priorities for research and investment and have been designated by Australian governments as key targets because of their contribution to the burden of disease in Australian (309).

Ireland: The Food Institutional Research Measure (FIRM) is funded by the Department of Agriculture, Food and the Marine and is the primary national funding mechanism for food research in higher education institutions and other public research

institutes. Beneficiaries are required to widely disseminate the results of their research. The programme is creating a base of knowledge and expertise in generic technologies that will support a modern, consumer-focused industry and build Ireland's capacity for R&D (310).

11 Funding and Resources: Sufficient funding is invested in 'Population Nutrition Promotion' to create healthy food environments, improved population nutrition, reductions in obesity, diet-related NCDs and their related inequalities.

FUND3:

There is a statutory health promotion agency in place that includes an objective to improve population nutrition, with a secure funding stream.

High priority recommendation from 2020: Funding Health Promotion Authority: The Health Promotion Agency funding is increased for promoting healthy and sustainable eating including through sector engagement towards a comprehensive approach to food policy.

Evidence of Implementation:

The Health Promotion Agency is a Crown entity established by the NZ Public Health and Disability Act 2000 (125). HPA has an overall function to lead and support activities to promote health and wellbeing and encourage healthy lifestyles, prevent disease, illness and injury; enable environments which support health, wellbeing and healthy lifestyles; reduce personal, social and economic harm. HPA is required to give effect to Government policy when directed by the responsible Minister. HPA has a central role as the Government's expert on health promotion. Within the HPA's 2018-19 Statement of Performance Expectations 'Nutrition and Physical Activity' are considered a major domain for the HPA (311).

As of 2022 with the health system reform, HPA is now part of National Public Health Service in Te Whatu Ora (312)

International Best Practice Example (benchmarks):

Thailand (2001): The Thai Health Promotion Foundation (ThaiHealth) is an autonomous government agency established by the Health Promotion Foundation Act as a dedicated health promotion agency. ThaiHealth's annual revenue of about USD 120 million is derived from a surcharge of 2 percent of the excise taxes on tobacco and alcohol, collected directly from tobacco and alcohol producers and importers.

Victoria, Australia (1987): The Victorian Health Promotion Foundation (VicHealth) was the world's first health promotion foundation. VicHealth continues to maintain bipartisan support (313).

12 Platforms and Interaction:

here are coordination platforms and opportunities for synergies across government departments, levels of government, and other sectors (NGOs, private sector, and academia) such that policies and actions in food and nutrition are coherent, efficient and effective in improving food environments, population nutrition, diet-related NCDs and their related inequalities.

PLATF1:

There are robust coordination mechanisms across departments and levels of government (national and local) to ensure policy coherence, alignment, and integration of food, obesity and diet-related NCD prevention policies across governments.

High priority recommendation from 2020: Cross Government Platforms for Engagement: The Government strengthens and expands platforms for engagement for food-related prevention policies across Government (national and local).

Evidence of Implementation:

- The requirement for co-ordinated action across Government continues to feature in the Ministry of Health Statements of Intent. The introduction of the 2017-21 MoH Statement of Intent (178) states the need for our system to adapt to the changing needs of our diverse communities living in a rapidly advancing digital society with a burden of disease shifting to lifestyle and life-long chronic conditions. There is a greater focus on wanting to improve outcomes for people with long-term health conditions, especially those who are obese or who have diabetes and discuss collaboration across multiple sectors to reach success.
- The Healthy Families NZ (226) encourages organisations to work across sectors.
- Healthy Active Learning is a new initiative from the 2019 Wellbeing budget that is a collaboration between the Ministry of Health and Sport New Zealand (314).
- Whānau Ora is an inclusive interagency approach to providing health and social services to build the capacity of all New Zealand families in need. It empowers whānau rather than focusing separately on individual family members and their problems (315). It is jointly implemented by MoH, MSD and TPK.

International Best Practice Example (benchmarks):

Finland: The Finnish National Nutrition Council is an inter-governmental expert body under the Ministry of Agriculture and Forestry with advisory, coordinating and monitoring functions. It is composed of representatives elected for three-year terms from government authorities dealing with nutrition, food safety, health promotion, catering, food industry, trade and agriculture (316).

Thailand (2008): 'The National Food Committee (NFC) Act' frames food management policies and strategies in all dimensions and at all levels, including facilitating coordination among related agencies charged with strengthening food management efficiency and effectiveness. The NFC is the highest legitimate forum that allows multi-sectoral cooperation and total stakeholder participation. It has served as a forum for coordination, facilitation and problem solving at a national level while all implementation actions are carried out at the local level and within workplaces based on similar approaches to those used to alleviate undernutrition under the nation's Poverty Alleviation Plan (317).

12 Platforms and Interaction: here are coordination platforms and opportunities for synergies across government departments, levels of government, and other sectors (NGOs, private sector, and academia) such that policies and actions in food and nutrition are coherent, efficient and effective in improving food environments, population nutrition, diet-related NCDs and their related inequalities.

PLATF2:

There are formal platforms between the government and the commercial food sector to implement healthy food policies.

Low priority recommendation from 2020: The Government creates a meaningful, representative platform to engage and motivate industry to provide a healthier food environment.

Evidence of Implementation:**Advisory groups related to HSR**

- The advisory groups related to HSR (48) are the front-of-pack labelling steering committee, trans-Tasman HSR advisory group (NZ holds one of 10 seats), NZ HSR advisory group. The NZ Health Star Ratings Advisory Group was established to provide advice on an approach to the voluntary interpretive front of pack labelling in New Zealand. This committee has wide representation and includes commercial food, academia and public health and is chaired by MPI.

Food Industry Taskforce

- In June 2018 leading food and beverage industry members formed the Food Industry Taskforce on Addressing Factors Contributing to Obesity, at the request of the Ministers of Health and Food Safety.
- On 20 December 2018, the Taskforce provided the 'Final Report to Ministers of Health and Food Safety' identifying actions that industry members could take to further address obesity.
- The Minister for Health and Minister for Food Safety responded to the taskforce one year later in December 2019. The Ministers encouraged the Taskforce to prioritise the following workstreams based on the WHO publication 'Essential Nutrition Actions – mainstreaming nutrition through the life-course'. However, the Ministers did not provide any information on how the government would contribute to progress on these recommendations. and no visible progress has been made by government to support action.

Heart Foundation Food Reformulation

- Since 2007, the Heart Foundation has implemented a food reformulation programme focused primarily on reducing salt levels and sugar levels across packaged (318). This is a service delivery approach rather than a direct engagement platform.

Food for Thought is owned by Foodstuffs and delivered by Heart Foundation regional staff in low-decile schools throughout the country.

Conflicts of Interest

- An important document in the conflicts of interest sphere is the Office of the Auditor-General's 'Managing conflicts of interest: Guidance for public entities' (235,319). Current in relations to conflicts of interest, State Servants are bound by the 'Standards of Integrity and Conduct' ('The Code') which sets out the standards expected of State servants. The Code includes the statement 'we must ensure our actions are not affected by our personal interests or relationships.' A breach of this (or any aspect) of the Code may be grounds for disciplinary action (319).
- Controller and Auditor General. 'Reflections from our audits: Governance and accountability', has a chapter 'Managing conflicts of interest' April 2016 (320).
- The SSC in New Zealand has published Best Practice Guidelines for Departments Responsible for Regulatory Processes with Significant Commercial Implications (321). These guidelines cover a section on managing conflict of interest issues in different government departments as well. As a principle, it is stated that Departments should have clear, effective and robust processes in place for identifying and addressing potential conflicts of interest (321).
- The 2013 Integrity and Conduct Survey (322) by the State Services Commission was an overall assessment of integrity and conduct in the State Services covering 40 agencies.
- There is conflict of interest registers available for senior management staff by each department. Board members have duties under the Crown Entities act (much stricter for boards than committees). The conflicts of interest are looked after through the crown ownership unit at the treasury. HPA manages conflicts of interest (declaration of interests was received) in accordance with the provisions of the Crown Entities Act 2004 and advice provided to the state sector from the Office of the Auditor-General and the State Services Commission. Once board members are appointed, the following HPA procedures apply; A register of interests, regularly updated, in accordance with policy. Identification and noting of interests in preparing agenda Interest disclosure to be the first item at each meeting. Affected member leaves room for discussion/decision (personal communication, HPA, 2020).

- The Treasury's guideline for public-private partnerships in New Zealand (2009) refers to public-private initiatives as being direct agreements between the Crown and the private sector. The Ministry of Health does not have any direct agreements with the Private Sector for nutrition initiatives. However, the Ministry has a small number of contracts with NGOs who have either memorandum of understandings or other formal arrangements with the private sector; or the Ministry funds NGOs who also receive separate funding from the private sector for different services. These are managed separately by the NGO. Two nutrition-related Ministry funded joint public-private initiatives are as follows:
 - Food for Thought is owned by Foodstuffs and delivered by Heart Foundation regional staff in low decile schools throughout the country.
 - Voluntary Schools Beverage Agreement between NZ Government and beverage industry leaders, Coca-Cola Amatil NZ and Frucor Beverages (323).

International Best Practice Example (benchmarks):

- **UK:** The UK 'Responsibility Deal' was a UK government initiative to bring together food companies and non-government organisations to take steps (through voluntary pledges) to address NCDs during 2010-2015. It was chaired by the Secretary of State for Health and included senior representatives from the business community (as well as NGOs, public health organisations and local government). A number of other subgroups were responsible for driving specific programs relevant to the commercial food sector.
Norway (2016-2021): The '*Partnership for a healthier diet*' agreement contains specific quantitative goals related to reducing the intake of salt, added sugar and saturated fat, and increasing the intake of fruits and berries, vegetables, whole grain foods, fish and seafood in the population. The Partnership is organised in a Coordination group with representatives from the main partners including the health authorities. The Coordination group reports to the Minister's food industry group (lead by the Minister for the Elderly and Public Health) that ensures dialogue and political focus on the areas of action. A Reference group of scientists within nutrition, food technology, consumer behaviour, psychology and marketing provide expert advice to the coordination group (324).

12 Platforms and Interaction: here are coordination platforms and opportunities for synergies across government departments, levels of government, and other sectors (NGOs, private sector, and academia) such that policies and actions in food and nutrition are coherent, efficient and effective in improving food environments, population nutrition, diet-related NCDs and their related inequalities.

PLATF3:

There are formal platforms for regular interactions between government and civil society on food policies and other strategies to improve population nutrition.

High priority recommendation from 2020: Engagement Platforms with Civil Society: The Government ensures formal platforms are created for civil society, academic and affected communities' input into central and local food policy development, implementation and evaluation.

Evidence of Implementation:

Ministries and agencies across government

- There is a network of Chief Science Advisors based in different departments, Ministries and agencies across government. The Advisors support ministry/department to better use evidence to inform policy, to perform a brokering role within their respective agencies and as a forum of science advisors along with the chief economist, chief statistician and deputy head of the State Services Commission. The Chief Science Advisor Forum provides a sounding board for the Prime Minister's Chief Science Advisor and allows for a more coordinated whole-of-government view of science advice. There are 18 members of the forum. A priority of the Chief Science Advisor is to give this group more form and a higher profile, establishing a community of practice for science advice across government (325).
- **Health Star Rating Advisory Committee, Health Promotion Agency Board, Healthy Families NZ**
 - There are academics on the Health Star Rating advisory committee (48) and the former HPA Board.

- The current advisory groups with a focus on nutrition, obesity or prevention of NCDs are: Nutrition Survey Development Technical Advisory Group and Māori Advisory group, Physical Activity Technical Advisory Group, National Diabetes Leadership Group, Well Child Tamariki Ora Review Rōpū (personal communication, MoH, 2020).
 - Each Healthy Families NZ location has a governance/strategic leadership group comprised of leaders who can influence change locally. These may include leaders from local government, regional sports trust, education, health, iwi, business. This group oversees the investment of the Action Budget
- Some NGOs in NZ receive MoH funding, for example, the Heart Foundation food reformulation programme (326).
 - Civil society is encouraged to participate in public submissions in certain aspects of food policy development (e.g. to Parliamentary Inquiries, Select Committees).
 - The National Science Challenges encourage collaboration with academia, Crown Research Institutes and NGOs and Malaghan Institute. Challenges are funded by MBIE (327).

The FSANZ Consumer and Public Health Dialogue provides a means by which FSANZ can engage in deeper and more meaningful consultation with peak consumer and public health bodies and academics (326). The objective is to improve FSANZ's awareness and understanding of community food and health issues; and public priorities, and through this communication, provide a more effective food regulatory response. The Ministry of Health and Ministry for Primary Industries attend as observers.

International Best Practice Example (benchmarks):

Brazil: The National Council of Food and Nutrition Security (CONSEA) was a formal advisory platform made up of civil society (2/3) and government reps (1/3). It was a participatory instrument for designing, suggesting, implementing and evaluating food and nutritional security policy. Through CONSEA, civil society was able to influence policy directions more directly. CONSEA was disbanded in 2019 by President Bolsonaro (328)(329).

12 Platforms and Interaction: here are coordination platforms and opportunities for synergies across government departments, levels of government, and other sectors (NGOs, private sector, and academia) such that policies and actions in food and nutrition are coherent, efficient and effective in improving food environments, population nutrition, diet-related NCDs and their related inequalities.

PLATF4:

The government leads a broad, effective and sustainable systems-based approach with local organisations to improve the healthiness of food environments at a national level.

High priority recommendation from 2020: Community Systems Change: The Government expands regional systems platforms (like Healthy Families New Zealand) to other regions and creates more sustainable systems platforms.

Evidence of Implementation:

Project Energize

Capital Coast Health funds the Heart Foundation to deliver Project Energize in the Wellington region. In 2020, there was 2.8FTE working with 30 Wellington schools. Energizers provide practical 'hands-on' support and assistance to schools and teachers with initiatives that will increase the quality and quantity of physical activity or improve the uptake of healthy eating (personal communication, Heart Foundation, 2023).

Healthy Families NZ

- Healthy Families NZ (HFNZ) was launched in 2014 (226). Healthy Families NZ is a collaborative, whole of the community, collective approach to prevention. It aims to make changes to systems that influence the health and

wellbeing of families and communities. The Ministry of Health has led the establishment of HFNZ communities in 11 locations across NZ as of late 2020 when Waikato was added as another location (Far North, Waitākere, South Auckland, East Cape, Waikato, Rotorua, Whanganui Rangitīkei Ruapehu, Hutt Valley, Christchurch and Invercargill). HFNZ supports local leaders to implement voluntary initiatives that encourage families to live healthy, active lives. Through investment in community partnerships and a skilled health promotion workforce, these communities find local solutions to local needs, supporting healthy living. Activities initially focus on the settings where people live, learn, work, and play. The 11 HFNZ communities come from areas with higher-than-average rates of preventable chronic diseases, risk factors for these diseases (such as smoking), and/or high levels of deprivation. It is expected that HFNZ communities will reach approximately 900,000 New Zealanders. The design for Healthy Families NZ communities draws on evidence from the Be Active Eat Well pilot (Colac, Australia), EPODE pilots (France) and Project Energize (New Zealand), which have been associated with several measurable improvements that will support the health and wellbeing of children. A skilled prevention team is established at each site to bring together partnerships of key organisations and local leaders who can influence transformational change in their communities. The approach is based on a dedicated, reflective and skilled workforce, building leadership and relationships for prevention across the system, allocating resources to effect sustainable change, capturing and feeding back knowledge and data. It is guided by principles: implementation at scale, collaboration for collective effect, equity of outcome, line-of-sight, adaptation, experimentation and leadership. A range of organisations is leading Healthy Families NZ including sports trusts, iwi organisations, councils, Pacific PHOs. Massey University has conducted a progress evaluation in 2019/20 and Victoria University of Wellington has conducted an evaluation in 2022 (227)

Healthy Auckland Together

- Healthy Auckland Together (HAT) (330): Te Whatu Ora (National Public Health Service - Tamaki Makaurau) (previously facilitated by ARPHS) facilitates a coalition of local government, NGOs, health, iwi, and others working collaboratively to make it easier for everyone to reach the 3 goals: improving nutrition, increasing physical activity, reducing obesity. There is a strategic framework with a vision and the context the group operates within with six action plans of which one is food environments and marketing. HAT focuses on collaboration, profile raising, monitoring across streets, parks and places, food environments and marketing, schools and early childhood education services, workplaces and community settings. During the Covid pandemic, Healthy Auckland Together was less active as Te Whatu Ora and partner organisations were focus on Covid work. Now that Te Whatu Ora has resumed work on business-as-usual initiatives, the team are establishing key priority areas, including:
 - Monitoring and Reporting: monitoring nutrition and physical activity data, along with environmental indicators to provide insight into the health of people living in Tamaki Makaurau. Outputs are variable and can include [HAT Scorecard](#) (scope for 2023 TBC).
 - Junk Food Marketing working group advocating for national legislation to regulate expose of junk food marketing to children.
 - Scoping of a Wai and Kai working group in 2023 for partners to collaborate under topic areas in this space including food security, food sovereignty and cost of living.

Beyond the HAT programme, other Te Whatu Ora National Public Health Service - Tamaki Makaurau food environments work includes:

- As part of the health reform in New Zealand, the Te Whatu Ora National Public navigating new networks and participating in the establishment of food environment groups in an advisory, steering and working group capacity.
- Contributing to consultations on food environments topics, where appropriate
- The **National Good Food Network** (<http://sustainable.org.nz/good-food-nation-2/>) is a coordinated approach driven by Sustainable Business Network, to bring together and strengthen organisations working regionally in their food system through sharing learning and building capacity.

Mana Kai Initiative – National Food Roadmap

- This is an initiative developed by the Aotearoa Circle in 2022. This is intended as a starting point for kōrero or dialogue and is a collaboration, involving all parts of our national food system, to co-create solutions to some of the biggest challenges facing Aotearoa New Zealand food system today. The initiative is grounded in Te Ao Māori wisdom and presents a Māori view of the food system (331).

International Best Practice Example (benchmarks):

Australia: Healthy together Victoria in Australia aims to improve people's health where they live, learn, work and play. It focuses on addressing the underlying causes of poor health in children's settings, workplaces and communities by encouraging healthy eating and physical activity and reducing smoking and harmful alcohol use. Healthy Together Victoria incorporates policies and strategies to support good health across Victoria, as well as locally-led Healthy Together Communities. The initiative was originally jointly funded by the State Government of Victoria and the Australian Government through the National Partnership Agreement on Preventive Health (332). It is unclear at this stage whether funding for Healthy Together Victoria will continue or not.

13 Health in All Policies:

Processes are in place to ensure policy coherence and alignment, and that population health impacts are explicitly considered in the development of government policies

HIAP1:

There are processes in place to ensure that population nutrition, health outcomes and reducing health inequalities are considered and prioritised in the development of all government policies relating to food

High priority recommendation from 2020: Monitoring Food Environments: The Government regularly monitors the food environment for health, equity and sustainability.

Evidence of Implementation:

- FSANZ does not undertake health impact assessments. However, their standards development process (which is based on the Codex risk analysis model) incorporates key elements, including assessment of issues (including health impacts, if relevant) and consultation. Their process also includes a regulatory impact analysis, and a Regulation Impact Statement (RIS) may be prepared to inform this process. Regulatory impact assessments usually compare several scenarios: no regulation, voluntary regulation and mandatory regulation (1 or 2 different scenarios), but this is not considered a health impact assessment.

International Best Practice Example (benchmarks):

- **Slovenia:** Undertook a HIA in relation to agricultural policy at a national level. The HIA followed a six-stage process: policy analysis; rapid appraisal workshops with stakeholders from a range of backgrounds; review of research evidence relevant to the agricultural policy; analysis of Slovenian data for key health-related indicators; a report on the findings to a key cross-government group; and evaluation (333).
- **South Australia, Australia (2007):** A Health in All Policies approach was implemented by the government, supported by central governance and accountability mechanisms, an overarching framework with a program of work across government and a commitment to work collaboratively across agencies. The government has established a dedicated Health in All Policies team within SA Health to build workforce capacity and support Health Lens Analysis projects (334).

13 Health in All Policies: Processes are in place to ensure policy coherence and alignment, and that population health impacts are explicitly considered in the development of government policies

HIAP2:

There are processes (e.g. health impact assessments) to assess and consider health impacts during the development of other non-food policies

Low priority recommendation from 2020: The Government establishes a health impact assessment capacity, including funding for health impact assessments at the national and local level, to ensure that government policies in general are compatible with the objectives of improving health.

Evidence of Implementation:

- The MoH released Health Impact Assessment (HIA) guidelines in 2007 with a focus on whānau ora (health and well-being for Māori, their families and communities) (335). It can still be accessed online through the Ministry of Health (336).
- Health in All Policies (HiAP) is defined as "an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts, in order to improve population health and health equity" (337). Local examples include Canterbury Health in All Policies Partnership (338), an approach to public policies across sectors that takes into account the health implications of decisions, seeks synergies and avoids harmful health impacts in order to improve population health and equity.

International Best Practice Example (benchmarks):

Australia: Established in 2007, the successful implementation of Health in All Policies (HiAP) in South Australia has been supported by a high-level mandate from central government, an overarching framework which is supportive of a diverse program of work, a commitment to work collaboratively and in partnership across agencies, and a strong evaluation process. The government has established a dedicated HiAP team within South Australia Health to build workforce capacity and support Health lens Analysis projects (334). Since 2007, the South Australian HiAP approach has evolved to remain relevant in a changing context. However, the purpose and core principles of the approach remain unchanged. There have been five phases to the work of HiAP in South Australia between 2007 and 2016: 1) Prove concept and practice emerges (2007-2008), 2) Establish and apply methodology (2008-2009), 3) Consolidate and grow (2009-2013), 4) Adapt and review (2014) and 5) Strengthen and systematise (2015-2016).

- **Finland:** Finland worked towards a Health in All Policies (HiAP) approach over the past four decades (339). In the early 1970s, improving public health became a political priority, and the need to influence key determinants of health through sectors beyond the health sector became evident. The work began with policy on nutrition, smoking and accident prevention. Finland adopted HiAP as the health theme for its EU Presidency in 2006.
- **Slovenia:** Undertook a HIA in relation to agricultural policy at a national level. The HIA followed a six-stage process: policy analysis; rapid appraisal workshops with stakeholders from a range of backgrounds; review of research evidence relevant to the agricultural policy; analysis of Slovenian data for key health-related indicators; a report on the findings to a key cross-government group; and evaluation (333).

References

1. Thomas R. Kiwi kids are exposed to 27 junk food advertisements a day, study finds [Internet]. Stuff.co.nz. 2017 [cited 2022 Nov 14]. Available from: <https://www.stuff.co.nz/life-style/well-good/teach-me/97677040/kiwi-kids-are-exposed-to-27-junk-food-advertisements-a-day-study-finds>
2. Nestlé New Zealand pledges to support a healthy future for kids [Internet]. Nestlé New Zealand. 2016 [cited 2022 Nov 14]. Available from: <https://www.nestle.co.nz/media/pressreleases/nestle-new-zealand-pledges-to-support-a-healthy-future-for-kids>
3. Supporting the Health of New Zealanders - Healthy Kids Pledge [Internet]. Fonterra. [cited 2022 Nov 14]. Available from: <https://www.fonterra.com/nz/en/goodness-of-nz-milk/what-makes-nz-milk-good/supporting-the-health-of-nz.html>
4. Healthy kids industry pledge [Internet]. Sanitarium. [cited 2022 Nov 14]. Available from: <https://www.sanitarium.co.nz/social-purpose/fighting-lifestyle-diseases/healthy-kids-industry-pledge>
5. Sustainability in New Zealand [Internet]. Coca-Cola. 2020 [cited 2022 Nov 14]. Available from: <https://www.cocacolaep.com/assets/New-Zealand/2020-Sustainability-Fact-Sheet-NZ.pdf>
6. Clark D, O'Connor D. Government response to the Food Industry Taskforce's Report. 2018.
7. Heart Foundation Celebrates 15 Years of Food Reformulation [Internet]. Supermarketnews. 2022 [cited 2022 Nov 14]. Available from: <https://supermarketnews.co.nz/news/heart-foundation-celebrates-15-years-of-food-reformulation/>
8. Improve food supply [Internet]. World Cancer Research Fund International. [cited 2023 Feb 16]. Available from: https://policydatabase.wcrf.org/level_one?page=nourishing-level-one#step2=4
9. Sugar, salt and calorie reduction and reformulation [Internet]. GOV.UK. 2022 [cited 2023 Feb 16]. Available from: <https://www.gov.uk/government/collections/sugar-reduction>
10. Sugar reduction - Report on progress between 2015 and 2019 [Internet]. Public Health England. 2021 [cited 2023 Feb 16]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/984282/Sugar_reduction_progress_report_2015_to_2019-1.pdf
11. The Chip Group. Helping you to make better chips [Internet]. [cited 2022 Nov 21]. Available from: <http://blog.thechipgroup.co.nz/>
12. Allemandi L, Tiscornia M, Guarnieri L, Castronuovo L, Martins E. Monitoring Sodium Content in Processed Foods in Argentina 2017–2018: Compliance with National Legislation and Regional Targets. *Nutrients* 2019, Vol 11, Page 1474 [Internet]. 2019 Jun 28 [cited 2023 Feb 16];11(7):1474. Available from: <https://www.mdpi.com/2072-6643/11/7/1474/htm>

13. Charlton KE, Corso B, Ware L, Schutte AE, Wepener L, Minicuci N, et al. Effect of South Africa's interim mandatory salt reduction programme on urinary sodium excretion and blood pressure. *Prev Med Rep*. 2021 Sep 1;23:101469.
14. Salt reduction targets for 2024 [Internet]. Public Health England. 2020 [cited 2023 Feb 16]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/915406/2024_salt_reduction_targets_070920-FINAL-1.pdf
15. UK Salt Reduction Timeline [Internet]. Action on Salt. [cited 2023 Feb 16]. Available from: <https://www.actiononsalt.org.uk/reformulation/uk-salt-reduction-timeline/>
16. Ministry for Primary Industries. Codex and food safety standards | NZ Government [Internet]. [cited 2022 Nov 11]. Available from: <https://www.mpi.govt.nz/food-business/food-safety-codes-standards/codex/introduction-to-codex/>
17. Food Standards Australia New Zealand. Food Standards Code [Internet]. [cited 2022 Nov 15]. Available from: <https://www.foodstandards.gov.au/code/Pages/default.aspx>
18. Ministry for Primary Industries. Food standards [Internet]. NZ Government. [cited 2022 Nov 15]. Available from: <https://www.mpi.govt.nz/legal/compliance-requirements/food-standards/>
19. New Zealand Food Safety. A guide to food labelling [Internet]. Ministry for Primary Industries. 2021 [cited 2022 Nov 15]. Available from: <https://www.mpi.govt.nz/dmsdocument/2965-A-guide-to-food-labelling>
20. Australia and New Zealand Food Regulation Ministerial Council. Response to the Recommendations of Labelling Logic: Review of Food Labelling Law and Policy (2011). 2011 [cited 2022 Nov 15]; Available from: [https://foodregulation.gov.au/internet/fr/publishing.nsf/Content/53351997D78AAC31CA258359007E80F5/\\$File/Forum-Response-to-the-Food-Labelling-Law-and-Policy-Review-9-12-2011.pdf](https://foodregulation.gov.au/internet/fr/publishing.nsf/Content/53351997D78AAC31CA258359007E80F5/$File/Forum-Response-to-the-Food-Labelling-Law-and-Policy-Review-9-12-2011.pdf)
21. Australia and New Zealand Food Regulation Ministerial Council. Progress Report on the Implementation of the Government Response to the Labelling Logic Recommendations [Internet]. [cited 2022 Nov 15]. Available from: [https://foodregulation.gov.au/internet/fr/publishing.nsf/Content/53351997D78AAC31CA258359007E80F5/\\$File/Forum-Progress-Report-Labelling-Logic-Recommendations-9-12-2011.pdf](https://foodregulation.gov.au/internet/fr/publishing.nsf/Content/53351997D78AAC31CA258359007E80F5/$File/Forum-Progress-Report-Labelling-Logic-Recommendations-9-12-2011.pdf)
22. Food Standards Australia New Zealand. Nutrition labelling about added sugars. 2022 [cited 2022 Jul 27]; Available from: <https://www.foodstandards.gov.au/code/proposals/Documents/Admin%20Assessment%20-%20Added%20sugars%20proposal.pdf>
23. Food Standards Australia New Zealand. Administrative Assessment Report - Proposal P1058 [Internet]. 2022 [cited 2022 Nov 15]. Available from: <https://www.foodstandards.gov.au/code/proposals/Documents/Admin%20Assessment%20-%20Added%20sugars%20proposal.pdf>
24. Food Standards Australia New Zealand. Review of nutrition labelling for added sugars. 2021 [cited 2022 Jul 27]; Available from:

<https://www.foodstandards.gov.au/consumer/labelling/Documents/Review%20of%20Nutrition%20labelling%20for%20added%20sugars.pdf>

25. Food Standards Australia New Zealand. Energy labelling of alcoholic beverages [Internet]. 2022 [cited 2022 Nov 15]. Available from: <https://www.foodstandards.gov.au/consumer/labelling/Pages/Energy-labelling-of-alcoholic-beverages.aspx>
26. Thomas R. Taxing sugary drinks leads to about 15% drop in sales, new research shows. stuff.co.nz [Internet]. 2022 Jun 1 [cited 2022 Nov 24];5(6). Available from: <https://www.stuff.co.nz/national/health/128823595/taxing-sugary-drinks-leads-to-about-15-drop-in-sales-new-research-shows>
27. Ministry for Primary Industries. Introduction to health and nutrition content claims [Internet]. New Zealand Government, 2020 [cited 2022 Nov 16]. Available from: <https://www.mpi.govt.nz/food-business/labelling-composition-food-drinks/health-and-nutrition-content-claims-for-food-and-drink/introduction-to-health-and-nutrition-content-claims/>
28. Ministry for Primary Industries. Making and substantiating a health claim [Internet]. 2020 [cited 2022 Nov 16]. Available from: <https://www.mpi.govt.nz/food-business/labelling-composition-food-drinks/health-and-nutrition-content-claims-for-food-and-drink/making-and-substantiating-a-health-claim/>
29. Federal Register of Legislation. Australia New Zealand Food Standards Code – Standard 1.2.7 – Nutrition, health and related claims [Internet]. Australian Government. 2018 [cited 2022 Nov 16]. Available from: <https://www.legislation.gov.au/Details/F2018C00942>
30. Ministry for Primary Industries. Health and nutrition claims regulations: Standard 1.2.7 [Internet]. New Zealand Government. 2022 [cited 2022 Nov 16]. Available from: <https://www.mpi.govt.nz/food-business/labelling-composition-food-drinks/health-and-nutrition-content-claims-for-food-and-drink/health-and-nutrition-claims-regulations-standard-1-2-7/>
31. Australia New Zealand Food Standards Code – Standard 1.2.7 – Nutrition, health and related claims [Internet]. Australian Government. 2018 [cited 2023 Feb 13]. Available from: <https://www.legislation.gov.au/Details/F2018C00942>
32. Food Standards Australia New Zealand. Health Claims Scientific Advisory Group [Internet]. 2021 [cited 2022 Nov 16]. Available from: <https://www.foodstandards.gov.au/science/expertise/Pages/Health-Claims-Scientific-Advisory-Group-.aspx>
33. Food Standards Australia New Zealand. Schedule 4 | Nutrition, health and related claims [Internet]. 2016 [cited 2022 Nov 16]. Available from: <https://www.foodstandards.gov.au/code/Documents/Sched%204%20Nutrition%20and%20health%20claims%20v159.pdf>
34. Food Standards Australia New Zealand. Nutrition, health and related claims [Internet]. 2022 [cited 2022 Nov 16]. Available from: <https://www.foodstandards.gov.au/industry/labelling/pages/nutrition-health-and-related-claims.aspx>
35. Ministry for Primary Industries. Prosperity Sustainability Protection - Strategic Plan [Internet]. New Zealand Government. 2019 [cited 2022 Nov 16]. Available from: <https://www.mpi.govt.nz/dmsdocument/35403/direct>

36. Consumer Protection. Consumer Guarantees Act [Internet]. [cited 2022 Nov 16]. Available from: <https://www.consumerprotection.govt.nz/general-help/consumer-laws/consumer-guarantees-act/>
37. Consumer Protection. Fair Trading Act [Internet]. [cited 2022 Nov 16]. Available from: <https://www.consumerprotection.govt.nz/general-help/consumer-laws/fair-trading-act/>
38. Food Standards Australia New Zealand [FSANZ]. Food Standards Work Plan – proposed standards development and variations to standards for applications and proposals. 2023.
39. Food Standards Australia New Zealand. Approval Report - Proposal P1030 [Internet]. 2022 [cited 2022 Nov 16]. Available from: <https://www.foodstandards.gov.au/code/proposals/Documents/P1030%20Approval%20Report.pdf>
40. Food Standards Australia New Zealand. Australia New Zealand Food Standards Code – Standard 1.2.3 – Information requirements – warning statements, advisory statements and declarations [Internet]. 2021 [cited 2022 Nov 8]. Available from: <https://www.legislation.gov.au/Details/F2021C00202>
41. Food Standards Australia New Zealand. Food Standards (Proposal P1050 – Pregnancy warning labels on alcoholic beverages) Variation [Internet]. 2020 [cited 2022 Nov 8]. Available from: <https://www.legislation.gov.au/Details/F2020L00952>
42. Added Sugars on the New Nutrition Facts Label | FDA [Internet]. U.S. Food & Drug Administration. [cited 2023 Feb 16]. Available from: <https://www.fda.gov/food/new-nutrition-facts-label/added-sugars-new-nutrition-facts-label>
43. The Minister of Health. Foodstuffs, Cosmetics and Disinfectants Act, 1972: Regulations: Labeling and advertising of foodstuffs. Department of Health. 2010.
44. Public Health (Food) Regulations. Public Health (Food) Act - Chapter 182 [Internet]. 2001 [cited 2023 Feb 21]. Available from: https://www.agc.gov.bn/AGC%20Images/LAWS/ACT_PDF/Cap182subRg1.pdf
45. Food Standards Australia New Zealand. Standard 1.2.7 Nutrition, health and related claims [Internet]. [cited 2023 Feb 21]. Available from: <https://www.foodstandards.gov.au/code/Documents/1.2.7%20Nutrition%20and%20health%20claims%20v157.pdf>
46. U.S. Food and Drug Administration. Questions and Answers on Health Claims in Food Labeling [Internet]. [cited 2023 Feb 21]. Available from: <https://www.fda.gov/food/food-labeling-nutrition/questions-and-answers-health-claims-food-labeling>
47. Health Star Rating System. Health Star Rating - About Health Star Ratings [Internet]. Australian Government. 2020 [cited 2022 Nov 17]. Available from: <http://www.healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/About-health-stars>
48. Health Star Rating System. Health Star Rating - Governance [Internet]. Australian Government. 2022 [cited 2022 Nov 17]. Available from: <http://www.healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/Governance>

49. Ministry for Primary Industries. Governance for Health Star Ratings [Internet]. New Zealand Government, 2022 [cited 2022 Nov 17]. Available from: <https://www.mpi.govt.nz/food-business/labelling-composition-food-drinks/health-star-ratings-food-labelling/governance-for-health-star-ratings/>
50. Ministry for Primary Industries. The Health Star Rating system in New Zealand 2014-2018 [Internet]. New Zealand Government. 2018 [cited 2022 Nov 17]. Available from: <https://www.mpi.govt.nz/dmsdocument/43519-The-Health-Star-Rating-system-in-New-Zealand-2014-2018>
51. Health Star Rating. Health Star Rating System Policy Context - What is an anomaly [Internet]. Australian Government. 2016 [cited 2022 Nov 17]. Available from: [http://healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/873516DC76D23EC2CA257DA500196043/\\$File/Process%20for%20assessing%20a%20potential%20anomaly.pdf](http://healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/873516DC76D23EC2CA257DA500196043/$File/Process%20for%20assessing%20a%20potential%20anomaly.pdf)
52. Health Star Rating System. Health Star Rating - HSR system changes – 2020 [Internet]. Australian Government. 2020 [cited 2022 Nov 17]. Available from: <http://www.healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/HSR-system-changes2020>
53. Health Star Rating System. Information for food retailers and manufacturers on changes to the Health Star Rating System [Internet]. [cited 2022 Nov 17]. Available from: <https://www.unitedfresh.co.nz/assets/E-News-PDFs/Industry-HSR-Factsheet.PDF>
54. Mackay S, Sing F, Gerritsen S, Swinburn B. Benchmarking Food Environments 2020. 2020 Jun 18 [cited 2022 Nov 17]; Available from: /articles/report/Benchmarking_Food_Environments/12502283/3
55. Ministry for Primary Industries. Boosted Health Star Ratings get tougher on sugar and salt [Internet]. NZ Government. 2022 [cited 2022 Nov 15]. Available from: <https://www.mpi.govt.nz/news/media-releases/boosted-health-star-ratings-get-tougher-on-sugar-and-salt/>
56. Department of Health. Guide to creating a front of pack (FoP) nutrition label for pre-packed products sold through retail outlets. 2016 [cited 2023 Mar 28]; Available from: <https://www.gov.uk/government/publications>
57. Commonwealth of Australia. Health Star Rating System [Internet]. [cited 2023 Mar 28]. Available from: <http://healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/content/home>
58. Diario Oficial de La Republica de Chile. Decreto 13 – Reglamento Ley 20.606 sobre Composición Nutricional de los Alimentos y su Publicidad [Internet]. 2015. [cited 2023 Mar 28]. Available from: <https://www.achipia.gob.cl/wp-content/uploads/2016/02/InfoACHIPIA-N-211.pdf>
59. World Cancer Research Fund. NOURISHING - Nutrition Label [Internet]. [cited 2023 Mar 28]. Available from: https://policydatabase.wcrf.org/level_one?page=nourishing-level-one#step2=0
60. Ministry for Primary Industries. Policy guidance for menu labelling in Australia and New Zealand [Internet]. 2021 [cited 2022 Nov 8]. Available from:

<https://www.mpi.govt.nz/consultations/policy-guidance-for-menu-labelling-in-australia-and-new-zealand/>

61. Joint Food Regulation System. Consultation Regulation Impact Statement: Policy Guidance: Menu labelling in Australia and New Zealand. 2021 [cited 2022 Nov 8]; Available from:

<https://foodregulation.gov.au/internet/fr/publishing.nsf/Content/forum-communicue-2019-August>

62. Australian Government Department of Health. Policy Guideline on menu labelling. 2023.

63. Food Regulation. Policy Guidance for Menu Labelling in Australia and New Zealand [Internet]. 2023 [cited 2023 Mar 1]. Available from:

<https://foodregulation.gov.au/internet/fr/publishing.nsf/Content/Policy-Guidance-for-Menu-Labelling-in-Australia-and-New-Zealand>

64. Joint Food Regulation System. DECISION Regulation Impact Statement: Menu labelling in Australia and New Zealand [Internet]. 2022 [cited 2023 Mar 1]. Available from:

[https://foodregulation.gov.au/internet/fr/publishing.nsf/content/AF5982C52AE9C31FCA258942000184D0/\\$File/Decision%20Regulatory%20Impact%20Statement%20%E2%80%93Menu%20labelling%20in%20Australia%20and%20New%20Zealand.pdf](https://foodregulation.gov.au/internet/fr/publishing.nsf/content/AF5982C52AE9C31FCA258942000184D0/$File/Decision%20Regulatory%20Impact%20Statement%20%E2%80%93Menu%20labelling%20in%20Australia%20and%20New%20Zealand.pdf)

65. Office of the Federal Register. Food Labeling: Nutrition Labeling of Standard Menu Items in Restaurants and Similar Retail Food Establishments. [Internet]. 2013. [cited 2023 Mar 28]. Available from:

<https://www.reginfo.gov/public/do/eAgendaViewRule?RIN=0910-AG57>

66. Department of Health and Mental Hygiene. Food Preparation and Food Establishments (Article 81, Section 49) - Sodium Warning. [Internet]. [cited 2023 Mar 28]. Available from:

<https://www.nyc.gov/assets/doh/downloads/pdf/about/healthcode/health-code-article81.pdf>

67. Advertising Standards Authority. Children and Young People's Advertising Code [Internet]. 2017 [cited 2021 Apr 12]. Available from:

<https://www.asa.co.nz/codes/codes/children-and-young-people/>

68. Swinburn B, Vandevijvere S. Proposed new industry code on unhealthy food marketing to children and young people: will it make a difference? *N Z Med J*. 2017;130(1450):94–101.

69. Advertising Standards Authority. ASA launches review of Children and Young People's Advertising [Internet]. 2022 [cited 2022 Nov 17]. Available from:

<https://www.asa.co.nz/2022/07/12/asa-launches-review-of-children-and-young-peoples-advertising-code/>

70. Advertising Standards Authority. Key issues for discussion in the Children and Young People's Advertising Code [Internet]. 2022 [cited 2022 Nov 17]. Available from:

<https://www.asa.co.nz/2022/07/12/key-issues-for-discussion-in-the-children-and-young-peoples-advertising-code/>

71. Advertising Standards Authority. Alcohol Advertising and Promotion Code [Internet]. 2021 [cited 2022 Nov 24]. Available from: <https://cdn.asa.co.nz/wp-content/uploads/2020/12/Alcohol-Advertising-and-Promotion-Code-December-2020.pdf>

72. Advertising Standards Authority (ASA). Media Release: ASA announces further consultation on draft Children’s Advertising Code and draft Food and Beverage Advertising Code [Internet]. 2023 [cited 2023 Apr 5]. Available from: <https://www.asa.co.nz/2023/04/03/media-release-asa-announces-further-consultation-on-draft-childrens-advertising-code-and-draft-food-and-beverage-advertising-code/>
73. United Nations Food Systems Summit. New Zealand’s Food System Pathway. 2021 [cited 2022 Nov 8]; Available from: <https://summitdialogues.org/wp-content/uploads/2021/09/New-Zealands-food-systems-pathway-to-the-SDGs.pdf>
74. Protect Kids from Junk Food Marketing. Vision — Junk-free kids [Internet]. [cited 2022 Nov 8]. Available from: <https://www.junkfoodfree.org/vision>
75. Garton K, Mackay S, Sing F, Egli V, Signal L. Unhealthy food and drink marketing in Aotearoa New Zealand: Evidence Snapshot 2022. 2022 Feb 2 [cited 2022 Nov 8]; Available from: /articles/report/Unhealthy_food_and_drink_marketing_in_Aotearoa_New_Zealand_Evidence_Snapshot_2022/19105496/1
76. Matbransjens Faglige Utvalg. Guidance on the Code for marketing of food and drink aimed at children – Mfu [Internet]. [cited 2023 Feb 21]. Available from: <https://mfu.as/guidance-on-the-code-for-marketing-of-food-and-drink-aimed-at-children/>
77. USDA Foreign Agricultural Service. The Special Act on Children’s Dietary Life Safety Management [Internet]. 2009 [cited 2023 Feb 21]. Available from: https://unicefaproinasactoolkit.files.wordpress.com/2017/09/the-special-act-on-childrens-dietary-life-safety-management_seoul_korea-republic-of_5-15-2009.pdf
78. World Cancer Research Fund. Restrict food marketing [Internet]. [cited 2023 Feb 27]. Available from: https://policydatabase.wcrf.org/level_one?page=nourishing-level-one#step2=3
79. ASA, CAP. Tougher new food and drink rules come into effect in children’s media [Internet]. 2017 [cited 2023 Feb 27]. Available from: <https://www.asa.org.uk/news/tougher-new-food-and-drink-rules-come-into-effect-in-children-s-media.html>
80. Department of Health and Social Care. New advertising rules to help tackle childhood obesity [Internet]. GOV.UK. 2021 [cited 2023 Feb 27]. Available from: <https://www.gov.uk/government/news/new-advertising-rules-to-help-tackle-childhood-obesity>
81. MINISTERIO DE SALUD, SUBSECRETARÍA DE SALUD PÚBLICA. SOBRE COMPOSICIÓN NUTRICIONAL DE LOS ALIMENTOS Y SU PUBLICIDAD [Internet]. 2021 [cited 2023 Feb 27]. Available from: <https://www.bcn.cl/leychile/navegar?idNorma=1041570&idVersion=2015-11-13>
82. GST | Australian Taxation Office [Internet]. [cited 2023 Feb 27]. Available from: <https://www.ato.gov.au/business/gst/>
83. Bell C, Latu C, Na’ati E, Snowdon W, Moodie M, Waqa G. Barriers and facilitators to the introduction of import duties designed to prevent noncommunicable disease in Tonga: a case study. *Global Health* [Internet]. 2021 Dec 1 [cited 2023 Feb 27];17(1). Available from: </pmc/articles/PMC8626938/>

84. Sundborn G, Thornley S, Beaglehole R, Bezzant N. Policy brief: a sugary drink tax for New Zealand and 10,000-strong petition snubbed by Minister of Health and National Government [Internet]. *New Zealand Medical Journal*. 2017 [cited 2022 Nov 17]. Available from: <https://pubmed.ncbi.nlm.nih.gov/28934776/>
85. New Zealand Institute of Economic Research. Sugar taxes: a review of the evidence [Internet]. 2018 [cited 2022 Nov 17]. Available from: <https://www.nzier.org.nz/publications/sugar-taxes-a-review-of-the-evidence>
86. New Zealand Beverage Council. Sugar Tax [Internet]. [cited 2022 Nov 24]. Available from: <https://www.nzbeveragecouncil.org.nz/positions/sugar-tax/>
87. World Cancer Research Fund. Use economic tools [Internet]. [cited 2023 Feb 27]. Available from: https://policydatabase.wcrf.org/level_one?page=nourishing-level-one#step2=2
88. HM Treasury. Soft Drinks Industry Levy comes into effect [Internet]. GOV.UK. 2018 [cited 2023 Feb 27]. Available from: <https://www.gov.uk/government/news/soft-drinks-industry-levy-comes-into-effect>
89. World Cancer Research Fund. NOURISHING Framework - Harness supply chain [Internet]. [cited 2023 Mar 28]. Available from: https://policydatabase.wcrf.org/level_one?page=nourishing-level-one#step2=6
90. Work and Income. Disability Allowance [Internet]. Ministry of Social Development. [cited 2022 Nov 21]. Available from: <https://www.workandincome.govt.nz/products/a-z-benefits/disability-allowance.html>
91. Work and Income. Increase to payments on 1 April 2022 - Work and Income. Ministry of Social Development [Internet]. 2022 [cited 2022 Nov 24]; Available from: <https://www.workandincome.govt.nz/about-work-and-income/news/2022/changes-to-benefit-rates-from-1-april-2022.html>
92. McLay M. Copies of all briefings, memos, or advice provided and received by MSD regarding the decision to trial My Food Bag boxes with beneficiaries [Internet]. Ministry of Social Development. 2020 [cited 2022 Nov 21]. Available from: <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/official-information-responses/2020/march/r-20200313-all-briefings-memos-or-advice-provided-and-received-by-msd-regarding-the-trialling-of-my-food-bag-boxes-with-beneficiaries.pdf>
93. Russell J. Request to know the amount MSD has spent with My Food Bag in the last 15 months [Internet]. Ministry of Social Development. 2021 [cited 2022 Nov 21]. Available from: <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/official-information-responses/2021/january/20210113-request-to-know-the-amount-msd-has-spent-with-my-food-bag-in-the-last-15-months.pdf>
94. Bargain Box. Who are we? – Bargain Box [Internet]. My Food Bag. [cited 2022 Nov 21]. Available from: https://help.bargainbox.co.nz/hc/en-nz/articles/360009810673-Who-are-we?gclid=Cj0KCQiAveebBhD_ARIsAFaAvrG5xnr9s3EusM7WY6YfILRgobnuBwURbKKWBM_DjmM5uhTy4PXcVm0aApgfEALw_wcB&gclsrc=aw.ds

95. Key J. Funding boosts to help vulnerable children - PM [Internet]. New Zealand Government. 2013 [cited 2022 Nov 21]. Available from: <https://www.beehive.govt.nz/release/funding-boosts-help-vulnerable-children-pm>
96. KickStart Breakfast. Our Story - Kickstart Breakfast [Internet]. 2022 [cited 2022 Nov 21]. Available from: <https://www.kickstartbreakfast.co.nz/our-story>
97. KickStart Breakfast. More Than Just Breakfast [Internet]. [cited 2022 Nov 21]. Available from: <https://www.kickstartbreakfast.co.nz/our-opportunities>
98. United Fresh New Zealand Incorporated. Fruit and Vegetables in Schools - Fact Sheet [Internet]. 2022 [cited 2022 Nov 21]. Available from: <https://www.unitedfresh.co.nz/assets/FIS/Fruit---Vegetables-in-Schools-Fact-Sheet-2022.pdf>
99. Arden J, Martin T. School lunch programme launched [Internet]. New Zealand Government. 2019 [cited 2022 Nov 21]. Available from: <https://www.beehive.govt.nz/release/school-lunch-programme-launched>
100. Ministry of Health. Healthy Food and Drink Guidance – Schools [Internet]. Wellington; 2020 [cited 2022 Nov 9]. Available from: https://www.health.govt.nz/system/files/documents/publications/guidance-schools_june2021.pdf
101. Ministry of Education. Ka Ora, Ka Ako: Healthy School Lunches Programme [Internet]. 2021 [cited 2021 May 13]. Available from: <https://www.education.govt.nz/our-work/overall-strategies-and-policies/wellbeing-in-education/free-and-healthy-school-lunches/>
102. New Zealand Government. Major expansion of the school lunch programme [Internet]. Media release. 2021. Available from: <https://www.beehive.govt.nz/release/major-expansion-school-lunch-programme>
103. Frischknecht D. The impacts of COVID-19 on one-off hardship assistance [Internet]. 2020 Jul [cited 2022 Nov 14]. Available from: www.msd.govt.nz/insights
104. Ministry of Social Development. Food Secure Communities Programme - Supporting communities to become food secure [Internet]. [cited 2022 Nov 14]. Available from: <https://www.msd.govt.nz/what-we-can-do/community/food-secure-communities/funding-for-community-food-providers.html>
105. Office of the Minister for Social Development and Employment Social Wellbeing Committee. The Care in the Community welfare response after the peak of Omicron [Internet]. Ministry of Social Development. 2022 [cited 2022 Nov 14]. Available from: <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/information-releases/cabinet-papers/2022/care-in-the-community/paper-the-care-in-the-community-welfare-response-after-the-peak-of-omicron.pdf>
106. Kore hiakai - Zero Hunger Collective. What is a Food Parcel? Nutritional Guide: Content Guidelines for a Standard Food Parcel [Internet]. 2021 [cited 2022 Nov 14]. Available from: https://static1.squarespace.com/static/5e8e4bf34078e655d8150f64/t/60f911d8d6a22c495fcd1137/1626935781372/Kore_Hiakai-Nutritional_Guide_web.pdf
107. Kore hiakai - Zero Hunger Collective. What is a Food Parcel? 2021 [cited 2022 Nov 14]; Available from:

https://static1.squarespace.com/static/5e8e4bf34078e655d8150f64/t/60f91192f94f7d19ee19cd0b/1626935705533/Kore_Hiakai-What_is_a_Food_Parcel_web.pdf

108. Ministry of Education. The National Administration Guidelines (NAGs) [Internet]. New Zealand Government. 2020 [cited 2022 Nov 21]. Available from: <https://www.education.govt.nz/our-work/legislation/nags/>

109. Ministry of Education. The National Administration Guidelines (NAGs) Where to find the requirements formerly included in the NAGs from 1 January 2023 [Internet]. 2023 [cited 2023 Mar 2]. Available from: https://assets.education.govt.nz/public/Documents/our-work/legislation/The-National-Administration-Guidelines_NAGs_211222.pdf

110. Ministry of Education. Consultation on introducing a healthy drinks only policy in primary schools [Internet]. 2022 [cited 2022 Nov 23]. Available from: <https://www.education.govt.nz/news/consultation-on-introducing-a-healthy-drinks-only-policy-in-primary-schools/>

111. Ministry of Education. Promoting healthy food and nutrition in schools [Internet]. 2022 [cited 2022 Nov 25]. Available from: <https://www.education.govt.nz/news/promoting-healthy-food-and-nutrition-in-schools/>

112. Parliamentary Counsel Office. Education (Early Childhood Services) Regulations - 46 Health and safety practices standard: general [Internet]. New Zealand Government. 2022 [cited 2022 Nov 22]. Available from: <https://www.legislation.govt.nz/regulation/public/2008/0204/latest/DLM1412619.html>

113. Children's Commissioner. Guidelines for School Food Programmes. 2014.

114. Vermillion Perice P, Blackie E, Morris M, Jarvis-Child B, Engelbertz S. New Zealand Healthy School Lunch Pilot | Ka Ora, Ka Ako Interim Evaluation [Internet]. 2021 [cited 2022 Nov 14]. Available from: https://assets.education.govt.nz/public/Ka-Ora-Ka-Ako-Evaluation_ImpactFinal_20210517_revisedFINAL.pdf

115. Nutrition Standards for Ka Ora, Ka Ako menus - Ka Ora, Ka Ako - Healthy School Lunches Programme [Internet]. [cited 2023 Mar 2]. Available from: <https://kaorakaako.education.govt.nz/nutrition-standards>

116. Ministry of Education. Ka Ora, Ka Ako | Healthy School Lunches Programme What has changed and why? New Nutrition Standards 2023. 2022 Oct [cited 2022 Nov 9]; Available from: https://assets.education.govt.nz/public/Documents/What-has-changed-and-why_Nutrition-Standards-2023-v2.pdf

117. School-FERST. School-FERST - Preliminary Results for Secondary Schools. [cited 2022 Nov 21]; Available from: <http://health.tki.org.nz/Key-collections/Healthy->

118. Pillay D, Ali A, Wham CA. Examining the New Zealand School Food Environment: What Needs to Change? Nutr Res Rev [Internet]. 2022 [cited 2022 Nov 9]; Available from: https://drive.google.com/file/d/1QKNUyriCSoiOHpqzqo_wR_1UkdsTj9FB/view?usp=drive_open&usp=embed_facebook

119. World Cancer Research Fund. Offer healthy food and set standards in public institutions and other specific settings [Internet]. [cited 2023 Mar 2]. Available from: https://policydatabase.wcrf.org/level_one?page=nourishing-level-one#step2=1

120. National District Health Board Food and Drink Environments Network. National Health Food and Drink Policy (2nd ed) [Internet]. Wellington; 2019 [cited 2021 Jun 15]. Available from: <https://www.health.govt.nz/system/files/documents/publications/national-healthy-food-and-drink-policy-2nd-edition.pdf>
121. Ministry of Health. Healthy Food and Drinks Guidance for Organisations [Internet]. New Zealand Government. 2020 [cited 2022 Nov 22]. Available from: <https://www.health.govt.nz/system/files/documents/publications/healthy-food-drink-guidance-organisations-dec2020.pdf>
122. Gerritsen S, Kidd B, Rosin M, Shen S, Mackay S, Te Morenga L, et al. 2021 Assessment of New Zealand district health boards' institutional healthy food and drink policies: the HealthY Policy Evaluation (HYPE) study. *New Zealand Medical Journal*, [Internet]. 2022 [cited 2022 Dec 9];135. Available from: www.nzma.org.nz/journal
123. Gerritsen S, Kidd B, Rosin M, Shen S, Mackay S, Te Morenga L, et al. 2021 assessment of New Zealand district health boards' institutional healthy food and drink policies [Internet]. *The New Zealand Medical Journal - Te ara tika hauora hapori*. 2022 [cited 2023 Mar 29]. p. 67–76. Available from: <https://drive.google.com/drive/u/0/folders/1mShkyUI8YpcXwVAmJ7UFrntVf4Mzilt3>
124. Department of Corrections. F.01. Res.01 Catering [Internet]. New Zealand Government. [cited 2022 Nov 22]. Available from: https://www.corrections.govt.nz/resources/policy_and_legislation/Prison-Operations-Manual/Public-RL/F.01.Res.01-catering
125. Ministry of Health. Health and Disability Services (Safety) Act [Internet]. 2022 [cited 2022 Nov 22]. Available from: <https://www.health.govt.nz/our-work/regulation-health-and-disability-system/certification-health-care-services/health-and-disability-services-safety-act>
126. New Zealand Standard. NZS 8134:2021 Ngā Paerewa Health and disability services standard. Ministry of Health. 2021.
127. Health Promotion Agency. Annual Report For the year ended 30 June 2015 [Internet]. 2015 [cited 2022 Nov 22]. Available from: https://www.hpa.org.nz/sites/default/files/AR-14-15_0_0.pdf
128. Healthy Kids [Internet]. [cited 2022 Nov 22]. Available from: <https://healthykids.org.nz/>
129. Hapu Hauora [Internet]. [cited 2022 Nov 22]. Available from: <https://www.hapuhauora.health.nz/>
130. Healthy Eating Advisory Service. Healthy Eating Advisory Service [Internet]. [cited 2023 Mar 3]. Available from: <https://heas.health.vic.gov.au/>
131. Department of Health. Healthy Options WA Policy [Internet]. Government of Western Australia, 2021 [cited 2023 Mar 3]. Available from: <https://www.health.wa.gov.au/healthyoptions>
132. NSW Health. Healthy Food and Drink in NSW Health Facilities for Staff and Visitors Framework [Internet]. NSW Government. [cited 2023 Mar 3]. Available from: <https://www.health.nsw.gov.au/heal/Pages/healthy-food-framework.aspx>

133. Ministry of Education. Promoting healthy lifestyles [Internet]. [cited 2022 Nov 22]. Available from: <https://www.education.govt.nz/school/health-safety-and-wellbeing/student-and-staff-health/why-promote-healthy-lifestyles/>
134. Home | Health & PE · TKI [Internet]. [cited 2022 Nov 22]. Available from: <https://hpe.tki.org.nz/>
135. Ministry of Health. Fruit in Schools programme [Internet]. [cited 2022 Nov 24]. Available from: <https://www.health.govt.nz/our-work/life-stages/child-health/fruit-schools-programme>
136. Garden to Table [Internet]. [cited 2022 Nov 24]. Available from: <https://gardentotable.org.nz/>
137. KidsCan NZ. About the KidsCan Charitable Trust [Internet]. [cited 2022 Nov 24]. Available from: <https://www.kidscan.org.nz/about-kidscan/>
138. South Canterbury DHB. WAVE Project Plan 2020-21 [Internet]. 2021 [cited 2022 Nov 23]. Available from: <https://wavesouthcanterbury.co.nz/media/4800/planfinal200923.pdf>
139. New Zealand Government. Child and Youth Wellbeing. 2021.
140. Ministry of Education. Healthy Active Learning [Internet]. New Zealand Government. 2020 [cited 2022 Nov 14]. Available from: <https://www.education.govt.nz/our-work/changes-in-education/healthy-active-learning/>
141. Wylie L. Heart Start award winners focus on wellbeing [Internet]. New Zealand Herald. 2015 [cited 2022 Nov 22]. Available from: <https://www.nzherald.co.nz/wanganui-chronicle/news/heart-start-award-winners-focus-on-wellbeing/ZHPVWZLPKAFS7CVE4JZYJXL7E/>
142. Ministry of Health. Classifying foods and drinks for early childhood education services [Internet]. 2007. Available from: <http://www.health.govt.nz/our-work/preventative-health-wellness/nutrition/food-and-beverage-classification-system>
143. Ministry of Health. Food and beverage classification system for years 1-13 [Internet]. 2007. Available from: <http://www.health.govt.nz/our-work/preventative-health-wellness/nutrition/food-and-beverage-classification-system>
144. Fonterra. Fonterra Milk for Schools improves kids health [Internet]. [cited 2022 Nov 24]. Available from: <https://www.fonterra.com/nz/en/our-stories/articles/Fonterra-Milk-for-Schools-improves-kids-health.html>
145. WorkWell. Home | WorkWell [Internet]. [cited 2022 Nov 22]. Available from: https://www.workwell.health.nz/workwell_home
146. Sport Northland. Active Workplaces [Internet]. [cited 2022 Nov 23]. Available from: <https://www.sportnorthland.co.nz/nga-mahi-a-te-rehia-l-get-active/Active-Workplaces-1>
147. Heart Foundation. Pacific nutrition courses [Internet]. [cited 2022 Nov 23]. Available from: <https://www.heartfoundation.org.nz/your-heart/pacific-heartbeat/nutrition-courses>
148. Heart Foundation. Who is Pacific Heartbeat? [Internet]. [cited 2022 Nov 23]. Available from: <https://www.heartfoundation.org.nz/your-heart/pacific-heartbeat/pacific-heartbeat-team>

149. Activity & Nutrition Aotearoa. Healthy Workplace [Internet]. [cited 2022 Nov 23]. Available from: <https://ana.org.nz/category/resources/work-place/>
150. Activity & Nutrition Aotearoa. About ANA [Internet]. 2021 [cited 2022 Nov 23]. Available from: <https://ana.org.nz/about-us/>
151. Ignite Aotearoa [Internet]. [cited 2022 Nov 22]. Available from: <https://ignite.org.nz/learn>
152. Healthy Eating Advisory Service. Improving wellbeing through healthy eating. 2017.
153. Miyoshi M, NTKNN. School-based “Shokuiku” program in Japan: application to nutrition education in Asian countries. *Asia Pac J Clin Nutr.* 2012;21(1):152–62.
154. Tanaka N and MM. School lunch program for health promotion among children in Japan. *Asia Pac J Clin Nutr.* 2012;21(1):155–8.
155. Government of Japan. Basic Act on Shokuiku. 2005.
156. Ministry of Education Culture Sports Science and Technology. Reference Intake Values for School Lunch. 2009.
157. Ministry of Education Culture Sports Science and Technology. A Study on the Implementation Status of School Lunch Program 2008. 2009.
158. Good4Work. Good4Work [Internet]. [cited 2022 Nov 22]. Available from: <https://www.good4work.nz/>
159. Taranaki DHB. Healthy Food and Beverage Policy [Internet]. 2022 [cited 2022 Nov 23]. Available from: https://www.tdhb.org.nz/services/public_health/food-beverage.shtml
160. Victoria State Government. Healthy Eating Policy and Catering Guide for Workplaces. 2016; Available from: <https://www.health.vic.gov.au/sites/default/files/2021-11/healthy-choices-healthy-eating-policy-and-catering-guide-for-workplaces.pdf>.
161. Goble A. Promoting Healthy Eating at the Local Government Level, [Internet]. Agencies for Nutrition Action. 2016 [cited 2022 Nov 23]. Available from: https://ana.org.nz/wp-content/uploads/2016/08/Evidence-Snapshot_0.pdf
162. Federal Register of Legislation. Stronger Futures in the Northern Territory (Food Security Areas) Rule 2012 [Internet]. Australian Government. [cited 2023 Mar 3]. Available from: <https://www.legislation.gov.au/Details/F2012L02073/Explanatory%20Statement/Text>
163. Government of Canada. Nutrition North Canada [Internet]. [cited 2023 Mar 3]. Available from: <https://www.nutritionnorthcanada.gc.ca/eng/1415385762263/1415385790537>
164. Korea Legislation Research Institute. SPECIAL ACT ON SAFETY MANAGEMENT OF CHILDREN’S DIETARY LIFESTYLE [Internet]. [cited 2023 Mar 3]. Available from: https://elaw.klri.re.kr/eng_service/lawView.do?hseq=19679&lang=ENG
165. World Cancer Research Fund. Nourishing [Internet]. [cited 2023 Mar 3]. Available from: https://policydatabase.wcrf.org/level_one?page=nourishing-level-one
166. Health Promotion Board. Healthier dining programme extended to include food in hawker centres and coffee shops [Internet]. [cited 2023 Mar 3]. Available

from: <https://www.hpb.gov.sg/newsroom/article/healthier-dining-programme-extended-to-include-food-in-hawker-centres-and-coffee-shops>

167. Food and Nutrition Service. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) [Internet]. USDA. [cited 2023 Mar 3]. Available from: <https://www.fns.usda.gov/wic>

168. SA Health. Healthy Kids Menu Initiative [Internet]. Government of South Australia. [cited 2023 Mar 3]. Available from: <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/about+us/about+sa+health/health+in+all+policies/healthy+kids+menu+initiative>

169. Healthy Food Financing Initiative. Healthy Food Financing Initiative [Internet]. [cited 2023 Mar 3]. Available from: <https://www.rd.usda.gov/about-rd/initiatives/healthy-food-financing-initiative>

170. NYC Business. Green Cart Permit [Internet]. [cited 2023 Mar 3]. Available from: <https://www.nyc.gov/nycbusiness/description/green-cart-permit>

171. Department of Health and Social Care. Restricting promotions of products high in fat, sugar and salt by location and by price: government response to public consultation [Internet]. GOV.UK. 2021 [cited 2023 Mar 3]. Available from: <https://www.gov.uk/government/consultations/restricting-promotions-of-food-and-drink-that-is-high-in-fat-sugar-and-salt/outcome/restricting-promotions-of-products-high-in-fat-sugar-and-salt-by-location-and-by-price-government-response-to-public-consultation>

172. Heart Foundation. Hospitality hub [Internet]. [cited 2022 Nov 23]. Available from: <https://www.heartfoundation.org.nz/professionals/food-industry-and-hospitality/hospitality-hub/>

173. New Zealand Ministry of Foreign Affairs & Trade. Free trade agreements [Internet]. [cited 2022 Nov 28]. Available from: <https://www.mfat.govt.nz/en/trade/free-trade-agreements/>

174. New Zealand Ministry of Foreign Affairs & Trade. Strategic Intentions 2021 - 2025. 2021.

175. New Zealand Ministry of Foreign Affairs & Trade. Annual Report 2021-2022 [Internet]. 2022 [cited 2022 Nov 28]. Available from: <https://www.mfat.govt.nz/assets/About-us-Corporate/MFAT-corporate-publications/MFAT-Annual-Report-2021-22.pdf>

176. New Zealand Parliament. Food Bill - [Internet]. [cited 2022 Nov 29]. Available from: https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/00DBHOH_BILL9974_1/food-bill

177. Friel S, et al. Monitoring the impacts of trade agreements on food environments. *Obes Rev*, 2013;120–34.

178. Thow AM, et al. Development, implementation and outcome of standards to restrict fatty meat in the food supply and prevent NCDs: learning from an innovative trade/food policy in Ghana. *BMC Public Health*. 2014;14:249.

179. World Health Organisation. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. World Health Organization [Internet]. 2013 [cited 2022 Nov 29];102. Available from: http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf

180. Ministry of Health. Statement of Strategic Intentions 2017 to 2021. 2017;
181. Ministry of Health. Strategic Intentions 2021 to 2025 [Internet]. Wellington: Ministry of Health. 2021 [cited 2022 Nov 29]. Available from: https://www.health.govt.nz/system/files/documents/publications/strategic_intentions_2021-2025-withcover_9_dec.pdf
182. Ministry of Health. Health System Indicators framework [Internet]. 2022 [cited 2022 Dec 6]. Available from: <https://www.health.govt.nz/new-zealand-health-system/health-system-indicators-framework>
183. Ministry of Health. Health and Independence Report 2017. The Director-General of Health's Annual Report on the State of Public Health. [Internet]. Wellington: Ministry of Health. 2018 [cited 2022 Nov 29]. Available from: <https://www.health.govt.nz/system/files/documents/publications/health-and-independence-report-2017-v2.pdf>
184. Ministry of Health. Health and Independence Report 2020: The Director-General of Health's annual report on the state of public health [Internet]. Wellington: Ministry of Health. 2021 [cited 2022 Nov 29]. Available from: <https://www.health.govt.nz/system/files/documents/publications/health-and-independence-report-2020-24-nov-dg.pdf>
185. Ministry of Health. New Zealand Health Strategy 2016 [Internet]. 2016 [cited 2022 Dec 6]. Available from: <https://www.health.govt.nz/publication/new-zealand-health-strategy-2016>
186. Ministry of Health. New Zealand Health Strategy: Roadmap of actions 2016. [Internet]. Wellington: Ministry of Health. 2016 [cited 2022 Nov 29]. Available from: <https://www.health.govt.nz/system/files/documents/publications/new-zealand-health-strategy-roadmapofactions-2016-apr16.pdf>
187. Ministry of Health. New Zealand Health Strategy: Future direction [Internet]. Wellington: Ministry of Health. 2016 [cited 2022 Nov 29]. Available from: <https://www.health.govt.nz/system/files/documents/publications/new-zealand-health-strategy-futuredirection-2016-apr16.pdf>
188. Ministry of Health. New Zealand Health Strategy update [Internet]. 2022 [cited 2022 Dec 6]. Available from: <https://www.health.govt.nz/about-ministry/what-we-do/new-zealand-health-strategy-update>
189. Ministry of Health. Setting the direction for our new health system [Internet]. 2022 [cited 2022 Dec 6]. Available from: <https://www.health.govt.nz/new-zealand-health-system/setting-direction-our-new-health-system>
190. Associate Minister of Health. Healthy Ageing Strategy [Internet]. Wellington: Ministry of Health. 2016 [cited 2022 Nov 29]. Available from: https://www.health.govt.nz/system/files/documents/publications/healthy-ageing-strategy_june_2017.pdf
191. Ministry of Health. Healthy Ageing Strategy: update [Internet]. 2022 [cited 2022 Nov 29]. Available from: <https://www.health.govt.nz/our-work/life-stages/health-older-people/healthy-ageing-strategy-update>
192. Ministry of Health. 'Ola Manuia: Pacific Health and Wellbeing Action Plan 2020-2025 [Internet]. Wellington: Ministry of Health. 2020 [cited 2022 Nov 29]. Available from:

https://www.health.govt.nz/system/files/documents/publications/ola_manuia-phwap-22june.pdf

193. Health Promotion Agency. Statement of Intent [Internet]. 2017 [cited 2022 Nov 29]. Available from: https://www.hpa.org.nz/sites/default/files/soi_0.pdf

194. Health Promotion Agency. Statement of Performance Expectations 2018/19 [Internet]. 2018 [cited 2022 Nov 29]. Available from: <https://www.hpa.org.nz/sites/default/files/SPE%202018-19.pdf>

195. Healthy Kids [Internet]. [cited 2022 Nov 29]. Available from: <https://www.healthykids.org.nz/>

196. Te hiringa hauora. Statement of Performance Expectations 2021/22. 2021;

197. Ministry of Health. Media releases [Internet]. [cited 2022 Nov 29]. Available from: <https://www.health.govt.nz/news-media/media-releases>

198. Search | Beehive.govt.nz [Internet]. [cited 2022 Nov 29]. Available from: <https://www.beehive.govt.nz/search?query=obesity>

199. Kelly PM, et al., Obesity Prevention in a City State: Lessons from New York City during the Bloomberg Administration. *Front Public Health*. 2016; 4:60.

200. World Public Health Nutrition Association Update team. Brazilian dietary guidelines. At last! Guidelines based on food and meals! 2014; Available from: <http://wphna.org/wp-content/uploads/2015/01/WN-2014-05-12-1050-1051-Update-Guia.pdf>.

201. Eat For Health. Nutrient Reference Values for Australia and New Zealand [Internet]. Australian Government. [cited 2022 Nov 30]. Available from: <https://www.eatforhealth.gov.au/nutrient-reference-values>

202. Department of Health and Aged Care. What we're doing about food and nutrition [Internet]. Australian Government. [cited 2022 Nov 30]. Available from: https://www.health.gov.au/topics/food-and-nutrition/what-were-doing?language=en&utm_source=health.gov.au&utm_medium=callout-auto-custom&utm_campaign=digital_transformation

203. Ministry of Health Brazil. Health Surveillance Secretariat: Health situation analysis department. Strategic action plan to tackle noncommunicable diseases in Brazil 2011-2022. Ministry of Health: Brazil. 2011.

204. Norwegian Ministries. Norwegian National Action Plan for a Healthier Diet – an outline. 2017.

205. Ministry of Health. Eating and Activity Guidelines for New Zealand Adults - 2020. 2020 [cited 2022 Nov 8]; Available from: www.health.govt.nz

206. Ministry of Health. Food and Nutrition Guidelines for Healthy Pregnant and Breastfeeding Women: A background paper. 2008 [cited 2022 Nov 8]; Available from: <http://www.moh.govt.nz>

207. Mottola MF, Davenport MH, Ruchat SM, Davies GA, Poitras VJ, Gray CE, et al. 2019 Canadian guideline for physical activity throughout pregnancy. *Br J Sports Med* [Internet]. 2018 Nov 1 [cited 2022 Nov 8];52(21):1339–46. Available from: <https://bjsm.bmj.com/content/52/21/1339>

208. Ministry of Health. Eating and Activity Guidelines for New Zealand Adults – What's changed. 2020.

209. Ministry of Health. Healthy Eating Guidelines for New Zealand Babies and Toddlers (0-2 years old) | Ministry of Health NZ [Internet]. 2021 [cited 2022 Nov 8]. Available from: <https://www.health.govt.nz/publication/healthy-eating-guidelines-new-zealand-babies-and-toddlers-0-2-years-old>
210. Monteiro CA, et al., Dietary guidelines to nourish humanity and the planet in the twenty-first century. A blueprint from Brazil. *Public Health Nutr*, 2015;18(13):2311–22.
211. Ministry of Health Brazil. Dietary guidelines for the Brazilian population. 2014; Available from: <http://www.foodpolitics.com/wp-content/uploads/Brazilian-Dietary-Guidelines-2014.pdf>
212. New Zealand Government. New Zealand Childhood Obesity Plan - Cabinet Social Policy Committee [Internet]. 2015 [cited 2022 Nov 30]. Available from: <https://extranet.who.int/nutrition/gina/sites/default/filesstore/NZL%202015%20New%20Zealand%20Childhood%20Obesity%20Plan.pdf>
213. Ministry of Health. How is my DHB performing? [Internet]. 2022 [cited 2022 Nov 30]. Available from: <https://www.health.govt.nz/new-zealand-health-system/health-targets/how-my-dhb-performing>
214. Ministry of Health. Children and Young People Living Well and Staying Well: New Zealand Childhood Obesity Programme Baseline Report 2016/17 [Internet]. Wellington: Ministry of Health. 2017 [cited 2022 Nov 30]. Available from: <https://www.health.govt.nz/publication/children-and-young-people-living-well-and-staying-well-new-zealand-childhood-obesity-programme>
215. Ministry for Primary Industries. Review of folic acid fortification of food [Internet]. 2019 [cited 2022 Nov 30]. Available from: <https://www.mpi.govt.nz/consultations/review-of-folic-acid-fortification-of-food/>
216. Ministry for Primary Industries. Folic acid fortification of bread [Internet]. 2022 [cited 2023 Jan 17]. Available from: <https://www.mpi.govt.nz/food-business/bakery-and-grain-based-products/folic-acid-fortification-of-bread/>
217. Te Aka Whai Ora - Māori Health Authority, Te Whatu Ora - Health New Zealand. Te Pae Tata Interim New Zealand Health Plan 2022 – Te Whatu Ora - Health New Zealand [Internet]. 2022 [cited 2022 Nov 8]. Available from: <https://www.tewhatauora.govt.nz/about-us/publications/te-pae-tata-interim-new-zealand-health-plan-2022/>
218. Government of the Netherlands. The National Prevention Agreement 2019. 2019; Available from: <https://www.government.nl/documents/reports/2019/06/30/the-national-prevention-agreement>
219. Government of Ireland. A Healthy Weight for Ireland: Obesity Policy and Action Plan 2016 - 2025. 2020; Available from: <https://www.gov.ie/en/publication/c778a9-a-healthy-weight-for-ireland-obesity-policy-and-action-plan-2016-2025/#:~:text=Departments,A%20Healthy%20Weight%20for%20Ireland%3A%20Obesity,and%20Action%20Plan%202016%20%2D%202025&text=This%20Obesity%20Policy%20and%20Action,levels%20of%20overweight%20and%20obesity>
220. Ministry of Health. Statement of Intent 2012/13 to 2014/15: Ministry of Health [Internet]. Wellington: Ministry of Health. 2012 [cited 2022 Nov 30]. Available

from: <https://www.health.govt.nz/publication/statement-intent-2012-13-2014-15-ministry-health>

221. Ministry of Health. He Korowai Oranga [Internet]. [cited 2022 Nov 30]. Available from: <https://www.health.govt.nz/our-work/populations/maori-health/he-korowai-oranga>

222. Ministry of Health. Whakamaua: Māori Health Action Plan 2020-2025. Wellington: Ministry of Health. 2020.

223. Ministry of Health. He Korowai Oranga [Internet]. 2020 [cited 2022 Dec 6]. Available from: <https://www.health.govt.nz/our-work/populations/maori-health/he-korowai-oranga>

224. Ministry of Health. Responsibility for Pacific health outcomes [Internet]. Wellington: Ministry of Health. 2014 [cited 2022 Nov 30]. Available from: <https://www.health.govt.nz/our-work/populations/pacific-health/responsibility-pacific-health-outcomes>

225. Ministry of Health. Te Ao Auahatanga Hauora Māori: the Māori Health Innovation Fund [Internet]. 2021 [cited 2022 Nov 30]. Available from: <https://www.health.govt.nz/our-work/populations/maori-health/maori-health-providers/te-ao-auahatanga-hauora-maori-maori-health-innovation-fund>

226. Ministry of Health. Tatau Kahukura: Māori health statistics [Internet]. 2015 [cited 2022 Nov 30]. Available from: <https://www.health.govt.nz/our-work/populations/maori-health/tatau-kahukura-maori-health-statistics>

227. A Focus on Māori Nutrition: Findings from the 2008/09 New Zealand Adult Nutrition Survey [Internet]. Wellington: Ministry of Health. [cited 2022 Nov 30]. Available from: <https://www.health.govt.nz/publication/focus-maori-nutrition>

228. Ministry of Health. Healthy Families NZ [Internet]. 2022 [cited 2022 Nov 30]. Available from: <https://www.health.govt.nz/our-work/preventative-health-wellness/healthy-families-nz>

229. Matheson A, Lindberg K, Shanthakumar M, Ellison-Loschmann L. Community-up system change for health and wellbeing: Healthy Families NZ Summative Evaluation Report 2022 [Internet]. Te Whatu Ora—Health New Zealand. Wellington. [cited 2023 Feb 7]. Available from: <https://www.tewhatauora.govt.nz/assets/Uploads/Healthy-Families-NZ-Summative-Report-2022.pdf>

230. Te Hiringa Hauora. Siu Ki Moana – the Pacific Health Promotion Action Plan. 2022 [cited 2022 Nov 11]; Available from: <https://www.hpa.org.nz/sites/default/files/Siu%20Ki%20Moana%20Pacific%20Health%20Promotion%20Action%20Plan%202022.pdf>

231. New Zealand Legislation. Crimes Act 1961 [Internet]. [cited 2022 Nov 30]. Available from: <https://www.legislation.govt.nz/act/public/1961/0043/latest/DLM327382.html>

232. New Zealand Legislation. Electoral Act 1993 [Internet]. [cited 2022 Nov 30]. Available from: <https://www.legislation.govt.nz/act/public/1993/0087/latest/DLM307519.html>

233. New Zealand Legislation. Secret Commissions Act 1910 No 40 [Internet]. [cited 2022 Nov 30]. Available from: <https://www.legislation.govt.nz/act/public/1910/0040/latest/DLM177643.html>
234. New Zealand Parliament. Lobbying Disclosure Bill [Internet]. 2013 [cited 2022 Nov 30]. Available from: https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/00DBHOH_BILL11278_1/lobbying-disclosure-bill
235. Te Kawa Mataaho Public Service Commission. Integrity and conduct [Internet]. 2022 [cited 2022 Nov 30]. Available from: <https://www.publicservice.govt.nz/guidance/integrity-and-conduct/>
236. Te Kawa Mataaho Public Service Commission. Guide: Board Appointment and Induction Guidelines (BAIG) [Internet]. 2021 [cited 2022 Dec 5]. Available from: <https://www.publicservice.govt.nz/guidance/guide-board-appointment-and-induction-guidelines/>
237. Te Kawa Mataaho Public Service Commission. Conflicts of interest [Internet]. [cited 2022 Dec 5]. Available from: <https://www.publicservice.govt.nz/guidance/guide-he-aratohu/model-standards/conflicts-of-interest/>
238. National Health and Medical Research Council. Policy on the Disclosure of Interests Requirements for Prospective and Appointed NHMRC Committee Members. 2019; Available from: <https://www.nhmrc.gov.au/about-us/leadership-and-governance/committees#download>
239. Gluckman P. The role of evidence in policy formation and implementation A report from the Prime Minister's Chief Science Advisor. 2013 [cited 2022 Dec 5]; Available from: www.pmcsa.org.nz
240. Our office | Office of the Prime Minister's Chief Science Advisor [Internet]. [cited 2023 Mar 17]. Available from: <https://www.pmcsa.ac.nz/who-we-are/our-office/>
241. Our role and work plan | Office of the Prime Minister's Chief Science Advisor [Internet]. [cited 2023 Mar 17]. Available from: <https://www.pmcsa.ac.nz/what-we-do/our-work-programme/>
242. Ministry of Social Development. Families Commission / Superu Annual Report 2017-2018 - Ministry of Social Development. 2018.
243. Ministry of Education. Anti-obesity and wellbeing expert takes up new role with the Ministry of Education [Internet]. 2017. Available from: <http://www.education.govt.nz/news/anti-obesity-and-wellbeing-expert-takes-up-new-role-with-the-ministry-of-education/>
244. Parata H, Coleman J. New appointment to support physical activity and nutrition in schools [Internet]. 2017 [cited 2022 Dec 5]. Available from: <https://www.beehive.govt.nz/release/new-appointment-support-physical-activity-and-nutrition-schools>
245. Ministry of Health. Chief Science Advisor [Internet]. 2019 [cited 2022 Dec 5]. Available from: <https://www.health.govt.nz/about-ministry/leadership-ministry/chief-science-advisor>

246. State Services Commission. The Policy Advice Initiative: Opportunities for Management. 1995; Available from: <https://www.ssc.govt.nz/resources/2698/all-pages>
247. State Services Commission. Performance Improvement Framework [Internet]. 2018 [cited 2020 Feb 2]. Available from: <https://ssc.govt.nz/our-work/performance-improvement-framework/>
248. The Treasury. Review of Policy Expenditure and Advice [Internet]. [cited 2022 Dec 5]. Available from: <https://www.treasury.govt.nz/information-and-services/state-sector-leadership/cross-agency-initiatives/review-policy-expenditure-and-advice>
249. Rebstock P, Bestwick J. Performance Improvement Framework: Review for Manatū Hauora, the Ministry of Health, December 2017 [Internet]. 2017 [cited 2022 Dec 5]. Available from: www.ssc.govt.nz/pif
250. National Health and Medical Research Council. How the NHMRC develops its guidelines. Available from: <https://www.nhmrc.gov.au/research-policy/guideline-development>
251. State Services Commission. Performance Improvement Framework Reports and Related Announcements. 2016.
252. International Budget Partnership. Rankings [Internet]. [cited 2022 Dec 5]. Available from: <https://internationalbudget.org/open-budget-survey/rankings>
253. International Budget Partnership. Open Budget Survey New Zealand 2021 [Internet]. 2021 [cited 2022 Dec 6]. Available from: <https://internationalbudget.org/open-budget-survey/country-results/2021/new-zealand>
254. Transparency International. Corruption Perceptions Index [Internet]. [cited 2022 Dec 5]. Available from: <https://www.transparency.org/en/cpi/2020>
255. Government of Canada. Transparency of stakeholder communications for healthy eating initiatives. 2016 [cited 2023 Mar 9]; Available from: <https://www.canada.ca/en/services/health/food-nutrition/healthy-eating/transparency-stakeholder-communications-healthy-eating-initiatives.html>
256. Government of Norway. Freedom of Information Act. 2006; [cited 2023 Mar 9]; Available from: http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=88381
257. The World Wide Web Foundation. Open Data Barometer 4th Edition — Global Report, May 2017 [Internet]. 2017 [cited 2022 Dec 5]. Available from: <https://opendatabarometer.org/doc/4thEdition/ODB-4thEdition-GlobalReport.pdf>
258. Ministry for Primary Industries. New Zealand Total Diet Study [Internet]. 2021 [cited 2022 Dec 6]. Available from: <https://www.mpi.govt.nz/food-business/food-monitoring-surveillance/new-zealand-total-diet-study/>
259. Food Standards Australia New Zealand. Monitoring of trans fatty acids [Internet]. 2017 [cited 2022 Dec 6]. Available from: <https://www.foodstandards.govt.nz/science/monitoringnutrients/Pages/Monitoring-of-trans-fatty-acids.aspx>
260. Food Standards Australia New Zealand. Assessment of Trans Fatty Acids in Imported Oils. 2017.

261. FOODfiles™ - New Zealand Food Composition Database [Internet]. [cited 2022 Dec 6]. Available from: <https://www.foodcomposition.co.nz/foodfiles/>
262. Standards » GS1 New Zealand [Internet]. [cited 2022 Dec 6]. Available from: <https://www.gs1nz.org/standards/>
263. Education Review Office. Food, Nutrition and Physical Activity in NZ Schools and Early Learning Services [Internet]. 2010 [cited 2022 Dec 6]. Available from: <https://ero.govt.nz/our-research/food-nutrition-and-physical-activity-in-nz-schools-and-early-learning-services>
264. Children's Food Trust. Our research. 2016 [cited 2023 Mar 9]; Available from: <http://www.childrensfoodtrust.org.uk/childrens-food-trust/our-research/>
265. The Dutch Institute of Public Health and Environment. National Institute for Public Health and the Environment. [cited 2023 Mar 9]; Available from: <https://www.rivm.nl/en>
266. Ministry of Health. New Zealand Health Survey - About the survey [Internet]. [cited 2022 Dec 7]. Available from: <https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/new-zealand-health-survey>
267. Ministry of Health. Annual Update of Key Results 2021/22: New Zealand Health Survey [Internet]. 2022 [cited 2022 Dec 7]. Available from: <https://www.health.govt.nz/publication/annual-update-key-results-2021-22-new-zealand-health-survey>
268. Ministry of Health. Methodology Report 2021/22: New Zealand Health Survey. Wellington: Ministry of Health. 2022.
269. Ministry of Health. Obesity in 2021/22: An experimental analysis using data from general practices. Wellington: Ministry of Health. 2022.
270. Ministry of Health. Children's Dietary Habits – Findings from the 2018/19 and 2019/20 New Zealand Health Survey [Internet]. Wellington: Ministry of Health. 2022 [cited 2022 Dec 7]. Available from: <https://www.health.govt.nz/publication/childrens-dietary-habits>
271. Ministry of Health. Adults' Dietary Habits – Findings from the 2018/19 and 2019/20 New Zealand Health Survey [Internet]. Wellington: Ministry of Health. 2022 [cited 2022 Dec 7]. Available from: <https://www.health.govt.nz/publication/adults-dietary-habits>
272. Ministry of Health. Reports into New Zealanders' eating and drinking habits [Internet]. 2022 [cited 2022 Dec 7]. Available from: <https://www.health.govt.nz/news-media/news-items/reports-new-zealanders-eating-and-drinking-habits>
273. Health Promotion Agency. Annual Report For the year ended 30 June 2021. 2021.
274. New Zealand Government. GETS - Government Electronic Tender Service | Current Tenders [Internet]. Gets.govt.nz. [cited 2020 Feb 5]. Available from: <https://www.gets.govt.nz/ExternalIndex.htm>
275. Kupe - Data Explorer [Internet]. [cited 2023 Mar 17]. Available from: <https://kupe.hpa.org.nz/#!/eating>
276. Centres for Disease Control. National Center for Health Statistics. 2020 [cited 2023 Mar 9]; Available from: <http://www.cdc.gov/nchs/nhanes.htm>

277. Ministry of Health. Annual Data Explorer 2020/21: New Zealand Health Survey [Data File] [Internet]. 2021 [cited 2022 Nov 10]. Available from: https://minhealthnz.shinyapps.io/nz-health-survey-2020-21-annual-data-explorer/_w_12f3c138/#!/
278. Ministry of Health. B4 School Check [Internet]. [cited 2022 Dec 8]. Available from: <https://www.health.govt.nz/our-work/life-stages/child-health/b4-school-check>
279. Ministry of Health. Access, use and disclosure policy for B4 school check information system users. Wellington: Ministry of Health [Internet]. 2010 [cited 2022 Dec 8]; Available from: <https://www.health.govt.nz/publication/access-use-and-disclosure-policy-b4-school-check-information-system-users>
280. Health and Social Care Information Centre. National Child Measurement Programme. 2016 [cited 2023 Mar 9]; Available from: <http://www.hscic.gov.uk/ncmp>
281. Health Service Executive Ireland. Childhood Obesity Surveillance Initiative. [cited 2023 Mar 9]; Available from: <https://www.hse.ie/eng/about/who/healthwellbeing/our-priority-programmes/heal/childhood-obesity-surveillance-initiativecosi/>
282. Ministry of Health. Annual Update of Key Results 2019/2020: New Zealand Health Survey. [Internet]. 2020 [cited 2021 May 1]. Available from: <https://www.health.govt.nz/publication/annual-update-key-results-2019-20-new-zealand-health-survey>
283. Ministry of Health. Biomedical Data Explorer 2014/15: New Zealand Health Survey [Internet]. 2020 [cited 2020 Mar 22]. Available from: <https://minhealthnz.shinyapps.io/nz-health-survey-2014-15-biomedical>
284. Ministry of Health. Mortality Collection [Internet]. 2021 [cited 2022 Dec 8]. Available from: <https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/mortality-collection>
285. Ministry of Health. National Minimum Dataset (hospital events) [Internet]. 2021 [cited 2022 Dec 8]. Available from: <https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/national-minimum-dataset-hospital-events>
286. Ministry of Health. New Zealand Cancer Registry (NZCR) [Internet]. 2020 [cited 2022 Dec 8]. Available from: <https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/new-zealand-cancer-registry-nzcr>
287. Ministry of Health. Health Loss in New Zealand - A report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study, 2006–2016. Wellington: Ministry of Health. 2013.
288. Ministry of Health. Longer, Healthier Lives: New Zealand’s Health 1990–2017. Wellington: Ministry of Health. 2020.
289. Te Whatu Ora. Virtual Diabetes Register and web tool [Internet]. 2021 [cited 2022 Dec 8]. Available from: <https://www.tewhatauora.govt.nz/our-health-system/digital-health/virtual-diabetes-tool/>
290. Te Whatu Ora. Virtual Diabetes Register and web tool [Internet]. [cited 2023 Mar 28]. Available from: <https://www.tewhatauora.govt.nz/our-health-system/data-and-statistics/virtual-diabetes-tool/>

291. Stats NZ. Life expectancy [Internet]. [cited 2022 Dec 8]. Available from: <https://www.stats.govt.nz/topics/life-expectancy>
292. Yamamoto M, De Seymour J, Cavallaro AS, Wharemate-Keung L, Ching S, Jackson J. Nutrient-Level Evaluation of Meals Provided on the Government-Funded School Lunch Program in New Zealand. *Nutrients* 2022, Vol 14, Page 5087 [Internet]. 2022 Nov 30 [cited 2022 Dec 12];14(23):5087. Available from: <https://www.mdpi.com/2072-6643/14/23/5087/htm>
293. US National Institutes of Health. Time-Sensitive Obesity Policy and Program Evaluation (R01). 2016 [cited 2023 Mar 9]; Available from: <http://grants.nih.gov/grants/guide/pa-files/PA-12-257.html>
294. The Dutch Institute of Public Health and Environment. National Agreement leads to small improvement in intake of salt and sugar. 2018 [cited 2023 Mar 9]; Available from: rivm.nl/en/news/national-agreement-leads-to-small-improvement-in-intake-of-salt-and-sugar.
295. The Dutch Institute of Public Health and Environment. Zout-, verzadigd vet- en suikergehalten in bewerkte voedingsmiddelen. RIVM Herformuleringsmonitor 2020. 2021 [cited 2023 Mar 9]; Available from: <https://www.rivm.nl/publicaties/zout-verzadigd-vet-en-suikergehalten-in-bewerkte-voedingsmiddelen-rivm>
296. Kore hiakai, Zero Hunger Collective. Ka Mākona 2022 - Income adequacy in Aotearoa New Zealand: Three Household Scenarios. 2022 [cited 2022 Nov 11]; Available from: <https://static1.squarespace.com/static/5e8e4bf34078e655d8150f64/t/634d181c7d268b0d73c62ab3/1665996839092/Kore+Hiakai+-+Ka+M%C4%81kona+2022+-+Web.pdf>
297. Te Whatu Ora. Changing the system - Te huri i te punaha [Internet]. 2022 [cited 2022 Dec 12]. Available from: <https://www.tewhatauora.govt.nz/whats-happening/changing-the-system/>
298. Robertson G, Hipkins C. Healthy Active Learning now in 40 percent of schools across New Zealand [Internet]. *Beehive.govt.nz*. 2022 [cited 2023 Feb 7]. Available from: <https://www.beehive.govt.nz/release/healthy-active-learning-now-40-percent-schools-across-new-zealand>
299. New Zealand Legislation. Official Information Act 1982 No 156 [Internet]. 2022 [cited 2022 Dec 11]. Available from: <https://www.legislation.govt.nz/act/public/1982/0156/latest/DLM64785.html>
300. Royal Society. Marsden Fund [Internet]. [cited 2022 Dec 11]. Available from: <https://www.royalsociety.org.nz/what-we-do/funds-and-opportunities/marsden/>
301. Health Research Council of New Zealand. HRC Research Repository [Internet]. [cited 2022 Dec 11]. Available from: <https://www.hrc.govt.nz/resources/research-repository?query=>
302. Health Research Council of New Zealand. Major push to tackle diabetes with \$5.7m research funding [Internet]. [cited 2022 Dec 11]. Available from: <https://www.hrc.govt.nz/news-and-events/major-push-tackle-diabetes-57m-research-funding>
303. Ministry for Primary Industries. Funding and rural support [Internet]. [cited 2022 Dec 12]. Available from: <https://www.mpi.govt.nz/funding-rural-support/>

304. Science for Technological Innovation. Vision Mātauranga [Internet]. [cited 2022 Dec 11]. Available from: <https://www.sftichallenge.govt.nz/for-researchers/vision-matauranga/>
305. A Better Start - National Science Challenge | [Internet]. [cited 2022 Dec 11]. Available from: <https://www.abetterstart.nz/>
306. National Science Challenges. A Better Start: E Tipu e Rea Improving the potential for all young New Zealanders.
307. Ministry of Business I& E. Healthier Lives | He Oranga Hauora [Internet]. [cited 2022 Dec 11]. Available from: <https://www.mbie.govt.nz/science-and-technology/science-and-innovation/funding-information-and-opportunities/investment-funds/national-science-challenges/the-11-challenges/healthier-lives/>
308. Ageing Well National Science Challenge. Staying Upright and Eating Well [Internet]. [cited 2022 Dec 11]. Available from: <https://www.ageingwellchallenge.co.nz/research/staying-upright-and-eating-well/>
309. Improving the health of New Zealanders | Ministry of Health NZ [Internet]. [cited 2022 Dec 11]. Available from: <https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/new-zealand-health-survey/improving-health-new-zealanders>
310. Te Whatu Ora Health New Zealand. Pacific Community Health Fund [Internet]. 2022 [cited 2023 Mar 28]. Available from: <https://www.tewhatuora.govt.nz/for-the-health-sector/information-for-pacific-communities/pacific-community-health-fund/>
311. Australian Institute of Health and Welfare. First report on the National Health Priority Areas. 1997 [cited 2023 Mar 9]; Available from: <https://www.aihw.gov.au/reports/health-care-quality-performance/national-health-priority-areas-first-report/background>
312. Government of Ireland. Food Institutional Research Measure. 2021 [cited 2023 Mar 9]; Available from: <https://www.gov.ie/en/service/d1955e-food-institutional-research-measure/>
313. Public Service Commission. A guide on integrity and conduct [Internet]. [cited 2022 Dec 11]. Available from: <https://www.publicservice.govt.nz/guidance/guide-he-aratohu/>
314. Health Promotion Agency. Te Hiringa Hauora/Health Promotion Agency [Internet]. [cited 2022 Dec 12]. Available from: <https://www.hpa.org.nz/>
315. Victorian Health Promotion Foundation. VicHealth. [cited 2023 Mar 9]; Available from: <https://www.vichealth.vic.gov.au/>
316. Sport New Zealand. What we're working towards [Internet]. New Zealand Government. [cited 2022 Nov 14]. Available from: <https://sportnz.org.nz/resources/what-we-re-working-towards/>
317. Te Puni Kokiri. Whānau Ora [Internet]. [cited 2022 Dec 11]. Available from: <https://www.tpk.govt.nz/en/nga-putea-me-nga-ratonga/whanau-ora>
318. World Cancer Research Fund. NOURISHING Framework - Harness food supply chain. [cited 2023 Mar 9]; Available from: https://policydatabase.wcrf.org/level_one?page=nourishing-level-one#step2=6

319. National Food Committee Act 2008. | FAOLEX [Internet]. [cited 2023 Mar 9]. Available from: <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC170028/>
320. Heart Foundation. Food reformulation programme [Internet]. [cited 2022 Nov 21]. Available from: <https://assets.heartfoundation.org.nz/documents/food-industry/food-reformulation/food-reformation-programme.pdf?mtime=1649799161?1668982152>
321. State Services Commission. Code of conduct for the State Services. <http://www.ssc.govt.nz/code>. 2007.
322. Controller and Auditor-General. Health Promotion Agency - Katherine Rich - possible conflicts of interest [Internet]. 2015 [cited 2022 Dec 11]. Available from: <https://oag.parliament.nz/media/2015/health-promotion-agency>
323. State Services Commission. Best Practice Guidelines for Departments Responsible for Regulatory Processes with Significant Commercial Implications [Internet]. [cited 2022 Nov 30]. Available from: <http://www.ssc.govt.nz/resources/2814/all-pages>
324. State Services Commission. Integrity and Conduct Survey 2013 [Internet]. 2014. Available from: <http://www.ssc.govt.nz/integrity-and-conduct-survey-2013-report>
325. Coca-Cola Amatil NZ. Students across the country benefit from world-leading agreement between Government and beverage industry leaders [Internet]. 2014. Available from: <https://ccamatil.co.nz/news/students-across-the-country-benefit-from-world-leading-agreement-between-government-and-beverage-industry-leaders/>
326. Helsedirektoratet. Partnership for a healthier diet. 2022 [cited 2023 Mar 9]; Available from: <https://www.helsedirektoratet.no/english/partnership-for-a-healthier-diet>
327. Office of the Prime Minister's Chief Science Advisor. ANNUAL REPORT: Annual report 2019 - Mahi Tahi 1. 2019 [cited 2022 Dec 12]; Available from: www.pmcsa.nz
328. Consumer and Public Health Dialogue [Internet]. [cited 2022 Dec 12]. Available from: <https://www.foodstandards.govt.nz/about/committees/Pages/Consumer-and-Public-Health-Dialogue-.aspx>
329. Ministry of Business I& E. National Science Challenges [Internet]. [cited 2022 Dec 12]. Available from: <https://www.mbie.govt.nz/science-and-technology/science-and-innovation/funding-information-and-opportunities/investment-funds/national-science-challenges/>
330. CONSEA. Building up the National Policy and System for Food and Nutrition Security: The Brazilian experience. [cited 2023 Mar 9]; Available from: https://www.fao.org.br/download/Seguranca_Alimentar_Ingles.pdf
331. Leão MM and RSM. Effective public policies and active citizenship: Brazil's experience of building a Food and Nutrition Security System. 2012.
332. Healthy Auckland Together [Internet]. Available from: <https://www.healthyaucklandtogether.org.nz/>

333. The Aotearoa Circle. Mana Kai | A framework for korero on enhancing Aotearoa New Zealand's food systems. 2022.
334. Healthy Together Victoria. Healthy Together Victoria: Achievement Program. 2016 [cited 2023 Mar 9]; Available from: <http://www.achievementprogram.healthytogether.vic.gov.au/>
335. Lock K, et al., Health impact assessment of agriculture and food policies: lessons learnt from the Republic of Slovenia. *Bull World Health Organ.* 2003;81(6):391–8.
336. Government of South Australia. Health in All Policies: The South Australian Approach. [cited 2023 Mar 9]; Available from: <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/about+us/about+sa+health/health+in+all+policies/south+australias+hiap+approach#:~:text=The%20South%20Australian%20Health%20in,improve%20population%20health%20and%20wellbeing>
337. Ministry of Health. Whanau Ora Health Impact Assessment. Wellington: Ministry of Health [Internet]. 2007 [cited 2022 Dec 12]; Available from: <http://www.moh.govt.nz>
338. Ministry of Health. Whānau Ora Health Impact Assessment [Internet]. 2014 [cited 2022 Dec 12]. Available from: <https://www.health.govt.nz/our-work/health-impact-assessment/whanau-ora-health-impact-assessment>
339. Community & Public Health. Health in All Policies [Internet]. 2020 [cited 2022 Dec 12]. Available from: <https://www.cph.co.nz/your-health/health-in-all-policies/>
340. Community & Public Health. Health in All Policies: Ways of Working [Internet]. 2022 [cited 2022 Dec 12]. Available from: <https://www.cph.co.nz/your-health/health-in-all-policies/ways-of-working/>
341. Health in all policies as a priority in Finnish health policy: a case study on national health policy development. *Scand J Public Health.* 2013; 41:3–28.